Being ready for the digital age

OPTIC 2023 – Brussels, 17 October 2023

Verena Ross
Chair

Ladies and Gentlemen,

I thank the Association for Financial Markets in Europe (AFME) for giving me the opportunity of addressing you today. I am delighted to stand before you as we gather to discuss the new technologies and their impact on capital markets.

The times we are living in could be undoubtedly called a technological “renaissance”. We are experiencing very high pace of change that impacts almost every aspect of our life – private and professional. This comes with the exponential growth of available data and information. On the professional front, we have the opportunity to harness available technologies and develop new tools that could change the way we work for the benefit of all – market participants and supervisors. Thanks to the new tools and data, we can become more efficient and make smarter
decisions. Importantly, the technologies could also help in reducing compliance costs for the market.

Technological developments and their impact on the operations of financial institutions are the dominant theme of this event. Therefore, I would like to speak today about ESMA’s take on this topic and our strategic initiatives in the technology and data domain. Given the agenda for this conference, I also would also like, at the end of my remarks, touch briefly on one topic that is raising a lot of debate and on which AFME has been very engaged – namely settlement cycles and T+1.

**ESMA Data Strategy**

Data and reporting have played an important role on ESMA’s agenda already for several years. We have been entrusted with the leading role in the implementation of multiple supervisory reporting regimes in EU securities markets and data systems underpinning these regimes. We have also grown significantly as the direct supervisor of the key market data infrastructures, such as Trade Repositories first and Data Reporting Services Providers more recently.
In order to have a more holistic approach to our work on data, we developed, already in 2017, the first ESMA Data Strategy. This strategy has guided us in the successful delivery of multiple projects. We have progressed significantly in the standardisation of the reporting regimes within our remit.

We have also contributed to international work, for example, to the development and successful implementation of key international data standards, such as the Legal Entity Identifier (LEI), Unique Transaction Identifier (UTI), Unique Product Identifier (UPI), International Securities Identification Number (ISIN), and many others. These standards are instrumental for both the regulators and the industry to move away from a regime-specific and siloed approach, towards a more holistic approach to data. The end goal being to allow entities to report the same information in the same way, no matter which regulation they need to comply with. Such an approach can contribute to significantly reducing the compliance burden that market players face.

We have also increased the use of data in our own day-to-day work. You might have noticed our multiple publications on monitoring market developments and pointing to key risks. These are relying heavily on data.
As examples, let me just cite here the regular risk and statistical reports as well as such ad-hoc deliverables as the reports on the carbon market (the latter being driven by new monitoring mandates in light of the energy crisis). Such publications make data and analysis (based on the new regulatory data) available to the wider market. The work contributes to building a better picture of the structure of, and key developments in, EU markets, it provides information on risks to supervisors and policy makers at EU and national level, and ultimately helps to inform policy decisions.

Finally, we have progressed towards becoming a reliable data hub for EU securities markets, through the development of many centralised systems that provide data to multiple authorities, market participants, and the public. Our exchange systems provide authorities with access to supervisory data such as transaction data or trade repositories data. Moreover, we publish a wide range of cross-EU data sets, including reference and transparency data on financial instruments, that is important for multiple market participants.

**But we cannot rest on our laurels.** Data and technology will remain an extremely hot topic in the years to come, with plenty of opportunities and challenges for all of us. That is why we have reflected it as a key cross-
cutting thematic driver in our five-year ESMA Strategy last year. We have also developed a new Data Strategy that sets out our specific objectives in this area for the next 5 years. This document was published in June. I want to give you a few examples of important topics we have included in this Strategy.

**Data-driven supervision**

The supervision of EU financial markets and markets participants is shared between ESMA and the National Competent Authorities (NCAs), with the vast majority of market players being supervised at national level. Ensuring efficient and convergent supervision throughout the Union is one of our strategic priorities. I have been trained as a supervisor and it is very clear to me that in order to properly perform supervisory duties, to be able to properly identify, analyse, and address risk, we need data.

A data and evidence-based approach has been the key to the successful implementation of ESMA’s own supervisory mandates during the last couple of years. Many NCAs have taken a similar approach. **We now want to further strengthen our cooperation with and amongst NCAs, with common tools and methodologies** – not only to enable effective
collaboration and sharing of information – but also to drive proactive identification, prioritisation and addressing of risks across the EU financial markets.

I am sure that we all follow the developments in the domain of Artificial Intelligence (AI) as it has been gaining more and more attention recently. Not so long ago, AI was considered as something advanced and complex and only trained experts could use it. Today, it is a very tangible and easily available technology that can be used by everyone, as conveniently as Google Search.

