Antilope

Advancing eHealth Interoperability

Portuguese eHealth Interoperability strategy

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Antilope Iberic Summit

Valladolid, Spain / 2014-09-24

cip competitiveness and innovation framework programme 2007-2013

SEVENTH FRAMEWORK PROGRAMME

Portuguese eHealth Interoperability strategy

SPMS EPE
Serviços Partilhados do Ministério da Saúde

Agenda

1. Background and scoping
2. Vision and approach
3. PT in action

eHEALTH INTEROPERABILITY

How did we get here?

SPMS – Who we are

- SPMS stands for
  - Ministry of Health Shared Services

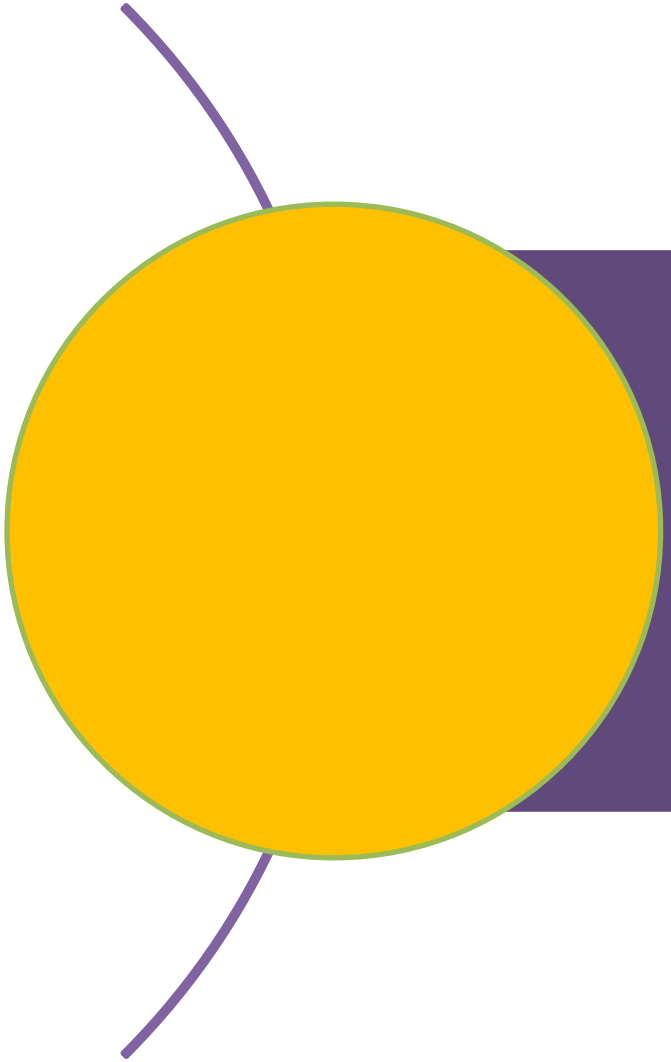
SPMS – Who we are

- A public enterprise created in 2010
- Functioning under the guardianship of the **Ministries of Health** and Finance
- We aim to provide shared services:
  - purchasing and logistics, financial management, human resources
  - **information and communications systems**

SPMS – Our mission

- Cooperation with the health services in innovation and change management;
- Promoting knowledge sharing for strengthening the reform of the health sector;
- Provision of shared services, keeping in mind the needs and responsibilities of the services of the NHS network;
- Functioning as a purchasing agency, obtaining economic gains through economies of scale and trading in competitive dialogue with suppliers;
- **Contributing as an Operating Unit of the Ministry of Health for the promotion of modernisation and innovation, through the proper integration of information and communications technologies, in perfect coordination with national and regional policies**.

SPMS – Our mission



Contributing as an Operating Unit of the Ministry of Health for the promotion of modernisation and innovation**, through the proper integration of information and communications technologies**, in perfect coordination with national and regional policies.

