The HITCH project:

Cooperation between EuroRec and IHE

June 18th 2010

Pascal Coorevits

EuroRec 2010 Annual Conference

Introduction

- January 2010 – June 2011
- Supported by the European Commission

- € 500.000 funding
- 6 partners

Project partners

EuroRec

- Not-for-profit organisation
- Organised as network of national ProRec centers
- Promoting use of high quality EHRs
- Support EHR quality labelling and certification
- Repository of functional criteria
- Use Tools

EuroRec

National ProRec centres in Europe

Members:

Austria
Belgium
Bulgaria
Czech Republic
Denmark
France
Italy
Germany
Ireland
Norway
Romania
Slovenia
Spain
Slovakia
Serbia
The Netherlands
United Kingdom

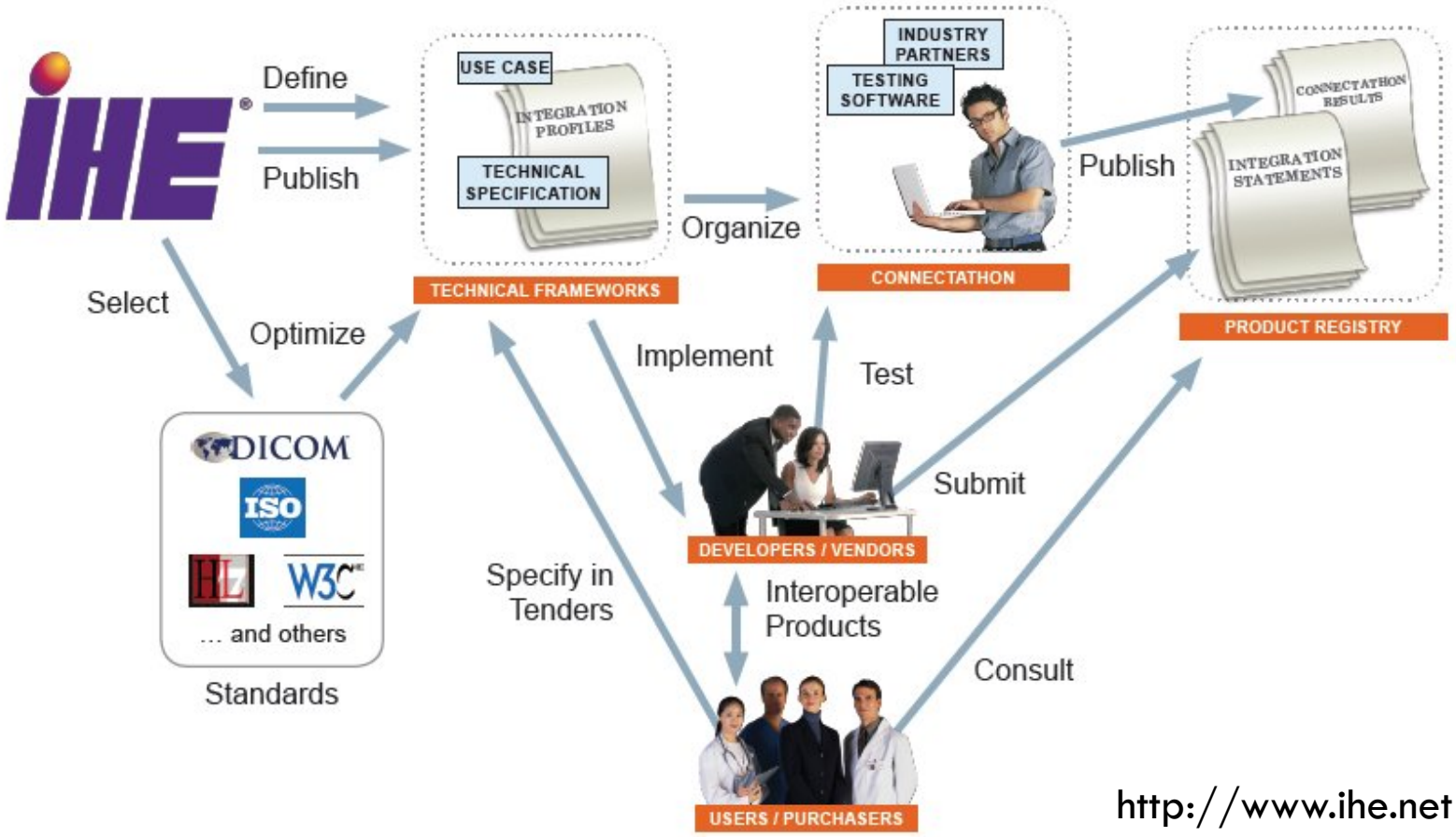
New applicants:

Cyprus
Greece
Hungary
Poland
Portugal
Sweden

IHE-Europe

- Integrating the Healthcare Enterprise
- Initiative by healthcare professionals and industry to improve the way in which computer systems in healthcare share information
- IHE promotes the coordinated use of established standards such as DICOM and HL7 to address specific clinical needs
- Interoperability tests @ Connectathons

IHE-Europe



http://www.ihe.net

IHE-Europe

- IHE Technical Framework
  - A detailed, rigorously organized document that provides a comprehensive guide to implementing the defined integration capabilities. The Technical Framework delineates standards-based transactions among systems (generically defined as IHE Actors) required to support specific workflow and integration capabilities
- Actors
  - Information systems or applications that produce, manage or act on information are represented as functional units called IHE Actors
  - Each actor supports a specific set of IHE transactions
  - A given information system may support one or more IHE actors

IHE-Europe

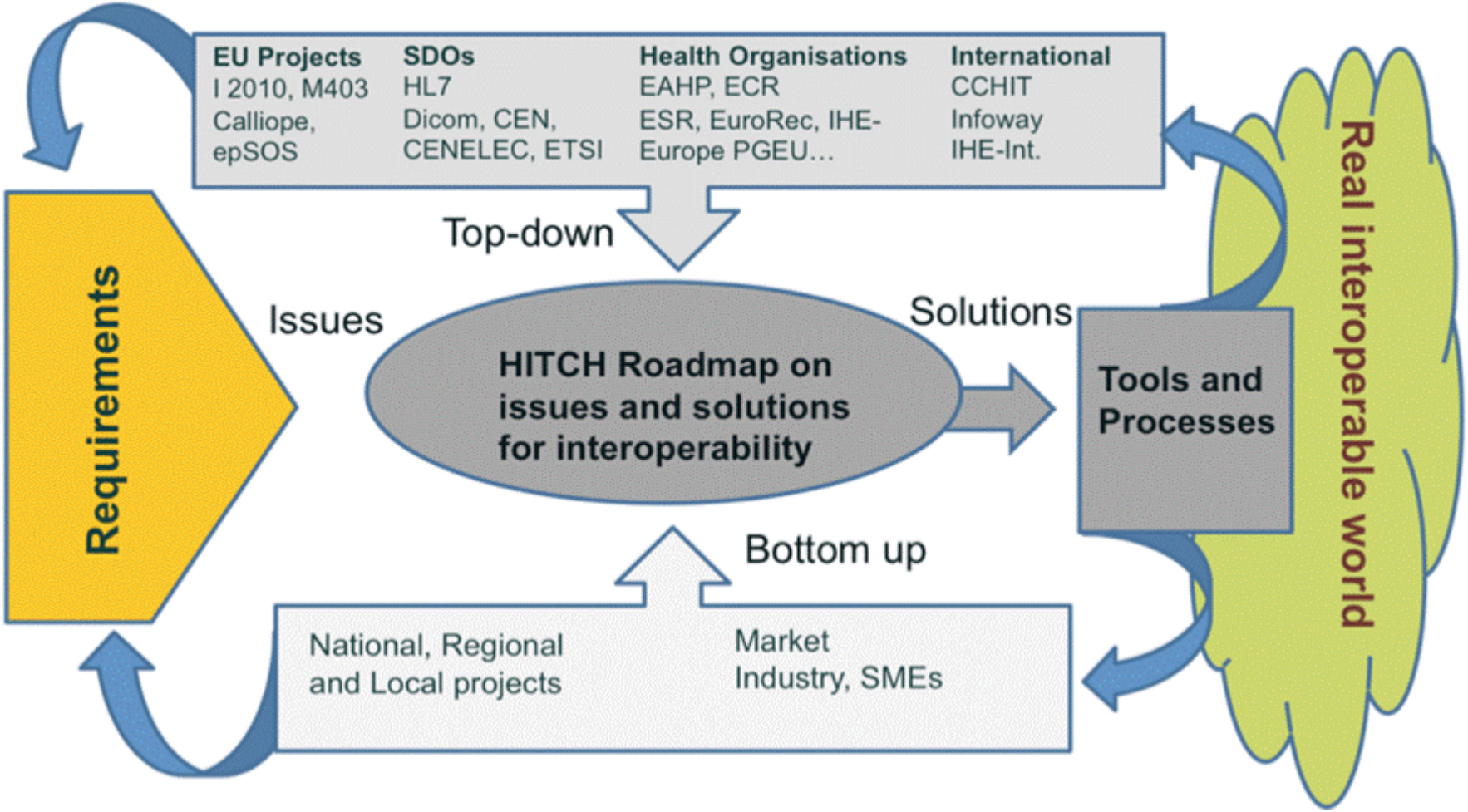
- Transactions
  - exchanges of information between actors using messages based on established standards (such as HL7, DICOM ,…)
  - Each transaction is defined with reference to a specific standard and additional detailed information, including use cases
- Integration profiles
  - IHE Integration Profiles organize sets of IHE actors and transactions in order to address specific patient care needs.
  - Integration Profiles offer a convenient way for vendors and users to reference the functionality defined in the IHE Technical Framework without having to restate all of the detail regarding IHE actors and transactions
  - They describe clinical information and workflow needs and specify the actors and transactions required to address them.

