

Digitalisation

# EIOPA's Digital Strategy

*Support consumers, markets and the supervisory community through digital transformation.*

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**eiopa**

European Insurance and  
Occupational Pensions Authority

## EXECUTIVE SUMMARY

A digital wave is transforming the world as we know it at an unprecedented speed. Innovative technologies are changing business operations, how people and organisations connect as well as how they exchange and share an increasing amount of information. The rapid technological developments are also changing the way insurance and pension products are developed, underwriting is done, and how consumers shop.

Innovation is essential for the evolution of insurance and will, when regulated and well supervised, be beneficial for policyholders, the sector, and for supervisors.

Given these continuous developments and adapting regulatory environment, EIOPA considers it important to have an overarching strategy to guide its priorities, principles, envisaged role, and the ensuing focus areas over the next three years. The strategy integrates EIOPA's view and mission on the digitalisation of the insurance and pensions sectors, i.e., including the markets, National Competent Authorities (NCAs), and EIOPA itself.

Based on the changes in the legislative framework, identified main trends in the insurance industry and the accompanying opportunities and risks, EIOPA reflects on the impact on the supervisory community.

EIOPA's supervisory and regulatory activities are underpinned by two overarching objectives: promoting consumer protection and financial stability. Regarding digitalisation, EIOPA defines in this strategy two core principles: *“technologically neutral, and people first”* and *“flexible, yet firmly rooted”*. To reach the overarching objectives, EIOPA embeds in its work on digitalisation these two principles.

EIOPA acknowledges that different perspectives must be balanced to ensure a healthy insurance market for all participants. Breaking down the strategic priority on digital transformation as identified in its overall 2023-2026 strategy, EIOPA identifies three key long-term priorities that will guide EIOPA's contribution on digitalisation:

- ▶ ensuring innovation is aligned with the best interests of citizens;
- ▶ strengthening the business model sustainability and resilience of all insurance market players;
- ▶ enhancing the supervisory capabilities of EIOPA and NCAs.

In this Digital Strategy EIOPA also underlines the role it should take in its efforts to “ensure (it) supports consumers, the supervisory community, and the industry to mitigate the risks and seize the opportunities of the digital transformation” as defined in the EIOPA Strategy for 2023-2026.

# 1 INTRODUCTION

Innovative digital technologies are altering the way the financial sector operates. Artificial intelligence (AI), big data analytics, cloud computing and blockchain are just some of the technologies that insurers have added to their toolkits in recent years, although at various levels of maturity. These technologies are generating extremely large new datasets and techniques for using the data. Financial undertakings can also accelerate internal processes in an efficient manner thanks to automation and transform their business due to these new datasets, such as those arising from the Internet of Things (IoT), as well as increasingly predictive and powerful analytics, including through AI.

Digital transformation is not only affecting organisations, but also individuals. Every person has their own path but is typically aligned with their generational peers. The composition of the demand side is therefore changing with an increasing number of young digital native consumers entering adulthood and the workforce. In this new setting, a subset of consumers increasingly demands products and services to be available from a single access point through their devices, on a 24/7 basis and from any location. At the same time, another subset of consumers faces challenges with digitalisation and expects to continue to have access to traditional channels, while still benefiting from better conditions and user experience.

The composition of the suppliers in the market is also subject to changes and poses challenges for those incumbents who are failing to strategically address the digital transformation. Digitally native InsurTech start-ups and well-established technology companies (including the so-called “BigTech” companies) enter the financial markets, leading to novel offerings, and pushing incumbents to transform their value chains.

While innovation can increase efficiency and reduce consumer prices, it can also come with high investment costs, increasingly complex value chains, and lead to new risks that need to be addressed by sufficiently agile undertakings and supervisors to protect consumers. The digital transformation necessitates changes to the legal framework, changes in public and private infrastructure, and leads to the creation of new risks and opportunities for consumers and the economy.

New supervisory profiles and skillsets are required to protect consumers, ensure sustainable business models, and maintain financial stability. Supervisors are also subject to digitalisation pressures from a content and process perspective. The legislative framework is being updated for the digital age by the European Commission, following its digital agenda<sup>1</sup>, and the European Supervisory Authorities, steered and supported by the National Competent Authorities, are often

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<sup>1</sup> e.g., Digital Finance Strategy<sup>1</sup>, Data Strategy, Retail Investment Strategy, Artificial Intelligence Act, Digital Markets Act, etc

invited to participate and contribute. In addition, authorities must improve the efficiency of their own processes and keep up to speed with changes in the market to allow for suitable regulation, supervision, and oversight.

