D7.3 PROJECT FINAL REPORT

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1. Final publishable summary report

During the last ten years, eHealth Interoperability has become a major policy topic in Europe, critical for the development of Member States' national or regional eHealth services. Policies address services which rely on the availability of reliable and interpretable data exchanged between healthcare systems used by health professionals as well as by patients.

Increased clarity about the necessity for eHealth interoperability originates from national and regional programmes. European cross-border projects includes the epSOS[1] project, the Calliope[2] project and its governance roadmap, the HITCH[3] project for interoperability testing recommendations and roadmap, the eHealth European Interoperability Framework (eEIF) for the definition of the standards adoption process, use cases and identification of business use cases and EHR-QTN[4] with a roadmap for functional quality assessment of EHR systems.

A good level of interoperability could be the result of these converging actions and investments if they are understood and positioned in a consistent enabling framework.

The Thematic Network, Antilope was set up to support the dissemination and adoption of such an Interoperability Framework and concretely to build on these recommendations, roadmaps, national/regional and local Interoperability projects. In particular, the task of Antilope was to:

- Drive the adoption of recognised sets of use cases, profiles and underlying standards for eHealth interoperability, and improve the impact of the EU and international eHealth standards development process;
- Define and validate testing guidelines and common approaches on interoperability labelling and certification processes at European and at national/regional level.

To achieve these goals, the Antilope project used the following approach:

- Enhancing the use cases coming from the eHealth European Interoperability Framework, validating their relevance, identifying remaining barriers and producing education material to strengthen the adoption of interoperability standards;
- Defining and validation of European level and national/project level testing guidelines and common approaches on interoperability labelling and certification in Europe. Education material regarding these guidelines and processes has been developed for adoption at the European level. The material is defining basic principle for leveraging by the cross-border, national, regional and local projects.
- Analysing gaps between existing testing tools and tools that are needed for deploying the defined sets of profiles and standards, also taking into account the testing procedures for European and for national, regional or local use;
- Validation and dissemination of the Antilope recommendations and their applicability and scalability for the European Innovation Partnership on Active and Healthy Ageing (EIP AHA) was organised by setting up ten regional public workshops/summits that involved the main stakeholders across Europe

[1] http://epsos.eu/
[2] http://www.calliope-network.eu/
[3] http://www.hitch-project.eu/
[4] Thematic Network on Quality Labelling And Certification of EHR Systems: http://ec.europa.eu/information_society/apps/projects/factsheet/index.cfm?project_ref=238912

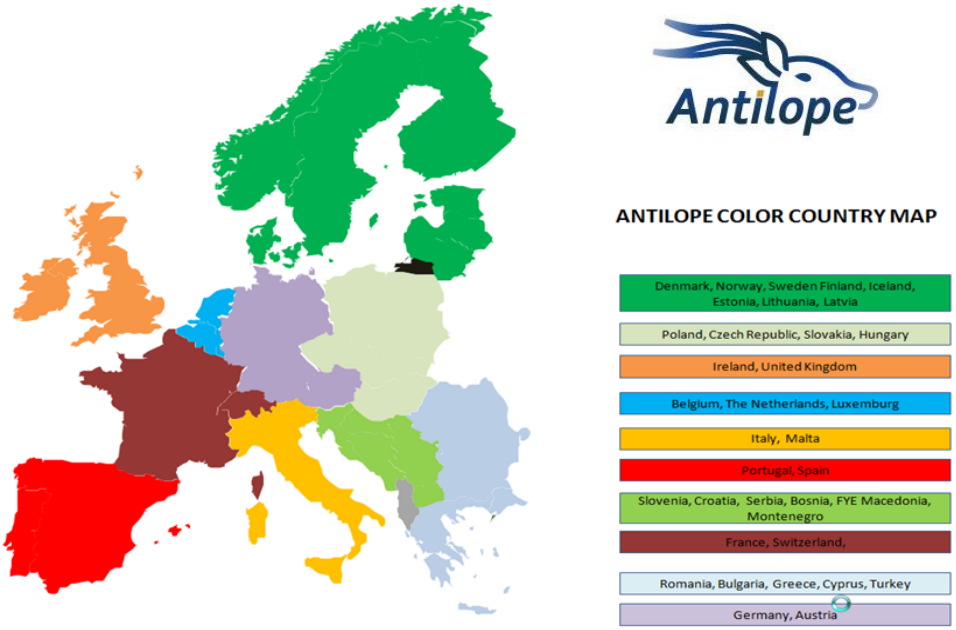

Figure 1 Workshops / events in ten areas in 2014

Four work packages were responsible for providing guidelines and recommendations including a set of use cases, related profiles and standards, interoperability quality management system, testing guidelines and certification process. The scalability of the results from the preparation phase to the EIP on AHA was also considered. All the deliverables were presented for validation and promotion during the before mentioned workshops/summits across Europe.

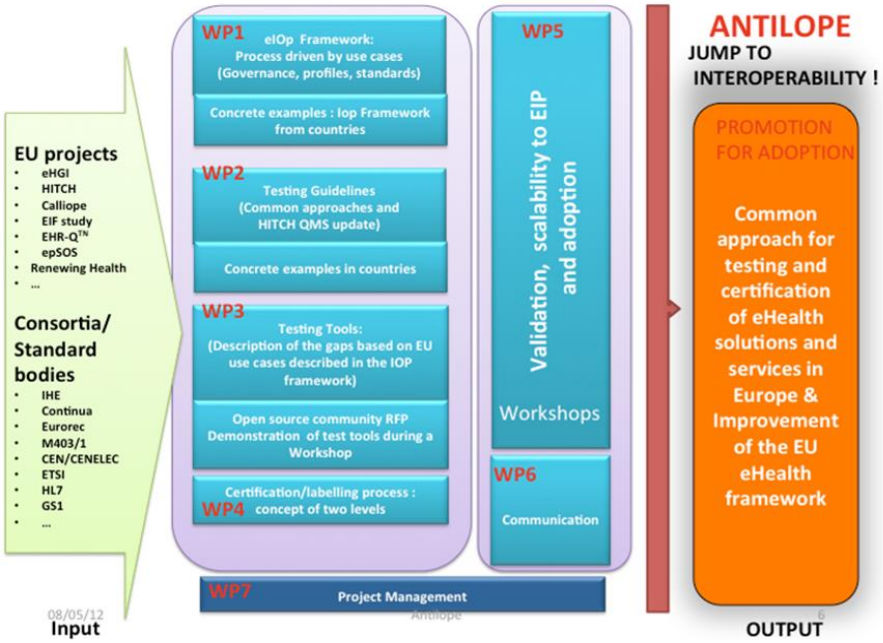

Figure 2 Antilope-Thematic Network, organisation

The project partners were organised in three groups:

The Core Team was in charge of the production of the deliverables and documentation as well as responsible for the organisation of the project. The core team included the following partners:

No	Name	Short name	Country
1	MEDCOM	MedCom	Denmark
2	INTEGRATING THE HEALTHCARE ENTERPRISE-EUROPE AISBL	IHE-Europe	Belgium
3	EUROPEAN INSTITUTE FOR HEALTH RECORDS	EuroRec	France
4	CONTINUA HEALTH ALLIANCE PRIVATE STICHTING	Continua	Belgium
5	STICHTING NATIONAAL ICT INSTITUUT IN DE ZORG	NICTIZ	Netherlands
6	INSTITUT EUROPEEN DES NORMES DE TELECOMMUNICATION	ETSI	France

The Supportive and SDO Expert Partners (SEP) contributed with their specific expertise to the deliverables, more specifically regarding development and uptake of standards. They were responsible for the initial internal validation of the Antilope documentation, before using that documentation during the Antilope workshops. The SEP group consisted of:

No	Name	Short name	Country
7	EESTI E-TERVISE SIHTASUTUS	EEHF	Estonia
8	EUROPEAN HEALTH TELEMATICS ASSOCIATION	EHTEL	Belgium
9	STICHTING NEDERLANDS NORMALISATIE - INSTITUUT	NEN	Netherlands
10	VERENIGING EN13606 CONSORTIUM	EN13606	Netherlands
11	INSTYTUT LOGISTYKI I MAGAZYNOWANIA	ILiM	Poland
12	HL7 INTERNATIONAL FONDATION	HL7 INT	Belgium
23	INSTITUT ZA VAROVANJE ZDRAVJA REPUBLIKE SLOVENIJE	NIJZ	Slovenia

The Supportive Validation Partners (SVP) were in charge of dissemination and "field validation" of the Antilope recommendations among all stakeholders in their geographical area. They included:

No	Name	Short name	Country
13	USTANOVA PROREC.SI	ProRec.SI	Slovenia
14	NARODNE CENTRUM ZDRAVOTNICKYCH INFORMACII	NCZI	Slovakia
15	ASSINTER - ASSOCIAZIONE DELLE SOCIETA PER L INNOVAZIONE TECNOLOGICA NELLE REGIONI-ASSINTER ITALIA	ASSINTER	Italy
16	HEALTH LEVEL SEVEN ELLAS	HL7HELLAS	Greece
17	IHE-UK LTD LBG	IHE-UK	UK

18	FUNDACIO TICSALUT	TICSALUT	Spain
19	PROREC-BE VZW	ProRec-BE	Belgium
20	INTEROP'SANTE ASSOCIATION*ASS	Interop Santé	France
21	TECHNIKUM WIEN GMBH	Technikum Wien	Austria
22	MEDIQ AS	MEDIQ	Denmark

Within its first year, the Antilope project produced a number of deliverables in draft version and education material which was used during the ten summits and subsequently updated based on the feedback received during these summits as well as on reviews conducted by the experts and validation partners.

Ten summits were successfully organised:

Odense, January 2014	Athens, May 2014
Bratislava, February 2014	Delft, May 2014
Ljubljana, April 2014	Paris, May 2014
Vienna, April 2014	Treviso, June 2014
London, April 2014	Valladolid, September, 2014

One of the learnings of the Antilope project was that Member States are becoming only slowly aware of the eHealth strategy or programme in their neighbouring countries. During the summits, countries presented a "Status of eHealth Interoperability" and this always generated an interesting exchange of information and interesting input for the debates.

A large majority of the attendees fully supported the main Antilope approach regarding the interoperability progress and the importance of third party assessment of the compliance of health information system to these interoperability requirements.

More information about the summits and all presentations can be found on the project website: http://www.antilope-project.eu/

A final “handover” workshop was organised in Ghent, Belgium, on 29 January 2015 to “hand over” Antilope’s documents and learnings to a group of projects that will be further advancing eHealth interoperability and who are committed to building on the Antilope framework. Many members of the Antilope consortium will participate in these initiatives and promote the Antilope legacy.

Project coordinator Ib Johansen (ijo@medcom.dk) & Mie Hjorth Matthiesen (mhm@medcom.dk), MedCom.

1.1 Executive summary

The main focus of the Antilope project, a European Thematic Network, was the adoption, take up and testing of existing and recognised profiles and standards as part of the eHealth Interoperability Framework (eEIF). Today, standards and profiles are available and cover a very large spectrum of use cases. They can be easily implemented by ICT solutions deployed within the European market. To meet regulation requirements such as the directive 2007/47/EC on medical devices or simply to ensure state of art of data exchange, an interoperability testing process should be one of the main requirements for the success of eHealth solution deployment. An Interoperability Quality Management System is also a requirement for any entity that wants to test their interoperability environment of products. Promoting a quality label or certificate at the European level, will leverage the integration of solutions and offer a good opportunity to the industry to sell their products in Europe within one recognised testing process, avoiding redundancy among different not compliant testing processes.

Antilope's beneficiaries are all aware of these challenges. Through the project's core group and expert partners, Antilope has provided high quality and specific documentation that can be used by multiple stakeholders over Europe for their own projects or developments. This was achieved by launching workshops or summits where decision makers and opinion leaders were introduced to all deliverables and were encouraged to implement the Antilope results. Four main topics closely related were documented:

1. The refined eHealth European Interoperability Framework (reEIF) building upon the eEIF and using a case driven approach, sets the scene. It offers modelling of the interoperability world in order to create an environment to describe and discuss interoperability problems and solutions. Realisation scenarios, based on available profiles and standards are specified for each of these use cases.

2. The Quality Management System (QMS) for Interoperability Testing and the processes building upon the HITCH QMS and ISO standards, is a customisable description and a set of templates with instructions that allow a testing entity to create its own, specific Interoperability Testing documentation in the form of a single Quality Manual for Interoperability Testing.

3. The test tools inventory depicts the testing tools that would be sufficient for testing the recognised profiles that are selected for implementing the use cases described in the reEIF. For each of the existing testing tools that have been identified and analysed, the basic tool information such as relevant profile, tool name, tool developed by, tool location and tool info pages is supplemented with information on the tool use (web or local), access to source code and last but surely not least a tool category. In addition, the analysis points to areas where new or improved testing tools are needed to improve testing of eEIF Use Cases.

4. The quality label and certification processes describes the processes and gives models and description of the Conformity Assessment scheme and the relevant bodies that are involved in the process, concrete examples and governance that can be implemented in Europe, as well as recommendations and guidelines for supporting the deployment of such processes. The flexibility between European and national/regional levels is also considered: Recommendations are presented, based on the reusability at each level of the test methods and test tools. Extensions for fitting to particular projects or national needs are allowed and can be also reused at European level.

The results were presented during the ten summits organised during 2014 for adoption, uptake and promotion. Feedback and validation were helpful to the consolidation and the improvement of the documents. Governance of the interoperability assets and resources and an interoperability roadmap in Europe were also discussed in order to clarify the ecosystem and its sustainability.

1.2 Project context and objectives

During the last ten years, eHealth interoperability has become a major policy topic in Europe, critical for the development of Member States' national or regional eHealth services. Policies address services which rely on the availability of reliable and interpretable data exchanged between healthcare systems used by Health Professionals as well as by patients.

Increased clarity about the needs in terms of eHealth interoperability originates from national and regional programs, European cross-border projects such as the epSOS project, the Calliope project proposal for a governance roadmap, the HITCH project for interoperability testing recommendations and roadmap, the Mandate M403 for the definition of the standards adoption process and identification of business use cases and EHR-QTN with a roadmap for functional quality assessment of EHR systems.

The purpose of this Thematic Network project was to "support and broaden/strengthen the adoption, take-up and testing of existing eHealth standards and specifications as part of the eHealth European Interoperability Framework". According to the Description of Work:

> The project's objective was to promote the need for an eHealth interoperability European Framework that recognises well adopted standards-based profiles and to which is associated testing and quality label or certification processes for adoption. A quality manual and testing guidelines are also promoted within workshops and summits dedicated to decision makers and stakeholders.

The expected benefits of such an approach for stakeholders, competences centres, national eHealth programmes and any eHealth projects deployed cross-border, at national and regional levels, include:

- Interoperability harmonisation over Europe through common set of interoperability references (eEIF, QMS, testing tools and testing processes);
- Single European market for Healthcare ICT;
- Improved Patient safety;
- Reduction of costs by avoiding duplication of processes and none-compliant standards used by vendors.

To achieve the objectives, the project was divided into a number of work packages with specific activities related to one or more of the objectives. An overview of all the project's objectives as well as an explanation to how they have been addressed is available in appendix 2.

1.3 Main Scientific &Technological results

The project was divided into seven work packages. Four of them provided input and documents on the eHealth European Interoperability Framework, quality manual, testing tools and testing and quality label or certification processes. These work packages are complemented with the additional work packages on communication and adoption.

The deliverables were reviewed carefully by expert partners with a high level knowledge of standards and profiles. The experts were from standards bodies and competence centres, representing the projects or programmes that will implement the results of Antilope.

