

Open Finance and Data Sharing

Building Blocks for a Competitive,
Innovative and Secure Framework

September 2022



Contents

Foreword.....	3
Executive summary.....	4
Introduction	5
Level Playing Field and Cross Sectoral Data Sharing.....	8
Interoperability / Standardisation.....	10
Compensation.....	15
Clarity on liability assignment.....	20
Conclusion	23

Foreword

AFME is pleased to publish our new report, “Open Finance and Data Sharing – Building Blocks for a Competitive, Innovative and Secure Framework”.

In July 2022 we **responded** to the European Commission’s Targeted Consultation on an Open Finance Framework and data sharing in the financial sector. This report complements our consultation response. We thought it beneficial to set out additional technical detail on the key drivers which we believe will support the successful development of an Open Finance Framework; we also have included a series of building blocks to form the foundation of a robust data ecosystem in the EU.

The Digital transition and the pace of innovation have rightly remained a regulatory priority throughout the last decade. The financial services sector will be impacted by evolving regulations, in particular as the EU looks to make data more available and easily shareable across sectors. The EU has already taken steps to develop its data economy, with ongoing debates on the horizontal Data Act Regulation, and imminent proposals for an Open Finance Framework and broader data sharing in financial services.

Open finance, defined as third party access to a financial entity’s customer data for the purpose of providing financial services and products, could improve the way banks operate, maximise the value of data, make data more readily available for innovative use, and maintain incentives for corporate customers and the financial services industry to invest in the broader data ecosystem.

We have identified four key principles to support the development of a robust Open Finance Framework. These are:

- (1) A level playing field is crucial;
- (2) Interoperability and an appropriate level of standardization;
- (3) An appropriate framework for compensation; and,
- (4) Clear liability provisions.

We believe these four key principles will encourage trust in an EU data ecosystem that is sustainable, competitive and delivers beneficial long term impact, while also mitigating the risks of data exploitation.

We have developed this report to support participants in the global data economy in the development of a competitive, innovative and secure Open Finance Framework.

We wish to thank the subject matter experts from the AFME Data Strategy Working Group for their efforts in contributing to this report.



James Kemp
Managing Director, Global FX,
Technology and Operations and Policy Divisions
GFMA and **AFME**

Executive summary

This paper aims to complement our [response](#) submitted to the recent European Commission's consultation on Open Finance and Data Sharing in Financial Services, as well as further inform discussions on other EU regulatory initiatives. We believe that emerging data sharing frameworks (including but not limited to Open Finance) should be complementary and consistent with other cross-sectoral regulatory initiatives targeting data and digital service providers in the EU single market, such as the proposed Data Act (DA), the Digital Markets Act (DMA), the Digital Services Act (DSA), the General Data Protection Regulation (GDPR), international data transfer agreements and sectoral initiatives, such as the Payment Services Directive 2 (PSD2) and the Digital Operational Resilience Act (DORA).

Our white paper discusses the following four key principles:

- 1) First, **the principle of a level playing field is crucial**, and underscores each of the subsequent 3 principles. **In order for an Open Finance Framework to flourish not only in financial services but across multiple sectors, there must be consistent and appropriate regulatory oversight.** This consistency is key in order to both support innovation, but also to discourage monopolies, encourage competition and efficiency, and to lower costs for both corporate and retail customers, creating a robust and effective data economy. For this to occur, regulation must address risks consistently and market players must have consistent regulation if data is to be shared across the sectors. We remain supportive of a thriving data economy for market participants and believe that a level playing field will ensure this outcome, but also will ensure that public policy and financial stability objectives are met.
- 2) **We believe that a robust data economy and its positive long-term impacts will be supported by both interoperability and an appropriate level of standardisation on a global scale.** Interoperability should also support a level playing field so that, if data is being shared outside the financial services sector, it is still subject to appropriate requirements and remains high quality and fit for purpose. Furthermore, any harmonisation would also need to occur across EU member states, while also being complementary to global frameworks. As outlined within the paper, this interoperability could be supported through a market-led forum that could support the implementation of both principle based standards and technical and security standards where appropriate.
- 3) **We believe that compensation is important in order to ensure fair allocation of costs across the data value chain and to safeguard fair competition. Compensation, for infrastructure and data services provided is also important to incentivise data holders to maintain a high level of quality and high functioning data sharing mechanisms.** Ensuring that each type of data is supported by an appropriate data sharing infrastructure enables data to be fit for purpose and reliable when used. Data reliability also supports a robust data economy and mitigates risks to data integrity, data security, regulatory compliance and the accuracy of end products for both corporate and retail consumers.
- 4) Finally, **liability provisions are important in order to provide legal clarity with respect to the access, processing, sharing, and storage of data.** These provisions should be consistent with GDPR and should also include specifications on redress and dispute resolution as well as consent mechanisms for consent beyond the usage of the data controller. In addition to the Open Finance Framework setting out liability provisions, it should also support and enable contractual agreements as these are crucial to fill any gaps in new use cases, or specialised scenarios which may require additional clarity on the legal, technical and other conditions governing data sharing.

AFME is supportive of the development of a robust data economy with a clear regulatory perimeter and hopes that the paper will encourage further analysis and consideration of these foundational principles as the EU continues its work on a future Open Finance Framework and data governance more broadly.

We have put forward 20 building blocks underpinning our key principles. Each of the four sections of the paper discusses the importance of the building blocks in further detail and provides illustrative examples of how they might be implemented in a future Open Finance Framework.

Introduction

The Association for Financial Markets in Europe (AFME) has welcomed the opportunity to comment on the recent EU consultations and proposals on data sharing such as the Data Act and the Targeted Consultation on an Open Finance Framework and Data Sharing in the Financial Sector. Building on these engagements, AFME has developed the following paper, to discuss in further technical detail, the impact of policy and emerging regulatory proposals within Europe on the data sharing practices of European wholesale capital markets banks.

We seek to complement our submitted responses and provide industry insights and use cases to illustrate the opportunities, challenges and focus areas of European capital markets banks for data sharing. The paper will also consider how the data sharing of banks can improve the way banks operate, while also encouraging innovation, mitigating risks being faced, and implementing new regulations.

