

European Primary Dealers Handbook

Updated Q3 2017





About AFME

The Association for Financial Markets in Europe (AFME) is the voice of Europe's wholesale financial markets. We represent the leading global and European banks and other significant capital market players. We focus on a wide range of market, business and prudential issues and offer a pan-European perspective, bringing to bear deep policy and technical expertise and constructive influence with European and global policymakers. We advocate stable, competitive, sustainable European financial markets that support economic growth and benefit society. For more information, please visit the AFME website, www.afme.eu

About AFME/Primary Dealers

AFME/Primary Dealers advocates on behalf of eurozone government bond Primary Dealers with relevant government and regulatory bodies through dialogue and market best-practices recommendations. AFME/Primary Dealers is a Division, which promotes integration and efficiency within the European government bond market.

It addresses primary and secondary market issues by facilitating consultation with key market participants, including European Debt Management Offices, the European Commission, the European Central Bank, and trading platforms. As an ancillary part of its advocacy efforts, AFME/Primary Dealers provides recommendations for efficient primary and secondary market procedures and promotes best practices in order to support industry standards as an efficient alternative to government regulation.

Disclaimer

This handbook has been compiled from public information, including that available on the various Debt Management Agencies' websites and information submitted by the AFME European Primary Dealers members and other interested third parties. It is intended to be used only as a general guide for Primary Dealers to better understand the different Primary Dealership systems in place in Europe.

Whilst all reasonable care has been taken in the preparation of this guide, AFME and the author do not accept any responsibility for any omissions or errors that it may contain. Nothing in this guide should be construed as legal advice and AFME does not accept any responsibility for any consequence or use of the data provided in it.

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Introduction and thanks

Welcome to our latest edition of the AFME/Primary Dealers Handbook. Since it was first published in 2008, this handbook has proven to be an invaluable reference work for European government bond market participants; dealers, brokers, DMOs, investors, as well as policymakers and journalists.

Primary Dealers fulfil a key role by providing liquidity in the markets for government debt and the sovereign debt crisis emphasised the importance of Primary Dealers within the structure of the government debt markets.

Each of the 16 chapters of this handbook offers a detailed description of the infrastructure of the primary and secondary market of a European country and the organisation of its Primary Dealer system.

The appendices offer cross country overviews of certain organisational aspects, such as the electronic trading environment and summaries of the Primary Dealerships and sovereign credit ratings, while the preamble provides general background information on government bond trading in Europe.

Future handbook updates will be available on the AFME website.

This European Primary Dealerships Handbook would not have been possible without the active cooperation of the European Debt Management Offices of Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Netherlands, Portugal, Slovenia, Slovakia, Spain, Sweden and the United Kingdom.

We would also like to thank our members who actively trade in the European Government bond markets, as well as the various trading platforms, for their cooperation and valuable feedback.

We hope that this handbook provides a convenient and user-friendly source of information on the structure and functioning of the various Primary Dealership systems in Europe.

Victoria Webster Director Primary Dealers, Credit & Covered Bonds

European Primary Dealers Handbook



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Preamble

The aim of this Preamble is to put information contained within this handbook into context, by explaining how the government bond market is structured. A useful starting point is to explain how trading in the bond market differs from trading in the equities market.

1. Structure of the Government Bonds Market

In the equity market, issuers generally have one instrument which is subject to a single initial public offering – with the possibility of additional rights issues at later stages in a company's development. As a share has no redemption date, an investor must sell it in the secondary market in order to realise its value. In the past, equity trading was concentrated on the national exchanges where all participants would do the bulk of their trading (at least the trading in smaller sizes). Since MiFID, exchange monopolies have been subject to competition from recognised Multilateral Trading Facilities and crossing networks. As such, the market share of exchange trading has gone down considerably from highs of around 90%. Nevertheless, exchanges remain dominant players.

By contrast, bonds trade over the counter; both electronically and via voice brokers. Whereas equities only have a single issue, government bond issuers have many outstanding issues of varying maturity; currency and type (e.g. bullets, linkers). Furthermore, a good part of the market is "buy and hold", because bonds can be held to redemption. Once those bonds are purchased, they are simply redeemed at maturity by the investor and will not be traded again.

Therefore, government bonds are inherently less liquid than equities, which has resulted in a different type of market. It is characterised by a Primary Dealer system.

2. Price Transparency

The decentralised structure of the government bond market results in the fragmentation of sources of price information. However, there exists a large and competitive industry of financial services providers whose business it is to collect, aggregate, consolidate or evaluate price information for use by dealers and investors. They compete, amongst other things, on data availability, user friendliness, speed and analytical soundness. This dynamic market-driven process reacts to changing market conditions and investor needs, thereby helping to determine optimal price transparency in the markets.

Nevertheless, the decentralised market environment might lead to some confusion among market participants over where to find market data with specific characteristics. The AFME guide on price transparency aims to provide some clarity, by offering an overview of the market for government bonds price and market data.

The members of AFME/Primary Dealers are working with policymakers to help implement the price transparency regime under MiFID II.

3. The Primary Dealer System

Primary Dealers are financial institutions that are appointed by sovereign issuers to buy, promote and distribute government bonds.

Once a bond is issued, issuers rely on their Primary Dealers to make a market and support the liquidity in the product. Market participants profit from this liquidity. It allows market makers to be more aggressive in their pricing for clients because they know that they can unwind positions taken from clients in this market.

Quoting in the interdealer market can also take the form of a quoting obligation. Under this obligation, which forms part of most Primary Dealer contracts, banks are obliged to quote two-way prices to each other within a certain spread and for a number of hours per day. Prices that are formed here, serve as an important benchmark throughout the market. As this can create a cost to the Primary Dealer, the issuers can in turn provide them with certain incentives; such as access to auctions, consideration for syndications, and access to a non competitive bidding facility after an auction, or the possibility to compete for derivatives contracts.



This type of market making is concentrated on certain recognised electronic trading platforms. This provides a liquid and transparent inter-dealer market. The interdealer systems generally operate via cross-matching methods. This means customers are able to enter anonymous buy and sell orders that are automatically executed when another party's buy and sell orders are entered at the same price, or when the bid is "hit", or the offer "lifted."

In spite of the market making requirements within the electronic interdealer market, electronic trading encompasses only half of the executed trades. Dealers prefer to do transactions in large sizes of "off the run" bonds (where liquidity is at its thinnest) with voice brokers, to prevent the market from moving against them.

As well as the interdealer market there is also the dealer-to-customer market which, in the wholesale market, is defined as the trades between dealer and institutional investor. This market can be multidealer oriented, in which case it is centred on a trading platform. The end investor then has a choice between the quotes of several dealers. The market can also be single dealer oriented. In this case, the investor receives quotes during one-on-one contact with the bank. This contact can be via email, phone or via an internal electronic trading system.

Certain dealer-to-customer platforms operate through a request for quote system. The request for quote system enables an investor to send a request for a bid, having seen and selected from the best indicative quotes for a specific trade, simultaneously to multiple dealers (of which it is a customer). Bids from those dealers that choose to respond are firm for a specified period of time. They typically are unilateral offers to buy or sell. The investor can then choose to execute the trade with any of the responding dealers. In the request for quote, only the requesting party sees the quotations for the trade provided by the dealers. However, there are also dealer-to- customer platforms that use firm/executable quotes.

In general, indicative quotes are very close to, or the same as, executable or firm quotes. Typically, over 75% of trades are executed within the indicative bid/offer spreads. Trades executed outside the indicative range are mostly the larger ones.



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1. Austria

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A. List of Primary Dealers¹

| FIRM | Austria (AT) | Firm's location |
|--|--------------|-----------------|
| Merrill Lynch International | X | London |
| Barclays Bank PLC | Х | London |
| BAWAG | X | Vienna |
| BNP Paribas | X | Paris |
| Citigroup Global Markets Limited | Х | London |
| Commerzbank AG | Х | Frankfurt |
| Deutsche Bank Aktiengesellschaft | Х | Frankfurt |
| Erste Group Bank AG | X | Vienna |
| Goldman Sachs International Bank | Х | London |
| HSBC France | Х | Paris |
| J.P. Morgan Securities plc | Х | London |
| Landesbank Baden-Württemberg | X | Stuttgart |
| Morgan Stanley & Co. International plc | Х | London |
| Natixis | X | Paris |
| NatWest Markets | X | London |
| Nomura International plc | X | London |
| Oberbank AG | X | Linz |
| Raiffeisen Bank International AG | X | Vienna |
| Société Générale | X | Paris |
| UniCredit Bank AG | X | Munich |
| Volksbank Wien AG | X | Vienna |
| TOTAL | 21 | |

KEY:

AFME/Primary Dealer Members



AFME Members

1 List of the Primary Dealers operating in the Austrian government bond market as of September 2017. Source: Austrian Treasury





B. Credit Rating

Austrian debt is currently rated as follows:²

- Standard & Poor's: AA+ (stable)
- Moody's: Aa1 (negative)
- Fitch Ratings: AA+ (stable)
- DBRS: AAA (stable)

C. Debt Instruments

| Government Bonds | Government bonds are issued through the Austrian Treasury (Oesterreichische Bundesfinanzierungsagentur - OeBFA) in the name of and for the account of the Republic of Austria. |
|------------------------|---|
| Austrian Treasury Bill | The ATB programme provides short-term products alongside the existing debt facilities of the Republic of Austria. The programme was launched in March 1999 with an unlimited maximum amount of bills outstanding. It allows a period of two days between launch and the payment date, thus enabling the Republic of Austria to react quickly to investors' needs. The bills are sold by auction and/or on a tap basis. The programme also includes an "ad hoc dealer" option. Standard & Poor's and Moody's have assigned a A-1+/P-1 rating to the programme. |
| Euro Medium Term Note | The EMTN programme of the Republic of Austria, established in March 1999, contains standardised documentation for the issuance of international, currency-hedged notes under English law. |
| Bundesschatz | Bundesschatz (http://www.bundesschatz.at) is the online retail savings product of the Republic of Austria. Launched in 2002 by the Austrian Treasury as part of the e-government initiative of the Austrian government. It combines the safety of the Republic of Austria with quick and easy online execution 24 hours a day, seven days a week. Maturities range from one month to ten years and the minimum deposit is €100. There are no fees or costs charged by the Republic of Austria. |
| Australian Dollar MTN | The Australian Dollar Medium Term Note Programme, which was established in May 2004, is a master agreement to tap the market for Kangaroo Bonds. |





Terms and Conditions for Government Bonds

| Interest Payment | Interest (act./act.) is paid on the nominal value per annum, payable annually in arrears. The interest payment period of the bonds begins on the first day (including) of the term of the bond and ends on the day before the maturity date (including). The interest payment is effected exclusively by payment to OeKB CSD GmbH for the banks holding securities accounts for the bonds purpose. |
|-----------------------|--|
| Redemption | The bonds are redeemed on the maturity date at par. |
| Termination | Neither the Republic of Austria nor the bearer (which means the co-owner of the global bond corresponding to its respective interests in the global bond) of the bonds (the Bondholders) may terminate the bonds. |
| Denomination and Form | The bonds are issued in nominal values of €1000 and are represented entirely by a global bond in bearer form. There will be no claim for Government Bonds in definitive form. Each global bond will be lawfully signed by the Republic of Austria and the Court of Account of the Republic of Austria and will be deposited with OeKB CSD GmbH in its function as Central Securities Depositary until all of the obligations of the Republic of Austria under the Government Bonds have been satisfied. |
| Trustee Investments | The bonds are eligible for use as trustee investments. |
| Limitation of Claims | Claims for the payment of interest expire three years after maturity and claims for payment of principal expire 30 years after maturity. |
| Status | The bonds constitute direct, unsecured, unconditional and unsubordinated obligations of the Republic of Austria and will rank pari passu, without preference among themselves, with all other unsecured External Indebtedness of the Republic of Austria, from time to time outstanding. In the event of a modification of the bonds, the Republic of Austria shall have no obligation to effect equal or rateable payment(s) at any time with respect to any such other External Indebtedness and shall have no obligation to pay other External Indebtedness at the same time or as a condition of paying amounts due under the bonds and vice versa. "External Indebtedness" means any indebtedness, which is in the form of Government Bonds or any other bonds, which are listed on a stock exchange. |
| Negative Pledge | The Republic of Austria will undertake for the benefit of the Bondholders for such period until the principal and all other payments under the Terms and Conditions of the bonds have been made by the Paying Agent that it will not provide security for any other obligations resulting from external indebtedness without securing the Bondholders equally and rateably therewith. |
| Payment | Payments of principal and interest shall be made exclusively to the Paying Agent. If the maturity date for payment of any amount in respect of the Government Bonds is not a Business Day, the Bondholder shall not be entitled to payment until the next such day in the relevant place and shall not be entitled to further interest or other payment in respect of such delay. For these purposes, "Business Day" means a day (other than a Saturday or a Sunday) on which the Clearing System as well as all relevant parts of the Trans-European Automated Real-time Gross Settlement Express Transfer system (TARGET2) are operational to effect payments. |



| Taxation | All payments of principal and interest will be made without deduction for or on account of any present or future taxes or duties of whatsoever nature, imposed or levied by or within the Republic or any province, municipality or other political subdivision or taxing authority therein or thereof, unless the deduction of such taxes or duties is required by law. In that event, the Republic will pay such additional amounts as may be necessary in order that the net amounts received by the Bondholders and the holders of the coupons (the "Coupons") after such deduction shall equal the respective amounts of principal and interest which would have been receivable in respect of the Government Bonds or, as the case may be, Coupons in the absence of such deduction. The Republic must not pay such additional amounts in respect of any Government Bonds or Coupon if: 1. Government Bonds or Coupons are presented for payment in the Republic of Austria; or 2. such deduction would not be required if the Bondholder or any person acting on his behalf had presented the requested form or certificate or had made the requested declaration of non-residence or similar claim for exemption upon the presentation or making of which that Bondholder would have been able to avoid such deductior; or 3. a Bondholder who is liable to such taxes or duties in respect of such Government Bonds or Coupons, has a connection with the Republic of Austria other than the mere holding of the Government Bonds or Coupons; or 4. Government Bonds or Coupons are presented more than 30 days after the respective due date except to the extent that the Bondholder thereof would have been entitled to additional amounts on presenting the same for payment at the latest on the expiry of such period of 30 days; or 5. such deduction or withholding is made pursuant to (i) any European Union Directive or Regulation or (ii) any international or intergovernmental agreement, to which the Republic of Austria or the European Union is a party, or (ii) any provision of law implementing |
|---|---|
| Bond Stripping | sources mentioned under (i) or (ii) above. The stripping of Government Bonds (fixed-rate only), specifically designated for this purpose by the Republic of Austria, into bond capital and bond interest coupons according to the conditions of the strip programme for government bonds, is possible. |
| Reopening of Issues | The issue volume of individual issues of Government Bonds may be increased by way of tap issues later on. |
| Stock Exchange Listing and Tier 1 Collateral | The bonds will be at least listed in the Official Market at the Vienna Stock Exchange at the earliest possible date. An application for inclusion in the list of assets eligible for use as Tier 1 collateral in the System of European Central Banks credit operations will be made promptly. |
| Announcements | All announcements shall be legally effective upon publication in the "Amtsblatt zur Wiener Zeitung". The holders of the bonds will be deemed to have been notified of the content of any such notice. The Republic of Austria may deliver the relevant notice to the Clearing System in lieu of publication in the "Amtsblatt zur Wiener Zeitung", for communication by the Clearing System to the Bondholders, provided that the rules of the stock exchange on which the Government Bonds are listed permit such form of notice. Any such notice shall be deemed to have been given to the Bondholders on the fifth day after the day on which the said notice was given to the Clearing System. |
| Principal Paying Agent | Oesterreichische Kontrollbank Aktiengesellschaft. |



| Applicable Law, Jurisdiction | These Terms and Conditions shall be governed by and construed in accordance with Austrian law, excluding the conflict of law rules of private international |
|------------------------------|---|
| | law. Exclusive place of jurisdiction shall be the respective court with subject- matter jurisdiction for Vienna, Inner City. |

D. Primary Market

i. Government Bonds

a. Auctions

Government bonds have been issued under an auction procedure since 1989. Bonds are offered to a defined group of financial institutions at regular intervals. The eligible institutions (21 at present) are called primary dealers.

The participants are obligated to place a bid for at least 1/21 of the issuance volume at the auction date. The institutions that are prepared to pay the highest price, i.e. that demand the lowest yield, are awarded the bonds for which they bid. The entire auction procedure has been carried out electronically since 1998 by means of the Austrian Direct Auction System (ADAS) by Oesterreichische Kontrollbank AG (OeKB). The auction platform was developed and is administered by OeKB. More details on the auction procedure can be found in the OeKB brochure: Auction procedure for Austrian Government Bonds.

The auction results are published on the website of the Austrian Treasury. According to international best practice standards, the planned annual issuance volume and the Auction Calendar are announced each December for the forthcoming year. Exactly one week prior to the auction date the Austrian Treasury publishes the planned issuance volume and maturity for the respective auction.

| Maturities | No more than 100 years |
|------------------------|---|
| Currency | Euro € |
| Dealers | Participants in the Auction procedures (i.e. The list of Primary Dealers) |
| Interest Rate | Fixed interest rate (act./act.) payable annually in arrears or floating interest rate (act/360) |
| Denomination | €1,000 |
| Form of the Notes | Bearer Global Notes |
| Status of the Notes | Pari passu |
| Negative Pledge | Yes |
| Cross-Default | No |
| Taxation | Austrian Standard |
| Listing | At least the Vienna Stock Exchange |
| Business Days | TARGET2 |
| Principal Paying Agent | Oesterreichische Kontrollbank AG |
| Clearing System | OeKB CSD GmbH |
| Governing Law | Austrian law |
| Strips | Possible for fixed interest rate bonds |



b. Debt Issuance Programme

Since 1999, the Republic of Austria has been issuing government bonds under the DIP through a bank syndicate. Only participants in the auction procedure are permitted to act as lead managers and co-lead managers. The syndicate may change for each issue. DIP 144A allows certain groups of investors in the United States of America to buy government bonds subject to the relevant selling restrictions. The terms and conditions of these government bonds remain unchanged except for necessary adjustments to these selling restrictions. This programme enables the Republic to react in a fast and flexible way to specific market situations and investor demands.

| Maturities | No more than 100 years |
|------------------------|---|
| Currency | Euro € |
| Interest Rate | Fixed interest rate (act./act.) payable annually in arrears or floating interest rate (act/360) |
| Denomination | €1,000 |
| Form of the Notes | Bearer Global Notes |
| Status of the Notes | Pari passu |
| Negative Pledge | Yes |
| Cross-Default | No |
| Taxation | Austrian Standard |
| Listing | At least the Vienna Stock Exchange |
| Business Days | TARGET |
| Principal Paying Agent | Oesterreichische Kontrollbank AG |
| Clearing System | OeKB CSD GmbH |
| Governing Law | Austrian law |
| Strips | Possible for fixed interest rate bonds |

ii. Treasury Bills

The programme was launched in March 1999 with an unlimited maximum amount of bills outstanding. It allows a period between launch and payment date of two days, thus enabling the Republic to react quickly to investors' needs. The bills are sold by auction and/or on a tap basis. The programme also includes an "ad hoc dealer" - option. Standard & Poor's and Moody's have assigned a A-1+/P-1 rating to the programme.



| Maturities | 7 to 364 days |
|------------------------|--|
| Currency | Any currency |
| Dealers | Dealers of Austrian Treasury Bills ³ |
| Interest Rate | Discount, fixed or floating |
| Denomination | Euro 100,000 and conventionally accepted denominations in other currencies |
| Form of the Notes | Bearer Global Bills |
| Status of the Notes | Pari passu |
| Cross-Default | No |
| Taxation | Austrian Standard |
| Listing | The bills will not be listed on any stock exchange, unless otherwise agreed |
| Business Days | Euro: TARGET2 and London; other currencies: relevant financial centre of the currency and London |
| Principal Paying Agent | Citibank N.A., London |
| Clearing System | Euroclear, Clearstream |
| Governing Law | English law |

iii. Issuing Frequency/Schedule for the Auction Procedure

The issuance of government bonds is carried out monthly. At the end of each year the issuer announces the auction dates projected for the coming year.⁴

| 1 week prior to the auction (T-7) | Maturity recommendation of the participants. Announcement of the auction parameters. |
|-----------------------------------|--|
| Tuesday (T) by CET 11.00 | Submission of competitive bids and immediate announcement of competitive results once the issuer's consent has been given. |
| Wednesday (T+1) by CET 11.00 | Submission of non-competitive bids and immediate announcement of the total results and individual allotments. |
| Thursday (T+2) | Settlement; Listing |

iv. Announcement of Issues

The parameters for the issue of the government bond (ISIN, maturity, accrued interest), its planned issue size and information on the submission of bids are announced electronically via Austrian Direct Auction System (ADAS), fax and e-mail to the auction participants and additionally published on the OeKB website one week prior to the auction. In case of multiplesecurities auctions ('parallel auction') the issuer may determine and announce only the total competitive issue volume to be auctioned. In this case the distribution of the total competitive issue volume to the respective government bonds is determined and announced after the deadline of the competitive bidding.

3 Available at http://www.oebfa.at/en/financinginstruments/pages/participantsATB.aspx

4 For more information see the Republic of Austria's investor presentation



v. Submission of Competitive Bids

The start time for the bidding process is at 10.00 a.m. CET on auction day and the deadline for the submission of competitive bids falls one hour later at 11.00 a.m. CET. The actual time is given by the system to guarantee equal opportunities for all bidders. Only those bids that have been submitted electronically before the deadline are accepted.

- The bids must be submitted in denominations of €1 million or a multiple thereof in round numbers containing the yield or the price at which the issuer is prepared to accept the nominal amount.
- Multiple bids are allowed. Bids may be modified and submitted prior to the deadline as often as desired.
- The minimum total amount a bank is obliged to bid corresponds to the issue size announced by the issuer divided by the number of auction participants. The maximum volume bid per bank is 30% of the issue size, if the issue size is equal to or exceeds €1 billion. For competitive issues of volumes below €1 billion, the maximum limit corresponds to the announced issue volume.
- Bids are subject to a real-time plausibility check to avoid erroneous bids and to guarantee the above-mentioned bidding limits.

vi. Allotment of Competitive Bids

The bids submitted are ranked in descending order, according to price. The allotment of bonds is carried out based on the corresponding prices bid. Bids at the lowest price accepted (the cut-off price) may be subject to pro rata curtailments to provide for a precise representation of the scheduled competitive issue size. On the basis of the actual set of bids, all figures are calculated by the electronic system on a permanent basis.

Allotments per participant (nominal amount, price, amount payable, etc.) and the overall issue results are announced electronically via ADAS immediately after the expiration of the deadline for the submission of competitive bids and the confirmation of the issuer via ADAS.

vii. Cancellation of an Issue

The issuer may cancel an issue up to 12.00 p.m. CET on the day of the auction. In such a case, a new auction date is set for one week later. Since the introduction of electronic auction system in 1998 only one auction has been cancelled by the issuer.

viii. Submission of Non-Competitive Bids

An additional 20% of the competitive issue amount is made available to the participants for the submission of noncompetitive bids. Each bank is entitled to submit a non-competitive bid at the average price of competitive allotments via ADAS until 11.00 a.m. CET one business banking day after the announcement of competitive allotments.

The available amount is split among the participants as follows: 1/3 is based on predefined secondary market criteria, 2/3 is based on the individual weighted average of the competitive allotments of the two previous auctions.

ix. Determination of Coupon and Issue Price

In the case of a new issue where a yield auction is employed, the coupon is calculated on the basis of the weighted average of the accepted yields and an issue price which shall be as close to par as possible. However, in practice new bonds have been generally issued via syndicated format over the past years. In case of a fungible tranche (where a price auction is employed) the issue price corresponds to the weighted average of the accepted prices.



x. Dissemination of Auction Results

The announcement of the final results and the allotments per participant (amounts payable, prices, etc.) is carried out electronically by OeKB via ADAS, immediately after the issuer confirms the issue.

xi. Austrian Direct Auction System (ADAS)

Since May 1998 the auction procedure has been carried out by ADAS, software developed for this purpose by OeKB. This software has been adjusted continuously to accommodate changing requirements, and as such, it covers a wide range of possibilities (different auction procedures, submission of competitive and non-competitive bids, parallel auctions, personalized reports etc.). Constant communication and feedback from both sides, the issuer as well as the banks, before, during and after the auction, has enhanced the development of ADAS.

Thus, ADAS was established as a reliable and user-friendly application with a high standard of security. In addition to technical support, OeKB assists all parties involved in dealing with questions concerning the auction procedure. All results may also be calculated using Excel-spreadsheets, in order to guarantee the participants maximum transparency and the possibility to arrive at the same results calculated by the system.

The essential advantage of the electronic auction-system may be found in its ability to respond quickly:

- The submission of bids is carried out electronically.
- The issuer confirms the issue electronically once the deadline for the submission of competitive bids has expired. In case of parallel auctions, the issuer determines the issue size per government bond electronically.
- Next, the total auction results are made available to the participants.
- All information (total auction results, resulting parameters in case of a new issue as well as individual allotments per bank) is communicated electronically via ADAS and are also distributed automatically via email and/or fax without delay.

E. Secondary Market⁵

i. Interdealer Market

a. Multiplatform Environment

According to the Master Agreement for the Issuance of Government Bonds of the Republic of Austria, Primary Dealers are obliged to actively participate in the secondary market and ensure a high level of liquidity. Austria doesn't have a firm quoting obligation in place but the Primary Dealers are required to submit data, which are being closely monitored.

Austria encourages electronic trading for the sake of transparency and facilitating price discovery. Austria leaves the selection of a platform to its Primary Dealers and does not prescribe specific platform eligibility criteria.

Austria regularly receives data from all major platforms on a voluntary basis. This data is used to monitor secondary market activity and fulfilment of the Primary Dealers' obligation to actively participate in the secondary markets.



ii. Dealer to Customer Market

a. Direct Negotiation

Private Placements, Loans, Treasury Bills and US Commercial Paper Notes.

b. E-trading

Austrian government bonds (RAGB), are actively traded on all major Dealer-to-customer platforms (e.g. Bloomberg, Bondvision and TradeWeb).

c. Sale of "Bundesschatzscheine" (Bundesschätze) over the Internet

The main investors are real money accounts such as pension funds and insurance companies. However, since August 2002, "Bundeschätze" have been offered directly to retail investors over the Internet. By entering the website www.bundesschatz. at, investors have the possibility to open an account directly at the Republic of Austria. Investors can choose between maturities of one month (BS 1), three months (BS 3), six months (BS 6), 12 months (BS12), two years (BS24), four years (BS48), five years (BS60) and 10 years (BS120), respectively Upon maturity, they have the option either to re-invest their capital and interest or to receive payment of capital and interest. The opening of an account and all transactions are free of charge.

F. Appraisal of the Activity of Primary Dealers

Austria uses a performance measurement system based on a broad range of criteria both quantitative and qualitative. Secondary market activity of Primary Dealers is monitored on a daily basis. Reports on the performance are sent to Primary Dealers monthly. A preliminary ranking including all performance aspects is published in December.

The performance ranking includes:

- Successful participation in the primary markets
- Active market making for all RAGB: providing narrow bid/offer prices with high bid/offer sizes during market hours.
- Share of electronic trading
- Turnover statistics: particularly turnover with real money investors
- Spread-to-peers: spreads versus peer countries with similar quality are taken into account
- Qualitative factors: service quality operational quality, reputational quality.

The final ranking's top ten dealers are made public via the website in January.

G. Contacts

i. Austrian Treasury

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Markus Stix

Managing Director, Treasury Markets markus.stix@oebfa.at Tel: +43 1 512 25 11 22

Gero Sodia

Oesterreichische Kontrollbank AG - Auction and Paying Agent for Austrian Government Bonds govbonds@oekb.at Tel: +43 1 531 27 1315 Fax: +43 1 531 27 5233

ii. Primary Dealers Contact Details

| FIRM | CONTACT |
|---|--|
| MERRILL LYNCH | |
| 2 King Edward Street London EC1A 1HQ United Kingdom | Stefan Auerweck Trading stefan.auerweck@baml.com |
| BARCLAYS | |
| 5 The North Colonnade | Mark Thrush |

| 5 The North Colonnade | Mark Thrush |
|-----------------------|--|
| Canary Wharf | Trading |
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| DEUTSCHE BANK | |
|---|--|
| Mainzer Landstrasse 11-17 D-60329 Frankfurt am Main Germany | Natacha Hilger Trading +49 69 9103 2853 natacha.hilger@db.com |

| GOLDMAN SACHS | |
|--------------------|-----------------------|
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| HSBC | |
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| Avenue des Champs Elysée 103 F-75008 Paris France | Franck Motte Trading +33 1 40 70 22 94 franck.motte@hsbc.fr |

| JP MORGAN | |
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| MORGAN STANLEY | |
|------------------------|---------------------|
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| NATIXIS | |
|-----------------------|-----------------------------|
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| France | Roberto.burello@Natixis.com |

| NOMURA | |
|-----------------|-----------------------|
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| NATWEST MARKETS | |
|---------------------------|---------------------------------|
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| SOCIETE GENERALE | |
|--|---|
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iii. Central Bank

Austrian National Bank

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A. List of Primary Dealers and Recognised Dealers¹

| FIRM | Belgium (BE) | Firm's location |
|------------------|--------------|-----------------|
| ABN AMRO | • | Amsterdam |
| Barclays | X | London |
| Belfius | • | Brussels |
| BNP Paribas | X | Brussels |
| Citigroup | X | London |
| Commerzbank | • | Frankfurt |
| Crédit Agricole | Х | Paris |
| Goldman Sachs | • | London |
| HSBC | X | Paris |
| ING | Х | Amsterdam |
| J.P. Morgan | X | London |
| KBC | X | Brussels |
| Morgan Stanley | X | London |
| Natixis | X | Paris |
| NatWest Markets | X | London |
| Nomura | Х | London |
| Rabobank | • | Utrecht |
| Scotiabank | • | London |
| Société Générale | X | Paris |
| TOTAL | 19 | |

KEY:



AFME/Primary Dealer Members



Non-AFME Members

AFME Members

X

Primary Dealers (PDs)



Recognised Dealers (RDs)

1 1. List of the Primary Dealers operating on the Belgian Government Bond Market as of January 2017. For complete information please refer to the Belgium Treasury website.

2. Belgium



B. Credit Rating²

The Belgian debt is rated as follows:

- Standard & Poor's: AA (stable)
- Moody's: Aa3 (stable)
- Fitch Ratings: AA- (stable)
- DBRS: AA(high) (stable)

C. Debt Instruments

| Linear Bonds (OLOs) | Medium, long and very long-term securities. Euro denominated. |
|--------------------------------|---|
| Treasury Certificates (TCs) | Short-term bills with maturities up to a maximum of one year. Euro denominated. |
| Euro Commercial Paper (ECP) | Short-term financing instrument that is issued on tap with maturities between 3 days and 1 year. ECP can be denominated in foreign currencies for which the European Central Bank publishes reference rates on a daily basis. |
| Euro Medium Term Note (EMTN) | Generally have a maturity between the one of Commercial Paper (below one year) and the one of bonds but there are EMTNs with a maturity of 10 years. |
| Schuldschein | Loan agreement, not a security, by which the borrower commits himself to the lender to reimburse him a fixed sum on a fixed date against a fixed remuneration. Euro denominated and governed by German law. |

D. Privileges and Obligations of Primary Dealers and Recognised Dealers³

i. Privileges

| Primary Dealers only | Primary Dealers and Recognised Dealers |
|--|--|
| To carry the title of "Primary Dealer in Belgian Government Securities". | To participate in competitive auctions of OLOs and TCs. |
| To submit non-competitive subscriptions after the auction (see section E – Auctions/ NCs). | To strip and to reconstitute OLOs and to convert into BE-strips. |
| To be the privileged counterparties of the Kingdom of Belgium in its debt management operations. | To participate in the buyback operations organised by the Belgium Debt Agency. |
| | To use the repo facility organised by the Belgium Debt Agency for OLO, TC and BE-strips. |
| | To be eligible counterparties of the Kingdom of Belgium in its debt management operations. |

2 Ratings correct as of September 2017

³ Source: Code of duties for the Primary Dealers and Code of Duties for the Recognised Dealers as of January 2017.



ii. Obligations

| Primary Dealers only | Recognised Dealers |
|---|--|
| Participation in the primary market - regular and significant participation in auctions. | To promote the placement of Belgian Government securities. |
| Participation in the secondary market - contribute significantly to the liquidity of OLOs, TCs and strips, including repos. | To contribute to the liquidity of the secondary market by quoting firm dealing prices to their customers. Also post up-to-date indicative prices on their screens for the securities which they trade and, at the minimum, for the market "benchmarks". |
| Quotation of firm rates or prices – must quote firm bid and offer rates or prices to customers for OLOs and TCs, as well as post indicative prices and rates. Participate as market maker in one or more of the selected e-trading platforms. | To actively participate, as market maker or market taker, in one or more of the selected e-trading platforms in Belgian Government securities. |
| Promotion and placement of Belgian Government securities – place OLOs, strips and TCs with final investors in Belgium and abroad | To submit a business plan within the timing determined by the Treasury. |
| Information and reporting - To report regularly on developments in the financial markets, and to provide general information to the Belgium Debt Agency. To submit a business plan and regularly a report on their activity (according to the European Harmonised reporting format). | To submit regularly to the Belgian Debt Agency a report on their activity (according to the European Harmonised reporting format). |
| Ethical Behaviour - PDs hold themselves to the highest standards in financial business practice. In particular, their activity in Belgian Government securities is consistent with the objective of the Belgian Debt Agency to maintain orderly, efficient and liquid markets | Ethical Behaviour - RDs hold themselves to the highest standards in financial business practice. In particular, their activity in Belgian Government securities is consistent with the objective of the Belgian Debt Agency to maintain orderly, efficient and liquid markets |

E. The Primary Market

i. Auctions

a. Duties and Obligations

The Primary Dealers have the duty to participate regularly in the auctions of OLOs and TCs. In exchange for fulfilling this obligation, the Primary Dealers have the right to acquire a certain amount of the corresponding securities at the weighted average price or rate auctioned (see below – non-competitive subscriptions section⁴).

At the end of the period for which the status of Primary Dealer has been granted, the amount of the Competitive Bids (CBs) accepted from each Primary Dealer, expressed as a percentage of the total amount allocated by the Treasury on a competitive basis, represents on average:

- At least 2% for TCs on a duration weighted basis;
- At least 2% for OLOs on a duration weighted basis.

The Belgian Debt Agency (BDA) has the right to publish a league table ranking the Primary Dealers according to their market share in the auctions.

Linear Bonds (OLOs)

Auctions are based on the prices offered by bidders. The amount per bid should be a multiple of $\notin 1$ million with a minimum of $\notin 10$ million. All bids submitted at prices higher than the stop price are allotted for their full amount. Bids at the stop price may be proportionally scaled down with a minimum p/bid of $\notin 10$ million, and rounded up to the nearest $\notin 1$ million.

| Before the Auction (T= Day of the auction) | T-5 (Monday preceding T): Auction announcement Auctions are normally announced on the Monday preceding the auction after 5:00 p.m (CET). The BDA's pages on Thomson Reuters and Bloomberg mention the OLO lines - usually two or three - that will be reopened. T-1 (Friday before T): Announcement of the range On the Friday morning before the auction, the Treasury announces also the range of the global nominal amount to be auctioned, all lines together. |
|---|---|
| During the Auction | T: Submission of the bids and results On the day of the auction, competitive bids are submitted on the Bloomberg Auction System (BAS) from 11:30 a.m. onwards until 12 noon at the latest. The auction results are normally published a few minutes after cut-off time of the bidding process. Rule: The Primary Dealer whose accepted competitive bids total more than 40% of the amount issued in a line at an auction, informs the BDA of the amount it has taken for its own account and of the degree of concentration of its underlying customers' orders (with no name disclosure). |

4 The Primary Dealers can submit ordinary non-competitive subscriptions and special non-competitive subscriptions, following the conditions contained in appendix 2 of the present Code of Duties (or according to the conditions contained in the appendix 3 for the newly appointed Primary Dealers)



| After the Auction | T+2 (Wednesday following T): Settlement Settlement of the competitive bids takes place until 4:00 pm the second Target operating day following the auction through the National Bank of Belgium Securities Settlement System (NBB SSS). |
|-------------------|--|
| | T+3 (Thursday following T): Ordinary non-competitive subscriptions Participating in ordinary non-competitive subscriptions is an advantage granted to Primary Dealers. Ordinary non-competitive subscriptions take place between 11:30 a.m. and 12 noon. Non-competitive bids are submitted at the weighted average price of the auction. |
| | T+5 (Monday following T): Special non-competitive subscriptions The 5 top ranked Primary Dealers entitled to special non-competitive subscriptions have to submit their bids between 11:30 a.m. and 12. Non- competitive bids are submitted at the weighted average price of the auction. |
| | Settlement of the Ordinary and special non- competitive subscriptions take place on the day of their introduction (ordinary subscriptions on T+3 and special subscriptions on T+5). |
| | Rule: In the event of abnormal trading conditions in a specific line, the Treasury may require a Primary Dealer to disclose the size of the position taken for its own account in that line. |
| | If the size of the position is likely to cause market distortions, the Treasury may request that the Primary Dealer to reduce the amount of the position. |

Treasury Certificates (TCs)

The BDA issues, in principle, twice a month on a Tuesday, Treasury Certificates of 3 and 6 or of 3 and 12 months by means of competitive bidding.

Auctions of Treasury Certificates are based on the rates offered by the bidders. Bids must be at least \notin 10 million and a multiple of \notin 1 million.

The BDA determines a limit rate. All bids submitted at rates lower than this limit rate are allocated for their full amount. Allocations in response to bids submitted at the limit rate chosen by the BDA may be proportionally scaled down. The amounts thus reduced are rounded up to the next tranche of $\notin 1$ million with a minimum of $\notin 10$ million per bid.

2. Belgium



| Before the Auction (T= Day of the auction) During the Auction | T-2: Invitation to bid The invitation to bid is announced on the BDA's pages before 4 pm (CET) on the Friday before the auction (T-2). T: Submission of the bids and results On the day itself (T), the bids must be submitted between 11:00 and 11:30 AM (CET). The results of the auction are published as quickly as possible a few minutes after cut-off time of the bidding process on the BDA's pages. |
|---|--|
| After the Auction | T+2: Settlement Settlement of the competitive bids (TC auction) takes place on the second Target operating day following the auction. T+2: Ordinary non-competitive subscriptions Participating in ordinary non-competitive subscriptions is an advantage granted to Primary Dealers. Ordinary non-competitive subscriptions take place between 11:00 a.m. and 11:30 am. Non-competitive bids are submitted at the weighted average yield of the auction. T+4: Special non-competitive subscriptions Primary Dealers entitled to special non-competitive subscriptions have to submit their bids between 11:00 a.m. and 11:30 am. Non-competitive bids are submitted at the weighted average yield of the auction. Settlement of the Ordinary and special non- competitive subscriptions take place on the day of their introduction (ordinary subscriptions on T+2 and special subscriptions on T+4). |

Restrictions applicable to the auction (issuance):

- 25% rule: the amount bid for at each yield cannot supersede 25% of the indicative issuance amount announced by the BDA; and
- 40% rule: when issuing a new 12-month TC line the total amount of a participant's accepted bids cannot supersede 40% of the issued amount.

If deemed necessary, the Treasury can occasionally extend this rule to other TC lines offered at the auction.

b. Non-Competitive Subscriptions (NCs)

General Principle

The Primary Dealers have the right to acquire, following the auction of OLOs or TCs, a certain amount of the corresponding securities at the weighted average price or rate auctioned. They may participate twice in non-competitive subscriptions: once in the ordinary non-competitive subscriptions and a second time in the special non-competitive subscriptions.

Special NCSs

To be considered for the SNCSs, a Primary Dealer needs to be compliant in every month of the reference period for the relevant instrument. A Primary Dealer is compliant on a monthly basis if its Monthly Compliance Ratio (MCR) is at least 85%. In the group of the compliant Primary Dealers, a ranking will be established by taking into account the quoting performance and volumes traded on the selected e-platforms during the reference period.⁵

5 The 10% will be distributed between the 5 best ranked Primary Dealers based on the GR, as follows: Primary Dealer 1 receives 35% of the 10%, Primary Dealer 2 receives 25% of the 10%, Primary Dealer 3 receives 18% of the 10%, Primary Dealer 4 receives 13% of the 10%, Primary Dealer 5 receives 9% of the 10%



The basis of this ranking is called: Global Result (GR). **The five Primary Dealers with the highest average GR during the reference period are entitled to the SNCS**. The calculation method of the GR can be found on the private Primary Dealer & Recognised Dealer website.

| | Ordinary NCSs | Special NCSs |
|------|---|--|
| OLOs | <i>Exercise time:</i> From 11:30 a.m. to 12:00 noon (CET) on 3 rd TARGET day following the auction. The value date of the ONCSs is the same as the exercise date. | <i>Exercise time:</i> From 11:30 a.m. to 12:00 noon (CET) on 5th TARGET day following the auction . The value date of the SNCSs is the same as the exercise date. |
| | Amount: 20% of the average of two amounts of the accepted CBs of the specific Primary Dealer: 1) in the relevant line at the current auction; 2) in the corresponding maturity segment at the previous auction. | <i>Amount:</i> 10% of the average of two amounts of the accepted CBs of all Primary Dealers in: the relevant line at the current auction; and the corresponding maturity segment at the previous auction. |
| | In the case of there being no issuance in that maturity segment in the previous auction, the last auction in which a corresponding maturity segment was issued will be considered. | |
| | <i>Maturity segments:</i> The following residual maturity segments are applicable for the auctions of OLOs: medium: below 8 years; long: from 8 years to less than 11 years; and very long: 11 years and beyond. | |
| TCs | <i>Exercise time:</i> From 11:00 a.m. to 11:30 a.m. (CET) on the value date of the auction. The value date of the ONCSs is the same as the exercise date. | <i>Exercise time:</i> From 11:00 a.m. to 11:30 a.m. (CET) on the 4th TARGET operating day following the auction. The value date of the SNCSs is the same as the exercise date. |
| | Amount: 20% of the average of two amounts of the accepted CBs of the specific Primary Dealer: 1) in the relevant line at the current auction; 2) in the corresponding maturity segment at the previous auction. | <i>Amount:</i> 10% of the average of two amounts of the accepted CBs of all Primary Dealers in: the relevant line at the current auction; and the corresponding maturity segment at the previous auction. |
| | <i>Maturity segments:</i> The following residual maturity segments are applicable for the auctions of TCs: short: from 0 to less than 5 months; medium: from 5 to 9 months; and long: from 9 to 12 months | |

NCSs Per Instrument



2. Belgium



c. Auctions – Non-Competitive Subscriptions for New Primary Dealers Calculation of the Ordinary Non-Competitive Subscriptions

During the first auction following the appointment of a new Primary Dealer, the authorised amount of Ordinary Non-Competitive Subscriptions of the new Primary Dealer is calculated following the same principles as for the other Primary Dealers.

However, the average of the accepted CBs is calculated as follows:

- First auction: accepted CBs of the new Primary Dealer at this auction divided by 1
- From the second auction onwards: same procedure as for the other Primary Dealers.

Eligibility for Special NCSs

A new Primary Dealer can become eligible for SNCSs as from the fourth month after his appointment (the status of Primary Dealer is, in principle, granted as from 1 January). The reference period for the new Primary Dealer is then as follows:

| Auction Dates | Reference period |
|---------------|--|
| January | Not applicable |
| February | Not applicable |
| March | Not applicable |
| April | Same procedure as for the other Primary Dealers, in this case: January and February |

ii. Syndication

Although auctions constitute the primary means of Belgian Debt issuance of OLOs, the BDA may from time-to-time issue by means of a syndicated offer, especially when issuing the first tranche of a new OLO-line.

The BDA announces the number of OLO syndications when publishing its funding plan. However, there is no commitment around the number of syndications. The Belgian DMO announces its decision through the press and the BDA's pages on Thomson Reuters and Bloomberg.

F. Secondary Market⁶

i. Interdealer Market

The Primary Dealers contribute significantly to the liquidity of the OLOs, of the stripped securities and of the TCs, including repos. The Primary Dealers carry out the major part of their transactions on one or more of the e-trading platform(s) selected in the framework of the procedure established by the BDA, hereafter referred to as the selected e-trading platforms.

At the end of the period for which the status of Primary Dealer has been granted, the amount of the purchases and sales reported by the Primary Dealer to the competent authority, expressed as a percentage of the total amount of the purchases and sales reported by all Primary Dealers, active during the entire reference period, represents on average:

- At least 2% for TCs ; and
- At least 2% for OLOs.

The repos and the buy & sell back (or sell & buy back) are excluded from the aforementioned calculation.

The PDs participate actively in the liquidity management transactions executed by the Belgian Debt Agency.

a. Definitions

- **Market Makers** Primary Dealers participate as market makers in one or more of the selected e-trading platform(s).
- **Quoting obligations**['] The quoting obligations are defined by the Government Securities Dealers Committee (GSDC) of which all Primary Dealers are a member Primary Dealers are allowed to implement their quoting obligation on any selected e-trading platform. Primary Dealers can quote a part of their allocated securities on one e-trading platform and another part on one or more other e-trading platforms. A Primary Dealer will be considered to have complied with its daily quoting obligations regarding a specific security only if it has complied with it on one platform. Primary Dealers commit to comply with the internal regulations of every selected e-trading platform on which they quote prices.
- **Appraisals of the quoting obligations** The rules of the performance appraisal are established by the BDA. The BDA provides information to the Primary Dealers with regards to these rules. The BDA publishes daily information on the Primary Dealer quoting performance. Primary Dealers' compliance with their quoting obligation is checked by the BDA on the basis of the activity reports submitted daily to the BDA by the selected e-trading platforms.
- **Market takers** Primary Dealers are encouraged to participate as market takers in all selected e-trading platforms. Recognized dealers actively participate, as market maker or market taker in one or more of the selected e-trading platforms.

⁷ Source: Code of duties for the Primary Dealers as of January 2017



Government Securities Dealers Committee (GSDC)°

The GSDC:

- Is composed of all Primary Dealers and chaired by the Belgian Debt Agency;
- May invite a representative of the selected platform(s) to attend its meetings as an observer;
- Determines the Primary Dealers' quoting obligations;
- Ensures that the organisation of every selected platform enables Primary Dealers to comply with their quoting obligations; and
- Issues recommendations to the selected platforms with the aim to standardise procedures across selected platforms to the extent possible;

b. Multiple Trading Platforms Environment

Since 1 April 2016, the following three Trading Platforms (TPs) have been selected as the platforms on which the Primary Dealers can comply with their quoting obligations for Belgian Government securities:

- BrokerTec
- BGC Brokers e-Speed
- MTS Belgium

The Primary Dealers can select at their discretion the platform on which they comply with their quoting obligations. The TP does not need to be the same for all the securities that a Primary Dealer is committed to quote.

The platform can also change from one day to another. However, for every security on any given day, the quoting obligations (QO) must be complied with on at least one single platform. The QO cannot be split across platforms intra-day per bond.

Primary Dealers can quote part of their allocated securities on one platform and another part on one or more other platforms. However, a Primary Dealer will be considered to have complied with its quoting obligations (time, quantity and spread) regarding a specific security as long as it has complied with it on one platform.

c. Compliance Monitoring

The following will be monitored by the BDA:

- Compliant time
- Spread
- Quantity
- Number of securities quoted

Primary Dealers' compliance appraisal is monitored for:

- Compliance
- Quoting performance
- Volume traded

⁸ Please refer to the Belgian Debt Agency's website, Appendices 2 to the Code of Duties of the Primary Dealers in Belgian Government Securities on page 16 for more information.



The performance of a Primary Dealer that quotes on more than one selected platform is appraised globally by the BDA Platforms must notify the BDA when a Primary Dealer is unable to quote due to technical reasons attributable to the platform.

Compliance/Quoting is reported in ASCII format file by the TP on a daily basis, by e-mail:

- For every Primary Dealer who has displayed quotes on the relevant platform;
- For every security identified by an ISIN code provided by the BDA, irrespective of whether the relevant Primary Dealer has quoted it or not.

Platform Compliance Report Detail

- Identification of Primary Dealer
- Identification of securities
- Total quotation time
- Time weighted average spread of the best (i.e. sharpest) quoted five hours
- Time weighted average quantity quoted during the "Best 5 Hrs Spread"
- Time weighted average spread of the total quotation time
- Time weighted average quantity during the total quotation time Volume traded:
- Active volume nominal amount of aggressive buys and sells only
- Passive volume nominal amount of the passive buys and sells

All Primary Dealers and Recognised Dealers have equal access to the TP.

All the TPs must make public the current bid/offer prices and the depth of market at those prices that are advertised through its system on a continuous basis during normal trading hours, on reasonable commercial terms, to all market participants, and free of charge to the BDA.

Eligible Platforms

Each platform keeps its status for a period of two years (subject to continuing to meet the above mentioned eligibility requirements). The eligible TPs do not ensure the compliance of Primary Dealers with their quoting obligations. This remains the BDA's responsibility on the basis of the activity reports submitted by the selected platforms to the BDA.

Quoting Obligations Details

Proposals inserted in respect of the following quoting obligations must be valid for a minimum of five (5) hours per Trading Day for OLO and TC.



OLOs

Each year, in December, the BDA and its Primary Dealers select at least 10 OLO lines that will be assigned for compulsory quoting the next calendar year. Furthermore, any newly issued OLO is assigned to all Primary Dealers for compulsory quoting.

The minimum quoting quantity is decided by the BDA and it is set at \in 5 million or \in 10 million depending upon the benchmark status, the liquidity and the maturity of the OLO lines.

The Maximum bid/offer spread (expressed in price ticks) follows the market situation and alters daily For each OLO line, the maximum bid/offer spread is equal to the widest of:

- Either the average b/o spread quoted by all Primary Dealers + 25% (rounded up to the next half tick); or
- The bottom spread which is set at 1.5 basis points (converted into ticks). The bottom spread is updated on a monthly basis.

тС

The Primary Dealers have quoting obligations on 6 TC lines:

- The on-the-run three, six and 12 month TCs; and
- The most recent of the run three, six and 12 month securities.

The Maximum bid/offer spread follows the market situation and alters daily. For each TC line, the maximum bid/offer spread is equal to the widest of:

- Either the average b/o spread quoted by all Primary Dealers + 25% (rounded up to the next half basis point); or
- The bottom spread, which is set at 2 basis points.

The minimum quoting quantity is set at €10 million. Spread for TCs are expressed in yield basis points.

G. Appraisal of the Activity of Primary Dealers

Primary Dealers Ranking Criteria

The BDA appraises the activity of the Primary Dealers each semester according to the various quantitative and qualitative criteria. They include, among other things, the primary market and secondary market performance, the compliance on market making obligations (see section F), advice and information on relevant markets.

Communication of the Appraisal

The appraisal is forwarded to each Primary Dealer individually.



H. Contacts

i. Debt Management Office

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ii. Primary Dealers and Recognised Dealers Contact Details

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iii. Central Bank: National Bank of Belgium

National Bank of Belgium

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European Primary Dealers Handbook

Updated Q3 2017

3. Denmark

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A. List of Primary Dealers¹

i. Government Bonds

| FIRM | Denmark (DK) | Firm's location |
|----------------|--------------|-----------------|
| Barclays | Х | London |
| BNP Paribas | Х | London |
| Danske Bank | Х | Copenhagen |
| HSBC | Х | Paris |
| J.P. Morgan | Х | London |
| Morgan Stanley | Х | London |
| Nordea | Х | Copenhagen |
| Nykredit Bank | Х | Copenhagen |
| SEB | Х | Copenhagen |
| Spar Nord Bank | Х | Aalborg |
| Sydbank | Х | Aabenraa |
| TOTAL | 11 | |

ii. T-Bills

| FIRM | Denmark (DK) | Firm's location |
|---------------|--------------|-----------------|
| Danske Bank | Х | Copenhagen |
| Nordea | Х | Copenhagen |
| Nykredit Bank | Х | Copenhagen |
| SEB | Х | Copenhagen |
| Sydbank | Х | Aabenraa |
| TOTAL | 5 | |

KEY:

AFME/Primary Dealer Members

Non-AFME Members

AFME Members

1 List of primary dealers in Danish government securities as of September 2017.



3. Denmark



B. Credit Rating

Danish domestic and foreign government debt has the following ratings:²

- Standard & Poor's: AAA (stable)
- Moody's: Aaa (stable)
- Fitch Ratings: AAA (stable)
- DBRS: AAA (stable)

C. Debt Instruments

i. Domestic Debt Instruments

Government Bonds

The central government of Denmark issues nominal government bonds in the 2-, 5-, 10- and 30-year segments. Danish government bonds are issued as bullet loans.

In addition to the nominal bonds, a 10-year inflation-linked government bond was introduced in 2012. Terms of Borrowing are available at http://www.governmentdebt.dk

Treasury Bills

Danish T-bills can be issued with a maturity up to 1-year. At the moment, new 6-months T-bills are opened every third month. Hence, the Danish T-bill program consists at all times of two issues with three month difference in maturity. Monthly auctions are held at the penultimate business day.

ii. Foreign Debt Instruments

EMTN-program

The central government has a Euro Medium Term Notes (EMTN) programme that is used for bond issuances in foreign currency Further documentation may be found here.

Commercial Paper

The central government has two commercial paper (CP) programmes. One directed at the European market, the ECP programme, and one directed at the American market, the USCP programme. Under the USCP programme the issuance is exclusively in US dollar, while under the ECP programme it is possible to issue in several currencies. Both the ECP and the USCP programme have a maximum outstanding of \$12 billion.





D. Privileges and Obligations of Primary Dealers

Primary Dealer Contract

The Danish Government Debt Management (DMO) has primary dealer (PD) contracts for government bonds and T-bills, respectively The rights and obligations of the primary dealers are specified in the primary dealer contract, which can be retrieved at http://www.nationalbanken.dk

| Privileges | Obligations |
|--|---|
| Use of the title "Primary Dealer in Danish Government Bonds" and/or "Primary Dealer in Danish T-bills". | Be active counterparts in Government Debt Management's activities |
| Participate in Government Debt Management's openings of new government bond issues and subsequent auctions and tap-sale | Be market makers in the bond series with more than 13 months remaining maturity and/or be market makers in T-bills with more than 1-month remaining maturity. |
| Participate in Government Debt Management's buy-back and switch operations and be counterparts in transactions with the Government Funds, insofar as these operations can be conducted on the chosen platforms. | Quote two-way prices between 09.00 and 16.30 within the applicable framework for market making. |
| Use of the securities lending facilities of the central Government and the Social Pension Fund. | Promote and increase awareness of Danish government securities. |
| Participate in meetings of the Primary Dealer Committee and advice and discuss with the Government Debt Management developments in government debt markets. | Make every effort to support a well-functioning market, and to prevent occurrences of market failures, i.e. be obliged to generally display good code of conduct. |
| Elect participants among the Primary Dealers in government bonds to the Market Operation Committee. | Display good code of conduct in the clearing and settlement of trades ensuring high settlement rates in the settlement institutions clearing trades. |
| Receive a share of the Primary Dealer Fee based on the relevant Primary Dealer in government bonds' performance in accordance with the Primary Dealer Terms and Conditions. (Government Bond PDs only) | Report on developments in financial markets and accept automatically transmitted reports to Government Debt Management from the elected platforms regarding their turnover of Danish government bonds and/or T-bills and regarding their quotation of prices related to the market making obligation. |
| | Submit periodic performance data to Government Debt Management in accordance with the Primary Dealer Terms & Conditions for the purpose of determining the Primary Dealer Fee and, if so requested by Government Debt Management, promptly deliver additional documentation confirming the submitted performance data. (Government Bond PDs only) |

E. Primary Market

i. Domestic issuance

Domestic government securities are sold via regular auctions supplemented with tap sales in the secondary market. At auctions, investors can buy government securities by submitting bids via a primary dealer. New issues are also opened via auctions.

a. Auctions

Auctions take place via an auction facility with the primary dealers as counterparties. Currently the auction facility of MTS Denmark is used. Only primary dealers and the DMO have access to the auction facility In consultation with the primary dealers, the DMO evaluates the functioning of the auction facility on an ongoing basis and may decide to amend the auction framework.

The DMO regularly announces preliminary auction dates for domestic government bonds for the next three months. As a general rule, two different bonds are offered at each auction, because investor demand may change quickly across maturity segments. The government bond(s) to be auctioned will be announced no later than three trading days prior to each auction. The auction calendar and auction results are published at www.governmentdebt.dk.

Bids shall be submitted in prices on the auction day Normally the ultimate deadline for submitting bids is 10:15 A.M. CET with the aim of subsequent announcement of the auction result taking place no later than 10 minutes after the deadline for submitting bids.

The auction principle is uniform pricing, i.e. bids at the cut-off price or above are met at the cut-off price. A cut-off price will be fixed on the basis of the bids received and the prevailing market conditions. Securities can be allotted pro rata to bids at the cut-off price. An auction can be terminated without allotment.

b. Tap Issuance

Tap issuance is conducted in the secondary market (MTS Denmark) where the DMO operates with similar technical status as either a market taker or market maker. The DMO may decide to amend the framework.

ii. Foreign issuance

The central government raises loans in foreign currency in order to maintain the foreign-exchange reserve. Foreign loans are syndicated and the strategy for foreign borrowing in coming year is outlined in yearly strategy announcement published in December The quantities are estimates and subject to change and the DMO may adjust the strategy as long as this is approved by the Danish Ministry of Finance.