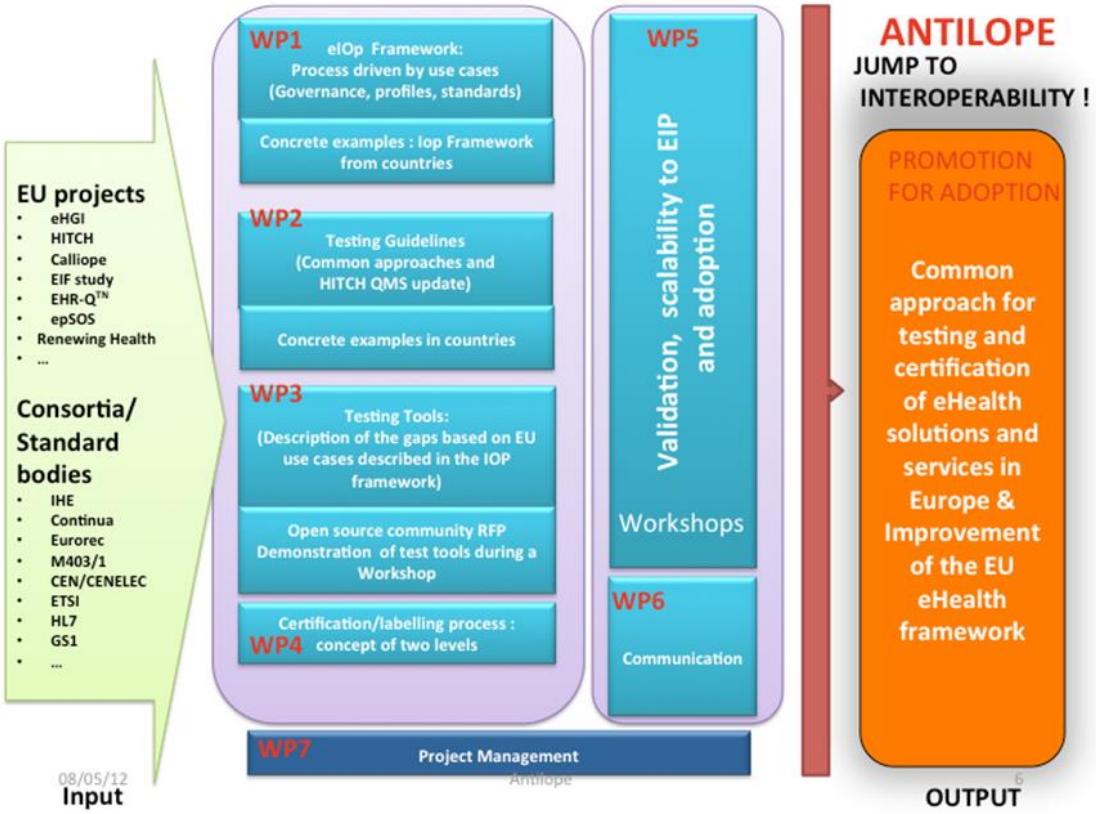

Figure 1: Antilope organisation

All work packages worked closely together in order to ensure consistency and a high level of quality of the project's deliverables.

Parallel to the work carried out in Antilope, the stakeholders were encouraged to adopt the approach described by the project.

All deliverables in WP1-5 went through the same process:

- Design and build first drafts of the deliverables: during the first period, the concepts, model and outline were submitted to the Core Group who debated and validated the content.
- A meeting with expert partners was held in Nice in September 2013 for their comments and feedback. The deliverables were adjusted consequently.
- First pre-final versions were submitted at the first period reviewers for comments and feedbacks (see first period report).
- The deliverables were published on the website end of 2013.
- Education material was presented during the ten summits (from February 2013 to October 2014).

- Presentations of the results were also presented in conferences, at meetings of the EIP AHA, or discussed with stakeholders interested in the work in 2014.

- After integration of the comments collected during the summits and other events, the deliverables were submitted to the validation partners (October 2014) and expert partners (November 2014) for review.

- Final versions were available in December 2014 on the Antilope website after integration of the last comments.

- All the comments and their resolution are available in one spreadsheet which holds all comments and responses. The spreadsheet is available here: http://www.antilope-project.eu/wp-content/uploads/2015/01/D7.3_Antilope_Appendix_5.pdf.

Below is an overview of the seven work packages' objectives and main outcomes.

WP1: Interoperability Framework

Objectives

Work Package 1 had three main tasks:

Task 1.1 – Inventory of relevant input: identification, selection and harmonisation of interoperability related use cases, using different sources.

Task 1.2 – Refining the European Interoperability Framework: detailed description of the selected relevant use cases for the EIF and, where possible, link them to relevant profiles from the standardisation consortia. The outcome was a refinement document that presents a more robust and enhanced interoperability framework, based on the additional material and inputs collected from the Thematic Network.

Task 1.3 – Create education material: This material was be used in the validation workshops organised by the Thematic Network across Europe.

Outcome

D1.1: The refined framework consists of:

- A set of Use Cases, which serve as standardised clinical problem settings that can be used as the basis for interoperability projects. Also, for each Use Case, one or more Realisation Scenarios were defined, that link the Use Case to internationally accepted Profiles and Standards. These will increase the interoperability consistency in Europe.

- A set of templates for the uniform description of these Use Cases, and of the accompanying Realisation Scenarios. These templates can be used to further expand the set of Use Cases presented by the Antilope project.

- A refined model for interoperability. This model will promote a shared model and understanding of interoperability aspects.

- A glossary of healthcare interoperability terms and definitions, as used throughout the Antilope documentation.

- An overview of the interoperability profiles that are mentioned in the different Use Cases and Realisation Scenarios. This consists of a short description of the different Profiles, and a schema that groups these Profiles into functionality categories.

The models and assets presented by WP1 are applicable in all European countries, even though the national/regional infrastructures are very dissimilar. During the different Antilope summits, where different countries informed each other about their national infrastructure, it became clear that countries may have different solutions and architectures, but that they can join forces to solve challenges that are largely identical. The materials provided by WP1 were seen as recognisable, understandable and practical at the same time, providing just enough depth to be applicable in almost all countries. Some countries/regions are working towards a more standardised approach towards healthcare interoperability, but these also have found the materials useful and insightful.

As an example of how standards and profiles can lead to much more economic solutions, the Netherlands and Denmark have compared notes on how to categorise some XDS metadata elements. This has become a possibility because both countries use a standardised solution (XDS) for the exchange of healthcare documents.

The refined interoperability model, which has evolved from the original eEIF model, has been accepted widely as a non-technical but comprehensive schema that shows the different aspects that have to be taken into consideration when interoperability issues are discussed. The model has already been translated into Dutch, Danish and Portuguese. Especially because technical terms have been avoided, it is easy to understand and helps driving home the idea that interoperability is more than just a technical issue. The Dutch ministry of health has validated the model and is using it in their documents and discussions.

The glossary of terms and definitions can be seen as a compact thesaurus containing the different terms used in interoperability. Interoperability that starts with interoperability of terms, and a clear definition of what is meant, is vital for good discussions.

One of the goals of Antilope was to help add more use cases, besides the ones that were worked out in the Antilope project. For this reason, WP1 has provided a template for the description of Interoperability Use Cases and their accompanying Realisation Scenarios. This means, that new use cases can be added, using these templates. They make sure that all necessary aspects of the use cases are covered, and that all use cases are described in the same manner.

The IHE and Continua profiles that are linked to the different use cases could overwhelm parties who wish to start implementing. Therefore, a practical categorisation of these profiles, and a short summary of each profile, has been given. This was considered as being a good introduction to these profiles.

Finally, it is important to note that a European approach towards interoperability and the use of interoperability profiles means that countries and regions can benefit from cooperation and alignment, also for some very specific projects. We all have the same patients and the same diseases, and therefore we can look for common solutions for the same interoperability challenges.

WP2 - Quality Manual for Interoperability Testing

Objectives

The overall objective of WP2 was to produce a Quality Manual for Interoperability Testing. The Quality Manual consists of:

- PART I: Quality Management System for Interoperability Testing
- PART II: Interoperability Testing Processes

The Quality Manual will ensure uniform and transparent interoperability testing of eHealth systems across organisations and vendor systems. The Quality Manual will be a valuable tool for the continuous improvement of interoperability testing in the eHealth domain.

Outcome

In the HITCH[5] project a Quality Management System for Interoperability Testing was developed. In Antilope this work has been revisited and extended with requirements for the operation of Conformity Assessment Bodies (CAB) performing Interoperability Testing (D2.1 Part 1: Quality Management System for Interoperability Testing). A number of relevant standards[6] have been assessed and added to the work done in Antilope.

D2.2 Part 2: The Interoperability Testing Processes is a set of interconnected "guidelines" that describes how to run a test session from start end to end. Each process has defined input and output and can be maintained and improved as a stand-alone entity by different people with the needed experience and skills.

[5] http://www.hitch-project.eu/

[6] Relevant standards have contributed to the QMS work in Antilope: ISO 17000, ISO 17011, ISO 17020, ISO 17025, ISO 13485, ISO 25000, IEEE 829

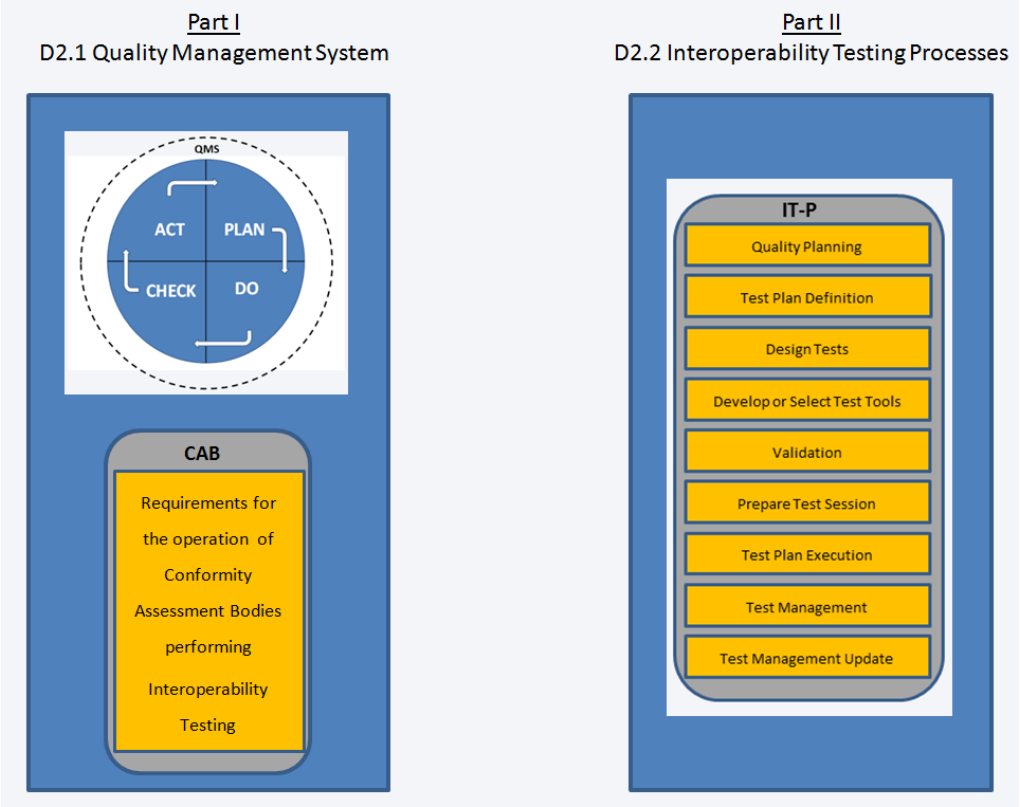

Figure 3 Quality Manual for Interoperability Testing

In year 1, a draft Quality Manual was prepared. The work was followed by preparation of education material to be used at the summits in Europe. The education material is based on an executive summary for D2.1 and D2.2 and a PowerPoint presentation.

The comments and feedback from the Supportive Validation Partners and the ten summits in Europe have been very positive as more organisations have expressed their interest in using the Quality Manual for Interoperability Testing. The national steering group for MedCom (the Ministry of Health, the Danish Regions, the Local Government and the General Practitioner Association) has agreed that MedCom shall implement the Quality Management System for Interoperability Testing based on the Quality Manual from the Antilope project. The work is scheduled to take eight months (January-August 2015) and will include 2,000 internal working hours and external consultancy assistance. The aim is to get the Quality Management System certified by an external accredited organisation. The Quality Management will ensure transparent processes and uniform quality for performing interoperability testing of the approx. 150 profiles used in Denmark in the eHealth domain.

During the lifetime of Antilope, it has been discussed with the "standardisation partners" if and how they can continue the work with the Quality Manual. Unfortunately no real agreement has been made, but a process for the continuation of the Quality Manual for Interoperability Testing is ensured. The work will be continued in the eStandards project funded by Horizon 2020 (start May 2015). In eStandards the Quality Manual for Interoperability Testing will be used for an update of the eEIF.

WP3 – Testing Tools

Objectives

The objective of this work package was to identify the required new testing tools that would, together with existing test tools, be sufficient for testing the selection of recognised profiles described in the eEIF framework. The work package will promote the development of required new tools in the open source community emphasising the consistency with the Gazelle test management tool. It is of particular importance that the testing tools can be adapted for use in testing at European, national/regional or project level.

Outcome

Antilope developed the report D3.1 that deals with testing tools required to continuously improve the interoperability of eHealth solutions. It specifically addresses testing tools that would be sufficient for testing the selection of recognised profiles used to implement eHealth Interoperability Framework and further elaborated in Antilope work package 1 deliverable D1.1. Having defined the methodology of the testing tools gap analysis, the document classifies the existing testing tools, concluding that for all relevant profiles numerous testing tools are actually available and their wider use need to be promoted. The deliverable further identifies possible testing tools improvements. Both profile specific and profile independent improvements are described. The final version of the document addressed comments received from project reviewers as well as from expert and validation partners.

Deliverable D3.2 is a Request for Proposal for development of new or improved testing tools. The document lists the desired testing tools improvement, defines the validation process for new tools including timeline and stipulates that new testing tools are planned to be demonstrated at the Connectathon in Luxemburg in April 2015. A reader friendly version of the RFP was published on Antilope website.

Deliverable D3.3 contains the education material related to testing tools. The material was extensively used during Antilope summits. Minor improvements and updates were prepared following the summits and reviews by expert and validation partners.

This work highlights the fact that interoperability of eHealth solutions can only be improved if appropriate testing tools are available and are being used. More specifically, the situation with testing tools can be characterised as follows:

- The gap analysis shows that testing tools for eEIF Use Cases do exist.
- The use of existing testing tools will improve interoperability of systems implementing eEIF Use Cases.
- In addition to immediate use of existing tools, improved testing tools should be developed to increase testing precision and productivity.
- Improvements needed at this point in time have been identified and the call to develop new or improved testing tools has been issued.

- As the eEIF evolves, there should be a continuous process of review, development and deployment of improved testing tools.

WP3 work was done by representatives of IHE, Continua and ETSI. This required individual contributions on specific agreed topics and numerous remote meetings using teleconferencing facilities. WP3 attended and presented at all Antilope regional summits. The perception is that the knowledge about existing testing tools was rather successfully spread in all regions of Europe. The RFP for new testing tools attracted interest and Antilope lead several more detailed discussions with interested organisations, but there were no firm commitments on new development. In retrospect, some kind of Antilope stimulation probably should have been envisaged to attract organisations to engage. WP3 deliverables were reviewed both by the Antilope core group, by the consortium's expert partners (SEPs) as well as Antilope validation partners (SVPs) in dedicated meetings.

WP4 - Interoperability Label and Certification process

Objectives

The goals of the WP were to design testing, quality label and certification processes that support, at the European level, the common interoperability requirements and at the national level of each European country or region, the specific or extended interoperability requirements respecting diversity and policy settings from each of the member states. Education material was provided for promotion and has been used in summits and conferences.

The results of this WP are built upon the recommendations of two previous projects:

- The HITCH project which after an analysis of the quality label and certification processes deployed in Europe provided recommendations for the specifications of such processes at the European and national/regional levels;

- EHR QTN which describe entities that support such processes.

The two tasks that were performed have specified in detail the quality label and certification processes that will fit to the European organisation (Europe and national/regional levels) and provided education material for decision makers and other stakeholders interested to develop these processes for their own needs:

- T4.1: after presentation of the benefit of the processes and clarification of the concept, the goal of the task was to propose functional models for the quality or certification processes. After selection of concrete examples over Europe, the task was to propose a guideline for those who want to develop such processes. A working group composed by the core group validated very early in the project all the concepts and the outline of the deliverable. Comments from the reviewers of the first period and the feedback from the ten summits and the expert partners were integrated at the end of the project for a new version of the document.

