

European Statistical System Innovation Agenda





Innovation and the ESS

Innovation is not an option for the European Statistical System (ESS). It is a necessity. Today's business environment — defined by competition from a large number of private data providers, an ever faster changing data ecosystem, and a rapid rise in increasingly urgent demands for new, timelier and more detailed statistics — makes innovation an even higher priority for all ESS partners.

In fact, innovation is nothing new for the ESS. Eurostat and the National Statistical Institutes (NSIs) have for decades worked innovatively, by successfully implementing new solutions and business ideas and creating genuine value for their partners and users.

The current situation calls for ESS members to expand their use of **digital technologies**, widen the use of data sources like **new digital sources**, and apply new technologies, such as artificial intelligence. The ESS members should also pursue more **innovative practices** and create **conditions for successful innovation** so that they can more quickly anticipate and respond to the challenges ahead. The ESS Innovation Agenda tackles these issues, with the ESS Directors' Groups helping to implement it and the ESS Innovation Network (EIN) working to coordinate it.

The ESS Committee has emphasised the importance of ensuring **adequate communication** in the implementation of the ESS Innovation Agenda in order to make the agenda better known within the ESS.

The successful implementation of the ESS Innovation Agenda will bring tangible results and strengthen the position of official statistics at both the national and European levels, through incremental and transformational innovation.



What are the goals and why?

In recent years, the ESS has been faced with increased demands from users for it to be more **responsive and agile**, especially in times of crises, and to expand the range of its statistics and improve their timeliness and the level of their detail. The financial crisis and the COVID-19 pandemic have demonstrated like never before the value of **accurate and timely data**, especially for democratic decision-making processes. They have also revealed that the ESS needs to improve its statistical production.

The main goals of the ESS Innovation Agenda are therefore to:

- strengthen the ESS's ability to **respond rapidly** to new and urgent user needs;
- augment products and service portfolios for meeting **policy needs** (e.g. new metrics and statistical insights, more granularity, timelier statistics, better access to the portfolio of products);
- realise **efficiency gains** to free up resources;
- **strengthen resilience** to shocks and **adapt to societal changes**.

What are the opportunities?

Novel digital technologies provide opportunities to help address these challenges. Taking advantage of **new technological and methodological developments** — such as artificial intelligence and machine learning, privacy enhancing techniques, smart devices, methods for data integration, geospatial capabilities, and data analytics — are crucial for the implementation of the ESS Innovation Agenda. Such developments also contribute to improving data literacy and skills and advancing collaboration with researchers, businesses, and civil society.

Additionally, the increased use of **new data sources** across the ESS, including privately held data, shows how existing data gaps can be filled to respond to new user needs and policy demands. It also allows the ESS to react faster in emergency situations and crises.



What is the approach?

The ESS Innovation Agenda covers both **incremental short-term innovations and transformational ones** that will require a longer time horizon. This dual approach aims at achieving maximum efficiency and high impact.

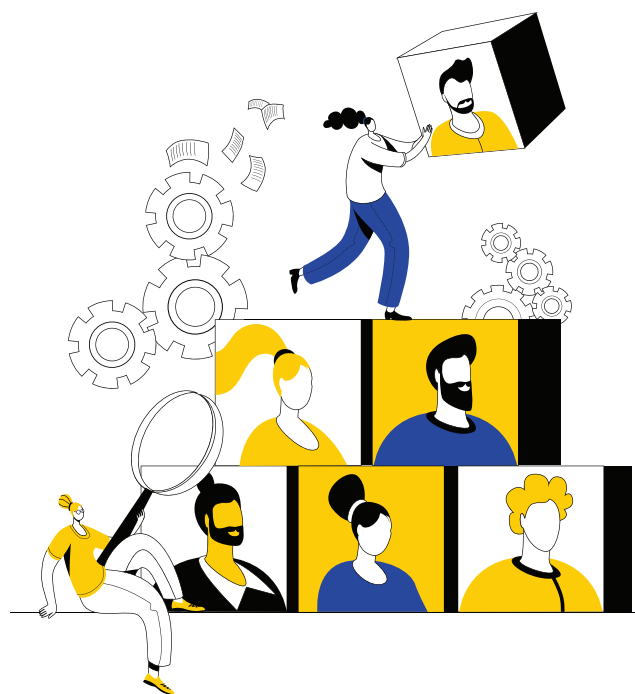
Rolling out the ESS Innovation Agenda comprises **activities** of various types, such as developing new products and putting in place improved processes that are cross cutting various statistical domains. These activities touch upon the use of a wide range of **technologies**, such as AI/ML, privacy enhancing technologies, smart devices, advanced methods for data integration, exploiting geospatial capabilities and the use of cloud native environment.

Improving the **dissemination and communication** of official statistics by focusing on those who are currently non-users of statistics, including through social media, interactive dashboards, infographics, storytelling, and digital publications, is imperative.

The development of new and innovative visualisation tools to disseminate statistics

considering the different profiles of users is also important. The portfolio of innovation activities of all types is reviewed regularly.

Furthermore, a successful implementation requires putting in place within the ESS the **necessary structures** that enable innovation. These include knowledge sharing, developing training programmes for capacity building, and leveraging opportunities within existing programmes like the European Master in Official Statistics (EMOS). Engaging citizens, effectively communicating with numerous stakeholders, and raising awareness of statistics (thereby improving statistical literacy) are also essential elements, as is the modernisation of the legal framework of European statistics. Investments that are required for the implementation of the ESS Innovation Agenda may benefit from the many EU funding programmes.



Spreading the word

To ensure the successful implementation of the ESS Innovation Agenda, in the spring of 2023 Eurostat established the **ESS Innovation Network** (EIN), which comprises innovation champions from all ESS Member States. The EIN has a coordinating role in promoting the activities and actions necessary to implement the ESS Innovation Agenda, and it also has a role in engaging with stakeholders. The guiding work principles of the EIN include:

- user information needs remain the key innovation driver;
- innovation encompasses the entire ESS — no NSI is left behind;
- innovation results are integrated into ESS statistical production (“from lab to fab”);
- participation by individual ESS members in the ESS Innovation Agenda remains voluntary (NSIs decide on participation and the focus of the innovation activities), while seeking to find the optimal role distribution (encouraging innovation and providing support to the ESS).

Engaging with external stakeholders

The implementation of the ESS Innovation Agenda also encompasses cooperation with stakeholders outside of the ESS and other statistical offices outside of Europe, as well as with non-statistical organisations and their innovation centres and hubs.

Sharing knowledge and experiences, as well as training material and resources, can be mutually beneficial. **Universities and research institutes** require specific attention, especially considering that they provide access to state-of-the-art data analytics research and can be critical for developing applied research in the domain of official statistics. **Private sector** data holders, start-ups, and providers of innovative ICT solutions are also part of the innovation ecosystem.

The EIN will have a role in shaping the relationship with external stakeholders with a view to maintaining links with them and expanding the network.



EUROPEAN STATISTICAL SYSTEM

Eurostat does not work alone. Since the beginning of the European Community, it has been clear that policy decisions, planning, and implementation must be based on reliable and comparable statistics. To accomplish this, the ESS was built up gradually with the objective of providing comparable statistics at the EU level.

The ESS is the partnership between Eurostat, the EU's statistical authority that is part of the European Commission, and the NSIs and Other National Authorities (ONAs) in each EU country that are responsible for the development, production, and dissemination of European statistics. This partnership also includes the European Free Trade Association (EFTA) countries.



For more information

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