Strategic Vision on the Information Exchange Testing Continuum

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Testing of Interoperability is about:

- *Testing Tools and Test Plans*
- *Testing Processes*

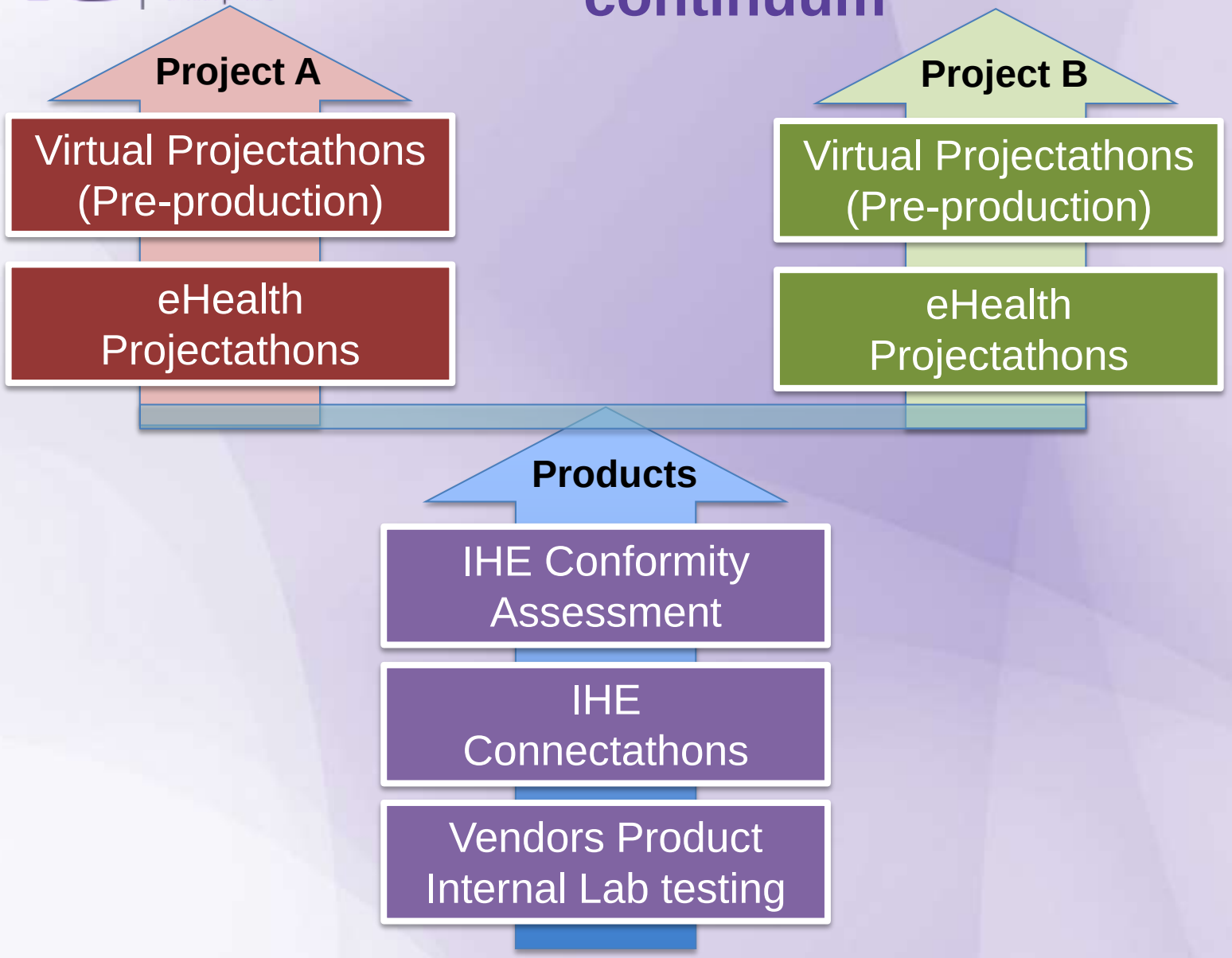
➔ A culture of testing

eHealth deployment continues to struggle with achieving quality in interoperability