We believe that AI could be useful for supervisors in **unlocking the full potential of data that we have access to**. Indeed, AI could allow us to combine and analyse structured and unstructured data from different sources and make sense of it. It may also help to identify new types of risks or illicit behaviours that could not be easily identified by “traditional” data analysis and monitoring systems.
Let me give you two examples of exciting projects we are now starting with the NCAs:

- One is related to the use of AI in the monitoring of market abuse. We believe that the new analytical approaches based on AI could help the NCAs become more effective and efficient in dealing with large volumes of data, including transaction and orderbook data as well as unstructured information from public sources, such as social media.

- Another example is the development of Natural Language Processing (NLP) tools to scan the public disclosures of investment funds, which consist of thousands of documents and, in practice, are difficult to be analysed by supervisors manually. Our objective is to build automated supervisory indicators helping to spot potential greenwashing practices for example.

While AI opens a lot of opportunities for enhanced complex analysis, it also comprises a number of risks that we need to properly assess and monitor.

**Efficient reporting and use of data**
Another important focus area in the ESMA Data Strategy is ensuring the overall efficiency of data reporting. During the last years, we have experienced substantial growth of reporting obligations, including on OTC derivatives, securities financing transactions, securities markets and hedge funds. Some important reporting and disclosure requirements are yet to come, for example those related to ESG or investment funds. This, obviously, is necessary to provide the supervisors with the data to allow them to conduct effective supervision. But it also requires substantial investments to develop data systems by both: market participants having the obligation to report or disclose data, and authorities receiving it.

We consider it very important to ensure that we make efficient and effective use of the data that the authorities receive. During recent years, ESMA and the NCAs have made substantial investments to overhaul their technology infrastructure and resources, ensuring that we have the capability and flexibility that is required. This resulted in multiple systems being developed and built at Member States level and – in a centralised manner - at EU level.

One of the most important developments for ESMA was our Data Platform that is based on cutting-edge cloud and big data technologies. So far, it
has been used by ESMA staff to support more and more of our regular tasks related to the analysis of the universe of data that ESMA has.

Building on our past experience, we will continue joint EU projects that allow achieving economies of scales and minimising costs, maximising the use and sharing of data, and reducing duplicative data flows and requests.

Therefore, the next step for us is to bring the benefits of the ESMA Data Platform to the NCAs and we are now working to provide them access to this platform. This will allow the larger supervisory community to use the centralised data source and the modern system. It will be also an important step in ESMA’s evolution from a data hub to an information hub that provides analytical outcomes and actionable insights in a user-friendly manner.

We also plan specific initiatives aimed at aligning and modernising the reporting regimes and, consequently, reducing the reporting burdens. The legislation amending the AIFMD and UCITS directives, that is now being finalised, mandates ESMA to assess the feasibility of improving data reporting in the assets management sector. We have multiple coexisting reporting regimes in this part of the financial sector,
which results in overlapping and inconsistent reporting obligations to securities regulators as well as to central banks, at national and EU level. It is an example of where there is clearly room for improvement, along the lines of the issues we want to tackle when implementing our Data Strategy.

ESMA welcomes this new empowerment under AIFMD and UCITS. We have started preparations for how to develop an integrated supervisory data collection and we intend to kick off the work as soon as the laws are adopted. While working on this topic, we intend to cooperate with the ECB and the other ESAs, to look for opportunities to improve the alignment of the various data reporting requirements - increase the use of common standards, decrease the duplications among multiple reporting regimes, and explore the use of modern technologies. This work on funds data is just one example. We intend to apply the same principles in all the upcoming reviews of reporting regimes.

**MiCA and DLT Pilot**

The strategic role of data has evolved significantly. New technologies and regulatory work on digital finance such as MiCA and DLT Pilot require supervisors to set up new data collection and monitoring capabilities. At
the same time, these developments provide the opportunity to explore more efficient ways to monitor markets. In line with our data strategy, ESMA has launched two projects to support national supervisors in developing the necessary capabilities to explore these opportunities.

First, we have commissioned a study to understand the specificities of different DLT / blockchain solutions. The study focused on three selected DLTs (Corda, Ethereum and Hyperledger Fabric) that were considered as a representative sample of the available technologies and assessed their impact on:

- The modalities of access and extraction of the relevant data recorded by DLT infrastructures;
- The data needed by regulators and ESMA to conduct their supervisory duties.

This study was critical to support MiCA policy development as well as the implementation of the DLT Pilot regime. Many believe that DLT can allow regulators to have real time access to very detailed and precise information required for markets monitoring and supervision, by enabling direct access to the systems where transactions are executed and
recorded. At the same time, it is seen as a way that could reduce some of the reporting burdens, by removing the obligation to prepare specific regulatory reports and rather giving supervisors direct access.