- **Procedure:** The DMO organizes a syndicate of banks that have a good reputation and extensive experience of syndicated issuance in the international bond markets. The banks must complement each other so as to ensure access to a broad geographical and institutional investor distribution.
- **Method of sale:** Bids are placed in a joint pool on a current basis (book-building). Each bid comprises a price (e.g. stated as a spread to the equivalent German benchmark bond or the swap curve) and a volume. This gives the issuer information on aggregate demand at different price levels. Upon conclusion of the book-building, the DMO sets a price to match the desired issuance volume. In this way, the pricing resembles an auction.
- **Communication:** Prior to the time of issuance, the banks in the syndicate work together to find investors for the bonds issued. After the issuance, the syndicate of banks issues a press release stating the results.



F. Secondary Market

i. Trading in Government Securities

Danish government securities are traded on several electronic trading platforms, some of which are targeted at trading between dealers and others at trading between dealers and investors. In addition, a large share of turnover takes place in the over-the-counter market.

Danish government securities are primarily traded on the following trading platforms:

- Interdealer trading platforms:
 - MTS Denmark
 - Eurex Bonds
 - Nasdaq OMX Copenhagen
- Electronic trading platforms targeted at investors:
 - Bloomberg
 - BondVision
 - TradeWeb

ii. Securities Lending Facilities

The central government's lending facility applies to on-the-run government securities and government securities with benchmark status. SPF's securities lending facility applies to government bonds with more than 1-month remaining maturity of the type bullet loans in SPF's portfolio. Collateral in other Danish government securities is required.

Primary dealers in government bonds can borrow bonds for a period of up to 5 trading days. Primary dealers in T-bills can borrow T-bills for a period of up to 5 trading days. The fee is 0.1 per cent per year for both government bonds and T-bills. The lending facility is available as buy-/sell-back transactions. Participants borrow in one buy-/sell-back transaction and lend (provide collateral) in another buy-/sell-back transaction. A haircut of 2.5 per cent is applied to each buy-/sell-back transaction.

iii. Market Making

A group of banks have agreed to a primary dealer contract with the Danish DMO regarding ongoing market making, which contributes to a transparent and well-functioning market for Danish government securities.

Primary dealers are required to quote two-way prices on an eligible trading platform in Danish government securities 5 hours per day within a specific bid-ask spread, depending on the average of the 3 best bid-ask spreads. Thus, the market making scheme for primary dealers in Danish government bonds is a relative setup where spreads are evaluated relative to other primary dealers, i.e. the minimum requirements for quoted spreads adjust automatically to changing market conditions.

Payment of fees to Primary Dealers is introduced in a nine-month trial period from 1 April 2017 to 31 December 2017 with an aggregate maximum total amount of fees in this period of up to DKK 18,750,000, equivalent to DKK 25,000,000 annually. The amount of fees payable to the Primary Dealers depends on the performance of each Primary Dealer.

3. Denmark



The fees consist of one fixed fee and two variable fees. The fees are determined and distributed to the Primary Dealers based on their performance in terms of price quotation and turnover with customers. Compliance with the Market Making Obligations is a minimum requirement for being eligible to earn any fees. Fees are accrued monthly and the Primary Dealers will receive reports on their relative performance. If a Primary Dealer is non-compliant in a specific month, no fees (neither fixed nor variable) are accrued in that month.

Each Primary Dealer earns a monthly fixed fee for each month in which it is compliant with the Market Making Obligations. Conditional on being in compliance with the Market Making Obligations, each Primary Dealer will, in addition and on a monthly basis, be eligible to a variable fee depending on its performance in terms of price quotation within the relevant month. Further, and again conditional on being in compliance with the Market Making Obligations, each Primary Dealer will also, on a monthly basis, be eligible to a variable fee depending on its market share of the risk-adjusted turnover with customers within the relevant month.

Among the eligible trading platforms, the primary dealers choose freely which platform they want to fulfill their quoting obligations on. Eligible trading platforms are elected by the primary dealers in consultation with the Danish DMO. Eligible trading platforms are required to meet a list of minimum requirements. The requirements can be retrieved at http://www.nationalbanken.dk/da/statsgaeld/Sekundaerhandelogmarketmaking/Documents/Minimum_Conditions.pdf. At the moment MTS Denmark and Eurex Bonds are eligible trading platforms.

Government Debt Management has established a price-quoting system on NASDAQ OMX with four banks. Through the pricequoting system, investors have ongoing access to pre-trade information for Danish government securities. Members of the bond sub-segment on NASDAQ OMX can trade directly with the price quoters. In addition, other investors, via their bankers, have access to submitting orders in the trading system, which enables minor investors to trade directly in a transparent market.

The setup and necessary calculations are described below:

a. Evaluation of compliance regarding quoting obligations

The Primary Dealers shall comply with the market making obligations set out in this section. Compliance with the Market Making Obligations requires Primary Dealers to quote sufficiently tight two-way prices (bid-ask spread) for minimum amounts for a minimum period of the day. The minimum amounts for the relevant bonds (i.e. bond series with more than 13 months' remaining maturity) are specified in Table 1. The Market Making Obligations in new issues will apply as soon as the outstanding amount exceeds DKK 5 billion.

Quotation Time (Hours)

These data provide the total time the security is quoted with a quantity higher than or equal to compulsory quantity (MQty).

Best 5 Hours Spread (5HrSp)

For each Primary Dealer the daily bid-ask spread for a particular bond is calculated as the time-weighted average during the best (i.e. tightest bid-ask spread) five hours of the day, in which prices are quoted by the relevant Primary Dealer for the minimum amount or more. If a Primary Dealer quotes prices for less than five hours, the time-weighted average for such hours will be applied

b. Calculation of Compliance

For each Primary Dealer the daily bid-ask spread for a particular bond is calculated as the time-weighted average during the best (i.e. tightest bid-ask spread) five hours of the day, in which prices are quoted by the relevant Primary Dealer for the minimum amount or more. If a Primary Dealer quotes prices for less than five hours, the time-weighted average for such hours will be applied.

Price quotes are said to be sufficiently tight if the daily bid-ask spread for a particular bond is lower than the competitive spread (max spread) calculated daily as the average of the daily bid-ask spreads for the three best (i.e. tightest) Primary Dealers multiplied by a fixed factor (kappa) set to 1.50.

3. Denmark



The calculation of daily and monthly compliance rates is described in Box 1. A Primary Dealer is compliant with the Market Making Obligations in a given month if the relevant Primary Dealer achieves a monthly compliance rate of at least 85 per cent.

Table 1: Minimum amounts and periods

| Security | Minimum amount | |
|-------------------------|----------------|--|
| Key on-the-run issues | | |
| 0.25% 2020 | DKK 50 million | |
| 0.50% 2027 | DKK 25 million | |
| Other on-the-run issues | | |
| 1.50% 2023 | DKK 25 million | |
| 4.50% 2039 | DKK 10 million | |
| 0.10% 2023i | DKK 25 million | |
| Off-the-run issues | | |
| 0.25% 2018 | DKK 50 million | |
| 4.00% 2019 | DKK 50 million | |
| 3.00% 2021 | DKK 25 million | |
| 7.00% 2024 | DKK 25 million | |
| 1.75% 2025 | DKK 25 million | |

Note: As of 1 July 2017.

Box 1: Calculation of compliance rates

Daily degree of compliance for a specific security

For each security, compliance (*Compliance*_{*p,s*}) will be in the 0-1 interval, depending on the number of hours (*Hours*_{*p,s*}), during which Primary Dealer p quotes prices in security s within the competitive spread and for the minimum amount. If *Hours*_{*p,s*} is minimum five, there is full compliance with the obligations in security *s*, i.e.:

$$Compliance_{p,s} = \min\left[\frac{Hours_{p,s}}{5}, 1\right]$$

Daily Compliance

Based on compliance in each security daily compliance is calculated for each Primary Dealer as a weighted average of compliance degrees for all securities using the security-weights specified in Table 1.

Monthly compliance rate

Based on daily compliance rates the monthly compliance rate for each Primary Dealer is calculated as a simple average of the daily compliance rates for all business days within a month.

In case that a Primary Dealer is not in compliance with the Market Making Obligations in any given month, Government Debt Management may commence a dialogue with the relevant Primary Dealer in order to resolve the matter of non-compliance.



c. Price Quoting in the Dealer to Customer Market

In addition to the market making setup in relation to the primary dealers, the DMO has a price-quoting system aimed at the retail market on NASDAQ OMX. Four banks (Danske Bank, Nordea, Nykredit Bank and Sydbank) have agreed to quote prices within pre-defined spreads and for minimum amounts for at least 5 hours between 09.00 and 16.00.

Through the price-quoting system, investors have ongoing access to pre-trade information for Danish government bonds. Members of the bond sub-segment on NASDAQ OMX can trade directly with the price quoters. In addition, investors have access to submitting orders in the trading system via their bankers. This enables retail investors to trade directly in a transparent market.

d. Settlement

The standard market settlement days of two day apply to Danish government bonds. The normal auction day for Danish government bonds is Wednesday with settlement on Friday. Monthly buy-back auctions are held at the penultimate banking day each month.

G. General Information on Government Borrowing and Debt

i. Framework of Government Debt Management in Denmark

The Minister of Finance is authorized by law to raise government loans and has the overall and political responsibility for central-government borrowing and debt, including relationships with the Folketing (Parliament). The management of the central-government debt is conducted by the Government Debt Management at Danmarks Nationalbank on behalf of the Ministry of Finance, and in accordance with the government debt strategy agreed with the Ministry of Finance.

ACT ON THE AUTHORITY TO RAISE LOANS ON BEHALF OF THE CENTRAL GOVERNMENT

Under the Danish Constitution, debt can be issued by the central government on a statutory basis only. The statutory basis for central-government borrowing is set out in the "Act on the authority to raise loans on behalf of the central government",4 which authorizes the Minister of Finance to raise loans on behalf of the central government for a maximum of kr. 2,000 billion. This amount is the upper limit for domestic and foreign gross debt. In connection with current debt management, the Minister of Finance is moreover authorized to enter into swap agreements and other financial transactions. The central government's cost of borrowing, i.e. interest costs and capital losses on issues and buy-backs, must be appropriated under the annual finance acts.

The distribution of responsibilities between the DMO and the Ministry of Finance is specified in the 'Agreement on the division of work in the area of government debt between Danmarks Nationalbank and the Ministry of Finance', 10 April 2014. The framework for management of the assets of the Social Pension Fund is laid down in the 'Regulations governing the management of the Social Pension Fund'.³

In most countries, day-to-day management of the central Government debt is undertaken by the Ministry of Finance or a separate DMO. In Denmark, the DMO is located in Danmarks Nationalbank, but its tasks and organization corresponds to those in other countries. The internal structure of the Danish DMO reflects international standards and recommendations.

The Danish DMO is audited by Danmarks Nationalbank's auditors on behalf of the National audit office of Denmark. The National audit office reviews the accounts of government institutions, i.e. checks that they are without significant errors and discrepancies. The audit office of Denmark may in addition assess whether the funds received by government institutions are applied in the best possible way.

³ Act no. 1079 of 22/12/1993 as amended, see www.governmentdebt.dk





H. Appraisal of the Activity of Primary Dealers

The evaluation of the primary dealers is based on a broad range of criteria in order to take each primary dealer's overall contribution to a well-functioning market into account. Payment of fees to Primary Dealers was introduced in a nine-month trial period from 1 April 2017 to 31 December 2017 with an aggregate maximum total amount of fees in this period of up to DKK 18,750,000, equivalent to DKK 25,000,000 annually. The amount of fees payable to the Primary Dealers depends on the performance of each Primary Dealer, cf. the description above.

In addition primary dealers have an obligation to promote Danish government securities and provide reporting and quality advisory services.



I. Contacts

i. The Danish Government Debt Management Office⁴

State Treasury

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Lars Mayland Nielsen

Head of Government Debt Management lmn@nationalbanken.dk governmentdebt@nationalbanken.dk Tel: +45 33 63 61 02

ii. Primary Dealers Contact Details

| FIRM | CONTACT |
|---|---|
| | |
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| | Lee Cumbes DCM +44 (0)20 7773 8395 lee.cumbes@barclayscapital.com |

| BNP PARIBAS | |
|--------------------------------------|---|
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| United Kingdom | +44 (0)20 7595 8229 |
| 3 Rue d'Antin 75002 Paris | frederic.lasry@uk.bnpparibas.com |
| France | Nathalie Fillet |
| | +33 1 42 98 72 83 Nathalie.fillet@bnpparibas.com |

4 The Debt Management Agency in Denmark is part of the National Central Bank



3. Denmark



| DANSKE BANK | |
|-----------------|-----------------------------|
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| Balkon | Sales |
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| Denmark | |
| | Lass Hoejlund |
| | Trading |
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| HSBC | |
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| 103 Avenue des Champs Elysées 75008 Paris France | Franck Motte Trading +33 1 40 70 22 94 franck.motte@hsbc.fr |

| JP MORGAN | |
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| 25 Bank Street Canary Wharf London E14 5JP United Kingdom | Dick Soderberg Trading +44 207 1342974 dick.soderberg@jpmorgan.com |
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| NORDEA | |
|--|---|
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| | Jan Sass Kindberg Sales +45 3333 1931 jan.kindberg@nordea.com |



3. Denmark



| NYKREDIT BANK | |
|---|--|
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| SEB | |
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| | Rene Jæger Sales +45 3317 7729 rene.jaeger@seb.dk |

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| | Jørgen Hansen Sales +45 9634 1013 jmh@sparnord.dk |

| SYDBANK | |
|--|--|
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r

iii. Central Bank

Danmarks Nationalbank

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4. Finland

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A. List of Primary Dealers¹

| FIRM | Finland (FI) | Firm's location |
|-------------------------------|--------------|-----------------|
| Bank of America Merrill Lynch | Х | London |
| Barclays | Х | London |
| BNP Paribas | Х | London |
| Citigroup | Х | London |
| Crédit Agricole | Х | London |
| Danske Bank | Х | Copenhagen |
| Deutsche Bank | Х | Frankfurt |
| Goldman Sachs | Х | London |
| HSBC | Х | Paris |
| J.P. Morgan | Х | London |
| NatWest Markets | Х | London |
| Nomura | Х | London |
| Nordea | Х | Helsinki |
| Société Générale | Х | Paris |
| TOTAL | 14 | |

KEY:

AFME/Primary Dealer Members

Non-AFME Members

AFME Members

1 List of the Primary Dealers operating on the Finnish Government Bond Market as of September 2017. For complete information please refer to the Finnish Government Debt Management web site: http://www.treasuryfinland.fi



B. Credit Rating

Finnish debt is rated as follows:²

- Standard and Poor's: AA+ (stable)
- Moody's: Aa1 (stable)
- Fitch Ratings: AA+ (stable)
- DBRS: AAA (stable)

C. Debt Instruments

i. Serial Bonds

Serial bonds are fixed-rate bullet loans on which the government pays coupon interest once a year. The calculation of interest is based on the actual/actual date basis method. The government bonds are book-entry securities with a settlement date of T+5 for new bonds and T+2 in auctions.

ii. EMTN programme

The State Treasury can issue bonds in different currencies under the Euro Medium Term Note (EMTN) programme.

The EMTN programme complements the government's long-term funding in euro benchmark bonds. Issuance in foreign currencies enables the government to broaden its investor base and reduce borrowing costs. The issues under the EMTN programme are always hedged against foreign currency risk by currency swaps.

iii. Treasury Bills

Treasury bills are issued in accordance with the T-bill programme. Whenever there is a need to issue T-bills, the government notifies the market participants of the reference price and quantity.

Treasury bills are zero-coupon instruments issued at a discount and with a maturity ranging from one to 364 days. They are in the form of book-entries, usually with a value date of T+2.

The government issues Treasury bills in euros and in US dollars. It uses currency swaps to exchange the dollar Treasury bills for euros. Within the Treasury bill programme it is also possible to issue Treasury bills denominated in foreign currency.





D. Privileges and Obligations of Primary Dealers

| Privileges | Obligations |
|---|---|
| Right to participate in RFGB syndicated tranches and auctions. | Obligation to participate in Serial Bond and other Government Bond issuances as agreed with the State Treasury |
| Possibility to participate in other Government Bond issues, as well as buybacks and exchange auctions. | Obligation to participate in Serial Bond auctions by submitting one or more binding bids that in aggregate amount to at least 2 per cent. of the Serial Bond auction nominal amount. |
| Right to access a two-way pricing in inter-bank market (as more precisely defined in current or any other applicable secondary market platforms rules). | Obligation to actively participate and maintain a secondary market for Benchmark Bonds, as more precisely defined in the applicable market rules from time to time. |
| Prioritised status as a counterparty of the Republic of Finland in the debt and liquidity management operations subject to applicable credit approvals | Obligation to allocate sufficient resources for trading of Government Bonds and to support the State Treasury in its treasury operations. |
| Right to access the last resort repurchase lending facility of the State Treasury | Obligation to maintain required documentation in force with State Treasury, e.g. ISDA and Global Master Repurchase Agreement. |
| | Obligation to promote Government Bond markets by adequate analysis, research and publications. |

Benchmark Bonds

The general criteria for a Serial Bond to be assigned as a Benchmark Bond are: sufficient size, liquidity and diversification of the investor base. These criteria are deemed fulfilled when a Serial Bond is at least \notin 3 billion in size and a majority of Primary Dealers have participated in the offering of the bond. A Benchmark Bond status is then automatically assigned. The Primary Dealer Committee may withdraw the benchmark status of a bond if the criteria no longer apply to the bond. When there is less than one year until the maturity of a Benchmark Bond it automatically loses its Benchmark Bond status.

A list of Benchmark Bonds is published on the State Treasury's Internet site www.treasuryfinland.fi which will be updated by the State Treasury as a new Serial Bond attains a Benchmark Bond status or an existing Serial Bond loses its Benchmark Bond status.



E. Primary Market³

Offering Mechanisms of Serial Bonds and Other Government Bonds

Government Bonds may be offered to the market either via syndications (underwritten issues) or competitive auctions arranged by the State Treasury or any combination of the two or any other structure to be applied in the future. the State Treasury will have the right to select at its discretion all or part of Primary Dealers or any other banks to participate in the offering. In Government Bond offerings, with the exception of Serial Bond offerings, the State Treasury has no obligation to invite all Primary Dealers to participate in the syndicate.

i. Auctions

Auction Terms

Auctions take place in accordance with an auction calendar or outside such a calendar, provided that a notice is given to the Primary Dealers at least one week prior to the auction.

The auctions are arranged electronically via the Bloomberg Auction System. The State Treasury announces the results of the auction about 5-10 minutes after the close of the bidding period.

The government uses the Dutch uniform price auction procedure. All accepted bids are reduced to the lowest accepted bid price. The Primary Dealer undertakes to observe any bond and auction terms confirmed by the State Treasury The Primary Dealer shall make a binding bid for an issue offered for sale in the manner determined by the State Treasury The minimum bid amount in the auction is $\notin 10$ million, in increments of $\notin 1$ millon thereafter There is no maximum amount. The maximum bid amount is 30% in the auction.

Primary Market Reporting

The Primary Dealer undertakes to report on a best effort basis on the activity regarding the primary market placement following the syndicated transactions and auctions as requested by the State Treasury and any relevant market authorities.

ii. Syndication

The Finnish DMO publishes a quarterly review to elaborate on both executed and planned funding operations. Syndication mandate announcements, where applicable, are published via financial information providers. Syndicated issue details are published in a press release after deal launch. The selection of lead managers for syndications is based on an internal scorecard calculated by the State Treasury Only Primary Dealers can be mandated to lead manage a syndication. The RFGB syndication procedure includes a lead managers' pot and a co-lead retention.



F. Secondary Market⁴

i. Interdealer Market

a. Price Information

The Primary Dealer shall maintain price quotations for Benchmark Bonds in the manner determined by the Primary Dealer Committee. The Primary Dealer undertakes to provide the State Treasury and any relevant market authority with the data in the manner to be specified on the transactions carried out and gives his consent to the publication of price information by the State Treasury or any relevant market authority and/or or a successor publisher of the data. The Primary Dealer is advised to consult the relevant market authorities.

b. Trading on the Secondary Market

The Primary Dealer undertakes to actively participate in secondary market trading in Benchmark Bonds in accordance with good trading practice, maintaining a functioning market-making system and ensuring the liquidity of the Benchmark Bonds.

The Primary Dealer undertakes to allocate a sufficient amount of personnel and other resources to facilitate a high standard of work quality and commitment to Serial Bond trading.

c. Multiplatform Environment

The Finnish DMO recognizes BGC Partners, Brokertec Europe Ltd, Eurex Bonds and MTS Finland as eligible Platforms on its market. The number of platforms is currently deemed adequate. The selection of platforms was initially based on perceived/ realized trading volume.

The Primary Dealers can independently select the platform to fulfill their quoting obligation, no specific procedure is required. There are no restrictions on quoting different securities on different platforms.

d. Trading Procedures/quoting obligations

Trading procedures are more precisely defined in the applicable documentation of the current trading platform or platforms as agreed by the Primary Dealer Committee from time to time. The selected platforms must meet the reporting requirements based on harmonized PD-reporting standards as well as reasonable reporting requirements of the State Treasury and agreed by the Primary Dealer Committee.

ii. Dealer-to-Customer Market

A Primary Dealer shall actively promote the functioning and liquidity of Benchmark Bonds to its customers, either endinvestors or market counterparts. The main dealer-to-customer platforms are Bloomberg, TradeWeb and Bondvision. A large share of customer trading takes place in non-electronic format. Due to settlement systems, benchmark bonds are not currently offered to the retail market.

Secondary Market Reporting

In addition to any reporting to market authorities as may be requested from time to time, the Primary Dealer undertakes to report on the trades in the secondary market in the form requested by the State Treasury.

Reporting requirements shall be based on harmonized Primary Dealer-reporting format as agreed in co-operation with European debt managers ("Harmonized Reporting Format") or they may be based on any other reasonable reporting needs of the State Treasury as agreed with the State Treasury and the Primary Dealer Committee.

Customer sales of a syndicated bond on the pricing day for value settlement ("Syndication Sales") shall be excluded from customer trades reporting in accordance with the Harmonized Reporting Format. This can be accomplished either by providing a separate syndication report as described in the Harmonized Reporting Format rules or by providing a standard report excluding Syndication Sales. Customer sales of auctioned Serial Bonds on the auction date may be included in customer trades reporting.

⁴ Source: Treasury of Finland http://www.treasuryfinland.fi







G. Quoting Obligations

Finnish Treasury Quoting Obligations

From time to time the Finnish Treasury may operate in the money and capital markets in terms of its own debt management objectives. However there are no formal obligations on quoting.

- Market making requirements for Benchmark Bonds are as follows:
- Primary Dealer undertakes to quote 5 hours per its local business day for all Benchmark Bonds Bonds with a remaining maturity less than 12 years with minimum EUR 10,000,000 quoted amount.
- Primary Dealer undertakes to quote 5 hours per its local business day Benchmark Bonds with a remaining maturity of 12 years or longer with minimum EUR 5,000,000 quoted amount.
- Primary Dealer undertakes to maintain the following target bid-offer spreads for different bond buckets (actual quoted spreads may vary subject to market conditions):
- Bucket A 1 3.5 years to maturity: 0.10 €
- Bucket B 3.5 6.5 years to maturity: 0.15 €
- Bucket C 6.5 12 years to maturity: 0.20 €
- Bucket D over 12 years to maturity: 0.25 €

The above are target spreads, actual criteria for spread compliance in quoting is a target range in each Benchmark Bond, which is based on average market spread plus one standard deviation. For performance measurement purposes the tightest bid-offer spreads provide the highest score.

MTS Finland Market Making Obligations⁵

All Market Makers must provide two-way proposals for all Finnish benchmark and liquid securities. Two-way proposals for all securities assigned must be displayed for at least five hours per day. Minimum quantity and maximum spread obligations: for RFGs, spreads and proposal size obligations can vary from bucket to bucket and between benchmark and liquid issues.

⁵ Please note that as of now, the other eligible platforms in Finland do not have market making obligations.



H. Appraisal of the Activity of Primary Dealers

The Finnish DMO evaluates Primary Dealer performance semi-annually. An evaluation takes place in January and another evaluation is conducted mid-year.

The evaluation is based on an internal scorecard model, taking into account various areas of service (including both the investment side and derivative products) and all products on the borrowing programme (i.e. treasury bills, bond auctions). The scorecard model includes both quantitative and qualitative elements. The scorecard rankings are not public.

Primary Dealer will be evaluated according to the following criteria ("PD Evaluation Criteria").

| PD Evaluation Criteria | Content of the PD Evaluation Criteria |
|-------------------------------|---|
| Customer sales | Maturity weighted market share based on HRF reporting |
| Interdealer market making | Spread compliance as reported by the interdealer platforms |
| Advice and investor relations | Qualitative assessment |
| Bond auctions | Duration weighted market share |
| T-bills | Duration weighted volume |
| Liquidity management | Duration weighted triparty repo volume |
| Derivatives | Pricing, volume executed, qualitative assessment of service and market research |

I. Contacts

i. Debt Management Office

State Treasury

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Anu Sammallahti

Deputy Director, Funding and Investor Relations anu.sammallahti@statetreasuryfi Tel: +358 295 50 2575

ii. Primary Dealer Committee

The Primary Dealers and the State Treasury form a committee for the purpose of promoting the smooth operation of the Government Bond market and to provide a forum for the exchange of information and resolution of problems.

Each party to the agreement shall appoint one member to represent it on the committee. In the event that a regular member is unable to attend a committee meeting, the concerned party may be represented by a specifically-named deputy member

The State Treasury's representative shall act as chairman of the committee, and the State Treasury shall name the secretary of the committee. Meetings of the committee shall be called at the initiative of the chairman or when at least half of the members of the Primary Dealer Committee request a meeting for the purpose of considering a specified matter

iii. Primary Dealers Contact Details

| FIRM | CONTACT |
|---|--|
| | |
| BANK OF AMERICA MERRILL LYNCH | |
| 2 King Edward Street London EC1A 1HQ United Kingdom | Stefan Auerweck Trading stefan.auerweck@baml.com |







| BARCLAYS | |
|---|--|
| 5 The North Colonnade Canary Wharf London E14 4BB United Kingdom | Mark Thrush Trading +44 (0)20 7773 8129 mark.thrush@barclays.com |
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|---|--|
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| DEUTSCHE BANK | |
|---|--|
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|---|---|
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| 75008 Paris | Trading |
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| NOMURA | |
|-----------------|-----------------------|
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| NATWEST MARKETS | | |
|-----------------|---------------------------------|--|
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| SOCIETE GENERALE | |
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iv. Central Bank

Bank of Finland

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5. France

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A. List of Primary Dealers¹

| FIRM | France (FR) | Firm's location |
|-------------------------------|-------------|-----------------|
| Bank of America Merrill Lynch | Х | Paris |
| Barclays | Х | Paris |
| BNP Paribas | Х | Paris |
| Citigroup | Х | Paris |
| Commerzbank | Х | Paris |
| Crédit Agricole | Х | London |
| Deutsche Bank | Х | Paris |
| Goldman Sachs | Х | London |
| HSBC | Х | Paris |
| J.P. Morgan | Х | Paris |
| Morgan Stanley | Х | Paris |
| Natixis | Х | Paris |
| NatWest Markets | Х | London |
| Nomura | Х | Paris |
| Société Générale | Х | Paris |
| UBS | Х | London |
| TOTAL | 16 | |

KEY:

AFME/Primary Dealer Members

Non-AFME Members

AFME Members

1 List of the Primary Dealers operating on the French Government Bond Market as of September 2017. For complete information please refer to the AFT's website at http://www.aft.gouv.fr





B. Credit Rating

French debt is rated as follows:²

- Standard and Poor's: AA (stable)
- Moody's: Aa2 (stable)
- Fitch Ratings: AA (stable)
- DBRS: AAA (stable)

C. Debt Instruments

In 1985, the Treasury embarked upon a series of reforms designed to lay the groundwork for harmonious growth of a liquid, attractive and safe government securities market. From inception, the objective was to enable the State as an issuer to borrow on optimum conditions while offering market players standardised securities along with easy and safe access to the primary and secondary markets. The composition of government debt has been rationalised by creating three categories of standardised government securities: OATs, and BTFs. These securities are issued with a face value of ≤ 1 , are distinguished by their maturity on issue. To simplify the market, new medium-term benchmark securities with 2-year and 5-year maturities have been issued as OATs as of 1 January 2013, as is the case for long-term securities with maturities of 7 years or more.

Obligations Assimilables du Trésor (OATs, or fungible Treasury bonds) are the government's medium and long-term debt instruments with maturities from two to fifty years. Most OATs are fixed-rate bonds redeemable on maturity However, the Treasury issues inflation-indexed bonds (OATi, OAT€i). OATs with residual maturities from 7 years are auctioned on the first Thursday of each month whereas OATs with residual maturities from 2 to 7 years are auctioned on the third Thursday of each month (cf. below). OAT maturities and interest payment dates are set on the 25th day of the month.

Bons du Trésor à Intérêts Annuels (BTANs or negotiable fixed-rate medium-term Treasury notes paying an annual interest) represented until 2012 medium-term government debt. From the 1st January of 2013, in order to simplify the set of products, the new medium term benchmarks are issued as OATs, like the long term issues. Existing BTAN lines continue to be tapped and thus their liquidity continue to be ensured. Existing lines of BTAN and new medium term OAT are auctioned on the third Thursday of each month. The Treasury generally issues one line of BTAN or medium term OAT with a maturity of either two years or five years, completed with one or several other BTAN or OAT (if their remaining maturity is less than five years).

Bons du Trésor à Taux fixe et à Intérêts Précomptés (BTFs or negotiable fixed-rate discount Treasury bills) are the government's cash management instrument. They are used to cover fluctuations in the government's cash position over the course of the year, which are mainly the result of lags between revenue collection and expenditure disbursement, as well as the debt repayment schedule. BTFs have maturities of less than one year at issue. BTFs are issued at auctions held every Monday, according to a quarterly schedule published in advance that specifies the maturities of securities to be issued at each auction. Every week, one BTF with a maturity of 3 months is issued. This issue is supplemented with BTFs issued with maturities of 6 months or 1 year, as the case may be. Unscheduled BTFs with maturities from 4 to 7 weeks may be issued as needed for cash management purposes. The reliability of BTF issuance enhances the advantages of this market for short-term assets.





D. Privileges and Obligations of Primary Dealers

a. Primary Dealership Organisation³

Primary Dealers (also called 'SVTs' in this document for Spécialistes en Valeurs du Trésor) are are key partners for Agence France Trésor (AFT) in managing government debt and cash holdings. As such, the SVTs must do business ethically and comply with industry best practices. They provide AFT with the services required to perform its duties, which are managing the French Republic's cash holdings and obtaining market financing, at the lowest cost, over the long term and with maximum safety. SVTs are selected for a period of 3 years.

b. Primary Dealers (SVT)

These are subject to certain obligations, which include participating in auctions, placing treasury securities and maintaining a liquid secondary market. The Agence France Trésor maintains the relationships with them that is required in the furtherance of their stated missions. The SVTs agree to comply with the specifications drawn up annually since 1986. Intense discussions with the SVTs regarding these specifications led to the development of a new charter of the relationship with the Agence France Trésor (available on the AFT website). This charter seeks to fully reflect the implications of the establishment of the Agency and changes in bond market trading activities.

c. Selection of the Primary Dealers

Primary Dealers are selected by the Minister of the Economy and Finance, upon the recommendation of the Director General of the Treasury, President of the AFT. The Director General of the Treasury may, in order to prepare his recommendations, call upon the advice of a selection committee. The institutions concerned with this procedure are informed in due time and are made aware of the composition of the committee by the AFT's Chief Executive.

d. Charter Implementing Terms

In the event of any breach of the terms of the charter, the AFT may decide to suspend the Primary Dealer, as regards all or part of its operations, for such period as the AFT shall determine, or may lower the qualitative assessment stated in the annual ranking.

In the event of any serious breach, the AFT shall propose to the Minister the suspension or de-listing of the Primary Dealer. Such suspension or de-listing is then made public.

³ All the information developed in this paragraph is publicly available on the AFT's website at http://www.aft.gouv.fr



E. The Primary Market

The AFT prepares its transactions on the primary market with the Primary Dealers – and informs the Primary Dealers of any material changes to its borrowing calendar.

i. Auctions⁴

Except in the case of force majeure, each SVT shall participate in all auctions. Each SVT employs every material and organizational means to ensure its participation

in auctions, including when using the back-up procedure.

SVTs shall be significant buyers at auctions, with average purchases over the previous 12 months of:

- 2% of volumes sold through competitive bidding at each type of auction – BTFs, medium-term OATs (OAT MT), long-term OATs (OAT LT) and inflation-indexed OATs;

or

- 2% of the volumes sold through competitive bidding at three of the four types of auction and an arithmetic mean of at least 3% for the four types of auction combined.

The AFT regularly assesses the way in which each institution performs its obligations.

At the end of each standard auction, with the exception of reverse auctions, the SVTs may submit non-competitive bids (NCBs) in accordance with the terms specified by the AFT. The AFT reserves the right to withdraw the right to submit NCBs from any SVT that has failed without cause to participate in an auction or has failed to uphold the principles of its charter.

a. Timetable of Regular Sessions

- Long term OAT auctions are held on the first Thursday of each month, at 10.50 a.m. Paris time. These auctions include fixed-rate OATs and with a minimum residual maturity of 5 years.
- Medium term OAT auctions are held on the third Thursday of each month, except for August and December (which are optional), at 10.50 a.m. Paris time. These auctions include fixed-rate OATs and with a residual maturity from 2 to 5 years.
- OATi and/or OAT€i auctions are held on specific sessions on the third Thursday of each month (except August, December and potential syndication) at 11.50 a.m. Paris time.

For August and December, the modalities of possible auctions are specified with the announcement of the annual financing programme.

• BTF auctions are held each Monday at 2.50 p.m. Paris time.

The timetable of auction sessions of medium and long term bonds' auction session and settlement dates for each year is published at the beginning of the year on AFT's website.

The timetable of BTF auction sessions and settlement dates for the following quarter is published at the beginning of each quarter on the AFT website.

4 See SVT Charter on the AFT website at http://www.aft.gouv.fr



b. Specific Timetable Rules

Auctions whose announcements, session, NCBs or settlement are scheduled for a day that is a legal holiday in Paris shall be covered by a specific communication from the AFT.

On an exceptional basis, in particular when the AFT relies on syndication in order to carry out a primary market operation, the AFT may depart from the publicly-announced timetable and may change the date of, or remove, a monthly auction.

An additional auction of short-term BTF may be held for cash management purposes in exceptional circumstances; it is announced to the market at least one day in advance and its settlement may take place one business day following the auction.

The AFT may change the dates of auctions throughout the year, after consulting the SVTs. The AFT then publicly announces the new timetable applicable until the end of the year.

c. Announcements Made Prior to the Auctions

For BTFs, AFT announces on the morning of the Friday prior to auction the exact amount of the securities to be issued, in accordance with the quarterly calendar for BTFs. For OATs, AFT announces on the preceding Friday to auction, the securities concerned and an upper and lower limit.

Announcements are made by way of AFT press releases and through TELSAT. Such announcements are featured on the Agence France Trésor pages on the main information news wires as well as on AFT's website:

| | OATLT | OATMT | OAT € i/i | BTF |
|-----------|---------------------------|---------------------------|----------------------------|----------------------------|
| REUTERS | ADJUOATLT/ AUCTOATLT | ADJUOATMT/ AUCTOATMT | ADJUINFLA/ AUCTINFLA | ADJUBTF/ AUCTBTF |
| BLOOMBERG | TREX <go> 8<go></go></go> | TREX <go> 9<go></go></go> | TREX <go> 10<go></go></go> | TREX <g0> 11<g0></g0></g0> |
| INTERNET | www.aft.gouv.fr | | | |

d. Proceedings at Auctions

Participants compete in the auction on an equal footing through a transparent system of open bidding according to a planned issuance programme. The bid price system consists of supplying securities at the bid price or the effective bid rate as opposed to the marginal price or rate. This type of auction is known as an "auction with several prices and sealed prices". The highest bids are served first, followed by lower bids and so on, up to AFT's target amount. Participants whose bids are served pay different prices, precisely reflecting their bids.

Bids from participants (primary dealers) may be sent to the Banque de France up to the time of the auction (10.50am for auctions of medium- and long-term OATs, 11.50am for auctions of inflation-indexed securities, 2.50pm for auctions of BTFs). The Banque de France delivers the bids to AFT withholding the names of the bidders. AFT then determines the amount to be allocated on each security and reserves the right to scale down bids to the lowest accepted price (OATs) or rate (BTFs) on a pro-rata basis.

e. Publication of prices

Auction results are immediately announced to the bidders and displayed on the specialised agencies' screens. They set out the quantities requested, the quantities served, the marginal price for each security (or marginal rate for the BTFs) and the weighted average rate for the various securities auctioned.



f. Settlement

As a general rule, regular auctions are to be settled three business days after the auction, i.e. in general, on the following Thursday for BTFs and on the following Tuesday for other **securities (see 1.1.3 for the specific timetable rules).**

g. Reverse Auctions (buy-backs of Valeurs du Trésor through auctions) and Exchange Auctions

The terms of the reverse auctions are determined by *Agence France Trésor* after consulting the SVTs.

h. Rules concerning Participation in Auctions

Price Dispersion

The maximum amount proposed for each price (or rate) of the bidding scale for each participant in BTF auctions and in the first two issues of a new OAT is set as follows: ≤ 1 billion for BTF, ≤ 600 million for fixed-rate OAT bonds and ≤ 300 million for floating-rate OATs. This is in order to ensure the smooth execution of auctions and to avoid excessive concentration of the securities among several investors upon issuance. This rule does not apply to additional auction of short-term BTF held for cash management purpose as described above. For BTF and OAT, the minimum amount per price/rate is $\leq 1,000,000$.

Reporting Obligation in case of Material Participation

Any institution obtaining more than 40% of the issued volume (not including NCBs) must inform AFT. The participant discloses to AFT the identity of its main clients or the SVT's rationale if the SVT intends to retain a material fraction of the obtained volume.

ii. Syndications

Bought deals, which are another issuance technique, are usually conducted by syndication. This is a specific commitment between banks (bidders forming a banking syndicate) and the issuer to buy securities for a price agreed to with the latter. The procedure is used to launch innovative securities and on less deep market segments, particularly on the long end of the yield curve (15 years and more).

In the event of syndication, all Primary Dealers participate in the placement syndicate and ensure the proper functioning of the transaction according to the tasks entrusted to each of them by AFT. The syndicate's lead managers are appointed, in particular taking into account their expertise on the market segment concerned their place in the Primary Dealer ranking and their contribution to the discussions and preliminary works precedes the transaction. The lead managers have a special responsibility with regards to the liquidity of the secondary market for the issued security.

The DMO announces the decision of syndication through an announcement. There is no specific method of sale and there was no retention when the offer is placed. During the sale procedure, the key stages of the operation and their results are communicated to all market participants through dealers, until the pricing, and through the publication of usual allocation statistics on the AFT website, after the pricing.

F. Secondary Market⁵

i. Interdealer Market

Through their market-making, Primary Dealers support the liquidity of the overall market for French Treasury securities. More specifically, each Primary Dealer materially participates in transactions on the "grey" and secondary markets for French Treasury securities and ensures a consistent coverage of the entire range of products issued by AFT, as well as the repo market, by quoting firm bid and ask prices on a continuous basis for customers and other SVTs.

In order to guarantee market transparency, Primary Dealers display, on an ongoing basis, the buyer and seller prices of French Treasury securities.

Each SVT quotes prices for other SVTs on a continuous basis through a multilateral trading facility in accordance with the facility rules and practices, which must comply with the rules defined by the SVT market committee.

A 2% share of the secondary market is considered a reasonable minimum.

SVTs may access a repo facility that provides temporary interest-bearing lending of French Treasury securities (OATs and BTANs, including inflation-indexed securities) in exchange for other French Treasury securities of an equivalent value to the lent securities. Applications for the use of this facility are made to AFT, which acts on behalf of CDP. Individual SVTs must sign a specific agreement with CDP to have access to this facility.

The Primary Dealers are responsible for keeping AFT informed of decisions concerning the multilateral trading systems in which they participate. Primary Dealers also ensure that the best treatment is given to French debt in such systems. In general, AFT values being informed of work concerning the organisation of financial markets that is carried out by the industry associations to which the Primary Dealers belong.⁶

a. Multiplatform Environment

Brokertec Europe Ltd⁷ and MTS France⁸ are platforms selected by the SVT Market Committee.

Platforms Selection Procedure

Organisation of the Primary Dealers' Market-Making Activity on the Selected Platforms The SVT Market Committee provides a one-year accreditation, for trading platforms, which satisfy the following criteria:

- 1. The trading platform is a MTF ('Multilateral Trade Facility') within the meaning of the MiFID directive (Article 4(1) (15)). The platform must transmit information on the prices and transactions on the market's French bonds at a reasonable price.
- 2. All the securities issued by the Treasury must be quoted and negotiable on the platform i.e. all the BTFs, BTAN, OAT, index-linked securities, and all the strips.
- 3. Only the following are authorized to trade on the platform and to trade debt securities issued by the French State:
 - Investment services suppliers with SVT status, which respect to the SVT Charter (cf in the appendix)
 - On default, investment service suppliers with 'Primary Dealer' status in at least three countries in the euro zone and respecting the same quotation obligation than the SVT

⁸ More information see the MTS France website http://www.mtsfrance.com





⁵ Source: AFT website http://www.aft.gouv.fr

⁶ For more information please refer to the appendix at the end of this chapter

⁷ For all the markets on which Brokertec Europe Ltd operates please see its website http://www.nexmarkets.com



- 4. The platform must include a minimum of three Participants who are committed to performing their quotation obligations for a minimum period of three months;
- 5. The platform allows access to all Participants, (for any type of order), under its own conditions, but at a reasonable price. (A participant's decision of whether or not to select the platform to perform its quotation obligations must not be a condition for access to the Platform or to some of its services).
- 6. The platform supplies the Market Committee, via the Secretariat, with the list of its Participants on the French bond segments, and undertakes to immediately inform it of any modification to this list.
- 7. The platform must provide the reports stipulated above, in compliance with the procedures stipulated in this section.
- 8. The platform uses a system to track and control transactions and provides all the means and information required for the system to operate correctly.
- 9. The platform authorises the AFT to perform any control, either directly or through a third party, instructed by it, in order to check that the platform is respecting the above criteria.
- 10. The platform provides to the Marker Committee through the Secretariat, the price grid applying to the various participants, according to their commitments towards the said platform.
- 11. The platform must guarantee equal access for the system to all participants
- 12. The platform executes an agreement with all participants that are permitted to quote on its system.
- 13. The platform commits itself to comply with the Market Rules.
- 14. The platform complies with the real time name-give-up.

The "Accredited Platform" status is granted for a year, and each condition must be continuously inspected (except condition number 4 which is verified at the end of each year). The Market Committee can withdraw the platform's Accredited Platform status if operating breaches are found.

b. Admission Procedure

Platforms seeking accreditation file an application dossier with the Market Committee, which will decide on the accreditation, based on the eligibility criteria in the previous article, within a maximum of two months.

ii. Repo Market

In addition to the quality of the systems offered by the Paris market, the secondary market in French government securities has also benefited from the rapid development of a modern and efficient repo market in Paris since 1994, following the sharp growth in such transactions in recent years.

This success has improved the fluidity of the government debt spot market by offering investors a means of financing their positions, or making attractive and safe short-term investments in French government securities. Repos can be used to refinance portfolio securities in the short term. Reverse repos can be used to generate safely interest on funds available for short periods, generally for less than one year.

Modernisation of the Legal Framework

The legal definition and neutral tax status of repos has made such credit transactions completely safe: a repo is a repurchase agreement between a seller and a buyer, usually of debt securities, whereby the seller agrees to repurchase and the buyer to re-sell the securities at an agreed price and at a stated time. In addition to the irrevocable commitment by both parties to settle the transaction, delivered securities repo transactions involve exchanges of cash and of securities at the beginning and at the end of the transaction.





Market-Making in Repos against Government Securities

The large volumes traded on the Repo Market reflect the feeling of enhanced safety and transparency. SVTs continually display prices for standardized maturities and amounts. This enables investors to be constantly aware of the state of market conditions. These benchmarks are published in the form of ranges of rates that reflect the terms and conditions upon which bulk or cash repo transactions are negotiated, and under which the buyers who lend their cash accept all types of government securities lent by the sellers, covering the four maturities quoted on screen. Thus, the fixed-rate Treasury repo has become a benchmark rate on the money market: it fluctuates between the "blank" interbank money market rate and the BTF rate for the same maturity.

It is easy to see how the government securities market benefits from all this: the development of the Paris repo market has helped make French government securities even more liquid, and therefore to lower the cost of government debt.

iii. Strips Market

France was the first European sovereign debt issuer to authorise bond stripping in 1991. It has since become the euro area benchmark for stripped bonds.

The market for stripped OATs boasts the same liquidity and security guarantees as those granted to other Government securities. Stripping and unstripping is managed by an economic interest group comprising Euroclear France and primary dealers. This group establishes the rules for dealing in bonds of this kind. AFT acts in an advisory capacity.

Primary dealers act as market makers. OAT bonds are listed on the Euronext Paris exchange and traded on the basis of a discount rate expressed as an annual percentage calculated on the basis of 365 or 366 days (ACT/ACT). The price is rounded up to the fourth decimal place as a percentage of the par value. Strips are settled on D + 3 through Euroclear France, Clearstream International or Euroclear.

Responding to requests from Primary Dealers, the Agence France Trésor has authorised new rules on stripping and reconstituting fixed-rate French Treasury bonds (OATs). The new procedure will introduce a "fungible zero-coupon certificate", a single certificate with no distinction between principal and interest.

When an OAT is stripped, it is divided into a set of these new certificates, which have the same face value ($\in 0.01$) but different maturities calibrated on the cash flows from the original bond. All same-maturity certificates will be fungible with each other. They can also be put back together to reconstitute either the original OAT or a synthetic bond composed of certificates from different OAT issues. Coupons from different OATs are mutually fungible if they have the same maturity. Like all euro area bonds, zero-coupon bonds issued by AFT after January 1, 2013 have collective action clauses. They are therefore not compatible with bonds issued prior to this date.

The new stripping/reconstitution rules came into effect on 23 November 2009. Prior to this, an OAT was strippable into a principal-only certificate (PO) representing the bond's principal repayment flow at maturity (with a \in 1 face value), and a set of interest-only certificates (COs) representing accrued interest flows with due dates corresponding to the coupon payment dates of the original OAT (the face value of an CO was \in 0.25).



G. Monitoring and Control of the Resources Dedicated to the SVT Operations

The AFT may conduct on-site and off-site controls concerning the Primary Dealers' compliance with their obligations or may procure such controls by the General Secretariat of the Autorité de contrôle prudentiel et de Résolution (ACPR).

In connection with the controls carried out by the ACPR at the AFT's request and on the AFT's behalf, the ACPR shall have access to all necessary information. The ACPR shall, in particular, check the reliability of the statistical information sent to AFT and shall report to AFT on the results of such investigations. The Primary Dealer hereby authorizes the ACPR to carry out its investigations not only in its establishment in France, but also in all other establishments involved in Primary Dealer operations. The Primary Dealer shall, if necessary, ensure that such authorization is approved by the supervisory authorities of the country or countries concerned, where applicable.

The SVT shall provide annually to AFT the overall risk limits allotted to traders in French Treasury securities as well as the extent to which they are used.

Each month, the Primary Dealers shall report to the AFT on their operations on the secondary market for French Treasury securities. The Primary Dealers shall transmit to that end all information required by:

- The harmonized reporting document on European secondary debt markets prepared by the bonds and bills subcommittee of the European Union's Economic and Financial Committee, which is made available on the website of the European Commission's ECFIN Directorate;
- The document entitled "specific activity report on securities repurchase operations," which is available at the same address.

These reports, validated by the Primary Dealer manager or the Primary Dealer permanent representative, must reach the AFT on the 13th working day of each month at the latest. The AFT may ask for an additional specific report, whether on a regular or ad-hoc basis. In particular, the AFT takes into account, in the evaluation of the quality of its relationship with each SVT, the SVTs that provide the detail by bond, by type of counterpart (which remain anonymous) and by country of transactions on the secondary market.

The compliance officer shall commit in writing as to the reliability of the process for the preparation and transmission of these statistics. The compliance officer agrees that such a process is aimed to ensure that the preparation of statistics are providing a fair and true picture of the market-maker's operations with customers, transactions related to the management of the interest rate risk of the Primary Dealers' book, and the Primary Dealers ' proprietary trading.

The AFT agrees to protect the confidentiality of the information transmitted by the Primary Dealers. Save as otherwise indicated; the information aggregated by the AFT is communicated to the Primary Dealers purely for internal use. The AFT reserves the right to use some of these aggregated items of information in connection with the promotion of French Government debt securities and the Government's general communication policy. Aggregated information does not allow identifying counterparts.

The AFT communicates to each Primary Dealer every month, at the latest on the 23rd working day of that month:

- An aggregated report on all counterparties, based on the harmonized format described above; and
- A summary report indicating its market share and its place in the auctions and on the secondary market (cash and repo) and per type of product (in particular OATi and stripped bonds).



AFT provides quarterly to each SVT:

- A summary report indicating its market share and place in the auctions and on the secondary market by product type
- A summary report indicating its market share on gross sales by geographical zone and by product type.

SVTs authorize transmission to AFT of data on their CDS (credit default swap) activity on French bonds.

H. Provision of Information and Advisory Services

Market Information and Advice

The SVTs inform the AFT daily, on market developments, the volume of transactions that they carry out, or even, when they deem it relevant, on the nature of their customers and their own positions.

Strategic and Economic Information, Advice and Research

The SVTs systematically forward the production of all of their analysis and research services to the AFT, when it concerns matters that are useful to the understanding of the sovereign bond market or affecting the French Republic's credit quality, in particular:

- monetary policy, macro-economic and financial environment, public finance, and national structural policies in the main monetary zones;
- developments in the finance sector;
- asset allocation strategies of the main classes of investors.

The SVTs provide the AFT free access to all analysis and research concerning the functioning of financial markets; fixed income markets with their various compartments (sovereign and quasi-sovereign, corporate, derivatives including volatility), foreign-exchange markets, commodity markets, and other markets.

The AFT equally informs the SVTs of any topics or projects for which it anticipates receiving from the SVTs specific support in terms of research and advice. Such information may be furnished during the annual assessment meeting.

The SVTs organize meetings and support an ongoing dialogue between AFT and their teams of economists and strategists. The teams of each SVT must include an economist specialized in French issues whose primary geographic location is Paris. Such an economist shall regularly visit the AFT. The AFT is made available to the SVTs in order to provide explanations and comments concerning the French economic policy or, more broadly, European policy in the areas included in its mandate. If necessary, the AFT organizes contacts between the SVTs and the relevant teams of French administrative authorities.



I. Appraisal of the Activity of Primary Dealers

An annual meeting is organised between the AFT and the Primary Dealer. The Primary Dealer manager and the Primary Dealer permanent representative participate in such meeting. The objective of this meeting is, on the basis of the assessment criteria defined by the charter, to assess the service supplied by the SVT during the previous year, as well as anticipated changes for the forthcoming year. Such meeting gives rise to the preparation of a written report.

The assessment of the Primary Dealers relies on the factoring in of all tasks forming part of their operations and on the implementation terms of these tasks as defined by the charter and its schedules. Three factors are used in order to assess the relative efforts of each Primary Dealer. The first factor relies on participation in the auctions. The second assessment factor relies on the operations on the secondary market. The last factor taken into account is an assessment by the AFT of the quality of the relationship maintained with the PD. Each year, the AFT discloses the results of its assessment in the form of a ranking, under terms which the Primary Dealers are informed of beforehand. For the purposes of ranking the Primary Dealers, the three assessment factors are taken into account with the following weightings: 40% corresponding to participation in the primary market, 30% corresponding to operations on the secondary market and 30% corresponding to the qualitative assessment.

The AFT indicates, each quarter, to each Primary Dealer, its position on the primary and secondary markets. AFT informs, if necessary, the Primary Dealers of changes in its assessment of the quality of services supplied.

i. Assessment of Primary Dealers' Performance in the Primary Market

a. Principle

The ranking of the Primary Dealers is obtained by adding the points resulting from the application of three criteria:

- Primary Dealers ' operations on the primary market (40 points in total);
- Primary Dealers ' operations on the secondary market (30 points in total) assessed on the basis of three sets of figures: overall volumes handled by the Primary Dealer on the secondary market, volumes handled with final customers and volumes handled in relation to specific products (repos, OATs and BTANs linked to a price index, strips);
- Quality of the service supplied by the Primary Dealers (30 points in total), assessed from three standpoints: operational quality; quality of advice; proximity and stability of relationships with the issuing State.

Points are allocated to the Primary Dealers on a pro rata basis of their market share, whether actual (primary or secondary operations) or reconstituted (qualitative assessment). For instance, a Primary Dealer having a 5% share of the primary market will obtain 2 points (40 times 0.05) for the primary market component. The allocation method as well as the weighting coefficients can be reviewed at any time by AFT and the Primary Dealers.

b. Detail

Operations on the primary market are assessed on the basis of the Primary Dealers' market share in auctions and buyback operations. The rating obtained by each Primary Dealer corresponds to 40 times the weighted market share obtained at auctions and redemptions. Such market share is defined up to four decimal places. Weighting coefficients correspond approximately to the duration of the benchmark securities for the maturity area to which such coefficients apply.



Such weighting coefficients are as follows:

| For BTF. | BTAN. | OAT | (excluding | Indexed | bonds) |
|----------|-------|----------|--------------|------------|-----------|
| , | , | . | (0/10/0/0/19 | 1110107000 | 10011010/ |

| Maturity | <3.5 mth | 3.5 mth - 1 yr | 1-2.5 yr | 2.5 –7 yr | >7-12 yr | >12-17 yr | >17-43 yr | >43 years |
|----------|----------|----------------|----------|-----------|----------|-----------|-----------|-----------|
| Coeff. | 0.5 | 1 | 2 | 4.5 | 8.5 | 11 | 15.5 | 21.5 |

For floating-rate products: all coefficients of the above chart are multiplied by 1.5

| Maturity | <3.5 mth | 2.5 - 7 yr | > 7- 12 yr | > 12-17 yr | >17 yr |
|----------|----------|------------|------------|------------|--------|
| Coeff. | 3 | 6.75 | 12.75 | 16.5 | 23.25 |

Coefficients are identical for redemptions made through reverse auctions. A coefficient equal to 1 is used for over-thecounter buy-backs, regardless of the security.

For an exchange auction, except if specified by the the AFT, the weighted market share is determined by the volume in principal bought by the SVT, to which is applied a coefficient equal to the absolute value of the difference between the coefficients relative to the bond issued and to bond bought back.⁹

c. Supply of Advisory Services regarding the Issuance Policy

The Primary Dealers provide the AFT with an opinion on the contents of primary transactions:

- Prior to the publication of the annual financing program;
- During the week preceding each BTF auction, Primary Dealers are required to participate in a teleconference or, if the AFT so decides, in a meeting at the AFT's premises;
- Within the weeks preceding each OAT auction, the Primary Dealers are required to participate in a meeting on the premises of the AFT or, if the AFT so decides, exceptionally, in a teleconference organised by the AFT.

SVTs shall maintain confidentiality of the discussions at these meetings and shall refrain from making any disclosures to third parties. This information can be disseminated internally to the SVT personnel directly concerned by the discussions, after notifying those persons of its confidential nature. AFT reserves the right to impose any penalty on an SVT that fails to comply with this requirement.

In connection with its assessment of the Primary Dealers' contribution to the smooth progress of primary transactions, AFT takes into account adequate participation in meetings and consistency between opinions expressed and transactions carried out.

The AFT convenes a semi-annual meeting of the Primary Dealers in order to assess market developments. The AFT may involve, in such periodical meetings, representatives of investors selected by AFT or Primary Dealers' trading, origination or sale operations are represented at a proper responsibility and expertise level.

⁹ As an example, the coefficient to apply for an exchange between fixed-rate bonds with maturities respectively of 5 years and 30 years is 11 (difference between 4.5 and 15.5) and the coefficient to apply for an exchange between fixed-rate bonds with maturities respectively of 25 years and 30 years is 0 (difference between 15.5 and 15.5)





ii. Assessment of SVTs' Performance on the Secondary Market

This assessment relies on the statistical data provided by the Primary Dealers according to the harmonised European format, supplemented with the report on repo transactions.

The following is not taken into account and is therefore assigned a weighting equal to zero:

- Purchase and sale transactions made through auctions and OTC buy-backs with the AFT, which are taken into account in the primary ranking;
- Transactions carried out during syndication.

On the contrary, repo transactions carried out with the AFT are taken into account in the secondary market's performance. 30 points are thus allocated to all Primary Dealers in order to account for their operations on the secondary market. Such points are allocated according to the Primary Dealers' performance on each of the segments described in the chart below:

| SEGMENT | ASSIGNED POINTS |
|-------------------------|-----------------|
| Nominal bonds | 19 points |
| Inflation-indexed bonds | 6 points |
| Stripped bonds | 2 points |
| Repos | 3 points |

The points assigned to a Primary Dealer are obtained by multiplying its market share on each segment, rounded to two decimal places, by the number of points assigned for that segment. This market share is a weighted average in which the weighting coefficients depend upon the maturity and nature of the security and on the counterparty.