A large scale eHealth deployment without an adequate testing strategy is at risk

The central role of the Gazelle Platform

Overview of overall testing continuum



Vendors Product Internal Lab testing

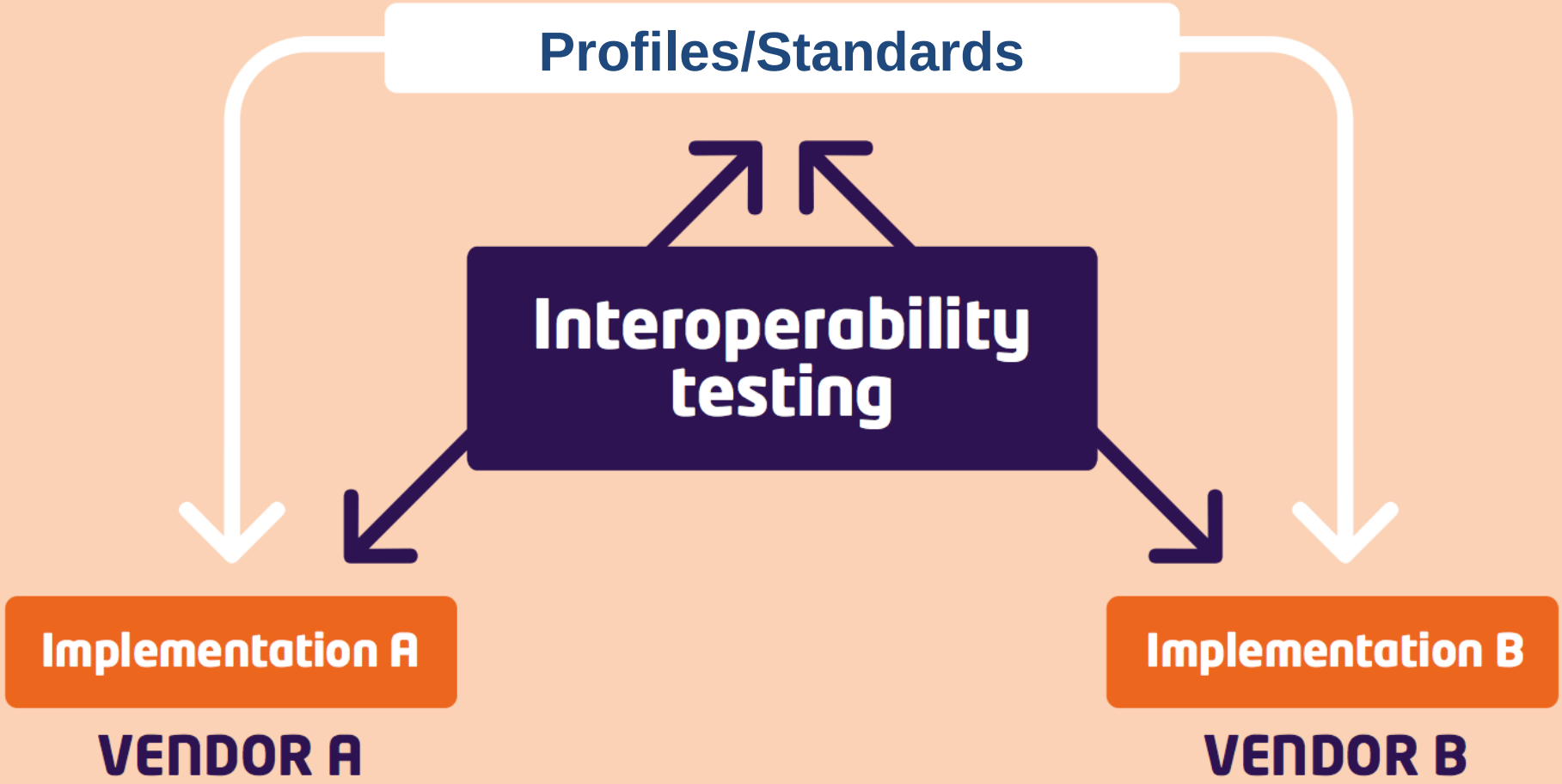
- Need:
  - Validate product compliance to profiles and underlying standards
  - Continuous integration process
  - Quality assurance
  - Product sustainability and market acceptance
- Examples:

IHE Connectathons

→ *Connectivity Marathons*

- Open invitation to vendor and other implementers community
- Advanced testing tools (GAZELLE, a GITB platform)
- Testing organized and supervised by IHE technical management team and monitors
- Thousands of cross-vendor tests performed
- Results recorded and published

What is the Connectathon ?



IHE EUROPE

CONNECTATHON

VENICE APRIL 3-7 2017

Venice 2017

~370 Participants **90** Companies	300 engineers from participating organizations	**500+** Delegates in parallel events	**60** monitors	**3300** tests performed	**115** systems