AFME represents a broad array of European and global participants in the wholesale financial markets. Its members comprise pan-EU and global banks as well as key regional banks, brokers, law firms, investors and other financial market participants. We advocate stable, competitive, sustainable European financial markets that support economic growth and benefit society.

Our recommendations for an Open Finance Framework are discussed throughout the key principles of the paper, and the 20 building blocks underpinning those principles are provided below.

20 Building Blocks: Our key recommendations for a competitive, innovative and secure Open Finance Framework in the EU

Support a robust data economy and financial stability by ensuring a level playing field and enabling cross-sectoral data sharing:

1. The level playing field should ultimately be grounded in the principle of ‘same risk – same regulation’. This means that market participants who conduct the same activity with their data thus creating the same risks, should be subject to the same requirements and regulations. This principle should be applied across all parts of the data value chain and should include provisions for (among other things) accessing, sharing and reusing data, competition, consumer protection, and operational resilience of data services.
2. A level playing field should support the framework’s provisions for fair compensation for all data economy participants across the value chain.
3. A level playing field should encourage high quality, availability, and appropriate data controls across the data value chain.
4. The level playing field should remain flexible in the event that the Open Finance Framework generates new and different risks.

The framework should support both interoperability and an appropriate level of standardisation in order to promote fairness and deliver long-term impacts:

5. The standards should leverage elements already available, either at international level (OAuth, json, etc.) as well as those already occurring at European level (e.g. Berlin Group, STET, EPC, and PSD2).
6. The standards implemented should be voluntary and complementary with broader global financial sector guidance.
7. A future open finance and data sharing framework should encourage market-led standardisation and should incentivise quality control, appropriate security of data, and compliance with broader data requirements.
8. Some standards should remain principles based both to support EU-wide and global interoperability for financial services and to enable appropriate flexibility where needed.
9. Some principles should be specific depending on what type of data is in question (e.g. technical and security standards).

Building on the principle of a level playing field, we believe that a robust data economy is underpinned by an appropriate framework for compensation for infrastructure and data services provided:

10. The framework should incentivise data holders to maintain a high level of quality in the data and well-functioning and secure data sharing mechanisms, which is costly in and of itself. In the context of an Open Finance Framework, good quality data can be defined as data that is fit for purpose and can support the outcomes that it is being used for. The qualities that would make data fit for purpose include, but are not limited to: accuracy, removal of any duplicates, completeness of the data set, timeliness of the data if relevant to the use, and consistency.
11. The level of appropriate compensation should be set by the market.
12. The framework should support contractual agreements between data holders and recipients that enable agreements to be determined on a case-by-case basis as needed.
13. A compensation scheme should be interoperable across the EU and across multiple sectors, while taking global compensation practices into consideration.

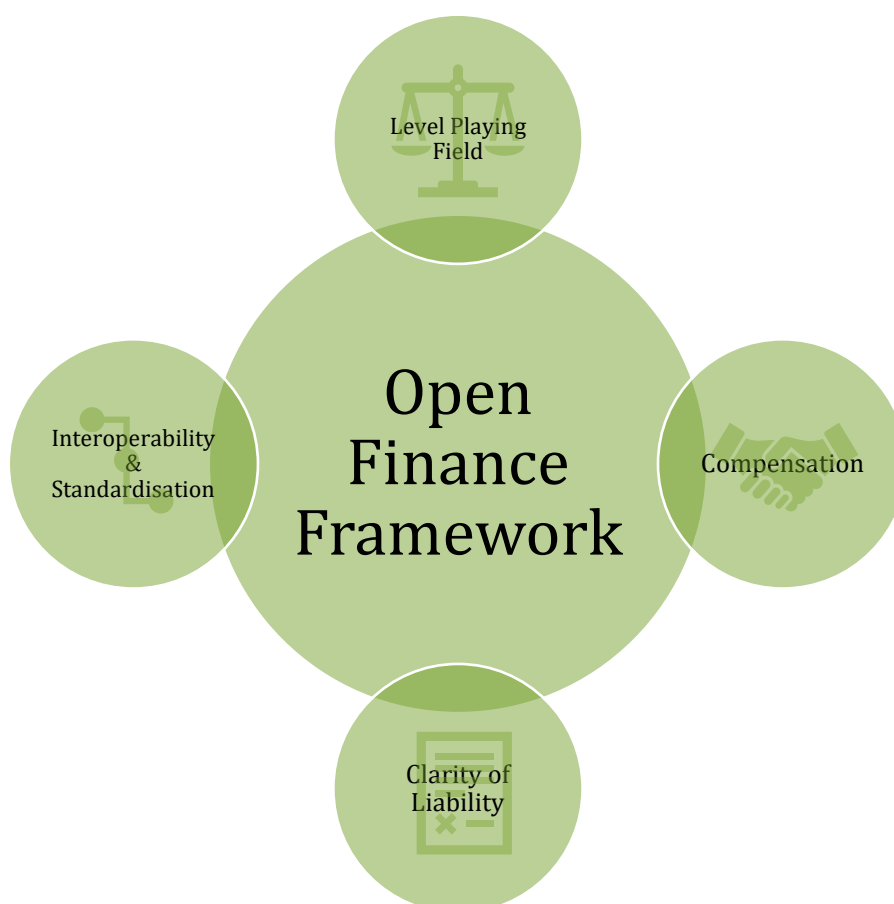
20 Building Blocks (continued): Our key recommendations for a competitive, innovative and secure Open Finance Framework in the EU

Building on the principle of a level playing field, we believe that a robust data economy is underpinned by an appropriate framework for compensation for infrastructure and data services provided (continued):

14. The compensation framework should encourage competition, whilst complementing existing competition law.

A future framework should clearly set out liability provisions to maintain trust in the ecosystem:

15. Clarify obligations and rights within the Open Finance Framework to better determine liability provisions with respect to access, processing, sharing and storage of data.
16. Ensure alignment with existing legislation in this space (e.g., the General Data Protection Regulation) and leverage instances where traditional liability provisions already apply.
17. Ensure appropriate redress mechanisms between actors in the data value chain in cases where data shared is misused, incorrect or out of date.
18. Ensure appropriate consent management mechanisms.
19. The liability framework should remain flexible to quickly adapt to new risks and liability considerations.
20. Contractual agreements should be supported to mitigate any unintended gaps or loopholes in liability when sharing on a cross-sectoral basis.