For purchases and sales of OAT, OAT indexed, BTAN, BTAN indexed and BTF, market share is calculated on the basis of a weighted average per maturity, by applying the following weighting coefficients:

| Maturity | <1 yr | 1-3 yr | >3-5 yr | >5-7 yr | >7-10 yr | >10-15 yr | >15 yr |
|-----------------|-------|--------|---------|---------|----------|-----------|--------|
| Maturity coeff. | 1 | 2 | 3.5 | 5.5 | 7 | 10 | 15.5 |

Coefficients are as follows for stripped bonds:

| Maturity | <1 yr | 1-3 yr | >3-5 yr | >5-7 yr | >7-10 yr | >10-15yr | >15 yr |
|-----------------|-------|--------|---------|---------|----------|----------|--------|
| Maturity coeff. | 1 | 2 | 4 | 6 | 8.5 | 12.5 | 30 |

Finally, transactions carried out with an end-customer type counterparty ("customer" in the harmonized European format) are assigned a coefficient equal to 2.5 times that assigned to interdealer transactions.

| Counterparty | End Customer Counterparty | Interdealer Counterparty |
|--------------|---------------------------|--------------------------|
| Coeff. | Maturity coeff. x 2.5 | Maturity coeff. x 1 |

For repo transactions, the total volume of transactions carried out by the Primary Dealer are divided by the total transaction volume carried out within the relevant month.



a. Qualitative Assessment of Relationships between SVTs and Agence France Trésor

The Primary Dealer's operational quality, quality of advice and close relationship are assessed on the basis of the criteria defined in the chart below. All of these criteria correspond to undertakings provided for in the charter governing relationships between the AFT and the Primary Dealers.

Operational criteria are rated from 0 to 3 or 4. Rating 2 corresponds to standard service. The advisory services rating criteria range from 0 to 2 or 3. Rating 1 corresponds to standard service.

The proximity and continuity of the relationship are assessed through a cluster of interrelated indices that do not give rise to a detailed rating.

| Indicators | Criteria | Rating | Reference to the charter |
|--|--|--------|--------------------------|
| Operational Quality | - Smooth functioning of primary operations (advice, security, participation). | /4 | A-1-a,b,c) |
| Contribution to the secure operation of the market for Valeurs du Trésor and | - Liquidity services on the secondary market. | /4 | A-2 |
| financing of the State | Security of clearing and settlement operations. | /3 | B-1-b) |
| | - Market information and analysis | /3 | A-3-a) / C-1 |
| Quality of Advice Contribution to the | - Operational research/modelling | /2 | A-3-b) |
| improvement of the work of AFT and the State | - Economic research | /2 | A-3-b) |
| | - Market information and analysis | /2 | A-4 |
| Proximity and Stability of the Relationship with the Issuing State | - Quality and continuity of contacts at all levels; compliance; presence in France and contribution to financial centre projects; ability to cooperate with AFT on strategic projects. | /10 | A-5 / B-1-a) / B-2 |

J. Contacts

i. Debt Management Office

Ministère de l'Economie, de l'Industrie et de l'Emploi

Agence France Trésor (AFT) Télédoc 287 139 rue de Bercy France-75572 Paris Cedex 12 Tel: +33 1 40 04 15 00 Fax: +33 1 40 04 15 93 www.aft.gouv.fr

Anthony Requin CEO

anthony.requin@aft.gouv.fr

ii. Primary Dealers Contact Details

| FIRM | CONTACT |
|-------------------------------|--------------------------|
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| France | |

| BARCLAYS | |
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| Paris Cedex 8 | Emmanuelle Ortiz |
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| France | +33 1 42 98 72 83 |
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CITIGROUP

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Benoît Vele DCM +33 1 70 75 51 59 benoit.vele@citi.com

| COMM | ERZBANK |
|------|----------|
| | ENLDAINN |
| | |

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| CREDIT AGRICOLE-CIB | |
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| DEUTSCHE BANK | |
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| GOLDMAN SACHS | |
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| HSBC | |
|--|--|
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| JP MORGAN | |
|----------------|-----------------------------------|
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| MORGAN STANLEY | |
|---|--|
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| NATIXIS | |
|-----------------------|-----------------------------|
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| France | Roberto.burello@Natixis.com |

| NOMURA | |
|-----------------|-----------------------|
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| NATWEST MARKETS | |
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| SOCIETE GENERALE | |
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| UBS | |
|--------------------------------------|--|
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iii. Central Bank

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31 rue Croix des Petits Champs 75001 Paris France infos@banque-france.fr Tel: +33 1 42 92 42 92 or +33 1 64 80 20 20 www.banque-france.fr



K. French Market Appendices

Quoting Obligations

The following rules have been worked out by AMTE (Association des Marchés de Taux en Euro, an affiliate of ICMA).

i. BTF

a. Maturity Bands

Each category of BTF admitted on the Market is distributed in three maturity bands:

- 0 to 3 months maturity band;
- 3 to 6 months maturity band;
- 6 to 12 months maturity band.

b. Quotation Obligations

The Participants' quotation obligations take effect on the working day following their adjudication and are decided in accordance with three parameters:

- The minimum size to be displayed (trading lot): €10 million;
- The maximum band expressed in basis points: 3 basis points (bp) for the "benchmarks" (last issued BTF for each maturity) and free for the "liquids" (other BTF than the "benchmarks");
- The length of the quotation: five hours a day.

| | BTF | | | |
|-----------|-------------|-------------|-------------|-------------|
| | Be | enchmark | Liquid | |
| Maturity | Spread (bp) | Lot (Mln €) | Spread (bp) | Lot (Mln €) |
| 3 months | 3 | 10 | Free | 10 |
| 6 months | 3 | 10 | Free | 10 |
| 12 months | 3 | 10 | Free | 10 |

Each Market Maker is obliged to insert proposals on 6 lines of BTFs: the last 2 issued on the 3 months, on the 6 months and on the 1 year maturity buckets (so 1 bench- mark and 1 liquid for each of the maturity bucket); BTFs are allocated and renewed according to the BTF issuance and tap calendar, and according.

c. Renewing the Quotation Obligations

The quotation obligations for the BTF are renewed without notice as follows: the new BTF must be quoted from its first day of auction. It ceases to be quoted on the day it is replaced by a new line, without the Participant receiving any other notice. The oldest line is replaced by the new line.



ii. BTAN, OAT and Other Variable Rate of Financial Instruments

a. Classifications

The BTAN, OAT and other variable rate Financial Instruments admitted on the Market are divided in accordance with the following maturity bands and categories.

The BTAN, OAT and other variable rate Financial Instruments admitted on the Market are divided into four categories:

- The 'benchmarks' these are the Financial Instruments of reference (benchmarks) with 2, 5, 10, 15, 30 and 50 year maturities, regularly selected by the Market Committee;
- The 'liquids' these are the most liquid Financial Instruments which are not 'benchmarks';
- The 'regulars' these are Financial Instruments which are traded regularly with a reduced liquidity;
- The 'variables' these are variable rate Financial Instruments.

Each category of BTAN, OAT and other variable-rate Financial Instruments admitted on the Market is divided into maturity bands:

- Maturity Bands A: from 1 to 3.5 years;
- Maturity Bands B: from 3.5 to 6.5 years;
- Maturity Bands C: from 6.5 to 11.5 years;
- Maturity Bands D: from 11.5 to 17 years;
- Maturity Bands E: from 17 to 35 years ;
- Maturity Bands F: greater than 35 year

b. Quotation Obligations

The Participants' quotation obligations are established in accordance with three parameters:

- The minimum size to be displayed (trading lot);
- The maximum band expressed in cents of price (spread);
- The duration of the quotation: five hours a day.

The secretariat of Market Committee informs the Platforms if a new benchmark security is launched by the Agence France Trésor This security must be quoted by all the Participants from the working day after the security's first auction. The next month, it replaces the 'benchmark' with the same maturity which immediately joins the liquids category.



The quotation obligations are defined in accordance with following table (lots in millions of Euros, spreads in euro cents, or basis points depending on the detail).

| | | OAT & BTAN | | OAT & BTAN | | TEC | | |
|-------------|---|-------------------|-----------------|------------|-----------------|------|-----------------|------|
| Category | | Maturity | Spread (CTS) | Size | Spread (CTS) | Size | Spread (CTS) | Size |
| | A | 1 to 3.5 years | 4 | 10 | 25 | 10 | 25 | 5 |
| | В | 3.5 to 6.5 years | 4 | 10 | 25 | 10 | 25 | 5 |
| Donohunoula | С | 6.5 to 11.5 years | 5 | 10 | 25 | 5 | 25 | 5 |
| Benchmark | D | 11,5 to 17 years. | 10 | 5 | 40 | 5 | 25 | 5 |
| | Е | 17 to 35 years | 20 | 5 | 50 | 2.5 | 25 | 5 |
| | F | > 35 years | 30 | 5 | | | | |
| | A | 1 to 3.5 years | 4 | 5 | | | | |
| | В | 3.5 to 6.5 years | 5 | 5 | | | | |
| T1 | С | 6.5 to 11.5 years | 7 | 5 | | | | |
| Liquid | D | 11.5 to 17 years | 12 | 5 | | | | |
| | Е | 17 to 35 years | 25 | 5 | | | | |
| | F | > 35 years | 30 | 5 | | | | |

| | B | ſF |
|-----------|--------------|--------------|
| Maturity | Spread (bps) | Size (Mln €) |
| 3 Months | 3 | 10 |
| 6 Months | 3 | 10 |
| 12 Months | 3 | 10 |

| Regular | Spread (cts) | Lot |
|----------------|--------------|-------------|
| OAT 25/10/2019 | 20 | 2.5 |
| OAT 04/2022 | No quoting | obligations |
| OAT 25/04/2023 | 30 | 2.5 |

On the basis, each Participant must display proposals for:

- Six 'benchmark' Financial Instruments;
- Nine 'liquid' or 'regular' Financial Instruments;
- Three 'indexed' Financial Instruments.



c. Renewing Quotation Obligations

The AMTE attributes the Financial Instruments to each Participant in a random draw with a renewal at the start of each month by informing each Platform of its Participants.

The groups of financial investments are constituted in equal numbers to the number of Participants: each group comprises different categories of Financial Instruments with different maturity windows to respect a balance in quotation difficulty.

iii. Principal Certificates and Coupon Certificates

a. The List of Stripped Securities Subject to Quotation Obligations

The Participants concerned select the certificates, which are subject to quotation ob- ligations. The Participants can modify this product selection on an ordinary majority of votes cast by any written means (letter, e-mail or fax). The list of securities subject to quotation obligations will be modified on the request of Participants for Stripped Securities or on the Market Committee's proposal.

b. Quotation Obligations

The Participants' quotation obligations for stripped securities are decided in accordance with two parameters:

- The minimum size to be displayed (trading lot): €10 million for Principal Certificates and €5 million for Coupon Certificates;
- The maximum band expressed in basis points: 3 basis points.

Each Participant for stripped securities must respect the quotation obligations for the two Principal Certificates belonging to the 'benchmark' category.

c. Renewing Quotation Obligations

The allocation of quotation obligations for Participants of Stripped Securities for the two (2) Principal Certificates belonging to the 'Benchmark' category referred to in the above paragraph is attributed by the Market Committee and renewed every month.

Any modification to the quotation obligations for Stripped Securities is decided by the Participants for these products, based on an ordinary majority of the votes cast. The committee must be informed of any modification as quickly as possible.



European Primary Dealers Handbook

Updated Q3 2017

6. Germany

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A. List of Bund Issues Auction Group^{1 2}

| FIRM | Germany (DE) | Firm's location |
|-------------------------------|--------------|-----------------|
| ABN AMRO | Х | Amsterdam |
| Banca IMI | Х | Milan |
| Bankhaus Lampe KG | Х | Bielefeld |
| Bank of America Merrill Lynch | Х | London |
| Barclays | Х | London |
| Bayerische Landesbank | Х | Munich |
| BBVA | Х | Madrid |
| ODDO BHF | Х | Frankfurt |
| BNP Paribas | Х | London |
| Citigroup | Х | London |
| Commerzbank | Х | Frankfurt |
| Crédit Agricole | Х | London |
| Danske Bank A/S | Х | Copenhagen |
| Dekabank | Х | Frankfurt |
| Deutsche Bank | Х | Frankfurt |
| DZ Bank | Х | Frankfurt |
| Goldman Sachs | Х | London |
| HSBC | Х | Paris |
| ING | Х | Amsterdam |
| Jefferies | Х | London |
| J.P. Morgan | Х | London |
| Landesbank Baden-Wurttemberg | Х | Stuttgart |
| Helaba | Х | Frankfurt |
| Mizuho | X | London |
| Morgan Stanley | X | London |
| Natixis | X | Paris |
| Royal Bank of Scotland plc NL | X | Amsterdam |
| Nomura | X | London |
| Nord/LB | X | Hannover |

1 Germany does not have any Primary Dealership system per se but as there are still rules that apply to the investment banks members of the Bund Issues Auction Group we decided to include this European Member State to this Handbook

2 List of the members of the Bund Issues Auction Group operating on the German Government Bond Market as of September 2017. For complete information please refer to the Bundesbank's website http://bundesbank.de



| Nordea | X | Helsinki |
|-------------------|----|----------|
| Rabobank | X | Utrecht |
| Santander | X | Madrid |
| Scotiabank Europe | X | London |
| Société Générale | X | Paris |
| UBS | X | London |
| Unicredit | Х | Munich |
| TOTAL | 36 | |

KEY:



AFME/Primary Dealer Members



Non-AFME Members

AFME Members





B. Credit Rating

German debt is rated as follows:³

- Standard and Poor's: AAA (stable)
- Moody's: Aaa (stable)
- Fitch Ratings: AAA (stable)
- DBRS: AAA (stable)

C. Financial Instruments

The German Federal Government currently uses a wide range of securities to borrow funds for financing its budget. This includes:

- Federal bonds (Bunds) 10 or 30-year maturity
- Federal notes (Bobls) 5-year maturity
- Federal Treasury notes (Schaetze) 2-year maturity
- Inflation-linked German Government Securities (iBobls or iBunds)
- Treasury discount paper (Bubills) 6 or 12-month maturity

German Government securities are generally placed as single issues via auction at volumes of at least EUR 1 billion. New issues with higher volumes take place, particularly in the capital market, which are followed by several increases, up to approximately EUR 15 billion.

The Government also issues Federal Treasury financing papers, Federal savings notes and Government Day-Bond which are securities that are offered solely to the retail base.

Foreign currency bonds were added in May 2005, followed by Inflation-linked German Government securities in March 2006. German-type promissory notes (Schuldscheindarlehen) are also offered. The primary issuance of the foreign currency bonds was realized by a syndicate of international investment banks, and the bonds were admitted for trading on the Frankfurt Stock Exchange. Since 2002, growing use has been of derivative financial instruments (swaps). They serve to lower the Federal Government's interest burden and help optimise the risk structures in the Federal Government's portfolio.

Additional investment opportunities have been available since the introduction of "Stripping" of ten and thirty-year Bunds in 1997, allowing for these issues' par value (principal) and interest coupon to be traded separately (from \notin 50,000 upwards, minimum denomination \notin 0.01). Stripping of the principal and coupon claims on behalf of the bondholder is the responsibility of the institution with which the securities are held in custody. It is also possible to reconstruct coupon and principal strips into a bond, but this is reserved for credit institutions for their own proprietary holdings. Coupon strips with the same maturity are combined and traded under one single ISIN (security identification number). Strips from different types of bonds cannot be combined.

German Government securities have a fixed coupon with annual coupon dates. Inflation-linked Bobls and Bunds also have a fixed (real) coupon; however, nominal interest amounts and repayments are in this case linked to an inflation index. Bubills, in contrast, are issued in the form of discount paper. All German Government securities are issued in the form of debt register claims without paper certificates. Maturities are fixed, and there is no provision for premature redemption by the issuer either by call or drawing lots.

³ Credit rating correct as of September 2017





All German Government securities are eligible for the investment of mutual funds or as life insurance cover funds and are eligible for refinancing at the central bank, pursuant to Article 18.1 of the ESCB/ECB Statute. Purchases of tap issues of German Government securities in the primary market (that is to say, purchases of Federal paper that is not issued by auction) are free of charge to the investor because the issuers pay the credit institutions a selling commission.

Federal bonds, five-year Federal notes, Federal Treasury notes and Treasury discount paper have been issued in Euros since the beginning of stage three of European monetary union on 1 January 1999.

Listed securities (except Treasury discount paper) still outstanding were redenominated in Euro on 1 January 1999. At the same time the minimum denomination for these issues was fixed at $\notin 0.01$ and was also introduced for new issues in order to achieve uniform market standards.

With respect to the calculation of accrued interest in the case of both old and new issues:

- The money market method of a 360-day year (act/360) applies to Treasury discount papers and floating-rate notes; and
- The act/act method (day-count/365 or in leap years day-count/366) applies to capital market

D. Primary Market

i. Auctions⁴

a. Preamble

The German Finance Agency, through the Deutsche Bundesbank, conducts the sale of Federal bonds, inflation linked Federal securities, five-year Federal notes, Federal Treasury notes and Treasury discount papers by auction. Authorization for the German Finance Agency to conduct auctions and other debt management transactions is to act only for the name and account of the German Federal Government.

Special funding tools, such as the US-dollar bonds issued in 2005 and 2009, are placed by the Federal Government on the primary market via a banking consortium.

b. Issuance Timetable

The established issuance pattern of nominal German Government bonds remains unchanged: The auctions of Treasury Discount Papers (Bubills) take place on Mondays with value date on the following Wednesday. Capital market securities are issued on Wednesdays with value date on the following Friday.

Since January 2013 auctions of inflation linked bonds take place on Tuesdays at 11.30 a.m. Hence, members of the Bund Issues Auction Group will have the opportunity to place their bids unified in all auctions until 11.30 a.m. Frankfurt time on the Bund Bidding System (BBS) from 2013 onwards. Six bank working days before the tender deadline, the Deutsche Bundesbank issues a press release announcing the auction of the German Government securities, specifying the issuance volume and maturity. One day before the tender, the coupon and interest date are announced in the invitation to tender, which also takes the form of a press release.

On the auction day itself, members of the Bund Issues Auction Group can digitally issue their bids for the tender via the BBS between 8.00 am and 11.30 am Frankfurt time. Decisions on allotment are taken by the Finance Agency immediately after the end of the bidding and sent to the bidders via the BBS. The results are then published via news information services and this website.

At the end of each year, in the second half of December, the German Federal Government publishes a preview in the form of a press release announcing its plans for the following year's issuance of Treasury discount paper (Bubills), Federal Treasury notes (Schaetze), five-year Federal notes (Bobls) and Federal bonds (Bunds). The annual preview provides a clear overview of the type of Federal Government security to be issued, the type and day of issue, the day of maturity as well as the targeted nominal volume for each single issue type. During the course of the year each quarter of the issuance calendar is published separately at the end of each previous quarter.

⁴ Source: Auction Rules for the issue of Federal bonds, five-year Federal notes, Federal Treasury notes and Treasury discount paper





Detailed planning information is not yet provided for the newer types of government funding instruments, such as inflationlinked securities, foreign currency bonds and securitised loans. Although the Federal Government always aims to proceed with issues as announced, its issuance planning is subject to change with respect to the amounts and dates in question depending on the funding requirements and liquidity of the Federal Government, not to mention the conditions prevailing on the capital market. However, the German Federal Government aims to adhere as closely as possible to its announced issuance plans in order to provide market participants with the reliable guidance they need to make well-informed investment decisions.

| | Annual Outlook | Quarterly Issuance Calendar |
|-----------|--|-----------------------------|
| INTERNET | www.deutsche-f | ïnanzagentur. de |
| BLOOMBERG | BUND <go> 2nd Menu BUND<go> 3rd Menu</go></go> | |
| REUTERS | | Bund02 – Bund09 |

c. Members

There are no restrictions on the range of potential buyers. However, only members of the "Bund Issues Auction Group" may participate in the auctions directly. Membership is approved by the German Finance Agency on behalf of the German Government.

An organization may become a member provided that they are

- A German resident credit institutions, securities trading firms and securities trading banks pursuant to section 1 (1) and (3d) sentence 2 and sentence 3 of the German Banking Act, or German branches of foreign enterprises pursuant to sections 53, 53b and 53c of the German Banking Act, and are authorised to engage in issuing business pursuant to section 1 (1) sentence 2 number 10 of the German Banking Act
- credit institutions within the meaning of Article 1 number 1 of Directive 2000/12/EC as well as for investment firms within the meaning of Article 4 (1) number 1 subparagraph 1 of Directive 2004/39/EC which are domiciled in another member state of the European Union and render investment services and activities within the meaning of numbers 1 to 6 of Annex I, section A of this Directive if the enterprise is licensed by the competent authorities of the home state, the business it conducts is covered by the licence, the enterprise is supervised by the competent authorities in accordance with the Directives issued by the European Union and the enterprise is not exempt from the application of the Directive

Subject to these conditions, the intra-Community branches of credit institutions authorised in a third country and the intra-Community branches of investment firms authorised in a third country, within the meaning of the aforementioned Directive, can also become members. Membership is subject to the requirement that the delivery can be effected via a securities account at Clearstream Banking AG Frankfurt and the cash settlement can be carried out through TARGET2.

Applications for membership of the Auction Group may be submitted to the German Finance Agency at any time. Applicants have no legal right of admission to the Auction Group.

d. Conditions

The Auction Group members are expected to have submitted successful bids for at least 0.05% (unrounded) of the total issue amounts allotted, weighted by duration, at auctions in one calendar year. The respective weights to be applied will be published by press release and all bidders will be notified. A ranking list of the Auction Group members by size of their shares in the weighted issue volume allotted without quoting percentages will be published annually without quoting percentages. Those member institutions that fail to reach the required minimum share of the total amount allotted will be excluded from the Auction Group. It will be possible for them to rejoin at a later date.



e. Submission of Bids

Bids are to be transmitted electronically through the Deutsche Bundesbank's Bund Bidding System (BBS) before the bidding deadline specified in the invitation to bid. The special terms and conditions for auction procedures of the Deutsche Bundesbank for auctions of German Federal securities using the Bund Bidding System (BBS) are an integral part of these auction rules.

Bids for Federal bonds, five-year Federal notes and Federal Treasury notes and Treasury discount paper must be for a par value of no less than ≤ 1 million or an integral multiple thereof and should state the price, as a percentage of the par value, at which the bidders are prepared to purchase the Federal securities offered. No yield bids will be considered. The price bids for Federal bonds and five-year Federal notes must be expressed as full 0.01 percentage points. The price bids for Federal Treasury notes must be expressed as full 0.005 percentage points. The price bids for Treasury discount paper must be expressed as full 0.0005 percentage points. The price bids and to submit several bids at different prices.

The bidders are bound by their bids until allotment. The bids for Federal bonds, five- year Federal notes and Federal Treasury notes and Treasury discount paper which are accepted by the Federal Government will be allotted at the price specified in the bid. Bids which are above the lowest price accepted by the Federal Government will be allotted in full. Bids which are below the lowest accepted price will not be considered. Non-competitive bids are allotted at the weighted average price of the competitive bids accepted. The Federal Government reserves the right to reject all bids, or to scale down bids quoting the lowest accepted price, and/or to scale down non-competitive bids. If bids are scaled down, there will be no minimum allotment.

Bids which have been submitted on time but which, for technical reasons, have to be considered after the allotment, will have no effect on the weighted average price of accepted bids which is relevant for settlement.

The bids for Treasury discount paper which are accepted by the Federal Government will be allotted at the yield specified in the bid. Bids which are below the highest yield accepted by the Federal Government will be allotted in full. Bids which are above the highest accepted yield will not be considered. Non-competitive bids are allotted at the weighted average yield of the competitive bids accepted. The Federal Government reserves the right to reject all bids, or to scale down bids quoting the highest accepted yield, and/or to scale down non-competitive bids. If bids are scaled down, there will be no minimum allotment. Bids which have been submitted on time but which, for technical reasons, have to be considered after the allotment, will have no effect on the weighted average yield of accepted bids which is relevant for settlement.

Bidders will be informed of the allotment immediately. The allotted amounts are published in the Bund Bidding System (BBS) for the members of the Bund Issues Auction Group on the day of the auction immediately after the allotment decision has been made. Directly thereafter, the auction results are published on the usual capital market information systems and on this website.

The securities allotted will be settled on the value date specified in the invitation to bid. The settlement will be affected in the night-time processing of Clearstream Banking AG Frankfurt in accordance with the terms and conditions of Clearstream for night-time processing. The Federal Government reserves the right to reopen the issues.

f. Bund Bidding System (BBS)

The Deutsche Bundesbank provides the BBS (Bund Bidding System) as an electronic primary market platform. BBS enables the issuer to auction Federal securities quickly, smoothly and securely.

A detailed description of the BBS is available in the customer area of the BBS, which is user name and password protected. Access is primarily reserved for the members of the Auction Group. All necessary links to the user management in the Deutsche Bundesbank's ExtraNet as well as for the access to the BBS application are available under BBS access. For detailed information on BBS (in the case that no user name and password is available), please contact the Service Centre for Credit Operations.

ii. Syndication

The German Federal Government usually places single issues by auction. Only in very exceptional cases are single issues offered via a syndicate of banks. In these special cases, a case-by-case approach, based on auction performances, will be used.





E. Secondary Market

Secondary Market Activity Reporting

In 2005, the German Finance Agency established a reporting system regarding the secondary market activities of the members of the Bund Issues Auction Group in marketable German Federal securities. The members of the Bund Issues Auction Group provide the Finance Agency the following information on every trade, on a voluntary basis:

- Trade date;
- ISIN;
- Counterparty group;
- Country of the counterparty (in principle for every trade the country of the counterparty is reported, in the case of Central Banks, however, only the region of the central bank is reported);
- Buy/sell price; and
- Trade volume.

The data include only the secondary market activities in German Government securities and trading statistics are published on the company homepage semiannually. Purchases of the banks in Bund auctions are not included.

F. Ranking of Bund Issues Auction Group

A ranking list of the members of the Bund Issues Auction Group is published every six months at the end of June and December. It is sorted by the share of the weighted issuance volume allotted without stating any further details.

For the ranking list, the auction allotments are weighted as last announced on December 10, 2014 according to the remaining time to maturity of German Government securities:

| Instrument | Remaining time to maturity | Weighting factor |
|----------------------------|----------------------------|------------------|
| | 3 months | 0.25 |
| Managementationation anta | 6 months | 0.5 |
| Money market instruments | 9 months | 0.75 |
| | 12 months | 1 |
| | 1-3 years | 2 |
| | 3-7 years | 5 |
| Capital market instruments | 7-15 years | 10 |
| | 15-25 years | 15 |
| | 25-35 years | 20 |

The weighting factors remain unchanged for at least one year and apply to both nominal and inflation-linked German Government securities of the corresponding remaining time to maturity segment. The weighting factors reflect various capital lock-up and interest rate risks of German Government securities of different maturities.

G. Contacts

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iii. Central Bank

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European Primary Dealers Handbook

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A. List of Primary Dealers¹

| FIRM | Greece (GR) | Firm's location |
|-------------------------------|-------------|-----------------|
| Alpha Bank | X | Athens |
| Banca IMI | Х | Milan |
| Bank of America Merrill Lynch | Х | London |
| Barclays | Х | London |
| BNP Paribas | Х | London |
| Citigroup | X | London |
| Commerzbank | X | Frankfurt |
| Crédit Suisse | X | London |
| Deutsche Bank | X | Frankfurt |
| EFG Eurobank-Ergasias | X | Athens |
| Goldman Sachs | Х | London |
| HSBC | Х | Athens |
| J.P. Morgan | X | London |
| Morgan Stanley | X | London |
| National Bank of Greece | X | Athens |
| NatWest Markets | X | London |
| Nomura | X | London |
| Piraeus Bank | X | Athens |
| Société Générale | X | Paris |
| UBS | X | London |
| Unicredit | X | Munich |
| TOTAL | 21 | |

KEY:

AFME/Primary Dealer Members

Non-AFME Members

AFME Members

1 List of the Primary Dealers operating in the Greek Government Bond Market as of September 2017. In addition to the Primary Dealers list, Bank of Attica and Jefferies are recognized as Dealers. For complete information, please refer to the following websites: Bank of Greece Ministry of Finance



B. Credit Rating

Greek debt is currently rated as follows:²

- Standard and Poor's: B- (positive)
- Moody's: Caa2 (positive)
- Fitch Ratings: B- (positive)
- DBRS: B (stable)

C. Privileges and Obligations of Primary Dealers³

i. Preamble

Primary Dealers are appointed institutions authorised as credit institutions or investment firms in a country which is a member of the European Union or authorised as such in another jurisdiction by a regulatory authority which, in the opinion of the Minister of Finance and the Governor of the Bank of Greece (hereinafter "the Competent Authorities"), imposes an adequate supervisory/investor protection regime. Primary Dealers are selected in order to provide specialised services in the government securities market, i.e., to participate in the syndications and auctions of Greek government securities in the primary market as well as to trade such securities in the Electronic Secondary Securities Market (hereinafter "HDAT") at prices that they are obliged to announce.

The Primary Dealer status is granted for a calendar year, on a renewable basis.

ii. Selection Criteria

The selection of Primary Dealers takes place once a year based on the following criteria:

- To have a minimum net worth of EUR 375 million. For Greek branches of foreign credit institutions, as "net worth" is considered the net worth of their parent in the home country. Subject to the regulations in force on professional confidentiality, the candidates' general capital adequacy shall also be assessed.
- To have an organised unit (Dealing Room and Back Office) in order to trade efficiently in the securities market and to abide by the obligations of Primary Dealers.
- For the selection of Primary Dealers, the participation in HDAT, EuroMTS and other regulated market according to the definition under MiFID shall be taken into account in order of precedence and cumulatively as quantitative criteria. Additionally, the participation in the over-the-counter market, the activity in the respective European markets and the proposals regarding business plans concerning the year to which the selection refers shall be taken into account as qualitative criteria.

Within 20 calendar days before expiry of each calendar year, the Committee shall submit a written recommendation to the Competent Authorities to issue a joint decision amending, if necessary, the selection criteria and shall propose the number and the names of the institutions under Article 1.1 to be granted Primary Dealer status in the following year. If during any yearly term the total number of Primary Dealers is less than 15 either due to limited candidacies at the beginning of such term, or due to a Primary Dealer's discharge or resignation, the Committee may consider the applications of other institutions under Article 1.1, in accordance with the selection criteria set during the current year.

² Credit rating correct as of September 2017

³ Source: Operating Rules of the Primary Dealers System formulated by the Committee of Primary Dealers' Supervision and Control (Dec 2014):



iii. Privileges of a Primary Dealer

Primary Dealers are granted:

- The exclusive right to submit before the auction one non-competitive bid;
- The exclusive right to submit after the auction one additional non-competitive bid;
- The right to participate in the supervising bodies engaging in ensuring the smooth operation of the securities markets, evaluating the degree of market organisation as well as the performance of Primary Dealers;
- Privileged access to information pertaining to the borrowing needs of the Hellenic Republic and issuance planning, new financial instruments and relating operating rules, securities in circulation, volume and turnover as well as auction results;
- Exclusive access to short-term securities' lending mechanisms that may be created in order to facilitate hedging (short selling);
- Privileged access to syndication;
- Privileged access to liabilities management. The Public Debt Management Agency shall take into account the credit rating of the counterparty with which it shall perform such transactions.

The relations of Primary Dealers with the Bank of Greece, as well as their activities within the framework of such relations, are set by Bank of Greece Governor's Acts.

iv. Obligations of a Primary Dealer

Primary Dealers assume obligations in the following areas:

- a. Primary Market
- b. Secondary Market
- c. Yield Curve
- d. Further contribution to the Greek government bond market
- a. Primary Market

Primary Dealers are required, throughout the calendar year for which they have been granted Primary Dealer status, to actively participate in the auctions providing competitive and non-competitive bids for an amount no less than 2% per year (duration weighted) of the total amount of successful bids at Government bond and Treasury-bill auctions.

In addition, Primary Dealers participate in syndications of Greek government securities.

b. Secondary Market

Primary Dealers have the right to carry out transactions in Greek government bonds on every regulated market according to the definition under MiFID. However, they are required, throughout the entire calendar year for which they have been granted Primary Dealer status, to achieve a minimum turnover of no less than 2% of the total annual turnover (duration weighted) on the regulated markets approved by the Committee. Currently: HDAT, EuroMTS, BrokerTec and BGC.

The transactions can be settled in the Bank of Greece Securities Settlement System (BOGS) or in any other Clearing and Settlement System approved by the Bank of Greece.



c. Yield Curve

The Government requires that Primary Dealers provide a Greek government bond yield curve, on a daily basis, to act as a reference for a) the pricing of all Greek government securities used as collaterals at the European Central Bank and b) for the pricing of government securities portfolios held by financial institutions, mutual funds, insurance companies etc. The yield curve is obtained on the basis of the price quotes present in HDAT (which is a quote-driven system) and does not require transactions but only binding bid/ask quotes.

To construct the yield curve, Primary Dealers are required to continuously provide in HDAT the binding bid and ask price quotes for securities of a minimum quantity of 5 lots (where 1 lot = \leq 1,000,000) per transaction. During periods of so-called "Difficult Market Conditions", the Committee can change the minimum quantity per quote from 5 lots to 1 lot. The decision of the Committee will be immediately communicated to HDAT participants as well as to the Minister of Finance and to the Governor of the Bank of Greece

The minimum number of compulsory quotes to be displayed daily in HDAT by each Primary Dealer is periodically determined by the Committee. For such quotes the following applies: a) quotes for on-the-run benchmarks must be entered in HDAT from the start of the trading day (10:15:00 a.m.) and b) quotes for compulsory bonds, apart from the on-the-run benchmarks, must be entered during the time period 10:15:00 - 11:00:00 a.m.

Difficult Market Conditions

The "Difficult Market Conditions" procedure can be initiated at any time in a trading day when the administrator of HDAT notices that three-quarters of Primary Dealers have not entered quotes on HDAT. In such circumstances, the following procedure is implemented:

The administrator of HDAT confers with the PDMA to decide about the next steps.

A poll is conducted amongst the Primary Dealers who are asked to vote via e-mail on whether market conditions are 'difficult'. All voters would have 15 minutes to vote.

If 50% plus 1 of the all Primary Dealers find market conditions difficult, then the Committee, the Minister of Finance and the Governor of the Bank of Greece are informed. The Committee, following the proposal of the administrator of HDAT and the PDMA, decides whether the market is under difficult market conditions. If the Committee decides that the market is under difficult conditions, then, following a new proposal of the administrator of HDAT and the PDMA containing indicative new spreads, it decides also by how much the spreads must be widened. The decisions of the Committee will be immediately communicated to HDAT participants as well as to the Minister of Finance and to the Governor of the Bank of Greece.

Finally, if the administrator of HDAT notices that it is necessary to further change the spreads or to terminate the phase of difficult market conditions, steps 1, 2 and 3 are again implemented.



d. Further Contribution to the Greek Government Bond Market Primary Dealers are also required:

- a. To facilitate a broad distribution of Greek government securities domestically as well as internationally.
- b. To provide the Ministry of Finance, the PDMA and the Bank of Greece with advice, information on and assessment of market conditions, and other information pertaining to their status as Primary Dealers.
- c. To submit the monthly harmonised report on Primary Dealers activity on the primary and the secondary market, agreed by all the members of the EFC Sub-Committee on EU Government Bonds and Bills Market and by AFME/Primary Dealers. The report must be submitted to the Secretariat of the Committee of Primary Dealers Supervision and Control (HDAT, Bank of Greece) within 10 days from the end of the month under consideration, who will then forward it to the Public Debt Management Agency.

v. Primary Dealer Discharge and Resignation

If during any term the Committee establishes that a Primary Dealer does not perform its duties or does not any more satisfy the selection criteria (in whole or in part) for any reason, the Committee may once serve such Primary Dealer with a 3-month written notice to comply. Such notice, which shall be communicated to the Competent Authorities, shall explicitly state the specific obligations not fulfilled by the Primary Dealer.

Primary Dealers may resign subject to a 2-month written notice to the Committee.

A Primary Dealer's discharge or resignation entails loss of re-appointment right in the two succeeding years.

D. Primary Market⁴

i. General

To ensure the smooth operation of the Greek government securities market and competitive market conditions, syndications may also be employed (in addition to auctions which are the principal method of initial offering and re-opening of all securities in the domestic market) for the initial offering and exceptionally for the re-opening of benchmark bonds according to prevailing market conditions and at the full discretion of the issuer (the Hellenic Republic). The above issuance methods do not apply to private placements, savings bonds, equity capital increase or other issues under special laws etc.

Auctions shall be held on fixed dates in accordance with the pertinent tentative issuance calendar of the issuer and on terms previously announced. If the method of syndication is to be employed, this shall promptly be announced within the framework of the above calendar.

Competitive and non-competitive auction bids are submitted not later than 12:00 (Greek time) on the auction day and the results must be announced to participants by 12:45 the same day.

For Treasury bills and bonds, additional non-competitive bids after the auction are submitted no later than 12:00 (Greek time) on the first business day following the auction day. The results must be announced to participants by 12:45 on the same day.

Representatives from the Ministry of Finance, the Public Debt Management Agency, the Bank of Greece, the Hellenic Banks Association and the Primary Dealers shall meet to review prevailing market conditions and to provide the issuer with the information required for the smooth and successful conduct of auctions as well as for bond issues abroad.

⁴ Source: Operating Rules of the Primary Dealers System formulated by the Committee of Primary Dealers' Supervision and Control (Dec 2014)



ii. Syndications

Participation in syndications is open to Primary Dealers. If Primary Dealers reject participation, which shall be submitted in writing, the issuer has the right to approach credit institutions or investment firms other than Primary Dealers.

Furthermore, the issuer has the right to approach, besides the Primary Dealers, other international credit institutions or investment firms when concluding foreign-currency denominated loans or when concluding foreign-currency or euro denominated loans for specific purposes under special laws.

iii. Competitive Auctions

Participation in competitive auctions is exclusively open to Primary Dealers who submit no more than 5 bids each. The minimum bid amount cannot be less than ≤ 1 million while the maximum bid amount cannot exceed the level of the auctioned amount. For competitive bids, amounts will be allotted at the last bid accepted in the auction (cut-off price).

iv. Non-Competitive Auctions

Non-competitive bids may be submitted only by Primary Dealers. The minimum bid amount must be no less than €1 million. The aggregate amount offered by the issuer shall not exceed 30% of the auction amount per security category and shall be allotted on a pro-rata basis to Primary Dealers' non-competitive bids at the price of the last competitive bid accepted at the auction (the cut-off price).

After the announcement of the auction results, Primary Dealers may submit one additional bid in order to acquire securities, at the price of the last competitive bid accepted in the auction (the cut-off price), no later than 12:00 (Greek time) on the first succeeding business day for Treasury bills and for bonds.. The aggregate amount of this facility shall amount to 30% of the auction amount. If the aggregate nominal amount of additional bids exceeds such a percentage, allotment is made pro-rata to the weighted average of each Primary Dealer's accepted bids in the six auctions that immediately preceded the current auction. Any undisposed part of this facility shall be allotted equally among interested Primary Dealers.

v. Covering of Auction Amount

All the submitted bids, ranked in descending price order, are either accepted up to the auction amount or the auction will be cancelled entirely. The issuer has the right to repeat the cancelled auction.

Exceptionally, if prices given for 80% of the auction amount diverge significantly from those given for the remaining 20%, the issuer has the right to accept only 80% of the auction amount.

vi. Commissions

In case of payment of commissions, these are determined by decision of the Minister of Finance.





E. Secondary Market⁵

Primary Dealers have the right to carry out transactions in Greek government bonds on every regulated market, according to the definition under MiFID, which currently are: HDAT, EuroMTS, BrokerTec and BGC.

i. Electronic Secondary Securities Market (HDAT)⁶

The Electronic Secondary Securities Market (HDAT) is the regulated market for Greek government securities and bonds or other fixed-income debt securities issued by corporations and other entities. HDAT is operated and managed by the Bank of Greece. Its operation, organization and management are regulated by Operating rules, which contain the entire set of amendments until 28/4/2009, i.e. by the date of its approval, in accordance with Law 3606/2007.

HDAT is a quote-driven market where assets are traded at "bid" and "ask" prices quoted by participants/dealers. The HDAT technical platform is also used for auctioning Greek Government securities in the primary market and for end-of-day buy/ sell back transactions in securities within the Book-Entry Securities System of the Bank of Greece (BOGS), as well as for the real-time information to all members on the status of their transactions until final settlement. HDAT has a real-time data service connection with Bloomberg and Thomson Reuters.

HDAT's operation is divided into three main phases: ${}^{\!\scriptscriptstyle 7}$

Pre-Market Phase: which is opened only to the HDAT participants entitled to trade (Members) for entering quotes. During this phase, quotes are not publicised or displayed on the system and are not accessible to other HDAT members.

Open-Market Phase: during which HDAT is opened to any entity having access to the system. Members' quotes are displayed anonymously on the system and are accessible to the HDAT participants. Members may enter new quotes and/or modify earlier ones and may carry out trades thereon.

Closed-Market Phase: during which Members may only send or receive messages, print and save statistics on the day's trades and obtain the Securities' closing prices recorded by the System.

The length of each phase is set forth by the HDAT Management Council. Without prejudice to the Manager's right to modify the hours of each phase, the Pre-Market Phase shall last from 10:00 to 10:15, the Open-Market Phase from 10:15 to 17:00 and the Closed-Market Phase from 17:00 to 20:00 (Greek times).

ii. MTS Greece⁸

MTS Greece is part of the MTS Group. The two categories of participants which act on the MTS Greece system are:

Price Takers: the participants that are permitted to take part in trading of the tradable securities through orders (acceptance, whether whole or partial, of a quote, transmitted via the system) only;

Market Makers: the participants which are permitted to take part in trading through quotes and/or orders. Market Makers must also respect the quoting obligations.

Market Makers commit to provide liquidity for a set number of bonds while Price Takers can only lift the 'liquidity' or the prices available on the system. Price Takers can either hit or lift prices posted on the system.

6 Source: Bank of Greece website

⁸ Both Price Takers and Market Makers must respect the obligations laid down by the MTS Greece Rules. For more detailed information please visit the MTS website: http://www.mtsmarkets.com/



⁵ Source: Operating Rules of the Primary Dealers System formulated by the Committee of Primary Dealers' Supervision and Control (Dec 2014)

⁷ Source: Art 37 of the Operating Regulations of the Electronic Secondary Securities Market (HDAT)



F. Primary Dealers Evaluation Criteria⁹

i. General Criteria

Primary Dealer performance is rated according to the following point system:

| Area | Points |
|--|--------|
| Primary Market | 20 |
| Secondary Market | 25 |
| Yield curve | 40 |
| Further contribution to the Greek government bond market government bond market | 15 |

The evaluation of Primary Dealer performance is obtained by summing up all the points accumulated by each Primary Dealer in the above areas and the result is used for the ranking of all Primary Dealers.

ii. Calculation of the Points

More specifically the calculation of the points in each area is carried out as follows:

a. Primary Market (20 points)

The evaluation of Primary Dealer performance in the primary market is carried out according to the criterion of the Trading volume (duration weighted) in the Primary market.

Calculation: Based on the successful, competitive and non-competitive bids submitted by each PrimaryDealer at bond and Treasury bill auctions that take place through HDATFor each successful bid, the nominal amount is duration-weighted. In the case of Treasury bills the weight is equal to 1.

Restrictions: On the day of the auction, the average secondary market (HDAT) price for the security auctioned is calculated between 11:45 a.m. and 11:55 a.m. (Greek time). Bid prices submitted by Primary Dealers at the auction cannot exceed the above average price plus 95 cents.

Scoring: In descending order

In the case where no Primary Dealer has a market share in the auction equal to or more than 10%, the first takes 20 points and all the others take points proportionally to the auction amount subscribed with respect to the amount of the best Primary Dealer

In the case where one or more Primary Dealers have a market share in the auction equal to or more than 10%, all of them take 20 points and all the others take points proportionally to the auction amount subscribed with respect to the amount corresponding to 10% of the total amount auctioned.

⁹ Source: Operating Rules of the Primary Dealers System formulated by the Committee of Primary Dealers' Supervision and control, Dec 2014



b. Secondary Market (25 points)

The evaluation of Primary Dealer performance in the secondary market is carried out according to the criterion of the monthly turnover on regulated markets (duration weighted).

Calculation: Takes into account Primary Dealer turnover (duration weighted) on each regulated market ("regulated" according to MiFID definition) approved by the Committee. Next, the percentage market share of each Primary Dealer is calculated on the basis of its total turnover (duration weighted) on all regulated markets.

Scoring: In descending order on the basis of the percentage market share of each Primary Dealer The first takes 25 points and all the others take points proportionally to their percentage market share with respect to the best Primary Dealer

In the case where Primary Dealers conduct reverse transactions on the same security at the same price, within a period of one minute, the Committee authorises the Bank of Greece to exclude such transactions from the above calculation. If such practice reoccurs persistently the Bank of Greece will inform the Committee accordingly The Committee in turn will provide the involved parties with the opportunity to provide written explanations about such transactions, upon which it may decide to deduct from the above calculation, trading amounts equal to multiples of the relevant reverse transaction, where such multiples will be decided by the Committee. When such penalties are imposed, the Primary Dealer Compliance and Back Offices will be informed accordingly

During periods of "Difficult Market Conditions," the turnover conducted by each Primary Dealer on HDAT will be multiplied by a factor equal to one plus the ratio of the time period in which each Primary Dealer is present in the market under "Difficult Market Conditions" divided by the overall time period of "Difficult Market Conditions":

1 + Overall time period of "Difficult Market Conditions"- abstention time during that period

Overall time period of "Difficult Market Conditions"

c. Yield Curve (40 points)

The evaluation of Primary Dealer performance with respect to the yield curve is carried out according to the following criteria:

Number of quotes displayed (10 points)

Calculation: The average daily number of all quotes, submitted by each Primary Dealer, that are active in HDAT during the period under consideration, apart from the quotes regarding compulsory bonds, Discount Margins (DM) and Strips (STPs).

Restrictions: For each quote submitted to HDAT the maximum abstention time is 2 hours, calculated from the moment that the quote is entered on HDAT (this is considered in a flexible way up to 2 hours and 15 minutes). All quotes have to be active for at least four hours during each trading day otherwise they will not be taken into account in the calculation (ex. If a quote is submitted at 13:01:00 it will not be considered in the calculation).

Scoring: In descending order on the basis of the average daily number of quotes of each Primary Dealer The first takes 10 points and all the others take points proportionally according to their average daily number of quotes and with respect to the average daily number of quotes of the best Primary Dealer

Abstention time (10 points) Calculation and Restrictions

- Only quotes referring to on-the-run benchmarks are taken into account. All such quotes have to be active for the whole trading day, with a maximum aggregate abstention time of 30 minutes. For example, if one or more of a Primary Dealer's quotes for the on-the-run benchmarks are deactivated for an aggregate time of more than 30 minutes, the time exceeding the 30 minutes is considered abstention time for the Primary Dealer
- From the daily abstention time the percentage daily abstention time for each Primary Dealer is calculated and, on the basis of this, the average percentage abstention time, for the period under consideration.





Scoring: In ascending order on the basis of the average percentage abstention time. The first takes 10 points and all the others take points in an inverse proportion to their average percentage abstention time with respect to the best Primary Dealer

Bid-ask spread (10 points)

The spread between bid and ask prices, cannot exceed 0.07% (7 cents) for fixed-rate bonds with remaining maturity within 5 years and Treasury bills, 0.10% (10 cents) for fixed-rate bonds with remaining maturity between 5 and 11 years as well as floating- rate bonds regardless of maturity and 0.20% (20 cents) for fixed-rate bonds with a remaining maturity exceeding 11 years. The Committee may periodically revise such spreads.

Calculation: For each category of securities (with remaining maturity less than 5 years, between 5 and 11 years and more than 11 years) and for each Primary Dealer, the bid-ask spreads are calculated. Then, the difference between each weighted-average spread and the maximum spread, as defined above, is computed for each category of securities. According to this difference, Primary Dealers are ranked by descending order The first takes 10 points and all the others take points proportionally to their difference with respect to the difference of the best Primary Dealer

Restrictions: Only fixed-rate bonds are taken into account for this criterion.

Scoring: Simple arithmetic average of each Primary Dealer's score in each category of securities.

Exceptionally, during the periods of "Difficult Market Conditions", the above- mentioned spreads shall not be compulsory

Daily Compliance Report (10 points)

Calculation: For this criterion, the compliance of each PD is measured every day according to the following three criteria:

- Daily trading volume of at least € 5 million
- Maximum daily abstention time for the compulsory bonds 30 minutes
- The bid-ask spread for compulsory bonds does not exceed 70 cents for fixed-rate bonds with remaining maturity within 5 years, as well as for Treasury bills, 100 cents for fixed-rate bonds with remaining maturity between 5 and 11 years as well as floating-rate bonds regardless of maturity, and 150 cents for fixed-rate bonds with remaining maturity above 11 years. (The Committee may revise these spreads, if the bid-ask spreads of criterion v change accordingly.)

Restrictions: For the calculation of the trading volume only fixed-rate bonds will be taken into account. For the abstention time and the bid-ask spread only PDs quotes on compulsory bonds will be taken into account.

Scoring: Every PD who daily complies with all three of the above criteria for at least 12 working days of the month, will receive 10 points in his monthly evaluation. In all other cases, he will receive 0 points.

d. Further contribution to the Greek government bond market (15 points)

The evaluation of Primary Dealers' performance with respect to their further contribution to the Greek government bond market will be provided twice a year by the PDMA and will take into account the following parameters:

- Market information and research
- Advice on issuance policy and the management of public debt
- Performance on syndications, private placement, swaps, execution efficiency
- Promotion of Greek government bonds
- End customer flow excluding Banks. This information will be provided by the monthly harmonised report on Primary Dealers' activity on the primary and the secondary market, agreed by all the members of the EFC Sub-Committee on EU Government Bonds and Bills Market and by AFME/Primary Dealers. This is submitted to the Secretariat of the Committee of Primary Dealers Supervision and Control (HDAT, Bank of Greece).





Every six months, the Bank of Greece publishes the ranking of the Primary Dealers in the press and refers to the period that has elapsed since the beginning of the calendar year

G. Quoting Obligations

i. Greek Treasury Quoting Obligations

According to the Operating Rules of the Primary Dealers System in Greece, both under normal and difficult market conditions, Primary Dealers in the Greek Government Bond Market are obliged to quote continuously during the trading hours within specific bid offer spreads, according to the maturity of the bond. The latter means that Primary Dealers cannot enter quotes in the System outside the predefined spreads.

In particular, under normal market conditions, these compulsory spreads are the following:

- For fixed-rate bonds with a remaining maturity within 5 years and Treasury bills: 7 price basis points;
- For fixed-rate bonds with a remaining maturity between 5 and 11 years and floating-rate bonds regardless of maturity: 10 price basis points; and
- For fix ed-rate bonds with a remaining maturity above 11 years: 20 price basis points.

The Committee of Primary Dealers Supervision and Control may periodically revise such spreads.

In the case of difficult market conditions, the Committee convenes and, after consulting with the Primary Dealers, sets new spreads.

ii. HDAT Quoting Obligations¹⁰

During business hours, Primary Dealers must provide their services continuously by quoting bid and ask prices for securities, according to the specific provisions of the HDAT Operating Regulations.

The bid/ask spread does not have to exceed the spread determined by the HDAT Management Council for each security category, as determined by the HDAT Supervision and Control Committee. By way of exception, divergences from such a spread are allowed when market conditions are not normal, as determined by the HDAT Management Council, based on the Committee's opinion.

The Bank of Greece issues the decision determining the securities for which Primary Dealers must compulsorily enter quotes into HDAT (Compulsory Securities). Moreover, it determines the Compulsory Securities for which each Primary Dealer has to quote on HDAT (compulsory quote). They are only required to quote, but are under no requirement as to the quantity per quote and the bid/ask prices, which shall be freely determined by the quoting Primary Dealer, in line with the general limits of the HDAT Regulations.

During the Pre-Market Phase, they must enter quotes on HDAT for their respective Compulsory Securities. Such quotes are not visible to other HDAT Members until commencement of the Open-Market Phase.

During the Open-Market Phase, if any Compulsory Quote is suspended because a trade has been carried out, the Primary Dealer that originally entered the quote on HDAT is obliged to re-enter it for a quantity and price that it wishes within the generally applicable limits. Unless otherwise specified, the rules applying to quotes also apply to Compulsory Quotes. The right to suspend Compulsory Quotes does not extend to benchmark securities specified by a decision of the HDAT Management Council.

The bid/ask spread in the pair of quotes entered in the electronic trading system managed by HDAT cannot exceed the spread laid down by the Council by Security category, on an opinion from the Committee.

¹⁰ Source: Art. 33 and 41 of the Operating Regulations of the Electronic Secondary Securities Market, HDAT



The permissible bid/ask spread is determined by the Bank of Greece, on an opinion from the Committee for three categories of securities based on their remaining maturity:

- Securities with a remaining maturity of less than 5 years;
- Securities with a remaining maturity of 5 to 11 years; and
- Securities with a remaining maturity exceeding 11 years.

The Council may, when decided by the Committee, determine that market conditions are not normal and lay down new spreads and their effective dates. In exceptional cases, the decision referred to in the preceding sentence may be made by the Council itself, and its decision shall apply for up to three business days. The Council, on an opinion from the Committee, decides to further adjust the spreads according to the current market conditions.

The HDAT Management Council, on an opinion from the Committee, determines a minimum quantity per quote, expressed in lots. Any quote exceeding the minimum shall be an integral multiple of one lot: no quote below the minimum is accepted by the system. The minimum permissible quantity per quote is modified by the Council and communicated to the HDAT participants through the electronic trading system managed by the HDAT

Members may modify their quotes in terms of price and/or quantity Once they have entered a quote, members have to keep the quote active throughout the Open-Market Phase; however, they may suspend it for a time period not to exceed two hours. A quote shall be reactivated on the responsibility of the member that has entered it. No quote may be withdrawn by the time and to the extent that a trade has been carried out on the basis of such quote.

Each member may make up to two quotes per Security simultaneously After the end of the Open-Market Phase, all quotes shall be automatically deleted.

iii. MTS Greece Market Making Obligations¹¹

As stated above, Market Makers commit to provide liquidity for a set number of bonds while Price Takers can only lift the 'liquidity' or the prices available on the system.

Only Market Makers may enter in the system quotes.

Quotes may be modified at any time, but a participant is obliged to conclude all contracts, at the price quoted and up to the volume offered, for those orders which have been confirmed by the system prior to reception of such modification. The quotes relating to each tradable security are ordered by the system according to the price that is best (Best Price) and, subordinate to that, according to time of entry. At the end of each trading day, quotes still registered in the system shall be automatically cancelled.

Market Makers may enter into the system both buy and sell quotes prior to the start of trading; such quotes will not be displayed to other participants until the start of trading.

Price Takers can either hit or lift prices posted on the system. No market making obligations apply to Price Takers.

¹¹ Source: Art. 33 and 41 of the Operating Regulations of the Electronic Secondary Securities Market, HDAT http://www.bankofgreece.gr/ BoGDocuments/HDAT_Operating_Regulations.pdf

H. Contacts

i. Debt Management Office

Public Debt Management Agency

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Stelios Papadopoulos

General Director of the Public Debt Management Agency s.papadopoulos@pdma.gr pdma@pdma.gr Tel: +30 210 370 1800

ii. Primary Dealers Contact Details

| FIRM | CONTACT |
|---|--|
| | |
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iii. Central Bank

Bank of Greece

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Efthymios Gatzonas

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8. Ireland

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A. List of Primary Dealers¹

| FIRM | Ireland (IE) | Firm's location |
|-------------------------------|--------------|-----------------|
| Barclays | Х | London |
| BNP Paribas | Х | Paris |
| Bank of America Merrill Lynch | Х | London |
| Cantor Fitzgerald Ireland Ltd | Х | Dublin |
| Citigroup | Х | London |
| Danske Bank | Х | Copenhagen |
| Davy | Х | Dublin |
| Deutsche Bank | Х | Frankfurt |
| Goldman Sachs | Х | London |
| HSBC | Х | Paris |
| J.P. Morgan | Х | London |
| Morgan Stanley | Х | London |
| NatWest Markets | Х | London |
| Nomura | Х | London |
| Société Générale | Х | Paris |
| UBS | Х | London |
| TOTAL | 16 | |

KEY:

AFME/Primary Dealer Members

Non-AFME Members

AFME Members

1 List of the recognised Primary Dealers as of September 2017 http://www.ntma.ie/business-areas/funding-and-debt-management/governmentbonds. In addition to the primary dealers, Bred Banque Populaire, Commerzbank and Santander are recognized as eligible counterparties.



B. Credit Rating

Irish sovereign debt is rated as follows:²

- Standard and Poor's: A+ (stable)
- Moody's: A2 (stable)
- Fitch Ratings: A (stable)
- DBRS: A (high) (stable)

C. Debt Instruments

Ireland's national debt is managed by the National Treasury Management Agency (NTMA). The NTMA issues Government bonds, Treasury Bills, Commercial Paper and other wholesale and retail debt products on behalf of the Minister for Finance.

Irish Government bonds are listed on the Irish Stock Exchange. The benchmark bonds are also traded on the electronic trading platforms, EuroMTS, Brokertec and BGC Partners. The clearing and settlement system of Irish Government bonds is carried out by Euroclear.

The NTMA has also designed amortising bonds, which make equal annual payments over their lifetime, to meet the needs of the Irish pensions industry.

Irish Treasury Bills are zero coupon instruments which normally have maturities at issue of between one and twelve months.

Ireland has a USD 50 billion multi-currency Euro Commercial Paper (ECP) Programme which is listed on the Irish Stock Exchange. The programme is fully STEP (Short-Term European Paper) compliant and therefore carries the STEP label. Paper is only sold through approved dealers and prices are quoted on Bloomberg while the maximum tenor available under the programme is 364 days. This programme is used as bridging finance in the replacement of longer term debt and for other liquidity management purposes.

Ireland's US Commercial Paper programme was launched in July 2009. Funds are raised within the United States, in US dollars, and are swapped into euro. Typical trades are in amounts of USD 50 million to USD 100 million.