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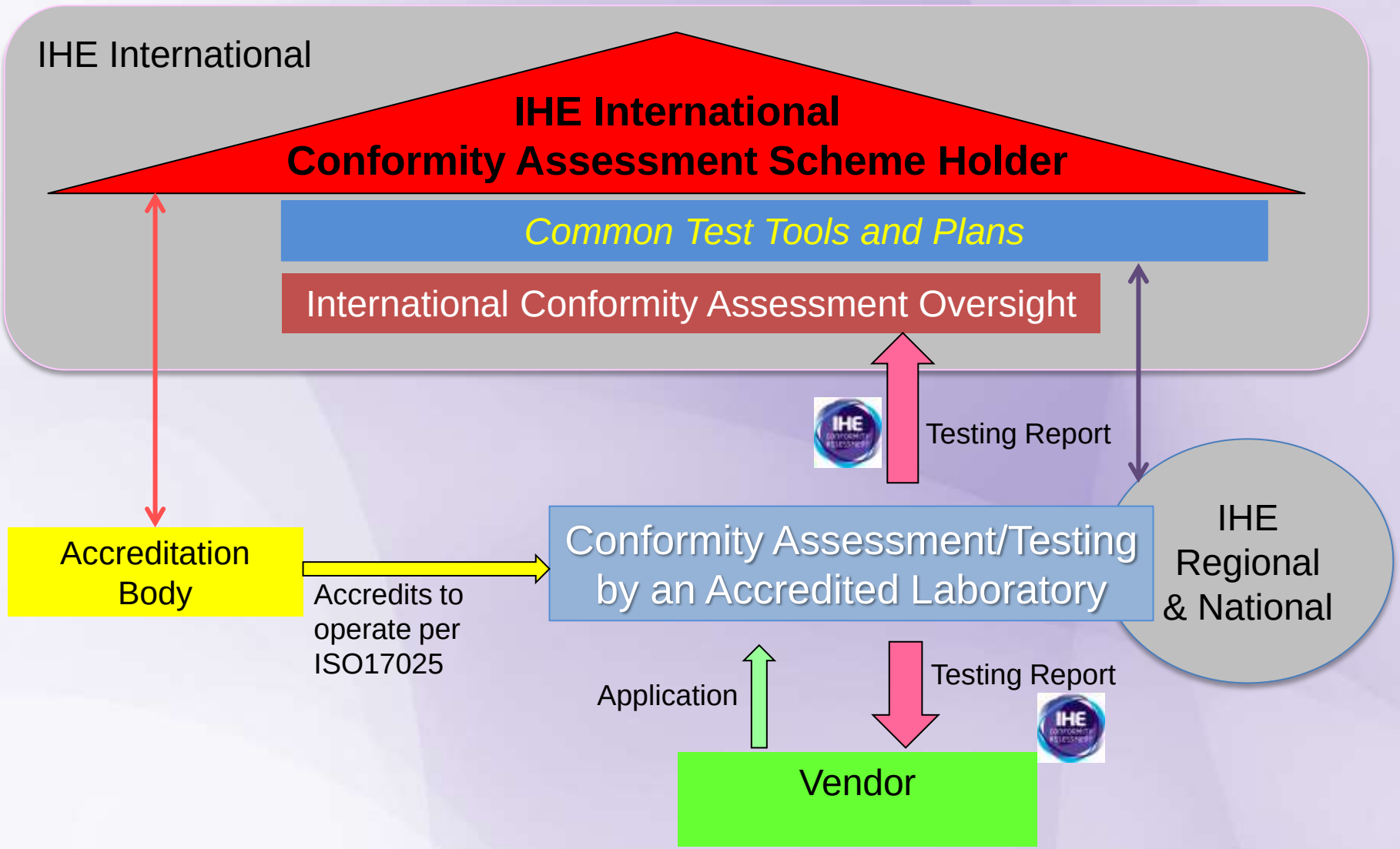
CONNECTATHON

RENNES APRIL 8-12 2019

IHE Conformity Assessment

- Focus on **Testing** ➔ deliver a trusted *Test Report*
- Enable countries/projects **to require and recognize** these *Test Reports* (may perform additional project specific testing and also possibly add a certification process).
- Ensure **international equivalency** of *Test Reports* and recognition of these for their trustworthiness:
  - A **single process** ➔ IHE conformity assessment **scheme**
  - The **same test tooling** ➔ provided by IHE International
  - *Test Reports* published ➔ by IHE International
- **Multiple testing laboratories** across the world accredited (ISO17025) & authorized by IHE Int'l (compete, convenient)

