# epsos

EUROPEAN PATIENTS
SMART OPEN SERVICES

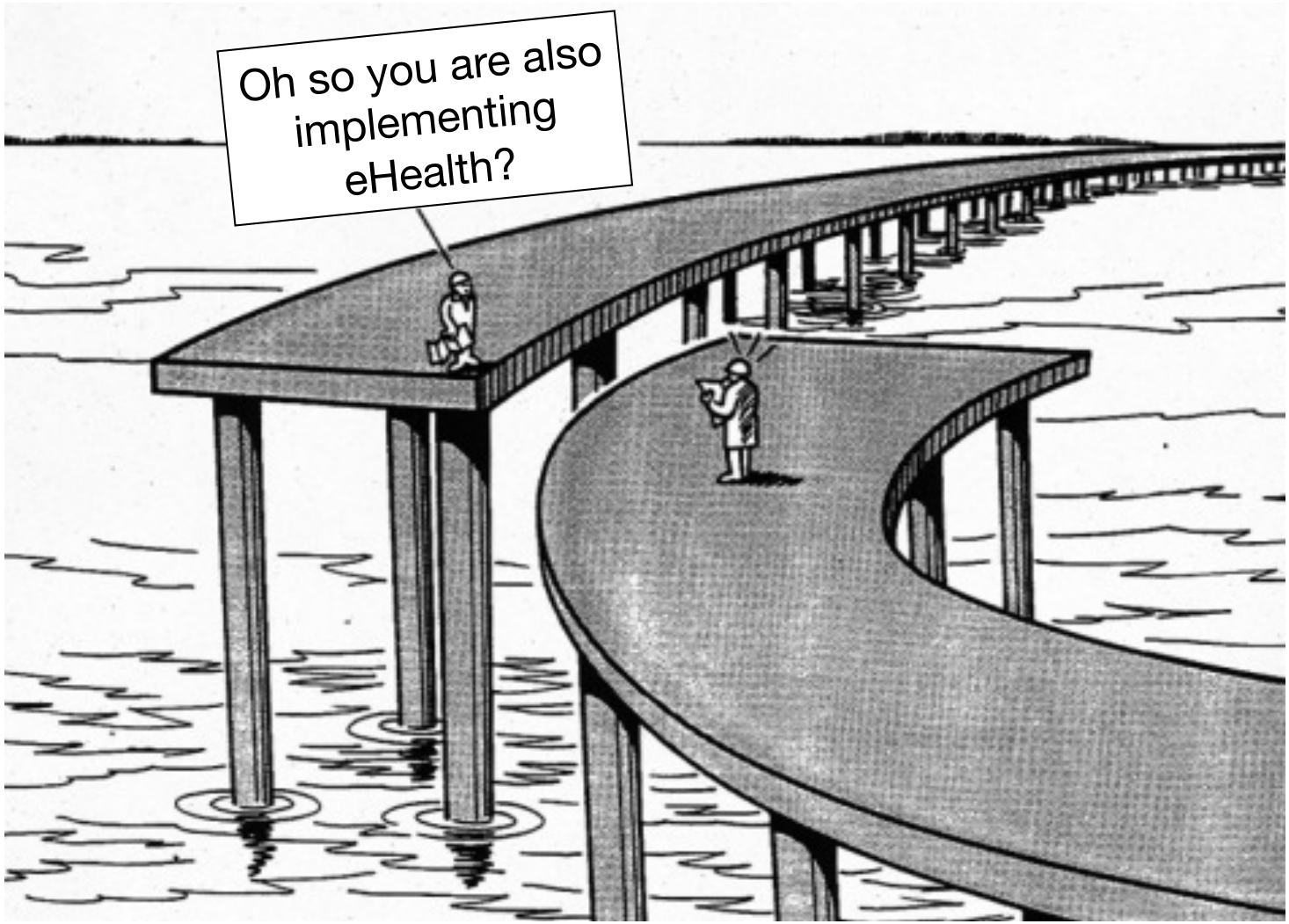
# epSOS in short

**www.epsos.eu**

# From strategies to services
## eHealth as the enabler for cross-border healthcare

# Cooperation is Key

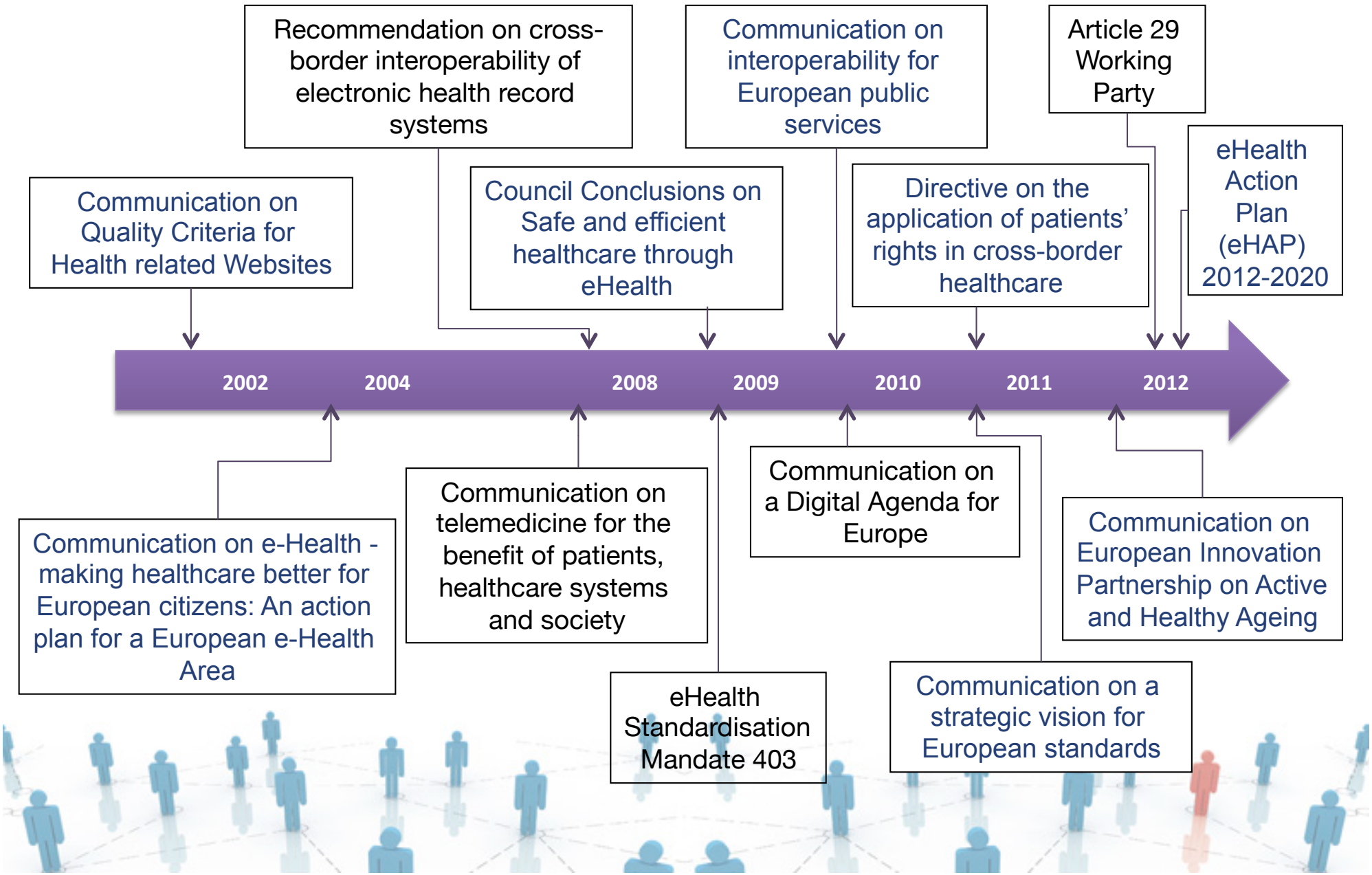