EIOPA keeps pace with these developments to ensure that both regulatory and supervisory frameworks account for the opportunities and risks that innovation and change bring. EIOPA has published various strategic perspectives, notably a Digital Transformation Strategy<sup>2</sup> and a SupTech strategy<sup>3</sup>. EIOPA has also developed an internal Data and IT strategy identifying the business needs arising from its functions, roles and responsibilities and identifying ways to unlock value to make the utmost use of data in achieving its objectives. In addition to a number of consultation papers, reports, and regulatory guidance on digitalisation topics, EIOPA has also organised a variety of events and discussions.<sup>4</sup> Jointly with EBA and ESMA, the ESAs have provided advice on ensuring the EU regulatory and supervisory framework remains fit for the digital age in their Joint Report on digital finance<sup>5</sup>.

As the regulatory environment is further adjusting and new horizontal initiatives such as the Digital Operational Resilience Act, the Artificial Intelligence Act, and a Framework for Financial Data Access (FIDA), a significant impact on the market and the supervisors is to be expected while also issues around biases, fairness and data ethics appear once again to be rising in prominence.

Given this, EIOPA considers it a good moment to review and integrate its strategies in this area and enrich them with insights from the past years into an overarching strategy for the upcoming years (2024-2026). This overarching strategy integrates EIOPA's views and missions on the digitalisation of the insurance and pensions sectors, i.e. including the markets, NCAs and EIOPA itself. The ambition is to set out a clear reasoning for prioritisation, principles, EIOPA's envisaged role and the ensuing focus areas over the next three years.

This Strategy consists of the following sections: a description of the trends that EIOPA has identified in its various work, the risks and opportunities these trends bring, core principles to be followed and EIOPA's role.

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<sup>2</sup> <https://www.eiopa.europa.eu/document-library/corporate-documents/digital-transformation-strategy>

<sup>3</sup> [https://www.eiopa.europa.eu/document-library/strategy/supervisory-technology-strategy\\_en](https://www.eiopa.europa.eu/document-library/strategy/supervisory-technology-strategy_en)

<sup>4</sup> E.g., AI, cloud computing, open insurance, Blockchain or licensing requirements in an InsurTech context. InsurTech roundtables and created a dedicated stakeholder expert group on digital ethics to discuss these topics from a broader perspective.

<sup>5</sup> [https://www.eiopa.europa.eu/document-library/report/joint-esas-report-digital-finance\\_en](https://www.eiopa.europa.eu/document-library/report/joint-esas-report-digital-finance_en)