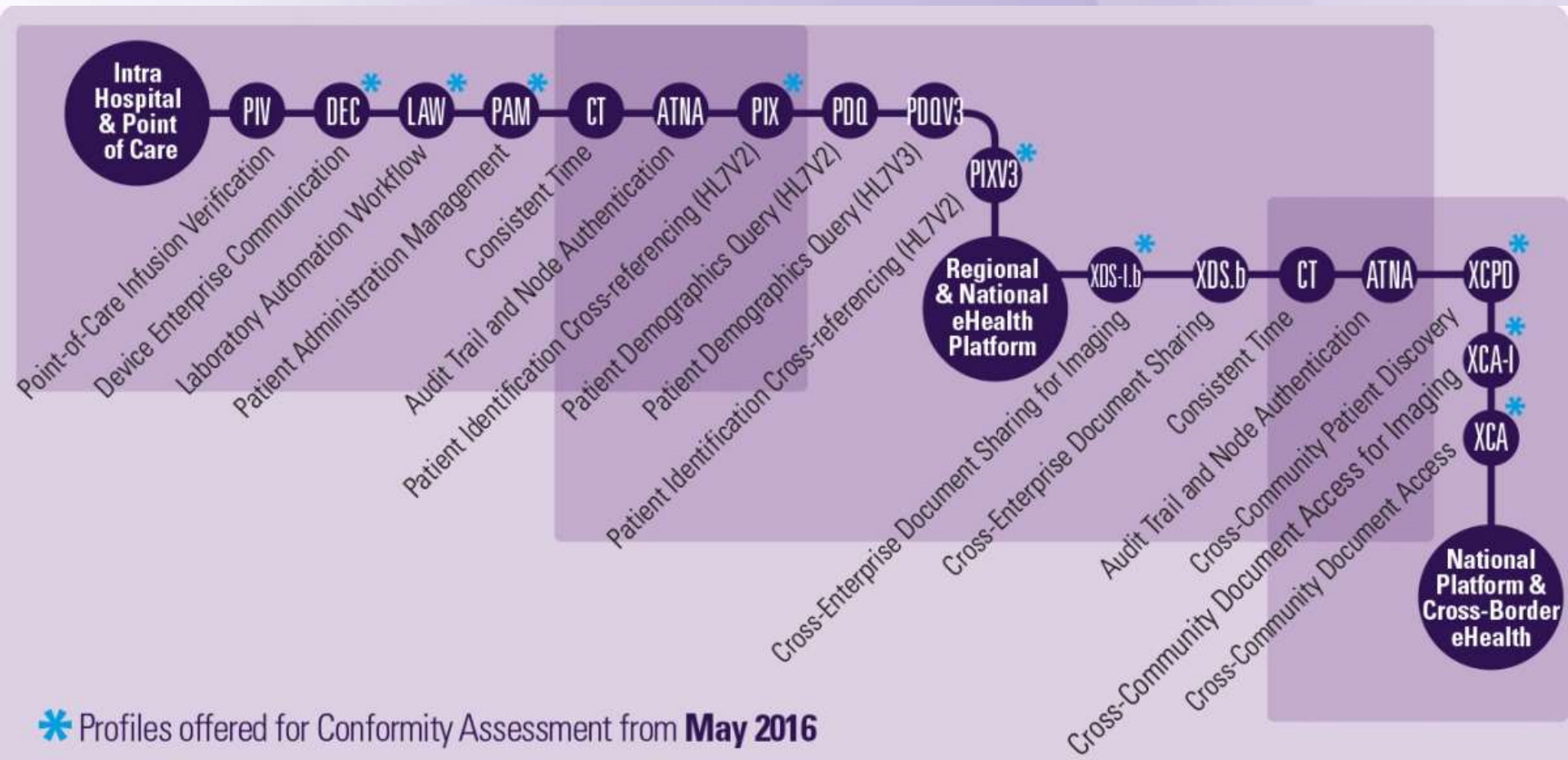
Concepts of IHE Conformity Assessment



International Consistency, Local Testing laboratories, Trust and Rigor.