- T4.2: the education material was developed and was presented during the ten summit and parts were also reused to present the results at European conferences.

Outcome

Two deliverables have been produced: D4.1: the deliverable was developed in two iterations. The pre-final version was delivered end of 2013. It was the basis for developing the education material that was used in the ten summits. The deliverable was also used as a basis to exchange with stakeholders interested to develop quality label or certification processes for their own programmes or projects. The phase of collecting feedback provided several adjustments that were taken into account in the deliverable. For example, a new section on rationale and benefits based on HITCH was added, a restructuration of the document, an update considering the evolution of the European environment (end of epSOS project, EXPAND, CEF).

D4.2: the education material presented during the ten summits was also reviewed and simplified after the first summits to improve it and make this hard topic more accessible.

What we learned from the ten summits related to WP4 was the following:

- Functional model: the model and the resulted recommendations are robust and are implementable. Some countries and organisations that we were in contact with used the results: France with their new definition of certification for hospital interoperability requirements, IHE with its Conformity Assessment Scheme (available on www.IHE.net) and other national and regional programmes.

- From the summits, the stakeholders focused on the necessity of flexibility of the quality label and certification processes definition for developing a single market in Europe e.g. extensions for the national/regional levels should be considered additionally to the European processes scheme which delivers requirements, test methods and testing processes for uses cases supported by standards and recognized IHE profiles.

- The next step shall be the development of the European Conformity Scheme based on the eHealth European Interoperability Framework developed in WP1 as the interoperability requirements.

WP5 – Validation Scalability to EIP and Adoption

Tasks 1 & 3: Antilope Interoperability Summits

The work package's main task was setting-up "Regional eHealth Interoperability Summits" in order to validate and promote the use of standards while progressing interoperability. The project organised, in partnership with expert partners as well as with validation partners, ten "Summits", covering the complete European Union and addressing mainly national decision makers.

Clusters of countries were defined. The local/regional validation partners, responsible for the logistics, identified and invited decision makers, while chairing their Summit. Ten Summits were organised as listed in the next table:

Nr.	Region		Date
1	Nordic	Odense, Denmark	2014.01.21
2	Eastern Europe	Bratislava Slovakia	2014.02.26
3	Western Balkan	Ljubljana, Slovenia	2014.04.03
4	Central Europe	Vienna, Austria	2014.04.11

5	United Kingdom/ Ireland	London, England	2014.04.30
6	South Eastern Europe	Athens, Greece	2014.05.13
7	France & Switzerland	Paris, France	2014.05.20
8	Benelux	Delft, The Netherlands	2014.06.06
9	Italy / Malta	Treviso, Italy	2014.06.18
10	Iberian Peninsula	Valladolid, Spain	2014.09.24

A standard agenda was provided to the SVP partners, of course with certain flexibility. The agenda always included a presentation of the education material for each of the work packages AND a presentation of the Status of Interoperability (Policy) in each of the countries within the cluster.

ANTILOPE REGIONAL SUMMIT ON INTEROPERABILITY Area 7		
City, date Location (name of meeting facility) Address		
08:45 – 09:00	Registration	
09:00 – 09:05	Welcome	
09:05 – 09:20	Roll Call of Delegates	All
09:20 – 10:00	ANTILOPE Main Presentation – Part I	SVP partner, assisted when requested by a core team member
10:00 - 10:30	Coffee Break	
10:30 – 11:15	ANTILOPE Main Presentation – Part II	SVP partner, assisted when requested by a core team member
11:15 – 12:00	National / Regional State of the Art	One speaker per country part of the cluster
12:00 - 12:30	Introduction to the debate	Core Team representative
12:30 - 13:40	Lunch Break	
13:40 – 15:00	Debate based on the ANTILOPE key messages: 20 minutes per topic / WP	All, chaired if possible by a core team member
15:00 - 15:20	Main conclusions	SVP partner
15:20 - 15:40	Coffee Break	
15:40 – 16:00	Introducing the Questionnaires	
16:00 – 16:15	Any other issue	All
16:15 – 17:20	Completing Questionnaire I & II	All

This resulted in a country oriented overview integrated into Deliverable D5.3. The attendees identified the lack of information sharing, even between neighbouring countries, as one of the reasons for a failing interoperability in cross-border settings.

Two standard questionnaires were provided, to be completed by the attendees, as input to the core team. The first questionnaire addressed mainly the organisational aspects while the second questionnaire focused on the presentations of the education material. Not all attendees completed the questionnaires.

The targeted audience was limited in number and described as the "decision makers". Most of the SVP partners, except UK and Italy, limited their invitations to decision makers. Most of the SVP partners succeeded in getting the decision makers in the meetings.

Each of the SVP partners produced a standardised report. All these reports are included, "as is" in Deliverable D5.3.

Main conclusions

- A very large majority of the attendees fully support the main Antilope approach regarding how to progress towards interoperability and regarding the importance of third party assessment of the compliance of health information system to these interoperability requirements.

- Consensus seems to grow regarding a use case based approach to improve interoperability step by step. The consortium confirms at the same time some conclusions of the HITCH and the EHR-QTN projects: the importance of quality management and quality assessing eHealth interoperability and services, using quality assessed testing tools and resulting in quality labels and/or certificates. Short description of the tasks and objectives within the WP.

- The implementation of business use cases is quite different from one country to another and harmonisation could be more complex and need more time than expected.

- One of the acquired advantages of the Antilope Summits was that authorities (from the public administration mainly) were acquainted with each other and started to become aware what happened in neighbouring countries.

T5.2 Objectives

Within work package 5 of the validation of Antilope deliverables with relevant stakeholders and audiences, task 5.2 worked to "assure that the options and education material of Antilope are aligned with the objectives of the European Innovation Partnership on Active and Health Ageing (EIP AHA). Practically, Antilope sought to promote its ideas and concepts of interoperability in the EIP AHA, to validate its use cases with the EIP AHA, and to deliver technical advice and support on interoperability.

T5.2 Outcome

Antilope developed the report D5.2 which details of the interactions, and their results, of Antilope with the EIP AHA, especially the action groups B3 and C2. Latest draft deliverables of the C2 action group (which leads the EIP AHA work on interoperability) prominently reference Antilope and reflect Antilope core recommendations and concepts including a commitment to an approach based on use cases, integration profiles, and validation/certification.

Beyond presentations delivered at EIP AHA events, no specific education material was developed.

The EIP AHA interoperability journey is far from over. C2 recommendations have to be recognised and adopted by other action groups (especially B3) and by the healthcare administrations which are their members. There remains a gap between a political, rather abstract commitment to interoperability and the reality and preferences of procurers who, given the choice, often choose the

easy (and sometimes seemingly cheaper) route of proprietary solutions. This gap needs to be overcome by leadership from regional and national policymakers.

WP5 attended and presented, with the help of WP1 and others, at various EIP AHA meetings and forged connections with the work group on interoperability in action group C2. The technical coordinator provided additional technical assistance. The deliverable was reviewed both by the Antilope core group, by representatives of EIP AHA action groups, and by a number of the consortium's expert partners at a dedicated event in November 2014 in Paris, France.

WP6 – Communication

Objectives

The objectives of this work package were (1) to help the project raise awareness among major stakeholders and the public about eHealth interoperability in general and the project specifically, and (2) to promote the wider adoption of standards and profiles. To address these objectives, the work package developed a consistent branding of the project (including logo and file templates), developed a website and electronic communication channels, and developed communication material such as a flyer, rollup, memory sticks to assist with real life events. Over the course of the project the work package developed and grew Antilope's presence in social networks and built a direct mailing list with more than 230 email recipients.

Outcome

The WP6 deliverables included:

- D6.1 Communication plan which set out early in the project the objectives, strategy and planned activities;
- D6.2 Communication tools which included branding, website, templates, and communication collateral like a standard flyer and a project rollup; and
- D6.3 Final Communication report as the final summary review of activities and an assessment of accomplishments.

A website section was created answering general questions about eHealth interoperability, benefits, and relevance.

The objectives, scope and deliverables of the Antilope project – proposing the framework conditions for eHealth interoperability, for quality management, for testing tools, certification and quality labelling – were geared towards an audience of policymakers, eHealth competence centres and experts. The attempts of the project to also reach buyers and end-users and to attract them to join the regional Antilope summits were met with limited success.

The branding, website and templates were developed in full consultation with the Antilope core group which gave ample input and advice to various proposals. The written deliverables were reviewed by the full core group, in line with the general project procedures.

WP7 – Project Management

Project management in WP7 started at the beginning of the project and continued throughout its lifetime.

Project management was divided between MedCom and IHE Europe. MedCom was responsible for overall project management (T7.1) and IHE was responsible for quality assurance and consolidation of the technical content and work package management (T7.2 and T7.3).

The Antilope project was organised in three groups:

The Core Team was in charge of the production of the deliverables and documentation as well as responsible for the organisation of the project. Six core team partners were identified: MedCom, a national competence centre on eHealth interoperability since 1994, IHE-Europe and Continua Health Alliance both have very strong experience on profiles, testing tools, testing process and labelling and certification processes. EuroRec as a consortium developing functional sets of criteria and perform testing with expertise in quality labelling and certification of EHR systems, Nictiz as a Dutch national competence centre in eHealth interoperability. ETSI is a recognised standards development organisation in Telecom field with mature standards and mature testing process.

The Supportive and SDO Expert Partners (SEP) contributed with their, more specifically regarding development and uptake of standards. They were responsible for the initial internal validation of the Antilope documentation, before using that documentation during the Antilope workshops. Three SDO experts were recruited from international and European standards bodies: EN13606, NEN representing CEN, HL7 International, as an international standard body, and ILiM representing GS1. Three supportive experts came from national and regional authorities as well as national competence centres: EEHF, the national Estonian E-Health Foundation, NIJZ, the central Slovenian institution for public health practice, and the ELO network (EHTEL) with national competence centres from most European countries.

The Supportive Validation Partners (SVP) were in charge of the dissemination and "field validation" of the Antilope recommendations among all stakeholders in their geographical area. This validation encompasses the organisation of at least one face-to-face validation workshop involving the main stakeholders of the countries to increase eHealth Interoperability. These validation activities were reported in a structured way and include comments as well as suggestions regarding the Antilope recommendations. The final purpose was to demonstrate, assisted by the core partners, feasibility and added value of the Antilope approach. The European countries were divided into ten regions with for each region a responsible SVP, coordinating with the different stakeholders in the area, organising the workshop and reporting comments and suggestions.

The ten regions were Scandinavia (MEDIQ), Central Europe (NCZI), Germany/Austria (Technikum Wien), Benelux (ProRec-BE), United Kingdom/Ireland (IHE UK), Italy/Malta (Assinter), France/Switzerland (Interop'Santé), Iberian peninsula (Ticsalut), Balkan (ProRec Slovenia) and South-Eastern Europe (HL7 Hellas).

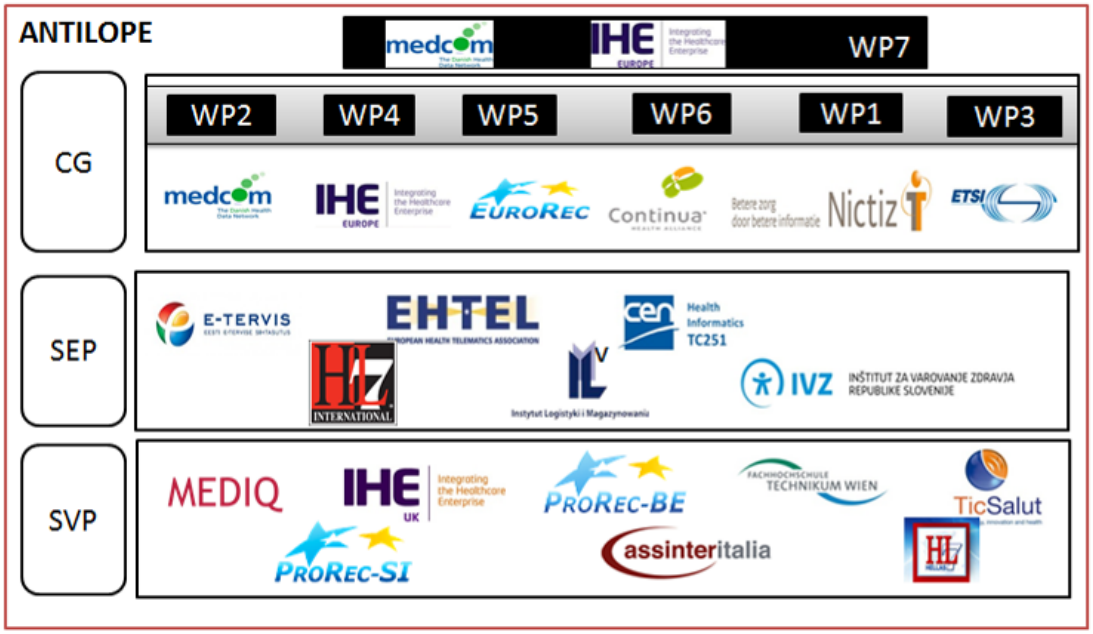

Figure 4 Management diagram

T7.1 objectives

The objectives of this task were to manage the project collectively, ensuring proper execution of project activities to the specified level of quality for deliverables and progress according to the project work plan and to provide the administrative and financial management of the whole project, the monitoring mechanisms and the liaison with the EC on behalf of the project consortium.

Outcome

Project management has ensured careful use of project resources, appropriate project performance along the guidelines of the Commission, duly reporting to the Project Officer. Project management has ensured commitment from all partners to work towards the project goals in a collaborative way. The tone and atmosphere between partners are constructive and friendly.

Deliverables

Even though the deliverables which form the basis for the education material (D1.1, D2.1, D.2.2, D3.1 and D4.1) were to be delivered in M23, they were already available in a pre-final form in M10 and they have been updated and delivered in M22, one month ahead of schedule. Furthermore, the education material which was delivered in M10 for WP1-WP4 has been updated to a version 1.1, where relevant, to match the updates of the deliverables.

The reason behind the decision to deliver the documents in a pre-final version in M10 was the need for stable and thoroughly prepared documents on which to base the education material. The pre-final versions were publically available on the Antilope website, giving stakeholders and other interested persons the possibility to read them and respond to them.

The pre-final deliverables were reviewed by the SEPs who provided input. Two physical meetings were arranged between the core group and the expert partners. During the first meeting (Dublin,

Ireland, 16 May 2013), the core group presented the project ideas and divided work between the expert partners. In the Description of Work, the work effort was spread out among all expert partners on all WPs. During the meeting, the experts were asked to commit to a few WPs and put their main effort there to provide thorough feedback, rather than superficial input to all. The division of work was the following:

No	SEP	WP1: IOP	WP2: Quality Manual	WP3: Testing Tool	WP4: Label & Certification	WP5: Validation
7	EEHF	X		X		X
8	EHTEL	X			X	X
9	CEN/NEN	X	X			X
10	Assoc13606		X		X	X
11	Ilim	X				X
12	HL7-INT		X	X	X	
23	NIPH	X	X		X	

The final deliverables were updated with input from the summits, the expert partners and the validation partners. On 16 October 2014, the SVPs met with the core group in Sophia-Antipolis, France to discuss the results from the summits and the deliverables. In advance, the SVPs were asked to prepare a presentation with outcomes from their respective summits as well as a "comment response sheet" (a structured way to provide feedback) with comments to the deliverables. The WP leaders received a lot of valuable input.

The SEPs were also invited to review the updated deliverables and discuss them with the core group on 19 November 2014 at a meeting in Paris. In advance they were asked to provide comments in the comment response sheet and deliver a report on each of the deliverables they were asked to review. Additionally, they were asked to prepare a presentation with their main conclusions (likes, dislikes, missing, recommendations) from their review. These were discussed during the meeting. This proved to be a successful way to engage the experts and spark fruitful discussions during the meeting. The deliverables have been updated accordingly. The experts' reports are available on request.

Both the validation and expert partners were very engaged and delivered valuable input for the core group. The comment response sheet with all comments and responses from the core group is available here:

http://www.antilope-project.eu/wp-content/uploads/2015/01/D7.3_Antilope_Appendix_5.pdf.