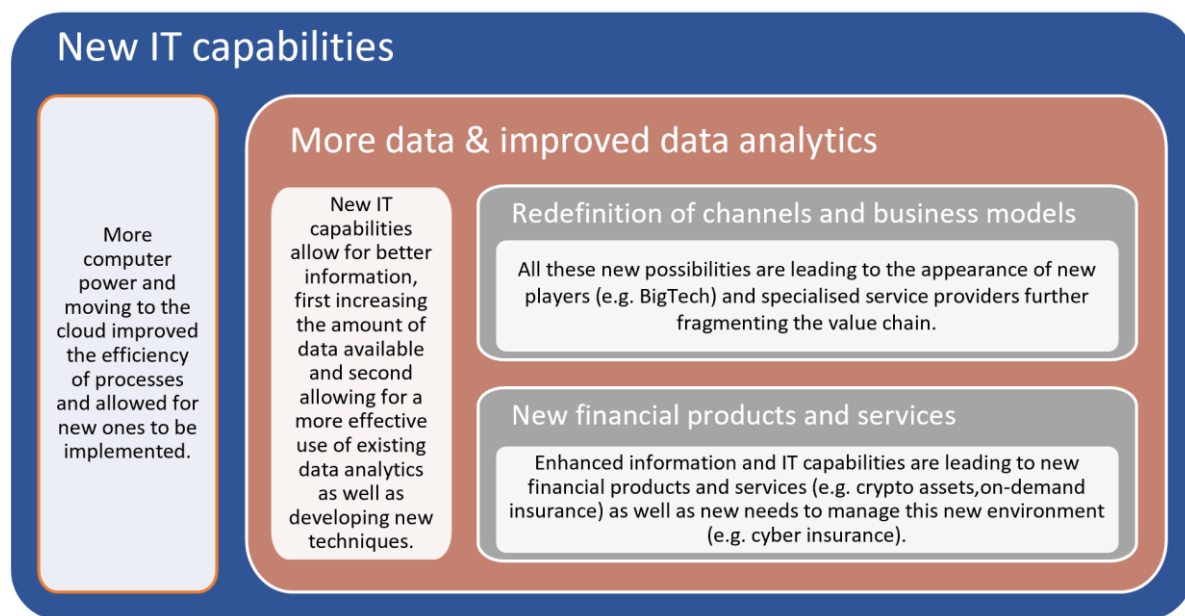
## 2 BACKGROUND

### 2.1 INSURANCE AND PENSIONS MARKET

Technology is evolving fast, and a succession of hype-cycles are expected to continue to stir up the insurance and pensions markets. New players appear and create challenges for those incumbents not strategically adapting to the digital transformation. Insurers and pension providers are being pushed towards innovation by the rapid technological developments that are changing the way insurance and pension products are being developed, commercialised, and managed, having an impact as well in consumer expectations. However, not all insurers and pension providers are adapting to this digital transformation, moreover the speed of the ones that do, varies significantly resulting in a wide spectrum of digitalisation.

Even though the impact of digitalisation is broad, we can see four main trends that are closely interrelated. New IT products and services have created the opportunity for new technologies to emerge, including new sources of data and enhanced data analytics solutions. This allows for increasing efficiency of processes and a reduction of operational costs with new insurance products and services emerging, but also requires solutions to counterbalance for the increasing dependence on technology (e.g., cyber risk). Within this increasingly digital and data-driven environment, new channels and business models are also starting to emerge, inevitably luring in new players such as Big Techs or start-ups into the insurance and pension sector.

Figure 1. visualisation of main trends



For each of these trends a variety of opportunities and risks can be identified.

- ▶ New IT capabilities have opened the door for innovation (Big Data, IoT, AI...). However, higher dependency on IT systems also elevates cyber risk, both as a new risk to be covered by the insurance sector, and as potential risk for insurers who should ensure their own resilience. With generative AI new issues around governance and explainability arise.
- ▶ Improved data analytics can allow for better risk management, more accurate pricing, efficiency gains. However, more granular risk selection might also undermine the mutualisation principle of insurance and lead also to financial exclusion for some consumers and risks. Moreover, the current data revolution also raises attention to the necessity of data protection and raised new ethical issues and dangers arising from unintentional biases and discrimination.
- ▶ Improved data availability and analytics can also lead to new financial products covering new or existing demand with a potential to reduce protection gaps and foster financial inclusion (e.g., cyber insurance or parametric insurance).
- ▶ Finally, although new (specialised) players, both regulated and unregulated, might be able to efficiently provide and develop new services, at the same time new regulation and/or adapting supervision may be needed given their distinct risk profile, raising questions on how for example to supervise decentralised/P2P insurance and open insurance developments. New business models may have different expectations and approaches towards risks in comparison with those in the traditional insurance sector. On the other side, not engaging in these new business models, services and channels may end-up with “traditional” undertakings being left out.

The identified trends represent a wide range of new possibilities and opportunities, not only for consumers and the insurance and pensions markets, but also for insurance and pensions supervisors. However, they pose also new risks and challenges that should be identified, assessed, and managed. These changes lead to a redefinition of the desired skillset of insurance and pension professionals including supervisors.

## 2.2 REGULATORY AND SUPERVISORY ENVIRONMENT

The regulatory environment is changing. With the new “horizontal” initiatives, e.g., the Digital Operational Resilience Act, the negotiations on the Artificial Intelligence Act and the COM proposal for a Regulation on a Framework for Financial Data Access (FIDA), discussions are shifting towards the financial sector more generally, or the economy as a whole, rather than on specific insurance or pensions business.

Responses to these developments are however heterogeneous at the national level - there are different levels of capacity among national supervisors in the monitoring of digitalisation

developments in the market and in adapting supervisory processes and procedures to this new reality. Where some supervisors have built dedicated innovation hubs or teams or units dedicated to addressing digitalisation, others rely on a few experts interested in the topic. These efforts are also mostly from a conduct of business perspective only and digital considerations have yet to be fully integrated into prudential supervision. However, as highlighted by EIOPA in the Union-Wide Strategic Supervisory Priorities, digitalisation is raising significant risks and opportunities from such a supervisory perspective including on the prudential side. A proper understanding of the direction of the future transformations is therefore crucial for both conduct and prudential supervisors.