Level Playing Field and Cross Sectoral Data Sharing

Overview

We believe it is important to consider market standards and best practice across the open finance and wider open data ecosystem (e.g. including non-financial firms, the public sector, third party service providers, and cross sectoral companies) to ensure a level playing field. The level playing field is an overarching principle that reiterates and supports the following provisions discussed in this paper. It would support all following principles being applied to all market participants across the data chain, which would mitigate the potential risks of market distortion or regulatory arbitrage. Fundamentally, it means that, where specific risks exist in the data economy, that the same regulation is applied to those risks regardless of the entity conducting the activity. In order to build a leading EU data economy that is both sustainable and competitive, a level playing field is crucial to both encourage innovation (e.g. data sharing from SMEs who may have important data for new use cases), but also to mitigate the risk of monopolies and the exploitation of data.

In order for a level playing field to occur, it is critical for the Open Finance Framework to be applicable regardless of the size of the entity. Furthermore, in order to be allowed to share customer data (with consent) with any third-party firm, including in other sectors of the economy, the EU's data sharing framework should be voluntary and cross-sectoral.

Capital markets are already subject to existing data requirements as outlined in the subsection under the liability principle (e.g. DMA, DSA, GDPR), as well as international data transfer agreements and sectoral initiatives (e.g. PSD2 and DORA). These regulatory requirements promote a high quality of data within financial services, which supports data reliability and trust in the data economy. We would reiterate that it is important to take into account the significant resource required to maintain this quality. A level playing field is crucial for both the implementation of standards, guidance and reliable data use. However, within the level playing field the principles supporting appropriate requirements and compensation should remain. These principles, implemented through a market-led, harmonised, framework, would in turn support a robust EU data economy that would encourage data sharing and reuse as well as high quality data, not only within financial services, but on a cross sectoral basis. Should this level playing field not be in place, we do not recommend that financial sector firms be mandated to share financial services data more broadly.

Please see below the following recommended principles for a level playing field within a future Open Finance Framework.

1. Following the principle of same risk – same regulation:

The level playing field should ultimately be grounded in the principle of 'same risk – same regulation'. Where similar activities occur, so do similar risks, meaning regulation must address risks consistently and market players should be subject to the same requirements and regulations to reach consistent outcomes. This principle should be applied across all parts of the data value chain and should include provisions for (among other things) accessing, sharing and reusing data, competition, consumer protection, and operational resilience of data services.

Financial regulation ensures that all market participants carrying out the same activity and creating the same risks are subject to similar requirements. In relation to consumer protection and operational resilience however, there may be additional risks not currently captured. Furthermore, there may also be complexities with companies which may provide both financial and non-financial services. This principle is important to ensure that even when the lines are blurred, customers of financial services still have the same level of protection and that data is still subject to the same requirements and appropriate control mechanisms.

Furthermore, should the principle of 'same risk – same regulation' apply, firms accessing data held by others could then utilise said data in a similar way.

2. Supporting fair compensation:

A level playing field should support the framework's provisions for fair compensation for all data economy participants across the value chain.

This would support data holders in recovering the cost of sharing data (either within financial services or on a cross-sectoral basis).

3. Encouraging high-quality and high standards:

A level playing field should encourage high quality, availability, and appropriate data controls across the data value chain. This is crucial to ensure that data can be relied upon by all holders and participants in the data economy, and is also critical in order for the EU to have a leading data economy that sets a high bar for data sharing at a global level.

4. Remaining flexible and future-proof:

The level playing field should remain flexible in the event that the Open Finance Framework generates new and different risks. This is important in the event that new rules are required – the level playing field should remain adaptable and flexible in order to continue to guarantee appropriate protections and requirements.

Illustrative example of the importance of a level playing field

A recent BIS paper illustrates well the importance of a level playing field when considering data sharing outside the financial services sector. It notes that, “Big techs have expanded into financial services in recent years and are poised to expand further. Even though their financial activities (e.g. payment services) are a small part of their overall business, big techs may already be large players in some systemic activity, or soon could be. AB [Activity Based] regulation would be a natural starting point to ensure that big techs are subject to the same financial stability measures as other entities performing the same activities. In addition, as argued above,[macroprudential] MaP considerations would call for imposing tighter constraints on big techs that dominate a specific activity.” (pg. 10) This further reiterates the importance of the “same risk – same regulation” principle that is set out above. However, even with these principles in place it is likely that regulators and standard setters may need to take further action to mitigate cross sectoral risks in a future Open Finance Framework. The paper expands further, noting, “Given the network externalities stemming from the combination of big techs' many services - notably those involving the collection and use of data - financial stability measures may fall short of attaining their objectives. If data collected from non-financial businesses (e.g. social media, search, online commerce etc) can be used for financial services provision, there is a risk that a few big techs would quickly come to dominate (some) markets. Combined with centralised technology structures, this concentration might jeopardise financial stability (BIS (2021))... Ultimately, proper limits on the collection and use of data across big techs' multiple services will probably be needed to attain public policy objectives, including financial stability ones.” (pg. 11)



Interoperability / Standardisation

Overview

We believe that it is critical that a future Open Finance Framework supports interoperability and an appropriate level of standardisation in order for a new framework to have a successful implementation with beneficial long-term impacts. Interoperability within financial services is crucial to foster fairness in the digital environment by enabling firms to seamlessly switch between service providers. Broader cross-sectoral interoperability should be principles based and should support a level playing field so that, if data is being shared outside of the financial services sector, it is still subject to appropriate requirements and remains high quality and fit for purpose. Furthermore any harmonisation would also need to occur across EU member states, while also being complementary to global frameworks, (for instance CPMI/IOSCO Critical Data Elements¹ for reporting of derivatives), to support cross-border data sharing and to avoid legal uncertainty from differences in the implementation and interpretation of the EU legal framework.

