



e-Delivery target architecture

e-Delivery is one of the high level building blocks identified by e-SENS. It is an electronic communication suite in which end-users exchange messages via intermediary gateways. Recently e-SENS project agreed on the eDelivery target architecture which results from the work of the previous LSPs and combines their results. The aim of e-SENS is to establish common transport infrastructure suitable for the requirements of cross-border communication between eGovernment applications in different domains.

Components of e-Delivery target architecture are:

ebMS3/AS4

The communication protocol used for the electronic communication is the ebMS3/AS4 protocol. ebMS3.0 is built as an extension on top of the SOAP with attachments specification. The SOAP message contains the meta-data required to exchange the business documents in a secure and reliable manner, while the business payload is attached to the SOAP message. Multiple business payloads may be attached to a single message, and any format of the payloads is supported. AS4 is an open standard for the secure and payload-agnostic exchange of Business-to-business documents using Web services. In that respect the ebMS3 will cover the communication choreography and the AS4 will cover the technical information transport.

BDXL (formerly SML)

The purpose of the BDXL is adding dynamic routing to the eDelivery. BDXL is a Service Location specification that is a next generation of SML (Service Metadata Locator) that is based on the mature underlying DNS infrastructure (the Internet Domain Name Service), but uses a different DNS record type (NAPTR-U as opposed to CNAME).

SMP - Service Metadata Publisher

The SMP adds dynamic capability look-up to eDelivery. This creates the possibility of having a flexible eDelivery community, where interoperability is maintained even if Gateways and End-Points are having different ambitions and requirements when it comes to Business Process-, eDocument- and Technical interoperability. The SMP also eases in release management, where new versions of Legal-, Process-, Semantic and Technical specifications and solutions can smoothly be phased in over a period of time.

ETSI REM Evidences

End-To-End technical non-repudiation can be added to the eDelivery using ETSI REM evidences (according to ETSI standard). Technical non-repudiation is created through required logging and



receipts from the Gateways and End-Points, with information about event issuer, sender and receiver.

ebCORE Party ID

The addressing is using the OASIS ebCore Party ID Type specification provides a standard URN-based syntax for business partner identifiers and identifier types using the formally IANA-registered OASIS namespace. These are based on XML and message headers.