The path of digital transformation for NCAs themselves has also commenced, although also here at different speeds. Some authorities have already identified clear objectives and priorities to move towards a strategic and intensive use of data and new technologies (sometimes referred to as SupTech or ‘smart supervision’), others have taken some steps but without a strategic approach and some are still planning their approach towards innovation.

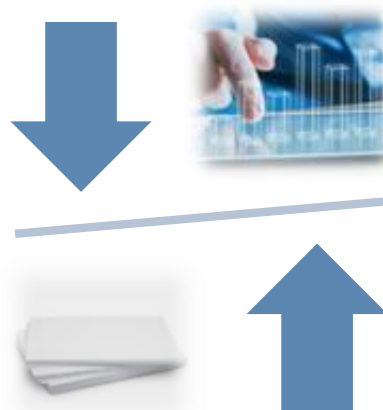
### 3 VISION FOR EIOPA: TWO CORE PRINCIPLES

#### 3.1 TECHNOLOGICALLY NEUTRAL, AND PEOPLE FIRST

Within this Digital Strategy, technological neutrality should be understood as the absence of any bias towards either innovation or traditional approaches by default. Within such an evolving environment, EIOPA does not only need to prioritise activities and objectives, but also identify the guiding principles allowing to define such prioritisation. EIOPA’s mission is to ensure a stable, effective, and sustainable financial system to protect the public interest. This means that EU citizens are at the heart of every objective set by EIOPA.

EIOPA will remain technologically neutral by default with no bias towards innovation or traditional approaches nor among different technologies. EIOPA position in each case will therefore be determined based on the best interest of people, not only considering consumer protection but also the services provided to individuals and the society. As such EIOPA may promote specific innovations if identified as highly beneficial for the society such as the pension dashboard or advancing financial literacy.

Different approaches towards digitalisation are significantly influenced by age/generation and social environment and therefore is expected to evolve over time and with increasing need for financial and digital education. This requires constant monitoring not only to



ensure inclusion and equal treatment of consumers, also between traditional and digital business models, but also to ensure different consumer needs. This includes ensuring new digital native generations as well as those potentially 'left behind', are being covered and undertakings are adapting to an evolving reality so their business model remains sustainable.

In practice this can mean being open to a hybrid world combining new digital business models alongside traditional ones. This can increase complexity but is consistent with true technological neutrality and a people first perspective.

### 3.2 FLEXIBLE, YET FIRMLY ROOTED



Successfully guiding the digital transformation of the insurance sector requires EIOPA to adopt a flexible approach towards innovation while remaining firmly rooted on its mission.

Insurance undertakings should keep pace with the digital transformation of the economy, keeping abreast of the principles of financial inclusion, reliability, ethics, and business model sustainability. A key consideration is to find a balance between data protection and

consumer interests on the one hand and insurance regulations and market competition on the other – while still allowing for innovation, efficiency, consumer protection and financial stability.

Achieving this requires NCAs and EIOPA to have at their disposal proper legal, supervisory, and cooperative tools, as well as know-how to efficiently and consistently supervise and oversee the insurance sector in an increasingly digital environment and set the right boundaries so innovation is in the best interest of consumers. Flexibility also means that NCAs and EIOPA must focus more on the regulatory perimeter and value chain as new business models emerge.

## 4 POSITIONING OF EIOPA

EIOPA must strategically position itself to ensure it can pursue the objectives within its mandate following the principles above. EIOPA's supervisory and regulatory activities are always underpinned by two overarching objectives: promoting consumer protection and financial stability.

The type of role EIOPA takes in this pursuit varies, reflecting different responsibilities and expectations. Following a clear role regarding addressing risk and opportunities linked to these



developments, EIOPA prioritises specific topics given their added value towards ensuring its objectives.

EIOPA has identified a set of specific key priorities in the context of digital finance to ensure key concerns are addressed where relevant in its work.

## 4.1 PRIORITIES

EIOPA's view on digitalisation in insurance balances a number of different perspectives:

- ▶ highlighting the specificities of the insurance and pensions sector;
- ▶ harnessing the benefits of financial innovation while ensuring that consumer protection and financial stability are not compromised;
- ▶ contributing to strike the right balance between market developments triggered by regulation and changes promoted by market players. It is also important that there is a balance between prudential and consumer protection goals when supervising digital aspects – e.g., large-scale differential pricing practices relying on AI could increase profitability but could also lead to consumer detriment.