*base from Mikael Erlandsson*

# Policy Context for EU eHealth Interoperability





# epSOS Time Frames

## epSOS 1
## 2008 to 2011

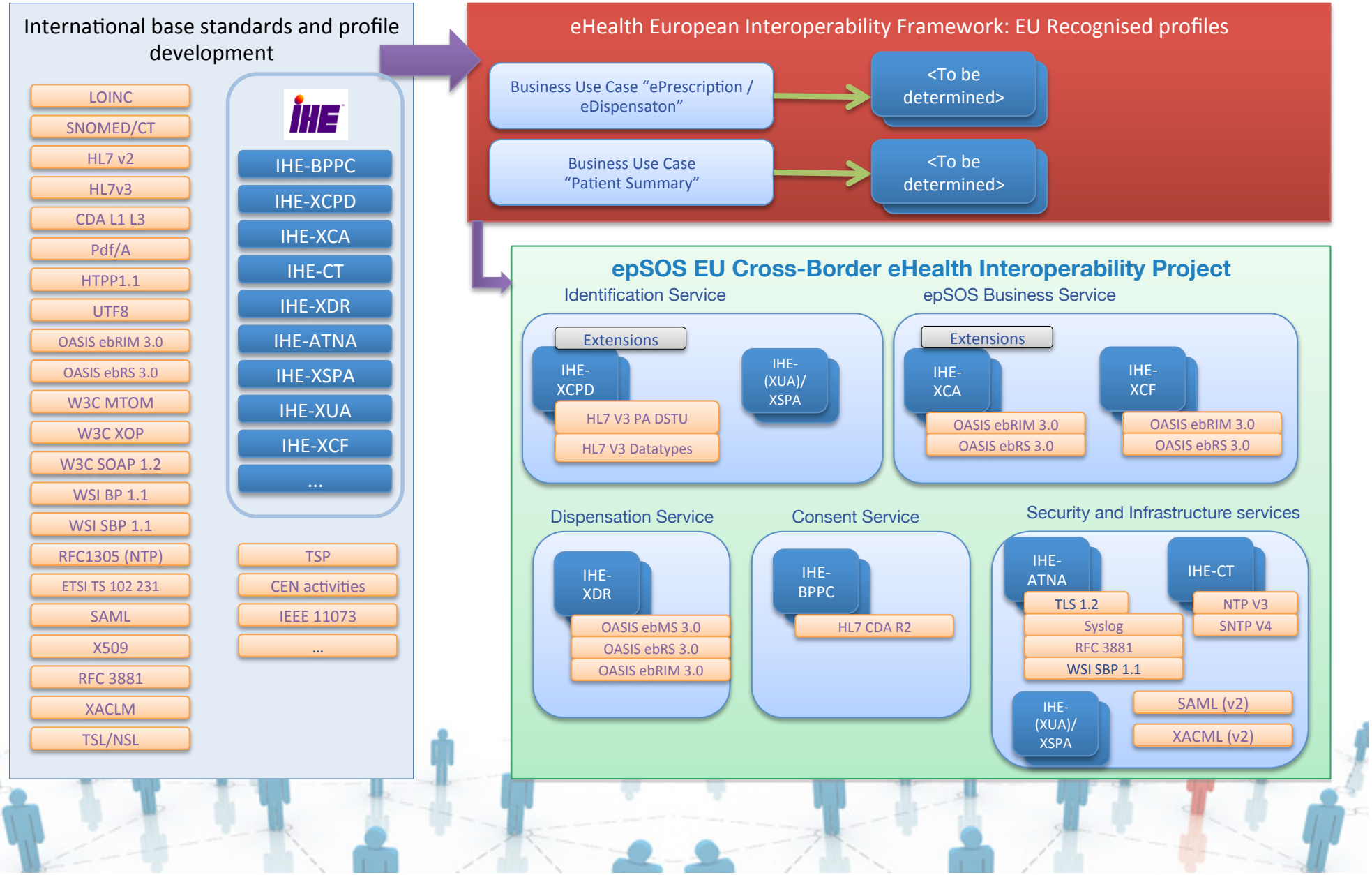
## epSOS 2
## 2012 to 2013

# Smart Open Services for European Patients

"to develop a **practical** eHealth framework and ICT infrastructure *[based on existing national infrastructures]* that will enable **secure access** to patient **health information**, particularly with respect to a basic **Patient Summary** and **ePrescription**, **between European** healthcare systems."