However, having completed our study, we see a number of challenges that still need to be resolved to ensure that supervisors can use DLT for more efficient data access models. The study identified potential areas of improvement that could be considered (for the upcoming revision of the DLT Pilot regime), such as the need for further standardisation and interoperability among the different DLT infrastructures.

With respect to MiCA, the study was instrumental to support ESMA’s assessment of the data elements that could be relevant for the purposes of supervising on-chain activities. In a nutshell, the study identified the critical on-chain data elements needed to enable regulators to perform on-chain analysis. At the same time, the study concluded that on-chain data does not provide sufficient information for market surveillance purposes and would still need to be enriched with additional off-chain data. More details on this analysis have been made public
alongside the 2nd MiCA consultation paper earlier this month and we would certainly be keen to get any feedback on the findings of the study.

Second, another study is currently being conducted in the context of MiCA, to assess the feasibility of more integrated monitoring of crypto markets at EU level. Due to MiCA specificities and the different technologies underpinning crypto markets, the way to access and analyse data for market monitoring purposes differs from the current approach under MiFIR and MAR. Due to these differences, NCAs will not be able to rely on the existing data collection and monitoring processes based on MiFIR transaction reporting and a new approach should be developed for the monitoring of crypto assets under MiCA. The study is expected to conclude by year-end and will assess various options for the development of cost-effective joint data collection and market monitoring tools under MiCA.

**Shortening settlement cycles**

As I said at the beginning, I didn’t want to conclude these remarks - at a conference about “operations, post-trade, technology and innovation” -
without mentioning the ongoing debates on shortening the securities settlement cycles and ESMA’s work on this.

If you put yourself in the shoes of a retail investor, you could have some sympathy for the surprise of most investors when they realise that buying a share of their favourite company takes in reality two days, while the acquisition of most of their other goods and services is instantaneous. However, you and I know that securities are not just any other good or service and that the two days between the conclusion of the transaction and its settlement are needed to undertake all the post-trade processes required to ensure safe and efficient settlement.

Still, the question of how long should the settlement cycle take has become a subject of debate again.

Looking at our European markets, at the technology available and at the evolution of other markets outside the EU, I think we really need to question whether a two-day settlement cycle is still right for European markets. This is the question that we are currently consulting on through our Call for Evidence on shortening settlement cycles. The objective of this work is for ESMA to gather all the necessary feedback to assess whether
settlement cycles in the Union should be shortened, and if yes, how, by how much and by when.

There are two of considerations on this issue that I would like to highlight today:

- **European markets must be stable and work in an orderly fashion:** The assessment of what would be the most adequate duration of settlement cycles in the EU has to be transversal. It has to include not only post-trading considerations but also the functioning of trading, any potential impact on liquidity or on the access to markets by investors, the functioning of securities lending and of the investment management industry, and the important priority of settlement efficiency … to name but a few issues to consider.

- **But EU markets also need to remain efficient and competitive:** we are conscious of the specific characteristics of EU markets, with a high number of market infrastructures, several different currencies, a common settlement platform, as well as a very specific settlement discipline framework. However, we need to recognise that the move to T+1 in other major jurisdictions will have an impact on European
markets. The question is whether we can remain at T+2 without damaging our competitiveness.

Our collective challenge in the assessment of a possible reduction of the settlement cycle in the EU, is to rightly weigh the pros and cons. We need to understand the costs and benefits of such a measure. Would a shortening of the settlement cycle contribute to building efficient and attractive EU capital markets or not? This analysis has to be done in the context of our European market structure and legislative framework while ensuring that the EU industry is competitive vis-à-vis other jurisdictions.

As a side benefit of the Call for Evidence we would hope to also find out whether there are any unexpected barriers in our legal framework for EU market participants to operate in a context where other jurisdictions move to T+1, while we remain in T+2.

I strongly encourage all of you to contribute to our Call for Evidence. ESMA needs as much qualitative and quantitative input as possible to be able to
provide our input on this important question for the efficiency and attractiveness of the EU capital markets.

**Conclusions**

Ladies and Gentlemen, I hope my intervention today allowed me to give you a little insight into our vision on how ESMA, together with the NCAs, can become more effective and efficient by exploiting the potential of the data and technologies we have at our disposal. But I believe that most of you, if not all, have similar conversations within your organisations.

Technology and data can contribute to the efficiency and effectiveness of the financial markets and the entire financial sector. Therefore, I am certain that we will have many more conversations on the various initiatives under the ESMA Data Strategy. We can learn from each other and need to collaborate closely to make the most of the opportunities that technology offers us. And given the pace at which the technology world is evolving, I am sure this is going to be an exciting journey.