EIOPA has identified digital transformation as one of its strategic priorities in its 2023-2026 strategy: **“Support consumers, the supervisory community, and the industry to mitigate the risks and seize the opportunities of the digital transformation.”**

This strategic priority can be broken down in three key long-term priorities that will guide EIOPA's contribution on digitalisation;

- ▶ ensuring innovation is aligned with the best interests of citizens;
- ▶ strengthening the business model sustainability and resilience of all insurance market players;
- ▶ enhancing the supervisory capabilities of EIOPA and the NCAs.

These priorities encompass EIOPA's vision on digital transformation, which includes both the insurance market itself and the supervisory community.

- ▶ The insurance market should keep pace with the digital transformation of the economy keeping abreast the principles of inclusion, reliability, ethics, and business model sustainability.
- ▶ NCAs should have at their disposal proper legal, supervisory, and cooperative tools, as well as know-how to supervise the insurance sector efficiently and consistently in an increasingly digital environment.

### Ensuring innovation is aligned with the best interest of citizens

From a policyholder perspective, digital ethics and financial inclusion are the two main dimensions that should be considered for technologies and services becoming mainstream in the insurance sector (e.g., artificial intelligence<sup>6</sup>, pension tracking systems<sup>7</sup>, new forms of platform or aggregator in view of open finance developments). EIOPA will assess the topic of financial inclusion from a broader perspective i.e., not only from a digitalisation angle, seeking to promote the fair and ethical treatment of consumers. Especially for those front-desk applications and insurance lines of business that are particularly important due to their social impact. EIOPA will routinely assess its consumer protection supervisory and policy work in view of impacts on financial inclusion and ensuring its work on digitalisation considers accessibility and inclusion impacts.

The take-up of Artificial Intelligence in all the areas of the insurance value chain in combination with a growing European data ecosystem raises specific opportunities and challenges. The variety of use cases is growing fast, while the technical, ethical, and supervisory issues thrown up in ensuring appropriate governance, oversight, 'explainability' and transparency are wide ranging and should be properly addressed by the supervisory community. Addressing risks of biases and discriminatory outcomes are critical.

### Strengthening the business model sustainability and resilience of all insurance market players

Harnessing all the benefits from digitalisation while at the same time managing the risks is often a complex task. EIOPA has identified the three lines of action where insurance undertakings need to focus on to keep in step with the digital transformation.

- ▶ Need to update risk management frameworks: undertakings should review the extent to which their control, testing and feedback loop criteria remain relevant and valid in the digital age and for new technologies. For example, the opacity of some AI algorithms (the so-called black box effect) brings new challenges, and insurance undertakings need to adapt their governance and control frameworks to take into account these aspects.
- ▶ IT-Landscape, hardware and software upgrades and resilience: the increasing number of cyber-attacks and use of technologies such as Machine Learning (ML) techniques and the consequential speed in new iterative models show the need for a more robust and also agile IT

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<sup>6</sup> [https://www.eiopa.europa.eu/media/news/eiopa-publishes-report-artificial-intelligence-governance-principles\\_en](https://www.eiopa.europa.eu/media/news/eiopa-publishes-report-artificial-intelligence-governance-principles_en)

<sup>7</sup> [https://www.eiopa.europa.eu/document-library/advice/technical-advice-development-of-pension-tracking-systems\\_en](https://www.eiopa.europa.eu/document-library/advice/technical-advice-development-of-pension-tracking-systems_en)

functions. Ensuring the digital operational resilience and managing legacy risk is more important than ever.

- ▶ Cultural shift, integration of old and new teams: insurers need to adapt processes and ensure that domain knowledge and data science skills are appropriately integrated to ensure continued rigorous testing / validation to support ongoing appropriateness of the new pricing models.

EIOPA will support NCAs in supervising the Digital Transformation of entities as well as on the implementation and initial supervision of DORA. This transformation should ultimately aim to benefiting citizens, preserve digital ethics and guarantee inclusion, which can also be fostered through financial and digital education.

#### Enhancing the supervisory capabilities of EIOPA and NCAs

Digital innovations in the financial sector often come with complex systems and specific risks that require new supervisory profiles as well as close interaction with the market and the academia and other supervisors. In order to supervise new types of solutions and entities effectively, the supervisory community needs to equip itself with new skills and refine its techniques - and develop new tools, which requires a strong commitment from leadership and close cooperation between authorities, also having in mind that markets and competent authorities may have different digital maturities and cross-border business may increase with digitalisation.