The Exchequer Note programme provides short-term funding directly from wholesale institutional clients. The available maturities range up to one year. Exchequer Notes are issued on a discount basis in line with commercial paper.





D. Rights and Obligations of Primary Dealers

Primary Dealers must be members of the Irish Stock Exchange and adhere to its rules.

Primary Dealers are required to be market makers in Irish Government bonds and to comply fully with the obligations arising therefrom.

The NTMA will have regard to a Primary Dealer's suitability for recognition by reference to its management depth and experience, dealing capability including the ability to participate in Irish Government bond and Irish Treasury Bill auctions, marketing strategy, geographic distribution capacity, and its ability to support the NTMA's funding programme. A prospective Primary Dealer will also be required to certify that it is authorised to conduct business of the nature contemplated herein under the laws of the jurisdiction in which it is incorporated and the markets in which it intends to deal in Irish Government bonds.

Primary Dealers shall be committed to developing, through their marketing strategy, new client investment in Irish Government bonds. To do this, Primary Dealers shall have available dedicated professionals, separate from their marketmaking personnel, selling Irish Government bonds, and shall regularly include coverage of developments in Ireland's economy and capital markets in their published research.

The NTMA reserves the right to withdraw recognition of a Primary Dealer particularly in the event of substantial change in that Primary Dealer's business or financial situation, its human or organisational resources, its performance against the criteria referred to in this document or for any other reason it deems necessary at its sole and absolute discretion. The NTMA will normally seek to provide at least three months' notice of withdrawal of recognition. However this period may be shortened at the sole and absolute discretion of the NTMA.

A Primary Dealer which intends to resign from that role should inform the NTMA in writing at least three months in advance in order to ensure an orderly withdrawal, including the timing and date of resignation.

Primary Dealers are obliged to quote on demand to clients, to agency-only stockbrokers acting on behalf of clients and to the NTMA, firm bid and offer prices in each benchmark bond notified by the NTMA on its website www.ntma.ie. Primary Dealers are also obliged to continuously display the bid and offer prices at which investors can, in the normal course, expect to transact, in each of the benchmark bonds.

The standard settlement period for Irish Government bonds is two days (T+2); and, unless indicated to the contrary, Primary Dealers' bond prices must be quoted on the basis of two-day settlement.³

Primary Dealers are required to quote bid and offer prices for benchmark Irish Government bonds (as listed on the NTMA's website www.ntma.ie), on any recognised electronic trading platform such as EuroMTS, BGC Partners Inc. and BrokerTec, or on any other platform of good market standing as agreed by it with the NTMA. Primary Dealers are obliged to quote in a minimum size of \in 5 million nominal per benchmark bond. The obligation to quote does not apply to bonds with less than 18 months to maturity.

A Primary Dealer shall be deemed to be compliant in respect of its quoting obligations if it maintains a bid-offer spread acceptable to the NTMA for each benchmark Irish Government bond for at least five hours per trading day on one of the electronic trading platforms outlined above. The NTMA will monitor each Primary Dealer's compliance on one electronic trading platform only, from month-to-month. Primary Dealers should notify the NTMA of any change of the platform used at least one month in advance.

The obligation to quote will apply between the hours of 8:00 a.m. and 4:00 p.m. every day on which the Irish Stock Exchange is open. However, a Primary Dealer will not be obliged to quote on public holidays in the financial centre from which it operates.

³ As a result of the Central Securities Depository (CSD) Regulation for T+2 settlement across the European Union, on Monday 6 October 2014 the standard settlement period was shortened from three to two days (T+2). Primary Dealers should make arrangements to accommodate this in their pricing and settlement systems





In general the NTMA will regard the bid-offer spreads maintained by each Primary Dealer on its platform of choice for compliance and in the broader market as a key component in assessing the Primary Dealer's ability to provide liquidity and show commitment to the Irish Government Bond market.

A Primary Dealer which is part of a wider corporate group conducting Irish Government bond business in other, separate, capacities (such as funds management) must ensure that there are no actual or potential conflicts of interest in the performance of its functions as a Primary Dealer. A Primary Dealer shall ensure that its employees engaged in carrying out functions as a Primary Dealer operate independently of, and do not share information with employees in other business areas involving Irish Government bonds by operating a strict separation by way of 'Chinese Walls' between the business units.

Each Primary Dealer will comply with all applicable laws and regulations in force in any jurisdiction in which it purchases, offers or sells Irish Government bonds and will obtain any consent, approval or permission required by it for the purchase, offer or sale by it of Irish Government bonds under the laws and regulations in force in any jurisdiction to which it is subject or in which it makes such purchases, offers or sales and the Issuer shall have no responsibility therefor.

The Irish Stock Exchange has provision in its Rules, as approved by The Central Bank of Ireland, for the timely reporting to the Irish Stock Exchange by Primary Dealers of each bond trade (including trades with the NTMA) undertaken by them. The NTMA expects that Primary Dealers will fully comply with their obligations as members of the Irish Stock Exchange.

In addition, the NTMA requires each Primary Dealer to provide it with a daily report on its end-day net open market-makingrelated position in benchmark and non-benchmark bonds, as listed on www.ntma.ie. Each Primary Dealer will also be required to supply the NTMA in arrears on a monthly basis with detailed turnover data conformed to the EU Harmonised Reporting Format certified by its Compliance Office. Daily positions reports and monthly turnover reports should be mutually consistent and consistent with turnover information provided to the Irish Stock Exchange.

E. Primary Market

i. Auctions

- The NTMA will undertake funding in designated benchmark bonds in order to continue the practice of creating large liquid issues. However, the NTMA may also issue other bonds for liquidity purposes pursuant to its debt management functions.
- Bonds are issued by way of scheduled auctions held by the NTMA. An indicative auction calendar for bonds will be published by the NTMA at the beginning of each calendar quarter.
- The auction calendar may be changed from time to time or the NTMA may, at any stage, decide not to hold any further auctions (or auction) during the year, depending on the evolution of the Government's funding needs and/or market conditions.
- Scheduled bond auctions will normally take place at 08:00 a.m. 10.00 a.m. on the second Thursday of each month indicated in the auction calendar.
- Participation in auctions is restricted to recognised Primary Dealers.
- One or more bonds may be offered in each auction.
- The NTMA will announce the details of the auctions on its website www.ntma.ie on the Monday before the auction date. The NTMA reserves the right, in exceptional conditions, not to proceed with a previously-announced auction.
- The Bloomberg Auction System will be used to conduct the auctions and announce the results. In the event of a Bloomberg network fault at any time during the bidding process the auction will be cancelled and all bids deemed void. An alternative time for the auction, and if necessary alternative arrangements, will be announced as soon as possible.





- The NTMA reserves the right to make other arrangements for the conduct of any auction if it is not fully satisfied with the operation of the Bloomberg Auction System.
- Each auction will consist of two phases, a competitive auction and, immediately afterwards, a non-competitive auction. The NTMA also organises extraordinary auctions, syndications and tap issuances, all of which are explained below.
- a. Competitive Auctions
- Primary Dealers are required to submit their bids via the Bloomberg Auction System.
- Bids may be submitted from 8.00 a.m. up to the deadline indicated in the auction announcement, normally 10.00 a.m.
- Each bid must indicate: (a) the bond required (b) the nominal amount, which must be at least €1,000,000 and a multiple of €100,000 (c) the price, which must be a multiple of € one cent (€0.01)
- Primary Dealers may amend bids on the Bloomberg Auction System up to the announced cut off time for the auction.
- Primary Dealers may submit multiple bids, but each Primary Dealer's total bids may not exceed the stated auction size or the upper-end of the stated range within which the auction size will be determined by the NTMA.
- Each bid will indicate the bond, the nominal amount and the price. Bid prices must be in multiples of one euro cent.
- Each Primary Dealer is required to submit bids at or above the market bid level for aggregate amounts of up to at least 10% of the maximum amount indicated for the auction.
- The NTMA reserves the right to reject at its discretion, all or any bids submitted by a Primary Dealer in a competitive auction and to allocate less than the full amount of the bond(s) on offer.
- Auction allocations will be based on the single-price, Dutch-style method, where all successful bids are allocated at the cut-off price. Allocations will be made in descending price order with a pro-rata adjustment of the allocations at the cut-off price, where required, in order to bring the total allocations in line with the amount to be issued as decided by the NTMA. The auction allocations will be in minimum lots of €1,000.
- Primary Dealers will be informed of the bids that have been accepted and of the overall results of the auction approximately fifteen minutes after the close of the auction, unless technical problems occur that call for contingency measures.
- The results of the auction, including the total amount of bids, the nominal amount sold, cover, highest accepted price, weighted average price and lowest accepted price will be announced to the market on Bloomberg page NTMA2 and on www.ntma.ie.

b. Non-Competitive Auctions

After the announcement of the results of the competitive auction, the NTMA will accept bids in a non-competitive auction from Primary Dealers at the cut-off price in the competitive auction, by no later than 10:00am on the day following the auction.

- 15% of the amount of each bond sold in the competitive auction will be made available in each non-competitive auction and the entitlement to this will be divided among Primary Dealers in proportion to their allocations in the competitive auction.
- The arrangements for the allocation to the Primary Dealers of their entitlements in the non-competitive auctions may be changed from time to time by the NTMA following discussions with the Primary Dealer group.



c. Extraordinary Auctions

In response to demonstrated investor demand, the NTMA reserves the right to hold an extraordinary auction of existing bonds or to issue a new bond outside of the auction calendar without regard to the notice periods indicated. All Primary Dealers will be notified of any such extraordinary auction by Bloomberg message and all will be eligible to participate.

ii. Syndications

The NTMA may issue a new bond or a further tranche of an existing bond via syndication from time to time. The form and procedure of the syndication will be in line with the custom and practice of the market and as is necessary under the prevailing market conditions.

iii. Tap issuance

Subject to market conditions, the NTMA may offer bonds by a tap mechanism. When issuing by tap, the NTMA will announce on Bloomberg (page NTMA2) and to the market generally the terms of the tap issue. Once the tap is opened, Primary Dealers may place their orders by Bloomberg messaging.

To the extent that total demand from all Primary Dealers exceeds the amount which the NTMA decides to issue, orders will be satisfied on a proportional basis. The NTMA reserves the right in its absolute discretion to reduce or reject all or any orders placed by Primary Dealers in a tap. If there is excess demand for a tap the NTMA may, at its sole and absolute discretion, supply up to the full amount demanded.

Primary Dealers will be advised via Bloomberg (page NTMA2) when a tap is closed and of the amount sold.

iv. Direct issuance

The NTMA will quote prices directly to certain eligible financial institutions for amounts of up to $\leq 100,000$ to facilitate purchases of bonds from such institutions by retail / personal investors. This facility will be confined to financial institutions that:

- i. are authorised by the Central Bank of Ireland under the Markets in Financial Instruments Regulations of 2007 2 to undertake the type of business contemplated herein; and
- ii. are general Trading Member Firms of the Irish Stock Exchange with approval to deal in Irish Government bonds; and

iii. maintain an active private client business that trades in Irish Government bonds with retail / personal investors.

v. Bond Switching

Switches initiated by NTMA

Subject to market conditions, the NTMA may offer a bond switch from time to time. A switch is the purchase of a bond and the simultaneous sale of another. A switch, including the terms, will be announced on Bloomberg page NTMA2 and on the NTMA's website

- Once the switch is opened, Primary Dealers may place their orders by the Bloomberg system. or, at the NTMA's sole and absolute discretion, by telephone.
- The general market will be advised via Bloomberg (NTMA2) when a switch is closed and of the amount switched. The NTMA reserves the right to simultaneously issue one or more new bonds via the switching mechanism.

To the extent that total demand from all Primary Dealers for the switch exceeds the amount which the NTMA decides is appropriate, orders will be satisfied on a proportional basis. The NTMA reserves the right in its absolute discretion to reduce or reject all or any orders placed by Primary Dealers for a switch





Subject to market conditions, the NTMA may, at its sole and absolute discretion, facilitate the switching needs of Primary Dealers on a reverse inquiry basis in order to assist the better management of their positions in Irish government bonds.

F. Secondary Market⁴

In order to be considered eligible for selection for market making, trading platforms should be recognised by the Primary Dealer community and the NTMA as being of good market standard. Primary Dealers are not required by the NTMA to follow any specific procedure for the selection of their platform. The status of the selected platform is subject to review as required.

i. Interdealer Market

Quoting Obligations

For the purposes of measurement and comparison, if a Primary Dealer provides quotations for more than five hours per day in any benchmark bond, the five hours with the narrowest bid-offer spread shall be used. The obligations to quote will apply between the hours of 8:00 a.m. and 4:00 p.m. every day that the Irish Stock Exchange is open. However, a Primary Dealer will not be obliged to quote on public holidays in the financial centre from which it operates. The NTMA will monitor the bid-offer spreads on a regular basis and the degree of compliance with the quoting obligations will form part of the basis for the non-competitive auction allocation.

The NTMA and the Primary Dealer group may, from time to time, agree other standards for measuring compliance with the obligation to quote bid and offer prices to other market participants.

In general, the NTMA will regard the bid-offer spreads, maintained by each Primary Dealer on its platform of choice for compliance and in the broader market, as a key component in assessing the Primary Dealer's ability to provide liquidity and show commitment to the Irish Government Bond market.

Primary Dealers are, under normal circumstances, committed to quote executable prices in minimum sizes of €5 million

Primary Dealers are expected to quote two-way prices, of a minimum size and within maximum spreads for designated benchmark bonds. The maximum spreads are reviewed periodically by the NTMA and may be revised following consultation with the Primary Dealers, in light of the changing maturities of the bonds, new issues and evolving market conditions.

The NTMA would anticipate that competitive forces would result in prices being quoted within the maximum spreads which are intended to be good for all normal market circumstances.

Each Primary Dealer will be expected to play an active role in the trading of Irish Government bonds on the approved electronic trading platforms. A Primary Dealer which is part of a wider group conducting Irish Government bond business in other, separate, capacities, such as funds management, must ensure, in accordance with best practice, strict separation by way of 'Chinese Walls' of the business of the Primary Dealer from other separate bond business that may be conducted within the wider group.

ii. Dealer to Customer Market

a. NTMA secondary trading function

The NTMA maintains a secondary trading function to trade in its bonds with other market participants. The purpose of the secondary trading function is to support market liquidity and to acquire market intelligence. The NTMA would expect Primary Dealers to actively engage with its secondary trading function at market levels.

b. E-trading

Bloomberg and TradeWeb are the main Dealer to customer platforms used for the Irish government bonds market.

⁴ Source: National Treasury Management Agency (NTMA) website 'Bond Issuance Procedures and Related Debt Management Arrangements including the Primary Dealer System'



iii. Repo (and Reverse Repos)

The NTMA may, at its sole discretion, supply bond repos to the Primary Dealers in response to their requirements. Under normal circumstances, such transactions will only apply to benchmark bonds and will be in line with current practice and custom in the market, as well as following the necessary legal arrangements.

iv. Reporting Arrangements

The Irish Stock Exchange has provision within its Rules, as approved by the Financial Regulator, for timely reporting to the Exchange by Primary Dealers of each bond transaction (including bond transactions with the NTMA) undertaken by the firm. All trades should be reported to the Irish Stock Exchange before 6.00 p.m. on the day they are undertaken. Trades entered into before market hours should be included with the trade report for that day. Trades entered into after market hours should be included in the next day's report.

The NTMA will require each Primary Dealer to furnish it daily with its end day net open position in specified bonds. Each Primary Dealer will also be required to supply the NTMA with detailed turnover data certified by its Compliance Office, in arrears and on a monthly basis.

The NTMA will include a review of the overall market making system in its annual report.

G. Appraisal of the Activity of the Primary Dealers

Appraisal of the activity of the Primary Dealers is carried out on an all-encompassing basis. Their market share of auctions, spreads maintained and turnover achieved are considered important indicators. This appraisal is undertaken on an ongoing basis. The ranking of Primary Dealers is not made public.

H. Contacts

i. Debt Management Office

National Treasury Management Agency

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ii. Review of Arrangements

The NTMA will meet regularly with Primary Dealers to review the working of the arrangements set out herein, including issuance arrangements, in order to improve the liquidity and efficiency of the market for Irish Government bonds, to examine market trends, and to consult Primary Dealers on proposed operational changes that may appear desirable in the running of the bond market.

The NTMA reserves the right, in its absolute discretion, following consultation with the Primary Dealers and other important market participants, to make such revisions to this document as it deems fit from time to time.

| FIRM | CONTACT |
|---|--|
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iii. Central Bank

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iv. Irish Stock Exchange

Irish Stock Exchange

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European Primary Dealers Handbook

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A. List of Primary Dealers¹

| FIRM | Italy (IT) | Firm's location |
|-------------------------------|------------|-----------------|
| Banca IMI | Х | Milan |
| Bank of America Merrill Lynch | Х | London |
| Barclays | Х | London |
| BNP Paribas | Х | London |
| Citigroup | Х | London |
| Crédit Agricole | Х | London |
| Deutsche Bank | Х | London |
| Goldman Sachs | Х | London |
| HSBC | Х | Paris |
| ING | Х | Milan |
| J.P. Morgan | Х | London |
| Monte dei Paschi di Siena | Х | Siena |
| Morgan Stanley | Х | London |
| NatWest Markets | Х | London |
| Nomura | Х | London |
| Société Générale | Х | Paris |
| UBS | Х | London |
| Unicredit | Х | Milan |
| TOTAL | 18 | |

KEY:

AFME/Primary Dealer Members

Non-AFME Members

AFME Members

1 List of the Primary Dealers operating on the Italian Government Bond Market as of September 2017 Source: Italian Department of Treasury



B. Credit Rating

Italian debt is currently rated as follows:²

- Standard and Poor's: BBB- (stable)
- Moody's: Baa2 (negative)
- Fitch Ratings: BBB (stable)
- DBRS: BBB(high) (stable)

C. Debt Instruments

The Ministry of the Economy and Finance sets out the issue of five categories of Government bonds available for both private and institutional investors on the domestic market:

- Treasury Bills (BOTs);
- Zero Coupon Bonds (CTZs);
- Treasury Certificates (CCTeus);
- Treasury Bonds (BTPs);
- Treasury Bonds Indexed to Eurozone Inflation (BTP€is)
- Treasury Bonds Indexed to Italian Inflation (BTPItalia)

² Credit rating updated as of September 2017





| BOND | Maturity | Interest | Medium Denomination | Type of Auction | Tax Rate | Redemption |
|---------------|--|---|------------------------|---|-------------|--|
| BOTs | 3,6,12 months, or any other maturity within one year (flexible BOTs) | Discount at issuance | €1,000 | Competitive auction referred to yield | 12.5% | At par, single payment at maturity |
| CTZs | 24 months | Discount at issuance | €1,000 | Marginal auction with discretional determination of price and quantity issued | 12.5% | At par, single payment at maturity |
| CCTeus | 5-7 years | Semi-annual floating coupons, possible discount at issuance | €1,000 | Marginal auction with discretional determination of price and quantity issued | 12.5% | At par, single payment at maturity |
| BTPs | 3,5,7,10,15,20,30 and 50 years | Fixed semi-annual coupons, possible discount at issuance | €1,000 | Marginal auction with discretional determination of price and quantity issued | 12.5% | At par, single payment at maturity |
| BTP€i | 5,10,15,30 years | Semi-annual real coupons, possible discount at issuance and revaluation of principal at maturity | €1,000 | Marginal auction with discretional determination of price and quantity issued | 12.5% | Single payment on maturity |
| BTP Italia | 4,6,8 years | Semi-annual real coupons, revaluation of principal on a semi-annual basis, bonus payment at maturity | €1,000 | Through the MOT (Borsa Italiana's Electronic Bond Market) | 12.5% | At par, single payment on maturity |

The Republic of Italy also issues other instruments in euros and in other currencies, generally subscribed by institutional investors. These issues are offered on international markets in the form of medium/long-term securities or of commercial papers.



D. Privileges and Obligations of Primary Dealers³

i. Privileges for Specialists (Primary Dealers)

Specialists benefit from the following unique privileges:

- Exclusive access to reserved reopenings of Government bond auctions that allow for this option as well as exchange and buyback transactions. Beginning with the second quarter of 2012, the share of re-openings has been increased and brought up to 15% (30% for the first tranches of medium/long-term bonds). The 5% increase, however, is only for Specialists that have demonstrated a particularly positive performance on the reference wholesale electronic secondary market. However, starting from 2014, the amount of reopenings for 6 month /12 month BOTs will be equal as a rule to 10% of the nominal amount offered in the auction. The above mentioned 10% will be linked to the performance of Specialists observed in the primary market and the secondary market, equally divided. Starting from 2017, with regard to nominal or inflation-indexed securities having a residual life of more than 10 years, the Treasury's programme includes the possibility of a discretionary increase of the non-comp auctions, raising it to 20% (compared to the current 15%). In such case, the amount accruing to each individual Specialist will be determined on the basis of the performance on the primary market for securities of the same type and maturity (10%) and the performance on the screen-based secondary market (10%). The deadline for participation in these reopenings is normally set at 3:30 p.m. of the day after the ordinary auction;
- Exclusive access for selection of:
 - lead managers of syndicated issuances in Euros,
 - dealers for the US dollar benchmark program,
 - dealers for bilateral buy-back transactions;
- Preference for the participation as counterparty in other issuances in euros and for derivatives transactions;

Candidate Specialists, whose performance is in line with the Treasury's expectations and that are thought to be able to significantly improve the placements results, can be invited to take part in syndicated transactions.

A satisfactory and consistent operational performance by the Specialist is a necessary condition, but not sufficient in itself for being selected to participate in the transactions described above. The Treasury takes into account the levels and continuity in their role as Specialist, but makes its choices based on:

- Their advisory activity related to the specific transaction;
- The possession of an adequate distributional structure with respect to the operation;
- The ability to achieve the targets set by the issuer.

ii. Obligations

Market makers in Italian Government bonds that want to apply for enrolment in the List of Specialists, must reside in the European Union, be a bank or an investment company, operate on regulated markets and/or on wholesale multilateral trading systems whose registered office is in the EU, that meet requirements provided by article 23, paragraph 2, of Regulation 216/2009 as well as:

• Have operated for at least five months, as market makers on Italian government bonds, on at least one of the trading venues included in the List;

³ Source: Italian Treasury's website, Evaluation Criteria of Specialists in Government bonds Year 2017



- Have signed the protocol agreement with the Bank of Italy to enable participation in auctions, buybacks and exchange transactions of Government bonds and attest that it is aware of what is therein contained and have put in place all that is necessary to fairly use the electronic auction system;
- Be in possession of a suitable organizational structure and of a satisfactory knowledge of the functioning of Italian Government bond markets from normative, technical and organizational points of view, to be checked also through relevant meetings with the Treasury;
- Be in possession of a net regulatory capital equal at least to 50 million euros;
- Participate in the Government securities auctions with continuity and efficiency;
- Contribute to the efficiency of the secondary market and not to compromise the orderly process of market trading;
- Possess an organizational structure suitable for the status of Government Bond Specialist;
- Contribute to the management of public debt and to the debt issuance policy choices, for example, through advisory and research activities;
- Respect the confidentiality of information to which Specialists have access.

E. Primary Market

Bonds can be sold via:

- Public auction to guarantee the access to a large number of investors and maintain a high level of competition and transparency;
- a bank syndicate chosen from Government bond Specialists, that collects final investors' orders (a placement syndicate);
- electronic trading platforms.

The Italian Treasury prefers public auctions for issues on the domestic market, normally limiting the use of the placement syndicate to the introduction of new instruments (like the first issue of BTP \in is in 2003 and of CCTeus in 2010) or when very in-depth evaluations need to be made as regards market interest, the quantity to offer or the issue price of the bond, as in the case of long-term BTPs and BTP \in is.

A new issue method was introduced for the BTP Italia, the Government bond linked to Italian inflation, first issued in 2012 and envisaged for retail market demands. It uses the Italian Exchange's MOT (regulated bond market dedicated to retail trading) electronic platform.⁴

i. Auctions

At the end of every calendar year, the Treasury drafts and publishes the "Annual Auction Calendar" for the next year together with the "Public Debt Management Guidelines", to inform dealers well beforehand on the frequency of auction placements and the quality profile that will guide the issuance policy during the year.⁵ A press release is also made before each auction. Aside from announcing the bonds to be issued and their characteristics, it indicates the quantities offered in the auction as well as all relevant dates, including the bond settlement date

⁴ For complete information on the issuance program please see the 2017 guidelines for public debt management, Auction Execution Methods

⁵ The days in which auctions take place are set in the annual issuance calendar released by the Ministry of Economy and Finance



Government bond auctions are carried out at the Bank of Italy, Market Operations Service - Public Debt Division, in the presence of an employee of the same Bank and an official (the Treasury Officer) from the Ministry of Economy and Finance (MEF) representing the Minister who is responsible for the auction's regularity. The MEF Treasury Officer can also participate to auction operations via video-conference.

Authorized dealers' bids to participate in the auctions are sent online, using the National Interbank Network. Dealers can place bids for each bond offered until 11 am of the auction day. The system automatically rejects bids beyond the deadline. Dealers can repeatedly adjust their bids, substituting the previous ones, since the system only considers the final bid made within the deadline as valid.

So as to maintain data privacy, bids sent online are encrypted on the receiving monitor at the Bank of Italy. They can be decrypted with a digital key only after 11 am by an official of the Bank of Italy in charge of the auction. A series of automatic operations thus begins. These produce a printout in which bids are listed in decreasing price order or increasing yield order.

The summary printouts are an essential part of the auction minutes. The latter are signed by the Treasury Officer and by the Bank of Italy employee. They include the auction results and the circumstances that characterized their execution. Moreover, immediately after the auction's end, the information that most interests the market is broadcast via press release, both by the Bank of Italy and the MEF - and published on their websites - as well as by Bloomberg and Reuters.

The auction mechanism includes recovery procedures in case a dealer's IT system malfunctions. The dealer must contact the Bank of Italy to inform of the problem and obtain authorization to transmit bids via fax.

Recovery procedures are also in place in the case of network downtime. In these cases the bidding deadline is postponed. The decision to postpone and the new deadline are communicated to dealers using economic-financial information circuits. Should the interruption last beyond 5 pm, the MEF will decide on how to proceed and its decisions will be communicated with the above mentioned means.

Medium/long-term Government bonds and 6/12-month BOTs have reopenings (a supplementary placement) reserved for Government bond Specialists. To be able to access the reopening, Specialists must have taken part in the main auction with at least one valid bid. Bonds are assigned at the marginal price of the ordinary auction for medium/long-term bonds and at the weighted average price of the ordinary auction for BOTs. The maximum amount offered in reopenings is usually 10% of the ordinary BOT issue. For medium/long-term bonds it is 30% of the amount offered in the first tranche of new bonds and 15% for the following reopenings. Starting from 2017, with regard to nominal or inflation-indexed securities having a residual life of more than 10 years, the Treasury's programme includes the possibility of a discretionary increase of the reopenings, raising it to 20% (compared to the current 15%). In such case, the amount accruing to each individual Specialist will be determined on the basis of the performance on the primary market for securities of the same type and maturity (10%) and the performance on the screen-based secondary market (10%).

The amount to assign to each Specialist is proportioned to what the dealer subscribed in the previous auctions and, in part, is linked to the dealer's performance on the secondary market in the wholesale trading venues chosen. Should one or more Specialists, during the reopening, place bids for amounts lower than what they are entitled to, the residual amounts will be redistributed proportionately to the other Specialists using the above mentioned criteria.

The bidding deadline of the reopening reserved for Specialists is extended to 3.30 pm of the business day following the ordinary auction. Settlement of the supplementary auction is with the same value date as the ordinary auction.⁶

⁶ For auction reopenings of securities issued before this date, the deadline for submitting bids was 12.00 a.m. of the day following the auction



a. Auction Settlement

- The days in which announcements are made, auctions are held and settled, are determined in the annual issuance calendar published by the MEF. Together with the announcement of the bonds to be auctioned, the sizes put on auction are communicated as well as, their settlement dates.
- Presently, the settlement date for all Government bonds is two business days following the auction date (T+2). For BOTs this usually coincides with the maturity of corresponding bonds, so as to facilitate reinvestment. When the settlement date of medium/long-term bonds does not coincide with the date in which the bond's interest begins to accrue (the interest commencement date), subscribers pay the Treasury the corresponding accrued interest. When the settlement date does not fall on the day on which security interest begins to accrue (the dated date), subscribers pay the Treasury the relative accrued interest
- The settlement of all bonds is through the settlement and payment service run by Monte Titoli and the Bank of Italy.

b. Types of Auctions

The Treasury implements two types of auctions:

- Competitive yield auction for BOTs;
- Marginal price auction with discretionary determination of the allocation price and the quantity issued for CTZs, BTPs, CCTeus and BTP€is.

Competitive yield auction⁷

Unlike other Government bonds, BOTs are placed with an auction in which dealers place their bids in yield, not price, terms. Moreover, in a competitive yield auction each bid, if placed, is awarded at the rate proposed. It follows that a competitive yield auction closes with a range of allocation rates. With these, the Bank of Italy calculates the weighted average yield and the corresponding weighted average price.

Authorized dealers can place up to five bids. Their yields must differ by at least one thousandth of one percent. Bids must be of at least 1.5 million euros and at most the entire quantity offered by the Treasury at the auction. Bids for greater amounts will be considered only for the amount on auction. The minimum denomination for investors is 1,000 euros.

Bids at the lowest yields are allocated first, followed by the others in increasing yield order, until the amount on offer is covered. If bids at the final awarded yield cannot be completely satisfied, they will be divided proportionally, rounding off when needed.

To avoid that the weighted average yield is negatively influenced by bids made at yields that are not in line with the market, a minimum acceptable (or safeguard) yield is calculated. Similarly, a maximum acceptable (or exclusion) yield is calculated in order to exclude any speculative bids from the auction.

Dealers' bids can be made at positive, negative or null yields. As established by a decree of the Ministry of Economy and Finance, dealers must apply the weighted average price of the auction to investors who subscribe bonds of the same auction.

Marginal Price auction

The marginal price auction is used to place medium/long-term bonds. In a marginal price auction allocated bids are all awarded at the same price, the marginal price. The auction price and quantity is determined discretionally. In this way the quantity issued is not set beforehand, but is between a minimum and maximum amount announced in the press release published some days before the auction.

The amount placed is determined by excluding bids made at prices that are not suitable with respect to market conditions, on the basis of a ranking in which dealers' bids are listed anonymously. The lowest price among those bid by awarded dealers is the auction (marginal) price which is applied to all awarded dealers. If bids at the marginal price cannot be completely satisfied, they will be divided proportionally, rounding off when needed.

⁷ Competitive auctions in yield terms came into force for BOTs in April 2009. Until then BOTs had been allocated by means of competitive auctions in price terms





Dealers can place up to five bids, each at different prices, for a minimum amount of at least 500,000 euros of nominal capital and less than the amount being issued. Bids beyond the latter limit will be accepted up to the amount on offer. The minimum denomination for investors is 1,000 euros.

Prices must vary by at least one thousandth for CTZs and one hundredth for the other bonds. Other variations will be rounded upwards.

ii. Syndication

In order to have flexibility to launch the deal when market conditions are suitable, the Treasury does not announce syndicated deals in advance. The quarterly issuance programme announces the bonds which will be issued via auction. It must be considered that the procedure could change, depending on the type of bond (BTP, BTP€I or other instruments).

The procedure begins with the announcement of the Treasury via a press release, a few days before the launch of the syndication.

Leaders are selected among Specialists taking into account several criterias: how Specialists have been performing over the previous months/years; which Specialist is supporting the Treasury in the analysis of the market in terms of demand, performance of previously-issued bonds on the secondary market, market rumors, etc, and specific expertise of the Specialist in the particular segment or geographical area in which it operates

The Treasury follows the standard procedure for placing bonds in a syndicated transaction, and for pricing and executing a transaction regarding a Government bond in the euro area.

The key stages of the operation and their results are communicated to all market participants through the most important financial information providers (Bloomberg, Reuters, IIIA, etc.), press release and the Treasury's website.

F. Secondary Market⁸

i. Interdealer Market

a. Multiplatform Environment⁹

In order to be considered as an authorized Trading Platform on which Primary Dealers' quotes and trading activity are evaluated by the Treasury, trading platforms based in the EU must be registered on a list managed by the Italian Treasury.

Decree No. 853355 of 1 March 2011 specifies the technical and administrative procedures that will be used to verify the requirements for registration in the list of regulated markets and multilateral trading facilities eligible for the evaluation of the activity carried out by Specialists in Italian Government bonds.

b. Platforms Selection Procedure

Decree no. 993039 of 11 November 2011 (Selection and Evaluation of Specialists in Government Bonds) specifies the selection of trading venues, among those eligible, of where to carry out the evaluation of Specialists and also the selection and evaluation of the Specialists themselves.

The potential revision of the Status of the selected platform is regulated by art. 23, paragraph 10 of the Decree no. 216 of December 2009 and Decree no. 853355 of March 2011, art. 4.

⁸ Source: Evaluation Criterias of Specialists in government bonds 2017

⁹ So far the Treasury has issued a decree for the selection of eligible markets for the evaluation of Primary Dealers. The set-up of the new multiplatform environment, from an organisational point of view, is currently under definition/construction



ii. Quoting Obligations

The Treasury does not directly set specific quoting obligations for the Specialist (i.e. Primary Dealers) on the market. Indeed, according to the current Italian framework, the Treasury must evaluate the Specialists on quote-driven regulated markets. The banks must therefore fulfill the quoting obligations set up by companies managing the markets (MTS Italy in this regard). The evaluation carried out by the Treasury is then performed on a relative basis monitoring certain parameters such as quotation quality index, depth contribution index etc.

On MTS Italy the allocation of Financial Instruments to each Market Maker shall be based on the following criteria:

- Full coverage of the Financial Instruments. All BTP, (BOT), BTP€I, CTZ, CCTeu having at least 45 days of residual life at the beginning of the month in which the commitments are valid shall be considered as eligible for Market Makers' commitments purposes.
- Quoting of each Financial Instrument by a number of Market Makers adequate to guarantee actual competition. Each Market Maker is assigned 31 Financial Instruments, including four index linked BTPs, so that each Market Maker shall quote a basket representing the full yield curve and balanced in terms of liquidity. Each Financial Instrument is allocated to at least three Market Makers.
- Half the number of Financial Instruments of each category, quoted with the narrowest average bid/ask spread during the two previous months, shall be considered as liquid.
- The Financial Instruments issued during the relevant current month shall be automatically considered as allocated to all the Market Makers

iii. Dealer to Customer Market

The first three platforms for the Italian Government Bonds market are Bondvision, Tradeweb and Bloomberg, which have almost the same market share.

G. Appraisal of the Primary Dealers' Activity¹⁰

The Specialists' operational activity is evaluated by the Treasury, according to the criteria outlined in the following paragraphs. For a description of the parameters used and the methodology implemented for the attribution of the score, please refer to the Italian Market Appendices at the end of the Italian chapter.

At the end of each year, usually one calendar year, on the basis of the overall performance evaluation, the Treasury will elaborate a final ranking of Specialists and it will publish the names of the top five Specialists on its website. The Treasury reserves the right, should exceptional circumstances occur during the evaluation period, to modify the criteria contained in the present document. In such circumstances, the final ranking will be revised to take into account the evaluation obtained on the basis of those criteria in effect during the different periods of observation.

A necessary condition to maintain the qualification of a Specialist is the allocation at auction, on an annual basis, of a primary market quota equal to, at least, 3% of the total annual issuance through auctions by the Treasury. This quota is calculated with a weighting that takes into account the different financial characteristics of the various securities issued. The performance of Specialists in the primary market is evaluated on the basis of quantitative and qualitative criterion.

10 Source: Evaluation Criterias of Specialists in government bonds

9. Italy



i. Primary Market Performance – Evaluation Parameters

a. Primary Market Quantitative Index

Each Specialist is assigned a score, between 0 and 34, in proportion to the share allocated obtained in the reference period. The score begins to be assigned with the allocation of a share of at least 3.5% up to a maximum level of 6.5%.

The score for the primary quantitative parameter is assigned according to the following formula:

$$Ps = \frac{Qs - Qmin}{Qmax - Qmin} x Pmax$$

Where:

- P_s is the score assigned to the Specialist and cannot exceed 34 points;
- P_{max} is the maximum score assigned for the quantitative parameter of the primary market (34 points);
- Q_s is the quota of the primary market allocated during the reference period by the operator whose performance is being evaluated. For values greater than 6.5%, $Q_s = 6.5\%$;
- Q_{min} is the minimum required primary market quota (3.5%);
- Q_{max} is the maximum primary market quota that allows for a score (6.5%).

The quota allocated obtained in the reference period (Qs) is calculated weighting the allocated amounts of each type of bond with weights that take into account the financial characteristics of the same bonds as well as the status of the bonds placed on auction (bonds currently being issued – on-the-run – or no longer being issued – off-the-run) according to the following scheme:

| BONDS | BOT 3 mth | BOT 6 mth | BOT 12 mth | CTZ 24 mth | BTP 3 yrs | BTP 5 yrs | BTP 7 yrs | BTP 10 yrs | BTP 15 yrs | BTP 20 yrs | BTP 30 yrs | BP 50 yrs | CCTe u/ CCT |
|----------------------------|--------------|--------------|------------------|------------------|---------------|---------------|---------------|------------------|------------------|------------------|------------------|--------------|-------------------|
| On the run | 0.25 | 0.5 | 1 | 2.0 | 2.50 | 4.0 | 6.0 | 7.5 | 13 | 15 | 20 | 25 | 7 |
| Off the run | - | - | - | - | 1.25 | 2.0 | 3.0 | 3.75 | 6.5 | 7.5 | 10 | 12.5 | 7 |
| Bonds | - | - | - | - | BTP€i 3yrs | BTP€i 5yrs | BTP€i 7yrs | BTP€i 10yrs | BTP€i 15yrs | BTP€i 20yrs | BTP€i 30yrs | | |
| On the run/ Off the run | - | - | - | - | 4 | 6.5 | 8.0 | 9.5 | 16 | 18 | 24 | | |

For the purpose of assigning weights, for flexible BOTs, off-the-run BTPs and BTP€is, reference is made to the residual maturity of the bond being issued.

To calculate the allocated quota in a set period of time, the auction settlement date is taken into consideration.

The value of the parameter is communicated at least monthly and is assigned every quarter.



b. Primary Qualitative Indicator

The qualitative evaluation of primary market¹¹ participation is based upon an indicator called the Auction Aggressivity Index (AAI), which measures the contribution of each Specialist's auction strategy in determining the difference between the bond auction price and the prices reported on the secondary market. For this parameter, a score between 0 and 10 is assigned, a higher score corresponds to low AAI, that is, for very low or non-aggressive strategies.

The AAI measures the degree of aggressivity of each Specialist's auction participation strategy, in other words, it is the combined effect of the difference between bid prices and market prices (overbidding) associated with bid quantities that ration the amount available to remaining participants (overdemanding).

The score is attributed on the basis of the AAI only for auctions of on-the-run BTPs, BTP€is, CCTeus and CTZs.

The score is attributed according to the intensity of the AAI obtained by each Specialist and is assigned according to the following scheme:

| Intensity of the AAI parameter | Points |
|--------------------------------|--|
| 0% < AAI < 0.2% | 10 |
| 0.2% < AAI < 1.2% | 0 - 10, in proportion to the AAI value |
| AAI > 1.2% | 0 |

For each auction the value of the AAI may be adjusted in case the Treasury receives, before the cut-off, a communication sent by Specialists on significant orders by customers, for a volume above the threshold share, taking into consideration the characteristics of the order itself (whether outright vs in switch from other bonds, whether coming from real money investors vs others). These communications will be subjected to some random control and, in any case, the auction behaviour will be evaluated also taking into account the principle stated in article 3, paragraph 1, letter b).

The qualitative evaluation of participation in auctions of bonds no longer being issued (off the-run) is subject to evaluation within the context of the parameter which evaluates the organizational structure of the Specialist (see below).

The value of the parameter is communicated at least monthly and is translated in points every quarter.

c. Indicator of Continuity of Participation in the Primary Market

The "Continuity of participation in auctions" parameter is an indicator, calculated on a quarterly basis, that evaluates the regularity of participation of Specialists in all the auctions of Government bonds.

The indicator measures the number of times in which the Specialist, in auctions, did not bid for a quota of at least 5% of the maximum quantity offered of each bond being issued. In case of multiple auctions, namely when are bonds offered together in a single range, the minimum quota of 5% is calculated considering the total cumulate amount requested on all bonds offered divided by the maximum cumulated quantity offered.

The indicator is made so as to proportionally penalize (by up to a maximum of 4 points) those Specialists that more frequently did not respect the minimum level of participation in the auctions, mentioned in the preceding paragraph.

The value of the parameter is communicated at least monthly and is translated in points every quarter.



ii. Secondary Market Performance – Evaluation Parameters

a. Quotation Quality Index – QQI

The quotation quality index (QQI) is an indicator based on high frequency snapshots (that mimic continuous monitoring) of the orderbook of each bond, for each Specialist, made each market day.

For each snapshot, the Specialist is ranked in the orderbook of the bond with respect to the best-ranked Specialist, both on the bid and ask sides. To calculate the indicator, only snapshots (both on the bid and ask sides) that reveal buy and/ or sale price proposals associated with (visible) quantities of at least €5 million will be considered, with the exception of the nominal BTPs with a maturity longer than 10 years and the BTP€i segment where all proposals will be evaluated. For each bond, the average ranking of the Specialist is calculated, relative to the market day.

To calculate the average ranking (in terms of ranking with respect to the best Specialist), each position in the orderbook is weighted with decreasing coefficients that are in proportion to that position in the orderbook with respect to the best price, thereby rewarding those dealers that continuously show the best prices both for the bid and the ask sides. The absence of a Specialist from the orderbook worsens the average ranking and the performance as measured by the QQI. However, this takes into account the safeguard mechanism if the Specialist is "technically suspended" having just settled a contract. Lower QQI values, which indicate an average overall positioning closer to the best prices, denote a better performance.

The coefficients to weight the ranking in the order book are listed in the following table. To calculate the rank in the order book the number of operators that precede the one being observed is taken into account.

| Values Assigned | | | |
|--------------------------|-------------|--|--|
| Ranking in the orderbook | Coefficient | | |
| 1 | 0 | | |
| 2 | 5 | | |
| 3 | 8 | | |
| 4 | 9 | | |
| 5 | 10 | | |
| | | | |
| Absent | 28 | | |

The daily rankings relative to each bond are then aggregated (simple average) by classes of bonds, differentiated by the financial characteristics of the same bonds and according to the following scheme:

| | | DTD | | | | | |
|----------------|------------------------|-------------|--------------|------------------|-----------|-----------|-------|
| ≤ 18 months | 18 months ≤ 3 years | 3 ≤ 5 years | 5 ≤ 10 years | 10 ≤ 24 years | >24 years | BTP €i | ССТеи |

For each class of bonds, each Specialist is assigned a class score in proportion to the QQI indicator value. This class score is calculated in reference to the index value obtained by the best Specialist for the given bond class. The score related to nominal bonds with a maturity between 10 years and 24 years is weighted the double with respect to that of the other classes of securities while it is weighted two and a half times if nominal bonds have a maturity above 24 years. Each Specialist, finally, is assigned an overall score equal to the sum of the class points, rescaled respect to a maximum of 8 points assigned to the Specialist with the highest sum of class points.

The value of the parameter is communicated as a rule weekly and monthly and is assigned every quarter.





b. Cash Traded Volumes

Given the number of open market days during the reference period, the "Cash traded volumes" parameter is calculated with two subsequent weightings. The first takes into account the type of bonds traded whose volumes are weighted according to the same weights mentioned above for the Primary Quantitative Indicator in the Primary Market (See Italian Market appendices), without distinguishing between off the-run and on-the-run. Then the volumes traded by the operator, thus weighted, are proportioned with regards the total volume of cash traded in the trading venues selected, taking into account whether the trade was as a filler or aggressor. Volumes traded as fillers are weighted 1, while those traded as aggressors are weighted 0.5.

The best Specialist is assigned a score of 8 points. All other Specialists with a market share above that of the average of market makers that are neither Specialists nor Candidate Specialists, are proportionally assigned a score between 0 and 8. Those Specialists with a market share less than that of the average of market makers that are neither Specialists nor Candidate Specialists are assigned a score equal to 0.

The value of the parameter is communicated normally weekly and monthly and is translated in points every quarter.

c. Number of bonds traded as filler

The parameter measures the ability of each Specialist to trade, as filler, the highest possible number of bonds on the selected trading venue, taking into account the financial characteristics of the bonds.

For the calculation of the parameter, bonds traded as filler, from each Specialist, are analysed for different segments (by class of maturity), as shown in the table referred to in paragraph a) Primary Market Quantitative Index of the section i. Primary Market Performance – Evaluation Parameters. For each class a ranking is carried out and a standardized maximum score is assigned to the to best and in proportion to the others within that class. The score related to nominal bonds with a maturity between 10 years and 24 years is weighted the double with respect to that of the other classes of securities, while it is weighted two and a half times if nominal bonds have a maturity above 24 years. The sum of the scores obtained in each class by each Specialist represents the reference indicator of the parameter.

To the best Specialist 4 points are assigned. A score between 0 and 4 is proportionally assigned to the other Specialists. The value of the parameter is communicated normally weekly and monthly and is translated in points every quarter.

d. Contribution to the average size of the contracts traded as filler

The parameter measures the contribution of each Specialist to provide size to contracts traded as filler, on the selected trading venue, taking into account the characteristics of the bonds.

For the calculation of the parameter, bonds are analysed for different classes (by type/class of maturity), as shown in the table referred to in article 10 paragraph 4. For each class all contracts larger than or equal to a threshold size are selected. The threshold size, for each class, is defined by averaging the size of contracts traded during the observation period within that class. Having selected the contracts for each class, then we calculate the share of each Specialist as filler. For each class the Specialists are then ranked giving a maximum standardized score to the better and in proportion to the others. The score related to nominal bonds with a maturity between 10 years and 24 years is weighted the double with respect to that of the other classes of securities while it is weighted two and a half times if nominal bonds have a maturity above 24 years. The sum of the scores obtained on all classes by each Specialist represents the reference indicator of the parameter. The Specialist with the highest indicator is given a score of 2 points. All other Specialists are assigned a proportional score between 0 and 2.



e. Repo Traded Volumes

Given the number of open market days during the reference period, the parameter is calculated, both for the General Collateral segment and for the Special Repo segment, as a percentage of volumes traded through ordinary contracts or Request-forquote type of contracts, weighted for the duration of the contract, of the overall total of the segment. In weighting for the duration, contracts with a duration above 90 days will be considered as 90-day contracts. The best Specialist is assigned a score, for the General Collateral segment and for the Special Repo segment, respectively up to a maximum score of 2 points and 4 points. A score between 0 and the maximum of each segment is proportionally assigned to the other Specialists with a market share above that of the average of market makers that are neither Specialists nor Candidate Specialists. Those Specialists are assigned a score equal to 0.

The value of the parameter is communicated normally weekly and monthly and is translated in points every quarter.

f. Bank of Italy Efficiency Index

For every open market day, bonds quoted are divided into seven classes according to their segment and degree of liquidity. For each class, the following parameters, indicative of each primary dealer's contribution to overall market efficiency, are taken into account:

- Average spread weighted for the exposition time;
- Volume of applications received;
- Number of bonds quoted;
- Number of bonds traded;
- Sum of the quoted quantities weighted for page exposition time.

To allow for the comparison of non-homogeneous quantities, in so far as they refer to bonds with different financial characteristics and different degrees of liquidity, processes of standardization of data used for analysis are carried out. The daily parameters, calculated for each Dealer within the context of each class of liquidity, are subsequently aggregated on a periodical basis in order to complete a comparative evaluation of the behavior of all the Primary Dealers in the market. Next, a comprehensive ranking is constructed, which constitutes the basis for the assigning of points by the Treasury.

At the end of each quarter, 5 points are assigned to the best Specialist. A score between 5 and 0 is assigned to the other Specialists proportionally.

g. Cash Traded Volumes on Other Electronic Trading Venues (HRF data)¹²

This parameter, calculated each quarter, assesses the Specialist's trading activity outside the selected platform, including non-electronic trades. This indicator, the calculation of which takes into account information included in the European harmonized report format (HRF), is computed as the percentage of volumes traded by the operator of the total trading activity, analysed for different segments (by type/class of maturity), as shown in the tables referred to in article 6 paragraph 3, without distinction between on-the-run and off-the-run. Volumes traded with final counterparts - therefore with the exclusion of dealers and DMOs, with the latter that are completely excluded from the evaluation – are weighted twice their nominal value. Volumes traded on non-electronic platforms are weighted 0.25 their nominal value.

The Specialist with the highest market share is assigned a score equal to 7. A score from to 7 to 0 is assigned proportionally to the other Specialists.

¹² The HRF was created by the Thomsen Group in cooperation with the AFME/Primary Dealers in 2006



h. Repo Distributional Ability on Other Electronic Trading Venues

This is a synthetic indicator that measures the quality of the trading activity of Government bonds outside wholesale regulated markets, on the repo segment, with regards to the diversification of bond types, of counterparties and of systems used.

The parameter is calculated each quarter on the basis of data communicated by the Specialist according to the format defined by the Treasury together with the Bank of Italy.

At the end of each quarter, two points are assigned to the Specialist with the best performance. A score between 0 and 2 is proportionally assigned to the other Specialists.

iii. Evaluation Criteria of buybacks and exchange transactions

a. Activity in Exchange and Buyback Transactions

Buy-back and exchange transactions are a strategic instrument for the management of public debt. Given the importance of these transactions and the technical procedures used, the Treasury allows only admits Specialists as counterparties.

A score of up to 5 points is assigned to each Specialist in buy-back and exchange transactions. The maximum score, which will be no lower than 3 points, will be set by the Treasury on the basis of the number and the overall volume of the operations held during the year. The score awarded to each Specialist is assigned proportionally with respect to the best dealer's performance.

Specialists that within the deadlines set for the settlement of exchange or buyback transactions fail to deliver, even partially, the share of bonds sold in the transaction, will be penalized. This penalty will result in a deduction from the score that the Specialists will be assigned on the parameter at year end, equal to 10% of the maximum score potentially assigned at year end (0.3 - 0.5) for each fail, up to a maximum of points achieved by the Specialist.

The parameter and the number of fails, as stated in paragraph 3, are communicated normally each quarter and are translated in points at the end of the year evaluation.

iv. Evaluation Criteria of the Organizational Structure

The adhesion to a Central Counterparty operating on the trading venues selected from among those listed in the Specialists Decree is considered a minimum general requirement for keeping the Specialist status.

The evaluation of the Organizational Structure given by the Treasury is made yearly and assigns up to 9 points. The parameter takes into account the overall assessment given by the Treasury on the Specialist's activity, with reference to aspects concerning the reliability of the organizational structure and the advisory and research ability on themes related to the management of public debt.

In assigning points, the contribution to the efficient functioning of the primary and secondary markets, which is not directly measurable with the indicators mentioned in the preceding articles, is also assessed, in particular with regard to:

- **The participation in Government bond auctions.** This is evaluated in reference to qualitative aspects such as, for example, the use of at least three available bids for each auction and their corresponding distribution, the insertion of prices that do not determine the activation of the safeguard mechanism or of the exclusion price, recourse to the recovery procedure (fax sending) to present bids at auction limited to cases of an exceptional nature;
- The strategy of participation in auctions of bonds that are no longer being issued (off-the-run) and for long term nominal BTPs. This is evaluated considering, each time, the consistency between the suggestions made by the Specialist concerning the bonds on offer and the behaviour in the auction;
- **The strategy of participation in BOT auctions.** The quality of the strategy used in BOT auctions is monitored through a specific indicator (which is distinct with respect to the AAI used for both nominal and inflation-linked medium/long-term bond auctions) based on principles of uniformity and continuity of participation in the auctions;



9. Italy



- The participation to the OPTES operations. This is evaluated taking into account the membership to the OPTES list of counterparts and the participation to the related operations;¹³
- **The behaviour during the execution of placement syndicates.** The Treasury evaluates the behaviour of all Specialists, independently of the role taken in the operations;
- **The contribution to the efficiency of the secondary market.** The activity of operators that contribute more to sustain the liquidity of Government bonds on the secondary market in those days characterised by higher volatility is positively evaluated.
- The contribution to set up monthly Specialists meetings via video-conference in an efficient manner both from a logistical and IT perspective;
- **The trading activity on stripped securities**. The activity of Specialists that contribute more to the trading on stripped securities, weighted according to residual maturity and the same weights of the table is positively evaluated. The best Specialist will be given a score up to one point.

13 OPTES activity is established by the Ministerial Decree no. 25391 of 25 October 2011

H. Contacts

i. Debt Management Office

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9. Italy



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iii. Central Bank

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I. Italian Market Appendices

i. MTS Italy

Market Hours of Cash System

- Pre-Market: 7.30a.m. 8.00a.m.
- Preliminary market: 8.00a.m. 8.15a.m.
- Trading Hours: 8.00a.m. 5.30p.m.
- Market Closed: 5.30p.m.

Market Structure

MTS S.p.A., founded in 1988 and privatised in 1997, was the first electronic market for government bonds.

MTS S.p.A., a regulated Market, provides wholesale electronic trading of Italian government bonds and other types of fixed income securities. MTS S.p.A. is supervised by the Italian Ministry of the Economy and Finance, the Bank of Italy and CONSOB. MTS S.p.A. is the founding member of the MTS Group of companies, which today spans Europe with average trading volumes of up to €90 billion a day. The majority of shares in the Company are owned by Borsa Italiana (60.37%). Major international financial institutions hold the remaining shares.

Instruments

The secondary market for Italian Government Bonds ranks third in the world in terms of size and trading turnover. Government bonds represent 84% of the overall bond market in Italy with fixed rate bonds (BTP) and floating rate notes (CCT) representing three quarters of government issues outstanding. A variety of Italian public debt issues are traded on MTS Italy and all are Euro-denominated.

Two-way quotes, fill-and-kill orders and fill-and-store orders can be formulated for a minimum quantity equal to EUR 2 million. Increment quantities for Quotes and Orders can be formulated for EUR 0.5 million.

ii. Settlement Procedure

Italian Government Bonds

Italian government bonds are settled through Express II, the settlement system managed by Monte Titoli S.p.A., which acts also as central depository. Bank of Italy manages the cash payment system (BI-REL).

Express II integrates the net settlement service and gross settlement service. Both settlement services work on delivery versus payment basis. MTS transmits trade details to the settlement system on behalf of both counterparties. All MTS participants must be members of Express II either directly or indirectly through an agent bank. Those participants making use of a local custodian bank must sign with the custodian a standard contract provided by MTS.

Participants can access the services of a central counterparty offered jointly by CC&G (Cassa di Compensazione e Garanzia) and LCH.Clearnet SA.



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10. The Netherlands

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| E. | Primary Market | 10.4 |
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| Ι. | Appendices | 10.14 |
| | | |







A. List of Primary Dealers and Commercial Paper Dealers¹

| FIRM | Netherlands (NL) Primary Dealers | NL Commercial Paper Dealers | Firm's location |
|------------------|-------------------------------------|--------------------------------|-----------------|
| ABN AMRO | Х | X | Amsterdam |
| Barclays | Х | X | London |
| Citigroup | Х | X | London |
| Commerzbank | Х | X | Frankfurt |
| Deutsche Bank | Х | | Frankfurt |
| Goldman Sachs | Х | | London |
| HSBC | Х | | Paris |
| ING | Х | X | Amsterdam |
| Jefferies | Х | | London |
| Natixis | Х | | Paris |
| NatWest Markets | Х | X | London |
| Nomura | Х | | London |
| Nordea | X | | Stockholm |
| Rabobank | Х | X | Utrecht |
| Société Générale | Х | | Paris |
| TOTAL | 15 | 7 | |

B. Single Market Specialists

| FIRM | The Netherlands (NL) | Location |
|-----------|----------------------|----------|
| Santander | Х | Madrid |
| TOTAL | 1 | |

KEY:

AFME/Primary Dealer Members

Non-AFME Members

AFME Members

1 List of the Primary Dealers operating on the Dutch Government Bond Market as of September 2017. For complete information please refer to the DSTA website



C. Credit Rating

Dutch debt is currently rated as follows:²

- Standard and Poor's: AAA (stable)
- Moody's: Aaa (stable)
- Fitch Ratings: AAA (stable)
- DBRS: AAA (stable)

D. Privileges and Obligations of Primary Dealers

i. Rights of a Primary Dealer

- Primary Dealers have the right to participate in the primary issuance of Dutch State Loans (DSL), that are taking place through a Tap auction or a Dutch Direct Auction (DDA). Primary Dealers are entitled to compensation for their participation in Tap auctions and DDAs.
- They have the right to use the title of 'Primary Dealer for the Dutch State' as well as to strip and reconstitute DSLs designated by the DSTA. The minimum amount for this is €1 million.
- Primary Dealers have access to a repo facility for each DSL and DTC. Under the repo facility, Primary Dealers are entitled to obtain until the settlement date of the next issuance for the DSL concerned, part of the unsold portion of the bond via a buy/sell-back transaction with the DSTA. Privileges do not apply to, and cannot be extended to, third parties.
- Primary Dealers inform the DSTA of developments in the primary and secondary markets. They are also entitled to participate in meetings, whether or not by telephone, between the DSTA and other Primary Dealers to discuss these developments in the primary and secondary markets.
- Primary Dealers have the right to be consulted regarding the DSTA's choice of trading systems. In choosing, the DSTA shall seek to preserve Primary Dealer privileges and governance of DSL market rules.
- Primary Dealers are listed on the DTC register, granting them access to DTC auctions and secondary market trading in DTCs. For DTCs the DSTA has one Single Market Specialist (comparable to Primary Dealers but just for T-Bills).
- Primary Dealers are entitled to receive, from the DSTA, all relevant public information about issuance policy and other public market operations.

ii. Obligations of a Primary Dealer

- Primary Dealers are supposed to participate in DSL primary issuance taking place through Tap auctions and via DDAs. Primary Dealers shall subscribe to or participate in an issuance independently of subscription or participation by other Primary Dealers.
- Primary Dealers are obliged to sign the ISDA Master Agreement in conformity with the terms and conditions of the Dutch State in order to enter into swap transactions with the State of the Netherlands.
- Primary Dealers support a liquid secondary market in DSLs and promote price discovery by making a market in DSLs on a designated electronic trading system.