HITCH

- Healthcare
- Interoperability
- Testing
- and
- Conformance
- Harmonisation

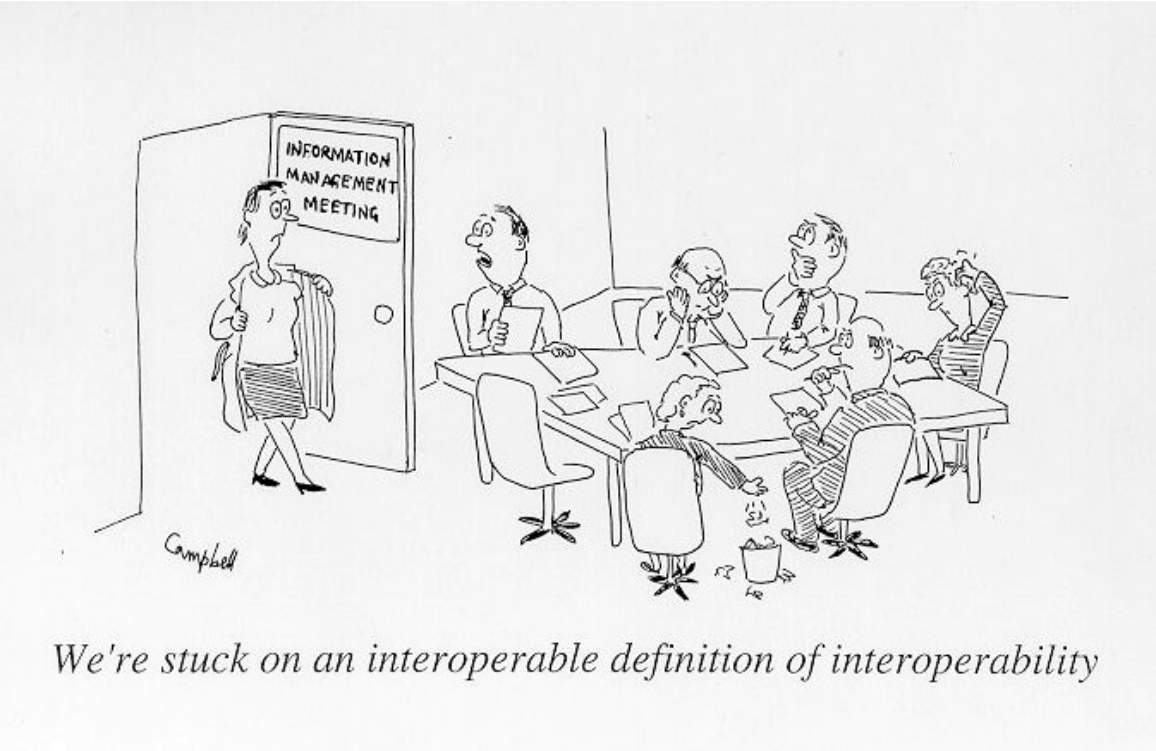
"...to involve major stakeholders being already at the heart of interoperability issues for defining and agreeing on a roadmap to establish a foundation for the Interoperability Conformance Testing of information systems in the field of healthcare..."