The ten summits were all successfully executed and contributed input to the updates of the deliverables. Core group members participated in the summits to help the validation partners present their work. This was not the original intention, however, the group realised that in order to ensure correct delivery of the Antilope message, this was necessary. Additionally, it also ensured that the experience and knowledge from the summit was captured and shared in the core group.

The final step for the project was to plan and carry out a handover workshop, where the main messages from the project were presented and the project engaged stakeholders and encouraged them to take over and use the results. A number of countries and organisations presented how they already plan to use the recommendations from Antilope. A roundtable discussion on how Antilope's results can be used onwards included a representative from the Commission as well as the new Horizon 2020 projects. This was the project's attempt to ensure that the important work carried out over the past two years will be used going forward.

The response at the workshop was very positive. The audience was engaged in the discussions and countries and projects alike are already planning to incorporate the results into their future work. The project's results have now been handed over to, among others, the new Horizon 2020 projects under PHC34. Please see appendix 4 for an overview of how Antilope's results will be adopted.

Programme and presentations from the Handover Workshop is available on the project's website: http://www.antilope-project.eu/results-handover-workshop-29-january-2015/.

Meetings

From the beginning of the project, the core group planned virtual meetings on the first Wednesday of every month using GoToMeeting which enables the participants to share the screen while talking. These core group meetings were facilitated by ETSI but hosted by MedCom. They were used for managing project progress and share knowledge. Extra meetings were arranged when necessary. A total of 32 virtual core group meetings were held. In addition, the work package leaders scheduled internal WP meetings whenever necessary.

In order to engage, coordinate and ensure project progress, a number of face to face meetings were organised:

Meeting type	**Date**	**Venue**
Kick-Off meeting Core Group	7 & 8 February 2013	MedCom, Odense, Denmark
Core Group meeting	17 April 2013	Istanbul, Turkey
Core Group + SEP meeting	16 May 2013	Irish Computer Society, Dublin, Ireland
Core Group + SVP meeting	23 August 2013	Copenhagen, Denmark
Core Group + SEP meeting	5 & 6 September 2013	ETSI, Sophia-Antipolis, France
Core Group meeting	18 October 2013	Paris, France
Core Group	13 May 2014	Athens, Greece
Core Group + SVP meeting	16 October 2014	ETSI, Sophia-Antipolis, France
Core Group meeting	17 October 2014	ETSI, Sophia-Antipolis, France
Core Group + SEP meeting	19 November 2014	Paris, France

For effective communication between project partners Antilope set up and extensively used four mailing lists: ANTILOPE_CORE with all members of the core team (15 subscribers), ANTILOPE_SEP with expert partners and core team members (31 subscriber), ANTILOPE_SVP with validation partners and core team (44 subscribers), and ANTILOPE_ALL with all partners on the project (71 subscriber). Mailing lists are archived and project partners could easily search through archived messages.

Administration

In order to monitor contribution from partners and their resource use, quarterly reports were introduced. In these, the partners were asked to report hours spent on each WP and explain which activities they had performed. It proved difficult to collect these reports from many partners on a regular basis. However in the end, with this system, it has been easier to collect information on resource use and activities which is now provided in this report and in the periodic report.

Deviations

Only one noticeable deviation has occurred in the project, however it has not affected the outcome or overall resource use in the project. In agreement with MedCom, Mediq has been the main contributor to WP2 instead of MedCom due to the fact that Mediq participated in the creation of the first QMS in the HITCH project. In return, MedCom, with the organisation's well-established network within the Nordic countries, was the main organiser of the Nordic summit instead of Mediq.

The Commission was informed about the change within the first year of the project and during the first review where a plan for resource redistribution was presented. This resource redistribution is currently in process.

T7.2 & T7.3 objectives

T7.2 is Quality assurance and T7.3 is Consolidation – technical and WP management.

The objective of these tasks were to control the quality of the deliverables and to ensure the consistency between all the WPs. Risk analysis was also defined to be sure that the deliverables were provide on time.

T7.2 & T7.3 Outcome

The main deliverable was the quality assurance document that included the risk analysis. The purpose of the document was to describe the quality objectives of the Antilope project. It describes how the deliverables are produced (create, update, review and approve), and also identifies the procedures and activities that the consortium partners define, plan, and execute to assure the quality of the project deliverables and project management.

The project quality plan provides an in depth description of the quality expectations, the methods to be used for reaching those expectations and a list of supporting documents.

The Quality Assurance was validated by the core group where the procedures were applied.

As an example, the risk analysis of November 2014 is presented:

Risk Management - November 2014

Type	Name of the risk	Description	likehood of occurrence	Severity	Mitigation	Means of verification
Project management						
	Finalisation of the deliverables on time	Deadline planned	Low	Medium	Reminder to the WPLs	Dates are planned
	Report of the summits to be finalised on time	due to the delay on providing the reports by the SVPs	Low	Low	contact the SVP L , reminder to them	quality on the minutes
Contents						
WP1	Update the deliverable with the feedbacks	feedback are not on line with the content	Low	Medium	Propose answers to the feedback and comments	Spreadheet with the answers well detailed
WP2	knowledge of quality regarding interoperability testing	skills are needed.	Low	Medium	few feedback from the summits	Validation of the Deliverable
WP3	linked with WP1	tools are related to the selection of profiles and standards of use cases described in WP1.	Medium	Medium	Acceptation of the risk	Deliverable on time
	New tools that were not listed	New tools are proposed by partners	Medium	Medium	Validate following the criteria if they are good candidate	Deliverable on time
WP4	Complexity of the content	need skills.	Low	Medium	few feedback from the summits	Validation of the Deliverable
	Feedbacks and omments to be integrated	collect new comments at the end of the project	Medium	Low	Feedbacks integrated	Deliverable on time
WP5	Complete all the summits and the reports	explain to SVPs to obtain feedback from the audience	Medium	Low	Reminder and closed contacts with the SVPs	Deliverable on time
WP6	Communication materials not available on time	materials not available to the final conference	Low	Low	Define with the coodinator a plan B	website, letter, flyer

In the beginning of the project, a few serious risks were detected. After they were addressed, the risk analysis was used less.

For a project like Antilope, it is very important to have a quality assurance and a clear planning that all the partners validate. The different steps of the quality were well known by the partners. Several actions were strictly managed by the technical coordinator:

- Production of templates: several templates were provided by WP6 for consistency between WPs: presentation, document, comment spreadsheet. Other communication deliverables were also reviewed in this spirit.
- Update of the deliverables (all WPLs): to update the deliverable a strict process was in place and followed by the Core group. Specific calls were performed and the monthly calls were also used to consolidate all the deliverables and their progress (the comment spreadsheet was tracking the progress);
- Consistency of the contents (all WPLs): a common glossary is available in the WP1 and was reused by each WP for their own needs.
- Quality review (Technical coordinator): all the final deliverables were checked when they were ready (November and December 2014). The review checked the form (template is correctly used, references are there, glossary is correct) and a light content review was also performed to check the consistency.

1.4 Main conclusions and results

Antilope is a thematic network with limited resources. In spite of this, all partners showed a great commitment to the work and to the objectives of the project.

The project was divided into three groups of participants:

- The core group which was the main contributors and authors of the deliverables
- The expert partners who helped the core group with expert input and review
- The validation partners who organised the summits and reviewed the deliverables

This division proved to be a good way to organise the project. All partners lived up to the expectations and delivered solid contributions. It turned out, however, that participation of core group members in the summits was valuable because the content of the deliverables is not easy to convey for the partners who were not involved in their creation. This required more travel for some core group members than anticipated. The positive side of their participation in the summits was the fact that the experiences and lessons learned from the summits were fed back to the core group in their monthly teleconferences.

Each WP produced deliverables and education material of high quality which can be used by interested countries and organisations. One of the advantages of the deliverables is that they can be used individually. If someone is interested in use cases, D1.1 is available; if an organisation wants to implement a quality management system, D2.1 and D2.2 provides guidelines for this; if a party is interested in testing tools, D3.1 is available; or if the interest is within interoperability labels and certification processes, D4.1 provides information about this.

The main outcome of the individual work packages are described in chapter 1.3 above. However, here is a short recap of the main achievements.

WP1: Detailed specification and interpretation of refined eEIF use cases and related education material was produced.

WP2: Framework for a Quality Manual defined and outlined. Interoperability testing process described. Education material in relation to Quality management provided.

WP3: Inventory of test tools for eEIF use cases was identified. Missing tools needed to be developed described. Education material related to interoperability test tools provided.

WP4: Specification of the quality label and certification processes that will fit to the European organisation is outlined. Education material related to this provided.

WP5: Ten summits completed, summary of results and feedback collected, Antilope results validated and disseminated also with the EIP AHA and assistance rendered to action group C2.

The summits organised in WP5 were all a success with great commitment from the validation partners and their network. The summits showed a great interest in interoperability and cooperation/knowledge sharing within countries and across borders. They also showed, however, that this knowledge sharing and cooperation is not yet established in most places. A significant result from the summits is that Antilope's work was endorsed but with the recognition that this is a difficult area, and interoperability is not easy to reach.

Another significant result of the summits concerns the "spin-off" they created. In appendix 3 is a list of 23 spin-offs results which range from information meetings to actual implementation of some of Antilope's recommendations. This is really an indication of the project's success and relevance in Europe.

The website has worked well and been used as the main communication tool. It has been useful for providing information about the summits (including registration management) and sharing the Antilope documents. Newsletters, Linked-In and Twitter accounts were used to share information. A public webinar had many visitors and a webinar for the validation partners to learn about the deliverables also proved useful.

Project management has ensured regular follow-up in order to ensure progress and commitment from partners. Resources have been monitored to ensure proper and efficient use and quality assurance has been enforced to guarantee consistency and quality of the deliverables.

1.5 Potential impact, main dissemination activities and exploitation of results

Potential impact

The Description of Work identified three areas of potential impact of the Antilope project:

Description in DoW	Antilope's response
Improve eHealth Interoperability: the ANTILOPE TN will largely contribute to realise interoperability based on a selection of profiles and standards from the eHealth EIF disseminated across Europe during the lifetime of the project. It will allow to the actual and future projects in Europe to have guidelines and educational material available that support them building their IT architecture in a confident manner in a context where the interoperability ecosystem will increase, facilitate appropriation of the knowledge and provide tools to enhance quality and interoperability.	Antilope reviewed the eHealth European Interoperability Framework and improved it by: • providing guidelines for use cases design • reviewing and validating the list of IHE profiles that are related to the use cases A refined eEIF is the result (D1.1) Education material was developed to decision makers and stakeholders and presented during the ten summits that were organised. Adoption of the results will be presented at the hand over workshop planned on 29 January 2015.
Provide testing Quality Processes and Tools: interoperability and correct use of the profiles of the Interoperability Framework will require objective and reliable ways to document compliance to these interoperability requirements. The development of guidelines for testing processes and tools will support the conformance of the applications to the Interoperability Framework requirements. Having a clear definition of the testing process and guidelines, compatible with the appropriate ISO/IEC standards, implemented at the	Quality manual systems for interoperability testing processes was developed based on HITCH deliverables and selected QMS standards (D2.1 and D2.2). An overview of testing tools related to the use cases were specified in D3.1. Guideline on testing processes is available in D4.1. Concepts and functional model for testing, quality label and certification processes were

European, national/regional and local levels will increase convergence of the applications and services offered by the market across the continent.	developed in D4.1 based on ISO/IEC 1700X standards. Recommendations from HITCH on testing processes flexibility were taken into account in the results
Testing and certification governance: will foster the Quality Labelling and Certification improving compliance and ease convergence and subsequently interoperability of the applications and eHealth services at National as well as at cross-border level. This will impact positively quality and continuity of care. It will also allow end-users, health professionals as well as patients, to be more confident with the products that they acquire.	The testing and certification governance were also taken into account, especially on the mutualisation of the processes from Europe to nation/region and vice versa for the benefit of patient and stakeholders, meaning: • better quality of the products • one single market • reducing costs by avoiding duplication and testing processes that are not compliant
Additional potential impact: Provide guidance for developing eHealth Interoperability in Europe.	The Antilope approach can guide any eHealth project or programme to develop interoperability design and testing.

Main dissemination activities

- Electronic (website, media, emails, social networks)
- Ten regional validation summits; EIP AHA, work with ELO network and international associations
- Outreach events of core group and entire consortium
- Presentations of Antilope at various occasions (network meetings, conferences etc.)

See chapter 2 for more information about dissemination.

Collaboration with other partners

The project consisted of a core group of six beneficiaries plus expert partners (SEPs) and regional partners (SVPs). Apart from the cooperation within the project, all partners helped communicate about Antilope within their regional/national networks and memberships.

Furthermore, Antilope conducted outreach activities to keep others apprised, including projects (ReAAL), AAL community (AAL Forum), and especially the regions and organisations in EIP AHA.

Exploitation of results

- Antilope created a solid legacy of guidance documents that serve as reference to the field. These documents will continue to be available to the field on the public Antilope website.
- Results are already used by Member States and EU projects.
- Through Antilope, many connections were forged that will outlast the project.
- Antilope linked with successor projects through "handover workshop" to pass on knowledge, networks (also social: Twitter, LinkedIn, mailing list), and accomplishments.
- Many Antilope consortium members will carry on the torch as their missions are similar to Antilope's.
- The EIP AHA has adopted core elements of the Antilope documents and will carry them forward.
- A list of "spin-offs" are attached in appendix 3. In the list are 23 examples of how Antilope will be used around Europe onwards.
- The WHO endorses Antilope's results and will promote them in upcoming events. They also consider translating core deliverables into Russian.

1.6 Project public website and contact details.

The public website has been hosted at www.antilope-project.eu and for the duration of the project has been managed with an online content management system (Wordpress). Physically the website was hosted by Antilope's website developer Mywebpixie to whom WP6 subcontracted website development and maintenance. In December 2014 the website had 658 unique website visitors and more than 2,000 page views.

With the end of the project, the website hosting will be transferred to IHE Europe which has kindly committed to hosting the Antilope website in its current form. The domain name www.antilope-project.eu will equally be transferred to IHE Europe. The website will be available at this URL until 2018 or longer.

Relevant contact details include:

Website manager until 31 January 2015	Michael Strübin	michael.strubin@continuaalliance.org +32 498 520044
Website developer and host until 31 January 2015	Lydie Baillie	info@mywebpixie.com +33 (695) 144 519
Webmaster after 1 February 2015	Eric Poiseau (IHE Europe)	eric.poiseau@univ-rennes1.fr +33 (676) 940 140

Project logo:

Project roll-up:

Invitation flyer (front page Denmark):

European Commission

ICTPSP

Antilope
Advancing eHealth Interoperability

Antilope
E-Health Interoperability – SUMMIT

The European Commission launched the Thematic Network project ***Antilope*** in 2013 in order to promote the use of standards and profiles for e-Health interoperability and foster their adoptions across the European Union.

Antilope www.antilope-project.eu is supported by leading International standardisation bodies and will through 10 regional summits throughout Europe, highlight the critical role played by a European Interoperability Framework, by an interoperability Quality Management System, by supportive test tools and by quality labels and certificates for interoperable solutions.

The ***Antilope*** Summit in Northern Europe will be held at MedCom, The Danish Health Data Network in Odense, and will provide you and other decisionmakers a unique opportunity to learn about and understand why such tools and associated policies are required to deploy interoperability in your country and across Europe.

Invitation
Antilope **summit, Northern Europe**

Date: Tuesday, 21st January 2014
Venue: MedCom, Forskerparken 10, Odense, Denmark.
Register: http://www.antilope-project.eu/events/6/dk-summit/

Who should attend:
- Persons interested in setting up Interoperability testing.
- Persons and organisations responsible for selecting, decisionmaking and implementing e-Health standards.
- People from Government and industry.

Background material:
www.antilope-project.eu/resources

What do you get from the summit:
- Overview, testing methods, testing tools.
- Good ideas for establishing interoperability testing.
- Network.

Hotel:
Radisson Blu H.C. Andersen Hotel, Odense.
Reduced Antilope-rate: Call +45 66 14 78 00.
Booking number: 1089475.

Travel info:
http://www.antilope-project.eu/events/6/dk-summit/

Read about MedCom: www.medcom.dk

Antilope is a thematic network partially funded by the European Commission under the ICT Policy Support Programme (ICT PSP) as part of the Competitiveness and Innovation Framework Programme (CIP).