² Credit rating as of September 2017



- Primary Dealers are consulted regarding the choice of designated trading systems. Primary Dealers act in accordance with the obligations, rules and regulations applicable to designated electronic trading systems. Concerning decision-making on rules regarding DSL quotation and the publication of DSL price-information, the DSTA shall take account of the interest of the Primary Dealers and Primary Dealers shall promote the interests of the State of the Netherlands and its DSLs.
- Primary Dealers actively promote and develop products related to DSLs. As part of this, Primary Dealers conduct research on DSLs and the Dutch economy. Findings are made available to clients and to the DSTA. Primary Dealers provide specific research support at the DSTA's request. By mutual arrangement the DSTA is available for road shows and other investor meetings.
- Primary Dealers shall inform the DSTA of developments in the financial markets and specific developments affecting DSLs, DTCs and related products. Primary Dealers shall submit secondary market trade reports. These reports shall be signed by the Primary Dealer. If requested by the DSTA, Primary Dealers shall co-operate in an audit of these reports. In addition, the DSTA is permitted to gather information from all major data vendors on turnover and market share on DSLs and DTCs of individual Primary Dealers.
- During DDAs, primary dealers are obliged to sell DSLs to end-investors at the same price as the auction price.

E. Primary Market

Dutch States Loans are issued using tap auction and the Dutch Direct Auction

i. Tap Auction

Dutch State Loans are reopened using the tap auctions. Tap auctions are also used for initial openings of short-dated bonds (new 3-year bonds).

The tap auction technique consists of the seller announcing the price and the buyer indicating the desired amount.

In the case of DSLs, this entails the following. The DSTA announces the bonds it will issue or re-open in the next three months through the publication of its quarterly issuance calendar. In principle, this calendar is published on the second to last Friday of the preceding quarter. Bond auctions take place on the second and fourth Tuesdays of the month (though there are not always two auctions a month). On the Wednesday prior to the auction, the DSTA will confirm the auction and will announce the target issuance volume.

At 10:00 a.m. on the day of the auction, the DSTA announces the price at which Primary Dealers may take up the issue. The announcement takes place via the screens of MTS Amsterdam. Primary dealers, who are connected to the MTS system, may input their orders from their internal systems.

During the auction, the DSTA adjusts the price upward or downward if capital market developments in general, or demand for the bond in particular, so require. Only Primary Dealers are entitled to participate at auction. Individual and professional investors may participate through Primary Dealers or through their own banks.

Once the DSTA reaches the desired amount (specified before the auction through a target range) the auction is closed. In contrast to a Dutch Auction, this is a multiple price auction. The benefit of the tap-method for participants is that they know immediately what amount they have bought, for what price, so that they can hedge the interest rate risk immediately.



ii. Dutch Direct Auction³

For large initial issues of new longer dated benchmark bonds, the DSTA uses a technique called the Dutch Direct Auction (DDA). The Dutch Direct Auction (DDA) is a concept designed by the Dutch State Treasury Agency (DSTA) to engage end investors directly in the primary issuance of debt securities. This unique auction is applied for initial issues of longer dated benchmark bonds. A large volume of a bond can instantly be placed with a broad and diversified investor base via this system.

The DDA is a transparent rules-based auction, where allocation is decided solely upon the price composition of the order book. This type of auction creates a level playing field for all investors. The DSTA is the sole book runner in this auction which safeguards the confidentiality of the participating investors. The Dutch Direct Auction eliminates the winner's curse as all bids are allocated at a single uniform price.

The DSTA introduced this auctioning system in 2003 and has used it ever since for launches of 5, 7 10, 20 and 30 year bonds year bonds. For the primary issuance of the 3-year bonds the regular tap auction is used. Although the rules may change in time, below you can find a general outline of the DDA.

a. Investors

The Primary Dealers of the Dutch state assist the DSTA with the marketing of the DDA and contact with investors. The investors subscribe their bids via the Primary dealer of their choice. For the purposes of the auction, the investors are classified into two groups: real money (long term) accounts and others (short term). Real money accounts include buy-and-hold-clients such as Asset and Fund managers, Central banks, Insurance companies, Pension funds and Private clients. The group classified as 'other clients', is composed of trading accounts such as Hedge funds and trading desks.

Treasuries and ALM accounts of banks are from 2014 on classified as 'real money' accounts, whereas all remaining accounts of banks are classified as 'other' accounts. This change in classification reflects the changes in regulation (such as Basel III) due to which treasuries and ALM accounts of banks are required to hold larger liquidity buffers. As highly rated sovereign bonds are an important asset class for liquidity purposes, the DSTA has decided to label bank treasuries (including ALM desks) as 'real money' investors.

b. Bidding

On the day of the auction, bidding starts at 10.00 a.m. CET and the book is closed no later than 5.00 p.m. The allocation is communicated at least one hour after the auction, but no later than 9.00 a.m. the following day. Bids in this type of auction are not submitted as a price or yield, because there may be a time lag between placing the orders and the actual allocation (therefore the price at the time of allocation would not necessarily reflect the market). Alternatively, a reference bond is chosen against which the new auctioned bond is priced. A liquid existing bond with a similar maturity term as the auctioned bond would be suitable as a reference bond. The price of the reference bond should be highly correlated with the price of the auctioned new bond. For the Euro area, German bonds usually fit these criteria.

Investors submit their bids at a yield spread versus the chosen reference bond. The minimum bid is $\leq 1,000$. A range of the yield spreads at which the orders can be placed is communicated prior to the auction and can be altered by the DSTA at any time during the auction. This spread guidance consists of several basis points (1 basis point is 0.01%) and the increments equal half a basis point. Next to bids at a certain spread, orders can also be placed "at best". These orders will be regarded as bids against the lowest spread in the "spread guidance".

c. Allocation

The DSTA is the sole book runner at this auction and decides solely on the allocation. The allocation rules of the Dutch Direct Auction are clear and transparent and are always communicated beforehand. The orders at the lowest spread and "at best" are allocated first.

3 Source: DSTA website, Dutch Direct Auction description





Next, orders at a spread 0.5 basis points higher are allocated (and so on) until the required volume is allocated. The highest allocated spread is called the cut-off spread. Orders below the cut-off spread are always allocated in full. Orders at the cut-off spread may be allocated only partially. At the cut-off spread, the bids from real money clients are allocated first. If funding is still required after full allocation of real money orders at the cut-off, then it will be allocated to other accounts.

The DSTA reserves the right to allocate a minimum of 35% of the total volume to trading accounts in order to strike the right balance between tradability and buy-and- hold investors. All allocations are assigned at the cut-off spread, including the orders entered at lower spreads and at best. In this way the 'winner's curse' is eliminated.

d. Pricing

The auction price of the new bond is determined at least one hour after allocation and no later than 12.00 p.m. the following day. The first step in pricing the new bond is the determination of the market price and the corresponding yield of the reference bond. The time of pricing is determined by the DSTA and communicated immediately to the Primary Dealers. By adding the cut-off spread resulting from the auction to the determined yield of the reference bond, the yield of the auctioned new bond emerges. All investors pay the price corresponding to this yield. All investors receive the bonds at this price.

In the process of the DDA, several press releases are issued. These press releases give a practical insight into the DDA process.

e. Calendar⁴

Issuance of bonds and bills takes place in accordance with a pre-announced calendar. At the end of December, the DSTA publishes an indicative annual calendar for the following year.

During the year, definitive quarterly calendars are made public. Publication and dissemination of quarterly calendars takes place approximately two weeks prior to the new quarter.

f. Settlement

The DSTA has decided to further harmonise the standard settlement period for OTC transactions in DSLs in primary markets with secondary markets. Therefore, as of 6 October 2014 the standard settlement period for newly issued DSLs is T+2. T+2 was already standard practice for DTCs. This modification followed the new European regulation on Securities Settlement and Central Securities Depositories (CSDR).

F. Secondary Market⁵

i. Interdealer Market⁶

a. Preamble

Primary Dealers may select a platform of choice to fulfil their quotation obligations, provided that the platform meets certain objective criteria.

The aim of the quoting obligation is to provide to all market participants an arbitrage-free reference price. As of now, the DSTA has selected four platforms; Brokertec Europe Ltd, EUREX Bonds GmbH, BGC Brokers LP and MTS Amsterdam NV. However, the application is open-ended. Eligibility criteria include, amongst other things, that the bid and ask prices at which Primary Dealers and SMSs can execute trades on the designated platform are available to investors in real time and at reasonable commercial terms.

The basics of the framework of the multi-platform environment are laid out in several annexes to the General Conditions to the Primary Dealer contract, which can be found on the Dutch Treasury website www.dtsa.nl

⁶ Source: Dutch Treasury website, annex 1 http://www.dsta.nl/english



⁴ Access this year's auction calendar on the Dutch Treasury website

⁵ General conditions to become a Primary Dealer, on the Dutch Treasury website



b. Selection of Designated Electronic System

For an e-trading platform to be eligible as a designated electronic trading system, it must:

- Be a Regulated Market or a Multilateral Trading Facility under the Markets in Financial Instruments Directive 2014/65/ EU (MiFID II).
- Offer access to all PDs equally and fairly. The fee structure of the platform must be nondiscriminatory; i.e. be based on objective criteria and must be made public. There should be no prohibitively high fees for market takers who are Primary Dealers.
- Make public current bid and offer prices at those levels which are advertised through the trading system on a continuous basis during normal trading hours on reasonable commercial terms to market participants. Bid and offer prices must be made available free of charge to private individuals at those levels which are advertised through the trading system on a continuous basis during normal trading hours.
- Make public a list of market makers and market takers on the platform.
- Provide the DSTA with all the market statistics needed to appraise the performance of its Primary Dealers and to monitor compliance with their market making commitment. If requested by the DSTA, platforms must co-operate in an audit of these statistics. The format under which the statistics are provided is set by the DSTA in consultation with the designated electronic trading systems and the Primary Dealers.
- Agree that the DSTA publishes a list of designated electronic trading systems.

For a Trading System to be designated, it must send a duly signed application form to the DSTA satisfying that it fulfills the above criteria. The DSTA appraises applications pursuant to the above-mentioned conditions. For a trading system to remain a designated electronic trading system, it must comply with the conditions stated above. To demonstrate compliance, designated electronic trading systems shall provide all necessary information and shall cooperate in an audit of this information upon the request of the DSTA. If a designated electronic trading system fails to meet one or more of the conditions stated above, the DSTA brings that fact to the attention of the trading system concerned. The DSTA shall communicate to the trading system a period of time within which the trading system can demonstrate that it fully complies with the conditions. If, at the DSTA's discretion, the envisaged compliance is not realised within that period, the DSTA has the right to withdraw the status of designated electronic trading system. The DSTA shall inform the trading system as well as all Primary Dealers without delay.

c. Dutch Treasury Quoting Obligations

Participants on the electronic trading system that submit (indicative or firm) quotes of a Primary Dealer should effectively deal on these bid and offer prices in at least 98 of 100 times, in order for the quotation of that Primary Dealer to be permissible for the fulfilment of the quotation obligations.

A Primary Dealer has fulfilled its quotation obligation if in each whole calendar month, from and including the month of the previous tap auction up to and including the month previous to the tap auction concerned, the Primary Dealer has established a compliance score of at least 90% on a designated electronic trading system. Daily compliance is calculated based only on quotes in volumes in conformity with the table below. Daily compliance per DSL is calculated as the time (expressed as a percentage of six hours) that:

- i. The time-weighted average spread of the actual hours quoted; or
- ii. The average time weighted spread over the best six hours quoted (whichever gives the highest compliance), is in conformity with the table below or when the spread is within one standard deviation of the average spread of the six best hours quotation of all PDs that have quoted that DSL. Daily compliance is calculated as the average compliance over all DSLs. Monthly compliance is calculated as the average of the daily compliance.



A Primary Dealer shall be relieved from its quotation obligations on days which are recognized as public holidays in the participant's country of quotation operations. All Primary Dealers shall be relieved from their quotation obligation on days on which more than half of the Primary Dealers is exempted due to a public holiday in their country of quotation operations. Furthermore, relief from the quotation obligation applies to Target holidays. Each year, Primary Dealers must submit in their business plan to the DSTA a calendar of holidays during which they would like to be exempted from their obligations. A calendar can only be submitted for one country. The DSTA reserves the right to relieve Primary Dealers from their quotation obligation obligation on other days at its own discretion. When exercising this right, the DSTA shall inform the PDs in a timely manner. If the PD does not submit a calendar in their business plan, the DSTA will use the public holiday calendar of the domicile country of the PD contract signature.

Should a Primary Dealer quote on more than one designated electronic trading system, only the quotes on the trading system on which the Primary Dealer has showed the best compliance score that day (when considering the total quoting performance of all DSLs) shall be taken into consideration when evaluating the fulfillment of the quotation obligation.

| | Standard Bid / Offer Spread | Max b/o spread | Minimum Quantity (€ million) |
|--|--------------------------------|-----------------------|---------------------------------|
| DTCs | 4 basis points | Max(4bp; π6h + σ6h)** | 10 |
| DSLs 1¼ years to 3½ years* | 4 cents | Max(4c; π6h + σ6h)** | 10 |
| DSLs 3 ¹ / ₂ years to 6 ¹ / ₂ years* | 5 cents | Max(5c; π6h + σ6h)** | 10 |
| DSLs 6½ years to 13½ years* | 7 cents | Max(7c; π6h + σ6h)** | 10 |
| DSLs 13½ years to 17½ years* | 12 cents | Max(12c; π6h + σ6h)** | 5 |
| DSLs over 17½ years* | 20 cents | Max(20c; π6h + σ6h)** | 5 |

*remaining maturity

** π_{6b} = average of the PDs 6 best hours quotes, σ_{6b} = standard deviation

If the average of the PDs quotes is wider than the standard b/o spread, the maximum b/o spread will be one standard deviation of the average spread of the 6 best hours quotation of all PDs that have quoted that DSL.

In the event that a certain Primary Dealer was not yet appointed in the calendar month preceding the auction concerned, it is assumed that it has fulfilled its quotation obligation for this auction.

The Primary Dealers will be informed on their compliance with quotation obligations on a daily and monthly basis. If requested by the Primary Dealers, the DSTA will co-operate in an audit of these reports. The format under which the information is provided is set out by the DSTA in consultation with the Primary Dealers and electronic trading systems.

ii. Dealer to Customer Market

Amongst others, Bloomberg, MTS Bondvision and Tradeweb are the most used trading platforms for Dutch government bonds.

Retail investors can access information on the prices for DSLs and DTCs on Eurex Bonds, MTS Netherlands, Brokertec Europe Ltd and BCG Brokers Ltd. The time delay ranges from 5 to 15 minutes.

iii. Repo Facility

Primary Dealers have access to a repo facility for each DSL or DTC, to be used only to facilitate their role as a market maker. Under the repo facility, Primary Dealers are entitled to obtain, until the settlement date of the next issuance for the DSL or DTC concerned, part of the unsold portion of the bond via a buy/sell-back transaction with the DSTA. When the next moment of issuance is not published, the maximum term for borrowing under the repo facility is 1 month. The minimum nominal amount for repo transactions is 10 million euro.





The rate paid by the DSTA is at least 25 basis points below the rate charged for a General Collateral transaction with the same maturity. Primary Dealers may offer the same effective amount of General Collateral for an identical period of time, via a sell/buy-back transaction. The DSTA may require the same effective amount of General Collateral or euro-denominated DTCs and DSLs for an identical period of time, via a sell/buy-back transaction.

G. Appraisal of Performance and Sanctions

Primary Dealer status may be continued for another year (beyond the term of the contract) if the Primary Dealer resubmits a business plan and subsequently receives confirmation of continuation of the PD-status from the Dutch State Treasury Agency (DSTA). If the relationship with a Primary Dealer is continued, the Primary Dealer and the DSTA will confirm this by each signing the new one-year contract.

The DSTA appraises Primary Dealer performance pursuant to the Primary Dealer Contract. Primary Dealers are obliged to provide information to that end at the request of the DSTA. If Primary Dealers fail to meet one or more of the obligations under the Primary Dealer Contract, the DSTA brings that fact to the attention of the Primary Dealer concerned. The DSTA shall communicate to the Primary Dealer concerned a period of time within which the Primary Dealer can demonstrate that he complies in full with the obligations. If the envisaged compliance is not realised within that period, the DSTA has the right, at its discretion, to suspend privileges for the Primary Dealer concerned. The DSTA shall inform the Primary Dealer concerned without delay.

Assessment criteria

The main criteria for appraising the Primary Dealer activity are: (1) performance in the primary and secondary markets for DSLs and DTCs, (2) the fulfillment of the quotation obligation on a selected platform and (3) the promotion and development of products related to DSLs and the provision of research material.

Primary Dealer ranking method

The performance of Primary Dealers is periodically evaluated with respect to the volumes purchased in auctions (including DDAs). The DSTA (Dutch State Treasury Agency) publishes the top five performing Primary Dealers in DSLs, DTCs and CP. For DSLs, this is based on duration weighted nominal amounts purchased or placed through tap auctions and DDAs, for DTCs and CP, it is unweighted. The weights for the DSLs duration weighted ranking are published annually and the 2017 weights are included below, by maturity.

| DSL maturing | Weighting factor |
|----------------|------------------|
| Before 2019 | 1 |
| In 2019 – 2020 | 2.5 |
| In 2021 – 2023 | 5 |
| In 2024 – 2029 | 8.5 |
| In 2030 – 2038 | 13 |
| In 2039 – 2047 | 18 |

H. Contacts

i. Debt Management Office

Dutch State Treasury Agency

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Head of Cash Management, Issuance and Trading (acting) Tel: +31 70 342 8681 e.b.spijkerman@minfin.nl

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iii. Central Bank

De Nederlandsche Bank

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I. Appendices

i. Glossary⁷

Terms shall be understood to have the following meanings:

| DSTA | The Dutch State Treasury Agency of the Ministry of Finance. | |
|---|---|--|
| DSLs | Dutch State Loans: public, Euro-denominated debt issued by the State of the Netherlands in accordance with the general terms and conditions for DSLs and the specific terms and condition laid down for each issuance. | |
| DTCs | Dutch Treasury Certificates: public, Euro-denominated treasury bills issued by the State of the Netherlands in accordance with the general terms and conditions for DTCs and the specific terms and conditions laid down for each issuance. | |
| Primary Market | nary Market The issuance of DSLs and DTCs by the DSTA on behalf of the State of the Netherlands. | |
| Secondary Market | ondary Market The trades in DSLs and DTCs, after issuance by the DSTA. | |
| Primary Dealer (PD) | A financial institution which is party to a Primary Dealer Contract with the State of the Netherlands. | |
| Primary Dealer Contract | Contract to which the State of the Netherlands and a financial institution are party, and in which reference is made to the General Primary Dealer Conditions. | |
| General Collateral | A part of any DSL, DTC, or a comparable tradable sovereign Euro- denominated loan or bill issued by States whose official currency is the Euro. | |
| Tap Auction | Auctioning method that consists of the State announcing the auction price and altering that price if need be, and Primary Dealers submitting bids stating the requested volume on behalf of clients or for their own account; The DSTA sets out the conditions regarding the Tap auction; these are transmitted separately prior to each Tap auction. | |
| DDA | Uniform-price auctioning method that consists of Primary Dealers submitting bids for volume and price on behalf of clients or for their own account; | |
| Designated Electronic Trading System | Electronic Trading System designated by the DSTA after consultation with the Primary Dealers and Single Market Specialists. | |
| Price Discovery | The continuous availability to market participants of bid and offer prices at which trades can be executed by Primary Dealers amongst each other. | |

ii. Issuance Programme⁸

At the end of the previous year, the DSTA publishes an indicative annual calendar.

It contains the planned dates for issuance. DSLs can be issued every second and fourth Tuesday of the month and DTCs can be issued every first and third Monday of the month.

7 General Primary Dealer Conditions, 2015

⁸ Please visit the Dutch State Treasury website for more information on the Issuance Calendar



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11. Portugal

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A. List of Primary Dealers¹

i. Bond Market (OVET)

| FIRM | Portugal (PT) | Firm's Location |
|-----------------------------|---------------|-----------------|
| Banco BPI | X | Lisbon |
| Barclays | X | London |
| BBVA | X | Madrid |
| BNP Paribas | X | London |
| Caixa Banco de Investimento | X | Lisbon |
| Citigroup | X | London |
| Commerzbank | X | Frankfurt |
| Crédit Agricole | X | London |
| Danske Bank | X | Copenhagen |
| Deutsche Bank | Х | Frankfurt |
| Goldman Sachs | Х | London |
| HSBC | X | Paris |
| J.P. Morgan | Х | London |
| Jefferies | Х | London |
| Morgan Stanley | Х | London |
| NatWest Markets | Х | London |
| Nomura | X | London |
| Novo Banco | X | Paris |
| Société Générale | X | Paris |
| TOTAL | 19 | |

KEY:



AFME/Primary Dealer Members

Non-AFME Members

AFME Members

Caixa Central de Credito Agricola Mutuo, Milleniumbcp, Santander and Caixa Bank are also authorized as Other Auction Participants (OMP)..

1 List of the Primary Dealers operating on the Portuguese Government Bond and T Bills Market as of September 2017. For complete information please refer to the Portuguese Treasury website http://www.igcp.pt



ii. T Bills Market (EBT)

| FIRM | Portugal (PT) | Firm's Location |
|--------------------------|---------------|-----------------|
| Barclays | Х | London |
| BBVA | Х | Madrid |
| BNP Paribas | Х | London |
| Caixabank | Х | Barcelona |
| Caixa Geral de Depositos | Х | Lisbon |
| Citigroup | Х | London |
| Crédit Agricole | Х | London |
| Danske Bank | Х | Copenhagen |
| Deutsche Bank | Х | Frankfurt |
| Goldman Sachs | Х | London |
| HSBC | Х | Paris |
| J.P. Morgan | Х | London |
| Jefferies | Х | London |
| Millennium bcp | Х | Lisbon |
| Morgan Stanley | Х | London |
| NatWest Markets | Х | London |
| Nomura | Х | London |
| Novo Banco | Х | Lisbon |
| Santander | Х | Madrid |
| Société Générale | Х | Paris |
| TOTAL | 20 | |

KEY:



AFME/Primary Dealer Members



Non-AFME Members

AFME Members

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B. Credit Rating

Portuguese debt is currently rated as follows:²

- Standard and Poor's: BBB- (stable)
- Moody's: Ba1 (positive)
- Fitch Ratings: BB+ (stable)
- DBRS: BBB(low) (stable)

C. Debt Instruments

Fixed Rate Bonds (OT)

Obrigações do Tesouro (OT) are the main instrument used by the Republic of Portugal to satisfy its borrowing requirements.

OTs are medium- and long-term book-entry securities issued by syndication, auction or by tap with:

- Maturities of between one and 50 years;
- Bearing a fixed interest rate coupon or not (zero coupon);
- Redeemable on maturity at nominal value; and
- With the possibility of stripping

Two methods have been adopted, by Agência de Gestão da Tesouraria e da Dívida Pública briefly called IGCP, E.P.E. for the issue of OT in the primary market through banking syndicate and via auction. The former has been used for launching new OT lines, since it fulfills the dual objective of simultaneously placing a larger amount of securities at market prices and achieving a greater diversification of the investor base, both geographically and by type of investor. New OT are subsequently reopened via auction in order to increase their initial amount outstanding.

All OT lines are admitted to trading on the designated electronic platforms for Portuguese Public Debt: MTS, BrokerTec, BGC Partners and Euronext Lisbon.

The placement of OT in the primary market is ensured by a group of financial institutions with the status of Primary Dealers (OEVT) or Other Auction Participants (OMP). Both OEVT and OMP contribute to the objectives defined for the management of government debt through their participation in the primary and secondary bond markets. OEVT have the obligation of promoting the liquidity of the secondary market.

Treasury Bills (BT)

Since their creation in 1985 and up until 1998, the Bilhetes do Tesouro (BT) have been an important source of State funding and of monetary intervention. The change in the framework of monetary policy definition and execution, brought about by the single currency in 1999 and the adoption of a State funding strategy primarily focused on the development of a medium-and long-term bond market of European size and with strong liquidity, led to the suspension of BT issuance from early 1999 to 2003.

Once an OT benchmark yield curve from 2 to 10 years had been achieved in 2002, the issuance of BT was resumed in 2003 as a new structural component of the State's funding strategy. BT therefore complement the Portuguese Government yield curve with a short-term segment.

² Credit rating updated as of September 2017



BT issuance was resumed according to a strategy aimed at developing a liquid market for these instruments, of international size and capable of contributing to further broaden and diversify the investor base for Portuguese government debt.

BTs are short-term securities with a face value of one euro, which can be issued with maturities of up to one year. They are issued at discount and placed via auction or limited subscription offer and redeemable on maturity at nominal value.

The placement of BT in the primary market is ensured by a group of banks recognised by IGCP, E.P.E as Treasury Bill Specialists (EBT). The EBT are required to offer recognized domestic and international placement capabilities so as to ensure a wide distribution of the new issues and to promote the liquidity of the secondary market through their role as market makers on the designated platforms.

BT are placed via regular auctions, according to a pre-announced calendar, designed to guarantee that the amount issued per line is enough to ensure the liquidity of the new issue from the start. BT are admitted to trading on the designated platforms for Portuguese Public Debt and transactions follow standard settlement procedures.

Floating Rate Bonds (OTRV)

Obrigações do Tesouro de Rendimento Variável (OTRV) are book-entry securities governed by Portuguese law representing medium- and long-term loans of the Republic of Portugal. They were created to diversify the public debt instruments and distribution channels available to investors in addition to promote the broadening of the Portuguese Republic's investor base.

The common characteristics of OTRV include:

- the nominal value of each OTRV corresponds to €1,000.00 (one thousand Euros);
- the maximum subscription per investor is €1,000,000.00 (one million Euros), corresponding to 1,000 (one thousand) bonds;
- the nominal interest rate applicable is floating;
- OTRV can be issued for a maturity of up to 10 years and the redemption (bullet) is made on the maturity date at nominal value.

OTRV are placed on the market by one or more credit institutions specifically mandated by IGCP, E.P.E. for this purpose. Potential investors can subscribe OTRV from any authorised financial intermediary in Portugal during the respective subscription period defined by IGCP, E.P.E.

If demand is greater than the overall nominal value of OTRV on offer, they will be assigned on a pro rata basis, according to the successive application of the criteria listed in the documentation relating to each transaction, as defined by IGCP, E.P.E. in conjunction with the credit institutions involved.

Saving Certificates (CA) and Treasury Certificates (CT)

The savings' instruments are issued with the objective of capturing households' savings. Their main feature is the fact that they are retail distributed, that is, they are issued directly to single investors and they have small minimum subscription amounts. These instruments can only be subscribed by households; they are non-tradable and may only be transferred upon the death of the owner.

The issue and redemption of these instruments is conducted directly through the IGCP's customer counter or through the customer counters of other institutions, hired by the IGCP for this purpose: the post office (CTT) and retail banks.

The subscription of Treasury certificates is suspended from September 1, 2012. The redemption of treasury certificates can be made directly at the counters for the purpose entities contracted by IGCP, E.P.E., CTT (see Service Stations Online), as well as through the Internet for access to AforroNet, should already be subscribed to this service provided by IGCP, E.P.E.



EMTN

Since January 2009 there has been the option to issue under the Euro Medium Term Note Programme (EMTN), which currently amounts to \leq 15,000,000,000, in order to diversify the investor base and to potentially benefit from favorable market conditions. The program was renewed in October 2017.

Other Instruments

To satisfy the State's specific short-term financing needs, the IGCP, E.P.E. resorts to repo transactions (or financing repos). Financing repos are set up bilaterally between the IGCP, E.P.E. and the OEVT or the EBT and consist of the sale of government bond (OT) or Treasury Bills (BT), issued for that purpose, with the simultaneous agreement for the repurchase of those securities at a specified time and price.

As a complement to financing repos, in order to satisfy short-term financing needs, the IGCP, E.P.E. has at its disposal a Euro-Commercial Paper (ECP) programme. The ECP consists in the issuance of tradable instruments on non-regulated markets, issued at discount and with maturities of between one week and one year. The maximum outstanding of this line is limited to \notin 4 billion or the equivalent and the line allows the issuance of securities in USD and EUR.

D. Privileges and obligations of Primary Dealers

i. Market Participants in the Bond Market

The placement of Obrigações do Tesouro (OT) or Portuguese bonds in the primary market is ensured by a group of financial institutions to which the IGCP, E.P.E., has granted the status of Primary Dealers (OEVT) or Other Auction Participants (OMP).

The status of OEVT and OMP is granted on the basis of an assessment of the capability of the financial institutions to consistently place and trade Portuguese Government debt instruments in international, European or domestic markets, ensuring access to a regular investor base and contributing to the liquidity of these instruments in the secondary market.

a. Rights of a Primary Dealer (OEVT)

The Primary Dealers and financial intermediaries are recognised by the IGCP for their capacity to place OT and to ensure the liquidity of these securities in the secondary market. These institutions are entitled to:

- Participation in the competitive phase and exclusive access to the non-competitive phase of auctions;
- Exclusive access to OT buyback auctions;
- Preference in the formation of syndicates and in transactions related to the active management of Government debt;
- Privileged hearing in matters of common interest;
- Access to the OT repo window of last resort.

b. Obligations of Primary Dealers (OEVT)

Their main duties are to:

- Participate actively in OT primary market, subscribing a share of no lower than 2 per cent of the amount placed at the competitive phase of auctions (the compliance with this duty is assessed for a 2-year period);
- Actively participate in the secondary market of government bonds (OT), acting in accordance with good market practices and ensuring the liquidity, efficiency and regularity of the trading conditions of these securities;
- to actively participate in the OT secondary market, acting as market makers through any of the electronic trading systems designated by IGCP, E.P.E., maintaining a share of no less than 2% of this market's turnover (the compliance with this duty is assessed for a 2-year period);





- Permanently update via a specialized remote information system a page of widespread access with the quotes of benchmark OT;
- Provide, according to the form and requirements of the IGCP, E.P.E. the information required for the monitoring of participants' activity in the secondary market and to check compliance with the provisions of this Regulation;
- Comply with all rules adopted by the IGCP, E.P.E. regarding the scope and the object of the present Regulation;
- Provide information and act as advisers to IGCP, E.P.E. in the monitoring of financial markets;
- Timely inform the IGCP, E.P.E. about their difficulty in performing any of the obligations laid down in this Regulation, namely in the case of abnormal or extraordinary market conditions and await the IGCP's consent to the change in the form of compliance, or of non-compliance, with any of the duties provided for in this Regulation.

c. Other Auction Participants (OMP)

The OMP status is assigned to institutions which, while not fulfilling the Primary Dealers requirements, contribute to achieving the goals set for the management of government debt by their participation in the primary and secondary debt market. OMP status may be granted to institutions that:

- Wish to apply for the OEVT status and wish to show in this way that they meet the necessary requisites;
- Have the capacity to place and trade Portuguese government debt securities in order to contribute to the broadening of the investor base and/or to the liquidity of these instruments in the secondary market;
- Offer guarantees for the physical and financial settlement of bonds in compliance with their form of creation and registration as well as with the procedures determined by the IGCP, E.P.E. for this purpose.

d. OMP Rights and Obligations

OMP have the right to participate in the competitive phase of bond auctions. OMP are obliged to:

- Regularly participate in bond auctions, by bidding under normal market conditions and by subscribing bonds in at least two auctions out of all auctions held during the year;
- Participate in the secondary market, through any of the electronic trading systems designated by IGCP, E.P.E. as market maker or market dealer and act in accordance with good market practices;
- Comply with all the rules adopted by the IGCP, E.P.E. on the scope and purpose of this Regulation.

ii. Market Participants in the Treasury Bill Market

Participation in BT auctions is confined to institutions that have been granted the status of Treasury Bill Specialist (EBT). The EBT status is granted by IGCP, E.P.E. on the basis of an assessment of the capability of the financial institutions to consistently place and trade BT in international, European or domestic markets, ensuring the access to a regular investor base and contributing to the liquidity of these instruments in the secondary market.

a. Rights of a Treasury Bill Specialist (EBT)

Treasury Bill Specialists are entitled to have:

- Exclusive access to the competitive and non-competitive phases of BT auctions;
- Preference in other forms of placement of BT;
- Access to the facilities created by the IGCP to support the market, namely the BT repo window of last resort;
- Privileged hearing on matters of common interest.



b. Obligations of a Treasury Bill Specialist (EBT) Treasury Bill Specialists are bound to:

- Actively participate in BT auctions, by bidding regularly under normal market conditions and by subscribing to a share no lower than 2% of the amount placed in the competitive phase of auctions (the compliance with this duty is assessed for a 1-year period);
- Actively participate in the secondary market of Treasury Bills (BT), acting in accordance with good market practice and ensuring the liquidity, efficiency and regularity of the trading conditions of these securities;
- to actively participate in the BT secondary market, acting as market makers through any of the electronic trading systems designated by IGCP, E.P.E., maintaining a share of no less than 2 per cent of the turnover of this market segment (the compliance with this duty is assessed for a 1-year period);
- Permanently update via a specialized remote information system a page of widespread access with the quotes of BT;
- Supply, according to the form and requirements of the IGCP, E.P.E. the information required for following up their activity in the secondary market and for monitoring compliance with the provisions of this Regulation;
- Respect all rules adopted by the IGCP, E.P.E. regarding the scope and objective of this Regulation;
- Operate as privileged consultants of the IGCP, E.P.E. in monitoring financial markets;
- Timely inform the IGCP, E.P.E. about the difficulty in complying with any of the duties laid down in this Regulation, namely in case of abnormal or extraordinary market conditions, and await the IGCP's consent on the change in the form of compliance, or of non-compliance, with any of the duties provided for in this Regulation.

E. Primary Bonds Market

Bonds may be placed by auction or by a consortium of financial institutions. Provided that they form part of an existing bond series, they may also be placed by subscription offer, limited to one or several financial institutions.

i. Auction Systems

a. Description of the Portuguese Bonds (OT) Auction

An indicative number of auctions of fixed-rate government bonds (OT) to be held are released every quarter by the IGCP, E.P.E. which may be periodically adjusted to borrowing requirements and to the corresponding financing strategy. Besides the auctions envisaged, the IGCP, E.P.E. may hold other auctions, announcing them at least three business days in advance. Two different bond series may be auctioned simultaneously.

The OT auctions can be held on the 2nd, 4th or 5th Wednesday of the month and are normally held on the second Wednesday of the month.

The specific characteristics of each auction are announced directly to the Primary Dealers (OEVT), to the Other Auction Participants (OMP) and to the market, up to three days before the auction date.

The settlement shall be made on the second business day following the competitive phase of the auction and on the first business day following the non-competitive auction date. OTs shall be delivered against the respective payment. Exceptionally, the IGCP, E.P.E. may set an alternative settlement date, disclosing it in the announcement of the respective auction

OT auctions are supported by an electronic system: the Bloomberg Auction System (BAS).

The auctions are carried out in two consecutive phases – competitive and non- competitive – and are only accessible to financial intermediaries authorised by the IGCP, E.P.E. i.e. institutions to which the status of Primary Dealer (OEVT) or Other Auction Participants (OMP) has been granted.





b. Phases Competitive Auction

- Open to the Primary Dealers (OEVT) and Other Auction Participants (OMP);
- Each participant may submit bids, in multiples of €1 million, with a total value which cannot exceed the upper limit of the overall indicative amount announced;
- Bids are ranked in decreasing order of the price offered;
- The IGCP, E.P.E. shall determine the minimum price depending on the amount placed, thereby setting the cut-off price;
- All bids offering a price greater than or equal to the cut-off price, unless the total of such bids exceeds the amount that IGCP, E.P.E. has decided to place in the auction shall be met at cut-off price;
- The bids with a price equal to the cut-off price are allotted on a pro-rata basis (according to €1,000 lots);
- The IGCP, E.P.E. may decide to place an amount up to one-third higher than that was announced and can also opt not to place part of, or the entire, amount announced.
- Bids should be entered in the auction system in the thirty-minute period preceding the deadline indicated in the auction announcement, which unless otherwise indicated by the IGCP, E.P.E. shall be 11.30 CET of the auction day. The auction results are announced up to 15 minutes after that time, usually in the three-minute period following the deadline.

Non-Competitive Auction

- Only Primary Dealers (OEVT) shall have access to this phase;
- In the non-competitive phase it is offered for subscription one-fifth (1/5) of the amount actually subscribed in the competitive phase;
- In the non-competitive phase, subscription shall be made at the same price of the competitive phase of the auction;
- Each Primary Dealer can subscribe bonds in the non-competitive phase of the auction up to an amount corresponding to its percentage of their participation in the amount placed in the competitive phase of the last three OT auctions multiplied by the indicative amount offered for subscription;
- The period for the submission of bids for the non-competitive phase will end at 10.30 p.m. (11.30 p.m. CET) of the following business day.
- The settlement of the amount subscribed by each institution shall be made on the second business day following the competitive phase of the auction and on the first business day following the non-competitive auction date. OT shall be delivered against the respective payment.

ii. Reverse Auction System

Reverse auctions are one of the methods used to implement the Republic of Portugal's Debt Exchange Programme.

a. Preamble

A debt exchange programme was developed in 2001 as part of the Republic of Portugal debt management strategy, which aimed to enhance the liquidity of the debt market and to act as an instrument for managing the refinancing risk.

In the Euro debt market, liquidity has emerged as one of the main factors explaining the spreads among issues of different sovereigns, the size of the issues and the trading conditions being the main determinants of liquidity.

Since the start of stage three of EMU in 1999, the borrowing needs of the Republic of Portugal are being met mainly through the issuance of Treasury Bonds in the Euro market. Nevertheless, the Portuguese government debt still includes a certain number of loans that are not liquid due to their small size, their coupons paying much higher than current market yields or the nature of the instrument or the market where it was issued.





The debt exchange programme includes the early redemption or the buyback of loans and less-liquid securities and their refinancing through the issuance of standard Treasury bonds (OT). When it was created in 2001, the main aim of the debt exchange programme was the acceleration of the exchange of old and less liquid debt for new OT issues. Since 2004, the programme has been predominantly aimed at minimising the refinancing risk resulting from the year's redemptions.

Different methods can be used for the execution of the buybacks:

- Buyback windows: during a pre-defined period of time, the IGCP is available to buyback certain securities at a predefined price;
- Buyback auctions: procedures identical to the OT regular auctions with settlement against cash. Securities are bought back at competitive prices;
- Exchange auctions: procedures identical to the OT regular auctions, securities being bought back in exchange for other securities; and finally
- Bilateral negotiations.

b. Principle of the Reverse Auction

The specific characteristics of each auction are announced directly to the Primary Dealers (OEVT) up to three days before the auction date, preferably. The time of the reverse auction is indicated in the auction announcement.

Reverse auctions only have a competitive phase and are supported by an electronic system – the Bloomberg Auction System (BAS). Access to these auctions is limited to financial intermediaries to whom Primary Dealer (OEVT) status has been granted by the IGCP, E.P.E.

Each participant may submit a maximum of five bids, in multiples of $\in 1$ million, the total of which cannot exceed the indicative amount of the auction.

OT are ranked in increasing order of the price offered until the price for which the amount of bids equals or exceeds the amount that the IGCP decides to buy back (until the cut-off price is reached). Should the total amount of bids with prices lower or equal to the cut-off price be more than the amount the IGCP decides to buy back, the bids with a price equal to the cut-off price are allotted on a pro-rata basis (according to €1,000 lots).

Should the total amount of bids with prices lower or equal to the cut-off price be more than the amount IGCP decides to buy back, the bids with a price equal to the cut-off price are allotted on a pro rata basis (according to \notin 1,000 lots).

iii. Syndications

Banking syndicates are the method typically used for the launch of new lines of OT, since this method fulfils the dual objective of simultaneously placing a larger amount of securities at market prices and achieving a greater diversification of the investor base, both geographically and by type of investor.

The issuance of OT is the main source of funding for the Republic of Portugal. The new OT series are launched via syndicate and their amount is subsequently increased through auctions, using an electronic multi-price auction system (the Bloomberg Auction System). The syndicated placement includes a pot system for the book-building, which enables the IGCP to intervene in the allocation of investors and to select those of greater quality, so as to ensure that the new issue achieves a good performance in the secondary market, thereby facilitating the placement of subsequent reopenings via auction.

Every quarter, the IGCP, E.P.E. announces the expected issuance for OT (a new line in the case of a syndicated issue and/or the number of auctions that are expected in that period for existing OT lines).

The syndicate members (leads and co-leads) include all OT Primary dealers (OEVT) and they are selected taking into account their evaluation performance over the past two years as well as their relative reward in the same period.





Key stages of the Operation: Bilateral discussion with Primary Dealers; Decision on maturity; Mandate announcement; Assessment market conditions; Decision for a potential transaction; Press release after pricing.

F. Treasury Bills Primary Market

i. Description of the Treasury Bills (BT) Auction

An indicative calendar of BT auctions is released every quarter by the IGCP, E.P.E. which may be periodically adjusted to borrowing requirements and to the corresponding financing strategy. More than one series may be issued simultaneously.

The BT auctions can be held on the 1st or 3rd Wednesday of each month and are normally held on the third Wednesday of the month.

The specific characteristics of each auction are announced directly to the Treasury Bill Specialists (EBT) and to the market, up to three days before the auction date. Settlement takes place two working days after the auction date (T+2).

BT auctions are supported by an electronic system: the Bloomberg Auction System (BAS) and follow a multi-price auction model.

The auctions are carried out in two consecutive phases - competitive and non-competitive - and are only accessible to financial intermediaries authorised by IGCP, i.e. institutions to which the status of Treasury Bill Specialist (EBT) has been granted.

ii. Phases

Competitive Auction

- Open only to Treasury Bill Specialists (EBT);
- Each participant may submit a maximum of five bids per line, in multiples of €1 million, the total of which cannot exceed the indicative amount of the auction, divided by the number of lines;
- Bids are ranked in ascending order of the interest rate required, bids whose interest rates are lower than or equal to the maximum interest rate accepted shall be satisfied;
- Should the total amount of bids exceed the amount that the IGCP decided to place in the auction, the bids with a rate equal to the cut-off rate are allotted on a pro-rata basis (according to €1,000 lots);
- The IGCP, E.P.E. may decide to place an amount up to one-third higher than that announced and may also decide not to place part of, or the entire, amount announced.

Bids should be entered in the auction system in the thirty-minute period preceding the deadline indicated in the auction announcement, which unless otherwise indicated by the IGCP, E.P.E. shall be at ten hours and thirty minutes [11.30 CET (Central European Time)] of the auction day. The auction results are announced up to 15 minutes after that time, usually in the three-minute period following the deadline.



Non-Competitive Auction

- Open only to the Treasury Bill Specialists (EBT);
- The non-competitive auction will amount to a maximum of 40% of the amount allocated at the competitive auction, divided into two different components:
 - 25% of the amount allocated at the competitive auction will be allocated to the Treasury Bill Specialists, depending on their share of the amounts allocated in the previous three competitive auctions (single or multiple line auctions will always be counted as one auction);
 - A maximum of 15% of the amount allocated at the competitive auction, depending exclusively on compliance, will be allocated as follows: up to five Treasury Bill Specialists will be awarded an extra 3% of the amount allocated at the competitive auction. These five Treasury Bill Specialists will have to be compliant and rank in the first five positions on the compliance criterion (as defined by the IGCP, E.P.E.). The relevant monthly appraisal for each non-competitive auction will be the latest one sent by the IGCP, E.P.E. as at the competitive auction date.
- Notwithstanding special circumstances, the competitive phase of auctions will end at 10.30 a.m. (11.30 a.m. CET) and the period for the submission of bids for the non-competitive phase will end at 10.30 p.m. (11.30 p.m. CET) of the following business day.
- The settlement of the amount subscribed by each institution shall be made on the 2nd business day following the competitive phase of the auction and on the 1st business day following the non-competitive phase of the auction. The BT shall be delivered against the respective payment

G. Secondary Market³

i. Framework of the Secondary Market for Government Debt

The secondary market for Portuguese Government debt underwent a profound change with the addition of two other recognised electronic platforms in 2010 increasing the competitiveness among the trading environment of the Portuguese Republic Debt. Apart MTS, were then accepted BrokerTec and BGC Partners (former BGC-eSpeed)as recognised platforms to trade OT and BT.

Following this reform, the secondary market structure is based on three complementary segments:

Regulated markets:

- Electronic platforms the wholesale segment for specialists,
- The retail segment, mainly for the trading of small lots and which is also a regulated market and where the majority of OT lines are listed Eurolist by Euronext managed by Euronext Lisbon;

Non-regulated markets:

• The Over-the-Counter (OTC) segment.

The creation of a multiple electronic platform environment led to a greater participation of non-resident investors and financial intermediaries, resulting in greater liquidity and turnover in the government bond market.

All government bonds (OT) and Treasury bills (BT) issued by the Republic of Portugal are admitted to trading on electronic platforms.

³ Source Instituto de Gestão da Tesouraria e do Crédito Público http://www.igcp.pt



The larger OT have also been admitted to trading on Euronext Lisbon and they are also actively traded on the electronic platforms MTS, BrokerTec and BGC Partners (former BGC-eSpeed).⁴

New OT and BT lines are admitted to trading immediately after being issued for the first time and once the pricing is defined; initially they are traded in the grey market.

The market making requirements for OT are set forth on the market rules, which can be downloaded from the market operator website.

ii. Requirements for Designated Electronic Trading Systems

An e-trading platform must comply with the following criteria, in order to be eligible as a designated electronic trading system for Portuguese public debt:

- Be a Regulated Market or a Multilateral Trading Facility under the Markets in Financial Instruments Directive 2004/39/ EC (MiFID);
- Offer access to all Primary Dealers equally and fairly. The fee structure of the platform must be non-discriminatory, and made public.
- There should be no prohibitively high fees for market takers who are Primary Dealers.
- Make public current bid and offer prices at those levels which are advertised through the trading system on a continuous basis during normal trading hours on reasonable commercial terms to market participants. Bid and offer prices must be made available free of charge to private individuals at those levels which are advertised through the trading system on a continuous basis during normal trading hours.
- Make public a list of market makers and market takers on the platform.
- Be continuously supported by at least one Primary Dealer promoting price discovery by making a market on Portuguese public debt securities on the system.
- Provide the IGCP, E.P.E. with all the market statistics needed to appraise the performance of its Primary Dealers and to monitor compliance with their market making commitment. If requested by the IGCP, E.P.E. platforms must cooperate with in an audit of these statistics. The format under which these statistics are provided is set by the IGCP, E.P.E..
- Agree that IGCP, E.P.E. publishes a list of designated electronic trading systems.

iii. The OT and BT Repo Market

Government bonds (OT) and Treasury Bills (BT) are included in the MTS Repo Facility. This is a real time-trading platform for real-time eurozone repo trading, pricing and liquidity, uniting market participants across Europe. OT and BT are also included in the BrokerTec repo trading facility.

Contrary to the cash market, there are no market-making requirements in this market. The inclusion of OT and BT in these platforms was an important step in the development of the OT and BT repo market and resulted in a significant growth in turnover.

4 Source: MTS markets





H. Quoting Obligations

Primary Dealers commit to continuously quote firm prices for all the securities subject to quoting obligations for a minimum of EUR 5 million amounts both for bid and offer sides at least five hours per day.

Primary Dealers are allowed to select at their discretion, the platform on which they comply with their quoting obligations. This platform needs not be the same for all the securities that a Primary Dealer is committed to quote. The platform can also change from one day to another. However, for every security on any given day, the quoting obligations must be complied with on at least one single platform. The quoting obligations cannot be split across platforms intra-day.

All fixed-rate Government bonds (OT) and Treasury Bills (BT) are currently admitted to trading on the designated platforms.

New OT and BT lines are admitted to trading immediately after being issued for the first time and once the pricing is defined; initially they are traded in the grey market.

The market making requirements for OT are set forth on the market rules, which can be downloaded from the market operator website.

One of the criteria used by the IGCP, E.P.E. to appraise the performance of the Primary Dealers, both on the OT and the BT segments, is compliance with market-making obligations set by the IGCP, E.P.E. and fulfilled on designated platforms.

An OEVT has fulfilled its quoting obligation if it has established a compliance ratio of at least 80% for each entire calendar month. For an OEVT to be compliant on any given security, it must provide quotes for a minimum of five hours a day in one of the designated platforms (BGC Partners/ BrokerTec/ MTS), and the bid offer spread of such quotes cannot exceed in more than 50% the average of all quotes from all OEVTs that quoted that security for at least five hours, on the same day. If any of these conditions are not met, the OEVT is non-compliant for that security.

An EBT has fulfilled its quoting obligation if it has established a compliance ratio of at least 80% for each entire calendar month. For an EBT to be compliant on any given security, it must provide quotes for a minimum of five hours a day in one of the designated platforms (BGC Partners/ BrokerTec/ MTS), and the bid offer spread of such quote cannot exceed in more than 50% the average of all quotes from all EBTs that quoted that security for at least five hours, on the same day. If any of these conditions are not met, the EBT is non-compliant on that security.

An OEVT or EBT can achieve additional points on the market making activity if:

- Quote more than the minimum amount required;
- Quote longer than the minimum time required;
- Comply with the requirements in the specially volatile days;



I. OEVT Performance Appraisal⁵

| CRITERIA | DESCRIPTION | SCORE | COMMENTS |
|---|---|------------|--|
| A. PRIMARY MARKET | | | |
| a.1. Primary Market Share | The OEVTs share of the amount placed by the IGCP, E.P.E. at the competitive phase of the OT auctions. | 35 | Adjusted by the regular participation and aggressive behavior |
| | Penalty of aggressive bidding YTD in OT auctions (score) | (negative) | |
| B. SECONDARY MARKET | | | |
| b.1. Market Making Compliance | The PD's compliance on quoting obligations in designated platforms. Obtained from the daily average of the percentage of bonds where PD's were compliant + the daily average quoting bid- offer spread ranking. | 7.5 | Adjusted for the volatility and Bid- Offer Spread target |
| b.2. Additional Amount and Time Quoted | The PD's additional time and amount quoted on designated platforms | 5 | Adjusted for the volatility and Bid- Offer Spread target |
| b.3. Interdealer Passive turnover | Assessment of passive turnover vs active turnover on the designated platforms. | 5 | |
| C. BROADENING THE BA | SE OF INVESTORS | | • |
| c.1. Meetings with investors | Overall assessment of PD's performance in the relationship with investors. | 5 | |
| c.2. Turnover with end investors | The PD's share of reported turnover with end investors in Harmonized Reporting Format. | 10 | |
| D. OTHER CRITERIA | | | |
| d.1. Buybacks and exchanges | The PD's share of the total amount in the scope of the buybacks and exchanges. | 5 | |
| d.2. Derivatives | The Primary Dealer's involvement in derivatives | 7.5 | |
| d.3. Qualitative appraisal of global relationship | The Primary Dealer's involvement regarding advisory and marketing roles. | 5 | |
| E. EBT PERFORMANCE A | PPRAISAL | | |
| e.1. EBT Performance Appraisal | The PD's EBT total score. | 10 | The best EBT receives the maximum score and the others receive a score proportional to their shares. |
| COMPOUND EVALUATION | The Primary Dealer's compound index will be the sum of the points collected in each different criteria. | 100 | For each quantitative criterion, the best Primary Dealer receives the maximum score and the others receive a score proportional to their shares, while for each qualitative criterion, the score that each Primary Dealer receives will be its best grade. |
| RANKING Ranking position of the Primary Dealer according to the above compound index. | | | npound index. |

5 Information provided by the Instituto de Gestao da Tesouraria e do Crédito Público



J. EBT Performance Appraisal⁶

| CRITERIA | DESCRIPTION | SCORE | COMMENTS |
|---|--|-------|--|
| A. PRIMARY MARKET | A. PRIMARY MARKET | | |
| a.1. Primary Market Share | The EBT's share of the amount placed by the IGCP, E.P.E. at the competitive phase of the BT auctions. | 50 | |
| B. SECONDARY MARKET | | | |
| b.1. Market Making Compliance | The EBT's compliance of MEDIP's quoting obligations. | 7.5 | This criterion will consider the annual average compliance of each EBT on the BT segment, according to the information provided by MTS Portugal. Furthermore, it will also consider any sanction that may have been applied for the non-compliance in this segment. |
| b.2. Additional Amount and Time Quoted | The EBT's additional time and amount quoted on designated platforms | 10 | |
| b.3. Market Making Compliance Volatility Adjusted | The EBT's compliance on quoting obligations in designated platforms weighted by daily volatility | 7.5 | |
| C. BROADENING THE BASE OF INVESTORS | | | • |
| c.1. Turnover with end investors | The EBT's share of reported turnover. | 25 | This criteria will be based on the monthly report of total turnover sent by each EBT to the IGCP, E.P.E |
| COMPOUND EVALUATION | The EBT's compound index will be the sum of the points collected in the different criteria. | 100 | For each quantitative criterion, the best EBT receives the maximum score and the others receive a score proportional to their shares, while for each qualitative criterion the score that each Primary Dealer receives will be its best grade. |
| OVERALL RANKING | VERALL RANKING Ranking position of the EBT according to the above compound index. | | ex. |

6 Information provided by the Instituto de Gestao da Tesouraria e do Crédito Público



K. Contacts

i. Debt Management Office

Agência de Gestão da Tesouraria e da Dívida Pública (IGCP, E.P.E.)

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| NOVO BANCO | |
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12. Slovakia

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A. List of Primary Dealers

| FIRM | Slovakia (SK) | Firm's location |
|---|---------------|-----------------|
| Barclays | Х | London |
| Citibank Europe | Х | Bratislava |
| Československá obchodná banka, a.s. (KBC) | Х | Bratislava |
| Deutsche Bank | Х | Frankfurt |
| HSBC | Х | Paris |
| Natixis | Х | Paris |
| Slovenská sporiteľňa, a.s. (Erste Bank) | Х | Bratislava |
| Société Générale | Х | Paris |
| Tatra banka, a.s. (RZB) | Х | Bratislava |
| Unicredit | X | Bratislava |
| Všeobecná úverová banka, a.s. (Intesa Sanpaolo) | Х | Bratislava |
| TOTAL | 11 | |

KEY:

AFME/Primary Dealer Members

Non-AFME Members

Credit Agricole and ING are classified as Recognised Dealers.



B. Credit Rating

The Slovak Republic's debt is currently rated as follows:¹

- Standard & Poor's: A+ (stable)
- Moody's: A2 (positive)
- Fitch: A+ (stable)
- DBRS: A (high) (stable)

C. Debt Instruments

There are two categories of "GDS" (Government Debt Securities).

- Treasury Bonds (T-Bonds)
- Treasury Bills (T-Bills)

Treasury Bonds

Maturity: Medium and long-term tenor securities

Coupon: fixed or floating rate, issued in one part or in several tranches

Principal: repaid at the face value on the maturity date

Issued on the primary market via auctions, via underwriting, via syndicated issues, by direct selling to investors, by exchange for other state securities, to the own portfolio

Listed on Bratislava Stock Exchange on the main quote market, or other similar organized market eligible for the ECB

Treasury Bills

Maturity: up to one year

Interest: discount/premium at issuance

Principal: repaid at the face value on the maturity date

Issued on the primary market via auctions under competitive and non-competitive bids, via underwriting, by direct selling to investors, by exchange for other state securities, to the own portfolio;

Listed on Bratislava Stock Exchange on the main quote market, or other similarly organized market eligible for ECB;





D. Rights and Duties of Primary Dealers

The placement of Government Debt Securities (GDS) in the primary market is ensured by a group of financial institutions to which ARDAL – the Debt and Liquidity Management Agency² – has granted the status of Primary Dealers (PDs).³ As such, they are entitled to a set of rights and must comply with a set of duties.