When we refer to interoperability, it is important to note that there are specific types to be considered underneath the broader ambition. Interoperability can be considered in the following categories:

- Foundational interoperability: is the ability of one IT system to send data to another IT system. The receiving IT system does not necessarily need to be able to interpret the exchanged data — it must simply be able to acknowledge receipt of the data.
- Structural interoperability: represents the ability of the recipient system to interpret information at the data field level.
- Semantic interoperability: is the ability of IT systems to exchange and interpret information and actively use the information exchanged.
- Organisational interoperability: includes governance, policy, social, legal, and organisational considerations to facilitate the secure, seamless and timely communication and use of data both within and between organisations, entities, and individuals.

Each of these will require specific considerations when developing an Open Finance Framework and, as standards are developed, further research will likely be required for each individual category. In the remainder of this paper, we refer to interoperability in the broadest sense but acknowledge that these will each need to be addressed by both industry and regulators in due course.

In order for interoperability to occur, it is also important that there is a certain level of standardisation and data uniformity. However, there will need to be a balance between uniformity and adaptability. Data requirements should support quality control and cross-border data sharing while still enabling an appropriate amount of flexibility for any necessary contractual arrangements that may be determined on a case by case basis.

AFME members also acknowledge that it would be difficult to immediately implement interoperability and standardisation in a data sharing framework. We would encourage a progressive approach that works in phases with the market to continuously improve and revise standards for data sharing as needed. Additionally, the EU aims to be a leader in the data economy and AFME members are supportive of this. To lead, it is important for a framework to be developed at pace in order for the EU to be a standard setter, not a standards taker. However, it may be important for these standards to evolve over time as the data economy matures and as other global data sharing frameworks are developed. Given these global developments, it will be important to consider how the EU can support global interoperability as well (in all its forms), and how the EU's framework can remain future-proof.

We recommend that a future framework should build this standardisation and interoperability through market-led guidance and collaboration between market players, standard setters and industry bodies. This approach is necessary to set an appropriate path of development towards a data-based economy. This would support fair compensation for collecting and sharing the data as previously noted.

¹ <https://www.bis.org/cpmi/publ/d182.pdf>

We also recommend the following principles for interoperability and standardisation:

5. Leverage existing solutions:

The standards should leverage elements already available, either at international level (OAuth, json, etc.) as well as those already occurring at European level (e.g. Berlin Group, STET, EPC, and PSD2).

As acknowledged above, interoperability is difficult and not expected to occur immediately. Given the challenges it is important that the Open Finance Framework leverages existing standards which are already being implemented in financial services for data sharing within the financial services sector (for example, FIX format and PSD2 data format).

The Open Finance Framework could begin by defining data structures, which are specialised formats for organising processing, retrieving and storing data. These structures would then bring together data elements and facilitate their effective use and sharing. Specific recommended structures for standard data types (e.g. integers or floating-point values) could be built into the market-led standards.

6. Ensure the voluntary and complementary nature of standards:

The standards implemented should be voluntary and complementary with broader global financial sector guidance.

Voluntary standards are beneficial because, if led by the participants of the data economy they could apply even if the financial regulatory perimeter may not extend to other sectors. If the participants of the data economy voluntarily set their own standards, it will be in the interest of market participants to meet them in order to interact with other market players. Moreover, they can be drafted to a level of technical detail that would simply not be possible with regulation. It is also much easier to update a voluntary standards to keep pace with changing market practice in the rapidly evolving data economy than to overhaul a piece of regulation.

Furthermore, for voluntary industry codes to be as effective as possible, the aim should be to create standards that are the result of rigorous drafting and consultation, which are also open to scrutiny, reviewed at regular intervals and are up to date, and that industry is committed to upholding.

It is also important to consider broader global financial sector regulation and guidance, so that the voluntary standards that are developed also support interoperability between the EU's data economy and other global markets.

7. Encourage market-led standardisation:

A future open finance and data sharing framework should encourage market-led standardisation and should incentivise quality control, appropriate security of data, and compliance with broader data requirements.

The approach to data sharing should be market-led, leveraging approaches from sectors with the highest quality standards and encouraging other market participants to reach that level (at a minimum). Additionally, the market-led approach should be harmonised, striking a balance between a centralised and federated approach. Harmonisation in data sharing would enable the market to come to agreements on recommended platform and standard services while still enabling individual firms to set up and own their data sharing platforms.

This approach would support harmonisation across financial services and beyond, but would also reduce a potential maintenance and governance burden that would accompany a completely centralised approach to standards and data sharing.

8. Focus on a principles-based approach:

Some standards should remain principles based both to support EU-wide and global interoperability for financial services and to enable appropriate flexibility where needed.

Harmonisation of principles across EU member states is important as the principles can remain consistent while still enabling specific relevant national laws to apply.

Principles based standards also allow for differences across varying types of data and data sharing. E.g. different standards may be needed for sharing specific types of data depending on the regulation certain data may already be subject to. They also enable guidance to be future proof and supportive of future innovation in data sharing. Standards that are principles based also support a level playing field. If financial services data is to be shared more broadly, it is crucial for quality control to be maintained as well as compliance with data governance for financial services data.

Those principles should be compatible with standards already implemented (in PSD2 area, for instance) to maximise the return and minimise the investment for those market players that have already implemented mechanisms to third parties to access data.

9. Take the infrastructure needed, and services applied, to specific data into consideration:

Some principles should be specific depending on what type of data is in question. For example, certain technical standards would not be appropriate to be applied as principles. Data sharing protocols are specific and would need to be precise in order for interoperability to occur on a large scale. Examples of some data protocols that already exist and could be leveraged in an Open Finance Framework are set out in the following section.

Similarly, certain security standards are also not appropriate to be applied via principles based guidance. In order to conduct a secure data transfer there are many options to ensure that sensitive data remains confidential. For example, a data holder or receiver could use (among other things): email encryption, website encryption, File Transfer Protocol (FTP) and/or Secure File Transfer Protocol (SFTP), Secure HyperText Transfer Protocol (HTTP), Off the Record (OTR) messaging, cloud services, or Peer to Peer (P2P) communication.

