[SINTEF ICT](#) from Oslo, Norway is represented in this project by the research groups Quality and Security Technology and Model-driven system development, both from the Department for Cooperative and Trusted Systems.

Research and networking expertise

The MOD group is internationally oriented and emphasizes networking and scientific interaction as part of the activities. The research group is actively involved in NESSI in which SINTEF is also member of the steering committee; it actively participates in two of the SSAI collaboration working groups; it is a partner of the Future Internet Innovation Institute (F3I). The MOD group is furthermore active in program committees in international conferences such as MODELS, ECMDA, and CAiSE. Additionally, the research group successfully organizes several international workshops such as the Traceability Workshop at ECMDA, Models@Runtime at MODELS, and Quality in Models, also at MODELS. The MOD group is actively involved in standardization efforts internationally, participating in standardization bodies such as the International Organization for Standardization (ISO), the Object Management Group (OMG) on Model Driven Architecture (MDA) standardization, and the European Committee for Standardization (CEN). The group is also actively involved in the Eclipse community, and is also serving the open source tools MOFScript and TRAMDE for model-based system development and traceability analysis.The Model-driven System Development (MOD) group has strong experience and expertise with model-driven development utilizing the internationally recognized modelling language UML (Unified Modelling Language). Furthermore, the group has developed various methods and tools for model-driven development many of which are integrated in their MODUS workbench. MOD's modelling philosophy may be used in the overlapping areas of enterprise modelling, architecture, system development methodology (Component based and SOA), product families, process modelling, interoperability, and tools (model transformation).The QST group maintains close interaction with research institutes world-wide. A group of internationally renowned researchers are funded as guest scientists in research projects managed by the QST group for the purpose of stimulating cross-fertilization, scientific interaction and networking. Currently, such fellowships are held by researchers from the following institutes: Victoria Institute (Sweden), University of Lille (France), IBM T.J. Watson Research Centre (USA), University of Trento (Italy), Stockholm University (Sweden), Technical University of Denmark, and University of Texas at San Antonio (USA). The QST group also maintains a series of public seminars as part of the dissemination of the project results. The seminars attract personnel from both industry and academia.The QST group builds and maintains networks involving industry, government and academia, both nationally and internationally. By establishing collaboration with partners ranging over several domains, the research group has gained strong experience on information security and risk management from several perspectives. In addition to addressing security as the problem of maintaining confidentiality, integrity and availability of information, the group collaborates and conducts research on security from perspectives in which issues such as trust and legal aspects play crucial roles and must be taken into account, for example in relation to e-commerce and data protection. By bringing together expertise from various backgrounds, including computer

science, law and social sciences, the QST group has during the recent years acquired broad experience in addressing information security from a multi-disciplinary perspective. Furthermore, the research group addresses security issues within the financial domain through collaboration with partners from the banking sector, in which services such as authentication are critical. From the perspective of partners representing governmental institutions, the QST group conducts research on security and risk management with respect to, e.g., critical public services such as power supply, as well as emergency planning and emergency operations.The Quality and Security Technology (QST) group has strong research expertise within methodologies and tools for the specification, development, maintenance, documentation and certification within the security field. In particular, the research group focuses on the areas of model-based security analysis; model-driven security architecture; system modelling, refinement and semantics; trust management; tools for analysis and documentation; empirical research on methods and tools. The research group is actively involved in numerous national and international projects, and works in close collaboration with industrial partners from domains like telecom, finance, power production, metallurgic industry, defence and governance.

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