SPMS – Our realm

- ~ 10 million citizen
- ~ 50 Public Hospitals
- ~ 400 Primary Care Centres
- ~ 90% running our ICT solutions (ADT and EHR)
- ~ 60 ICT Solutions (SPMS portfolio)

Healthcare Environments are.. Complex Adaptive Systems

And each one has their own little ecosystems'

Interoperability is "good will"

Interoperability: 'the ability of two or more systems or components to exchange information and to use the information that has been exchanged'

Barriers:

- Different languages
- Different health systems
- Different infrastructures
- Different technologies
- Different procedures

Building Blocks?
Standards, Profiles, Guidelines, Terminologies and Architectural Specifications

Even so, HOW TO:
- Provide appropriate treatment?
- Provide access to comprehensible and meaningful medical information?

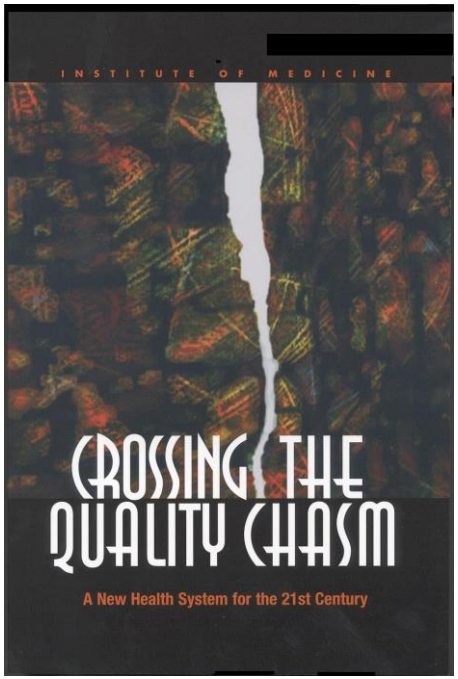
Can we measure interoperability?

Interoperability measures how accurately, effectively and consistently health entities exchange clinical information as **Electronic Health Records** by **Health Information Systems**

Better interoperability may lead to:

Better achieve health sector's goals

- Equitable
- Safe
- Effective
- Patient-Centered
- Timely
- Efficient



VISION AND APPROACH

Can we see and move beyond?