IHE Integrating the Healthcare Enterprise

IHE Conformity Assessment Scheme



* Profiles offered for Conformity Assessment from **May 2016**

IHE CONFORMITY ASSESSMENT

IHE SERVICES Building trust in eHealth interoperability

KEREVAL

cofrac ESSAIS

KEREVAL HEALTH LAB TESTING
ACCREDITATION N° 1-2347
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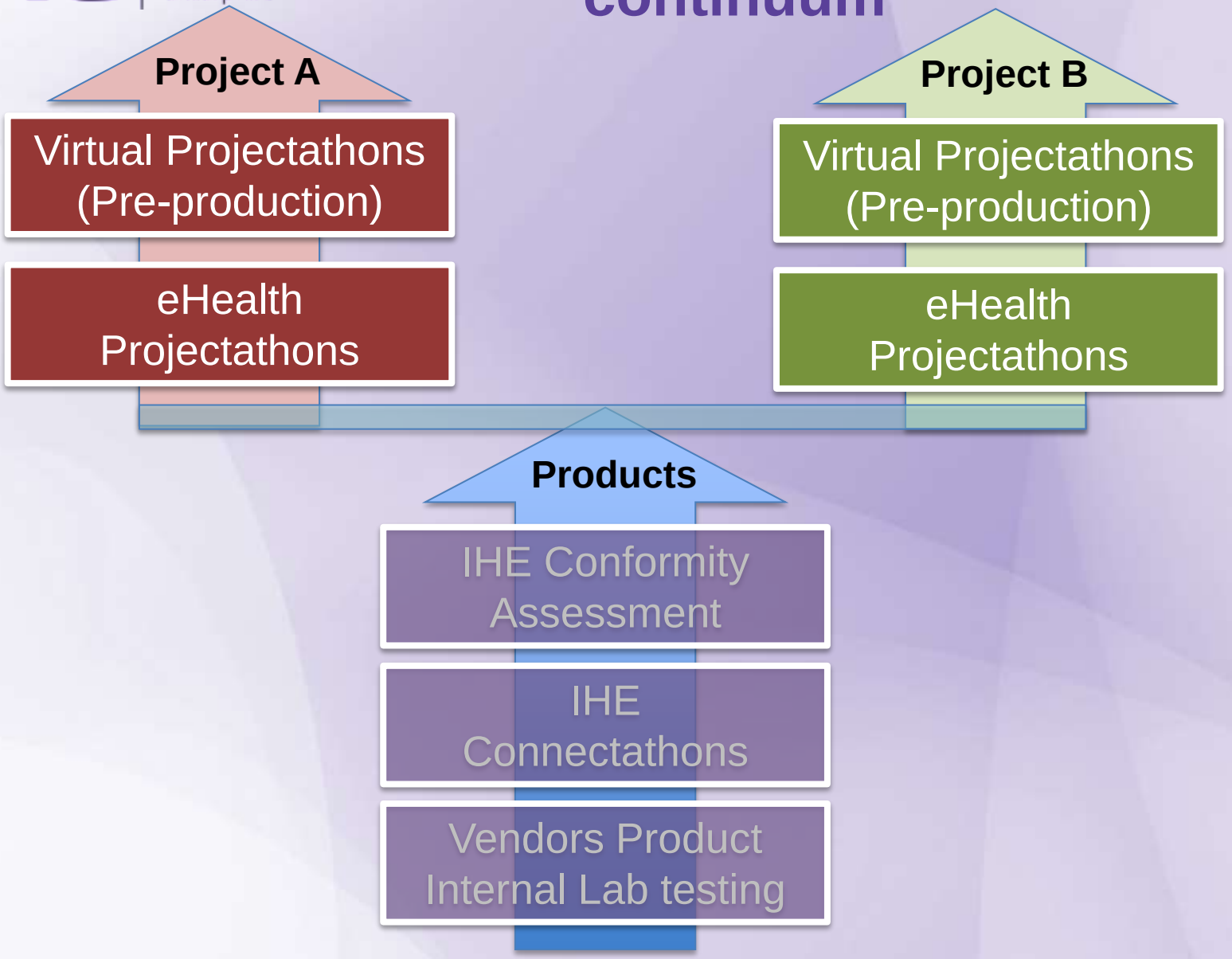
Overview of overall testing continuum