HITCH Overall Concept



Interoperability

- "the ability of two or more systems or components to exchange data and to use the information that has been exchanged" (IEEE)



We're stuck on an interoperable definition of interoperability

Levels of Interoperability

- Technical interoperability
  - enabling machine-machine communication
  - communication protocols
  - infrastructure

- Syntactical interoperability
  - data format
  - messages transferred by communication protocols need to have a well-defined syntax and encoding

Levels of Interoperability

- Semantic interoperability
  - meaning of the content
  - common understanding of what is being exchanged

- Organisational interoperability
  - ability of organisations to effectively communicate and transfer (meaningful) data
  - variety of different systems may be used

Interoperability Conformance Testing

- Conformance testing
- Interoperability testing
- Combination of both approaches

Work Packages

- WP1 ‘Interoperability Testing QMS’
- WP2 ‘Testing Tools Strategy’
- WP3 ‘Testing Process and Evaluation’
- WP4 ‘Integration of Quality Labelling for Interoperability’
- WP5 ‘Dissemination’
- WP6 ‘Management’

Work Packages

- **WP1 'Interoperability Testing QMS'**
- WP2 'Testing Tools Strategy'
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- WP4 'Integration of Quality Labelling for Interoperability'
- WP5 'Dissemination'
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WP1 'Interoperability Testing QMS'

- Evaluation of existing interoperability QMS
- Define requirements of interoperability QMS by relevant stakeholders
- Inventory of existing interoperability QMS standards and best practices
- Describe the interoperability QMS
  - process description
  - roles & responsabilities of participants
  - guidelines and best practices

Work Packages

- WP1 ‘Interoperability Testing QMS’
- **WP2 ‘Testing Tools Strategy’**
- WP3 ‘Testing Process and Evaluation’
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WP2 'Testing Tools Strategy'

- Overview & evaluation of existing tools
- Roadmap of future tools needed for interoperability testing
  - tools to define the tests that need to be performed based on profiles (cf. IHE-Europe & Connectathon)
  - simulator tools (e.g. in case of missing partners during tests)
  - tools to capture messages being exchanged
  - tools to evaluate syntax and semantics
  - ...

Work Packages

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WP3 'Testing Process and Evaluation'