EIOPA and national competent authorities (NCAs) should undergo their own digital transformation, both to keep up the standard of efficient prudential and conduct supervision and to be able to respond to technological innovation. This does not only include the use of technology, but also the skillset within authorities and the supervisory processes themselves.

EIOPA and NCAs need to understand the landscape, not only the impact of innovation on existing and new business models, but also how innovation can benefit supervisory processes. Supervisory skills need to be enhanced at national and EU level (trainings, adequate hiring programs...) to face challenges raised by digitalisation and understand new forms of risk. Cooperation is a great enabler—allowing not only knowledge building, but also exchanges of experience. To ensure a comprehensive understanding, EIOPA will monitor the developments in other European and international institutions to leverage on their experience and enhance supervisory and regulatory cooperation.

Building supervisory capacity and convergence is a critical enabler for other benefits of digitalisation. Without strong and convergent supervision, other benefits may be compromised. With the use of different tools available (innovation hubs, regulatory sandboxes, market monitoring, public consultations, desk-based reports etc.), supervisors seek to understand, engage, and supervise increasingly technology-driven undertakings.

Digital technologies can also help supervisors to implement more agile and efficient supervisory processes (commonly known as SupTech). They can support a continuous improvement of internal processes as well as business intelligence capabilities, including enhancing the analytical framework, the development of risk assessments and making more data available to the public (open data) and using open-source products whenever possible. Supervisors and regulators should also leverage on the development of a sound European data ecosystem to develop more pre-emptive and evidence-based supervision and regulation.

EIOPA, as a European Supervisory Authority, will support NCAs during this process offering training, guidance and facilitating knowledge sharing among its members. It will also support through a collaborative effort together with NCAs developing and sharing SupTech tools to address specific elements of the process in a coordinated manner. EIOPA will also leverage on its central data repository to identify emerging risks, allow for early warning detection, and identify other trends and relevant insights.

## 4.2 EIOPA'S ROLE

In financial innovation lies one of the biggest challenges that supervisors face: what is the role of regulators and supervisors in enabling innovation and how will supervisors continue to ensure consumer protection. It is important to strike a balance between allowing stakeholders to harness the benefits of innovation, like personalized products and services as well as lower costs, while at the same time ensuring that consumer protection and financial stability are not compromised and that more innovation does not lead to wide protection gaps and exclusion.

When defining EIOPA role it is also important to strike the balance between regulators' and supervisors' role on the development of the market and the role of Administrative, Management and Supervisory Boards (AMSB) when setting the undertakings' strategy and deciding which products and services to develop. The role of EIOPA will take will differ considering its mandate and the three priorities identified.



**Monitoring,** EIOPA monitors the developments on digitalisation on the insurance sector and adopts an agile approach to identify, assess, and monitor emerging risks, as well as raise awareness within the supervisory community.

**Facilitating,** EIOPA facilitates the entry into the market of actors or products relying on technological innovation.<sup>8</sup> In particular, this includes three courses of action:

1. Proactively ensuring the fitness of regulation and eliminating unnecessary barriers,
2. fostering dialogue and knowledge exchange between the industry, the supervisory community and academia, and
3. coordinating a harmonised approach towards digitalisation across Europe aiming to strike a balance between a market driven development and the AMSBs responsibility from one side and the role of regulators and supervisors on market developments from the other side.

**Promoting,** EIOPA promotes innovation on a targeted manner in cases EIOPA identified specific innovations with a material potential to benefit citizens that are not evolving adequately.

**Contributing,** EIOPA supports NCAs through their own digital transformation, representing their interests in future regulations, acting as a centre of expertise, providing adequate forums for knowledge and best practises sharing, fostering cooperation and collaborations (including with other ESAs, other supervisory authorities, and international institutions) as well as leading by example.

**Implementing,** EIOPA is also subject of its own digital transformation fostering data-driven decisions, agile processes and developing its own SupTech tools to enhance its efficiency and overall supporting cultural change and adaption needed in view of new developments.

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<sup>8</sup> As established by articles 31(2) and (3) of Regulation (EU) No 1094/2010 of the European Parliament and of the Council of 24 November 2010 establishing a European Supervisory Authority (European Insurance and Occupational Pensions Authority)

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