The rights and duties are listed in the table below.

| Rights | Duties |
|--|---|
| The right to participate on the primary and secondary market. | The PD shall participate in an auction of the GDS independently of other participants in auctions, and are required to achieve at least 3% of the GDS weighted by tenor sold via auctions within the calendar year. |
| The right to use the title "Primary Dealer of the Slovak Government Debt Securities". | Primary dealers shall support a liquid secondary market in state bonds and shall abstain from activities incompatible with this obligation. |
| Privileges do not apply to nor can be extended to third parties. | Primary dealers shall quote prices for benchmark issues on screens of major data vendors; they shall promote price discovery and shall be market makers on the designated electronic trading system. |
| Primary dealers are entitled and encouraged to advise the ARDAL and to participate in meetings with the ARDAL to discuss developments in the primary and secondary markets. | Primary dealers shall act in accordance with the obligations, rules and regulations applicable to the designated electronic trading system. |
| Primary dealers are entitled to receive from the ARDAL all relevant information regarding issuance policy and future financial requirements of the government. | Primary dealers shall actively promote and participate in development of products related to GDS, such as repos and indices. |
| Primary dealers will be addressed in preference in case of other financial needs of the state. | Primary dealers shall promote state bonds, e.g. by organising presentations or meetings with investors. |
| The PD have the right to bid for a non-competitive sale of the GDS. | Primary dealers shall conduct research on state securities and the Slovak economy. Findings shall be made available to clients and to the ARDAL. Primary dealers shall provide specific research support at the ARDAL's request. |
| | Primary dealers shall inform the ARDAL of developments in the financial markets and specific developments affecting state debt securities and related products. |

2 For further information on the ARDAL see http://www.ardal.sk/en

3 In order to become a primary dealer, the institution must sign a contract with the ARDAL ("Contract on Participation in the Primary dealership").



| Rights | Duties |
|--------|---|
| | Primary dealers shall submit secondary market trade reports in accordance with the Euro Market Activity Report (formerly HRF). ⁴ These reports shall be signed by a person acting on behalf of the PD. If requested by the ARDAL, primary dealers shall co- operate in an audit of these reports. |
| | ARDAL is allowed to gather information from all major data-vendors on turnover and market share on state securities of individual Primary dealers. |
| | Primary dealers are obliged to set up Money-Market credit line to Slovak Republic for trades on money market worth at least EUR €100 million with tenor at least 14 days. Primary dealers are obliged to provide two-way quotes at values of interbank market for deposits on demand during each trade day of TARGET system. |

⁴ The announcement of the terms includes the following minimum amount of data: issuer name; isin code; abbreviated name of a bond (and identification of the issued part); issue period; issue size; face value; issue date; maturity date; interest type; coupon interest yield in % p.a. (if available); payment agent (address); secondary market; auction type; auction date; settlement date (cash & security); price/ytm (at subscribing); accrued interest yield (if other than zero interest); issuer's account number





E. Primary Market

The GDS are sold through public auctions which ensure a high level of competition and transparency to the selling process. Auctions are organized by the ARDAL in the name of the Ministry of Finance.

i. Auctions

a. Date and Terms of the Auction

The auctions' calendar for the forthcoming quarter is published by the ARDAL by the 15th of March, June, September and December respectively. The ARDAL may publish a calendar for the half-year or the entire year by the 15th day in the month preceding the given period.

Notification of the terms of the auctions is usually published by the ARDAL five working days ahead of the auction day.⁵

If required by the ARDAL or the primary dealers, several auctions can take place on the same day.

b. Auction Type

There are three types of auction methods used for the placement of SDS:

Multiple price auction (American type). The PDs making competitive bids specify the price (the yield) they are willing to receive for the use of their funds. Successful bidders pay for the debt securities a price equivalent to the price quoted in the respective bid.

Single price auction (Dutch type). The PDs making competitive bids specify the price (the yield) they are willing to receive for the use of their funds. Successful bidders pay for the debt securities a "flat" price equivalent to the last accepted price, regardless of the price they bid.

Noncompetitive auction. Trades are executed at the average price resulting from competitive auction.

c. Evaluation of Bids

A PD may submit bids with different prices (yields) and amounts on own behalf and/or on behalf of clients. The evaluation of bids is based on a Bloomberg auction algorithm.

Bids accepted by the ARDAL with last price (yield) can be proportionately reduced via a Bloomberg auction algorithm.

d. Auction Participants

Only PDs who have a valid primary dealer Contract with the ARDAL are authorized to submit bids in auctions.

In addition, the National Bank of Slovakia (the "NBS") is authorized to submit bids (via the non-competitive subscriptions) on the account of foreign central banks and associated organizations of which the Slovak Republic is member.

e. Submission of Bids

The bids are submitted electronically via a Bloomberg auction system. Bids may be assigned and modified at any time before the deadline. In order to submit, the face value of the bid must be at least EUR ≤ 1 million. The increasing bidding amount is $\leq 100,000.6$ In exceptional circumstances, where the ARDAL is prevented from organizing the auction in a standard manner or the primary dealers are prevented from submitting bids in a standard manner, the submission or bids by other means is allowed (i.e. via email, fax). In a competitive auction the Dealer may submit bids with different prices (yield to maturity, hereinafter referred to as "YTM") on their own behalf and/or on behalf of clients. Evaluation of bids is realized on the principles of the algorithm of Bloomberg auction systems. Bids submitted with the last accepted price (the last YTM) can be shortened based on the Bloomberg auction system cutoff algorithm.

⁵ Source: Rules of the debt and liquidity management agency for trades on primary and secondary market of the State debt securities.



The ARDAL announces to the Primary dealers at the latest one hour before GDS non-competitive part of auction beginning coefficient for calculating the maximum bid (the "coefficient "). ARDAL agrees that the coefficient value does not exceed 25%. The Primary dealer can submit to non-competitive part of auction only one bid on his own behalf. Bids on behalf of client will be not accepted.

f. Publication of Auction results

The results of the auctions are published immediately after the evaluation of bids.

The bidders will see the allocation of the accepted bids via the Bloomberg auction system. In addition, aggregate results of the auction are disclosed through Reuters and Bloomberg pages DLMA.

Subsequently, the ARDAL delivers a voucher which serves as a confirmation of the deal, the purchase reservation and a call for payment.

Following the auction, a summary of results is published on the ARDAL website www.ardal.sk/en and delivered to the press, while a detailed account of the auction results is delivered to the Ministry of Finance and the National Bank of Slovakia.

g. Settlement

The cash settlement day, i.e. the day of payment for the debt securities, is the second business day following the auction. The day of cash settlement is crucial for the issue date, i.e. the interest of T-bonds and T-bills.

The PD is responsible for the timely payment of funds to the Issuer's account for all deals arising from the accepted by the Issuer.

The SDS are credited to the proprietary account of the final owner (or custody) on the day of the proprietary settlement at the moment of identification of PD's payment

The state securities which are not paid on the day of cash settlement will not be issued.

Delay in payment for the state securities bought in an auction means that the PD owes the Issuer not only the trade amount but also the SDS' applicable accrual.

The appeal for payment containing the accrued amount is sent as soon as possible by the ARDAL to the PDs the day following "delay day".

If the PD does not pay for the state securities within two business days from the date of the cash settlement, the ARDAL is authorized to cancel the deal.

The settlement can be delayed if the PD submits to the ARDAL a satisfactory reason for the delay in fund payments after the day of settlement, and it is possible for the penalty to be remitted. If no relevant reasons are submitted, the PD can be prevented from participating in some activities (e.g. competitive auctions, noncompetitive auctions, syndicate participation, other transactions).

F. Secondary Market

The Secondary market will be operational once the secondary market e-platform has been established and agreed upon by the PDs and the ARDAL, with the securities being quoted obligatorily.



G. Evaluation of Primary Dealers

The primary dealer's fulfillment of duties, trading behavior and performance is evaluated by the ARDAL, in accordance with certain criteria outlined in the paragraphs below. On the basis of the overall evaluation (e.g. the primary issuance purchases, secondary market trade performance and research coverage), the ARDAL may elaborate rankings of primary dealers. For this purpose, primary dealers are obliged to provide information at the request of the ARDAL.

If PDs fail to meet one or more obligations, the ARDAL brings that fact to the attention of the PD concerned. The ARDAL shall communicate to the PD concerned a period of time within which the PD can demonstrate that he complies in full with the obligations. If, at the ARDAL's discretion, the envisaged compliance is not realized within that period, the ARDAL has the right to suspend privileges for the PD concerned. The ARDAL shall inform the PD concerned without delay in written form.

i. Primary Market Performance – Evaluation Criteria

Primary Market Criteria

- Share of the GDS sold via auctions weighted by tenor in the time period.
- Share of the GDS sold via auctions in the time period
- Share of the GDS sold in direct sales weighted by tenor in the time period.
- Average weighted deviation of bids against average price.

ii. Secondary Market Performance – Evaluation Criteria

Secondary Market Criteria

- Share of state bonds traded on secondary market
- Performance of quoting obligations (on organized market average bid/offer spread, average time of quoting)
- Share of market maker trades and market taker trades

iii. Other Transactions Criteria

Share of money market trades realized with ARDAL

Share of back buy and exchanged bonds before maturity



H. Contacts

i. Debt Management Office

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13. Slovenia

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| Ι. | Slovenian Market Appendices | 13.16 |





A. List of Primary Dealers¹

i. Government Bonds

| FIRM | Slovenia (SL) | Firm's Location |
|---------------------------|---------------|-----------------|
| Abanka | Х | Ljubljana |
| Barclays | Х | London |
| BNP Paribas | Х | London |
| Citigroup | Х | London |
| Credit Agricole | Х | Paris |
| Commerzbank | Х | London |
| Deutsche Bank | Х | London |
| Goldman Sachs | Х | London |
| HSBC | Х | Paris |
| Jefferies | Х | London |
| J.P. Morgan | Х | Frankfurt |
| Nova Ljubljanska Banka | Х | Ljubljana |
| Société Générale | Х | Paris |
| Unicredit Banka Slovenija | Х | Ljubljana |
| TOTAL | 14 | |

1 List of Primary Dealers as of September 2017.

13. Slovenia



ii. T Bills

| FIRM | Slovenia (SL) | Firm's Location |
|------------------------------------|---------------|-----------------|
| Abanka | X | Ljubljana |
| Deželna Banka Slovenije | X | Ljubljana |
| Jefferies | X | London |
| Nova KBM | X | Maribor |
| Nova Ljubljanska Banka | X | Ljubljana |
| SKB Banka (Société Générale Group) | X | Ljubljana |
| Unicredit banka Slovenija | X | Ljubljana |
| TOTAL | 7 | |

KEY:

AFME/Primary Dealer Members

Non-AFME Members

AFME Members

B. Credit Rating

The Republic of Slovenia's debt is currently rated as follows:²

- Standard & Poor's: A+ (stable)
- Moody's: Baa1 (stable)
- Fitch: A- (stable)
- DBRS: n/a



13. Slovenia



C. Debt Instruments

The main instruments used to satisfy the Slovenian central government's funding needs are Government Bonds and Treasury Bills. The Euro-denominated government bonds and the Treasury Bills are issued as dematerialised securities in bookentry form in the central securities registry maintained by the local Central Securities Depositary (CSD): the KDD - Central Securities Clearing Corporation Inc., Ljubljana.³

The Benchmark Government bonds have the following standardised structure:

- Issue size: €1 billion €3 billion
- Coupon: fixed annual
- Maturity: 3, 5, 7, 10, 11, 15, 20-25, 30 years
- Repayment: bullet, in nominal value at maturity / non-callable
- Denomination: €1000
- Governing law: Slovenian law
- Listing: Ljubljana Stock Exchange

Foreign currency bonds were first introduced in the year 2012 in order to insure funding market access and broaden investor base. In 2016 and 2017 Slovenia reduced the size of outstanding foreign currency bonds by carrying out several buybacks and exchanges.

The main characteristics of the Treasury Bills are:

- Discount Security
- Issue size: There are provisional issue amounts set before each auction⁴
- Maturity: 3, 6, 12 and 18 months
- Repayment: nominal T-Bill value paid at maturity
- Interest: paid at maturity as the cashed-in difference between the selling price and the nominal value
- Denomination: €1000
- Governing law: Slovenian law

Slovenian Benchmark Government Bonds⁵ and Treasury Bills are listed on the stock exchange market (EEA Regulated Market) of the Ljubljana Stock Exchange (Ljubljanska borza D.D. - LJSE), on the bond segment. A full list and more detailed description of Government Securities are published on the Ministry of Finance site: http://www.mf.gov.si/en/areas_of_work/government_securities

⁵ Except for the first € benchmark bond issued after the euro changeover and USD denominated bonds, which are listed on Luxembourg Stock Exchange.



³ Links with both of the international central securities depositories (ICSD) Clearstream and Euroclear have been operational for the Slovenian government securities since the end of 2007

⁴ Provisional issue amount per auction is published in the Offer to purchase the Treasury Bills 5 business days prior to the auction on the ministry's website



D. Privileges and Obligations of Primary Dealers

i. Selection Criteria

A Primary Dealer is required to fulfil the following criteria:

- To be a financial institution licensed and authorised to conduct business in the nature contemplated herein under the laws of the jurisdiction in which it is incorporated.
- To have a high level of management, depth and experience, dealing capability, as well as marketing strength and strategy, including proven geographic and institutional distribution capacity.
- To have been a Designated Electronic Trading System (DETS)⁶ Participant for at least six months and to have a past record of active secondary trading of Government securities, particularly Government bonds. To act as Primary Dealer for at least three other EMU countries (applicable to non-resident institutions).
- To prove a record of support of the Government securities market and promotion of Government securities through adequate analysis, research and publications.
- To, in the opinion of the Ministry of Finance, maintain sufficient resources in terms of human resources, finances and such organisation of its syndicate desk, trading and sales forces so as to support an efficient primary and secondary market for Government bonds.
- To, in the opinion of the Ministry of Finance, maintain the highest standards in financial business practice, consistent with the Ministry of Finance's objective to achieve an orderly, efficient and liquid Government bond market.

The Primary Dealers are selected based on the selection criteria defined in the previous paragraph, the performance index evaluation⁷ of the Primary Dealers in the preceding contractual period and other criteria that the Ministry of Finance might consider relevant.

Existing Primary Dealers who resign during the time of validity of the Primary Dealer agreement are replaced by a new Primary Dealer, selected based on the criteria set above. The Ministry of Finance reserves the right to define the number of Primary Dealers in the Primary Dealer Group as well as the proportion between resident and non-resident Primary Dealers.

⁶ DETS means the electronic trading platform or the electronic trading platforms designated by the Ministry of Finance for the wholesale intradealer trading of Government Bonds based on the decision madeby the Primary Dealers on selection of electronic platform(s) from a list of electronic trading platforms, fulfilling the selection criteria set jointly by the Ministry of Finance and the Primary Dealers.

⁷ For description of the performance evaluation criteria please refer to paragraph G.



ii. Privileges and Obligations

| Privileges | Obligations |
|--|--|
| The exclusive right to the title of Primary Dealer of Government Bonds. | To be an active counterparty to the Ministry of Finance's debt issuance activities. |
| The exclusive right to directly participate in the syndicated Government bond offerings as well as in Government bonds auctions. | To submit bids of investors in the Auctions. |
| The exclusive right to participate in the non-competitive phase of Government Bond Auctions. | To actively assist the Ministry of Finance in the Buyback operations in line with the request of the Ministry of Finance sent to the Primary Dealer, especially by providing price guidance and information on the offered terms of the Buyback operations to the Government bond holders. |
| The exclusive right to directly participate in Buyback operations. | To be a system participant in the DETS and act in accordance with its Rules and to contribute on best efforts basis to the liquidity of the secondary market trading of the Government bonds. |
| The exclusive right to participate in the Primary Dealer Committee as defined in the Primary Dealer Agreement | To display good code of conduct in the clearing and settlement of the trades in Government Bonds, with a view to minimizing failed trades. |
| The right to become a System participant in the Designated Electronic Trading System and have a representative in the Market Committee established by the platform. | To report to the Ministry of Finance in agreed form and frequency. |
| To discuss estimates of the Republic of Slovenia borrowing needs and issuance planning, introduction of new financial instruments, selection of issuing and Buy-back methods, operating rules, choice of markets for primary market transactions. | To observe and follow all of the applicable laws, statutes and regulations imposing any and all of the selling restrictions for the sale of Government bonds in any country where they are placed or sold by the Primary Dealer. |
| To select by a decision taken by the Primary Dealers in a Primary Dealer Committee meeting, an electronic platform or electronic platforms as DETS from a list of electronic trading platforms fulfilling the selection criteria set jointly by the Ministry of Finance and Primary Dealer Group. | To actively promote Government bonds market by adequate analysis, research and publications and to seek placement of Government bonds with end investors. |
| | To allocate and maintain sufficient resources in terms of human resources, financial situation and organisation of its syndicate desk, trading and sales forces to support efficient primary and secondary market of Government bonds. |
| | To maintain the highest standards in financial business practice, consistent with the Ministry of Finance's objective to achieve an orderly, efficient and liquid Government bond market. |
| | To participate in the Primary Dealer Committee. |



iii. Primary Dealers for Treasury Bills

The Ministry of Finance selects Primary Dealers for Treasury Bills from banks fulfilling general criteria such as adequate licences for securities trading and a minimum capital requirement. In addition, it also assesses the capability of these financial institutions to place the Treasury Bill issues.

The Primary Dealers have the exclusive right to participate in the Treasury Bill auctions. They are obliged to submit bids of investors in the Auctions.

Due to the small scope of the Treasury Bills programme and the small size of issues, the Treasury Bills do not meet the selection criteria for trading on DETS and therefore there is currently no quoting obligation for the Primary Dealers for Treasury Bills. Their performance is evaluated solely on the basis of their activities in the primary market.

E. Primary Market

Government Bonds may be offered via syndication or auction. The Primary Dealers have the exclusive right to directly participate in the syndicated Government Bond Offerings as well as in Government Bond Auctions. With the objective of achieving a broader investor base and a more diversified geographical and institutional distribution, a syndication method has been used for new issues of Government Bonds. Existing Government Bonds may be re-opened via auction in order to increase their initial outstanding amount and to improve the liquidity of the issue.

Treasury Bills are issued by auctions in line with the auction calendar announced within the Financing Programme at the beginning of the year.⁸

i. Government Securities Auctions

a. General Description

The Government Bond and Treasury Bill auctions are executed according to the Rules of the Republic of Slovenia. The auctions of government securities are carried out through the Bloomberg Auction System (BAS).

Treasury Bill auctions are executed in a single phase by competitive bidding, using a Dutch algorithm.

The bond auctions are executed in two phases:

- 1st phase: Competitive bidding, using American allocation algorithm
- 2nd phase: Non-competitive bidding
- b. Competitive Bidding for Government Securities
- Invitation to the Primary Dealers is sent through Bloomberg Auction System (BAS) at least five business days before the auction date. The general public is notified of the auction by the publication of the offer to the public to purchase the securities on the Ministry of Finance's website.
- Primary Dealers submit the bids in their own name and for their own account as well as for the account of investors. Primary Dealers are not obliged to submit bids in their own name and for their own account.
- Each Primary Dealer can submit an unlimited number of Competitive Bids. The minimum bid amount is €100,000 for Government Bonds and €1,000 for the Treasury Bills.
- The bids submitted are ranked according to price in descending order. Should the total amount of bids with prices up to the lowest price accepted (the cut-off price) be higher than the size of issue that the Ministry decides to place, the bids with the cut-off price are allotted on pro-rata basis.

8 http://www.mf.gov.si/en/areas_of_work/government_securities/primary_market



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- Bids for the Government Bonds are accepted at the bid price, bids for the Treasury bills are accepted at the uniform price (the lowest bid price accepted).
- Unless otherwise indicated by the Ministry of Finance, the bids should be entered into BAS from 8:30 a.m. until 12:00 a.m. CET and the competitive bidding allocation is completed at 2:00 p.m. CET on the auction day.
- c. Non-Competitive Bidding for Government Bonds
- Only Primary Dealers may submit bids in their own name and for their account in the Non-competitive phase of the Auction. Submission of Non-competitive Bids is not obligatory.
- The subscription of Non-competitive Bids is made at the lowest price accepted in the first phase which is the competitive bidding phase of the auction.
- The maximum size of the Non-competitive phase is equal to 25% of the amount allocated in the Competitive phase of the Auction.
- Each Primary Dealer may submit one Non-competitive Bid only in the amount of up to the maximum amount offered this phase. If the sum of Non-competitive Bids submitted exceeds the maximum size of this phase, Primary Dealers who have participated in this phase of the Auction have the right to subscribe their bids at least at the Guaranteed Allocation Amount. The Guaranteed Allocation Amount is calculated as the maximum amount offered in the Non- competitive phase divided by the number of all of the Primary Dealers in the Primary Dealer Group. The sum of all Guaranteed Allocation Amounts shall not exceed the total Non-competitive Allocation amount.
- Unless otherwise indicated by the Ministry of Finance, the bids should be entered into BAS from 8:30 a.m. until 12:00 a.m. CET and the competitive bidding allocation is completed at 2:00 p.m. CET on the auction day.
- Unless otherwise announced by the Ministry of Finance, the Non-competitive bids should be entered in BAS from
- 2.30 p.m. CET until 3.00 p.m. CET and allocation is completed in BAS at 3:30 p.m. CET on the auction day.

d. Publication of the Auction Results and Settlement

The results of the auction will be published on the day of the auction after 3.30 p.m. CET on the Ministry of Finance's website and on Reuters (pages–MFSLO) and Bloomberg (page: ASUM SLTS for Treasury Bills and ASUM SLBS for Bonds) information systems. Settlement takes place two business days after auction (T+2).

ii. Bond Buyback and Exchange Auctions

a. The Criteria for Buyback and Exchange Transactions

The criteria, mode and timing of the Government Bond buybacks are determined by the annual Financing Programme. The main goal of the buyback and exchange programme is to enhance the liquidity of the Government bonds by early redemption of the less liquid securities. In addition, buybacks contribute to the consolidation of the government debt portfolio, larger sizes of new benchmark issues, building of the Government Bond yield curve.

Following the Public Finance Act, the Government Bond buybacks and exchange auctions can be executed, provided that:

- Measures to establish economic stability are supported;
- Expenses involving the public debt are reduced; or
- The quality of borrowing is improved and no increase in the public debt is recorded.

The bond buyback or exchange auctions will take place depending on the market conditions and the liquidity of the central government budget. In preparation of the auction the Ministry of Finance will determine the selection of bonds to be auctioned, the indicative total size of the buyback or exchange, the time of public announcement of the buyback or exchange offer and the date of the auction and, in case of an exchange, the list of new securities which will be offered in exchange and their exchange ratio.





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b. Buyback and Exchange Auction Procedure

Buybacks and exchange auctions of existing Government Bonds are executed by way of the electronic Bloomberg Auction System (BAS) in line with the Rules for the Republic of Slovenia Government Securities' Auctions.⁹

Buybacks and exchange auctions are executed following the announcement of a buyback offer or an exchange offer on the Ministry of Finance website. The invitation to participate in the buyback auction is sent to Primary dealers by e-mail and through BAS five business days before the buyback auction.

The Primary Dealers submit the buyback or exchange bids in their own name and for their own account as well in the name and for the account of other Bondholders.

The selection and acceptance of the bids is performed immediately after the closing time for submission of the bids.

The buyback or exchange price of a particular government security at the buyback or exchange auction is to be equal or lower than the highest acceptable buyback or exchange price for this government security as determined by the Ministry of Finance at a level that satisfies the criteria for buyback or exchange of securities, whereby:

The difference of the sum of the average annual net present values of cash flows of all the government securities eligible for buyback or exchange on a given date and average annual net present value of cash flow of the newly issued benchmark security, in the necessary amount to execute the buyback or exchange, equals ≤ 0

The total outstanding debt may increase or decrease, and the budgetary impact for individual years may be positive or negative.

The auction results are published on the Ministry of Finance website, as well as through the information systems Reuters (page MFSLO) and Bloomberg (page "ASUM SLTS" or "ASUM SLBS").

iii. Syndication

Within the framework of the long-term financing instruments, a public offering of benchmark bonds, issued on European or other financial markets via syndication represents the primary choice.¹⁰ The offering is placed via syndicate (lead managers, managers) in line with standard market procedures for syndicated deals. Lead managers are selected from the group of primary dealers according to their performance and according to the specific needs related to the new issue. A syndicated government bond issue is announced to the public by the Lead managers in agreement with the issuer in the form of the standard IIIA screen announcement and other messages/announcements on information systems. After the pricing the details of the deal are released via information systems. In addition, a press release containing pricing and distribution information is released by the lead managers and by the issuer's public relations office.

⁹ Buybacks and exchanges of bonds denominated in USD that were executed in 2016 and 2017 were not run via BAS.

¹⁰ The Method of issuance is expressly mentioned in the yearly Financing Programme published on the website of the Ministry of Finance.

F. Secondary Market

i. Interdealer Market

a. Preamble

Euro denominated government bonds are listed on the Ljubljana Stock exchange and are traded over the Stock Exchange electronic platform (the BTS) in accordance with the LJSE Rules.¹¹ There is no obligation for the Primary Dealers to trade the government bonds on the Ljubljana Stock Exchange market. The Primary Dealers contribute to the liquidity of the euro denominated government bond market by trading on the DETS in accordance with its Rules as well as with their other intradealer and customer trading. They are expected to allocate and maintain sufficient resources in terms of human resources, financial situation and organisation of its trading and sales forces to support an orderly, efficient and liquid secondary market of government bonds.

Treasury Bills are listed on the Ljubljana Stock Exchange and are traded over the Stock Exchange electronic platform (the BTS) in accordance with the LJSE Rules. Due to the small scope of the Treasury Bills programme and small size of issues, the Treasury Bills do not meet the selection criteria for trading on DETS. There is no quoting obligation for the Primary Dealers for Treasury Bills.

b. Designated Electronic Trading Platform(s)

The choice of electronic trading platforms designated by the Republic of Slovenia for the trading of Government Bonds is based on the decision made by the Primary Dealers (in a Primary Dealer Committee meeting) on the selection of electronic platform(s) from a list of electronic trading platforms, which fulfils the selection criteria set jointly by the Ministry of Finance and the Primary Dealers:¹²

- No additional direct or indirect costs for the connection to the trading platform for domestic banks;
- Availability of data on daily quoting performances and concluded trades, and other data required by the Ministry of Finance for the purpose of monitoring the market;
- An adequate settlement system (settlement of trades through Euroclear/ Clearstream and domestic KDD); and
- The agreement on the introduction of the specific platform among all Primary Dealers.

The decision whereby a Primary Dealer selects a specific platform is taken by voting in the Primary Dealer committee meeting. This is confirmed by the minutes of the meeting. In line with the Primary Dealer group selection period defined in the Primary Dealer Agreement, the status of selected platform is subject to review on an annual basis.

c. Quoting Obligations

DETS – MTS Slovenia Market Making Obligations

Based on the Primary Dealer Agreement, the Primary Dealers for Slovenian Government bonds are market makers on MTS Slovenia.¹³ They must quote and conclude trades according to the Rules of MTS Slovenia.¹⁴ Under normal market conditions, they are obliged to make proposals on the System for at least five hours per trading day during trading hours, with a minimum bid/ask spread as defined in Annex Slovenia.

The minimum quote size was reduced from €2 million to €1 million on 9 April 2013.

14 Source: MTS Slovenia



¹¹ Except for the first benchmark bond issued after the euro changeover and USD denominated bonds, which are listed on Luxembourg Stock Exchange.

¹² The platform selection criteria and the choice of the Designated Electronic Trading Platform is governed by the Primary Dealer Agreement.

¹³ Source: http://www.mtsmarkets.com

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Market Makers commit to the following market-making obligations to contribute on a best effort basis to the liquidity of the secondary market trading of the Government bonds:¹⁵

- All Market Makers provide two-way proposals for Slovenian issues.
- Two-way proposals for all bonds assigned must be displayed for at least five hours per day.
- All Market Makers are committed to quote all bonds listed.¹⁶

According to this model, the Slovenian Treasury assesses market makers performance on the basis of four different criteria with different weights within the index:

- Time of quoting on platform;
- Bid-ask spread of quotes;
- Volume of exposure during quoting on the platform; and
- Time of the beginning of quoting.

Each market maker's performance, calculated daily on the basis of the above index is sent to the market makers by e-mail by 9.00 a.m. CET the next day at the latest.

Other Interdealer Platforms

MTS Slovenia is the only DETS, i.e. the only intradealer platform on which the Primary Dealers are obliged to quote the government bonds by virtue of their obligations under the Primary Dealer Agreement.

However, based on the information gathered from the Primary Dealers' monthly HRF reports in 2017, the government bonds were traded also on other intradealer platforms (mainly on Bloomberg and BrokerTec). As the Primary Dealers are not obliged on a contractual basis to quote on anything other than DETS, this information may vary.

ii. Dealer to Customer Market

a. E-Trading

On a regular, systematic basis, the DMO has access only to information on Dealer to Customer trading of the Primary Dealers from their monthly HRF reports. Based on the HRF reports submitted in 2017, the government bonds were traded on Bloomberg, Bondvision, TradeWeb and MarketAxess. As the PDs are not obliged on contractual basis to quote/trade on other than DETS, this information may vary over the period of time. Slovenia does not gather information on trading of other (non-Primary Dealer) market participants' dealer to customer E-trading.

b. Retail Market

The size of the retail trading of Primary Dealers is reported by Primary Dealers in their monthly HRF.

¹⁵ Source: http://www.mtsmarkets.com

¹⁶ Access to price information on MTS Slovenia is published on the daily bulletin and fixing at: http://www.mtsdata.com/content/data/public/rsl/ bulletin and http://www.mtsdata.com/content/data/public/rsl/fixing



G. Appraisal of the Activity of Primary Dealers

a. Performance Index

The Ministry of Finance monitors and assesses the performance of Primary Dealers for Government Bonds on the basis of the performance index (PI) calculated from the following elements:

- The Primary Dealer's performance on the DETS (PI_{ID});
- The Primary Dealer's performance in the Secondary market trading of Government securities excluding the DETS (PI_{non-ID});
- The Primary Dealer's performance on Buy-back operations according to the Programme of Financing (BBO); and
- The qualitative assessment of the service supplied by the Primary Dealer (Q).

Primary Dealers' performance on the DETS and secondary market trading is considered following the data in reports structured according to the European harmonised reporting format, which is sent to the Ministry of Finance by each of the Primary Dealers on the tenth working day of each month at the latest.

b. Qualitative Assessment

The qualitative assessment of the Primary Dealer's service is evaluated by:

- Evaluation of the Primary Dealer performance in syndicated issues; and
- Evaluation of the Primary Dealer's promotion of Government securities, market information and analysis as well as strategic and economic information, advice and research.

The monthly performance evaluation of the Primary Dealers calculated on the basis of the performance index is sent to the Primary Dealers by the end of the following month.

H. Contacts

i. Ministry of Finance

Republic of Slovenia Ministry of Finance

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iii. Central Bank

| Bank of Slovenia |
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I. Slovenian Market Appendices

i. Financing Programme

The central government budget debt is managed on the basis of an annual Financing Programme, proposed to the Government by the Ministry of Finance following the parliamentary approval of the central government budget for the given year.

The Financing Programme contains basic principles of the central government budget financing operations and the central government debt management operations (buybacks, exchanges, derivatives). Adherence to the principle of predictability is maintained by stating the annual funding requirement and the range of financing instruments (primary and alternative), while allowing for flexibility with respect to the actual choice of of instruments and the timing of funding operations. The yearly funding quota is the sum of budget deficit and debt repayments maturing in the current year. In addition, the borrowing within a fiscal year may be increased for pre-funding of up to the amount of principals repayment of central government budget debt maturing in the two following fiscal years. This provides for additional flexibility and more efficient adjustment of the borrowing programme to market conditions.

The running execution of the yearly Financing Programme is coordinated with liquidity management and budget execution.

For the information on the Financing Programme of the current year please refer to the website of the Slovenian Ministry of Finance.

ii. MTS Slovenia

The euro denominated benchmark Government Bonds are traded on the designated interdealer trading platform MTS Slovenia¹⁷ (a division of EuroMTS) established in March 2007 after the Euro changeover. MTS Slovenia is governed by a Committee, which includes the Ministry of Finance of the Republic of Slovenia and the Primary Dealers of Slovenia.¹⁸

All Primary Dealers of Slovenian Government Bonds participate in MTS Slovenia as Market Makers directly. Additional participants are able to participate in the market, subject to the Committee approval.

Retail investors have no direct access to this trading platform, which is a wholesale interdealer trading infrastructure (B2B trading) with main purpose to provide liquidity to market makers of Slovenia's Government Bonds and thus indirectly providing for market makers' capacity to trade with their customers (B2C trading).

Settlement of trades in MTS Slovenia is performed by Euroclear Bank Brussels and Clearstream Banking Luxembourg on a gross delivery versus payment basis. In line with the settlement procedures of these companies, MTS Slovenia transmits payment/delivery instructions for each single transaction via Swift to Euroclear Bank Brussels/Clearstream Banking Luxembourg on behalf of both counter-parties. Each MTS Slovenia participant must be member of one of the two ICSD either directly or indirectly through an agent bank and is allowed one account for clearing transactions executed on MTS Slovenia for every type of security.

Information on trading is publicly available on the MTS Slovenia website (Daily Bulletin / Daily Fixings) http://www.mtsdata.com/content/data/public/rsl/fixing and https://www.mtsdata.com/content/data/public/rsl/bulletin

¹⁸ Primary Dealers for Government Bonds



¹⁷ See http://www.mtsmarkets.com



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A. List of Primary Dealers¹

| FIRM | Bonos & Obligaciones del Estado (Government bonds) | Letras del Tesoro (T-bills) |
|---------------------------|---|-----------------------------|
| Banco Cooperativo Español | | Х |
| Bankia (Caja Madrid) | X | Х |
| Bankinter | X | Х |
| Barclays | X | Х |
| BBVA | X | Х |
| BNP Paribas | X | Х |
| Caixa Bank | X | Х |
| Cecabank | X | Х |
| Citigroup | X | Х |
| Commerzbank | X | Х |
| Crédit Agricole | X | Х |
| Danske Bank | X | Х |
| Deutsche Bank | X | Х |
| Goldman Sachs | X | Х |
| HSBC | X | Х |
| JP Morgan | X | Х |
| Morgan Stanley | X | Х |
| Natixis | X | Х |
| NatWest Markets | X | Х |
| Nomura | X | |
| Santander | X | Х |
| Société Générale | X | Х |
| TOTAL in each group | 21 | 21 |
| Total Primary Dealers | 2 | 2 |

KEY:

AFME/Primary Dealer Members

Non-AFME Members

AFME Members

1 List of Primary Dealer Agreements as of September 2017



B. Credit Rating

Spanish debt is currently rated as follows:²

- Standard and Poor's: BBB+ (positive)
- Moody's: Baa2 (stable)
- Fitch Ratings: BBB+ (positive)
- DBRS: A(low) (negative)

C. Debt Instruments

i. Spanish Government Bonds: Bonos y Obligaciones del Estado

Bonos and Obligaciones del Estado are Treasury Securities with maturities above two years. Bonos and Obligaciones have exactly the same features, except for their maturity. Maturities of Bonos range from two to five years, while Obligaciones have maturities of more than five years.

The issuance of Bonos and Obligaciones del Estado is mainly made through competitive auctions. Bids must be made for at least €1,000, or a multiple of this minimum amount. The minimum face value to be traded is €1,000.

Government Bonds are interest-bearing securities, with annual coupons, as opposed to Letras which pay all interest at maturity. Coupons are paid on a yearly basis and reflect the "nominal" interest on the security.

Government bonds are issued in consecutive tranches in order to reach a global issue size which may grant high liquidity.

The Treasury currently issues Government Bonds with the following maturities:

- 3-year Bonos
- 5-year Bonos
- 10-year Obligaciones
- 15-year Obligaciones
- 30-year Obligaciones

ii. Spanish Treasury Bills: Letras del Tesoro

Letras del Tesoro are short-term fixed income instruments which exist only in book-entry form. They were created in June 1987, when the book-entry system was established.

Letras are issued at auctions. Bids must be made for at least €1,000, or a multiple of this minimum amount.

These instruments are issued at a discount, which means that the purchase price is lower than the amount which will be rendered at redemption. The difference between the price rendered by the Treasury at maturity (\leq 1,000) and the purchase price will be the return of the Letra.

² Credit rating updated as of September 2017



Treasury currently issues Letras del Tesoro with the following terms:

- 3-month Letras del Tesoro
- 6-month Letras del Tesoro
- 9-month Letras del Tesoro
- 12-month Letras del Tesoro

Given that these are short-term securities, price fluctuations in the secondary market tend to be quite small. Therefore, the risk incurred by investors who intend to sell Letras del Tesoro prior to maturity is usually low.

D. Privileges and Obligations of Primary Dealers

i. Rights of a Primary Dealer (Bonds and T-Bills)³

a. Participation in Treasury auctions

Only Market Makers in Government Bonds may present requests in the thirty minutes before the closing of the period of the presentation of requests in each Government Bond auction.

b. Access to Second Rounds

Market makers in Government Bonds may gain exclusive access to a second round of the Government Bonds auction, which will be carried out between the end of the auction and 12:00 P.M of the previous day of the effective date (D+3).

A maximum of 24% of the nominal amount of each bond allocated at auction will be issued in this second phase.

All bids for Bonos y Obligaciones will be met at the rounded-up weighted average price arising from the auction phase.

The share of the second round that can be obtained by each market maker that qualifies will be equal to that market maker's combined allotment in both the current auction and the previous auction of the similar bond. If it is the first auction a bond, the share will be the combined allotment in the current auction and the latest auction of the closest benchmark.

The maximum percentage of the second round for each Market maker is divided into several tranches:

- The maximum percentage of the second round for each Market maker is divided into several tranches: A 24% of the nominal allotted in the auction, which the Treasury may distribute among the most active Market makers, according to the last evaluation periods previous to the auction and those Market makers that have also complied with the minimum quoting obligations during the last evaluation period previous to the auction.
- A 20% of the nominal allotted in the auction, which the Treasury may distribute among those Market makers that have complied with the minimum quoting obligations during the last evaluation period previous to the auction and that are not among the most active Market makers, according to the last evaluation periods previous to the auction.
- A 4% of the nominal allotted in the auction, among the most active Market makers, according to the last evaluation periods previous to the auction and that have not complied with the minimum quoting obligations during the last evaluation period previous to the auction.
- A 0%, to those Market makers which have not been among the most active market makers, according to the last evaluation periods previous to the auction and that have not complied with the minimum quoting obligations during the last evaluation period previous to the auction.

³ Source: Tesoro Publico website



c. Stripping and Reconstitution of Government Debt Securities (Bonds only)

Bonos and Obligaciones Primary Dealers are the only entities authorised to strip and reconstitute strippable Government Debt securities.

d. Other Debt Management Operations

The status of Primary Dealer in Government Bond will be valued in the selection of counterparties for other Debt management and allocation operations which may be carried out by the Treasury, such as syndicated issues in Euros, financial exchange transactions and foreign currency issues.

- e. The receipt of timely updates on the Treasury's financing policy.
- f. Participation in the setting of issuance targets for short, medium- and long-term Government Debt instruments
- g. Representation on the Public Market Advisory committee.

ii. Obligations of a Primary Dealer

a. Participation in Auctions

Each Primary Dealer must submit bids for a minimum nominal value of 3% of the amount allotted by the General Secretariat of the Treasury and Financial Policy of each Bono and Obligación auctioned, at no lower than the auction's marginal price minus 5 cents for three-year Bonos del Estado; 10 cents for five-year Bonos del Estado; 15 cents for ten-year Obligaciones del Estado, and 30 cents for Obligaciones del Estado dated longer than ten years. For Letras del Tesoro, Each Primary Dealer must enter bids at each auction for a minimum nominal value of 3% of the amount the Treasury allots of each type of Letra, at a yields no higher than those given by the marginal rate plus two basis points of yield.

Excluded from the calculation of the fulfilment of this obligation will be those auctions in which any of the two following conditions are present:

- When the yield corresponding to the auction's marginal price is two or more basis points lower than the yield provided by secondary-market offer prices five minutes before the auction is held. The reference being the price posted on the regulated market or multilateral trading system recording the highest Bono and Obligación or Letra turn over in the previous month.
- When 40% of the issuance volume has gone to a single entity.

The General Secretariat of the Treasury and Financial Policy will give timely notification to Primary Dealers of auctions where either of these conditions applies.

b. To guarantee the liquidity of the secondary market in Government Bonds and stripped securities complying with the listing obligations imposed by the General Secretariat of the Treasury and Financial Policy.

The listing obligations of Government Bonds will be fulfilled when the listings, using the maximum differentials and the minimum volumes agreed by the General Secretariat of the Treasury and Financial Policy, are maintained on each one of the working days according to the calendar approved by the General Secretariat of the Treasury and Financial Policy, on the screens of the regulated markets or multilateral trading systems which are determined by this the General Secretariat, during, at least, five hours between 8:30 and 17:15 of each day for the aforementioned working days.

The General Secretariat of the Treasury and Financial Policy may modify the listing conditions, following consultation with the Primary Dealers.

a) Each Primary Dealer must obligatorily list the benchmarks that are defined as the market benchmark which have been agreed by the General Secretariat of the Treasury, following consultation with the Market Makers. In the listing of these benchmarks the maximum differentials of demand and offer prices and the minimum listed volumes agreed by the General Secretariat of the Treasury and Financial Policy, following consultation with the Primary Dealers, must be respected.





b) Each Primary Dealer must obligatorily list stripped principals in accordance with the conditions of maximum differentials and the minimum volumes agreed by the General Secretariat of the Treasury and Financial Policy, following consultation with the Primary Dealers.

For the listing of the stripped principals, the Primary Dealers may be divided into groups. In this way, the General Secretariat of the Treasury may design baskets following consultation with the Market Makers in which may be included the stripped principals whose quoting will be obligatory. Each basket will be assigned to a group of Primary Dealers. For the preparation of the baskets the maturity of the references that constitute them will be taken into account, in such a way that they are similar in duration and liquidity. The baskets will be modified periodically.

- c. To provide the information that the General Secretariat of the Treasury and Financial Policy may request about the Debt market in general and in particular the activity of the Market Maker itself
- d. To insure through their actions the smooth functioning of the market, respecting the operating obligations that are established and avoiding carrying out actions that could negatively affect the market or the Government Debt.

E. Primary Market⁴

i. Issuance and Auction Procedure

a. Auction Calendar

At the start of each year, the Treasury publishes a calendar in the Boletín Oficial del Estado setting out the auction dates for Government debt instruments, with dates for the presentation of bids and the settlement and issuance of securities.

The calendar published may be modified as the year goes on, depending on the needs and opportunities arising for the Treasury of the market itself. Special auctions may be called for example, for the launch of new public debt instrument. The Treasury can also cancel a scheduled auction included in the calendar.

Bonos and Obligaciones issuance follows one of the following procedures or a combination:

- By competitive auction;
- By means of a competitive process involving a restricted number of authorised institutions, who agree to underwrite the issue or act as counterparty in the secondary market. In such cases, the Treasury may formalise the arrangements and contracts that it deems appropriate with the institutions chosen, setting out allocation procedures where these differ from the terms of the auction system, and the form in which the issues will be placed. The selection of agent institutions may prioritise financial criteria, commercial capacity or Debt market performance.
- Letras del Tesoro issuance is by competitive auction.

Typically, the Treasury uses the auction as the procedure of issuance of Public Debt instruments denominated in national currency (the Euro, since 1 January 1999).

⁴ Source: Spanish Treasury website http://www.tesoro.es/en/Deuda-Publica/Mercado/primary-market



b. Calling of Auctions

Auctions are called by Resolution of the General Secretariat of the Treasury and Financial Policy, specifying the following details:

- Issue and redemption dates of the Debt securities in question;
- Date and latest time for lodging bids with the Bank of Spain;
- Allocation date;
- Settlement date;
- Date and latest time for payment of the securities allocated;
- Nominal amount offered (discretionary);
- Minimum nominal amount of bids (where appropriate);
- The possibility (or otherwise) of submitting non competitive bids;
- Annual nominal interest rate and coupon payment dates (in the case of Bonos and Obligaciones);
- The 'special' nature of the auction (where appropriate);
- Any additional conditions applying.

In Bonos and Obligaciones auctions, the technique used is aggregation, or issuance by tranche, whereby the issue of a determined security is kept open over several consecutive auctions. The securities allocated at such auctions are fungible, by virtue of sharing the same nominal coupon and the same interest payment and redemption dates.

Also in the case of Bonos and Obligaciones, a series of placement objectives are set for auctions in consultation with Primary Dealers, thereby helping to stabilise financing flows. These objectives are set on the Monday prior to each auction. Objectives refer both to the amount targeted and the maximum amount to be issued. Minimum issue amounts are also set, currently €180 million for 3- and 5-year Bonos, and €90 million for 15- and 30-year Obligaciones.

c. Presentation of Bids

Any individual or legal entity, resident or non-resident, may bid for and subscribe to Treasury securities. Bids can be submitted at any branch of the Bank of Spain, following the Bank's own procedures and within the date and time limits established in the Resolution calling the auction.

Investors other than Account Holders in the Book-Entry System can enter their bids directly or through a Management Institution or a placement agent authorised by the General Secretariat of the Treasury and Financial Policy.

Management Institutions and Account Holders in the Book-Entry System must lodge their bids with the Bank of Spain between 8.30 a.m. and 10.00 a.m. on the day of the auction via their computer terminals with the Bank of Spain Settlement Service, or by calling them in via the Money Market Telephone Service. In the case of Primary Dealers, the deadline is extended to 10.30 a.m.

Individuals going directly through the Bank of Spain must submit their bids two days before, specifying the Management Institution which will act as a depository for their securities.

Bids are considered firm orders for the purchase of the Debt instrument applied for, subject to the terms of the issue, and failure to pay in full on the payment date set will give rise to the corresponding liability or, as the case may be, loss of the deposit made previously as a guarantee (comprising 2% of the nominal amount bid for).





Bids may be of two types:

Competitive bids

Bidders indicate their best price for the Debt instrument in question. Bid prices must be expressed as a percentage of the nominal value, with three decimal places in the case of Letras del Tesoro (the last decimal being 0 or 5), two decimal places for Bonos del Estado (the last decimal place freely selected from 0 to 9 inclusive) and two decimal places for Obligaciones del Estado (the last a 0 or a 5). Notwithstanding this, the Treasury may modify these formulae if circumstances so advise. Competitive bids that do not specify a price will be deemed null and void. The General Director of the Treasury and Financial Policy may limit the number and maximum amount of competitive bids that each auction participant can submit, and set a minimum or stop-out price.

Non-competitive bids

Debt buyers do not specify a bid price, but accept the weighted average price resulting from the auction. The overall nominal amount of non-competitive bids per bidder generally may not exceed €1 million.

Bids for Bonos and Obligaciones and Letras del Tesoro must amount to at least $\leq 1,000$ for both competitive and non-competitive bids. As for these minimum amounts, the bids submitted must be multiples of $\leq 5,000$.

Investors other than Account Holders in the Book-Entry System presenting their bids directly in the Bank of Spain must make a prior deposit – in cash or by cheque – of 2% of the nominal amount bid for, in guarantee of payment. The deposit may be made in cash, by debit order in the current account held at the Bank of Spain branch where the bid has been lodged, or by bank or current account cheque made out to the Treasury or the Bank of Spain. The deposit will be part of the payment if the bid is successful. If the bid fails, or the auction is declared void, the Bank of Spain will return the deposit to the bidder, ordering such repayment on the first business day following the resolution of the auction, and the institutions concerned will return the money in the shortest possible time.

d. The Auction

Auctions are generally run on a modified Dutch auction basis, combining elements of the latter (single price) with elements of standard auctions (multiple prices).

The bids submitted are classified by descending order of price.

The General Director of the Treasury, at the proposal of a committee made up of two representatives from the Bank of Spain and two from the General Directorate of the Treasury and Financial Policy, decides the nominal amount to be issued and, on the basis of the last bid admitted, the stop-out price/rate, on which the marginal interest rate is calculated.

All bids, at or above this minimum, are accepted, unless the pro-rata formula is being used (affecting only bids made at the marginal price). Non-competitive bids are accepted in their entirety.

The allocation price of securities is calculated as follows: bids made at the minimum price are accepted at the same price; bids falling between the minimum and rounded-up weighted average price also pay the price actually bid; and bids higher than the rounded-up weighted average price and non-competitive bids pay the rounded-up weighted average price.

The auction could be solved by means of another method if the General Directory of the Treasury and Financial Policy decided it. For example, in 2002 the 10 year Government auctions were run on a multiple price system: bids higher than minimum price pay the price bid while non-competitive bids pay the weighted average price

e. Publication of Results

Auction results are made known by procedures that guarantee the most equal distribution of information to all operators. Specifically, they are published on the day of the auction on the Treasury's website http://www.tesoro.es, Reuters Reuters (TESORES 07 Y TESORES 08), Bloomberg (TESO5 Y TESO6) and Telerate (38631/2 y 38633/4). They are also printed in the Boletín Oficial del Estado pursuant to the Resolution of the General Secretariat of the Treasury and Financial Policy.



The information published includes:

- Nominal amount bid;
- Nominal amount allocated;
- Stop-out price;
- Rounded-off weighted average price of accepted bids;
- Price or prices payable on the debt allocated;
- Internal rate of return corresponding to the weighted average price and stop-out price of Bonos and Obligaciones auctions.

f. Second Round

Since 1991, the possibility has existed for Government Debt auctions to go to a second round. The rules applying to this second-round option stand as follows:

After Bonos and Obligaciones/Letras bids have been entered and resolved in the auction, and between the auction date and 12 p.m. of the day before the security's issuance.

A maximum of 24% of the nominal amount of each bond/Letra allocated at auction will be issued in this second round. All bids for Bonos y Obligaciones will be met at the rounded-up weighted average price arising from the auction phase and in the Letras case, all bids will be met at the rounded-up weighted average interest rate arising from the auction phase.

The share of the second round that can be obtained by each Market maker that qualifies will be equal to that market maker's combined allotment in both the current auction and the previous auction of the similar bond or Letra. If it is the first auction a bond, the share will be the combined allotment in the current auction and the latest auction of the closest benchmark.

The maximum percentage of the second round for each Market maker is divided into several tranches:

- 24%, that the General Secretariat for the Treasury and Financial Policy may grant to those Primary Dealers for Bonos and Obligaciones and Letras which the General Secretariat judges to have complied, in the evaluation period prior to the auction, with the minimum quoting standards determined by the General Secretariat, and which have been among the most active Primary Dealers in the months previous to the auction.
- 20%, which the General Secretariat for the Treasury and Financial Policy may grant to those Primary Dealers for Bonos and Obligaciones and Letras which the General Secretariat judges to have complied, in the evaluation period prior to the auction, with the minimum quoting standards determined by the General Secretariat, but which have not been among the most active Primary Dealers in the months previous to the auction.
- 4%, which the General Secretariat for the Treasury and Financial Policy may grant to those Primary Dealers for Bonos and Obligaciones and Letras which the General Secretariat judges have been among the most active Primary Dealers in the months previous to the auction, but which have not complied, in the evaluation period prior to the auction, with the minimum quoting standards determined by the General Secretariat.
- 0%, that the General Secretariat for the Treasury and Financial Policy may grant to those Primary Dealers for Bonos and Obligaciones and Letras which the General Secretariat judges not to have complied, in the evaluation period prior to the auction, with the minimum quoting standards determined by the General Secretariat, and which have not been among the most active Primary Dealers in the months previous to the auction.



g. Payment of the Nominal Value Allocated at Auction

In the case of bids entered directly at the Bank of Spain, the nominal amount allocated shall be paid by crediting the difference between the subscription price and the deposit made in the Treasury's account at the central bank. Payment can be by the same means as those described for the 2% deposit, and should be made prior to the date and time limits set in the auction call.

In the case of bidders submitting through a Management Institution (Entidad Gestora), the corresponding amounts will be duly debited on the payment date in the current accounts specified for billing. Alternatively, the Management Institution may deposit at the Treasury the amount corresponding to its own and third-party subscriptions. And finally, the Management Institution must furnish the subscribers whose bids they channeled with a certificate setting out the nominal amount subscribed and the cash sum to be deposited in the Treasury's account.

Likewise, the Bank of Spain must provide subscribers whose bids it received directly, with a certificate accrediting the nominal amount subscribed and the cash amount to be paid to the Treasury, and make the entries corresponding to the Debt allocated in the third-party accounts of the Management Institution stipulated by the bids' presenter.

h. Distribution of the Securities

The balances arising from the Treasury securities' subscription shall be credited in their holders' accounts on the day of issuance. From this date onwards, these balances may be mobilised by Account Holders for secondary market transactions or securities transfers.

The balances of individuals subscribing through a Management Institution shall likewise be credited in the latter's account on the day of issuance.

In the case of individuals subscribing through a placement agent other than the Management Institution specified as domicile or who operate through a Bank of Spain branch giving a domiciliation other than that of a Bank of Spain Direct Account, the credit entry in the domiciling Management Institution shall be recorded at a later date, once the Book-Entry System has informed each entity affected of the amounts and the identifying data of the subscribers of each institution.

ii. Buy-Backs, Early Redemptions and Exchanges

Government Debt exchange auctions are a discretionary formula used by the Treasury to withdraw from the market certain references, replacing them with others.

The main aims the Treasury pursues through its exchange programmes are:

- To rationalise the structure of government debt maturities by eliminating illiquid references with little residual life.
- To alter the maturities curve of outstanding debt, lengthening or shortening it
- To ensure that enough strippable bonds are outstanding in order to ensure that Bono and Obligación stripping and reconstitution operations are backed by sufficient liquidity
- To build up the liquidity and depth of the Public Debt market, in order to attract investor savings within the single capital market defined by European Economic and Monetary Union, and ensure the Spanish Treasury can successfully compete with other sovereign issuers.



iii. Syndication

Every year the Minister for the Economy and Finance issues an Order through which the creation of Central Government Debt is disposed for the current year, and which delegates certain functions onto the General Secretariat of the Treasury and Financial Policy. Article 5 stipulates that issuance of debt shall be carried out either through competitive auctions, or

"...through any other technique that is considered adequate, depending on the type of operation in question. In particular [the Treasury] may cede part or the entirety

of an issue, at a convened price, to one or several financial institutions to ensure its placement".

Syndication is, of course, a practice that is used among other established Treasuries.

F. Secondary Market⁵

i. Interdealer Market

a. Platforms Selection Procedure

The regulated markets or multilateral trading facilities shall be determined by the Secretariat-General of the Treasury and Financial Policy, after consultation with the Primary Dealers group, on the basis of the following criteria:

- The regulated markets or multilateral trading facilities must be recognised as such by a European Union country as specified in Securities Market Law 24/1988 of 28 July.
- A sufficient number of Primary Dealers must undertake to quote and trade Spanish Public Debt securities on these regulated markets or multilateral trading facilities, thereby promoting the liquidity of the Debt.
- The regulated markets or multilateral trading facilities must undertake to provide the Secretariat-General of the Treasury and Financial Policy with all such information as it may require to assess the performance of Primary Dealers. In the event of failure to comply with this undertaking, the Secretariat-General may disqualify the non-compliant regulated market or multilateral trading facility from consideration as an appropriate venue for Primary Dealers to satisfy their liquidity commitments vis à vis Government Debt.
- Insofar as the Management Company of the Securities Registration, Clearing and Settlement Systems (Iberclear) does not operate links with other settlement systems that can ensure the efficient and economical settlement of transactions, in the judgement of the supervisors of the Public Debt Book-Entry Market and in
- accordance with Article 44 quinquies of Securities Market Law 24/1988 of 28 July, trades closed between Primary Dealers should be settled on Iberclear.

Procedure

The Secretariat-General of the Treasury and Financial Policy issues a consultation to the Primary Dealers structured in terms of five simple multiple-choice questions related to: the change in number of eligible platforms; minimum number of dealers that should quote on a single platform; the preferred platform from the options listed and which would be their second preferred platform. On the basis of the results, the General Secretariat decides which platforms are eligible for the fulfillment of Primary Dealers' trading obligations.

The Spanish Government Bond market is currently open to two regulated market or multilateral trading systems: SENAF and MTS Spain. However, the Spanish Treasury is considering the possibility of opening the market to further platforms and therefore will examine any platforms candidature (provided that it meets minimum criteria such as volume capacity etc).

⁵ Source: Spanish Treasury website



b. Authorised Regulated Market or Multilateral Trading System, and Market Making Obligations

The Spanish Government Bond market is currently opened to two regulated market or multilateral trading system:

- SENAF Senaf at present does not impose any quoting obligations to the participants.
- MTS Spain Market Making Obligations. MTS at present imposes quoting obligations to Market makers not registered as Primary Dealers with the Treasury.

c. Quoting Obligations

Bonos, obligaciones and strips

Quotation requirements are focused on the benchmark issues (Bonds from three to five years and Obligaciones from 10 to 30 years) and in the quotation of three P.O strips per each Primary Dealer.

It will be compulsory to quote the benchmark issues for at least 5 hours from 8.30 a.m. to 5.15 p.m. with the volumes and differentials quoted below.

It will be compulsory to quote three Principal-Only strips for at least four hours from 9.00 a.m. to 5.15 p.m. with the volumes and maximum bid/offer spreads agreed by the Spanish Treasury and the group of Primary Dealers.

In order to quote the strips, the Creadores de Mercado will be split into three groups for the purpose of quoting principalonly strips.

A Strips basket will be assigned to a group of Primary Dealers. In order to create the strips baskets; the Spanish Treasury will take into consideration the advice of the Primary Dealers, and also will take into account the issues maturity. The assigned baskets will be modified regularly.

Points will be granted for the quotation of strips on the following conditions:

• The quotation of more issues (no matter if they are principals or coupons) with the time, volumes and maximum bid/ offer spread agreed by the Spanish Treasury and the group of Primary Dealers.

Letras del Tesoro

Quotation commitments in Letras del Tesoro will be deemed to be met when prices are quoted, with the maximum spreads and minimum volumes set by the General Secretariat of the Treasury and Financial Policy, on each of the business days figuring in the calendar approved by the General Secretariat of the Treasury and Financial Policy, on the screens of the regulated markets or multilateral trading facilities determined by the General Secretariat, for at least five hours between 8.30 and 17.15 on each of the above business days.

The General Secretariat of the Treasury and Financial Policy may modify these quotation conditions after consultation with Primary Dealers.

The General Secretariat of the Treasury and Financial Policy will specify the Letras stocks which each Primary Dealer is obliged to quote. It will also define the stocks to be considered benchmarks, after consultation with Primary Dealers, and establish the maximum spreads and minimum volumes they must quote.

• In relation to non-benchmark issues, there will not be quotation obligation, but the Spanish Treasury will only grant points for the issues quotation for at least 5 hours from 8.30 a.m. to 5.15 p.m in the conditions equal or better than those established below by the Spanish Treasury.

