



The e-SENS test bed 'Minder' to guarantee conformance and interoperability is available!

The delivery of cross-border digital public services in various sectors by using the generic and re-usable building blocks creates strong demands on interoperability in the e-SENS project.

To ensure the conformance to the technical specifications of e-SENS and interoperability among different systems, the extensible and highly available open source testing infrastructure called "Minder" has been developed by e-SENS. "Minder" is a generic and modular web-based application, which provides a generic testing environment and which can be used for any domain and implementation. Within the e-SENS project, 'Minder' is capable to perform conformance and interoperability tests on targeted systems in the following areas: e-Delivery, e-Documents and semantics, e-Signature and e-ID as well as piloting packages.

The aim of the testing infrastructure is to:

- Support the sustainability of the e-SENS network by ensuring the conformance and interoperability of the participant systems to the developed e-SENS interoperability specifications,
- Facilitate and accelerate the adoption of the e-SENS system by the targeted organizations by providing an environment where they are able to test their applications in terms of conformance and interoperability aspects and get detailed feedback,
- Ensure that the existing test applications and facilities operated by specific domains in e-SENS will be used.

Most of the currently available testing applications are dispersed, allowing usually testing only a part or a feature of systems at a time. The e-SENS test bed is a comprehensive framework, which can host testing applications and serve as the one stop shop to test systems. The software also enables to develop new interoperability testing scenarios to accommodate the possible future extensions to the infrastructure and the possible future use cases.

One of very important aim of Minder is to achieve compliance with the Global e-Business Interoperability Test Bed methodologies (GITB). Towards this target, GITB – Minder collaboration has been initiated through the Commission ISA Programme. The ISA GITB team has selected the "Minder" as the first test bed to be piloted for GITB compliance and **provided early July 2015** a gap analysis and impact assessment for the "Minder". The ultimate result of this collaboration is the planning to evolve "Minder" as a GITB compliant test bed that will be the part of a test bed network. In addition, the e-SENS team has collaborated with Commission Connecting Europe Facility and DG DIGIT team on AS4 protocol conformance testing. DG DIGIT has provided test assertions for the AS4.

"Minder" is an open source project and all its source code and documentation is available on JoinUp.

[Learn more technical facts about the "Minder"](#)