



# EDI-Service Pilot Project Description

The main objective of the EDI-Service project is to build example implementations using SOSE-development and application framework. Other objectives are to study how the research objectives can be accomplished using Open Source -tools and toolkit applications.

## Version 1

Version 1 offered the implementation of the writing service (WritingService). Using this writing service the customer can store data (meter readings) to persistent storages. The example scenario offers a writing service using EDIFACT-message, which is sent to the writing service by the customer. The security of this version is accomplished using the JAAS-specification.

## Version 2

Version 2 offered the implementation of the writing service (WritingService) as a composite service using RPC communication model. The example scenario offers a writing service as replication service using EDIFACT-message, which is sent to the writing service by the customer. Using this service the customer can send the data (meter readings) to several servers. The service model is based on the SOA-approach. The implementation of the service was accomplished using WS-specifications, which offer atomic transaction, security, and reliable messaging properties (WS-Coordination, WS-AtomicTransaction, WS-Security, WS-ReliableMessaging).

## Version 3

Version 3 offered the implementation of the writing service (WritingService) as a composite service using message-based communication model built on the version 2. The implementation of the service was accomplished message-based using WS-specifications, which offer business transaction with completion properties, security, and reliable messaging properties (WS-Coordination, WS-BusinessActivity, WS-Security, WS-ReliableMessaging).

## Version 4

Version 4 offered as the extension to the version 3 the implementation of a qualification service mechanism, which is used when a qualification algorithm is implemented. The qualification service was accomplished using software agent platform based on FIPA-specification. As implementation specific architecture we used JADE-agent platform, which is co-operational with the service layer. As communication language between service and agent layers the FIPA ACL-specification and as content language of the message based on the RDF-specification were used.

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# References

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