Bonos y Obligaciones Quoting Obligations

| Benchmarks | Maximum Spreads (cents) | Minimum Volume (mn euros) | Minimum Time | |
|------------------------------|-------------------------------|---------------------------------|------------------------------------|--|
| Зу | 15 | 10 | | |
| 5y | 20 | 10 | | |
| 10y | 25 | 10 | | |
| 10y €i | 30 | 5 | | |
| 15y | 40 | 5 | | |
| 30y | 50 | 5 | 5 hours from | |
| Off-the-run bonds | Maximum Spread (cents) | Minimum Volume (mn euros) | 8:30am to 17:15 CET | |
| <3.5y | 20 | 10 | 1 | |
| ≥ 3.5 < 6.5y | 25 | 10 | | |
| ≥ 6.5 < 12y | 30 | 10 | | |
| > 12y | 55 | 5 | | |
| Principal- Only strips | Maximum Spread (cents) | Minimum Volume (mn euros) | Minimum Time | |
| < 10y | 15 | 10 | | |
| > 10y | 20 | 5 |] | |
| Interest- Only strips | Maximum Spread (cents) | Minimum Volume (mn euros) | 4 hours, From 9:00 to 17:15 CET | |
| < 10y | 15 | 3 | | |
| > 10y | 20 | 2 | | |

Letras Quoting Obligations

| Benchmarks | Spread (puntos basicos) | Volume (mn euros) | Minimum Time |
|---------------|-------------------------------|---------------------------------|--------------|
| 3 months | 15 | 10 | |
| 6 months | 10 | 10 | |
| 9 months | 10 | 10 | 5 hours from |
| 12 months | 7 | 10 | 8:30am to |
| No Benchmarks | Spread (puntos basicos) | Minimum Volume (mn euros) | 17:15 CET |
| All | 15 | 10 | |

Each Primary Dealer can quote part of the securities on one platform and part on the other, but in order to consider that a Primary Dealer fulfils its quoting obligations regarding one specific security, it has to comply with its quoting obligations (in time, volume and spread) on one platform. If it has quoted half of the compulsory time of a security on one platform and half in another, the Treasury will not consider it as not having fulfilled its quoting obligations.







If it has quoted the compulsory time of the same security on both platforms, only one will be taken into account. However the quoting of some references on one platform and some on the other platform is allowed and will be taken into account. For example, a Primary Dealer can quote its long benchmarks on Senaf and the short on MTS.

ii. Dealer to Customer Market

a. Trading Systems

Secondary market trades are conducted through three systems (the first two reserved exclusively for market members):

- Through blind brokers (the blind market), also known as the "first tier" in which only Public Debt members can participate. Trading is electronically conducted without knowledge of the identity of the counterparty (hence the term 'blind'). This is the core of the Public Debt market, as participating agents undertake to quote bid and offer prices at relatively narrow spreads, thereby guaranteeing the market's overall liquidity. Transaction size is a minimum of 5 million euros. Blind market trades may only be to maturity, whether in spot or forward transactions. Repos are not permitted. Profits and losses are settled daily by marking to market, and the corresponding adjustments made on the operations Value date.
- The bilateral trading system, direct or via broker, also known as the "second tier", channels all remaining operations between Account Holders. The support for this market is provided by Bank of Spain Settlement Service. In this segment, participants can operate to maturity (in spot or forward, double or repo transactions). Operations can be entity-to-entity or through a broker. In the second case, the broker matches the operation and notifies each party of its counterparty (who is identified under this system). Both parties then notify the Bank of Spain Settlement Service of the terms of the transaction to enable its subsequent clearance and settlement.
- The third and last trading system comprises transactions between Management Institutions and their clients.

b. Type of Operations

Several types of operations may be conducted.

1. Single transactions

Here, the transaction is one way only. Securities are sold along with all the rights attached: coupon payment, redemption value, etc. Debt is considered transferred to maturity, allowing the new owner to transact in it freely on the secondary market under any authorised format. Single operations can be:

- Spot transactions: settlement takes place within the five business days following the transaction date.
- Forward transactions: settlement takes place after the fifth business day following the transaction.

2. Double or Buy-Back Transactions

These are when contracting parties simultaneously agree two single transactions, a buy and a sell, one spot and the other forward or both forward. The buyer in the first transaction will be the seller in the second and vice versa. These are firm transactions, with the sale and repurchase price previously agreed at a given date. This buy-back arrangement entitles the holder of the asset to collect coupon payments at maturity. Double operations can be divided into:

- **Ordinary repos or "simultáneas"**: both buying and selling transactions refer to the same type of instrument and are for the same nominal value. The buyer can transact freely with the securities purchased, regardless of the buy-back date set.
- **Blocked or "Spanish" repos**: the difference vs. ordinary repos is that the securities are not transferred to all effects and, as such, buy-back transactions can only take place up to the date set for their return. However, the buyer is entitled to collect coupon payments falling due in the interim.



3. Stripping and Reconstitution

Linked to Bonos del Estado and Obligaciones del Estado strips.

Stripping takes place when a strippable bond is withdrawn from the Book-Entry System and replaced by new securities with an implicit yield arising from the cash flow generated by the same bond's coupons and principal.

Reconstitution is the reverse process, i.e. all the outstanding securities with an implicit yield arising from the different cash flows of a strippable bond are withdrawn from the Book-Entry System and replaced by the bond itself.

Stripping and reconstitution transactions can only be processed by strippable debt Market Makers, who take on a series of commitments subject to annual review. Strip and reconstitution orders must be for a minimum nominal amount of 500,000 euros, while additional amounts must be multiples of 100,000 euros.

Public Debt Market Members who are not authorised to process strip and reconstitution orders, and agents who are not market members, may only hold stripped securities by acquiring them from the institutions authorised to strip. By the same token, they can only replace the stripped securities in their possession with strippable bonds if they sell the former and buy the latter, but may under no circumstances reconstitute.

iii. Book Entry System

The Book-Entry System managed by the Bank of Spain is responsible for the clearance and settlement of Public Debt market operations. Each market member holds an account in the Book-Entry System, where transactions in its securities are recorded.

Its main functions are:

- 1. To administer the issuance and redemption of securities traded in the book-entry system.
- 2. To pay the interest accrued and effect the transfers of balances arising from secondary market transactions
- 3. To facilitate the establishment of pledges and other guarantees and the identification of the same.
- 4. To organise the secondary market by establishing clearance and settlement procedures instrumented by simultaneous entry of securities transfers in Book-Entry System accounts and the corresponding balancing entries in Bank of Spain cash accounts.

The procedure used is one of cash on delivery. During each session, Account Holders notify the Book-Entry System of transactions channelled through the Bank of Spain Settlement Service, specifying the following:

- 1. type of operation
- 2. the reference transacted
- 3. the nominal amount
- 4. the price
- 5. the counterparty
- 6. the record date agreed

The Book-Entry System records all this information and, on the established record date, debits or credits the securities accounts against the corresponding cash accounts held by Account Holders at the Bank of Spain. The record date most commonly used in Bonos and Obligaciones del Estado operations is T+3, i.e. 3 business days after the transaction. In the case of Letras del Tesoro, value and transaction dates tend to coincide.





Individuals or institutions who are not members of the Public Debt market -i.e. who do not hold accounts in the Book-Entry System- have to channel transactions through a Management Institution (for Direct Account holders, the Bank of Spain itself acts in this capacity). The Management Institution can be that in which the securities are registered or any other. It must notify transactions to the Book-Entry System on the business day prior to the record date established, except where the unit value of the transaction exceeds 500,000 euros, in which case it may notify on the record date itself.

Transactions may also be settled against payment on third parties' behalf through the Bank of Spain Settlement Service.

Non-resident investors can also clear and settle their transactions through Euroclear and Cedel, international clearing and settlement systems linked to Spain's Book-Entry System through the third-party accounts of two Management Institutions, acting as their depositories.

Transactions between Euroclear or Cedel clients are cleared and settled internally, without notification to or intervention by the Spanish Book-Entry System.

When the transaction is between one Euroclear and one Cedel client, clearing and settlement is again internal, although in this case the third-party accounts held at each system's depository will reflect the corresponding change in their respective balances on the record date established.

When transactions are between a Euroclear or Cedel client and a non-depository individual or institution, two alternatives can arise

1. if the intervention of the Euroclear or Cedel depository is restricted to informing the Bank of Spain Settlement Service of the securities transfer, the settlement will be processed by Euroclear or Cedel;

2. if the depository is linked to the transaction, it will use the clearing and settlement services of the Book-Entry System in the form described above.

G. Appraisal of the Activity of the Primary Dealers

The General Secretariat of the Treasury and Financial Policy evaluates monthly the activity of Market Makers in Government Bonds, in accordance with the following areas:

- Participation in the Bonos, Obligaciones and Letra auctions.
- Participation in exchange and buy-back operations carried out by the Treasury.
- Involvement in the debt management and promotion initiatives organised by this General Secretariat.
- Listing of Letras, Bonos and Obligaciones in the regulated market or multilateral trading system specified by the General Secretariat of the Treasury and Financial Policy.
- Participation in the total monthly trading in Bonos, Obligaciones and Letras in the regulated markets or multilateral trading systems determined by the General Secretariat of the Treasury and Financial Policy.
- Participation in monthly Letras, Bono and Obligación trading between members of the market of Public Debt in Book Entries.
- Participation in the monthly trading in Treasury Bills carried out by Market Makers with companies which are not members of the market of Public Debt in Book Entries.
- Stripping and reconstitution of strippable securities and trading in these instruments.



• Any other activity reflecting their engagement with the Spanish public debt market. Qualitative considerations such as their involvement in campaigns to promote Government Debt inside and outside Spain, the extent of their Government Debt distribution in strategic national or regional markets, as inferred from the monthly reports sent to the Secretariat-General of the Treasury and Financial Policy, the regularity of their market-making, and any other activity which reflects their commitment to the Spanish Public Debt Market.

Aspects will be penalized such as not contributing information or advice requested by the General Secretariat of the Treasury and Financial Policy, not attending meetings of the General Secretariat of the Treasury and Financial Policy with the Market Makers, presenting requests in the auctions that deviate significantly from the price or the yield in the existing secondary market five minutes before the holding of the auction, or carrying out actions that could negatively affect the functioning of the market. In all cases companies will be penalised who do not comply with the obligations of participating in auctions and do not guarantee the liquidity of the secondary market through listing.

The status of Market Maker in Government Bonds may be lost for any of the following reasons:

- Due to a renouncement notified by the company itself to the General Secretariat of the Treasury and Financial Policy.
- Due to a decision of the General Secretariat of the Treasury and Financial Policy when it considers that the company has not maintained a commitment to the Spanish market in Public Debt that is considered sufficient.
- Due to a decision of the General Secretariat of the Treasury and Financial Policy when a company does not comply with the deductions at source scheme which is applicable to them according to the regulations in force.
- Due to a decision by the General Secretariat of the Treasury and Financial Policy that a company has carried out actions that could negatively affect the functioning of the market or Government Debt or when its behaviour is considered to be inappropriate for a Market Maker, to be contrary to the interests of the Treasury or to the smooth functioning of the Debt market.
- When the General Secretariat of the Treasury decides to rotate its Market Makers group for the purpose of providing access to the group to new companies, whether increasing the group's number or not.

H. Contacts

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Maria Concepción Jimenez

Secretariat General Operations, Markets and Payment Systems



I. Spanish Market Appendices

Legal Framework

The issuance of Public Debt must be authorised by law.

The General Budgetary Law provides the Government with a fairly free hand in public debt management, with the sole limitation that it must observe the restrictions imposed in each year's State Budget Law or in other legislation in force.

Specifically, each year's State Budget Law sets out the main guidelines governing public debt issuance in the corresponding year and establishes an issuance ceiling. This is a global limit which makes no distinction between types of public debt (domestic or foreign currency issues, particular instruments, etc.). Thus, the government, and by its delegation, the Minister of Economy and Finance (who in turn delegates most of his powers to the General Secretariat of the Treasury and Financial Policy), can freely choose any kind of debt instrument, its characteristics and the issuance procedure to apply. It can likewise vary the total amount of outstanding debt by means of additional issues, early redemptions and exchanges. All these aspects are regulated by Royal Decree and a Ministerial Order approved and published at the start of each year. Finally, the Resolutions of the General Secretariat of the Treasury and Financial Policy lay down more specific details for the conduct of debt issuance through the year, such as the calendar for ordinary auctions or equivalence tables of prices and yields.

Meanwhile, the Bank of Spain acts as the State's financial agent. This remit is perfectly compatible with the limitations established in the Maastricht Treaty and transposed in Law 13/1994, of 1 June, on the Bank of Spain's Independence, as regards the prohibition on the monetising and privileged financing of the public deficit. For this reason, rules also emanate to a significant extent from the Bank of Spain Circulars.





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15. Sweden

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A. List of Primary Dealers^{1 2}

i. Primary Dealers in Nominal Bonds (SGB)

| FIRM | Sweden (SE) | Firm's location |
|-----------------------|-------------|-----------------|
| Barclays | Х | London |
| Danske Bank | Х | Stockholm |
| Handelsbanken Markets | Х | Stockholm |
| Nordea Markets | Х | Stockholm |
| NatWest Markets | Х | London |
| SEB | Х | Stockholm |
| Swedbank | Х | Stockholm |
| TOTAL | 7 | |

ii. Primary Dealers in Inflation-Linked Bonds (SGB IL)

| FIRM | Sweden (SE) | Firm's location |
|-----------------------|-------------|-----------------|
| Danske Bank | Х | Stockholm |
| Handelsbanken Markets | Х | Austria |
| Nordea Markets | Х | Stockholm |
| SEB | Х | Stockholm |
| Swedbank | Х | Stockholm |
| TOTAL | 5 | |

iii. Primary Dealers in T-bills (STB)

| FIRM | Sweden (SE) | Firm's location |
|-----------------------|-------------|-----------------|
| Danske Bank | Х | Stockholm |
| Handelsbanken Markets | X | Stockholm |
| Nordea Markets | Х | Stockholm |
| SEB | Х | Stockholm |
| Swedbank | Х | Stockholm |
| TOTAL | 5 | |

KEY:

AFME/Primary Dealer Members



Non-AFME Members

AFME Members

1 Information as of September 2017

2 Source: Swedish National Debt Office's website http://www.riksgalden.se



15. Sweden



B. Credit Rating

Swedish debt has the following ratings issued by the various credit rating agencies:³

- Standard and Poor's: AAA (stable)
- Moody's: Aaa (stable)
- Fitch Ratings: AAA (stable)
- DBRS: AAA (stable

C. Privileges and Obligations of Primary Dealers

i. Rights of a Primary Dealer

- Exclusive access to the primary market;
- Each Primary Dealer shall receive a basic commission of SEK 600,000 each year;
- A commission amount of SEK 4,000,000 per year will be shared among all Primary Dealers in proportion to the commission-earning volumes sold in connection with the Regular auctions for nominal bonds (SGB).
- A commission amount per year of SEK 6,000,000 per year will be shared between all Primary Dealers in nominal bonds (SGB) in proportion to the share of respective Primary Dealer achieved during the past year of the total turnover in the Client Market.
- Primary Dealers may make use of the Swedish National Debt Office's decided and in force at any given time market commitments in Government Bonds repos and other market commitments on the part of the Swedish National Debt Office
- In the case of liquidity management and in the case of other business agreements within the framework of central government debt management, Primary Dealers are given priority before other counterparties, providing the terms and conditions, service and quality of the counterparty relationships are otherwise equivalent

ii. Obligations of a Primary Dealer

- A Primary Dealer is obliged to bid (for its own part or on behalf of a customer) at all auctions. The bids have to be reasonable compared to market rates and must comply with the sales conditions. The minimum share in the primary market is 2.5% per quarter;
- The Primary Dealer shall actively, and in accordance with sound and customary trading principles, contribute to liquidity and price transparency in Government Bonds on the Secondary Market (both on the Client Market and the Interbank market) both through trading on the spot (cash) market as well as by entering into transactions on the derivatives markets.
- The Primary Dealer shall make every reasonable effort to maintain in first the Electronic Interbank Market and second the Client Market, for each calendar quarter, market shares of not less than 5 per cent and 2.5 per cent respectively of the total market sales in the respective market.
- The Primary Dealer shall conduct analyses and research and present business proposals regarding Government Bonds in the Client Market and inform participants in the Client Market about the Swedish National Debt Office's borrowing and management of central government debt

³ Credit rating as of September 2017



- The Primary Dealer shall provide the Swedish National Debt Office at least once a year a written business plan regarding sales and marketing of Government Bonds for the forthcoming calendar year and on operations concerning the business plan for the preceding calendar year. A Primary Dealer should assist the SNDO with advice for improvements;
- The Primary Dealer shall actively work towards enhancing client interest in making bids in conjunction with the Swedish National Debt Office's sales of Government Bonds.
- Report daily on turnover to the Riksbank and the Stockholm stock exchange;
- Provide annual sales report to the SNDO of auction distribution by customer and region
- Allocate sufficient staff and other resources to ensure compliance with its commitments under this Agreement

D. Primary Market⁴

i. Auctions

Primary Dealers are the sales force for Government Securities and thus the preferred counter party in Repos and other instruments. The SNDO actively supports liquidity through market commitments. By reducing uncertainty and contributing to liquidity, the SNDO increases the attractiveness and risk-taking propensity in the market and hence leads to cost reduction.

a. Auction Terms

The SNDO issues Treasury bills, nominal and inflation-linked government bonds by means of auctions. Only Primary Dealers can place direct bids for the auctions. Others who are interested in bidding must go through a Primary Dealer. Auction dates are published on the SNDO's website every third months.5. The auction conditions are published on the SNDO's website one week prior to the auction at 4.20 pm on our website. Auction results for all government securities are published around three minutes after the auction closes, i.e. around 11.03 am on our website. Auctions for T-bills and government bonds take place every other Wednesday. Auctions for inflation-linked bonds take place on Thursdays according to our published auction calendar. The conditions state the auction date, maturities, volumes issued and the auction cut-off time. Bloomberg and Reuters also distribute the information.

The allotment for the auctions is made according to the principles of multi-price auctions. i.e. allocation at the interest rate offered. When the auction close, the bids are placed in rank order from the lowest to the highest interest rate. The bids which in terms of volume are below the auction volume published in advance receive an allocation. The bids which are on the margin and have the same interest rate as the highest accepted level are reduced in percentage terms so that the issued volume does not exceed the volume we wish to sell.

b. Bidding Terms

The bids shall be reasonable, taking into consideration the prevailing market interest rates at the time of each sale. Bids for government bonds, inflation-linked bonds and T-bills are placed at a yield together with a nominal volume in millions of Swedish kronor. Bids are placed electronically via Bloomberg auction system. A Primary Dealer undertakes to comply with the SNDO's Sales Terms and Conditions in force at any given time. The Primary Dealers shall make all bids as a principal. All bids are binding. The dealer is obliged to acquire the allocated volume even where it is less than the volume requested in the bid.

c. Auction Calendar

An auction calendar covering a period of at least six months is announced in advance, and is updated in February, June and October. This calendar officially announces forthcoming auction dates. Auction details are announced on the SNDO's website one week prior to each auction. Bloomberg and Reuters also distribute the information.⁵

4 Source: Agreement with Dealers of Swedish Government Bonds, Swedish National Debt Office

5 Auction calendars of the Swedish National Debt Office are available on its website



ii. Syndication

Syndication only applies to foreign currency funding and depends on market windows. The SNDO announces the decision of syndication through lead managers on Bloomberg and Reuters screens.

The managers/leaders are selected by track records, placing capability quality of overall relationship, pricing, etc. Primary Dealers have a preferred counterparty status but compete on equal terms with other investment banks. The distribution of the bond is announced through the National Debt Office's website and the lead managers' press release.

Regarding the syndication method, the SNDO uses the conventional pot transaction, i.e. a joint order-book with split economics, usually only by using lead managers. The key stages of the operation and their results are displayed on screens and also announced through the SNDO's website.

E. Secondary Market

i. Interdealer Market

a. Trading on the Secondary Market

The Primary Dealers shall actively, and in accordance with sound and customary trading principles, contribute to liquidity in the instruments issued by the SNDO on the Secondary Market, both through trading on the spot market as well as by entering into transactions on the derivatives markets. The Primary Dealer shall continuously make all reasonable efforts to maintain a secondary market for Government Bonds through providing on request binding bid and ask rates on the Client Market and continuously providing indicative bid and ask rates in the market Information System.

b. Multiplatform Environment

To be considered eligible for the selection, the Interbank electronic platform shall:

- Either be a multilateral trading facility or a regulated market according to the Securities Market Act (2007:528);
- Provide information to the SNDO as required and be open in a non- discriminatory way to all Primary Dealers,
- Contribute to a properly functioning secondary market.

The Primary Dealers may, by six months' advance written notice to the SNDO, change the Electronic Interbank Trading System(s) in which they commit themselves to trade on the Interbank Market.

If the Primary Dealers decide that there should be more than one Electronic Interbank Trading System, then at least so many Primary Dealers must have made a commitment to trade in several of these systems as is required to prevent a segmentation of the Electronic Interbank Market.

c. Quoting Obligations

The Organisation for the Electronic Trading System will select three Government bond loans, which at each time shall be Reference Loans.

The reference loan has a maturity of 2, 5 and 10 years. The Primary Dealer shall quote buying and selling interest rates, binding on the Primary Dealer, in the Reference Loans. The Organization for the Electronic Trading System will decide the spread between buying and selling interest rates and the amounts of the trading lots of the Reference Loans.

If exceptional conditions prevail in the Swedish bond market, the Primary Dealers need not quote binding buying and selling interest rates in the Reference Loans.

The Organisation for the Electronic Trading System will give guiding principles for determining when exceptional market conditions should be considered as prevailing.



15. Sweden



ii. Dealer to Customer Market

Most bonds trade on a dealer to customer platform, but the voice market remains substantial.

In terms of the retail market, prices for Swedish government bonds can be found on the Nasdaq OMX website. They are quoted by a Swedish bank, SEB.

For Over-the-counter (voice) trading, Tullet, RP Matin, Icap, and Gottex are the main end investors/retail brokers for institutional investors.

At least once a year, each Primary Dealer shall submit a report to SNDO concerning actions it has taken and is planning to take in order to promote the sale of instrument issued by the SNDO in the Client Market. The Primary Dealer shall report daily its purchase and sale of instrument issued by the SNDO, both to the Swedish Central Bank and to the stock exchange of Stockholm.

The SNDO offers repos in all nominal benchmark bonds, inflation-linked bond and T-bills to Primary Dealers upon request. In Sweden, the repo market is relatively large and well-functioning. The SNDO offers repos as part of the market support program, aiming to prevent squeezes in the market. The Primary Dealers may also enter into repo swaps with SNDO, i.e. exchanging one government security with maximum of two other government securities. SNDO also offers Primary Dealers to exchange inflation- linked bonds on an on tap basis.

F. Appraisal of the Activity of Primary Dealers

The SNDO organizes annual review meetings with Primary Dealers for evaluating their activity.

The assessment of the Primary Dealers relies on the fulfilment of the Primary Dealers' obligations (see above paragraph C.ii) and on the evaluation of some qualitative issues not stipulated in the Primary Dealer agreements (e.g. analysis, research, coverage).

The ranking of the Primary Dealers is not available to the public.



G. Contacts

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15. Sweden



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iii. Central Bank

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16. United Kingdom

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A. List of Market Participants: Gilt Market & Money Market

i. Gilt-Edged Market Makers (GEMMs)¹

| FIRM | United Kingdom (UK) | Firm's location |
|-------------------------------|---------------------|-----------------|
| Barclays+ | X | London |
| Bank of America Merrill Lynch | X | London |
| BNP Paribas | X | London |
| Citigroup | X | London |
| Deutsche Bank | X | London |
| Goldman Sachs | X | London |
| HSBC+ | X | London |
| Jefferies* | X | London |
| J.P. Morgan | X | London |
| Lloyds | X | London |
| Morgan Stanley | X | London |
| NatWest Markets+ | X | London |
| Nomura | X | London |
| Royal Bank of Canada | X | London |
| Santander | X | London |
| Scotiabank | X | London |
| Toronto-Dominion Bank* | X | London |
| UBS | X | London |
| Winterflood Securities+* | X | London |
| TOTAL | 19 | |

KEY:



AFME/Primary Dealer Members



Non-AFME Members

AFME Members

* Retail

Members Strips

+

1 List of the Gilt-edged Market Makers who operate on the Gilt market as of September 2017. To access the most current list please refer to UK DMO.





ii. Treasury Bill Primary Participants²

| FIRM | United Kingdom (UK) | Firm's location |
|----------------------------------|---------------------|-----------------|
| Abbey National Treasury Services | X | London |
| Bank of America Merrill Lynch | X | London |
| Barclays | X | London |
| BNP Paribas | X | London |
| Citigroup | X | London |
| Credit Agricole | X | London |
| Credit Suisse | X | London |
| Danske Bank | X | London |
| Deutsche Bank | X | London |
| Goldman Sachs | X | London |
| HSBC | X | London |
| Investec | X | London |
| Jefferies | Х | London |
| J.P. Morgan | X | London |
| King & Shaxson | X | London |
| Lloyds Bank | X | London |
| Mitsubishi UFJ | X | London |
| Morgan Stanley | X | London |
| NatWest Markets | X | London |
| Nomura | X | London |
| Royal Bank of Canada | X | London |
| Scotiabank Europe | X | London |
| Toronto-Dominion Bank | X | London |
| UBS | X | London |
| TOTAL | 24 | |

KEY:

AFME/Primary Dealer Members

Non-AFME Members

AFME Members

2 Source: UK Debt Management Office website



B. Credit Rating

The United Kingdom's debt is rated as follows:³

- Standard and Poor's: AA (negative)
- Moody's: Aa2 (stable)
- Fitch Ratings: AA (negative)
- DBRS: AAA (stable)

C. Debt Instruments

The principal instruments in which the DMO may transact for debt management purposes are set out below:

Gilts

A Gilt is a UK Government liability in sterling, issued by HM Treasury and listed on the London Stock Exchange. The term "gilt" or "gilt-edged security" is a reference to the primary characteristic of gilts as an investment: their security. This is a reflection of the fact that the British Government has never failed to make interest or principal payments on gilts as they fall due. The gilt market is essentially comprised of two different types of securities – conventional gilts and index-linked gilts – which between them account for around 99% of gilts in issue.⁴

Conventional gilts are Gilts on which interest payments and principal repayments are fixed in nominal terms. Conventional gilts constitute around 75% of the gilt portfolio. Coupon payments are made in two equal semi-annual payments on fixed dates six months apart.

Index-linked gilts are gilts whose semi-annual coupons and final redemption payment are related to movements in the UK Retail Prices Index (RPI). There are two fundamental designs of index-linked gilts – those with an eight-month indexation lag, launched in 1981, and those with a three-month lag, issued since 2005.

UK Treasury bills

UK Treasury bills are sterling-denominated unconditional obligations of the UK Government with recourse to the National Loans Fund and the Consolidated Fund. They are issued from, and are liabilities of, the Debt Management Account or the National Loans Fund. Treasury bills are zero-coupon eligible debt securities.⁵ The DMO issues Treasury bills through regular weekly tenders, and it may issue bills bilaterally upon request from recognised counterparties, subject to certain conditions.⁶

3 Credit rating as of September 2017

4 An explanation of the different types of gilt is available at the DMO's website

5 The term "eligible debt security" is the term used in the Uncertificated Securities Regulations 2001 (SI 2001/3755), as amended, to refer to those uncertificated securities, which may be issued into CREST, creating rights and obligations which (so far as practicable) correspond to those in relation to paper- based negotiable money market instruments.

⁶ Full details on the DMO's Treasury bill operations can be found in the UK Treasury Bills Information Memorandum, available on the DMO's website





D. Privileges and Obligations of Gilt-Edged Market Makers⁷

Firms endorsed by the DMO as Gilt-Edged Market makers (GEMMs) agree to meet a number of obligations on a continuous basis. The aims of these obligations are to ensure that Primary Dealers contribute to the liquidity of the secondary market and provide appropriate support to the primary issuance of Government debt. The obligations and privileges are as follows:

i. GEMMs' Commitments

a. Market Making

- All GEMMs are committed to make on demand and in all trading conditions, continuous and effective two-way prices upon request to their customers in all gilts in which they are recognised as a market maker.
- GEMMs must aim to achieve and maintain an individual secondary market share of at least 2.0% on a 6-month rolling average basis, in the sectors for which they are a recognised market maker.

However, there are exceptions to this rule:

- The DMO only expects its Primary Dealers to make prices and execute transactions with those customers who have already previously been subjected to due diligence and other anti-money laundering enquiries by the firm involved, not to all newcomers.
- A GEMM firm is not obligated to make a price to any other recognised GEMM, to an Inter-Dealer Broker or to an Agency broker, although the GEMM firm may, of course, choose to do so.

Conditions

GEMM firms are expected to stand ready to make prices at all times between the hours of 8.00 a.m. and 5.00 p.m (UK time) on UK business days. On certain occasions (e.g. Christmas Eve, New Year's Eve) the trading day may be shortened, depending on the opening hours of relevant Exchanges, although a firm can decide to deal outside these hours, based on that firm's own business decision, usually determined by the global nature of their operation and/or client base. In addition, the DMO deems it reasonable for market-making obligations to be suspended temporarily (for a minute or two) over the release of key economic news or data from the UK, the US or the Eurozone.

Wholesale or retail GEMMs may commit to making markets in conventional gilts, index-linked gilts and/or strips. They are expected to achieve and maintain a market presence sufficient to earn them an appropriate share of secondary market turnover. The DMO expects all wholesale market makers to aim to achieve and maintain an individual share of at least 2.0% in both conventional gilts and in the index-linked sector, on a six-month rolling average basis.

The DMO regards "effective two-way prices" as a bid and offer made in a regular- sized market with a reasonable spread between the two. 'Reasonable' is not strictly defined here in terms of pence or basis points, as the DMO recognises that prevaling spreads may change in the long or short term, dependent on current market conditions, competition, risk appetites, time of day, the identity of the client and/ or the characteristics of the individual bond involved. Similarly, anyone requesting a price in exceptional size (large or small) might expect the price quoted to be adjusted accordingly, to take account of the disproportionate risks or settlement costs involved. If a customer requests a non-standard settlement date, the price(s) may also be adjusted accordingly.

b. Participation in Primary Issuance

- GEMMs are expected to play an active role in the issuance, distribution and marketing of UK government debt.
- GEMMs should aim to purchase at least 2.0% of issuance by sector, conventional and index linked, on a six-month rolling average basis.
- GEMMs are expected to participate in every operation for which they are a designated market maker. GEMMs must aim to participate effectively in the price formation process at auctions: it is envisaged that each wholesale GEMM's bids would be for the equivalent of at least 5.0% of the amounts issued, on a six-month rolling average basis.

⁷ Source: A Guide to the Role of the DMO and PD in the UK Government Bond Market





c. Provision of Data and Information to the DMO

All GEMMs are obliged to provide the DMO with data in a pre-specified format relating to daily positions and weekly turnover. The DMO also expects GEMMs to provide real-time prices or accurate mid-market indications to at least one recognised wire services provider and/or electronic trading platform.

All GEMMs and endorsed Inter Dealer Brokers (IDBs) must install and maintain designated IT (including Bloomberg) and telecommunications links with the DMO. These are used by GEMMs for position and turnover reporting, bidding at auctions, secondary market dealing and provision of other market information, and by IDBs for reporting secondary market turnover information. GEMMs and IDBs must also be in a position to settle gilt transactions through Euroclear UK & Ireland's CREST system.

GEMMs and IDBs are actively encouraged to provide market intelligence to the DMO and are expected to respond promptly to market consultations or requests for information.

ii. GEMMs' Privileges

In return for undertaking the obligations detailed above, GEMMs are entitled to certain privileges in the gilt market, as follows:

a. Auction Bidding

As mentioned above, GEMMs are the only institutions eligible to submit a competitive bid directly to the DMO. This means that all other market participants wishing to bid at a gilt auction must route their order through a GEMM, which is not permitted to charge any fee for this service.

GEMM firms are entitled to a combined non-competitive allowance of 15% of the total amount of the bonds on offer at a gilt auction, defined as:

a. a pro-rata share at the average accepted price for conventional auctions; or

b. a performance-related share at the strike price for index-linked auctions, determined by performance at the previous three index-linked auctions.

b. Preferred Counterparty Status

As with the auction process, the DMO will only deal with GEMM firms in the gilt-edged secondary market. The DMO is active in the secondary market in a number of areas – executing transactions on behalf of members of the public⁸ or various Government funds managed by the Commissioners for the Reduction of the National Debt (CRND) and others, and smoothing redemption cash flows through the purchase of near-maturity⁹ gilts. In the latter case only, the DMO may also deal with IDBs.

Only wholesale GEMMs are normally invited to become members of any lead management group for syndicated offers

Additional dealing privileges associated with GEMM status are:

- The right to strip and reconstitute gilts through CREST and;
- GEMMs are eligible to be considered for participation in DMO standing or special repo operations.

⁹ Defined as gilts that have reached or passed their penultimate coupon payment



⁸ Members of the DMO's Approved Group of Investors scheme



c. Other Privileges

As stated above, GEMMs currently have exclusive trading and viewing access to the services of endorsed IDB firms, which enable them to unwind or acquire positions anonymously with their peers. Recognised GEMM firms are automatically invited to send a representative to the DMO's quarterly and annual consultation meetings on issuance policy, and to become a member of the Gilt-edged Market Makers Association (GEMMA), a self-governing body that represents the GEMM community's interests in the wider market place and with various authorities. Recognised GEMM firms may also apply to the FCA or other regulator for exemption from EU Short Selling Regulations in UK sovereign bonds and related markets as an Authorised Primary Dealer.

E. Primary Market

i. Policy and the Gilt Remit

Since 1998, auctions have constituted the primary means of issuance for both conventional and index-linked gilts. However, the DMO may also issue gilts via other methods (e.g. syndicated offerings, gilt tenders).

The DMO remit, setting out the broad parameters for issuance in the forthcoming financial year, is usually published alongside the Budget, in the Debt Management Report (DMR), every spring and is released after the Chancellor of the Exchequer has delivered his Budget speech. The remit itself is formulated and published after the Debt and Reserves Management (DRM) team at HM Treasury has consulted with the DMO, primary dealers, investors and other market participants. The DMO also publishes a supplementary market notice, which sets out the operation details, including an auction calendar for the year.

All primary dealer firms are invited to send a representative to annual meetings, chaired by the responsible Minister, in order to air their views on the content of the forthcoming year's remit, the perceived needs and demands of the market, and any other topical issues of the time.

The financing remit for each financial year, supplemented by the DMO's market notice, will indicate:

- The planned number of auctions in each broad maturity band¹⁰ to be held during the financial year;
- The dates planned for each auction;
- A range for the sizes of the auctions in cash terms for both conventional and index-linked gilts;
- Any other planned or authorised operations outside auctions;
- The target amounts of cash to be raised in each sector;
- Any planned change in the level of Treasury bills for debt management; and
- Any predetermined contingency arrangements to cover an increase or decrease in the Central Government Net Cash Requirement (CGNCR).

The issuance programme, and in particular the number and timing of auctions, may be varied during the year in the light of any substantial changes to any of the following:

- The CGNCR;
- The level and/or shape of the yield curve, market expectations of future interest and/or inflation rates;
- Market volatility; or
- Any other criteria specified in the relevant annual remit.

10 The DMO defines broad maturity bands as follows: shorts 1-7 years to maturity, medium 7-15 years, and longs 15+ years



In practice, variations are most likely to occur in regular quarterly issuance announcements, or at the time of publication of the outturn of the previous year's CGNCR in late April, and/or at the time of the Chancellor's Autumn Budget, usually in November or December. Any revisions will be announced by the DMO.

Decisions over the timing of the Budget and other announcements which revise public finance forecasts may result in the re-scheduling of previously-announced gilt operations, given the market sensitivity of these events.

ii. Auctions

a. Prior Notice of Gilt Auctions

The DMO itself hosts quarterly consultation meetings with representatives of GEMMs and end investors, in order to inform the DMO of the market's preferences for the issuance of individual gilts in forthcoming quarters (April-June, July-September, October-December and January-March), within the constraints of the published remit. These meetings are normally held towards the middle of March, May, August and November.¹¹ All GEMM firms are invited, and expected, to send a representative to these meetings, and will be asked to contribute their views in all sectors where they have primary dealer status.

The list of Primary Dealers attendees is coordinated by the secretary to the Chairman of the Gilt-Edged Market Makers Association (GEMMA). Summary minutes of these meetings are published on the DMO's wire services and web pages as soon as practicable the following day.

The DMO announces its plans for auctions on a quarterly basis) to be held over the following one to four months, typically at 7.30 a.m on the last business days of March, May, August and November. These announcements will normally indicate the identity of the individual gilt(s) or, if relevant, the creations of any new one(s), although coupons on new bonds are usually fixed closer to the auction date itself. Plans for syndicated offerings may also be announced at this time, depending on proximity of timing.

At 3.30 p.m. on the Tuesday in the week preceding a scheduled auction, the DMO will publish the final terms and conditions of an auction, including the nominal amount of stock on offer, ISIN and SEDOL codes etc, and, where the gilt is a new one, the coupon, which will normally be set at current market yields for the relevant maturity, where possible rounded to the nearest 1/8%. Further issues of existing gilts will usually be fungible with the parent issue from the settlement date of the auction.

As a general rule, the DMO will tailor the sizes of individual auctions to take account of the amount of risk being offered to the market in each operation. This means that auctions for shorter-dated gilts will generally be for larger sizes than those for longer-dated gilts, although there is no formulaic correlation. In determining the size of individual auctions, the DMO may also take into account specific market events (e.g. index changes, redemptions, coupon flows etc), perceived levels of demand, plus any portfolio considerations of its own.

Given that any of these announcements may be market sensitive, and in order to protect price providers, the DMO will remind gilt Inter Dealer Brokers to briefly suspend any 'live' dealing prices posted on their screens until after the announcement has been made and digested. Before each individual auction, the DMO will email each primary dealer firm to inform each firm of their individual reporting requirements. All GEMMs are required to submit details of auction day trading in the relevant gilt, with all counterparty types, by e-mail on the appropriate form. Reports must be received by the DMO by 9.00 a.m. on the morning after the auction.

b. Auction Mechanism

With the exception of small retail bids from members of the DMO's Approved Group scheme, all bids at gilt auctions must be submitted by, or through, a recognised primary dealer firm, via the Bloomberg Auction System (BAS), or, in emergency circumstances only, a direct telephone line to the DMO's dealing desk, maintained by all GEMMs. This means that all other investors wishing to participate in the auction process must submit their bid to a GEMM firm of their choosing, who is in turn obliged to submit that bid to the DMO, without charge., Direct bidding is open to all primary dealers recognised as a GEMM in conventional and/or index-linked gilts as appropriate, and permissioned as such in BAS. Approved Group bidders may each submit non-competitive bids for a maximum of £500,000 nominal.





Time

Bids may be submitted at any time from the opening of the bidding window (usually 8.00 a.m. on the morning of a scheduled auction), up until the published deadline (usually 10.30 a.m), after which no further bids can be accepted. BAS will automatically generate banner messages to all enabled primary dealer bidders, warning them that the deadline is approaching and the GEMMs' bid input screens show a countdown, utilising Bloomberg's in-built clock, which shall determine the cut-off timing absolutely. Enabled dealers may submit, cancel and/or amend as many bids as they wish before the deadline when utilising BAS. In the case of one or more GEMM firms, or the DMO itself, being unable to access BAS for technology-failure reasons, the DMO may, at its discretion, permit the submission of bids by GEMMs by direct telephone line as a back-up measure. In the event that the DMO itself is unable to access BAS, or a widespread market failure, the DMO may announce that all bids should be submitted by direct telephone line instead of BAS, along with any other emergency measures (e.g. limits on bid numbers). In such (extreme) circumstances, the publication of auction results is likely to take longer than normal.

Competitive Auction

Each competitive bid must be for one amount and at one clean price, expressed as a multiple of 0.001 of £1 (i.e. to three decimal places and including the 'big figure' – e.g. 102.345), for at least £ 1 million nominal and round multiples thereof. This limitation applies to individual client bids as well as GEMM own account bids, hence it is not possible for GEMMs to round client bids in fractions of £1 million to the nearest whole number, by taking the balance on their own account.

Dealers bidding on behalf of clients, or other non-GEMM dealers in their firm, must enter the applicable three-letter client code in the relevant field on the bid input screen. These codes are allocated and maintained by DMO dealers, and any client intending to participate in the auction should apply directly to DMO dealers for allocation of a code. Applications may be made by e-mail, Bloomberg message, company fax or letter. Such codes are allocated on a once-only basis, and will be retained for use in future auctions. However, the assignation of such a code should not be taken as a signal that the DMO has verified the legitimacy of the client institution, and GEMM firms are expected to conduct their own due diligence validations. GEMM dealers or salespeople may not apply to the DMO on behalf a client, but the latter is expected to reveal their code when submitting a bid to a GEMM.

Non-Competitive Allowance

Primary Dealers are also offered a non-competitive allowance at each conventional or index-linked auction. The DMO sets aside a total of 15% of the nominal amount on offer to provide the GEMM community with the assurance of a guaranteed minimum allocation, in order that they are more willing to carry short positions into the auction itself. In conventional gilt auctions, the 15% allowance is divided equally amongst wholesale GEMM firms, while in index-linked auctions individual firms' allowances, within the 15% aggregate total, are determined by reference to that firm's successful competitive bidding results in the three previous index-linked auctions. The maximum allowance appears on each GEMM's BAS bid input screen, after the bidding window has opened. Note that non-competitive allowances are not automatic – GEMMs must request an allocation each time, in one single non-competitive bid, for a size that is a multiple of £100,000, up to the stated maximum. Non-competitive bids are filled at the average accepted price in conventional gilt auctions, and at the lowest accepted strike price in index-linked auctions.

Results

After the designated bidding deadline has passed, DMO dealers will download the complete bid set from BAS into its own allocation systems, which will then calculate the result and individual GEMM allocations. The bid set and results are then 'sanity- checked' by DMO staff, prior to release, to guard against errors and anomalies, and to determine whether any GEMM or customer institution is likely to exceed the maximum allocation guidelines set down by the DMO (see below), in order to reduce the potential for stock squeezes in the aftermath of any auction. The information will be treated as confidential by the DMO and not released to any third party.

In processing auction results, the DMO may, at its own discretion, decline to allot stock to a bidder if it is deemed likely that a large allocation may lead to post-auction market distortion. In conventional auctions, the maximum permitted allocation for any single bidding institution is currently set at 25% of the nominal amount on offer, and in index linked auctions the figure is 40%. In the case of GEMMs, the DMO will take account of any net short position already accumulated in the When-Issued dealing period, thus raising their potential maximum allowance proportionally. Note that the term 'GEMM' in this case applies to the group as a whole, with the exception of any 'chinese-walled' entities. Should there be a need to scale back any allotments the DMO will discard the lowest competitive bid(s) first, up to the relevant cut-off point. Non-competitive bids and bids on behalf of unrelated clients will be unaffected by this measure.





The maximum allocation limit for client bidders is absolute, and any client bidding for more than 25/40% may be scaled back by the same method (i.e. lowest priced successful bids first) and, if necessary on a pro-rata basis per GEMM, where multiple bids are at the same price. GEMM personnel are expected to inform clients of this likelihood if they suspect that the client is bidding for total sizes in excess of these limits.

Allocation and Settlement

Allocations at the lowest accepted price are scaled pro rata to the nearest 0.0001%, and all such allocations are in multiples of £1,000 nominal of stock. In addition, a small amount of the gilt (typically around £,1000 nominal per auction) may be retained by the DMO to cover roundings. Results of the auction will be released on the DMO's wire services pages, simultaneously to all market participants, as soon as all the necessary calculations, allocations and checks have been performed internally by the DMO. Immediately prior to release, the DMO's dealers will inform Inter Dealer Brokers that results are ready for publication and request that they turn all current live prices on their screens 'subject to confirmation'. This is standard practice, and no indication of the outcome of the auction is given to IDBs. The results announcement itself will contain sufficient information for GEMMs to be able to calculate their own individual successful allocations, but the DMO will also transmit allocations back through the BAS system, after the wider results publication.

Gilt auctions will normally settle on the following business day, in accordance with the T+1 convention in the gilt market. For auction settlement purposes, accrued interest is rounded to 6 decimal places per £100 nominal.

All primary dealer firms are expected to match the DMO's settlement instructions in Euroclear UK & Ireland's CREST system, and to meet their commitments on the day and in good time. In order to settle auction allocations, GEMMs should instruct one single trade, with a nominal size equivalent to their entire auction allocation, including non-competitive bids, and match the DMO's consideration amount to the nearest penny where possible. The input price is not essential, but will equate to the average price of all the successful bids submitted by the individual GEMM.

c. Specific Auction Procedures

The procedures described above apply commonly to all conventional and index linked gilt auctions conducted by the DMO. The following sections identify areas where procedures and regulations may differ from one type of auction to another.

Conventional Gilt Auctions:

Conventional gilt auctions are held on a bid price basis (i.e. successful bidders pay the price that they bid), with noncompetitive bids allocated at the average accepted price.

Direct bidding is open to all primary dealers, wholesale or retail, recognised as a GEMM in conventional gilts.

The published results of a conventional gilt auction will include:

- Details of the highest, average and lowest accepted prices (with the pro rata scaling rate at the lowest accepted price);
- The gross redemption yields equivalent to these prices;
- The total nominal value of accepted non-competitive bids (split between GEMMs and non-GEMMs);
- The total value of all bids received, including those rejected in whole or in part on account of price; and
- The ratio of this total to the amount on offer (the 'cover').

Index-Linked Gilt Auctions:

Index-linked gilt auctions are held on a single price basis (i.e. all successful bidders pay the lowest accepted price), with noncompetitive bids also allocated at this lowest accepted price.

Direct bidding is open to those primary dealers, wholesale or retail, recognised as an index-linked GEMM.



The published results of an index-linked gilt auction will include:

- Details of the common allotment price (with the pro rata scaling rate at this lowest accepted price);
- The real yield equivalent to that price (and any inflation assumption contained therein);
- The total nominal value of accepted non-competitive bids (split between GEMMs and non-GEMMs);
- The total value of all bids received, including those rejected in whole or in part on account of price; and
- The ratio of this total to the amount on offer (the 'cover').

d. Post-Auction Options

Since 1 June 2009, all UK gilt auctions – conventional and index-linked – include an additional post-auction option facility, whereby all successful direct bidders – GEMMs and clients – have been offered the right to purchase up to an additional percentage (currently 15%) of the bonds they bought at the relevant auction, at the published average accepted price in multiple price format auctions, or at the published strike price in auctions of uniform price format.

Following each auction, the DMO calculates each GEMM firm's option entitlement, based on that firm's successful bids – noncompetitive, own account and/or those on behalf of clients – and inputs this allowance into the Bloomberg Auction System (BAS), which appears on dealers' screens once the take-up window is opened.

The option take-up window is open for a specified time period (normally 2 hours, from 12:00 noon until 2:00pm) and GEMMs have until the cut-off time to inform the DMO electronically via BAS whether they wish to take-up some or all of their entitlement by inputting the size required (up to the individual permitted maximum) in the (white) non-competitive box of their bid input screens. Dealers may cancel or amend these 'bids' as they wish, and only those 'live' at the cut-off time shall be counted.

GEMMs are under an obligation to pass on the right to the option to any client bidder(s) that submitted successful bids in the auction through their firm, and, as a result, dealers should factor client take-ups into the single amount of options that they 'bid' for during the take-up window. However, in the event that a client does not wish to take up his/her allowance, the GEMM may opt to take up that allowance for its own trading book.

After the designated take-up deadline has passed, the DMO sums the total take-up of the option facility across all GEMMs, and publishes this total as soon as practicable, on its wire services pages and website. This announcement also contains the revised total nominal amount in issue of the relevant gilt.

The DMO will only create an additional amount of the gilt equal to the amount of options taken up.

Settlement will normally take place on the following day, in line with the T+1 convention in gilts. GEMM dealers taking up option entitlements should book a single purchase trade as a normal secondary market transaction with the DMO, at the option strike price and separate from any instructions relating to the auction, and, where relevant, sales ticket(s) to clients who have exercised their options to purchase stock, at the same price.

The post-auction option facility will not be offered in the event that the auction itself is uncovered. For the avoidance of doubt, 'uncovered' in this respect means cases where either:

- Insufficient bids were received; or
- Where the DMO has exercised its discretion not to accept bids that it judged to have been at an unacceptably deep discount to the prevalent market level (see below).



e. Uncovered Auctions

The DMO reserves the right not to allot all of the stock on offer at a conventional or index-linked auction, although it would consider this only in exceptional circumstances, where it judges bids to be at an unacceptably deep discount to the prevalent market level. This is particularly pertinent, but not exclusive, to the index-linked sector, where the nature of the single price auction format means that the entire auction is allocated at the same low price, rather than individual outlier bids. In some circumstances, this could even mean that allocating a larger nominal amount of stock would actually lead to a lower amount of revenue being raised. In such cases, the DMO is likely to reject the lower bids. In other circumstances, an auction may still not be 100% covered, even if all bids submitted are accepted.

Where a regular conventional or index-linked auction is uncovered, for whatever reason, it is likely that the remaining gilts will still be created from the National Loans Fund (NLF). The unsold balance will then be held by the DMO on an official portfolio for a certain period of 'purdah' in order to allow market conditions to stabilise. The DMO may then offer the balance for re-sale at a time of its choosing, but no sooner than three business days after the original auction.

These arrangements will be detailed in a screen announcement to be published immediately after the results of an uncovered auction. Depending upon the amount of gilts involved, the re-sale of the unsold balance is likely to be via a tender process.

f. **GEMM** Auction Shares

The DMO acknowledges that it is neither possible, nor desirable, to set minimum allocation targets for individual GEMMs at each and every auction, recognising that market circumstances and individual positions may discourage certain traders from bidding 'at-the-money' at certain times. Nevertheless, wholesale GEMMs should aim to bid for amounts equivalent to at least 5% of the amount(s) on offer , and to achieve allocations of a minimum 2% in each sector where they are a primary dealer (conventional gilts and index-linked), both measured on a six-month rolling average basis.

g. Mini Tenders

The conventional and index-linked gilt auction programme in any year may be supplemented between auctions by official sales of gilts by the DMO via mini-tenders. The purpose of these operations is to contribute to meeting the Government's net financing requirement. Mini-tenders will typically be up to around half the size of conventional and index-linked gilt auctions of equivalent maturity.

Advance notice will be given of the specific details of the mini-tenders via an announcement(s) that will detail:

- The identity of the gilt(s) involved;
- The intended size of the operation; any applicable limitations on participation (e.g. minimum (maximum) acceptable prices, number of bids permissible, allocation limits etc); and
- Other operational details.

Tenders in index-linked gilts will normally be held on a single price basis, conventional gilts may be either single price or multiple price format, with bids at the striking/clearing price subject to the usual pro rata scaling. There is no non-competitive facility.

As with auction operations detailed above, GEMMs will be invited to submit bids, via BAS, either for their own account or on behalf of clients, in the usual denominations, within the timetable outlined in the screen announcement. Results of the operation, including new amounts outstanding, will be published as soon as possible, with settlement and, where appropriate, creation of the relevant gilt(s) taking place on the following business day. Again, the DMO expects all counterparties to be able to honour their commitments on that day.



iii. Syndication

Although auctions constitute the primary means of gilt issuance, the DMO may from time to time sell gilts by means of a syndicated offer. This may be the launch of a new line of gilts, or the re-opening of an existing line. The relevant annual debt management Remit (contained in the Debt Management Report) will make clear whether any such offerings are permitted and/or planned in any one financial year.

Should the decision to syndicate an issue of gilts be taken, the DMO would make an announcement to this effect as soon as practicable, on its wire services pages and in a press notice, also detailing any consequences of the decision (such as the rearrangement or cancellation of a scheduled auction), and any available timing or operational details regarding the selection of managers and/or of the actual syndicated offer itself.

In allocating managerial roles to investment banks in the syndicated issue, the DMO would expect to offer all relevant GEMMs the opportunity to present their advice and credentials on a fair and equal basis, although other factors (such as primary and secondary market shares, expertise in the relevant sector of the market, etc.) will also be taken into account in the final selection decision, which shall be merit based. The DMO would not normally expect to appoint newly-endorsed or retail GEMMs, or any non-GEMM firm, to any role in the managerial group.

The precise format of the group and method of sale may vary from issue to issue. The DMO will take such decisions based on its own policy and portfolio preferences at the time and advice from GEMM firms on prevalent best practices and their recommendations for the particular issue.

The DMO will endeavour, via screen and web announcements, press notices and/ or communiqués from lead managers, to keep all market participants informed of developments in the syndication process at all key stages of the operation.

F. Secondary Market

i. Interdealer Market

a. Inter-Dealer Brokers

List of Inter-Dealer Brokers in the UK Gilt Market

| FIRM | WEBSITE |
|--------------------------|-----------------------|
| BGC Partners | www.bgcpartners.com |
| Dowgate | www.ksbb.com |
| GFI Securities Ltd | www.gfigroup.com |
| BrokerTec Europe Limited | www.nexmarkets.com |
| ICAP WCLK Limited | www.icap.com |
| Tullett Prebon Gilts | www.tullettprebon.com |

Inter-Dealer Broking (IDB) firms currently operate in the gilt-edged market as intermediaries between the primary dealers only, where GEMMs may trade with each other on an anonymous basis.

IDBs must register as such with a Relevant Exchange, before the DMO will consider 'endorsing' them. Under the rules of the London Stock Exchange for example, IDBs must provide a service description to all GEMMs and lodge a copy with both the Exchange and the DMO. The service description covers all aspects of how the IDB operates its services.



IDBs are not permitted to take principal positions on their own account, except where they are dealing on a matched principal basis, with corresponding buying and selling counterparties. IDBs may also operate on a 'name-give-up' basis, or use a central clearing house for settlement, depending on their choice of business model, which may be voice broking or electronic one, or a combination of the two. In all cases though, the details of trades executed should be posted on the IDB's screens for the information of other members of the GEMM community. IDBs have a duty to offer their services to all recognised GEMMs equally, but there is no compulsion on GEMMs to use them. Note that non-index- linked GEMMs are not permitted to trade in that asset class with IDB firms.

There is no compulsion for a firm offering such brokerage services to apply to be 'endorsed' by the DMO, but potential applicants and GEMM users of their services should note that non-endorsed firms will not receive advance warning of market sensitive announcements from the DMO. For the DMO to endorse such an applicant, the broker must demonstrate a demand for their services in the market, and their own ability to deliver with a long-term commitment. The DMO, however, has no role in the compliance monitoring of the activities of any IDB firm in the gilt market – these remain the responsibility of the firm itself and its regulators.

b. Settlement

All GEMMs (and Inter Dealer Brokers) are expected to be able to settle all trades that they commit to, in a timely and accurate fashion, and to maintain accounts in CREST and other depositaries commensurate with their trading activities and customer preferences. Existing GEMMs are expected to ensure that any changes to their Standard Settlement Instructions (SSIs) are communicated to their customers and the DMO immediately, and new GEMMs must exchange such details with the DMO before assuming market making operations.

c. Standing Repo Facility

The DMO operates an automatic, non-discretionary standing repo facility, whereby any GEMM, who has signed the relevant documentation may request the temporary creation of any gilt for repo purposes. The facility was introduced in June 2000 in order to ensure that market makers could be assured of being able to access and deliver any gilt at any time, albeit at a price, hence maintaining their ability to make two-way prices in the secondary market and avoiding the prospect of delivery failures. Please note that, since August 2009, the DMO has also been able to borrow gilts from the Bank of England, acquired under the Asset Purchase Facility rather than create new bonds, for these purposes.

The facility is available from 12.30 p.m. on the previous day up until 11.30 a.m. on the same day of settlement. Participants may roll the facility on a day-to-day basis, but the DMO does not anticipate accommodating a continuous roll for a period of more than two weeks. The minimum size of such a request is £5 million nominal per gilt, and the DMO will normally charge a penal overnight rate, determined with reference to the Bank of England's prevailing repo rate at the time. At the same time, the DMO will normally insist on a back-to-back reverse repo of gilt collateral (GC) at the Bank's official rate, in order to neutralise the effect of the standing repo on funding requirements and its own cash management operations.

Details of the amount and terms of any standing repo operation will be published on the DMO's dedicated wire services pages and website as soon as possible after 11.30 a.m. on the relevant day, and the DMO will also publish the return of the gilt(s) on the following day or later, as appropriate. The counterparty(ies) involved will remain anonymous to the market, although the DMO reserves the right to share such information with other official regulatory bodies in appropriate circumstances.

None of the stock created for such purposes will be eligible for inclusion, temporary or otherwise, in the calculation of FTSE or iBoxx gilt indices.



d. Special Repo Facility

If the DMO considers that there is sufficient evidence of severe market dislocation or disruption, it may offer gilt(s) for repo to any GEMM that has signed the required legal agreements with the DMO. Such circumstances will need to have been persistent and are not likely to be tied to any single event (e.g. delivery of a cheapest-to-deliver gilt into a single futures contract) or difficulties encountered by a single market participant.