# epSOS - Vision

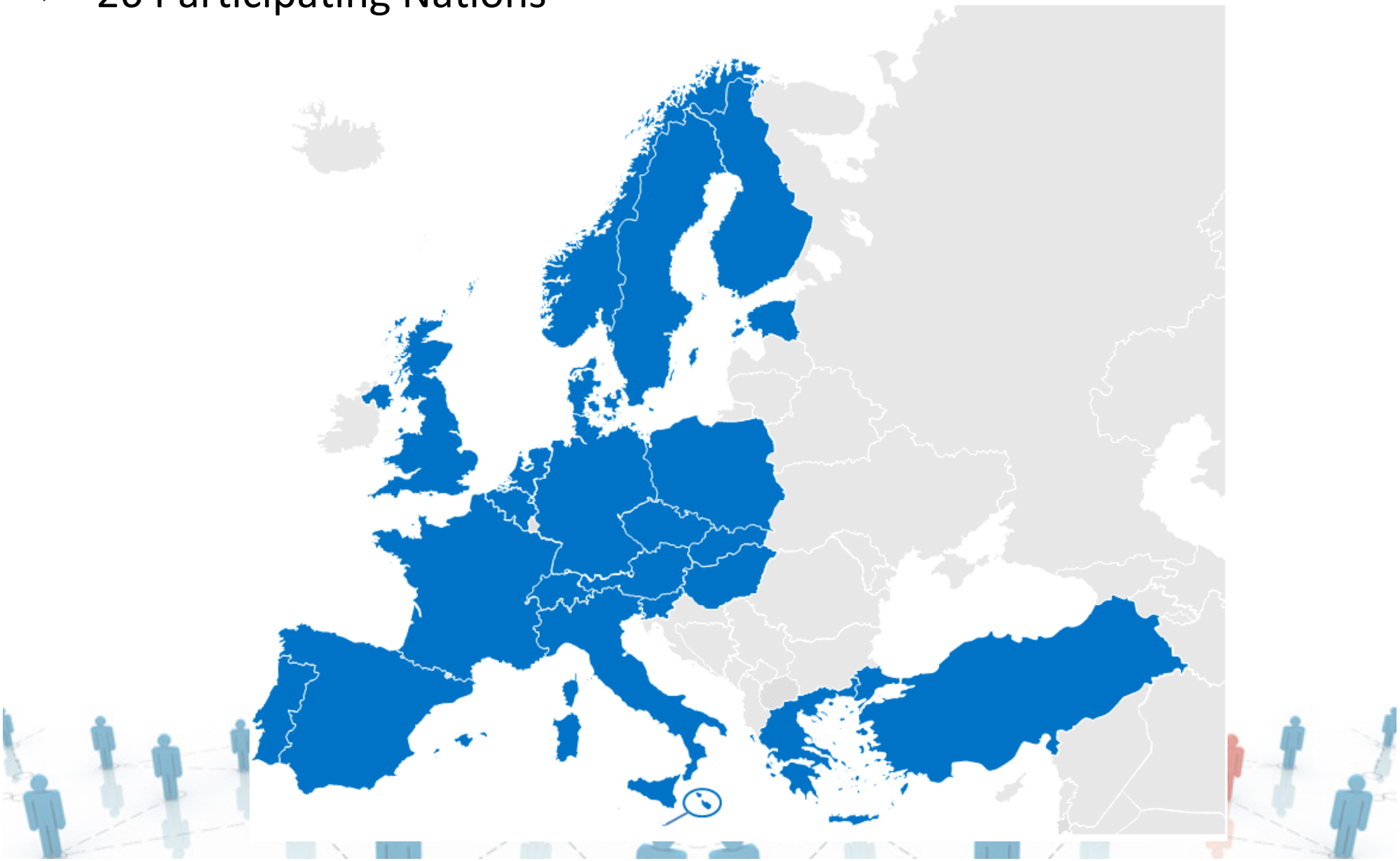




# epSOS - participating nations



- ✓ 26 Participating Nations



# epSOS - Industry Team



as per 15.05.2013

| | | | |
|---|---|---|---|
| 3M | Agfa HealthCare | Alert Life Sciences Computing | Apollo Information Technologies |
| Boston Life Labs | CareCom | Cisco | Conet AG |
| dbMotion | Dedalus Healthcare Systems Group | Engineering S.p.A | GE Healthcare |
| Gnomon Informatics | IBM | IHE Europe* | Indra |
| Insiel S.p.A. | Intel Corporation | Mawell | MediCognos |
| Microsoft | Netsmart | Oracle | Posam |
| RISE | Steria | Tiani-Spirit | TrebleM |
| T-Systems | UBM Medica | X-tention | |