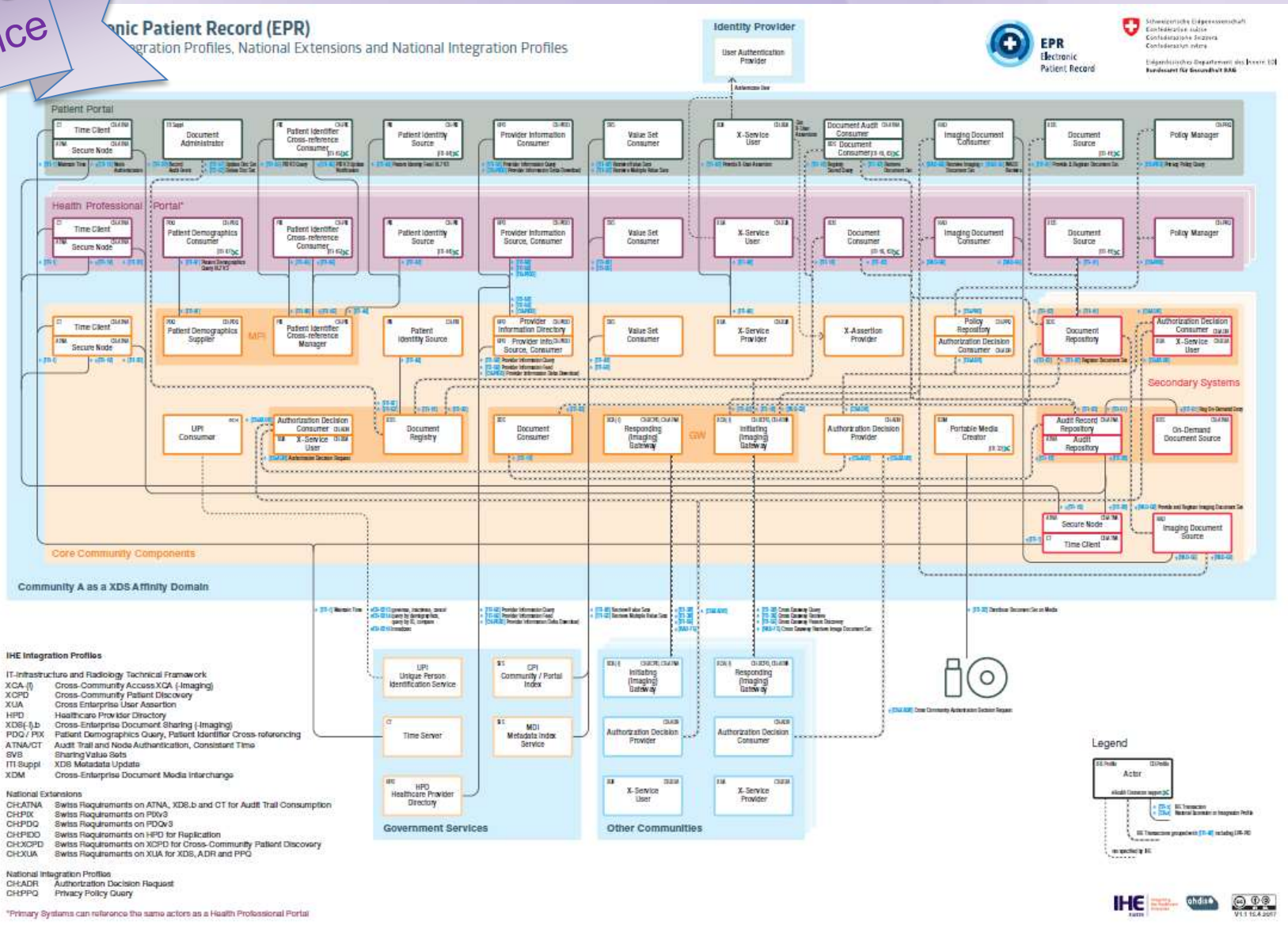


eHealth Projectathons

- *Projectathons* are peer to peer testing for “project” specific interoperability specifications:
  - based on IHE profiles
  - plus extensions to meet local, regional or national requirements.
- The need to be covered is to test healthcare information exchange in vitro prior to project implementations
- Examples: Swiss EPR project, EFA (Elektronische Fall Akte)

Swiss EPR mapping to IHE

IHE BEST Practice



EPR-Projectathon Switzerland

IHE BEST Practice

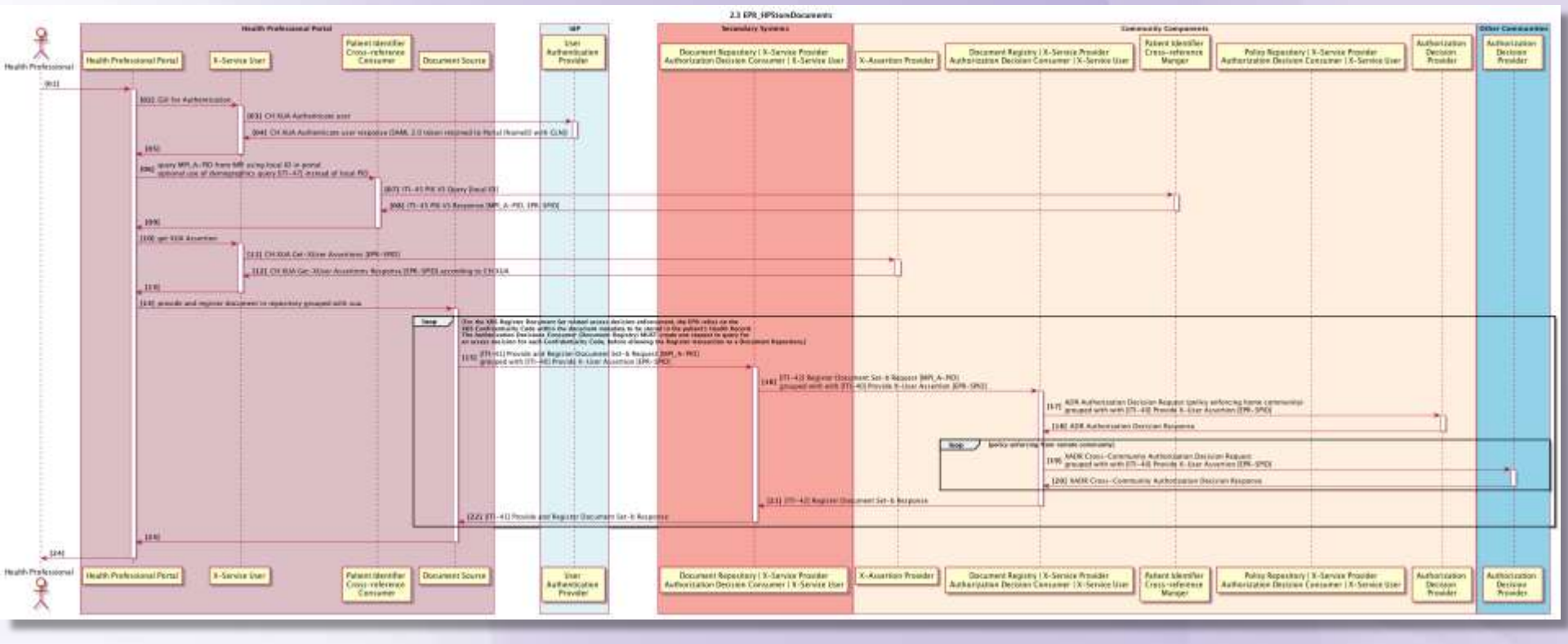
- 1st Projectathon September 2017

- EPR Reference platform built on IHE Gazelle®
- Platform planned to be used for certification in 2020