The terms of the facility, including any rate of repo, which may or may not be penal, and the amount of gilt(s) available for creation, will be announced on the DMO's wire services pages and the website. Any subsequent cancellations or withdrawal of the facility will be also announced in a similar fashion. As with the standing repo facility, such operations will usually involve a back-to-back, cash-for cash reverse repo of gilt collateral with the same counterparty (ies) at the Bank of England's prevailing repo rate, and none of the gilt(s) thus created will be eligible for inclusion, temporary or otherwise, in the calculation of FTSE or iBoxx gilt indices. Here too, the DMO may also borrow gilts from the Bank of England, acquired under the Asset Purchase Facility, rather than create new bonds, for such purposes.

ii. Dealer to Customer Market

a. Intermediary Agencies

Firms or platforms that operate as intermediary brokers in the gilt-edged market, but whose counterparty list is wider than just the GEMM community, are treated as Agency Brokers (or Broker Dealers) by the DMO. These firms may be registered as, or operate as, Wholesale Dealer Brokers, where their client base consists of banks that are active 'traders' in government bonds, corporate bonds or derivatives, or they may broke directly between traders and end-investors. In all cases, GEMMs have no obligation to quote prices to such firms, although they may, of course, choose to do so.

b. Retail Investor Services

Computershare/DMO Gilt Purchase and Sale Service

The DMO offers an "execution only" Purchase and Sale Service for private investors who are members of the DMO's Approved Group of Investors, to buy and sell gilts by post. Its commission charges for smaller transactions may be lower than the charges made for buying or selling gilts through a stockbroker or bank. Gilts may be bought or sold by completing the relevant form and sending it with the appropriate payment or gilt certificate to the gilts registrar, Computershare Investor Services PLC.

Please note that users of this Service are not able to specify the price or a maximum/minimum price at which your purchase/ sale of gilts are to be made. Neither Computershare nor the DMO offers investment advice. Any user unsure of what action to take should obtain independent financial advice. A small number of gilts are not available for purchase through the Gilt Purchase and Sale Service as they are not traded on a daily basis.

London Stock Exchange: ORB

In February 2010, the London Stock Exchange launched its new electronic Order book for Retail Bonds (ORB). An initial offering of gilts (tradable in denominations of £1,000 or similar) were made available on ORB in response to strong private investor demand for easier access to trading fixed income. The electronic order book for retail bonds offers an open model where dedicated market makers are able to enter named, electronically executable quotes and all other market participants are able to use limit orders and market orders, thereby offering the potential for more efficient price discovery.

Market makers are committed to showing two-way on-screen tradable prices and all ORB bonds are supported by a least one market maker. Because of the greater transparency, private investors in the UK are now able to see prices on-screen and trade in bonds in a similar way as they currently do for shares.



| Trading method | Electronic order driven platform supported by market makers. |
|------------------------------------|---|
| Participants | Retail brokers, market makers, investment managers. |
| Price contributors | Dedicated market makers in addition to informal liquidity providers. |
| Minimum trading size | £1 for gilts, for corporates as determined by the prospectus, but most ORB corporates have trading denominations of around £1,000 with some as low as £100. |
| Charges | 90 pence per executed order. |
| Product coverage | Gilts, UK Corporates, Supranationals. |
| Data available | Pre-trade prices: executable prices provided by market makers. Post-trade prices: real time |
| Distribution through other vendors | Data distributed as part of UK domestic feed, available through all major quote vendors. |

ORB contact information

Gillian Walmsley Head of Fixed Income Products London Stock Exchange gwalmsley@londonstockexchange.com Tel. +44 20 7797 3679 www.londonstockexchange.com/retail-bonds

G. Provision of data

i. Data provision by the GEMM community

- All GEMMs are required to provide the DMO with certain information –daily positions, weekly turnover, pre-auction reports etc., in a prescribed format and to a prescribed timetable.
- GEMMs are strongly encouraged to provide comprehensive and accurate, real-time price information to their client bases, either through proprietary dealer-to- customer platforms, via pages on the various wire services or by participation on multi-dealer electronic trading platforms (e.g. Tradeweb and/or BBT). The DMO expects to be treated as a GEMM's client in respect of being granted access to the provision of such prices, even if this is on a 'view-only' basis.

The DMO uses electronic file transfers for the provision of positions and turnover reports. Data are transferred over a secure Internet protocol system. All GEMMs (and IDBs) must install and maintain/upgrade these systems in order to be able to transmit sensitive data in a secure, accurate and timely fashion.

a. Positions Data

A GEMM's daily position file should also provide details of any trades over a specified minimum size that have failed on that day, or that are still outstanding as unsettled from a previous fail. These data will also be treated as commercially confidential by the DMO (but may be shared with other market authorities in appropriate circumstances).

These files may be submitted to the DMO, in the designated format and using designated channels, any time between 5:00pm on each trading day and 8:00am on the following business day.



b. Turnover Data

On a weekly basis, all GEMM firms are required to submit summary details of all transactions in gilts executed during the Monday-Friday period of the previous week. These files must be submitted in confidence by 8:00 a.m. on the Tuesday of the following week (or the second working day where there is a bank holiday), in the designated format and using designated channels.

c. Auction Data

All GEMMs are asked to provide details of transactions over a designated minimum size executed on the day of a gilt auction. These details should be submitted by secure e-mail to the DMO by 9:00 a.m. on the morning following an auction, on the template provided. The DMO requests this data in order that it may monitor the orderliness of the auction process, the grey or secondary market in that particular gilt or the market as a whole. As with all reporting submissions, the DMO will treat all such data as 'highly confidential'.

ii. Data provision by the DMO

a. Weekly Turnover and Market Shares

Turnover data submitted by the GEMMs to the DMO are collected and collated on a weekly basis. From the data received, the DMO will calculate total aggregate turnover volumes in the various maturity bands, types of gilt and on an overall basis, making a distinction between counterparties regarded as 'professional' and those regarded as 'customers'.

Market share data are collated by the DMO on a weekly basis, normally on a Tuesday, assuming that all contributions have been received on a timely basis. Output from DMO systems is sanity-checked by DMO dealers before being released for publication to GEMMs.

b. Quarterly Turnover

Weekly turnover files and data, submitted to the DMO by GEMM firms, are also used for the aggregation and production of quarterly turnover and market share data, which are published on an aggregated basis, to the wider market on the DMO website. Note that by their very nature, these data cover only those transactions conducted by recognised GEMM firms, and are therefore not wholly comprehensive in terms of turnover in the entire gilt market. Nevertheless, it does represent a very significant proportion of transaction volume.

Each quarter is taken as a 13-week period, dated as closely as possible to the beginning of January, April, July and October to the end of March, June, September and December respectively. Dealers and other market participants can therefore expect publication of quarterly data in the first week or so of the following three-month period, on the DMO website.

c. General Data Provision

The DMO website www.dmo.gov.uk also includes a host of data and information on all aspects of the gilt market, and forms the primary source of reference material from the DMO to the market – dealers, investors, analysts and all other interested parties.

d. Freedom of Information

Please note that as of 1 January 2005, the DMO is, as a 'public authority', subject to the provisions of the UK's Freedom of Information Act 2000, under which any person may make a request seeking information held by the DMO. Upon receipt of such a request, the DMO must balance the legitimate interests of all parties involved against public expectations of accountability, openness and transparency.



H. Appraisal of the Activity of the GEMMs

The DMO appraises the activities and performances of individual GEMM firms on a continuous basis, in various quantitative and qualitative ways, for example, by ongoing analysis of auction participation statistics and weekly secondary market turnover shares, as well as gathering anecdotal feedback from end investors regarding price, research and general service provision, alongside the DMO's own assessment of advice, information and support given to the issuer itself.

Whilst the DMO may compile its own internal statistics and rankings of Primary Dealers, some of which may be shared with the GEMM firms themselves on an individual basis, they are not published more widely on the grounds of protecting the legitimate business interests of the firms involved and as such are exempted from the provisions of the UK's Freedom of Information Act.

I. Contacts

i. Debt Management Office

| JK Debt Management Office |
|---------------------------|
| Eastcheap Court |
| 11 Philpot Lane |
| London EC3M 8UD |
| Jnited Kingdom |
| Fel: +44 (0)20 7862 6500 |
| www.dmo.gov.uk |
| 1 |

Sir Robert Stheeman Chief Executive

robert.stheeman@dmo.gsi.gov.uk Tel: +44 (0)20 7862 6533

Martin Duffell Head of Dealing martin.duffell@dmo.gsi.gov.uk Tel: +44 (0)20 7862 6517

ii. Primary Dealers Contact Details

| FIRM | CONTACT |
|-------------------------------|---------|
| | |
| BANK OF AMERICA MERRILL LYNCH | |

| DAMK OF APILMICA PILIMILL LENGT | |
|---------------------------------|--------------------------|
| 2 King Edward Street | Stefan Auerweck |
| London EC1A 1HQ | Trading |
| United Kingdom | stefan.auerweck@baml.com |





| BARCLAYS | |
|---|---|
| 5 The North Colonnade Canary Wharf London E14 4BB United Kingdom | Sarah Kiveal Trading +44 (0)20 7773 7542 sarah.kiveal@barclays.com Lee Cumbes DCM +44 (0)20 7773 8395 lee.cumbes@barclayscapital.com |
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| CITIGROUP | |
|--|--|
| Citigroup Centre 33 Canada Square Canary Wharf London E14 5LB | Jonathan Searle Trading jonathan.searle@citi.com |
| United Kingdom | Philip Brown DCM +44 (0)20 7986 8950 philip.brown@citigroup.com |

| DEUTSCHE BANK | |
|---|--|
| Mainzer Landstrasse 11-17 D-60329 Frankfurt am Main Germany | Natacha Hilger Trading +49 69 9103 2853 natacha.hilger@db.com |

| GOLDMAN SACHS | |
|---|--|
| Peterborough Court 133 Fleet Street London EC4A 2BB United Kingdom | Nikhil Choraria Trading Nikhil.Choraria@gs.com |





| HSBC | |
|---|---|
| 8 Canada Square Canary Wharf London E14 5HQ United Kingdom | Dariush Mirfendereski +44 (0)20 7991 1360 dariush.mirfendereski@hsbccib.com |
| | |
| JEFFERIES | |
| Vintners Place 68 Upper Thames Street London EC4V 3BJ United Kingdom | Emanuele Caloia Trading +44 (0)20 7898 7301 emanuele.caloia@jefferies.com |
| | |
| JP MORGAN | |
| 25 Bank Street London E14 5JP United Kingdom | Seth Morrison Trading +44 207 1342986 seth.n.morrison@jpmorgan.com |
| | |
| MORGAN STANLEY | |
| 20 Bank Street Canary Wharf, Floor 02 London E14 4AD United Kingdom | Guy Winkworth Trading +44 (0) 20 7677 4786 Guy.Winkworth@morganstanley.com |
| NOMURA | |
| 1 Angel Lane London EC4B 3AB | Will Scott Trading |

| United Kingdom | will.scott@nomura.com |
|-----------------|-----------------------|
| NATWEST MARKETS | |

| 250 Bishopsgate | James Konrad Trading |
|-----------------|---------------------------------|
| London | +44 (0)20 7085 5027 |
| E1 6AA | james.konrad@natwestmarkets.com |
| UK | |

| SANTANDER | | | | | |
|---|---|--|--|--|--|
| Av de Cantabria Boadilla del Monte Madrid, 28660 Spain | David López del Hoyo Trading davidlopezd@gruposantander.com | | | | |



| UBS | |
|----------------------|---|
| 100 Liverpool Street | Renato Giust |
| 2nd floor | Head of Trading – European government bonds |
| London EC2M 2RH | +44 (0)20 7567 4747 |
| United Kingdom | Renato.giust@ubs.com |

iii. Central Bank

Bank of England

Threadneedle Street London EC2R 8AH United Kingdom Tel: +44 (0)20 7601 5200 www.bankofengland.co.uk

Nick Govier

Manager, Sterling Markets Division Tel: +44 (0)20 7601 5675 nick.govier@bankofengland.gsi.gov.uk





European Primary Dealers Handbook

Updated Q3 2017

17. Appendices

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AFME Recommendation:

A. Electronic Inter-Dealer Market Trade Cancellation Procedure

Preamble

By confirming and approving this recommendation, the AFME / Primary Dealer Board hopes to increase standardisation among the trade cancellation procedures in the European Government Bond Market. The goal is to ensure consistency of impact across the market and in particular, to minimize the risk that cancellation requests for interdependent trades across platforms are subject to different outcomes and thereby result in increased trading risk to counterparties.

This Recommendation is approved and entered into force as of 24 November, 2011, between the member firms of AFME/ Primary Dealers: Bank of America Merrill Lynch, Banca IMI, Banco Santander, Scotiabank Europe, Barcap, BBVA, BNP Paribas, Citi, Commerzbank, Credit Agricole, Credit Suisse, Deutsche Bank, Goldman Sachs, HSBC, ING, Jefferies, JP Morgan, Morgan Stanley, Natixis, Nomura, RBC, Royal Bank of Scotland, Société Générale, UBS, Unicredit. AFME/Primary Dealers reiterated its approval of the trade cancellation procedure in September 2017.

1. Summary

AFME recommends the following principles and cancellation mechanisms to be adopted by the Trading Platforms in the European Government bond market as a part of their internal trade cancellation policy.

2. Definitions

- 2.1 European Government Bond Market: exclusively includes government bond markets of European Union Member States.
- 2.2 Trading Platform: includes the electronic trading venues used to trade bonds in the Interdealer European Government Bond Market.
- 2.3 Trade: includes both the purchase/sale of a Government bond. Also applies to basis trades.

3. Procedure

Bilateral Cancellation

- 3.1 A cancellation request shall be notified within 15 minutes from the time of execution of a trade (5 minutes on MTS). After receiving notification that a trade is in dispute the Trading Platform will promptly inform the counterparty (ies) that the trade is under review.¹
- 3.2 If the other counterparty confirms promptly to the Trading Platform that it agrees with the trade cancellation request, the request shall be treated as a bilateral cancellation. AFME/Primary Dealers members are recommended to allow their identity to be revealed, should the Trading Platform so request, in order to encourage fair settlement of a cancellation request.²
- 3.3 Such cancellation, once agreed, shall then be notified to the platform and any applicable central counterparty or settlement institution.

² The revealing of the counterparty identity should allow both counterparties to contact each other directly to encourage dialogue and settlement of the cancellation of the trade



¹ According to par 3.11, platforms retain the discretion to depart from the 15 minutes timeframe above if exceptional circumstances require so



Manifest Error: Calculation of an Off-Market Trade

- 3.4 In the event that agreement cannot be reached on the cancellation of the trade, the Platform shall apply the following procedure. The Trading Platform must verify that the trade in question was executed at a price level which is inconsistent with the market value at the time of execution. To be "inconsistent" with the market value, the trade price must have been executed at a price that was greater than 50% outside the current bid/offer spread on a specific instrument at the time of its execution.
- 3.5 In order to calculate whether the trade is greater than 50% outside the current bid/offer spread, the Trading Platform may request up to five (5) dealers, but no less than three (3) (excluding the counterparties) to provide a firm two-way inter-dealer electronic quote for that instrument at the time of execution of the trade. These dealers come from an agreed 'Wise Men Committee' of 10, annually rotating, dealers, appointed by AFME. The list of dealers will be published on the AFME website.
- 3.6 AFME/Primary Dealers members who are counterparties to the trade shall not contact any of the agreed 'Wise Men Committee' members concerning the trade dispute.
- 3.7 The platforms, if so requested by the counterparties involved in the trade, may distribute the prices used in the calculation but not the names of the members who provided the prices.
- 3.8 As soon as possible after the request, the dealers³ will communicate their current bid/offer i.e. the quote of a firm two-way price they entered or would have entered into any inter-dealer electronic Platform to the Trading Platform for that instrument at that time.⁴ The trade will be deemed 'off-market' if it is was executed at a price that was 50% wider than the average bid/offer spread the latter is calculated by excluding the highest and lowest price and averaging the remaining quotes.⁵
- 3.9 The Trading Platform will then communicate its decision to both counterparties as quickly as possible, but no later than 45 minutes from the time of execution of a trade.
- 3.10 Such cancellation, once promptly agreed by both parties, shall then be notified to the platform and any applicable central counterparty or settlement institution.
- 3.11 If exceptional circumstances so require a platform retains the discretion to depart from the 45 minutes timeframe above.

Name Give-Up

- 3.12 Should the method above not achieve a result that is acceptable for both counterparties, the platform shall reveal the counterparty names. AFME/ Primary Dealers members shall allow their identity to be revealed.⁶
- 3.13 In the event that a trade occurs between AFME members and non members; par 3.12 above will not apply.
- 3.14 If at this stage agreement is reached, this shall then be notified to the platform and to any applicable central counterparty or settlement institution.

⁶ The AFME/Primary Dealers members unanimously agree to give up their name. The list of all AFME/ Primary Dealers members and signatures is contained in the PREAMBLE



³ Between three (3) and five (5) as mentioned above

⁴ For example, the platform concerned by the transaction cancellation request

⁵ See practical example in ANNEX 1



Annex 1

Practical Example: Poll Average Belgian OLOs 3.5 28 March 2015

The Trading Platform had the following best bid/offer on the screen – 107.15/110.25 Seller aggresses bid at 98.20 and then reports it as an error trade (being an error sale). Following a poll of five market participants, the five quotes are as follows:

- 99.60/101.75
- 99.50/101.65
- 99.90/101.50
- 99.25/101.30
- 99.10/101.20

The high/low bid and high/low offer are thrown out which leaves the following:

- 99.60/101.75
- 99.50/101.65
- 99.25/101.30

The average bid/offer spread is therefore:

• 99.45/102.63

If we apply the 50% deviation margin to the average bid/offer spread (126 cts) we obtain the following bid and offer limits:

• 98.39/102.63

The sale executed at 98.20 will be cancelled as the low parameter is 98.39 i.e. all sales < 98.39 may be cancelled should that be requested by the seller in the present example.

So far, the following inter-dealer platforms have adopted the AFME recommendation for a common trade cancellation procedure:

As of May 2012, the recommendation has applied to all MTS markets. As of June 2012, the recommendation has applied to BrokerTec Europe Ltd

As of August 2012, the recommendation has applied to SENAF

As of August 2012, the recommendation has applied to **EurexBonds**





B. Trading Platforms Operating as Eligible Platforms on the European Government Bond Markets

| Country | Trading Platforms |
|-----------------|--|
| Austria | BGC Partners BrokerTec Europe Ltd MTS Austria Eurex Bonds |
| Belgium | BGC Partners BrokerTec Europe Ltd MTS Belgium |
| Czech Republic | MTS Czech Republic |
| Denmark | MTS Denmark Eurex Bonds |
| Finland | BGC Partners Eurex Bonds BrokerTec Europe Ltd MTS Finland |
| France | BrokerTec Europe Ltd MTS France |
| Germany | Eurex Bonds BrokerTec Europe Ltd MTS Germany |
| Greece | HDAT MTS Greece |
| Ireland | BGC Partners BrokerTec Europe Ltd MTS Ireland |
| Italy | MTS Italy |
| Portugal | MTS Portugal BrokerTec Europe Ltd BGC Partners |
| Slovenia | MTS Slovenia |
| Spain | MTS Spain SENAF |
| The Netherlands | BGC Partners Eurex Bonds BrokerTec Europe Ltd MTS Amsterdam |
| United Kingdom | MTS UK Gilts BrokerTec Europe Ltd |



C. Trading Platforms Contacts

| Trading Platform | Primary Contact | E-Mail Address | Phone Number |
|---|--------------------------------|---------------------------------------|----------------------|
| BGC Partners | John Walker-Robertson | john.walker-robertson@fenics.com | +44 (0)20 7894 7526 |
| Eurex | Annariina Komljenovic | annariina.komljenovic@eurex-bonds.com | +49 69 211 15120 |
| EuroMTS | Silvia Digiovanni ⁷ | silvia.digiovanni@mtsmarkets.com | + 44 (0)207 797 4171 |
| MTS Denmark, Finland | Jean-Pierre Mateza | mateza_jean-pierre@mtsam.com | +32 2 210 69 03 |
| BrokerTec () (MD BrokerTec EMEA) | John Edwards | john.edwards@nex.com | +44 (0)20 7818 9867 |
| BrokerTec Europe Ltd (Customer Support) | Lee Greenleaf | lee.greenleaf@nex.com | +44 (0)20 7818 9861 |
| SENAF | Gonzalo Gomez Retuerto | ggomezr@grupobme.es | + 34 91 709 5321 |

D. Overview of Main European Interdealer Trading Platforms

i. BGC Partners

BGC Partners operates as a designated platform in this country. BGC Brokers LP is authorised by the FCA to operate as a MTF.

- Electronic platform hours of operation 07.00 a.m. to 6.00 p.m. London time.
- Voice brokerage desk hours of operation 07.00 a.m. to 6.00 p.m. London time.

a. Participant Access

Cash Bonds & Basis trades

- Electronic access for Market makers and Market Takers
- Voice access via BGC Partners EGB brokerage desk under conditions: all Primary Dealer participants have power of veto regarding counterparty access to their electronic prices. All trading is conducted anonymously, with no voice brokerage desk access to electronic counterparty names.
- Basis trades are conducted using the market standard Conversion Factors as set by BGC Partners and published on http://www.bgcpartners.com

BGC Partners act as matched principal on all trades in the European Government Bonds settling via Euroclear or the relevant domestic CSD

⁷ Also the contact for Austria, Amsterdam, Belgium, France, Greece, Ireland, Italy, Portugal, Slovenia and Spain



- b. Fees
- No Access Fees
- No Membership Fees
- No Connectivity costs / Line charges

Full cost of European wide upgrade of bandwidth and customer gateways to be borne by BGC Partners or Internet install as appropriate.

All fees transaction based, specific rates available on application.

c. BGC Electronic Participants' List

| ABN AMRO | • HSBC | NATIXIS |
|-----------------|--|-------------------|
| Banca IMI | HSH Nordbank | • Nomura |
| Banco Santander | • ING | • Nordea |
| Barclays | • Jefferies | • Nord LB |
| BNP Paribas | • JP Morgan | • Rabobank |
| • Citigroup | • KBC | • RBC |
| Commerzbank | Landesbank Hessen Thuringen Circogentrale | Scotiabank Europe |
| Credit Agricole | Thuringen Girozentrale LBBW | Société Générale |
| • Daiwa | DDW Mitsubishi UFJ | State Street |
| • Danske Bank | Misubisii OrjMizuho | • UBS |
| • Deutsche Bank | | • Unicredit |
| • DZ Bank | Morgan StanleyNatWest Markets | • West LB |
| Goldman Sachs | NatWest Markets | • WGZ Bank |
| | | |

ii. Eurex Bonds⁸

a. Introduction

All market participants have equal privileges when trading bonds and basis on Eurex Bonds and thus may enter orders and quotes into the system. Furthermore, to ensure sufficient liquidity, a number of market participants act as market makers.

Trading on Eurex Bonds is based on a market model in which quotes and orders are entered into a central order book. All market participants have the possibility of entering limited buy or sell orders into the system. As a result, orders can be executed either in full, partially or not at all. Not executed parts of a limit order will be booked into the order book. The execution restrictions "Immediate-or-cancel" and "Fill-or-kill" prevent not executed parts of an order to be booked in the order book.

⁸ For more information on the Eurex Bonds model please visit their website http://www.eurex-bonds.com Should you wish to receive a detailed copy of their price model, please contact AFME



Through the trading parameter "Iceberg orders", market participants will be able to enter the part of the order which is to be initially displayed in the order book. Upon execution of this "visible part" of the iceberg order, new (partial) orders will be successively displayed until the entire order has been executed or the initiator has deleted the order.

All quotes and orders, including iceberg orders, are only good for day and are automatically deleted by the system after the close of trading.

Bond, Basis and Break Even instruments are traded in price terms whereas Treasury discount papers (Bubills) are traded in yield terms.

b. Pre-arranged Trade Facility

Besides normal trading, the "Pre-arranged Trade Facility" offers a functionality to enter trades outside the existing order book which previously have been agreed upon by trading members in the OTC market. The offer is valid for all products tradable on Eurex Bonds. The minimum trade size for all instruments in the "Pre-arranged Trade Facility" is ≤ 1 million (except Slimbos and Corporate bonds ≤ 0.5 million).

The settlement period within the "Pre-arranged Trade Facility" can be varied for bonds, Bubills and Break Even from T+1 to T+89 and for basis from T+2 to T+4.

c. Minimum Trading Quantities

The minimum quote and order size (round lot) for cash bonds has been set at $\notin 1$ million (except Slimbos and Corporate bonds $\notin 0.5$ million), $\notin 5$ million for basis and Break Even trades, $\notin 1$ million for Bubill trades and $\notin 10$ million for Bubill quotes.

The settlement period for bonds, basis trades and Bubills is T+2.

- d. Market Hours
- Pre-arranged trading bonds hours of operation 7.25 a.m. CET to 7.00 p.m. CET
- Pre-arranged trading basis hours of operation 8.20 a.m. CET to 7.00 p.m. CET
- Continuous trading bonds hours of operation 8.30 a.m. CET to 5.30 p.m. CET
- Continuous trading basis hours of operation 8.30 a.m. CET to 5.30 p.m. CET

e. Fees

The Eurex Bonds Pricing Model differentiates between five different kinds of fees: annual fees, transaction fees, connection fees, mistrade fees and training fees.

Annual Fees

Eurex Bonds charges an annual fee for providing the software, the releases and technical and functional support. The applicable time-frame for the annual fee is the calendar year.

- All Eurex Bonds members who are shareholders are charged an annual fee of €100,000.
- All Eurex Bonds members who are not shareholders are charged an annual fee of €40,000.

The annual fee is billed once a year and is included in the first monthly invoice for the current calendar year.



Transaction Fees

The transaction fees per million traded volume for a given trade depend on three factors:

- Shareholder/Non-Shareholder: Members who are shareholders in Eurex Bonds are charged lower transaction fees than members who are not shareholders..
- Aggressor/Non-Aggressor (on a per trade level): For each trade, the "non- aggressor" is the counterparty which has first entered the quote or order into the system. The "aggressor" is the counterparty which accepts the existing quote or order by entering a quote or order himself.
- Trading segment: the trading segment to which the instrument traded belongs determines the applicable row in the pricing.

For connection, mistrades and training fees, please see the detailed pricing model on the Eurex website.

f. Participants' Requirements Company status/capital:

- The enterprise possess equity capital of at least €50,000 unless:
- The enterprise is a credit institution, a financial service provider or a securities company complying with the definition of Council Directive 2004/39/EG on markets for financial instruments ("MiFId) or with a company acting pursuant to KWG ("German Banking Act") which is authorised to conduct financial commission business or to provide a financial service
- Participation in the clearing process of Eurex Clearing AG as a GCM or DCM or an NCM-CM agreement with an institution which holds a respective Clearing License.
- g. Eurex Bonds Electronic Participants' List

| • | Barclays | • | DekaBank Deutsche Girozentrale | • | NATIXIS |
|---|---|---|--------------------------------|---|-------------------------|
| • | Bayerische Landesbank | • | DZ Bank | • | Nomura |
| • | BBVA | • | Goldman Sachs | • | Norddeutsche Landesbank |
| • | BNP Paribas | • | HSBC | • | RBC |
| • | Bundesrepublik Deutschland Finanzagentur | • | ING Jefferies | • | RBS |
| | - | • | JP Morgan | • | Scotiabank Europe |
| • | Citigroup | • | Landesbank Baden-Württemberg | • | Societe Generale |
| • | Commerzbank | • | Landesbank Hessen-Thüringen | | UBS |
| • | Credit Agricole | | C C | | |
| • | Danske Bank | • | Merrill Lynch International | • | Unicredit |
| | • | • | Morgan Stanley | | |
| • | Deutsche Bank | | | | |





iii. iii. BrokerTec Europe Limited

BrokerTec Europe Limited, a NEX Group Business, operates the BrokerTec trading platform on which Participants are permitted to trade with other Participants, in accordance with the terms of the Agreements, the Rulebook and the relevant Product Appendix. The BrokerTec electronic trading system is regulated by the FCA as an MTF in Europe.

Hours of operation (BrokerTec) are 7.00am to 5.15pm, Monday to Friday, UK time zone.

Error Trades shall be treated in accordance with BrokerTec Error Trade Policy

European Primary Dealers Handbook 17.10



a. Participant Access Government Backed Securities – Government bonds and bills

| MarketCentral Counterparty (or CSD where noted)Typ | | Type of market | Minimum size requirements | Trading days |
|--|---|---|--|----------------------|
| Austria | LCH Clearnet Ltd | Cleared market | One million | TARGET Business Days |
| Belgium | LCH Clearnet Ltd | Cleared market | Two million | TARGET Business Days |
| Finland | LCH Clearnet Ltd | Cleared market | One million | TARGET Business Days |
| France | LCH Clearnet SA | Cleared market | BTF: €5m minimum then lots of €1m BTAN/OAT: Five million (less than 10 years) Three million (more than 10 years) then lots of one million Inflation bonds: Three million | TARGET Business Days |
| Germany | LCH Clearnet Ltd | Cleared market | Two million | TARGET Business Days |
| Greece | CSD: Bank of Greece | Bilateral market | One million | TARGET Business Days |
| Ireland | LCH Clearnet Ltd | Cleared market | One million | TARGET Business Days |
| Italy CSD: Monte Tolli CC: LCH Clearnet SA; Cassa di Compensazione e Garanzia (CCG) Cleared market | | Bonds with maturity up to Three years: Two million Bonds with maturity greater than Three years: One million | TARGET Business Days | |
| Netherlands | LCH Clearnet Ltd | Cleared market | Two million | TARGET Business Days |
| Portugal | LCH Clearnet Ltd | Cleared market | One million | TARGET Business Days |
| Spain | LCH Clearnet SA with settlement through Iberclear | Cleared market | One million | TARGET Business Days |
| Slovakia | LCH Clearnet Ltd | Cleared market | One million | TARGET Business Days |
| Slovenia | LCH Clearnet Ltd | Cleared market | One million | TARGET Business Days |
| United Kingdom | LCH Clearnet Ltd Cleared market | | One million | All UK Business Days |



b. Additional requirements by Country

Austria, Belgium, Finland and Ireland

- Participant must be authorised by LCH Clearnet Ltd to enter into Transactions on Broker Tec
- If the participant is an Austrian Primary Dealer or Recognised Dealer, then participant authorises the operator to send trading and quoting statistics to the DMO or National Competent Authority

France

- Participant must be authorised by LCH Clearnet Ltd to enter into Transactions on Broker Tec
- Only SVT and credit institutions and/or suppliers of investment services established in France or in the territory of a member's state of the European Economic Space with Primary Dealer status in at least 3 countries in the Euro Zone and subject to the same quotation obligations as the SVTs can have participant status
- Participant consents to their name being made available post trade to the matching participant in the event of a match
- If the participant has chosen BrokerTec as its platform of reference, then participant hereby authorises the operator to send its performance data to the AMTE Secretariat on a monthly basis
- If a non-SVT participant is deemed to be non-compliant with the quoting obligations imposed by the SVT Market Committee, the Participant agrees to comply with any notice issued by the Operator pursuant to Article 4.9 of the SVT Market Committee.

Germany, Spain, Slovenia, Slovakian and United Kingdom

• Participant must be authorised by LCH Clearnet Ltd to enter into Transactions on Broker Tec

Italy

- Participant must have an account (direct or indirect) at the CSD for settlement of Transactions
- Participant must be authorised by the CSD to enter into transactions on BrokerTec
- Participants must be a clearing member at LCH Clearnet SA or CCG or have arrangements with an eligible member of LCH Clearnet or CCG; and be authorised by LCH or CCG to trade transaction son BrokerTec
- Where required by applicable law or regulation, participant hereby authorise the operator to send trading and quoting statistics to the Italian Ministry of Economy and Finance

Netherlands

- Participant must be authorised by LCH Clearnet Ltd to enter into Transactions on Broker Tec
- Participant consents to having its participant status displayed on www.nexmarkets.com
- If the participant has chosen BrokerTec as its platform of reference, then participant hereby authorises the operator to send its performance data to the DSTA on a daily basis

Portugal

- Participant must be authorised by LCH Clearnet Ltd to enter into Transactions on Broker Tec
- Participant consents to having its participant status displayed on www.nexrmarkets.com
- Participant consents to their name being made available post trade to the matching participant in the event of a match
- If the participant has chosen BrokerTec as its platform of reference, then participant hereby authorises the operator to send its performance data to the IGCP on a daily basis



iv. MTS

MTS supports the full chain of pre-trade, trade execution and post-trade capabilities across cash and repo markets, and also provides independent benchmark market data and comprehensive fixed income indices. Its platforms are used daily by a very wide number of diverse counterparties, ensuring optimum liquidity.

MTS Cash

MTS Cash is the leading electronic market for dealers of fixed income rates products with over 100 unique counterparties trading on the system each day. Market participants benefit from access to the most liquid, transparent and efficient European bond marketplace combined with innovative technology and comprehensive support across the widest range of products.

MTS Repo

The MTS Repo market on the MMF trading platform unites over 150 unique participants across Europe, including international and domestic banks and institutional buy-side clients, to offer significant liquidity across all the eurozone repo markets. Offering bespoke functionality for the electronic transaction of repo agreements and buy/sellbacks through an efficient order driven market place alongside RFQ and OTC booking functionalities, the MTS Repo market has grown to become a de facto choice for repo and money market traders across Europe.

BondVision

Established in 2001, BondVision has grown to become the most trusted and efficient multi-dealer-to-client electronic bond trading market, giving institutional investors direct access to the heart of the market's liquidity. The platform supports trading in multiple currencies, including \in , GBP, USD and CEE local currencies. BondVision was designed and developed by traders, for traders, offering a specialised execution service and post-trade tools tailored directly to the needs of fixed income investors.

MTS Credit

MTS Credit delivers an electronic market for a wide range of euro-denominated non-government bonds, including corporate, financial and covered bonds.

MTS Data

MTS delivers a comprehensive and trusted market data service empowering fixed income market participants to set best practice for price discovery, verification and validation. MTS Data provides real-time tradable prices across the entire European government, quasi government and covered bond market. Real-time price information is complemented with a variety of benchmark value-added products that deliver unparalleled access to the European bond market





MTS Indices

MTS Indices (EuroMTS) are the trusted source for real-time eurozone bond pricing and liquidity discovery, based on real, tradable prices. They are the first independent total-return indices measuring the performance of the primary asset classes in the eurozone government bond market. The data fuelling MTS Indices is drawn from real-time tradable prices on MTS. This access to bond data from its pure market source enables MTS Indices to offer transparent and easily replicable data from the independent source of the fixed income market.

Rules of all MTS markets – available in several languages – can be found via the following link http://www.mtsmarkets.com/ Documents/Market-Rules. Links to the English version are on the table below.

a. Electronic Participants List

The Electronic Participants' List can be found via the following link: http://www.mtsdata.com/content/data/public/ats/ anagraph/memberphp





b. Minimum Trading Quantities

| Security details | Parameters | | | | | |
|----------------------|---|---|--|--------------------------------------|-----------------------------------|-----------------------------------|
| Market Section | Instrument Class | Parallel listed on EBM section | Min. Single- side Quote Qty (FAS Orders) | Min. Double- side Quote Qty | Min. Order Qty (FAK Orders) | Increment Qty |
| MTS | BTP-Btp Bonds BTI-BTP Inflation Linked CCT-Floating Rate CTZ-Zero CoupoNotes BOT-TBIlls | * * | €2.5 million | €2.5 million | €2.5 million | €0.5 million |
| ESP – Spain | BON-BONOS OBE-OBLES LET-LETRAS TBILLS | * * * | €2.5 million | €2.5 million | €1 million | €0.5 million |
| NLD – Netherlands | DSL-Dutch Bonds DTC-T Bills | * | €2.5 million DTC-T Bills | €2.5 million €10 million | €2.5 million €10 million | €0.5 million €10 million |
| GEM – Germany | DEM, SHATZE, OBLE, BUND GIL-GERMAN INFLATION LINKED LAN-LANDER BONDS GTC-TBILLS | * * | €2.5 million | €2.5 million | €2.5 million | €0.5 million |
| FRF – France | BTA-BTANS OAT-OATS BNI-BTAN INFLATION LINKED OAI - OAT INFLATION LINKED FTB-T BILLS | * * * * | €5-2.5 million | €5-2.5 million | €5-2.5 million | €0.5 million |
| ATS Austria | ATS-Bonds | * | €5-2.5 million | €5-2.5 million | €5-2.5 million | €0.5 million |

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c. General Information on MTS

| Country | Online information | Market rules |
|-----------------|--------------------|---------------------------------|
| Austria | MTS Austria | MTS Austria Market Rules |
| Belgium | MTS Belgium | MTS Belgium Market Rules |
| Czech Republic | MTS Czech Republic | MTS Czech Republic Market Rules |
| Denmark | MTS Denmark | MTS Denmark Market Rules |
| Finland | MTS Finland | MTS Finland Market Rules |
| France | MTS France | MTS France Market Rules |
| Germany | MTS Germany | MTS Germany Market Rules |
| Greece | MTS Greece | MTS Greece Market Rules |
| Ireland | MTS Ireland | MTS Ireland Market Rules |
| Italy | MTS Italy | MTS Italy Market Rules |
| The Netherlands | MTS Netherlands | MTS Netherlands Market Rules |
| Portugal | MTS Portugal | MTS Portugal Market Rules |
| Slovenia | MTS Slovenia | MTS Slovenia Market Rules |
| Spain | MTS Spain | MTS Spain Market Rules |
| United Kingdom | MTS United Kingdom | MTS UK Market Rules |

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E. Comparison of Mechanisms for Primary Dealer Performance Evaluation

| Austria | Belgium | Denmark | Finland |
|---|--|--|--|
| The performance measurement system is based on a broad range of criteria both quantitative and qualitative, which includes: • Successful participation in the primary markets; • Active market making for all RAGB: providing • narrow bid/offer prices with high bid/offer sizes during market hours; • Share of electronic trading; • Turnover statistics: particularly turnover with real money investors; • Spread-to-peers: spreads versus peer countries with similar quality are taken into account; • Qualitative factors: service quality, operational quality, reputational quality. | The BDA appraises the activity of the Primary Dealers according to the various quantitative and qualitative criteria, which include amongst the others: • Primary market performance; • Secondary market performance; • Compliance on market making obligations • Advice and information on relevant markets. | The evaluation of the primary dealers is based on a broad range of criteria in order to take each primary dealer's overall contribution to a well- functioning market into account. Payment of fees to Primary Dealers was introduced in a nine-month trial period from 1 April 2017 to 31 December 2017 with an aggregate maximum total amount of fees in this period of up to DKK 18,750,000, equivalent to DKK 25,000,000 annually. The amount of fees payable to the Primary Dealers depends on the performance of each Primary Dealer, cf. the description above. In addition primary dealers have an obligation to promote Danish government securities and provide reporting and quality advisory services. | The DMO evaluates Primary Dealers through an internal scorecard model taking into account various areas of service (including both the investment side and derivative products) and all products on the borrowing programme (i.e. treasury bills, bond auctions). The scorecard model includes: • Quantitative criteria; • Qualitative criteria. |



| France | Greece | Ireland | Italy |
|---|---|---|---|
| The evaluation of the Primary Dealers' performance is based on the following criteria: • Operational quality (primary and secondary markets, security of clearing and settlement operatiosn); • Quality of advice (market information, research and modelling) • Proximity and stability of the relationship with the Issuing State | The evaluation of the Primary Dealers Performance is obtained from the following point system: Primary Market (20 points): Trading volume (duration weighted); Secondary Market (25 points): Monthly turnover on regulated markets (duration weighted); Yield Curve (40 points): number of quotes displayed; abstention time; Bid-ask spread; Further contribution to the Greek government bond market (15 points): market information and research; advice on issuance policy and the management of public debt; performance on syndications, private placement, swaps, execution efficiency; Promotion of Greek government bonds; End customer flow excluding Banks | Appraisal of the activity of the Primary Dealers is carried out on a all- encompassing basis which includes the following criteria: • Their market share of auctions; • Spreads maintained; • Turnover achieved. | Appraisal of the Primary Market performance is based on: Primary market quantitative index; Primary qualitative indicator: Auction Aggressivity Index (AAI), difference between bond auction price and prices reported on the secondary market Continuity of participation in auctions; Appraisal of the Secondary Market performance is carried out on: Quotation Quality index (QQI): as a simple average of each bond's daily positions; Cash traded volumes; Repo traded volumes; Bank of Italy efficiency index; Cash traded volumes on other electronic trading venues; Cash distributional ability on other electronic trading venues; Repo distributional ability on other electronic trading venues; Specific criteria are established to evaluate OPTES transactions, buybacks and exchanges and of the organisational structure. |



| The Netherlands | Portugal | Spain | Slovakia |
|--|--|---|--|
| The main criteria for appraising the Primary Dealers' activity are: • Performance in the primary and secondary markets for DSLs and DTCs; • The fulfilment of the quotation obligation on a selected platform; • The promotion and development of products related to DSLs and the provision of research material. | OEVT Performance Appraisal Criteria: EBT Performance Appraisal (EBT Evaluation); Secondary Market Participation: Inter-dealer eligible turnover, market making compliance, broadening the base of investors, Buyback Programme; Other loans participation. EBT Performance Appraisal Criteria: Primary market participation: Primary market share, share of competitive bidding, regularity in competitive bidding, regularity of subscription of competitive bidding; Secondary market participation: inter-dealer eligible turnover, market making compliance; Broadening the base of investors: marketing and advisory, turnover with end investors. | Primary Dealer activity is evaluated (monthly) on the basis of their performance in the following areas: Participation in the Letras, Bonos and Obligaciones at auctions; Participation in exchange and buy- back operations carried out by the Treasury; Involvement in the debt management and promotion initiatives; Listing and participation in the overall monthly turnover of of Letras, Bonos and Obligaciones in the regulated market or MTSs; Participation in monthly Letras, Bono and Obligación trading between members of the market of Public Debt in Book Entries. Participation in the monthly trading in Treasury Bills carried out by Market Makers with companies which are not members of the market of Public Debt in Book Entries. Stripping and reconstitution of strippable securities and trading in these instruments; Any other activity reflecting their engagement with the Spanish public debt market (e.g. qualitative considerations). | Primary Dealer Evaluation Criteria: • Primary market (share of auctions, share of direct sales and deviation of bids against average price) • Secondary Market (share of bond trading, quoting obligation performance) • Other transactions criteria (share of money market trades realized, share of buy back and exchanged bonds before maturity) |



| Slovenia | Sweden | United Kingdom |
|---|--|---|
| The performance of Primary Dealers for Government Bonds is carried on the basis of the performance index (PI) calculated from the following elements: • performance on the DETS; • performance on the DETS; • performance in the Secondary market trading of Government securities excluding the DETS; • performance on Buy-back operations (BBO); • qualitative assessment of the service supplied by the Primary Dealer (Q). Qualitative assessment • performance in syndicated issues; • promotion of Government securities, market information and analysis as well as strategic and economic information, advice and research. | The assessment of the Primary Dealers relies on the fulfilment of the Primary Dealers' obligations (see above paragraph C.ii) and on the evaluation of some qualitative issues not stipulated in the Primary Dealer agreements (e.g. analysis, research, coverage). | The DMO appraises the activities and performances of individual GEMM firms on a continuous basis, in various quantitative and qualitative ways, for example by: • Ongoing analysis of auction participation statistics; • Weekly secondary market turnover shares; • Gathering anecdotal feedback from end investors regarding price, research and general service provision, alongside the DMO's own assessment of advice; • Information and support given to the issuer itself. |



F. List of Primary Dealers Across Europe

| FIRM | 1 Aus | 2 Bel | 3 Den | 4 Fin | 5 Fra | 6 Ger | 7 Gre | 8 Ire | 9 Ita | 10 Nth | 11 Por | 12 Slk | 13 Slv | 14 Spa | 15 Swe | 16 UK | TOTAL |
|----------------------------------|----------|----------|----------|--------------|----------|----------|----------|----------|----------|-----------|-----------|-----------|-----------|-----------|-----------|----------|-------|
| Abanka Vipa | Aus | Dei | Den | F III | ria | uei | ure | ne | па | Nui | FUI | SIK | X | эра | Swe | UK | 1 |
| ABN AMRO | | X | | | | X | | | | X | | | | | | | 3 |
| Alpha Bank | | | | | | | X | | | | | | | | | | 1 |
| Banca IMI | | | | | | Х | X | | Х | | | | | | | | 3 |
| Banco BPI | | | | | | | | | | | X | | | | | | 1 |
| Barclays | Х | X | X | X | Х | Х | X | Х | Х | X | X | X | X | X | X | Х | 16 |
| Banco Cooperativo Espanol | | | | | | | | | | | | | | x | | | 1 |
| Bankhaus Lampe KG | | | | | | Х | | | | | | | | | | | 1 |
| BAWAF P.S.K | Х | | | | | | | | | | | | | | | | 1 |
| Bank of America Merrill Lynch | Х | | | X | Х | х | X | х | Х | | | | | | | Х | 8 |
| Bankia | | | | | | | | | | | | | | X | | | 1 |
| Bankinter | | | | | | | | | | | | | | X | | | 1 |
| Bayerische Landesbank | | | | | | Х | | | | | | | | | | | 1 |
| BBVA | | | | | | Х | | | | | Х | | | Х | | | 3 |
| Belfius Bank | | Х | | | | | | | | | | | | | | | 1 |
| BHF-Bank AG | | | | | | Х | | | | | | | | | | | 1 |
| BNP Paribas | Х | X | X | X | Х | Х | X | Х | Х | | Х | | X | Х | | Х | 13 |
| Cantor Fitzgerald Ireland Ltd | | | | | | | | Х | | | | | | | | | 1 |
| Citigroup | Х | X | | X | X | X | X | Х | Х | X | X | X | X | X | | Х | 14 |
| Commerzbank | Х | Х | | | Х | Х | Х | | | X | X | | X | X | | | 9 |
| Caixabank | | | | | | | | | | | | | | X | | | 1 |
| Caixa Banco de Investimento | | | | | | | | | | | х | | | | | | 1 |
| Cecabank | | | | | | | | | | | | | | X | | | 1 |
| Crédit Agricole | | X | | X | X | X | | | Х | | X | | X | X | | | 8 |
| Credit Suisse | | | | | | | X | | | | | | | | | | 1 |
| Danske Bank | | | X | X | | Х | | Х | | | X | | | X | X | | 7 |

KEY:

AFME/Primary Dealer Members

Non-AFME Members

AFME Members

Х

Primary Dealers (Transactions to be reported as "Bank-Primary Dealer")



Recognised Dealers (Only applicable for Belgium) Х

Single Market Specialists (Only applicable for Netherlands)

Note: The following Euro-zone countries do not have a system of Primary Dealers: Estonia, Luxembourg, Malta.



F. List of Primary Dealers Across Europe

| FIDM | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | TOTAL |
|---|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|-------|
| FIRM | Aus | Bel | Den | Fin | Fra | Ger | Gre | Ire | Ita | Nth | Por | Slk | Slv | Spa | Swe | UK | TOTAL |
| Davy | | | | | | | | Х | | | | | | | | | 1 |
| DekaBank | | | | | | X | | | | | | | | | | | 1 |
| Deutsche Bank | Х | | | Х | Х | X | Х | Х | Х | Х | Х | Х | Х | Х | | Х | 13 |
| DZ Bank | | | | | | X | | | | | | | | | | | 1 |
| Erste Bank | Х | | | | | | | | | | | | | | | | 1 |
| Eurobank Ergasias | | | | | | | X | | | | | | | | | | 1 |
| Goldman Sachs | Х | Х | | X | Х | X | X | Х | Х | X | Х | | Х | X | | X | 13 |
| Handelsbanken | | | | | | | | | | | | | | | Х | | 1 |
| HSBC | Х | Х | X | X | Х | X | X | Х | Х | X | Х | X | Х | X | | Х | 15 |
| ING | | Х | | | | X | | | Х | X | | | | | | | 4 |
| Jefferies | | | | | | X | | | | X | Х | | X | | | X | 5 |
| J.P. Morgan | Х | X | X | X | X | X | X | Х | Х | | X | | X | X | | X | 13 |
| КВС | | X | | | | | | | | | | X | | | | | 2 |
| Landesbank Baden- Württemberg | X | | | | | x | | | | | | | | | | | 2 |
| Landes- bank Hes- sen-Thüringen Girozentrale (Helaba) | | | | | | x | | | | | | | | | | | 1 |
| Lloyds | | | | | | | | | | | | | | | | X | 1 |
| Mizuho | | | | | | X | | | | | | | | | | | 1 |
| Monte Paschi di Siena | | | | | | | | | Х | | | | | | | | 1 |
| Morgan Stanley | X | Х | X | | X | X | X | Х | Х | | X | | | X | | X | 11 |
| Natixis | Х | Х | | | X | X | | | | X | | X | | X | | | 7 |
| National Bank of Greece | | | | | | | Х | | | | | | | | | | 1 |
| NatWest Markets | Х | Х | | X | X | X | X | Х | Х | X | Х | | | X | Х | X | 13 |
| Nomura | Х | Х | | X | X | X | X | Х | Х | X | Х | | | X | | X | 12 |
| Norddeutsche Landesbank Girozentrale | | | | | | x | | | | | | | | | | | 1 |
| Nordea | | | X | X | | X | | | | X | | | | | X | | 5 |
| Nova Ljubljan- ska | | | | | | | | | | | | | X | | | | 1 |
| Novo Banco | | | | | | | | | | | Х | | | | | | 1 |
| Nykredit Bank | | | X | | | | | | | | | | | | | | 1 |

KEY:

AFME/Primary Dealer Members

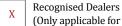
Non-AFME Members

AFME Members

Х



Primary Dealers (Transactions to be reported as "Bank-Primary Dealer")



(Only applicable for Belgium)

Single Market Specialists (Only applicable for Netherlands)

The following Euro-zone countries do not have a system of Primary Dealers: Estonia, Luxembourg, Malta. Note:





F. List of Primary Dealers Across Europe

| FIRM | 1 Aus | 2 Bel | 3 Den | 4 Fin | 5 Fra | 6 Ger | 7 Gre | 8 Ire | 9 Ita | 10 Nth | 11 Por | 12 Slk | 13 Slv | 14 Spa | 15 Swe | 16 UK | TOTAL |
|----------------------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|-----------|-----------|-----------|-----------|-----------|-----------|----------|-------|
| Oberbank | X | | | | | | | | | | | | | | | | 1 |
| Piraeus Bank | | | | | | | X | | | | | | | | | | 1 |
| Rabobank | | Х | | | | X | | | | Х | | | | | | | 3 |
| Raiffeisen Bank International | x | | | | | | | | | | | | | | | | 1 |
| Royal Bank of Canada | | | | | | | | | | | | | | | | Х | 1 |
| Santander | | | | | | X | | | | Х | Х | | | Х | | Х | 5 |
| Scotiabank | | X | | | | X | | | | | | | | | | Х | 3 |
| SEB | | | X | | | | | | | | | | | | Х | | 2 |
| Slovenská sporiteľňa | | | | | | | | | | | | X | | | | | 1 |
| Société Générale | X | X | | Х | X | X | X | Х | Х | Х | Х | X | Х | X | | | 13 |
| Spar Nord Bank | | | X | | | | | | | | | | | | | | 1 |
| Swedbank | | | | | | | | | | | | | | | Х | | 1 |
| Sydbank | | | X | | | | | | | | | | | | | | 1 |
| Tatra banka | | | | | | | | | | | | X | | | | | 1 |
| The Toronto- Dominion Bank | | | | | | | | | | | | | | | | х | 1 |
| UBS | | | | | X | X | X | Х | Х | | | | | | | Х | 6 |
| UniCredit | X | | | | | X | X | | Х | | | X | Х | | | | 6 |
| Volksbank | X | | | | | | | | | | | | | | | | |
| Všeobecná úverová banka | | | | | | | | | | | | x | | | | | 1 |
| Winterflood Securities | | | | | | | | | | | | | | | | Х | 1 |
| TOTAL | 21 | 19 | 11 | 14 | 16 | 36 | 21 | 16 | 18 | 16 | 20 | 11 | 14 | 22 | 7 | 19 | |

KEY:

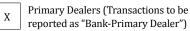


AFME/Primary Dealer Members



AFME Members

Х



X Recognised Dealers (Only applicable for Belgium) Single Market Specialists

(Only applicable for Netherlands)

Note: The following Euro-zone countries do not have a system of Primary Dealers: Estonia, Luxembourg, Malta.

Key: 1=Austria; 2=Belgium; 3=Denmark; 4=Finland; 5=France; 6=Germany; 7=Greece; 8=Ireland; 9=Italy; 10=The Netherlands; 11=Portugal; 12=Slovakia; 13=Slovenia; 14=Spain; 15=Sweden; 16=United Kingdom





Ratings as of September 2017 (Long–Term Foreign Currency)

| | Standard & Poor's | | Мос | ody's | Fitch F | Ratings | DBRS | | |
|-----------------|-------------------|----------|--------|----------|---------|----------|-----------|----------|--|
| | Rating | Outlook | Rating | Outlook | Rating | Outlook | Rating | Outlook | |
| Austria | AA+ | Stable | Aa1 | Negative | AA+ | Stable | AAA | Stable | |
| Belgium | AA | Stable | Aa3 | Stable | AA- | Stable | AA(high) | Stable | |
| Denmark | AAA | Stable | Aaa | Stable | AAA | Stable | AAA | Stable | |
| Finland | AA+ | Stable | Aa1 | Stable | AA+ | Stable | AAA | Stable | |
| France | AA | Stable | Aa2 | Stable | AA | Stable | AAA | Stable | |
| Germany | AAA | Stable | Aaa | Stable | AAA | Stable | AAA | Stable | |
| Greece | B- | Positive | Caa2 | Positive | B- | Positive | В | Stable | |
| Ireland | A+ | Stable | A3 | Positive | А | Stable | A(low) | Stable | |
| Italy | BBB- | Stable | Baa2 | Negative | BBB | Stable | BBB(high) | Stable | |
| The Netherlands | AAA | Stable | Aaa | Stable | AAA | Stable | AAA | Stable | |
| Portugal | BB+ | Stable | Ba1 | Positive | BB+ | Positive | BBB(low) | Stable | |
| Slovakia | A+ | Stable | A2 | Positive | A+ | Stable | A(high) | Stable | |
| Slovenia | A+ | Stable | Baa1 | Stable | A- | Stable | n/a | n/a | |
| Spain | BBB+ | Positive | Baa2 | Stable | BBB+ | Positive | A(low) | Negative | |
| Sweden | AAA | Stable | Aaa | Stable | AAA | Stable | AAA | Stable | |
| United Kingdom | AA | Negative | Aa1 | Negative | AA | Negative | AAA | Stable | |



G. Glossary⁹

| Term | Definition |
|------------------------------|--|
| Auctions | The sale of securities through an open bidding. |
| Benchmark issue | Issue of securities that is sufficiently large and actively traded that its price may serve as a reference point for other issues of similar maturity. |
| Best execution | Fair execution of client orders of securities, so that no client has preference over another in terms of time of execution and price received. |
| Bonds | Coupon-bearing securities, typically with a maturity of one year or more. |
| Buy-back operation | Repurchase of bonds by the issuer prior to their maturity. |
| Cash management | Service responsible for managing short-term out-flows and in-flows related to debt management. |
| Central depository | The depository where the final settlements of a securities transaction are recorded. |
| Clearing | Matching of orders prior to final settlement. |
| Credit rating agency | A firm that rates the value of financial obligations or the creditworthiness of firms or countries. |
| Credit risk | Risk that a counterparty will not honor an obligation when due. |
| Cut-off price | Lowest successful bid at an auction. |
| Debt management office (DMO) | The government office that manages the public debt. |
| Electronic trading systems | Computerized trading systems that centralize, match, cross, or otherwise execute trades. |
| E-trading | Trading of securities via electronic means. |
| Government bonds | Securities, usually of more than one year maturity, issued by the central government on behalf of the nation for purposes of financing general or specific budget expenditure. |
| Government debt manager | Trading of securities via electronic means. |
| Government securities market | Market for tradable securities issued by a government. |
| Government securities | Securities (bills and bonds) issued by the government |
| Issuing calendar | Dates at which debt will be issued, the maturities, and possibly the terms and amounts of the issues. |
| Liquid market | Market where buyers and sellers actively trade, so that individual trades are not likely to appreciably move securities prices. |
| Market maker | Market maker quotes bid and asked prices for securities and normally is prepared to deal with those prices. |
| Matching | Comparison of trade or settlement details provided by counterparties to ensure that they agree. |
| Money market | Market for short term, near-cash-equivalent securities. |

9 Source: "Government Bond Markets, a Handbook", by the World Bank and the International Monetary Fund



| Multilateral trading | Trading between market participants, where there is sufficient price discovery for transactions between participants to be possible. |
|-------------------------------|---|
| Multiple-price auctions | Auctions in which each bidder pays the price it bid. Bids are placed in descending order and the higher bids are accepted until the issue is exhausted. |
| Non-competitive auction bid | Tender, usually by retail investors or the central banks, that is not part of the competitive bidding process. Awards to non-competitive bidders are usually at the average auction price of successful competitive bids or at the cut-off price. |
| Over-the-counter (OTC) market | Market for the trading of assets outside a formal exchange. |
| Price taker | Seller who accepts the price offered for the amount of securities is selling. |
| Primary Dealers (PD) | Financial institutions that are appointed by sovereign issuers to buy, promote and distribute sovereign bonds. |
| Primary market | Asset market where securities - government, subnational, and private sector - are first issued and sold, typically through some form of tender or auction process. |
| Public debt | Stock of outstanding government debt obligations resulting from cumulative issuance of government securities. |
| Quote-driven market | Market dominated by the reaction of customers to bid/ask quotations by dealers. |
| Reverse auction | Auction for the repurchase, rather than for the sale, of bonds. |
| Secondary market | Asset market where securities - government, subnational, and private sector - are traded after they have been issued or sold on primary markets. |
| Syndication | Sale of securities through a group with which the issuer negotiated the price of the securities. |
| Tap sales of bonds | Sale of securities by the issuer over a specified period, the issuer fixing the price or setting a minimum price. |
| Treasury bills | Securities issued by a Treasury, usually on a discount basis and for maturities of no longer than one year. |
| Zero-coupon bond | Bond issued on a discount basis, so that all payment is deferred until maturity. |
| | |

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