**Industry Team Steering Group members are underlined**

*Industry Team Coordinator, no member of Industry Team

# epSOS – main Services



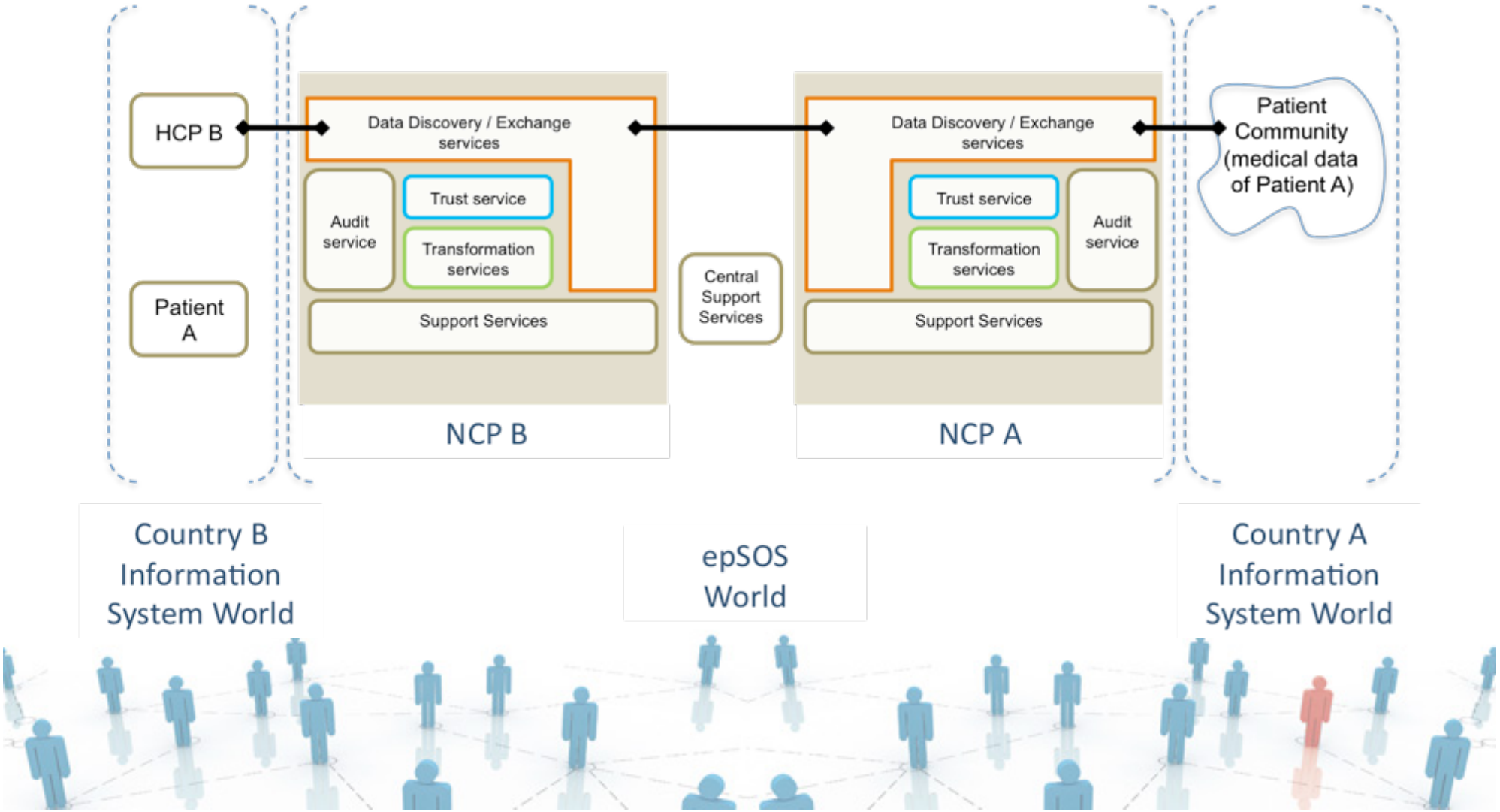
Provide concrete cross border Health services