Summit arranged by:

medcom The Danish Health Data Network

MEDIQ

Pictures

Picture from summit in Denmark:

Picture from summit in Italy:

Picture of the validation partners and the core group:

List of main contact persons:

No.	Partner short name	Name of contact person(s)	E-mail address(es)
1	MedCom	Ib Johansen Jennie Søderberg Mie H. Matthiesen	ijo@medcom.dk jsb@medcom.dk mhm@medcom.dk
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4	Continua	Michael Strübin	michael.strubin@continuaalliance.org
5	NICTIZ	Vincent van Pelt Michiel Sprenger	vanpelt@nictiz.nl sprenger@NICTIZ.NL
6	ETSI	Milan Zoric	milan.zoric@ETSI.ORG
7	EEHF	Heli Laarmann Pille Kink	heli@e-tervis.ee Pille.Kink@e-tervis.ee
8	EHTEL	Stephan Schug Andreas Grode Marc Lange	stephan.schug@ehtel.eu andreas.grode@gematik.dk marc.lange@ehtel.eu
9	NEN	Stephen Kay Shirin Golyardi	s.kay@HISTANDARDS.NET Shirin.golyardi@NEN.NL
10	EN13606	Gerard Freriks Renè Schippers Alberto Moreno Conde	gerard.freriks@EN13606.ORG rene.schippers@EN13606.ORG alberto.moreno.exts@juntadeandalucia.es
11	ILiM	Anna Gawronska Ewa Dobrzeniecka	anna.gawronska-blaszczyk@GS1PL.ORG ewa.dobrzeniecka@ILIM.POZNAN.PL
12	HL7 International	Catherine Chronaki	euoffice@HL7.ORG
13	ProRec.Si	Leo Ciglenečki	leo.ciglenecki@SIOL.NET
14	NCZI	Pavol Rieger	pavol.rieger@NCZISK.SK
15	Assinter	Marta Gentili Manuel Benedetti Luca Rigoni Gilda De Marco Teresa Gallelli Michela Gabrieli Andrea Migliavacca	marta.gentili@ASSINTERITALIA.IT Manuel.Benedetti@infotn.it Luca.rigoni@assinteritalia.it Gilda.demarco@insiel.it Teresa.gallelli@cup2000.it mgabrieli@consorzioarsenal.it andrea.migliavacca@cnt.lispa.it
16	HL7 Hellas	Alexander Berler Nikos Kyriakoulakos	a.berler@GNOMON.COM.GR kyriakoy@apollo.gr info@hl7.org.gr
17	IHE-UK	Roger Wallhouse (UK) Ed Conley (UK) Mary Cleary (Ireland)	roger.wallhouse@IHE-UK.ORG ed.conley@btinternet.com mary@ics.ie
18	TICSALUT	Ignasi Garcia-Milá Enric Llopis Escolar Bruna Miralpeix	igarciamila@TICSALUT.CAT ellopis@ticsalut.cat bmiralpeix@ticsalut.cat

19	ProRec.Be	Miet Dequae	miet.dequae@PROREC.BE
20	Interop Santé	Jean-Charles Dron	jean-charles.dron@INTEROPSANTE.ORG
21	Technikum Wien	Stefan Sauermann	sauermann@technikum-wien.at
22	MEDIQ	Morten Bruun-Rasmussen	mbr@MEDIQ.DK
23	NIJZ	Alen Vrecko	Alen.Vrecko@nijz.si

2. Use and dissemination of foreground

Dissemination measures

Education and dissemination about the Antilope network and its deliverables, including the testing tools and various education materials have been central objectives of the network. The aim of these activities has been to ensure the proper promotion of the network outcomes and the raising of public awareness.

Dissemination of Antilope's promotional tools and material has been done through several channels. On one hand, summits have been organised by the Supportive Validation Partners. The aim of these workshops has not only been to disseminate, but also to validate the materials and deliverables that were presented during the summits.

Standard dissemination activities in Europe have shown that standards adoption must be driven by local needs and stakeholders. Healthcare professionals and other users must be convinced of the benefits of standards; local SMEs and industry must be on board; and policy makers must allow or even require procurers to mandate standards compliance in their tenders to suppliers. Behind a successful standards adoption there is often a local "champion" who understands the technology and has the connections with the policy level and stakeholders to build coalitions and consensus. Antilope's Supportive Validation Partners have identified these champions and invited them to the summits.

Concerning addressing the political dimension within Antilope, Antilope presented occasionally about project progress and deliverables to the eHealth Governance Initiative with the objective to indirectly inform the EU eHealth Network. Antilope also worked in and with the European Innovation Partnership for Active and Healthy Ageing to reach a mix of regional policymakers, experts and stakeholders.

The consortium also planned two outreach and media initiatives in order to send out the Antilope message. The first was a public webinar held on 25 March 2014 that was an open invitation to the public to learn more about the Antilope deliverables. More than 50 people registered and about half attended, while the recording posted on the Antilope website has been viewed more than a hundred times (as of 31 December 2014). The second was originally conceived to be another webinar, but the core group determined that the first webinar, whose recording is still available on the website, has aged well and was still current. Instead, on 20 January 2015 Antilope held a handover workshop with other EU projects and open to the public to carry its mission forward.

Besides the summits as the main dissemination channel, we created the Antilope website early in the project. This website contains information about the project and partners, and has published the education material and project deliverables. The website also contains a news section, and sections about upcoming events, summits or workshops. To further the project's visibility, an Antilope logo was designed. Other dissemination tools are the Antilope flyer that was developed early on and periodic newscasts that will be published on the website and sent out to a mailing list of people who signed up for the news. Dissemination and communication has also been done through LinkedIn and Twitter.

Another dimension in the dissemination activities is the actions undertaken by the various consortium partners such as member conferences, workshops, roundtable discussions, and other activities specific to each organisation. The activities are listed below.

An Antilope communication, dissemination and liaison plan was prepared early in the project (due in month 4 but eventually submitted in month 8 due to delays). This document addressed all action items mentioned above and was adapted to reflect changing priorities and new opportunities that arise for the network after the first year of the project. The final communication report (D6.3) discusses activities and outcomes in detail.

Through its contacts with relevant interoperability projects and initiatives on the European, regional and national levels, Antilope has advanced interoperability at different levels. It has identified and distilled best practices described in relevant publications and policy documents. It has also worked to lower the threshold of shared (re)use of technology and efforts. Antilope has carried out extensive liaison activities with a view to establish the necessary links and cooperation with other initiatives to pursue new partners, exchange knowledge and maximise potential collaboration benefits.

Availability of results

All Antilope results are available on the Antilope website. The website is further promoted through consortium member websites, websites of supportive and other partners, social/professional networks, and in-person activities such as project presentations and presence at relevant events. Furthermore, the minutes and conclusions of each Antilope summit are disseminated and publicly available (all collected and consolidated in D5.3).

Section A (public)

Template A1: N/A

Template A2: Dissemination activities

WHEN	WHAT	WHERE	WHO
20/03/15	Antilope presentation in "Creating a Common Language: The Role of Standards in Interoperability" Track at HIMSS Turkey	Antalya, Turkey	Ib Johansen, Medcom
17/12/14	Announcement of deliverables and handover workshop	Continua Europe monthly tcon	Continua
27/11/14	Short presentation of Antilope Project at "IX Forum Risk Management in Sanità"	Arezzo, Italy	Assinter Italia
20/11/14	Antilope closing plenary session at the 19th at Healthcare Informatics Society of Ireland 2014 conference, with Peter Connolly (National Lead Integrated Service Framework) and Chrissie Keane (National Standards Authority), before 400 attendees.	Dublin, Ireland	Jos Devlies (Eurorec) and Roger Wallhouse (IHE-UK/iCS)
03/10/14	Presentation of Antilope at European Health Forum	Gastein, Austria	Ib Johansen, Medcom
24/09/14	Presentation of Antilope to Iberic region	Valladolid, Spain	TicSalut Foundation
02/09/14	Publication of a short video on Italian Antilope summit	https://www.youtube.com/watch?v=0MwDxu1YXYE	Marta Gentili, Assinter
18/06/14	On line news about Antilope Italian summit	http://bit.ly/1D1zPex	Antilope Italian groupwork, Lombardia Informatica

WHEN	WHAT	WHERE	WHO
18/06/14	Antilope Italian Summit on Twitter	http://bit.ly/1JWvEVY	Antilope Italian groupwork
16/06/14	On line news about Antilope Italian summit	http://bit.ly/1HSEVuz	Antilope Italian groupwork, Arsenàl.IT
10/06/14	On line news about Antilope Italian summit	http://bit.ly/1HSFXXt	Antilope Italian groupwork, Assinter Italia
07/06/14	On line news about Antilope Italian summit	http://bit.ly/16Y6IhI	Antilope Italian groupwork, Informatica Trentina
06/06/14	On line news about Antilope Italian summit	http://bit.ly/1xqB30Y	Antilope Italian groupwork, Cup2000
13/05/14	Antilope presentation at IHE Symposium at eHealth Forum 2014	Athens, Greece	Karima Bourquard, IHE
07/05/14	Antilope presentation at ETSI eHealth workshop on telemedicine	Sophia Antipolis, France	Karima Bourquard, IHE
30/04/14	UK Antilope Summit	London, UK	IHE-UK
30/04/14	Antilope press coverage of summit	UK wide	IHE-UK
03/04/14	Antilope presentation at World of Health IT conferencewebinar	Nice, France	Charles Parisot, IHE
25/03/14	Antilope Webinar	http://bit.ly/1wuGaJJ	WP leaders 1-4
17/03/14	Antilope presentation at EHTEL/ELO Meeting	Tallinn, Estonia	Jan Pederson, Medcom
20/02/14	Antilope presentation at ReAAL Interoperability Days	Brussels, Belgium	Vincent van Pelt, NICTIZ

WHEN	WHAT	WHERE	WHO
04/02/14	Antilope presentation before Nordic government representatives	Kiruna, Sweden	Claus Nielsen, Continua
03/02/14	Presentation of Antilope project at IHE-UK Interoperability seminar	London, UK	IHE-UK
28/01/14	Antilope workshop at JPND – AAL Joint Workshop	Amsterdam, Netherlands	Vincent van Pelt, WP1
15/01/14	Project updates to Continua membership	Continua Europe monthly tcon	Continua
14/12/13	Presentation at FEEI - Fachverband der Elektro- und Elektronikindustrie	Austria, Vienna	Technikum Wien
12/12/13	Presentation of Antilope to ETSI technical Committee SmartBAN	Sophia Antipolis, France	ETSI
10/12/13	Media release “Antilope guidance documents now available” sent to mailing list of 100 recipients	http://bit.ly/1AcrR2y	WP6, Antilope
09/12/13	Project updates to Continua membership	Continua Europe monthly tcon	Continua
28/11/13	Presentation of Antilope to Region Zealand	Sorø, Denmark	Mie H. Matthiesen, MedCom
27/11/13	Presentation of Antilope to North Denmark Region	Aalborg, Denmark	Mie H. Matthiesen, MedCom
27/11/13	Presentation of Antilope at one day conference "E-Health und KIS – Trends, ELGA-Anwendungsbeispiele"	Vienna, Austria	Technikum Wien
26/11/13	Presentation of Antilope to Local Government Denmark (LGDK)	Copenhagen, Denmark	Jan Petersen, MedCom
22/11/13	Presentation of Antilope to Capital Region	Hillerød, Denmark	Jan Petersen, MedCom

WHEN	WHAT	WHERE	WHO
20/11/13	Presentation of Antilope project to Irish health delegates at annual HISI conference	Dublin, Ireland	IHE-UK
12/11/13	Presentation of Antilope to Central Denmark Region	Viborg, Denmark	Mie H. Matthiesen, MedCom
07/11/13	Presentation at EHTEL meeting	The Hague, Netherlands	Vincent van Pelt, WP1
06/11/13	Presentation of Antilope at Interoperability and Standards in Healthcare – European Perspective (ISHEP) conference	Dubrovnik, Croatia	Leo Ciglenecki, ProRec.si Slovenia
06/11/13	Presentation of Antilope and the eEIF at IHE Day 2014	Vienna, Austria	Technikum Wien
05/11/13	Presentation of Antilope to Region of Southern Denmark	Odense, Denmark	Mie H. Matthiesen, MedCom
24/10/13	Presentation: 18th Congress of SK and CR informatics in healthcare NIS 2013	Hotel Magura, Zdiar, Slovakia	NCZI
23/10/13	Presentation at HIMSS, Asia-Pacific, Singapore. Digital Health-care week.	Singapore	Ib Johansen, MedCom
09/10/13	Project updates to Continua membership	Continua Europe monthly tcon	Continua
03/10/13	Presentation at LISA Vienna (supportive network for biotech and biomedical companies in the Vienna region)	Vienna, Austria	Technikum Wien
02/10/13	Presentation at ETSI technical committee eHealth	London, UK	ETSI
01/10/13	Presentation at EHGI - PSB: overview of the Antilope project and discussion	Brussels, Belgium	IHE Europe

WHEN	WHAT	WHERE	WHO
01/10/13	Presentation at Tieto Austria event	Vienna, Austria	Technikum Wien
27/09/13	Presentation of the Quality Manual for Interoperability testing at the REACTION project clustering event, with 25 EC funded projects attending.	Heraklion, Greece (Crete)	Morten Bruun Rasmussen, Mediq
25/09/13	AAL Forum workshop on interoperability	Norrköping, Sweden	Continua
27/06/13	Discussion of Antilope at ETSI technical committee eHealth	Sophia Antipolis, France	ETSI
27/06/13	Presentation on Antilope at Continua Annual European Summit	Edinburgh, UK	Continua
06/06/13	EIP-AHA meeting (B3 and C2 groups)	Brussels, Belgium	Vincent van Pelt, WP1
05/06/13	EIP-AHA meeting overview of the Antilope project and discussion at C2 group	Brussels, Belgium	Vincent van Pelt, WP1
05/06/13	Project updates to Continua membership	Continua Europe monthly tcon	Continua
28/05/13	Presentation at ETSI technical Committee SmartBAN (Body Area Networks) meeting	Sophia Antipolis, France	ETSI
08/05/13	Project updates to Continua membership	Continua Europe monthly tcon	Continua
26/02/13	The Antilope Italian groupwork in Assinter shares some updates with shareholders gathered at the meeting (presentation and documents).	Rome, Italy	Marta Gentili, Assinter
01/02/13	Publication of project-related information on the website of ILiM - GS1 Poland	www.gs1pl.org	ILiM
09/01/13	Project presentation to Continua membership	Continua Europe monthly tcon	Continua

WHEN	WHAT	WHERE	WHO
24/09/12	The Assinter Shareholders's meeting defines the Antilope Italian groupwork in Assinter.	Rome, Italy	Assinter
24/05/12	Project Presentation to Assinter Italia associates and resolution of the meeting to participate at Shareholders' Meeting.	Milan, Italy	Assinter

Sction B
(Confidential[7] or public: confidential information to be marked clearly)

Part B1
N/A

Part B2
N/A

[7] Note to be confused with the "EU CONFIDENTIAL" classification for some security research projects.

3. Report on societal implications

Replies to the following questions will assist the Commission to obtain statistics and indicators on societal and socio-economic issues addressed by projects. The questions are arranged in a number of key themes. As well as producing certain statistics, the replies will also help identify those projects that have shown a real engagement with wider societal issues, and thereby identify interesting approaches to these issues and best practices. The replies for individual projects will not be made public.

