Executive Summary (WP1)

Interoperability has been identified as one of the greatest challenges in healthcare IT. It is about bringing to life fruitful collaborations between different healthcare environments, with electronic means. Standards are essential in this context, but more is needed than just standards. Antilope, as a European initiative, aims to support any project in this field throughout Europe with help in modelling, describing, testing and certifying interoperable solutions on different scales: patient-centred, local, regional, national and crossing borders.

This document sets the scene. It offers modelling of the interoperability world in order to create an environment to describe and discuss interoperability problems and solutions. It establishes the need for a framework for interoperability, building upon and offering a refinement of the eHealth Interoperability Framework as brought out by the European Commission in 2013.

This refined framework consists of a number of 'tools' that can be used in solving interoperability challenges. An important element in this framework is the use case driven approach. The framework describes an initial set of interoperability *use cases* that can be used as the basis for national/regional deployment. Wherever applicable and useful, several variants of these use cases are given, to support the different deployment scales. Also, concrete *realisation scenarios,* based on available profiles and standards, is specified for each of these use cases. The linking to standards and profiles in these realisation scenarios provides guidance upon which to build localisation and interoperable implementations.

Another part of the framework consists of a template for the uniform description of these use cases, and for their accompanying realisation scenarios. Furthermore, a concise representation of interoperability levels, and a glossary of interoperability terms and definitions, are provided.

The framework increases consistency where possible, across eHealth projects in Europe, reducing project risks, giving higher quality with reused test tools, and offering a broader choice of compatible solutions. Finally, recommendations are given for governance and lifecycle of the interoperability framework described here.