- Patient Summary for EU Citizens
  - Occasional and Regular Visit
- ePrescribing for EU Citizens
  - Medication ePrescription and eDispensation
- *Other Services (epSOS 2):*
  - PAC, HCER, etc.

# epSOS 1
# Common Components Development

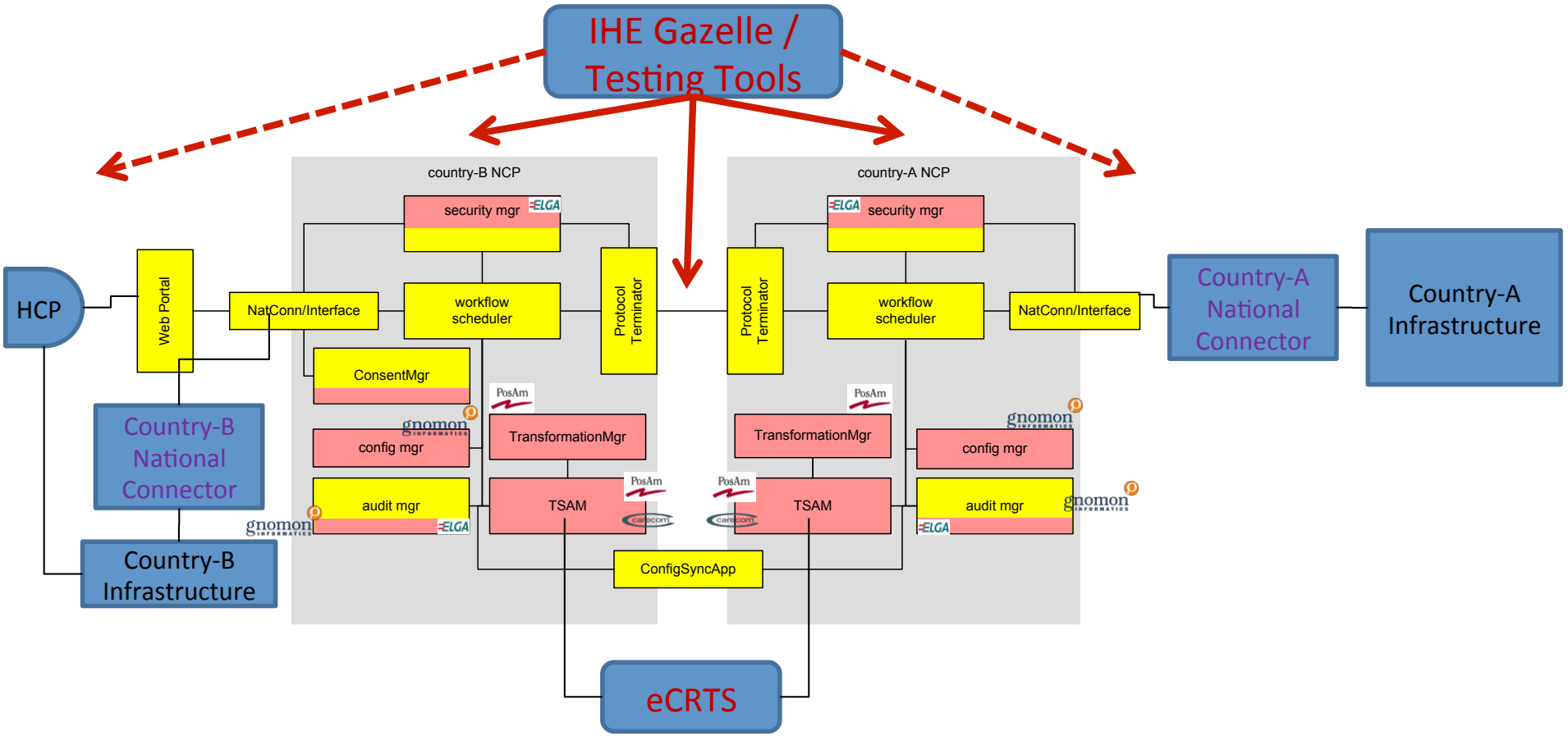
# Baselines

- Interoperability to connect services and architectures, potentially different in every Participating Nation (PN)
- The **National Contact Point** (NCP) is the fulcrum of cross border interoperability, exploiting the role of connecting the PN to the European Level environment.
- …


HCP B
Patient A
Data Discovery / Exchange services
Audit service
Trust service
Transformation services
Support Services
NCP B
Central Support Services
Data Discovery / Exchange services
Trust service
Transformation services
Audit service
Support Services
NCP A
Patient Community (medical data of Patient A)
Country B Information System World
epSOS World
Country A Information System World

# Common Components Development (CCD) Composition






yellow — **Vendor ready-to-deploy and IHE connect-a-thon tested products**
**→ no JARF sponsoring, royalty-free licence for epSOS pilot projects**

red — **cooperative, common development by Industry Team / Beneficiaries**
**→ JARF sponsored Open Source Software, linked to vendor products**

# epSOS 2
# Open Source Initiative

In the summer of 2012 (7 months ago)

- Concrete plans for forming an open source project (OpenNCP)
- Delivering the software components necessary to run a NCP
- Manifested in an international implementation team forming

# OpenNCP

"design and develop a set of Open Source Components (OpenNCP) that can be adopted by Participating Nation, to build their local implementation of the NCP (*National Contact Point)*"