- Using QMS (WP1) and tools (WP2)
- Testing
  - Connectathon
  - Internet

Work Packages

- WP1 ‘Interoperability Testing QMS’
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- **WP4 ‘Integration of Quality Labelling for Interoperability’**
- WP5 ‘Dissemination’
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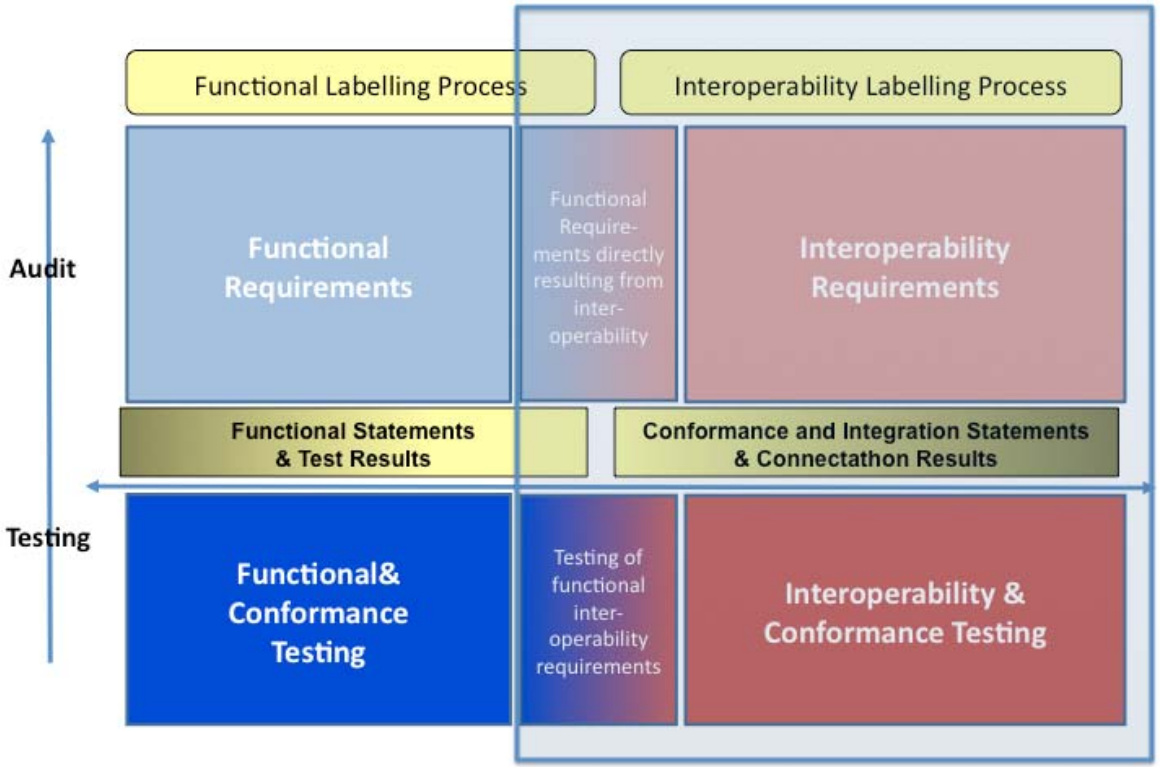
WP4 'Integration of Quality Labelling for Interoperability'

- Overall objective is to define how to integrate quality labelling for interoperability in a labelling/certification session



WP4 'Integration of Quality Labelling for Interoperability'

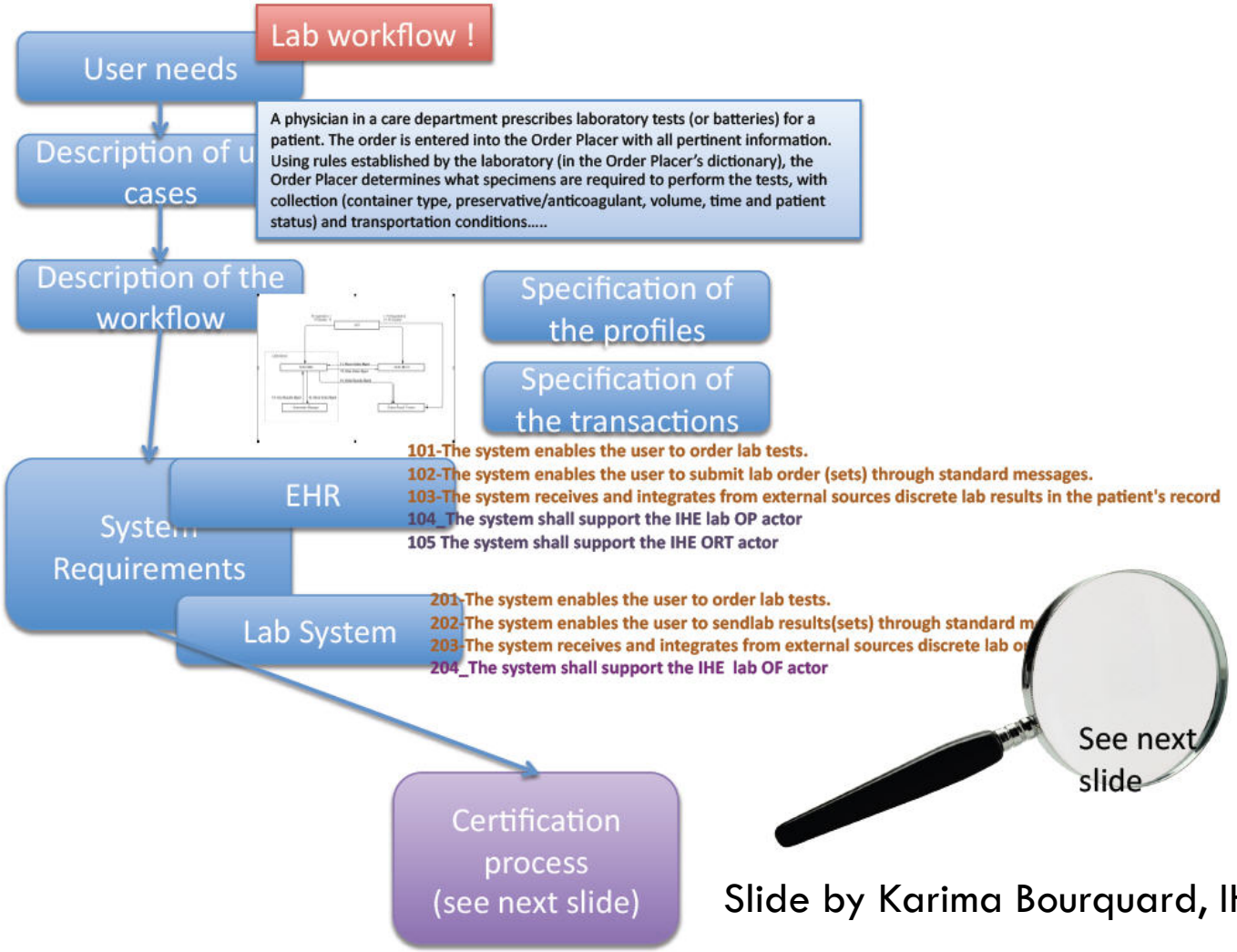
- Provide SoA on functional and interoperability labelling/certification
- Investigate links between functional and interoperability criteria, and define guidelines how to achieve both goals at the same time or separately within efficient and quality processes
- Evaluate different scenarios (self-certification, third party certification, ...)

