FSOR 2024



The Financial Sector forum for Operational Resilience, FSOR, is a public-private collaboration forum that aims to increase cyber resilience in the financial sector in Denmark. FSOR is chaired by Danmarks Nationalbank and comprises the key players in the Danish financial sector. In 2024, the ordinary meetings of FSOR were held in May and November.

Risk analysis guides FSOR's work

The FSOR members and Danmarks Nationalbank identify and address operational risks that could impact the sector and potentially threaten financial stability. FSOR's risk analysis addresses a number of cyber and supply chain risks. FSOR also assessed risks associated with hybrid threats, quantum technology and the use of cloud services in 2024. By the end of the year, the risk analysis had identified 28 risks, including several related to cyberattacks, data protection and the ability to quickly and safely recover from a cyberattack.

FSOR's risk analysis is updated every six months. Based on the results, FSOR assesses the need for additional measures to reduce the risks identified. The measures focus on different elements such as crisis response, stress testing of the sector's operational resilience, cyberresilience studies of companies, threat-based testing and the ability to continue critical activities in extreme but plausible scenarios.

Crisis response ensures cross-sectoral coordination in the event of a crisis situation

Danmarks Nationalbank chairs a secretariat that maintains and updates a crisis management plan at least quarterly, established by FSOR to ensure a coordinated response across the financial sector in the event of incidents with the potential to affect financial stability. The plan complements the members own crisis response plans and is coordinated with the national crisis response organised by the National Operational Staff, NOST.

The FSOR crisis response team conducted a comprehensive full-day test of crisis response in June 2024 with participation from all organisations. During the test, the FSOR crisis response and Danmarks Nationalbank's own response organization were activated and tested at the same time. Another test was conducted in November 2024 on the ability of the crisis response team to assemble quickly without warning, outside of normal working hours and using different tools than those that so far has been used for assemblence of the crisis response. Test reports have been prepared for both exercises, identifying possible points for improvement and providing input for the work of continuously optimising tools and processes in the crisis response.

Tool to increase sector's cyber maturity

The private members of FSOR have developed a tool which companies can use to evaluate their own cyber maturity and clarify where further work can be done to increase their level of maturity. A steering committee ensures the progress of the project chaired by e-nettet, which also acts as the system owner for the project. The private FSOR members involved worked on a major customisation of the tool in 2024 to meet user needs arising from new regulatory requirements.

Cyber survey

In Q4 of 2024, Danmarks Nationalbank collected answers on several areas from the private members in FSOR in a cyber survey. The tool mentioned above was used for this purpose. The cyber survey will form the basis for an analysis of the cyber maturity of the Danish financial sector. The results will also be discussed among FSOR members to the extent that confidentiality permits, and each participating organisation will receive individual feedback on its own results. Similar financial sector cyber maturity surveys were conducted in 2016, 2018, 2020 and 2022.

TIBER-DK creates learning to resist advanced cyber threats
Danmarks Nationalbank coordinates and facilitates threat-based
cyberresilience testing of critical actors in the financial sector under the TIBER-DK programme. TIBER testing simulates advanced
cyberattacks in live operation environments. The purpose is that
companies learn more about their own strengths and weaknesses in
their cyberdefence, and the tests provide important learning about
resisting advanced cyberthreats. In 2024, the programme continued
according to plan.

The annual threat landscape report, prepared by Nordic Financial CERT with the involvement of relevant parties for the TIBER tests, was published in December 2024 where NFCERT also presented the report to FSOR.

As from January 2025, threat-based testing will be covered by EU legislation (the Digital Operational Resilience Act, DORA), which makes the TIBER testing methodology mandatory for significant financial companies across the EU. Danmarks Nationalbank has contributed to European and Danish legislation in this area and also to the pan-European framework TIBER-EU in close collaboration with the ECB. A new version of the Danish TIBER-DK implementation was also released in January 2025 that incorporates the requirements from DORA and builds on the updated TIBER-EU framework.

Operational resilience stress test

In 2023, the Danish Financial Supervisory Authority, FSA, conducted a cyber stress test to determine the ability of a number of financial companies to handle extensive, long-term IT failures. Participants shared learning points and experiences from the cyber stress test with their fellow FSOR members in spring 2024.

Danmarks Nationalbank and the FSA are collaborating to conduct an operational resilience stress test that will involve a number of FSOR members. The purpose of the test is to examine how a large-scale, long-term operational failure is handled across players in the sector and to identify consequences at sector level. Planning started in autumn 2024 and the stress test is expected to be completed in the second half of 2025.

International cooperation and knowledge-sharing

International cooperation is part of ensuring operational resilience in the financial sector. At European level, various initiatives have been launched to strengthen cybersecurity in the financial sector, which Danmarks Nationalbank participates in and contributes to with experience from the work of FSOR. This is done under the auspices of the ECB, ESRB and CIISI-EU, among others.

During 2024, there was interest in hearing about the experiences of collaboration in FSOR and how it is organised and structured. The FSOR secretariat has therefore shared knowledge in a number of meetings where there also has been focus on gaining insight into knowledge and experiences from other parties that can provide inspiration for the work of FSOR.

Peter Ejler Storgaard

Chair of FSOR

Deputy Director and Head of Financial Stability at Danmarks Nationalbank