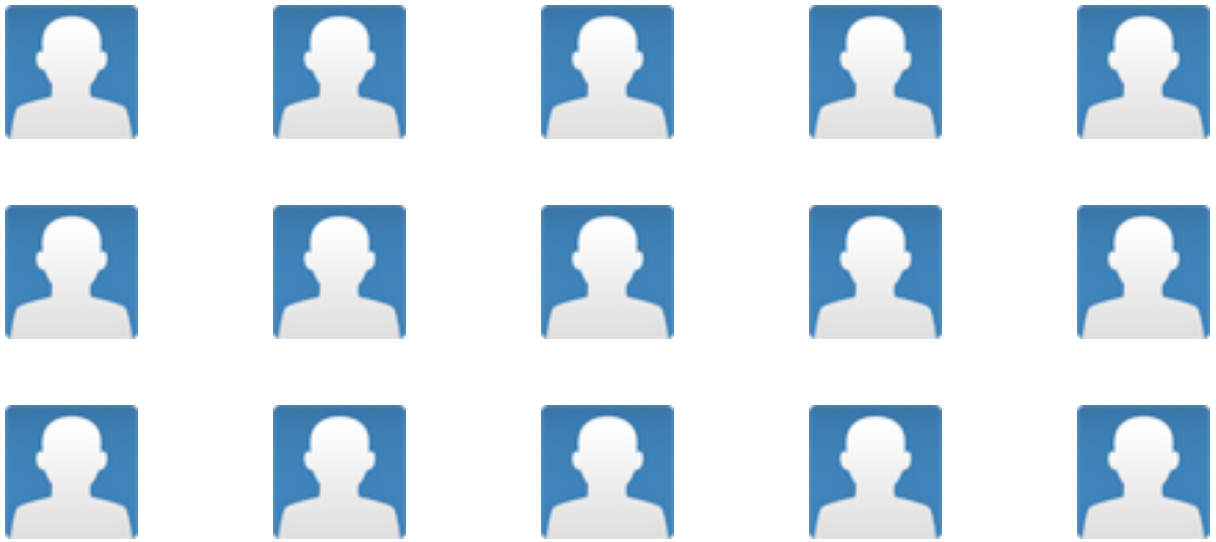
# Key Ingredients

## Motivation and Culture

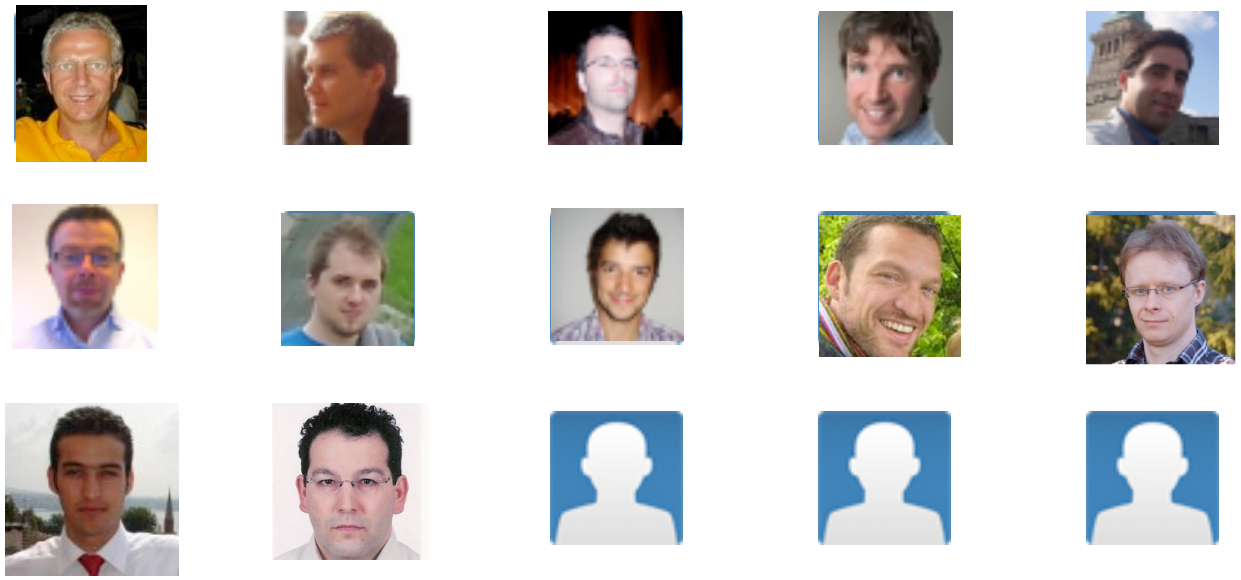
## Skills and Expertise

## Willing Person

# Willing Person



# Willing Person – have faces



# Principles

## distributed development

10 countries
27 contributors (not all coding)
spanning 3 time zones
24 source repositories

***develop*** *and* ***contribute*** *to the project should be* ***easily obtainable*** *and* ***understandable***

# contributions licensed over

## GPLv3

## ASLv2

# Method

## software components released MUST

- Readily deployable
- Qualitative demands on the build tools (**Continuous Integration Env.**)
- Discipline of the developers when committing code

# Tools

- **Programming Language** (Java)
- **Knowledge Sharing** (Atlassian Confluence)
- **Code Sharing** (Google Code + GIT)
- **Development Mng.** (Atlassian Jira & GreenHopper)
- **Build** (Maven + Semantic Versioning)
- **Quality Assurance** (Jenkins - Continuous Integration)

# Results

- **OpenNCP 1.0.0 – 9 Nov 2012**
  - ✓ **Pre-Pilot-Testing Ready** (release notes)
- **Open NCP 1.1.0 – 24 Jan 2013**
  - ✓ **Operation Ready**
  - ✓ Artefacts: *https://joinup.ec.europa.eu/nexus/index.html#view-repositories;releases~browsestorage~eu/europa/ec/joinup/ecc*
  - ✓ Release notes: *https://openncp.atlassian.net/wiki/display/ncp/1.1.0+Release+Changelog+and+Notes*
- **Open NCP 2.x.y – (2013 / 3 releases)**
  - ✓ **epSOS 2 Services**

# epSOS Open Source Community at JoinUP

- Collaborative platform created by the European Commission
  - ✓ *Support open source development work done by government agencies in Europe*

- The arena where we are building the **epSOS Open Source Community**
  - ✓ *work, improvement, extension, maintenance and release*

# epSOS OpenNCP

## Please, **jump in**!!!

Thank you for your attention!

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