Links between functional and interoperability criteria

- Distinction between
  - EuroRec criteria : more generic
  - IHE use-cases: more concrete

- Can we map EuroRec criteria to IHE use-cases?
  - Concrete example of lab report sharing

Links between functional and interoperability criteria



Slide by Karima Bourquard, IHE-Europe

HITCH Project Website

Imprint

HITCH
Healthcare Interoperability Testing and Conformance Harmonisation

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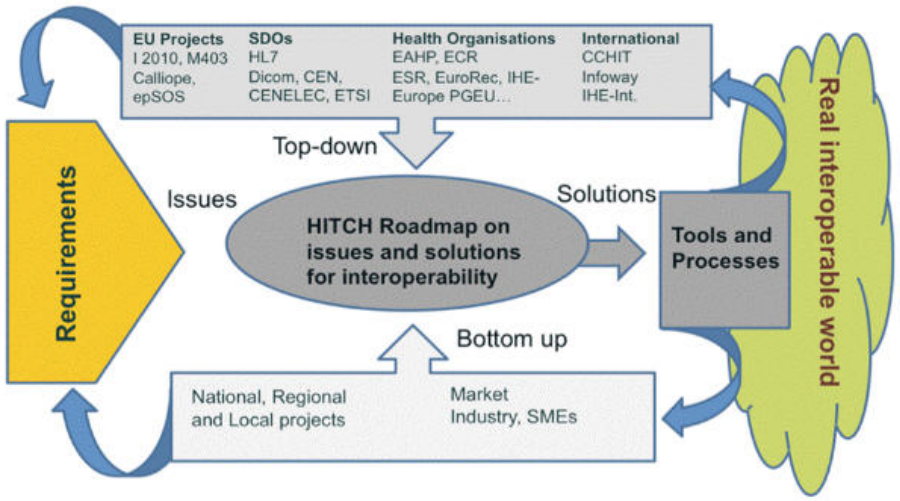
HITCH - Healthcare Interoperability Testing and Conformance Harmonization

Welcome to the homepage of the HITCH project!

HITCH is an EU-funded research project for developing a roadmap for Interoperability Conformance Testing of information systems in the field of Healthcare. The project started in Januar 2010 and is running for 18 months.

The figure below shows the overall concept of the HITCH project:



- http://www.hitch-project.eu

EuroRec website http://www.eurorec.org

Thank you!