eHealth European Interoperability Framework Vision on eHealth EIF

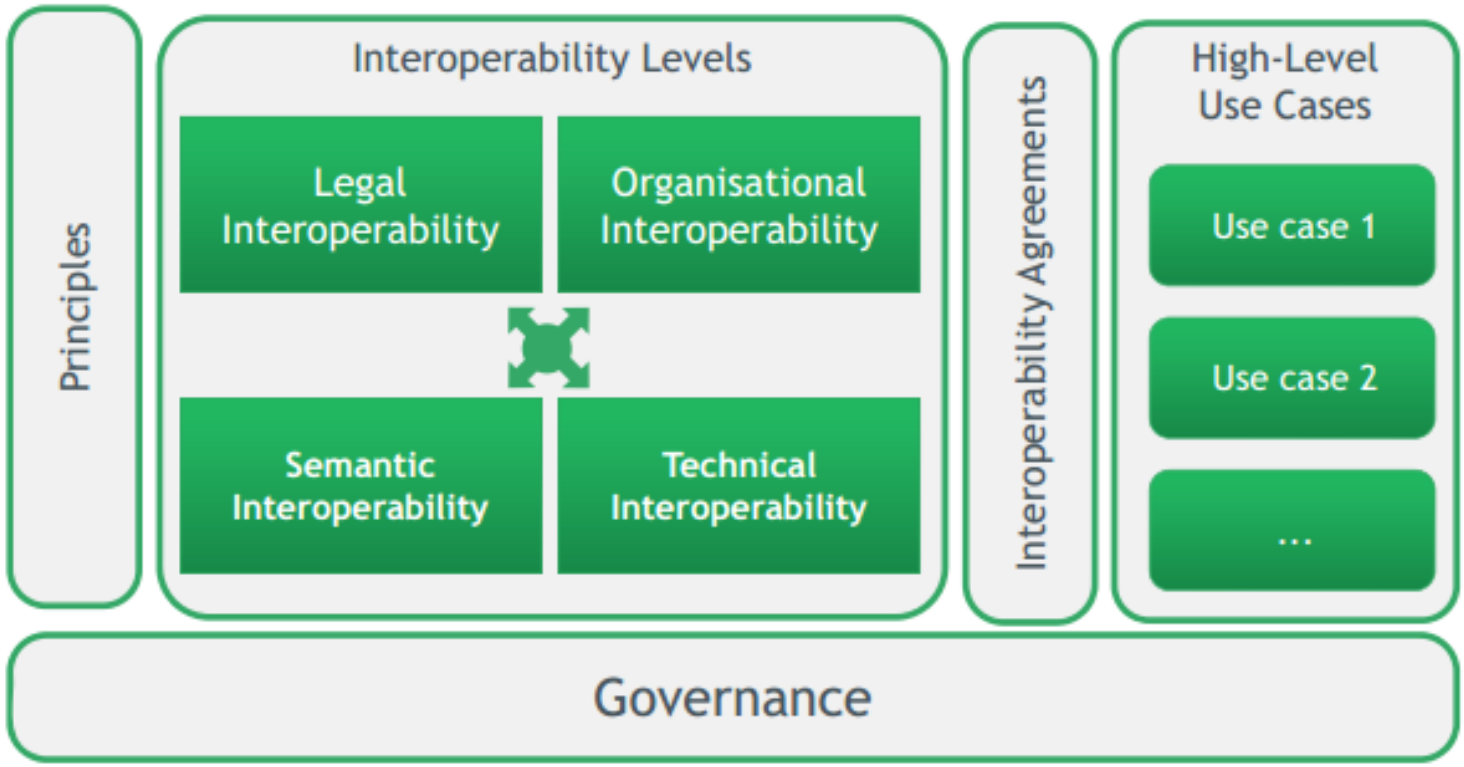
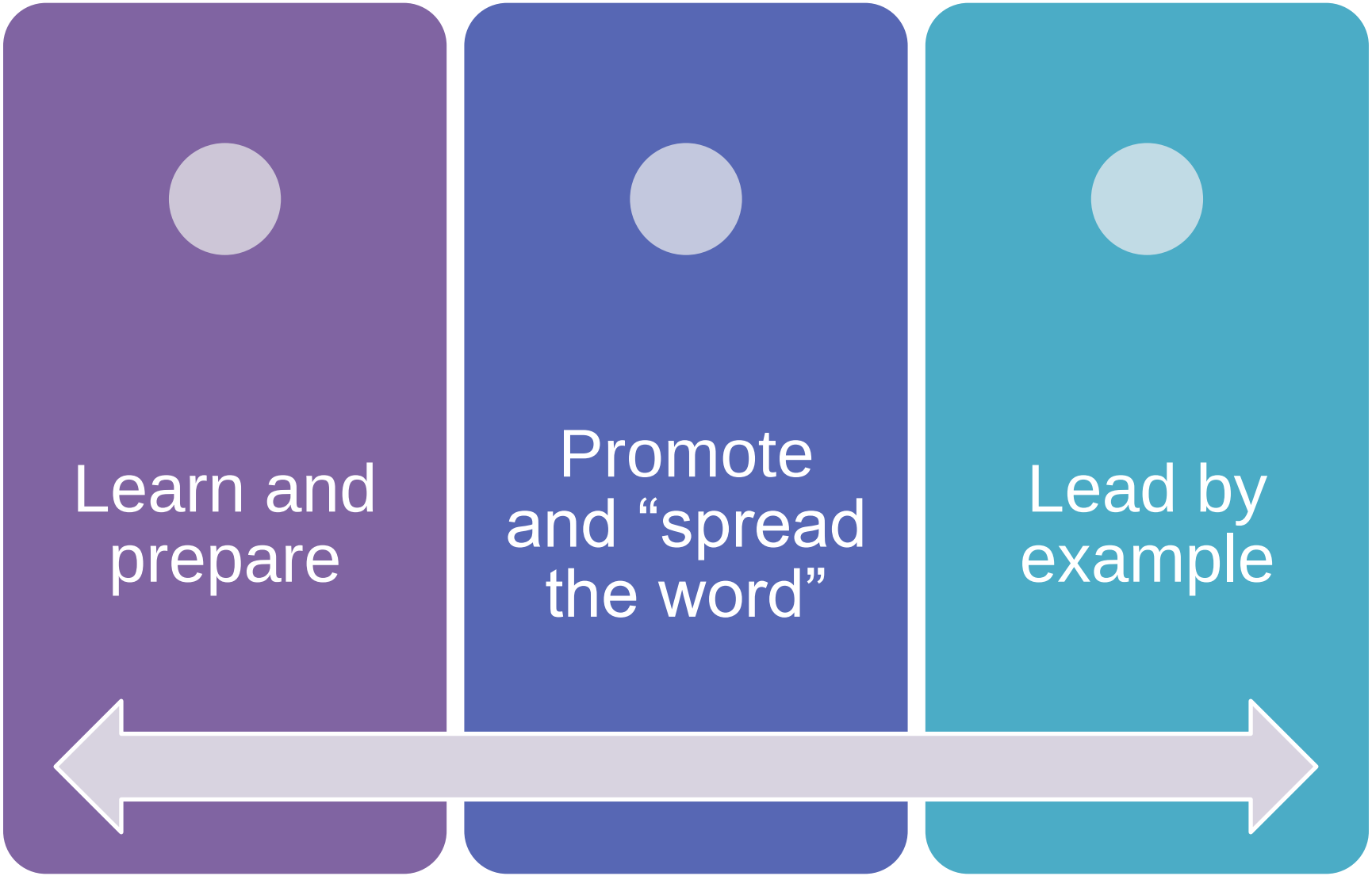


