10th SDMX Global Conference
September 29 to October 3, 2025
Rome, Italy

Executive Summary

The 10th SDMX Global Conference, themed "Smarter Data for Better Insights," provided a timely platform for the global statistical community to assess the strategic trajectory of the Statistical Data and Metadata Exchange (SDMX) standard amid rapid technological change and evolving data demands. The conference was hosted by the Bank of Italy and organised by the eight SDMX Sponsor agencies.

The discussions reaffirmed SDMX's role as a cornerstone for modernising statistical data management and fostering interoperability, while highlighting how its structured metadata foundation is critical for enabling AI-readiness rather than being overshadowed by AI-driven narratives.

A key insight is the need for the SDMX community to adapt more proactively to the AI era by leveraging its strengths—standardised metadata and interoperability—to ensure official data remains authoritative, discoverable, and machine-actionable in AI-driven environments. Success stories showcased during the conference—such as automation, improved dissemination, and cross-institutional collaboration—demonstrate SDMX's enabling power, while also exposing gaps in interoperability, metadata quality, and capacity, particularly in less-resourced settings.

Against this backdrop, SDMX Sponsors agreed to work jointly to provide strategic direction for making official statistics AI-ready, including by advancing interoperability, high-quality metadata, and machine-readability, as reflected in their joint statement on AI readiness published on the SDMX website.

To capitalise on the successes and maintain momentum, strategic efforts must focus on user-centric solutions, active AI partnerships, and targeted capacity building. Continued investment in open standards, open-source tooling, and inclusive community engagement remains essential to SDMX's core mission: making the production and exchange of high-quality official data efficient, interoperable, and AI-ready. While the current SDMX strategic direction and governance structure remain broadly sound, a more agile and responsive approach will be required to navigate technological shifts, ensuring SDMX maintains its relevance and impact in a rapidly evolving data landscape.

The conference also featured a strong capacity building component, reinforcing skills development as a strategic priority for the community.

Summary Report

Introduction

The 10th SDMX Global Conference, held from September 29 to October 3, 2025, in Rome, Italy, brought together a diverse group of official statisticians, data officers from central banks and national statistics offices, representatives from international organisations, data practitioners, policy analysts, and other data professionals. Hosted by the Bank of Italy and the SDMX Sponsors, the conference focused on the theme "***Smarter Data for Better Insights***," emphasising three key pillars: Innovation, Implementation, and Standards and Tools. Over the course of three days, participants engaged in discussions, presentations, and panel sessions to share knowledge, explore advancements, and identify pathways for the future of the SDMX standard.

The programme started with three days of plenary sessions from 29 September to 1 October and concluded with two days of capacity building on 2 and 3 October. The plenary was attended in-person by 300 participants representing 80 countries and 120 institutions, with more watching proceedings online.

Opening Session

The conference began with welcoming remarks from Sergio Nicoletti Altimari, Deputy Governor of the Bank of Italy, who highlighted the transformative role of SDMX in modernising statistical cooperation and promoting interoperability in an era of rapid technological innovation and increasing data demands. He emphasised the importance of SDMX as a shared language and technical backbone for the global statistical system. The keynote speaker, Georges-Simon Ulrich, Director General of the Swiss Federal Statistical Office, reflected on the growing complexity of global challenges, highlighting the critical role of statistics in fostering trust, guiding evidence-based decision-making, and combating misinformation in an era of "polycrisis." Mr. Ulrich also indicated that a draft resolution on "Enhancing AI-Readiness of Official Data and Statistics" will be proposed to the United Nations Statistical Commission at its 2026 meetings. The opening session underscored the need for international cooperation and innovation to ensure that official statistics remain reliable, transparent, and fit for purpose in addressing global challenges.

Key Themes and Insights

1. Innovation: SDMX and Artificial Intelligence (AI)

A significant focus of the conference was on the intersection of SDMX and AI. Presentations in Session II highlighted the potential of structured SDMX data to become "AI-ready" and the opportunities for AI to enhance SDMX workflows. Examples included the use of Generative AI and Large Language Models (LLMs) for automating analytical report drafting, improving data navigation, and contextualising Sustainable Development Goals (SDGs). The IMF's StatGPT and the ECB's AI-powered data portal search engine were showcased as practical applications of AI in statistical workflows. Discussions emphasised the importance of ensuring that official data remains discoverable, interoperable, and trustworthy in the AI era, requiring

collaboration between SDMX sponsors, technology developers, and the broader data community.

2. Implementation: Practical Use Cases and Success Stories

Sessions IV and V showcased diverse real-world implementations of SDMX across global, regional, and national contexts. Success stories included Madagascar's use of SDMX to modernise data management in the education sector, and the National Bank of Belgium's transition to a fully SDMX-based infrastructure, both powered by the .Stat Suite open-source platform, and UNICEF's automation of statistical table generation using the SDMX API. Presenters highlighted the transformative potential of SDMX in improving data harmonisation, accessibility, and dissemination. Challenges such as capacity building, governance, and the need for robust metadata quality were discussed, with an emphasis on cross-functional teamwork and international collaboration to support the widespread adoption of SDMX.