An Open Finance Framework would also need to specify which security standards would be permissible within the framework. It could also set out guidance on acceptable existing data sharing protocols that could be used and specify the standards that these protocols meet. Any new protocols used should also meet the minimum security requirements.

However, it is also important that these specificities / more prescriptive requirements are set in a future-proof way so that they can also continue to be evolved in an agile manner to adapt to market evolution.

The illustrations below demonstrate potential options to operationalise the five principles discussed above:

Proposals to operationalise interoperability and an appropriate level of standardisation

Market-led Open Finance Forum

- A forum could be developed that could operate in a harmonised manner with voluntary contractual schemes for participants.
- All market participants from various sectors could participate as long as they meet the requirements and standards agreed upon by the forum.
 - Market participants would have to sign up to the contractual scheme and agree to meet the requirements in order to participate in data sharing.
- These standards could be reviewed by the forum on a yearly basis.
- The forum could support for example minimum technical and security standards for data sharing as well as recommend specific platforms and data structures.
 - This would still allow for individual firms to develop their own platforms and adjust for business needs while still ensuring alignment with minimum standards and guidance.
- The forum could also meet on a quarterly basis with regulators to share market developments and future views on any changes that may be recommended to the minimum standards and guidance.
 - This regulatory engagement with both EU regulators and standard setters could ensure further promotion of the standards within the EU as well as globally.

SWIFT

(The Society for Worldwide Interbank Financial Telecommunication)

- SWIFT can be considered as a useful example of how successful interoperability and standardisation can occur with technical integration at a foundational level.
- SWIFT was originally built on three pillars: a secure and reliable communication protocol, a set of message standards, and continuous new services aligning with its members' needs. Growing from these three pillars SWIFT now provides interoperable financial messaging services that can be used on a cross-border and global scale.
- It is also interoperable on a cross-sectoral basis. Non-bank financial institutions are also able to participate in the exchange of securities, foreign exchange, and other financial messages.
- Because SWIFT was able to be an interoperable standardised connection it also created efficiencies and lowered costs.
- However, this interoperability was rooted in technical standards where necessary. It implemented a common language to be used by all members. The ISO 15022 standard, more commonly known as the SWIFT MT or Message Type standard, was introduced in 1995 and then as the market evolved and new technologies were developed XML (ISO 20022) was adopted and deployed in 2019 in every major global network.
- An Open Finance Framework could leverage this type of approach, implementing technical data standards where appropriate, but encouraging and promoting horizontal and global interoperability.
- Furthermore ISO 20022 could be referenced as a starting point for the data taxonomy. This would support standardisation as this has already been adopted and deployed across financial services as well as to non-bank financial institutions.

Existing Data Sharing protocols that can be leveraged by the Open Finance Framework

Delta Sharing Protocol: is a Linux Foundation open source framework that uses an open protocol to secure the real-time exchange of large datasets and enables secure data sharing across products. It securely shares access to part of a cloud data set and uses modern cloud storage systems (e.g. S3, ADLS, or GCS) to transfer data sets. A user accessing the shared data can directly connect via Pandas, Tableau, or other systems that implement the open protocol, without having to deploy a specific platform first. This creates time efficiencies and also enables data providers to reach a greater breadth of users.

Parquet file: is an open source file format that supports efficient compression and encoding schemes. It is a columnar storage format that supports nested data. This enables enhanced performance when compressing and encoding and can handle complex data in bulk. Parquet is available in multiple languages including Java, C++, and Python.

ISO 20022: As mentioned above is a single standardisation approach (methodology, process, repository) to be used by all financial standards initiatives. It is a multi-part International Standard prepared by ISO Technical Committee TC68 Financial Services. It describes a common platform for the development of messages.



Overview

We believe it is important that a future Open Finance Framework, and broader data sharing guidance, establishes the possibility of receiving reasonable compensation for making data available. In order to safeguard fair competition and achieve a level playing field, costs and incentives should be appropriately allocated among the different players in the data value chain. AFME members would note that this compensation is for the infrastructure and service slice restructuring that occurs, not the data itself.

Furthermore, as with all recommendations in this paper, a compensation scheme, regardless of what legislative framework it is part of, should also be complementary to broader horizontal approaches to data such as the Data Act, including its specific provisions with regard to, for example, the internet of things (IoT) and access to/use of data generated by IoT devices and related services. However, the Data Act mentions that compensation within sectors could be reduced or eliminated. In the considerations we set out below we aim to demonstrate that this should not be the case as it could create asymmetries and would not be appropriate considering the costs involved for the infrastructure and services applied. We would note though that the Data Act proposal also requires compensation to be fair, non-discriminatory and reasonable and these are principles that we would support in future frameworks.

Building on these principles of the Data Act, it is important to note that AFME members support the provisions that data users and subjects should not bear the compensation cost. Rather – it should be the third party accessing the data that should compensate the data holder. AFME members support a data economy that is fair and reasonable but that also protects the rights of data subjects and users.

Finally, it is important that the Open Finance Framework builds on utilities and partnerships where the market is functioning well. For example, it could continue to utilise industry utilities such as S&P, Bloomberg, and Reuters that already contribute to the data sharing ecosystem.

We recommend a future framework for compensation be based on the following five principles.

10. Encourage and incentivise a high level of quality:

The framework should incentivise data holders to maintain high quality data and well-functioning and secure data sharing mechanisms, which is costly in and of itself. In the context of an Open Finance Framework, good quality data can be defined as data that is fit for purpose and can support the outcomes that it is being used for. The qualities that would make data fit for purpose include, but are not limited to: accuracy, removal of any duplicates, completeness of the data set, timeliness of the data if relevant to the use, and consistency.

Quality control in data maintenance and sharing is critical because it enables the data to be relied upon. Data reliability ensures that data can be consistently used across multiple records, programs, or platforms. If a data source is untrustworthy it may not be consistently valid. It then follows that if a future framework incentivises the development of well-functioning and secure mechanisms this would support data sharing that is safe and secure.

A non-qualitative, low-cost or free data environment and data-sharing framework would be very detrimental to the reliability of the data being shared. Unreliable data could then have unintended negative knock-on impacts to the broader EU ambition of a modern and globally leading data economy.