A General Information *(completed automatically when **Grant Agreement number** is entered.*

Grant Agreement Number:	325077
Title of Project:	ANTILOPE - Adoption and take up of standards and profiles for eHealth Interoperability
Name and Title of Coordinator:	Ib Johansen, Deputy Manager, MedCom

B Ethics

1. Did your project undergo an Ethics Review (and/or Screening)? • If Yes: have you described the progress of compliance with the relevant Ethics Review/Screening Requirements in the frame of the periodic/final project reports? Special Reminder: the progress of compliance with the Ethics Review/Screening Requirements should be described in the Period/Final Project Reports under the Section 3.2.2 *'Work Progress and Achievements'*	***No***
2. Please indicate whether your project involved any of the following issues (tick box) :	***N/A***
RESEARCH ON HUMANS	
• Did the project involve children?	
• Did the project involve patients?	
• Did the project involve persons not able to give consent?	
• Did the project involve adult healthy volunteers?	
• Did the project involve Human genetic material?	
• Did the project involve Human biological samples?	
• Did the project involve Human data collection?	
RESEARCH ON HUMAN EMBRYO/FOETUS	
• Did the project involve Human Embryos?	
• Did the project involve Human Foetal Tissue / Cells?	
• Did the project involve Human Embryonic Stem Cells (hESCs)?	
• Did the project on human Embryonic Stem Cells involve cells in culture?	
• Did the project on human Embryonic Stem Cells involve the derivation of cells from Embryos?	
PRIVACY	
• Did the project involve processing of genetic information or personal data (eg. health, sexual lifestyle, ethnicity, political opinion, religious or philosophical conviction)?	
• Did the project involve tracking the location or observation of people?	
RESEARCH ON ANIMALS	

• Did the project involve research on animals?	
• Were those animals transgenic small laboratory animals?	
• Were those animals transgenic farm animals?	
• Were those animals cloned farm animals?	
• Were those animals non-human primates?	
RESEARCH INVOLVING DEVELOPING COUNTRIES	
• Did the project involve the use of local resources (genetic, animal, plant etc)?	
• Was the project of benefit to local community (capacity building, access to healthcare, education etc)?	
DUAL USE	
• Research having direct military use	0 Yes 0 No
• Research having the potential for terrorist abuse	

C Workforce Statistics

3. Workforce statistics for the project: Please indicate in the table below the number of people who worked on the project (on a headcount basis).

Type of Position	Number of Women	Number of Men
Scientific Coordinator	2	1
Work package leaders	1	5
Experienced researchers (i.e. PhD holders)	11	29
PhD Students	0	0
Other	4	3

4. How many additional researchers (in companies and universities) were recruited specifically for this project?	**N/A**
Of which, indicate the number of men:	

D Gender Aspects

5. Did you carry out specific Gender Equality Actions under the project?

○ Yes
X No

6. Which of the following actions did you carry out and how effective were they?

	Not at all effective				**Very effective**
❑ Design and implement an equal opportunity policy	○	○	○	○	○
❑ Set targets to achieve a gender balance in the workforce	○	○	○	○	○
❑ Organise conferences and workshops on gender	○	○	○	○	○
❑ Actions to improve work-life balance	○	○	○	○	○

○ Other:

7. Was there a gender dimension associated with the research content – i.e. wherever people were the focus of the research as, for example, consumers, users, patients or in trials, was the issue of gender considered and addressed?

○ Yes- please specify

X No

E Synergies with Science Education

8. Did your project involve working with students and/or school pupils (e.g. open days, participation in science festivals and events, prizes/competitions or joint projects)?

○ Yes- please specify

X No

9. Did the project generate any science education material (e.g. kits, websites, explanatory booklets, DVDs)?

X Yes- please specify: Educational material in the form of PowerPoint presentations with the results of the project has been developed

○ No

F Interdisciplinarity

10. Which disciplines (see list below) are involved in your project?

○ Main discipline[8]:

○ Associated discipline[8]: ○ Associated discipline[8]:

G Engaging with Civil society and policy makers

11a Did your project engage with societal actors beyond the research community? *(if 'No', go to Question 14)*

○ Yes
X No

11b If yes, did you engage with citizens (citizens' panels / juries) or organised civil society (NGOs, patients' groups etc.)?

X No

○ Yes- in determining what research should be performed

○ Yes - in implementing the research

○ Yes, in communicating /disseminating / using the results of the project

[8] Insert number from list below (Frascati Manual).

11c In doing so, did your project involve actors whose role is mainly to organise the dialogue with citizens and organised civil society (e.g. professional mediator; communication company, science museums)?	○ X	Yes No

12. Did you engage with government / public bodies or policy makers (including international organisations)

○	No
○	Yes- in framing the research agenda
○	Yes - in implementing the research agenda
X	Yes, in communicating /disseminating / using the results of the project

13a Will the project generate outputs (expertise or scientific advice) which could be used by policy makers?

X	Yes – as a **primary** objective (please indicate areas below- multiple answers possible)
○	Yes – as a **secondary** objective (please indicate areas below - multiple answer possible)
○	No

13b If Yes, in which fields?

Agriculture		Energy		Human rights	
Audiovisual and Media		Enlargement		Information Society √	
Budget		Enterprise		Institutional affairs	
Competition		Environment		Internal Market	
Consumers		External Relations		Justice, freedom and security	
Culture		External Trade		Public Health √	
Customs		Fisheries and Maritime Affairs		Regional Policy	
Development Economic and Monetary Affairs		Food Safety		Research and Innovation √	
Education, Training, Youth		Foreign and Security Policy		Space	
Employment and Social Affairs		Fraud		Taxation	
		Humanitarian aid		Transport	

13c If Yes, at which level?

- ○ Local / regional levels
- ○ National level
- X European level
- ○ International level

H Use and dissemination

14. How many Articles were published/accepted for publication in peer-reviewed journals?		**None**
To how many of these is open access[9] provided?		
How many of these are published in open access journals?		
How many of these are published in open repositories?		
To how many of these is open access not provided?		
Please check all applicable reasons for not providing open access:		
❑ publisher's licensing agreement would not permit publishing in a repository ❑ no suitable repository available ❑ no suitable open access journal available ❑ no funds available to publish in an open access journal ❑ lack of time and resources ❑ lack of information on open access ❑ other[10]: ……		
15. How many new patent applications ('priority filings') have been made? *("Technologically unique": multiple applications for the same invention in different jurisdictions should be counted as just one application of grant).*		**N/A**
16. Indicate how many of the following Intellectual Property Rights were applied for (give number in each box).	Trademark	**N/A**
	Registered design	**N/A**
	Other	
17. How many spin-off companies were created / are planned as a direct result of the project?		**N/A**
Indicate the approximate number of additional jobs in these companies:		

18. Please indicate whether your project has a potential impact on employment, in comparison with the situation before your project:

X	Increase in employment, or	X	In small & medium-sized enterprises
❑	Safeguard employment, or	X	In large companies
❑	Decrease in employment,	❑	None of the above / not relevant to the project
❑	Difficult to estimate / not possible to quantify		

19. For your project partnership please estimate the employment effect resulting directly from your participation in Full Time Equivalent (*FTE = one person working fulltime for a year*) jobs:	*Indicate figure:*

[9] Open Access is defined as free of charge access for anyone via Internet.
[10] For instance: classification for security project.

Difficult to estimate / not possible to quantify	X

I Media and Communication to the general public

20. As part of the project, were any of the beneficiaries professionals in communication or media relations?

○ Yes X No

21. As part of the project, have any beneficiaries received professional media / communication training / advice to improve communication with the general public?

○ Yes X No

22 Which of the following have been used to communicate information about your project to the general public, or have resulted from your project?

X	Press Release	❑	Coverage in specialist press
❑	Media briefing	❑	Coverage in general (non-specialist) press
❑	TV coverage / report	❑	Coverage in national press
❑	Radio coverage / report	❑	Coverage in international press
X	Brochures /posters / flyers	X	Website for the general public / internet
❑	DVD /Film /Multimedia	❑	Event targeting general public (festival, conference, exhibition, science café)

23 In which languages are the information products for the general public produced?

❑	Language of the coordinator	X	English
❑	Other language(s)		

***Question F-10*:** Classification of Scientific Disciplines according to the Frascati Manual 2002 (Proposed Standard Practice for Surveys on Research and Experimental Development, OECD 2002):

FIELDS OF SCIENCE AND TECHNOLOGY

1. NATURAL SCIENCES

1.1 Mathematics and computer sciences [mathematics and other allied fields: computer sciences and other allied subjects (software development only; hardware development should be classified in the engineering fields)]

1.2 Physical sciences (astronomy and space sciences, physics and other allied subjects)

1.3 Chemical sciences (chemistry, other allied subjects)

1.4 Earth and related environmental sciences (geology, geophysics, mineralogy, physical geography and other geosciences, meteorology and other atmospheric sciences including climatic research, oceanography, vulcanology, palaeoecology, other allied sciences)

1.5 Biological sciences (biology, botany, bacteriology, microbiology, zoology, entomology, genetics, biochemistry, biophysics, other allied sciences, excluding clinical and veterinary sciences)

2 ENGINEERING AND TECHNOLOGY

2.1 Civil engineering (architecture engineering, building science and engineering, construction engineering, municipal and structural engineering and other allied subjects)

2.2 Electrical engineering, electronics [electrical engineering, electronics, communication engineering and systems, computer engineering (hardware only) and other allied subjects]

2.3. Other engineering sciences (such as chemical, aeronautical and space, mechanical, metallurgical and materials engineering, and their specialised subdivisions; forest products; applied sciences such as

geodesy, industrial chemistry, etc.; the science and technology of food production; specialised technologies of interdisciplinary fields, e.g. systems analysis, metallurgy, mining, textile technology and other applied subjects)

3. MEDICAL SCIENCES

3.1 Basic medicine (anatomy, cytology, physiology, genetics, pharmacy, pharmacology, toxicology, immunology and immunohaematology, clinical chemistry, clinical microbiology, pathology)

3.2 Clinical medicine (anaesthesiology, paediatrics, obstetrics and gynaecology, internal medicine, surgery, dentistry, neurology, psychiatry, radiology, therapeutics, otorhinolaryngology, ophthalmology)

3.3 Health sciences (public health services, social medicine, hygiene, nursing, epidemiology)

4. AGRICULTURAL SCIENCES

4.1 Agriculture, forestry, fisheries and allied sciences (agronomy, animal husbandry, fisheries, forestry, horticulture, other allied subjects)

4.2 Veterinary medicine

5. SOCIAL SCIENCES

5.1 Psychology

5.2 Economics

5.3 Educational sciences (education and training and other allied subjects)

5.4 Other social sciences [anthropology (social and cultural) and ethnology, demography, geography (human, economic and social), town and country planning, management, law, linguistics, political sciences, sociology, organisation and methods, miscellaneous social sciences and interdisciplinary , methodological and historical S1T activities relating to subjects in this group. Physical anthropology, physical geography and psychophysiology should normally be classified with the natural sciences].

6. HUMANITIES

6.1 History (history, prehistory and history, together with auxiliary historical disciplines such as archaeology, numismatics, palaeography, genealogy, etc.)

6.2 Languages and literature (ancient and modern)

6.3 Other humanities [philosophy (including the history of science and technology) arts, history of art, art criticism, painting, sculpture, musicology, dramatic art excluding artistic "research" of any kind, religion, theology, other fields and subjects pertaining to the humanities, methodological, historical and other S1T activities relating to the subjects in this group]

Appendix 1: Final Report on the Distribution of the European Union Financial Contribution

The numbers below are covering numbers up until January 2015.

Participant number in this project	Participant short name	Submitted costs P1 and P2	NEW EU contribution	ORG. EU Contribution
1	MedCom	177.615,00	176.283,00	200.496,00
2	IHE-Europe	157.481,00	157.481,00	164.075,00
3	Eurorec	113.304,00	110.252,00	110.252,00
4	Continua	127.924,00	127.281,00	126.795,00
5	NICTIZ	71.978,00	68.714,00	65.729,00
6	ETSI	65.271,00	64.506,00	64.506,00
7	EEHF	27.388,00	27.009,00	27.009,00
8	EHTEL	29.833,00	29.833,00	26.705,00
9	NEN	40.202,00	25.190,00	25.190,00
10	EN13606	27.704,00	19.577,00	19.577,00
11	ILiM	16.218,00	16.095,00	16.095,00
12	HL7 INTERNATIONAL	24.367,00	24.008,00	24.008,00
13	ProRec.SI	15.222,00	13.414,00	13.414,00
14	NCZI	7.312,00	7.312,00	8.278,00
15	ASSINTER	15.410,00	8.278,00	8.278,00
16	HL7HELLAS	9.001,00	9.001,00	9.562,00
17	IHE-UK	32.650,00	15.344,00	15.344,00
18	TICSALUT	11.062,00	9.562,00	9.562,00
19	ProRec-BE	14.452,00	14.377,00	14.377,00
20	Interop Santé	15.196,00	15.196,00	15.340,00
21	Technikum Wien	9.780,00	9.498,00	9.498,00
22	MEDIQ	41.065,00	41.065,00	15.186,00
23	NIJZ	9.808,00	9.721,00	9.721,00
Total		1.060.243,00	998.997,00	998.997,00

Appendix 2: Antilope objectives and recommendation from first review – responses

In order to make sure that the project covers all the objectives described in the DoW and to ensure that all recommendations from the first review of the project (on 26 March 2014) are considered in the project, we have made an overview of the objectives and recommendations and provided a short explanation on how the project has addressed the individual points.

Antilope overall objectives

The Antilope project has a number of overall objectives which are listed here.

No.	Objective	Check √	Remarks/how is the objective achieved?
1	(Main) Support and broaden/strengthen the adoption, take-up and testing of existing eHealth standards and specifications as part of the eHealth European Interoperability Framework	√	(D1.1): definition of use cases, template for description of use cases and realisation scenarios, refined eEIF interoperability (adopted in at least three new countries during the project (Denmark, The Netherlands, Portugal)
2	(Main) Promote the need for an interoperability framework that recognizes well adopted standards-based profiles and to which is associated a two tier testing and certification process based on a standard and profile neutral Quality Manual for Interoperability Testing	√	Identification of profiles by MSP for ICT Extension of the testing tools every year
3	To support the dissemination and adoption of the Interoperability Framework in Europe and concretely to build on these recommendations, roadmaps, National/Regional and local Interoperability projects	√	Dissemination : 10 European summits were held during 8 months Successful alignment with EIP AHA Action Groups C2 and B3

No.	Objective	Check √	Remarks/how is the objective achieved?
4	Drive the adoption of recognised sets of profiles and underlying standards for eHealth interoperability, and improve the impact of the EU and International eHealth standards development process	√	(D1.1) Assets: - Links of use cases to interoperability profiles - overview and categorisation of interoperability profiles
5	Define and validate testing guidelines and common approaches on Interoperability Labelling and Certification processes at European and at National/Regional level.	√	Common approach explained during the summit Work in progress in some countries (France, Suisse, Denmark) and IHE
6	Enhancement of the use cases coming from the eHealth European Interoperability Framework, for which a first version is being elaborated in 2012, validating their relevance, identifying remaining barriers and producing educational materials to enhance the adoption of interoperability standards	√	(D1.1) Selected, harmonised, refined and elaborated set of use cases, described in a structured manner.
7	Definition and validation of European level and National/Project level testing guidelines and common approaches on interoperability Labelling and Certification in Europe. Educational materials regarding these guidelines and processes will be developed for adoption at the European level and defining basic principle for leveraging by the Cross-Border, National, Regional and local Projects	√	10 European Summits
8	Analyse gaps between existing test tools and tools that are needed for deploying the defined sets of profiles and standards taking also into account the testing procedures for European and for National, Regional or Local use	√	D3.1 provides the gap analysis. Existing tools are classified and required testing tool improvements or new developments are identified.

No.	Objective	Check √	Remarks/how is the objective achieved?
9	Validation and dissemination of the Antilope recommendations and their applicability and scalability for EIP on Active and Healthy Ageing by setting up ten regional public workshops that involve the main stakeholders across Europe.	√	Successful alignment with EIP AHA Action Groups C2 and B3, and invitation to join 10 European Summits
10	Drive **adoption of interoperability standards** and profiles at European level: the EU commission developed an eHealth Interoperability Framework at the European level that will be refined and validated by stakeholders in Antilope. An Interoperability Framework can be defined as a comprehensive set of use cases, testing processes, test tools and services resulting in sharable and exchangeable content (patient clinical data as well as clinical knowledge) understandable in the same way by the different end-users within their own care process.	√	(D1.1) – refined eEIP interoperability model (already in progress of adoption by NL, DK and PT); use cases. (D.4.1) Quality Label and certification processes
11	Drive **adoption of eHealth interoperability testing guidelines**: the Antilope project has the objective to refine the testing Quality manual that was delivered in the HITCH project by taking into account common approaches as well as the international standards (ISO 17025 for example) related to the subject;	√	D2.2 and D2.1
12	Drive **closure of key gaps in interoperability testing tools**: using the state of art on test tools delivered in HITCH project, Antilope will analyse the selected standard and profiles validated in the eHealth EIF and will specify a RFP for the test tools that are needed	√	D3.1 Identifies gaps in existing tools and describes new testing tools needed. Deliverable D3.2 did issue a RFP for the testing tools that are needed. Amore attractive version of the RFP was given a prominent place on Antilope web pages.

