SupTech – a core supervisory tool

At the Global Fintech Fest 2025 in Mumbai, FINMA Chair Marlene Amstad delivered a presentation and participated in a panel discussion on the global state of Supervisory Technology (SupTech). Drawing on IOSCO[1]'s first global SupTech Survey – developed under FINMA's leadership and covering jurisdictions representing over 75% of global securities market value – she outlined the main findings and placed them in the context of FINMA's own experiences and SupTech use cases. SupTech – the use of technology to enhance financial supervision – has evolved from pilot projects into an institutional priority. Authorities across jurisdictions are increasingly integrating digital tools to improve efficiency, timeliness, and supervisory insight. Three key messages emerged from Amstad's address:

- **The global rise of SupTech.** Across all IOSCO regions, authorities report embedding SupTech into their core supervisory functions. The strongest drivers of adoption are efficiency and timeliness, while key enablers include artificial intelligence, improved data access, and cloud-based solutions. However, cyber risks and third-party dependencies stand out as the most pressing concerns. Most authorities are still in the phase of partial implementation, but dedicated budgets and senior-level responsibility are becoming increasingly common.

- **Smaller and emerging market authorities face specific opportunities and challenges.** For these regulators, SupTech is a strategic tool to close gaps in supervisory capacity. They place particular emphasis on efficiency and effectiveness – almost all respondents in this group consider them critical. Many are also prioritising data strategies and modular solutions, such as APIs and microservices, to address resource constraints. At the same time, concerns about cybersecurity and dependence on third-party providers are even more pronounced among small and emerging market authorities. This reflects limited in-house capabilities and a greater reliance on external vendors. These findings highlight both the potential of SupTech to strengthen supervision in small and emerging market authorities, and the importance for international cooperation to mitigate shared risks.

- **FINMA is building its own SupTech landscape.** The foundation is a reliable and secure data infrastructure, anchored in FINMA's electronic platform for applications and reporting. In the area of insurance supervision, FINMA provides an open-source package developed in-house. This enables the automated calculation of the Swiss Solvency Test (SST) using stochastic models, and is used by both insurers and FINMA itself – for example, in stress testing. Furthermore, FINMA uses tools such as social media sentiment analysis to monitor early signals of market risk. In market supervision, FINMA is enhancing its analysis of potentially irregular trading activity with machine learning techniques trained on historical cases. These initiatives are supported by ongoing investments in secure cloud infrastructure and reinforced access controls to safeguard sensitive supervisory data.

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[1] International Organization of Securities Commissions.

Conclusion

The global SupTech Survey and FINMA's own initiatives send a clear message: supervisory technology is no longer experimental. It is becoming a core component of the regulatory toolkit worldwide – with particular relevance for small and emerging market authorities. Going forward, continued cooperation and peer learning will be essential to ensure that innovation in SupTech strengthens resilience, trust, and stability in the global financial markets.