High quality data is also important in order to ensure that consumer trust is upheld. If data cannot be relied upon to provide consistently valid information then it misrepresents the consumer and goes against basic principles of consumer protection.

Furthermore, capital markets are already subject to existing data requirements (DMA, DSA, GDPR) as well as international data transfer agreements and sectoral initiatives (PSD2 and DORA). These regulatory requirements promote a high quality of data within financial services.

An Open Finance Framework, implemented on a horizontal basis, enabling cross-sectoral data sharing, will require appropriate contractual agreements to ensure the data quality remains high, and that access

mechanisms are well implemented and remain well functioning and secure. We would emphasise the burden of care when using data. It is important for data receivers to conduct a robust assessment of any data used either from within their own sector, or from outside, to ensure that it is high quality and fit for purpose in each specific use case. The liability for the quality is therefore with the receiver which reiterates the importance of a level playing field which would ensure that conditions for data usage are consistent across sectors. Quality control of data as defined above would also support a level playing field across sectors, rather than creating unintended gaps in regulatory requirements for non-financial services firms who may be using financial services data.

11. Adopt a market-led approach:

The level of appropriate compensation should be set by the market. The market itself and those who are closest to the data would be able to most appropriately set a compensation rate that would avoid inconsistencies and gaps that may hamper a strong EU data economy.

It would also be beneficial to have common guidance for the market-led approach, for instance to identify parameters to take into consideration when setting compensation such as the complexity of the infrastructure supporting the data sharing or the volume of data exchanged. This voluntary guidance could be drafted in the same manner as regulatory technical standards – drafted by legislators with industry input.

A market-led approach that adapts with the market rate would also enable a compensation framework to be more future proof and adaptable. It may also be appropriate to apply multiple data sources / different interpretations of value when determining what the market rate is.

A market-led framework also could enable for the provision of data for free where this may be appropriate (e.g. as a universally agreed interest within an industry sector).

A market-led framework should – as noted above – support and protect the rights of data subjects meaning any costs would be borne by a third party accessing the data from the holder – not the data subject or user. This is because the compensation is for the infrastructure and data restructuring that occurs and the processes conducted by the data holder. Thus the third party accessing the data from the data holder is compensating them for the service provided within the data economy.

12. Support contractual arrangements:

The framework should support contractual agreements between data holders and recipients that enable agreements to be determined on a case-by-case basis as needed. There may not always be a one size fits all approach for data sharing. The ability to agree compensation on a contractual basis would support the above two principles of quality, and an appropriate market rate.

Contractual agreements would also serve to future proof the framework and support new types of data sharing as innovation continues (e.g. in the field of artificial intelligence) and technology continues to rapidly evolve.

We would also note that the Open Finance Framework, when prescribing the possibility of drafting contractual agreements between the data owner and the receiver, should also prescribe safeguards to avoid the negotiation autonomy of the parties to circumvent the principles, or weaken the protection already implemented by data protection rules for the benefit of the clients (e.g. to avoid contractual provisions that would be in practice, a sharing of clients' data, for mere marketing purposes).

13. Ensure interoperability:

A compensation scheme should be interoperable across the EU and across multiple sectors, while taking global compensation practices into consideration. This is important in order to mitigate the risk of fragmented national legislation which could exclude compensation or provide for lower compensation for making data available, which in turn may lead to market asymmetries.

14. Encourage competition

The compensation framework should encourage competition, whilst complementing existing competition law. An Open Finance Framework should encourage competition without creating barriers to entry for market participants. However, we would note that market participants should be regulated by the guidance set out in the level playing field in order to mitigate risks to clients and all the subjects involved (e.g. provider and user).

Generally speaking, we would also encourage participants to be entities that, for their activity, already own/use data exchange platforms or interoperability systems (e.g. SWIFT) or are equipped with appropriate data resources and infrastructure.

Open competition between data holders will also encourage the creation of products that meet users' needs and so compete on accessibility, quality as well as price to encourage continued innovation. Competition law and the EU's initiatives for the data economy (e.g. DMA etc) is there to provide a safeguard in the [unlikely] event that there is a concern around the manner in which a specific set of data is being provided, despite competition encouraging the provision of that data.

In summary, the Open Finance Framework should build on the existing idea of public markets as well as the principle of a level playing field, which is discussed in the previous section, in order to encourage a marketplace that evolves to support innovation and greater efficiencies as data technology continues to develop. The importance of these five principles is further illustrated in the considerations in the below section.

Further illustrations of the costs of data services and infrastructure

We would like to first emphasise that “data” is a broad term, and as stated before the different costs associated with data exist because of the different infrastructures utilised and services applied. Our illustrations below are non-exhaustive, and only aim to provide initial considerations for the development of compensation guidance in a future Open Finance Framework.

Furthermore, we would reiterate our support for the Data Act, and GDPR, as well as other existing legislation, and would urge any future framework to remain consistent with the requirements that already exist. For example, if certain data would be considered exempt from mandatory sharing within the Data Act (potentially due to factors such as competition), these exemptions should apply in an Open Finance Framework as well. Upholding these legislative principles will also support the development of a level playing field as set out in the first section of this paper.

We would first set out some considerations on the costs involved in financial services data and would reiterate that this is a non-exhaustive list.