3. Standards and Tools: Enhancing Interoperability and Usability

Sessions III, VI, and VII focused on advancing SDMX standards and tools to meet current and future challenges. The new SDMX 3.0 and SDMX 3.1 standards were introduced, offering more efficient management of data and metadata, support for alternative data sources, and enhanced capabilities for handling large datasets. The Validation and Transformation Language (VTL) was recognised as a complementary standard for advanced data validation and transformation. Efforts to achieve interoperability with other standards, such as DDI and DCAT, were discussed, alongside the development of an SDMX ontology to enable semantic integration. Tools like the SIS-CC .Stat Suite, ISTAT SDMX toolkit, ECB Data Portal Search Engine, and BIS-managed sdmx.io solutions were highlighted as instrumental in simplifying SDMX adoption and improving usability.

4. The Increasing Role of Capacity Building and Communities

The conference featured two panel discussions on "SDMX Capacity Building" and "SDMX Communities," which underscored the importance of modernising statistical systems and fostering collaboration among stakeholders. Experts highlighted the need for sustained cooperation, adaptive learning models, and regional partnerships to build capacity and embed SDMX knowledge within institutions. The discussions also emphasised the role of SDMX communities in driving innovation, sharing best practices, and ensuring the long-term impact of the standard. Participants were invited to engage further through the SDMX User Forum and explore the numerous trainings available on the SDMX Learning Resource page.

Emerging Opportunities and Challenges

Throughout the conference, speakers and participants identified key opportunities and challenges for the future of SDMX. The exponential growth of data, the rise of alternative data sources, and the rapid advancement of AI technologies present both opportunities and risks. While these developments offer potential for greater efficiency, real-time analysis, and improved decision-making, they also demand new rules for data integration, governance, quality assurance and trust. The proposed draft

resolution on "Enhancing AI-Readiness of Official Data and Statistics," brought by the Swiss Federal Statistical Office to the United Nations Statistics Commission, reflects the urgency of addressing these challenges. The resolution aims to ensure that official data remains authoritative and accessible in the digital age by promoting metadata catalogues, adopting interoperable standards, and fostering collaboration with AI developers to prioritise reliable and well-documented data sources.

Closing Remarks

The conference concluded with closing remarks from Rafael Schmidt (BIS), who emphasised the importance of maintaining the integrity, transparency, and trustworthiness of official statistics in a rapidly evolving data landscape. He highlighted the role of SDMX as a symbol of global cooperation and a foundation for evidence-based policymaking. Participants left the conference with a renewed commitment to advancing SDMX as a critical tool for smarter data and better insights.

Participants Feedback

The conference received broadly positive feedback from participants, who rated both their overall experience and the relevance of sessions very high (4.4 out of 5.0). Logistics and venue arrangements, including the exhibition, were well received **(**4.0 out of 5.0**).** Remote participation scored lower (3.5 out of 5), suggesting room to strengthen the hybrid format. Content that resonated most included practical use cases (Session IV, 24%), SDMX and AI nexus (17%), upgrading the standards (14%), and tools and platforms (13%). Looking ahead, priorities include deeper coverage of AI and VTL, interoperability and business processes, geospatial integration, and practical implementation guidance across SDMX communities. Comments praised the organisation—especially the social dinner and hosting by Banca d'Italia—and encouraged continued focus on novel, high-impact ideas with demonstrable implementations.

Capacity Building

As with past editions, the SDMX Global Conference 2025 featured an exciting capacity building programme taking place over two days immediately following the plenary sessions on 2 and 3 October. There were two dedicated rooms with room 1 targeting Statistician type profiles, and room 2 targeting Data Engineer profiles bringing together over 140 participants for two days of intensive learning.

The program featured a tailored curriculum delivered by multiple experts, including the first-ever introduction of SDMX 3.0 modelling, as well as key innovations such as the .Stat Suite, FMR, modelling approaches, and data pipelines were showcased throughout.

Overall participant satisfaction increased from 4.17 in 2023 to 4.50/5, with strong retention on day two.

Conclusion

The 10th SDMX Global Conference provided a platform for knowledge sharing, collaboration, and innovation, reaffirming the importance of SDMX in addressing the challenges and opportunities of the modern data ecosystem. By focusing on innovation, implementation, and standards and tools, the conference highlighted the transformative potential of SDMX to enhance statistical workflows, promote interoperability, and support evidence-based decision-making. As the global statistical community continues to navigate the complexities of the digital age, the insights and commitments from this conference will serve as a guiding framework for the future of SDMX and official statistics.