No.	Objective	Check √	Remarks/how is the objective achieved?
13	Drive **adoption of a two-level labeling and certification process**: interoperability proposed with the HITCH roadmap needs to be specified and detailed. Antilope with all the partners, at the national/regional and European level have the objective to define the labeling and certification process that can be applied for the next 5 years;	√	Described in the D4.1
14	Ensure that all necessary phases to attain eHealth interoperability shall be taken into account. It is the reason why Antilope project will carefully take into account experiences and deployed projects at the European level such as the epSOS project as well as national and regional projects.	√	(D1.1) eEIF model of interoperability highlight all aspects of interoperability. Selection of use cases also includes epSOS use cases.
15	By involving competence centers, standards bodies, industry and users associations, Antilope has the objective of developing a large network that will be able to give feedback and validation to the Antilope project. This will also provide a good basis for sustainability and scalability of the results beyond the phases of work sponsored by the Community.	√	Beneficiaries of Antilope Project participated to the dissemination and the validation of the deliverables: Summits, SEP and SVP meetings
16	Provide educational materials with high level of quality that can be used by the various stakeholders from the eHealth sector.	√	Educational materials for each WP
17	The scalability to the deployment of innovation services in the frame of the EIP on Active and Healthy Ageing (EIP) is also part of the Antilope project: after selection of the use cases, Antilope has the objective to extend the deliverables to this sector	√	Only two out of eight (eHealth) use cases have had relevance for the active and healthy ageing field (Action Group C2. The Action Group B3 ("Integrated Care") confirmed the relevance of Antilope use cases and will further consider them in the development of a maturity model and assessment tool.

WP related objectives

Each individual WP has a number of objectives which are listed here.

No.	Objective	WP(s)	Check √	Remarks/how is the objective achieved?
18	To develop documentation to assist Antilope members and similar organisations to comply with the requirements of 2012 regulation on European standardization	WP1	√	
19	The objective of work package 1 is to deliver a proposed refinement to the first version of the eHealth European Interoperability Framework (eHealth EIF)	WP1	√	D1.1: refined interoperability model, use cases description, templates for the description of use cases and realisation scenarios (for standardised addition of new use cases), interoperability glossary of terms, overview and categorisation of referred Profiles
20	Carefully build upon the eHealth EIF foundation, and propose refinements, in areas where the eHealth EIF would not be sufficiently developed, for the Antilope project to proceed	WP1	√	D1.1: evolution of existing interoperability model (explained in Appendix) to a practical model
21	Provide an overview of relevant use cases and appropriate links to the existing and available profiles from the major international consortia in the area of standardization and interoperability	WP1	√	Definition of use cases (functional requirements) and realisation scenarios (technical components). Realisation scenarios are then linked to interoperability profiles
22	Further define the functional and technical testing and quality labelling procedures, processes, tools and technologies at the European and national levels	WP1	√	D1.1 lays the foundation for testing and certification / labelling to which the other deliverables refer

No.	Objective	WP(s)	Check √	Remarks/how is the objective achieved?
23	Dissemination of the eHealth EIF, as well as use it as contextual input for later validation activities in the form of workshops, round tables, etc.	WP1	√	Use cases are described from different angles. One of these is the "raison d' être" and the relevance of the use case. Also, a separate section in the template is created to describe the context of the use case
24	Propose refinement and extensions of the eHealth EIF especially in the area of testing and labelling/certification.	WP1	√	Use cases and linked interoperability profiles are the basis for Europe-wide and national testing and qualification ecostructures.
25	To produce a Quality Manual for Interoperability Testing	WP2	√	This was done with input from the HITCH project
26	To develop educational materials that can be used use and develop "your own" Quality Manual for Interoperability Testing.	WP2	√	This has been done and was presented during the summits.
27	To identify the required new testing tools that would, together with existing test tools, be sufficient for testing the selection of recognised profiles described in the EIF framework	WP3	√	D3.1 classified the existing and identified the required new testing tools.
28	To enlarge the testing ecosystem.	WP3	√	The attempt was made by issuing the RFP for needed new testing tools.
29	To develop educational materials that can be used during public workshops and for any other educational event for dissemination in order to share and promote the result of the Work Package	WP3	√	D3.3 contains educational material related to testing tools.

No.	Objective	WP(s)	Check √	Remarks/how is the objective achieved?
30	To build upon the recommendations of the HITCH project such as recommendation 5: Preserve flexibility across the proposed label and certification schemes and recommendation 6 : Establish a two-level Label and certification process (European and National/project level), to formalize the establishment of a two levels label certification process that will obtain the consensus among stakeholders in Europe.	WP4	√	See section 6 of D4.1
31	To develop educational materials that can be used during the public workshop and for any other educational events for dissemination in order to share and promote the result of the work package. Forum, flyers and presentations will be delivered with the support of WP6- Communication.	WP4	√	See D4.2 and communication materials in WP6
32	To validate the deliverables as well as the educational material provided by the Work Packages 1, 2, 3 and 4 in accordance with the supporting expert organisations and through regional strategic validation meetings	WP5	√	
33	To assure that the options and educational material of Antilope are aligned with the objectives of the European Innovation Partnership on Active and Health Ageing (EIP AHA)	WP5	√	Antilope has supported Action Group C2 in its development of the "D3 Interoperability process recommendation" document, and is prominently referenced.
34	To collect feedback from the local stakeholders as input for updates of the project deliverables.	WP5	√	Happened during summits
35	To raise awareness among major stakeholders and the public about eHealth interoperability in general and the project specifically	WP6	√	Antilope has run an easy and accessible public website and run a mailing list with currently more than 150 subscribers.

No.	Objective	WP(s)	Check √	Remarks/how is the objective achieved?
36	To promote the wider adoption of standards and profiles.	WP6	√	Antilope presented at numerous conferences and meetings including eHealth week, AAL Forum, and the Gastein Health Forum, and run a webinar.

Review comments

During and after the first review of the project on 26 March 2014, the reviewers provided the following recommendations.

No.	Review comment	WP	Check √	Remark/how did you respond
37	It is recommended that the project rethinks the target audiences which it is targeting with its dissemination activities. The project states that the primary audience is those already engaged in interoperability and the secondary audience is users and buyers. We suggest reversing these audiences so that the primary audience becomes : senior users, policy makers and buyers of interoperability technologies and services, and so aligns with the main objective of WP6 as stated in the DoW		√	Antilope has reached all stakeholders that have shown an interest in interoperability by attending regional summits, visiting Antilope sessions and presentations at major events, or visited the Antilope website, signed up for the newsletter, or joined the webinar.
38	Revision of Deliverable the plan, D6.1 incorporating these suggestions. This needs to be accompanied by a revision of the content of the website and other communications channels.	WP6	√	D6.1 was adapted. A "Why eHealth interoperability" website section for procurers and users was created explaining basic concepts and offering assistance, and promoted through social media channels and at Antilope events. The page is at www.antilope-project.eu/ehealth-interoperability/

No.	Review comment	WP	Check √	Remark/how did you respond
39	Ensure consistency between deliverables, particularly with regard to use of framework models (adhering to EIF) and statements about profiles.	WP7	√	This was taken into consideration in the new versions of the deliverables.
40	Make sure that the use cases are not too much influenced by one specific vision of the healthcare system which may not apply to all European scenarios. For example, 4.1.2 Use Case lb: e-Prescription and e-Dispensing on a national/ regional scale proposes a central location were all medication related documentation is stored. Two suggestions: 1) use consistent headings in the 'Associated Profiles' section of the realisation scenario, such as • Information, • IT Infrastructure • Security Where no profile exists but is needed then document 'Not in existence, needs development' to link with the RFA document D3.2.	WP1	√	A consistent interoperability levels-approach to the associated profiles has been used throughout the updated D1.1 document. In cases where functionality is not covered by any standard or profile, or when a profile exists but is not mature enough, '—' is used, indicating the absence of an associated profile.
41	Consistently link the realisation scenarios with the test tools profiles in D3.1. Again use consistent language (semantic layer, or information layer, choose one word and use it through all documents).	WP1	√	This was taken into consideration in the new versions of the deliverables. Common definition section was included in the D1.1 and relevant definitions added in the different deliverables.

No.	Review comment	WP	Check √	Remark/how did you respond
42	It would be beneficial to emphasise that the project uses the PDCA cycle, which in other contexts is used for Action Research, Iterative product development and Healthcare Service Improvement (endorsed by NHS England for this purpose).	WP2	√	The PDCA cycle is used in connection with many projects and development of products, mainly to improve the quality. In Antilope the Quality Manual Part I: Quality Management System for Interoperability Testing is derived from ISO 9001. Feed-back from the summits is that most people find the PDCA cycle well known and very useable in the context of archiving and improving quality in Interoperability Testing.
43	Change the section heading 'Normative References' in D2.1 to 'Informative References' because normative is distinct mandatory meaning in standards world.	WP2	√	The proposed change is implemented in D2.1.
44	D2.2: references section is needed to ensure only academically and professionally recognised references are included.	WP2	√	The reference section in D2.2 is updated.
45	D3.1 needs more work (many errors in references). It could be improved by paying attention to terminology and other semantic testing processes. In addition a clear relationship to the scenarios document, particularly the associated profiles and use cases.	WP3	√	All references and links were checked and corrected. Some required spelling corrections but for some better links were provided. Antilope definitions prepared together with other work packages included in D1.1 and relevant parts copied in D3.1. Terminology used was aligned with it. Links to scenarios document are treated quite extensively in section 6.

No.	Review comment	WP	Check √	Remark/how did you respond
46	D3.1: Use language and diagrams consistent with other documents	WP3	√	Antilope definitions prepared together with other work packages included in D1.1 and relevant parts copied in D3.1.
47	It will be important for the project to more fully 'unpack' the value open source chain and make this more explicit when the project refines its exploitation (and to a lesser extent, dissemination) strategy (D 6.1.).	WP3 WP6	√	Text in D3.1 section 2.3 improved to address this comment. Examples of open source projects that were considered good were added.
48	Develop effective arguments for decision-makers as to why an investment in certification processes could be beneficial in the long run (and so justify the additional costs involved).	WP4	√	See the section 2, rationale of the D4.1
49	Use of C2 use cases would seem likely to add value	WP1 WP5	√	C2 use cases come have limited relevance for eHealth
50	Segment attenders into different types of (dissemination) targets, and then consider e.g. use of online surveys to gain insights into their views.	WP5	√	Not always possible. Online survey is out of scope and not within the budget

No.	Review comment	WP	Check √	Remark/how did you respond
51	A list of attendees at Summits should be used to count those from senior decision maker job roles. Key Performance Indicators counting only those attending from this category will be necessary, not just a count of all attendees.	WP5	√	The information from the summits does not allow us to identify senior decision makers, however, each summit report on types of attendees: Healthcare Authority, Health Insurance Organisation, Public Health Organisation, Scientific or Research Organisation – Academic Institute, Healthcare Institute (management staff, e.g. of hospitals), Healthcare Professional (physician, nurse, paramedic), Health IT service provider (supplier, informatician, maintenance services), Health Industry (device suppliers, pharma, etc…)
52	Collect 'stories' of spin off -effect achievements during these meetings	WP5	√	Have been collected and added as an appendix to D7.3.
53	Website needs to feature clearer and more prominent explanations of what interoperability is, why it is important, and provide evidence to demonstrate why better health outcomes, better patient care and cost reduction will result if interoperable solutions come to be more widely deployed.	WP6	√	A page on “why eHealth interoperability?” was created at http://www.antilope-project.eu/ehealth-interoperability/ explaining definition, importance and benefits of eHealth interoperability.
54	Develop material for different stakeholders: specific flyers aimed at different people; documents outlining paragraphs for tender documents, business cases, etc.	WP6	√	Generic high level output is in the deliverables Targeted information to different stakeholders will be presented at the final conference.

No.	Review comment	WP	Check √	Remark/how did you respond
55	For all deliverables make sure that the layout is consistent (for example, see page 1 of deliverables, layout, content, abstract or no abstract, etc.). Ensure consistent usage of terms, abbreviations, etc.	WP7	√	A quality review was planned during the month before the delivery (Month 23 of the project).
56	Single glossary	WP1	√	Available in D1.1

Appendix 3. Spin off activities

When	Summit/where	What	Result/forward	Contact person	Remarks
01-10-2013	Vienna Austria, Techgate Vienna, Donau City Straße 1200 Wien.	The "Fly Tieto" event drew an audience that is very focused towards implementation in eHealth and other public service settings. High level contacts were made and networking took place.	Stakeholders from public services, companies, in healthcare and other domains were informed. Customers and network partners of Tieto Austria.	Raimund Fukatsch, Tieto Austria GmbH	
03-10-2013	Vienna, Austria, Fachhochschule Technikum Wien, Höchstädtplatz 6, 1200 Vienna Austria.	Presentation at LISA Vienna, a supportive network for biotech and biomedical companies in the Vienna region. The presentation mentioned Antilope and additional networking took place in breaks and within a guided tour through the Technikum Wien labs.	Presentation reached 200 vendor representatives from the Vienna region.	Peter Halwachs, Managing Director, LISAvienna - Life Science Austria Vienna	
06-11-2013	Vienna, Austria, Austria Trend Hotel Parkhotel Schönbrunn	Presentation at IHE Austria Day 2014. Within the Austrian IHE Day 2014 the presentation reached representatives from user and vendor organisations, as well as SDO experts. A Swiss delegation also listened and actively jouned the discussion. At this point in time only a small handful of the attendants had ever heard about EIF and Antilope.	Information was provided to vendor and user representatives, national EHR project representatives from Austria (EHR) and Switzerland.	Jürgen Brandstätter, Member of the Board of IHE Austria	

27-11-2013	Austria, Vienn, Magistratsabteilung 14 1220 Wien, Stadlauer Straße 56 Erdgeschoß, Raum Polaris	A presentation was given within the one day conference "E-Health und KIS – Trends, ELGA-Anwendungsbeispiele". This was a major networking event in the Vienna region and delivered the Antilope message to key multipliers. New connections were made and further activity was prepared.	Major stakeholders and decision makers were informed from administration, industry and healthcare, especially from the Vienna region.	Bettina Hainschink, CON.ECT Eventmanagement GmbH	
14-12-2013	Austria, Vienna, FEEI, FEEI - Fachverband der Elektro- und Elektronikindustrie Mariahilfer Straße 37-39, 1060 Vienna	A presentation was arranged in order to raise awareness on EIF and Antilope, and to especially announce the Vienna Antilope Summit.	Information was distributed via a platform for software vendors in healthcare, especially focusing on the national EHR project ELGA	Manfred Müllner (FEEI)	
15&16 January 2014	Paris, France	A Swiss Delegation will come to Paris to meet Interop'Santé and ASIP Santé.	The main objectives are to confront the swiss federated approach versus the french centralized one. The issur of IOP and quality testing will be adressed.	DRON Jean-Charles (Interop'Santé) MACARY François (ASIP santé)	
21 January 2014	Odense, Denmark	WHO representative present and interested in discussing Antilope's results with in the WHO sphere	Antilope was presented at WHO event in Switzerland. Discussion about interoperability action plans between EU and WHO	**HAMILTON Clayton**, WHO <CLH@euro.who.int> **LOVIS Christian** <Christian.Lovis@hcuge.ch> **DZENOWAGIS Joan Helen** <dzenowagisj@who.int>	

21 January 2014	Odense, Denmark	Danish National Sundhets-IT representative is interested in the six-layer interoperability model (refinement of the eEIF model) from the D1.1 deliverable	First plans for a closer cooperation between the national competence centers in Denmark and the Netherlands.	**HJORTH Mads**, National Sundheds-IT <mah@nsi.dk> **VAN PELT Vincent**, Nictiz <vanpelt@nictiz.nl>	Quote from Mads Hjorth: "Lately I have been using quite some time trying to lift ideas from the Antilope refinement of EIF into a Danish context. Your presentations of interoperability layers and the split between Use Cases and Function has been easy to pick up on, both for technical people and management around me. We are trying to write up a National Interoperability Framework for eHealth and are focusing on the description of governance. "
21 January 2014	Odense, Denmark	Nordic collaboration regarding a Quality Management System for interoperability testing	The Nordic Countries will discuss further collaboration regarding a Quality Management System for interoperability testing	**JOHANSEN Ib**, MedCom <ijo@medcom.dk> **BRUUN-RASMUSSEN Morten**, MedCom <mbr@mediq.dk>	

21 January 2014	Odense, Denmark	MedCom has decided to implement Antilope Quality Mangement System to continious improve the quality of interoperability testing	A workplan for 2015 is under development and to be disussed and approved in the board	**JOHANSEN Ib**, MedCom <ijo@medcom.dk> **BRUUN-RASMUSSEN Morten**, MedCom <mbr@mediq.dk>	
03-apr-14	Ljubljana, Slovenia	EU-funded EU-IHIS project implemented by WHO Europe and UNOPS is developing the Serbian EHR. It adopted and extended the Antilope use cases and is aligning its developments with the use of validation tools desribed by Antilope. (Belgrade, Serbia. June 2014 onward)	Use cases that are described in http://eu-ihis.rs/docs/Docs/TechDocs/EU-IHIS%20EHR%20Use%20Cases%20v6_EN-701%20-%20for%20website.pdf and schematron validations implemented by EU-IHIS	Branko Marović <BrankoM@unops.org> Gabriel Barthe Marco <GabrielBM@unops.org>	
6-8.5.2014	Country Club Medellin, Medellin, Colombia	Legal and Biometrical Metrology, Congress and Workshop	The workshop provided an overview on standards for interoperability and on the Antilope concepts to students, researchers and industry representatives. The congress introduced metrology experts from accredited testing labs and from healthcare providers as well as administrators and managers to the current eHealth implementation activities in Europe, including a thorough introduction to Antilope deliverables and goals. This also resulted in a visit of one expert from Colombia in Vienna in October 2014, where further details were discussed on how to share experiences and to intensify the cooperation.	Maria Isabel Pena, Doxa International.	

