

Interoperability

According to IEEE interoperability is defined as:

'The ability of two or more systems or components to exchange information and use the information that has been exchanged.'

(Source: IEEE Standard Computer Dictionary: a compilation of IEEE Standard Computer

Glossaries, 1990.)

Interoperability can ambiguously be understood in different ways depending on the specification under consideration:

1. **Technical or Functional interoperability** = the ability for two systems to exchange information (message).
If the specification is of an artifact (e.g. a business document, a process definition, a policy contract, a Vitalink medication scheme), then interoperability is understood as the ability to process this artifact with consistent results, using different platforms or processors. In such a case, interoperability is often described as *portability* from the artifact perspective (the artifact is portable across platforms), while the platforms or processors are qualified as interoperable.
2. **Semantic or Non-Functional interoperability** = the ability of those systems to understand and use the information (meaning) held in the message.
If the specification is about a communication protocol (e.g. a transfer protocol, an interface like the eHealth Hub webservices) and about the behaviour of processors of this protocol, then interoperability is understood as the ability of two implementations of this specification – i.e. processors of this protocol - to communicate properly. In the case of an interface, ability of a user entity to communicate with an implementation (or processor) of the interface.

Given interoperability in general and interoperability in compliance with Vitalink, please find useful guidelines below:

- Specification
- Error Handling
- Data Mapping
- Testing
- Support

Vitalink Cookbooks

Specific helpful documentation exists for the implementation of Vitalink services into your applications. For more specific information we refer to the [Vitalink documentation](#) available on a dedicated Confluence site for this purpose.

Responsibility

Be aware that it is not always clear which aspects of interoperability fall under the specification writer's responsibility, and which fall under the implementation developers responsibility. Too often interoperability problems arise when each party is over-reliant on the other party to ensure interoperability.