Virtual Projectathons for Pre-production Testing

- Testing is needed at project deployment level (on-boarding products at sites) to allow for interoperability production use
- The need to be covered is to secure proper end to end workflow testing (multi profile testing)
- Examples:
  - eHDSI PreProduction testing
  - Swiss EPR group testing
  - Sequoia Project CDA Validation

CH-EPR end-to-end workflow testing



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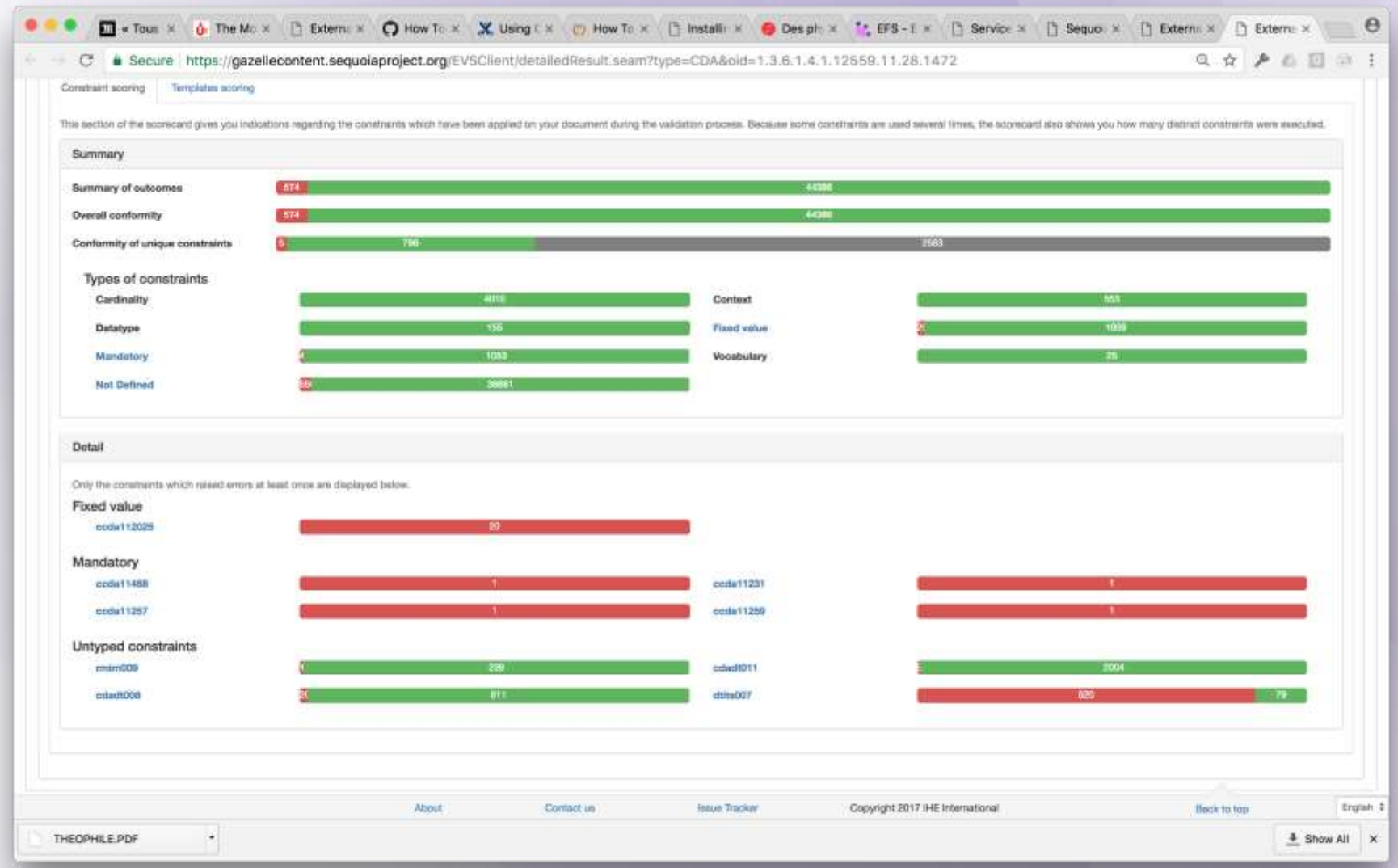
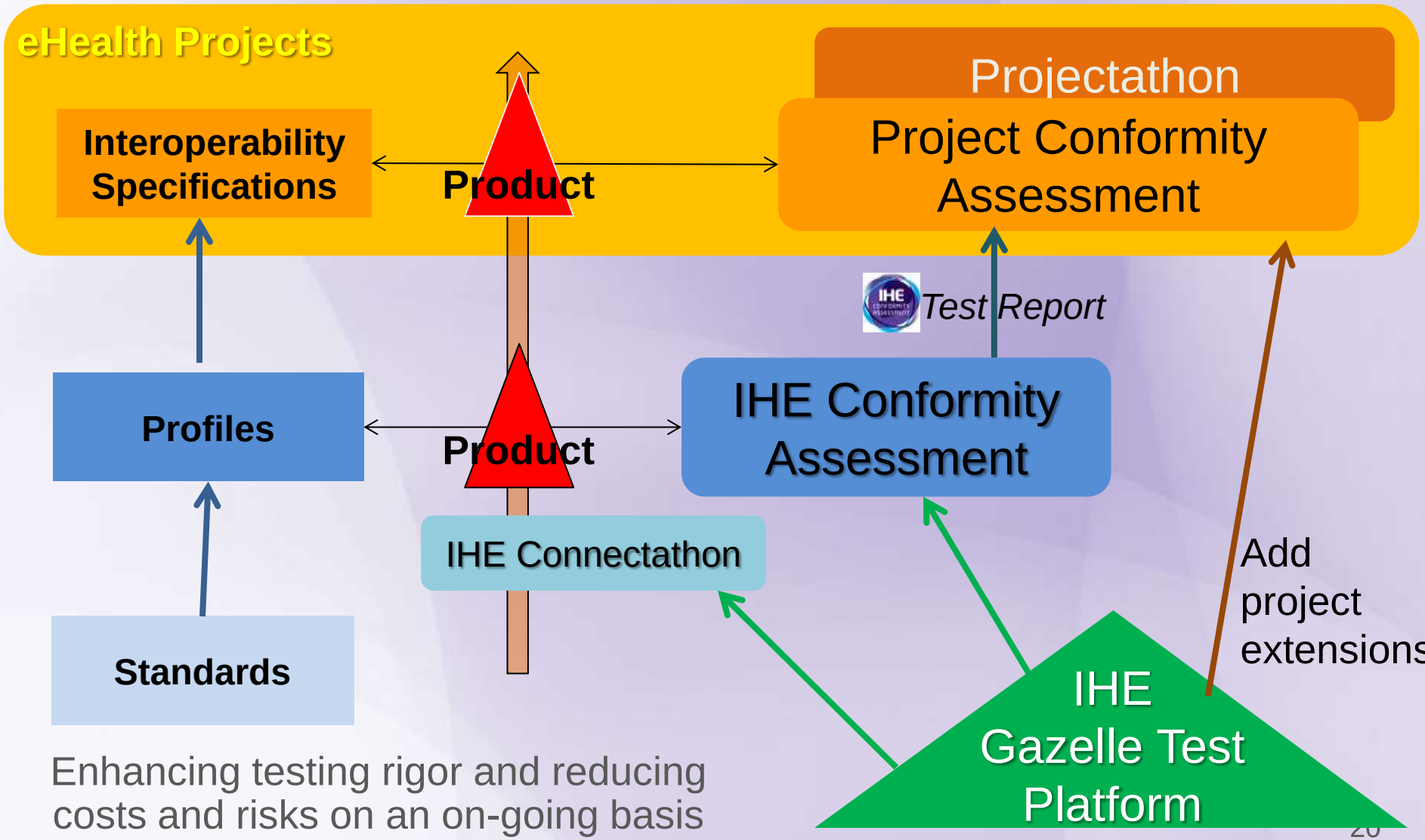
Document Quality Validation



A shared test platform: Connectathon, Conformity, and eHealth Projects



Enhancing testing rigor and reducing costs and risks on an on-going basis

IHE-Services

- Formally created in 2012
- Built upon a long experience in interoperability testing management and experience with epSOS.
- IHE-Services has the goal to offer professional services to support IHE Members as well as national/regional authorities, local projects or any other organizations deploying IHE profiles for their eHealth projects

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IHE Services Catalogue

1. Connectathons and Projectathons
2. Gazelle Test Bed and Tools
3. Training
4. Virtual Connectathons
5. Consulting / IoP Specifications
6. Tailored Test Tools
9. Conformity Assessment/Report
8. Interoperability Showcases
7. Tailored Test Plans

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IHE EUROPE Integrating the Healthcare Enterprise

CONNECTATHON WEEK THE HAGUE APRIL 2018

CONNECTATHON | PROJECTATHONS | IHE mHEALTH PLUGATHON | IHE SYMPOSIUM | Weekonnect

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Changing the Way Healthcare CONNECTS

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