16 May 2014	Delft, the Netherlands	At the Dutch 'national introduction' presentation, ART-DECOR, an Open Source tool and methodology for data modelling was introduced. The representative of Agence eSanté Luxembourg proposed to meet with IHE Services, Nictiz and the ART-DECOR Expert group with the purpose to see if Gazelle and ART-DECOR tooling can be combined.	ART-DECOR/Gazelle meeting at the Agence eSanté Luxembourg Date: July 30th 2014 Present: Eric Poiseau (IHE Services) Kai Heitmann (ART-DECOR expert group) Samuel Danhardt (eSanté) Heiko Zimmermann (eSanté) Maarten Ligtvoet (Nictiz) Preliminary conclusions: - The capabilities of the tools seem very compatible. ART-DECOR is the proposed tooling for the specification of health information standards. Gazelle is compatible with the output format of ART-DECOR. Gazelle uses the ART-DECOR deliverables for validation purposes. - eSanté Luxembourg would like to learn more about ART-DECOR as a tooling platform to possibly build information standards for Luxembourg. - eSanté Luxembourg is interested in the ART-DECOR terminology capabilities (SNOMED CT, ..) as used by Nictiz (the SNOMED CT National Release Center in the Netherlands).	**ZIMMERMANN Heiko**, eSante <heiko.zimmermann@agence-esante.lu> **DANHARDT Samuel**, eSante <Samuel.Danhardt@agence-esante.lu> **VAN PELT Vincent**, Nictiz <vanpelt@nictiz.nl>	Meeting schedule: - Short introduction of eHealth activities, current state, development process and tools in Luxembourg and the Netherlands - Presentation of capabilities, usage and roadmaps of Gazelle and ART-DECOR - Open discussion about possibilities for integration, processes, interfaces, ... More info: Information: http://www.art-decor.org/mediawiki/index.php/Main_Page Working environment: http://www.art-decor.org/art-decor/home Dutch working environment: https://decor.nictiz.nl/art-decor/home

16 May 2014	Delft, the Netherlands	IHE Netherlands is interested in using the eEIF interoperability model to explain deciders about the different standards and profiles that are required to achieve interoperability.	IHE Netherlands has adopted the six-layer IOP model. ictiz Project 'Guideline for Interoperability between IHE Affinity Domains' uses the six-layer interoperability model (refined eEIF) as the skeleton for the document structure.	TJEE Tie, vendor co-chair IHE-NL <tie.tjee@ihe-nl.org>	A meeting with the Ministery of Health, SDOs, Healthcare professionales, vendors and patients ('Bazaar') is being prepared with the six-layer interoperability model as its main theme. Awareness of the different levels of expertise and effort are demonstrated using this model, also explaining the place of the different standards and profiles in each of the different interoperability layers.
16 May 2014	Delft, the Netherlands	Interest from SDOs in using the six-layer iop (refined eEIF) model for explanatory purposes.	A meeting with the Ministery of Health, SDOs, healthcare professionals, vendors and patients ('Bazaar') is being prepared with the six-layer interoperability model as its main theme. Awareness of the different levels of expertise and effort that are necessary for interoperability are demonstrated using this model, also explaining the place of the different standards and profiles in each of the different interoperability layers.	BORGHUIS Gert-Jan, consultant. <gertjan@borghesi.nl> VAN PELT Vincent <vanpelt@nictiz.nl>	The basic idea is to use the IOP model to make clear to representatives from government and healthcare facilities what the role is of the different standards and profiles in healthcare ICT
20 May 2014	Paris, France	Interest for Certification and QL processes, eEIF from the two countries (France, Suisse)	France is working on their QL processes for HIS. Suisse is working on their federal framework based on use cases and IHE		

			profiles		
18 June	Treviso, Italy	Lobbying and advertising. Assinter and his representatives are spreading the project in all occasions (regional and national meetings, workshops, reunions with administratives). All ICT companies associated with Assinter are aware of the materials and the use cases developed. Assinter is bringing the experience of Antelope in institutional relations with the government and administrations. Next national event where Antilope Project will be nominated: Forum Risk Management in the Health care system, Arezzo 25-28/11/2014.	Implementing ehealth-systems at the regional level, companies associated with Assinter are considering standards and suggestions resulting from the Antilope project. Italian government is drawing up new rules for the national healthcare system including specifications for ehealth and interoperability. We hope that such rules do not conflict with EU directives, Antilope results and what are realizing ICT in-house societies at the regional level.	Marta Gentili <marta.gentili@assinteritalia.it> Manuel Benedetti <manuel.benedetti@infotn.i>	
24-06-2014	AGFA Healthcare GmbH, Diefenbachgasse 35, 1150 Wien	On the "AGFA Con" event a keynote was provided for AGFA employes and partners. The event was also shared with attendants in Germany via teleconferencing tools.	The Antilope goals and deliverables were introduced to one of the major software vendors (radiology and EHR systems) in Austria.	Patrick Reichmann, AGFA Healthcare GmbH	
To be confirmed	Geneve, Swiss	A closing meeting of the Antilope project will be organized in Switzerland		Stefan Wiss (eHealth Suisse) DRON Jean-Charles (Interop'Santé)	

23-09-2014	Werzer's Hotel Resort Pörtschach, Kärnten, Austria.	Within the "academy" event a presentation highlighted the role of standards and interoperability for risk management in hospitals. (ÖVKT-AKADEMIE: Risikomanagement in der Medizintechnik, Wissenschaft und Praxis). A podium discussion then deepened the issues.	The Antilope concepts were presented and discussed within the community of medical device managers of hospitals and healthcare providers in Austria. Follow up activities were planned, to support the use of inteoperability standards and conformance testing in the context of medical devices and medical IT networks in Austria.	Lukas Dolesch, gsm Gesellschaft für Sicherheit in der medizintechnik GmbH, Wilhelm Holcapek, Krankenanstaltenverbund Wien	
07-10-2014	Vila Real, Portugal	Within a congress focussing on interoperability standards for EHRs and healthcare the current activities in Austria, Europe and globally were presented, including an introduction on Antilope.	Stakeholders representatives from software vendors, hospitals and administration received an introduction on standardisation, testing and certification activities in the EU and globally. Further contacts were planned to keep the contact and exchange experiences.	Luis Torres Pereira, University de Tras o Montes, Vila Real, Portugal.	
29-10-2014	Austria, Vienna, FEEI, FEEI - Fachverband der Elektro- und Elektronikindustrie Mariahilfer Straße 37-39, 1060 Vienna	A presentation was arranged in order to provide an update on EIF and Antilope, and to present plans for future activities.	Information was distributed via a platform for software vendors in healthcare, especially focusing on the national EHR project ELGA, extending the contact of the event on 14.12.2013	Manfred Müllner (FEEI)	
05-12-2014	Region Ile de France France-Suisse	Arrangement of a meeting between the Suisse agency and GCS Ile de France focusing on Interoperability Framework, XDS infrastructure and other IHE profiles and sharing experience	on going action	Karima Bourquard	

Appendix 4: Antilope perspectives on adoption

Perspectives on the adoption and take up of the Antilope results by projects in Europe and internationally

Between 2013 and 2015, the Antilope project was focused on the dissemination and adoption of the eHealth European Interoperability Framework (eEIF) as defined by the eEIF study (also known as the "Deloitte study") published in July 2013 [available at https://ec.europa.eu/digital-agenda/en/news/ehealth-interoperability-framework-study]. Antilope developed guidelines and recommendations that support the eEIF. They are available on www.antilope-project.eu.

Based on the results of previous European projects (HITCH and EHRQTN), Antilope developed a consistent framework that will help projects or implementers to deploy their own interoperable solutions. It consists of several interrelated elements that will need to be used at different stages of a project, e.g. specifications, implementation and high level of quality in the testing processes.

The challenge for Antilope was to define a comprehensive, usable framework that enables the development of a unified market and improves the quality of the projects and solutions in eHealth.

Key Antilope results are:

- **The refined eEIF in version 1:** Based on the eEIF study (2013), the Antilope framework offers tools that can be used in solving interoperability problems with respect of inter-operability consistency over Europe. First of all, it proposes a level scheme, listing the multiple aspects of interoperability that projects need to take care of. Furthermore, it proposes a set of use cases and their implementation described by the corresponding realization scenarios which are linked to a selection of profiles (positively evaluated by the European Multi Stakeholder Platform on ICT Standardization in Nov 2014). Each profile is an implementation guidance specification for the underlying standards for a concrete and interoperable implementation.

- **The Quality Management System for Interoperability Testing:** The Quality Management System (QMS) for interoperability testing consists of a customizable description and a set of templates. It allows Conformity Assessment Bodies e.g. testing laboratories, to provide high quality test reports when the QMS is implemented as described.

- **A coherent set of Testing tools:** Antilope provides a portfolio of testing tools that would be sufficient for testing the recognized profiles from the eEIF, and developed an inventory of recommended existing open source testing tools. Key information is provided: target profile tested by tool, tool name, tool developer, tool location and tool info pages and access to source code and category of tools. Finally, Antilope identified gaps and proposed a process to address those.

- **Quality label and certification processes:** Antilope provides organizational models, concrete examples and guidance that can be implemented both at the European level and at the national/regional level to preserve consistency at each level. Specific recommendations are

presented based on the reusability of the testing plan, test cases and test tools. Extensions are allowed and a number should be leveraged at the European level for their integration in newer versions of the eHealth European Interoperability Framework.

The Antilope results are now available for EU projects already in progress, and for future projects linked specifically to PHC34 of Horizon 2020 (and possibly others) to implement and deploy.

The following figure shows how Antilope results ideally are taken up by projects and initiatives that are, at the time of this writing, active and in startup or still in their early phase. It is not exhaustive, as Antilope results might be used in other projects as well.

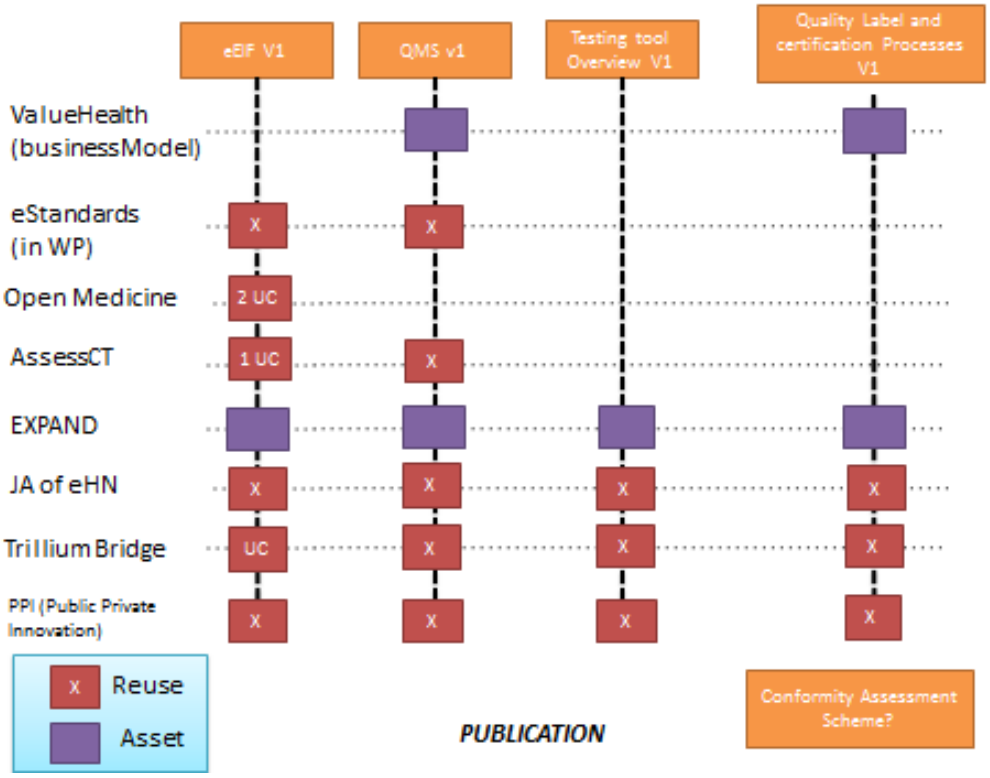

Figure 1: Re-use of Antilope assets in other EU projects and initiatives

The Assets (in purple) will serve as input and references for the projects Health Value, EXPAND and Joint Action of eHN. The projects can provide feedback and suggest improvements of the assets, however, a formal process for the governance of this process is not yet established.

The results (in red) will be reused for the purpose of the respective project: selection of use cases, QMS for implementation, testing tools and quality label testing processes. In this way, the results from the Antilope deliverables will be actively used and live on in the projects.

Some Antilope core team members are active in these projects and should take action to provide the assets and ensure their adoption by the other project teams. For example (and not exhaustive):

- Nictiz will provide to EXPAND and Joint Action of eHN the eEIF and will reedit the document for publication. It will ensure reuse of specific use cases in other projects;
- Mediq will provide QMS to eStandards for improvement;
- IHE-Europe will provide the testing tools portfolio for maintenance to the EXPAND project and assist CEF in the implementation of its testing strategy.

The objective is the further dissemination and adoption of the Antilope results as references used by other EU projects as well as national/regional programs or projects. A coordination of these projects should be set up for ensuring consistency and to avoid deviation between them.

The next step should be the development of an ISO 17025 based Conformity Assessment Scheme (CAS) at the EU level which establishes the necessary processes for managing the conformity assessment of profiles by testing laboratories. A certified/label product demonstrates that it conforms to specified requirements developed in Europe and described in the eEIF.

Furthermore, the WHO has expressed interest in Antilope's results and strongly advocates to promote their utilization by all Member States in the WHO European Region as best practice for developing a national approach to eHealth interoperability. In particular, the eHealth European Interoperability Framework (eEIF) and the use case approach developed by Antilope are considered by WHO to provide an excellent and pragmatic methodology for tackling interoperability at the national level.