Considerations on the costs involved in financial services data

- **System cost:** In order to collect data a firm must first have a data system. This will involve purchasing hardware and software, as well as spares, cables, batteries, accessories, service contracts etc. Additionally, each company will need to create their own custom programming and interfaces. This will all either require in-house programming and resources, or contracting this out to a third party. System costs will be incurred for all data types.
- **Production cost:** This is any direct or indirect cost that results from manufacturing a product or providing a service. For example, any organisation, standardisation or analysis of data would produce a production costs. Production costs also include a variety of expenses, such as labour, raw materials, consumable manufacturing supplies, and general overheads such as power and cooling, floor space (in data centres), and administrative costs. There may also be production costs required in order to make the data usable for compliance with applicable laws.
- **Collection cost:** Raw data is the form data takes when it reaches a computer system from the outside world. Even though it has not yet been vetted for correctness, nor sorted into any sequence, or processed in any other way, there would still have been system and production costs before the data can even be collected. Then, in collecting raw data, either through financial services, technology services, or human collection, there are costs that will be incurred for raw data to be obtained by the data holder. This collection cost is important to consider when developing a compensation framework.
- **Structuring cost:** Once collected, raw data will then likely be updated or enhanced either manually or via computer processing. This may mean either organisation/standardisation of the data, specific structuring being applied to data, adaptation or alteration of raw data or the combination of raw data with other information or data sets which may come from or EU law. These processes when applied will incur costs and should be taken into account in a compensation scheme.
- **Access cost:** Costs are also incurred in data access and in order to maintain the required infrastructure (e.g. Application Programming Interfaces APIs). In order to make data more widely available there will be additional system setup and maintenance costs, to ensure the quality of the data when access is granted but also to control its availability. Security is also a consideration, and additional costs may be incurred to ensure the security of the data communications. Data access costs may also vary in terms of the type of service (e.g. insurance, investment, banking), the scale of access, as well as the number of data access points in existence.
- **Sharing cost:** When data is shared, there are additional costs incurred or “lost” due to three key factors: underutilized network, the cost of productivity loss due to the requirement of moving or copying data, and the cost of storage used to store duplicates of data in multiple locations. These costs are also important to consider when determining the market rate for the data.

Taking these elements of cost into consideration we would provide the following recommendations – noting again that this is non-exhaustive and that overall, a wholistic market-led approach is encouraged that takes into consideration appropriate parameters to consider when developing a compensation framework. These parameters should aim to not be overly prescriptive so that they might remain future-proof and agile in order to adapt to market evolution. With these principles in mind, we propose the below key recommendations:

Key recommendations

- Given the different elements that contribute to the cost of data as set out above and the differences in complexity depending on what infrastructures and services are applied to data, we believe that there should also be different market-led rates of compensation. For instance, if data primarily incurred system, production and collection costs this may require a different rate to data that incurred all of the above in addition to structuring, sharing, and access costs.
- In cases where there may be dominant market players and there are limited market access points, (e.g. where data is not accessible and a new access point is being created), well-assessed market distortion, and when there are no other remedial measures to alleviate them, the data holders' ability to charge for data access should be limited through a maximum compensation ceiling and associated cost restrictions (e.g. defining which cost elements may be recovered by fees).
- In line with the Data Act, small market players should be taken into consideration and it is important to avoid excessive data access costs to ensure similar footing for smaller and larger market players.
- Additionally, any cost restrictions should aim to ensure to at least cover the costs of data sharing with other parties. There should also be safeguards from unilaterally imposed unfair terms to ensure the principle of a level playing field.
- As set out in the above section on interoperability, a harmonised forum could also support a common understanding of costs involved in some sectors and a specific cost sharing model may be applied. For instance, data sharing between actors may be facilitated through a forum which could also ensure some data quality oversight, and also assist in keeping track of the market actors with access to specific data. However, it is important to note that appropriate structuring to match market-led standards would also incur a cost.



Clarity on liability assignment

Overview

AFME members believe that it is crucial for a future Open Finance Framework to have clear obligations and rights to determine liability with respect to the access, processing, sharing, and storage of data. Clear rules on liability are of course of central importance from a legal perspective – particularly whether the disclosing party is obligated to vet the recipient party (absent any white-listing regime such as the Financial Conduct Authority's for Account Information Service Providers (AISPs) and Payment Initiation Service Providers (PISPs)) or implement any contractual controls in relation to protection and processing of the data. These liability provisions would still be important both for contractual and non-contractual data sharing. They should also build on existing standards such as GDPR.

According to Article 4 of the GDPR, a data controller is the entity (person, organisation, etc.) that determines the why and the how for processing personal data. A data processor, on the other hand, is the entity that actually performs the data processing on the controller's behalf. Generally, data controllers have more accountability and liability, but processors will also have responsibilities and liability written into their roles. An Open Finance Framework should build on these liability provisions – supporting consistency of standards and existing liability provisions in financial services.

Furthermore, we consider that, as in any type of transaction and, given that access to the data requires an appropriate processing base, any liability relating to a subsequent action taken on the data or use of the data should be borne directly by the third party who has acquired access to the data. Additionally, once data is received by a third party, the third party and original data holders are not joint-controllers under the GDPR. This would usually be clarified in contractual arrangements in order to provide clarity of liability throughout the entirety of the process.

Clear rules on liability are also important to ensure appropriate redress between actors in the data value chain in cases where data shared is misused, incorrect, or out-of-date. It is important that any participant in the data economy should be able to address liability claims in any cases of misuse. Dispute resolution procedures would be beneficial in order to facilitate out-of-court settlements.

Consent mechanisms are also crucial when implementing a future framework. When obtaining consent, firms should ensure that the consent is provided for usage beyond that of the data collector. Further to this when data is shared either within financial services or on a cross sectoral basis, the data holder who is planning to use the data should provide the declaration / consent similar to OAuth. OAuth or Open Authorisation is an open standard for access delegation, and commonly used as a way for internet users to grant websites or applications access to their information.

While clarity is important, the Open Finance Framework should also consider the rapid progress of digital innovations. The framework should be prepared to adapt as needed to accommodate the potential development of new risks and liability considerations.

Overall, AFME members believe that liability provisions are crucial as they would mitigate risks of legal uncertainty and also support broader accountability, trust, and reliability in an Open Finance Framework. These provisions can be further supported by the legal, technical and other conditions governing data sharing through contractual agreements and service documents supplementing the contract. These contractual schemes can also support the above through effective dispute settlement. However, it is important to note that contractual schemes alone will not likely be the solution to all needs and should work in cooperation with the other principles discussed throughout this paper. As also previously noted, contractual schemes - without prejudice to the negotiating autonomy of the parties - should not result in tools to circumvent the regulatory principles on this matter.

The following page illustrates existing liability provisions that could be built on in an Open Finance Framework.

Existing liability provisions that could be built upon in the Open Finance Framework

Data sharing within financial services.

- Within financial services, financial legislation and traditional liability provisions apply. For example in relation to consumer protection and liability:
 - PSD2 would apply (in relation to payment accounts),
 - Mortgage Credit Directive (in relation to mortgages),
 - Insurance Distribution Directive (in relation to activities of insurance and reinsurance),
 - MiFID II (in relation to the performance of investment activities).
- These existing liability frameworks mean that some of the liability risks would already be addressed because of the key principles already in place:
 - (e.g. ensuring that firms act in the best interest of the consumer, respect rules on disclosures, and provide sound advice).

Data sharing outside of financial services

- Sharing of data beyond what is required by PSD2, GDPR or any other regulation is usually based on bilateral or multilateral contracts between the data holder(s) and those willing to access customer data.
- In such situations, the legal, technical and other conditions governing the data sharing are covered in the contract or service documents supplementing the contract. Those conditions usually tackle any potential obstacle that could hinder the provision or use of those services, given that both the contract and the accompanying documentation are freely signed by all parties involved in the service, all of them are aware of its rights and obligations when using/providing the service(s). A contractual agreement could also help to mitigate any unintended gaps or loopholes in liability when sharing on a cross-sectoral basis. They would be a vital part of any future Open Finance Framework in order to uphold all the principles discussed throughout this paper.

Conclusion

In summary, we recommend that the future Open Finance Framework build upon the principles discussed in this paper to support the EU in leading a global data economy. We encourage a market-led approach that is harmonised and supports standard services but still gives individual firms the flexibility to setup and own their platform as a part of the broader framework. This would allow for alignment, without overly onerous requirements that may not remain future proof in the rapidly evolving digital economy.

We would reiterate the importance of our four key principles as the foundation of a future Open Finance Framework:

- 1) **First, the principle of a level playing field is crucial**, and underscores each of the subsequent 3 principles. **In order for an Open Finance Framework to flourish not only in financial services but across multiple sectors, there must be consistent and appropriate regulatory oversight.** This consistency is key in order to both support innovation, but also to discourage monopolies, encourage competition and efficiency, and to lower costs for both corporate and retail customers, creating a robust and effective data economy. For this to occur, regulation must address risks consistently and market players must have consistent regulation if data is to be shared across the sectors. We remain supportive of a thriving data economy for market participants and believe that a level playing field will ensure this outcome, but also will ensure that public policy and financial stability objectives are met.
- 2) **We believe that a robust data economy and its positive long-term impacts will be supported by both interoperability and an appropriate level of standardisation on a global scale.** Interoperability should also support a level playing field so that, if data is being shared outside the financial services sector, it is still subject to appropriate requirements and remains high quality and fit for purpose. Furthermore, any harmonisation would also need to occur across EU member states, while also being complementary to global frameworks. As outlined within the paper, this interoperability could be supported through a market-led forum that could support the implementation of both principle based standards and technical and security standards where appropriate.
- 3) **We believe that compensation is important in order to ensure fair allocation of costs across the data value chain and to safeguard fair competition.** Compensation, for infrastructure and data services provided is also important to incentivise data holders to maintain a high level of quality and high functioning data sharing mechanisms. Ensuring that each type of data is supported by an appropriate data sharing infrastructure enables data to be fit for purpose and reliable when used. Data reliability also supports a robust data economy and mitigates risks to data integrity, data security, regulatory compliance and the accuracy of end products for both corporate and retail consumers.
- 4) Finally, **liability provisions are important in order to provide legal clarity with respect to the access, processing, sharing, and storage of data.** These provisions should be consistent with GDPR and should also include specifications on redress and dispute resolution as well as consent mechanisms for consent beyond the usage of the data controller. In addition to the Open Finance Framework setting out liability provisions, it should also support and enable contractual agreements as these are crucial to fill any gaps in new use cases, or specialised scenarios which may require additional clarity on the legal, technical and other conditions governing data sharing.

Overall, AFME and AFME members continue to be supportive of the development of an Open Finance Framework and a robust data economy with a clear regulatory perimeter. We look forward to continuing to engage with regulatory partners as legislation is developed and hope that these foundational principles will provide further industry insights into technical topics on data sharing as the EU continues its work on a future Open Finance Framework and data governance more broadly.

Contacts



Andrew Harvey
Managing Director
+44 (0)20 3828 2694
aharvey@gfma.org



Ian Waterworth
Director, Technology and Operations
+44 (0)20 3828 2685
ian.waterworth@afme.eu



Elise Soucie
Associate Director, Technology & Operations
+44 (0)20 3828 2678
elise.soucie@afme.eu



Hélène Benoist
Associate Director, Advocacy Brussels
+32 2 788 39 76
helene.benoist@afme.eu

/ About AFME

The Association for Financial Markets in Europe (AFME) is the voice of all Europe's wholesale financial markets, providing expertise across a broad range of regulatory and capital markets issues.

We represent the leading global and European banks and other significant capital market players.

We advocate for deep and integrated European capital markets which serve the needs of companies and investors, supporting economic growth and benefiting society.

We aim to act as a bridge between market participants and policy makers across Europe, drawing on our strong and long-standing relationships, our technical knowledge and fact-based work.

Focus

on a wide range of market, business and prudential issues

Expertise

deep policy and technical skills

Strong relationships

with European and global policymakers

Breadth

broad global and European membership

Pan-European

organisation and perspective

Global reach

via the Global Financial Markets Association (GFMA)



London Office

39th Floor
25 Canada Square
London, E14 5LQ
United Kingdom
+44 (0)20 3828 2700

Brussels Office

Rue de la Loi, 82
1040 Brussels
Belgium
+32 (0)2 788 3971

Frankfurt Office

Neue Mainzer Straße 75
Bürohaus an der Alten Oper
60311 Frankfurt am Main
Germany
+49 69 153 258 963

Press enquiries

Rebecca Hansford
Head of Media Relations
rebecca.hansford@afme.eu
+44 (0)20 3828 2693

Membership

Elena Travaglini
Head of Membership
elena.travaglini@afme.eu
+44 (0)20 3828 2733

Follow AFME on Twitter

@AFME_EU