Figure 3 - Resulting eHealth EIF structure

What can we do towards interoperability?



Learn and prepare

- **Participation in International Projects:**
  - EXPAND, epSOS, eSENS, Trilium Bridge, (+4 EU projects in 2015)

- **Create internal skills and organizational culture about interoperability**
  - Internal Technical Interoperability team/efforts
  - Internal Semantic Interoperability expert and national orchestration
  - HL7 & IHE Training, Certification and Testing (e.g. Connectathons)

Learn and prepare

Promote and “Spread the word”

- **Organize events with industry to engage and learn needs and readiness**
- **Coordinate reference international projects**

http://www.expandproject.eu/

Lead by Example

- Evolving our ICT solutions with a Standard Interoperability Layer
- Inclusion of interoperability requirements and recommendations for IT investment on contracts with the NHS
- Link with other national wide efforts in ICT interoperability (eg. AMA: Stork 2, eID Nation Strategy)
- Promote the establishment of “PT” IHE, HL7… other Chapters or subgroups
- Representing Portugal on International Initiatives
- Foster national and international adoption of eHealth standards

Lead by Example

PDS PLATAFORMA DADOS SAÚDE | PORTAL DO PROFISSIONAL | PORTAL DO UTENTE

SClínico

- PDS – Use of Technical Interoperability standards
  - Links to more than 10 different applications using same technical specs;
  - API development for Patient portal – to link to mobile/other applications;

- Creation of a interoperability layer (HL7 based) between SONHO (main hospital ADT solution – more than 50 hospitals)

- Work towards decoupling application layers – in legacy applications (SONHO vs SAM/Sclinico)

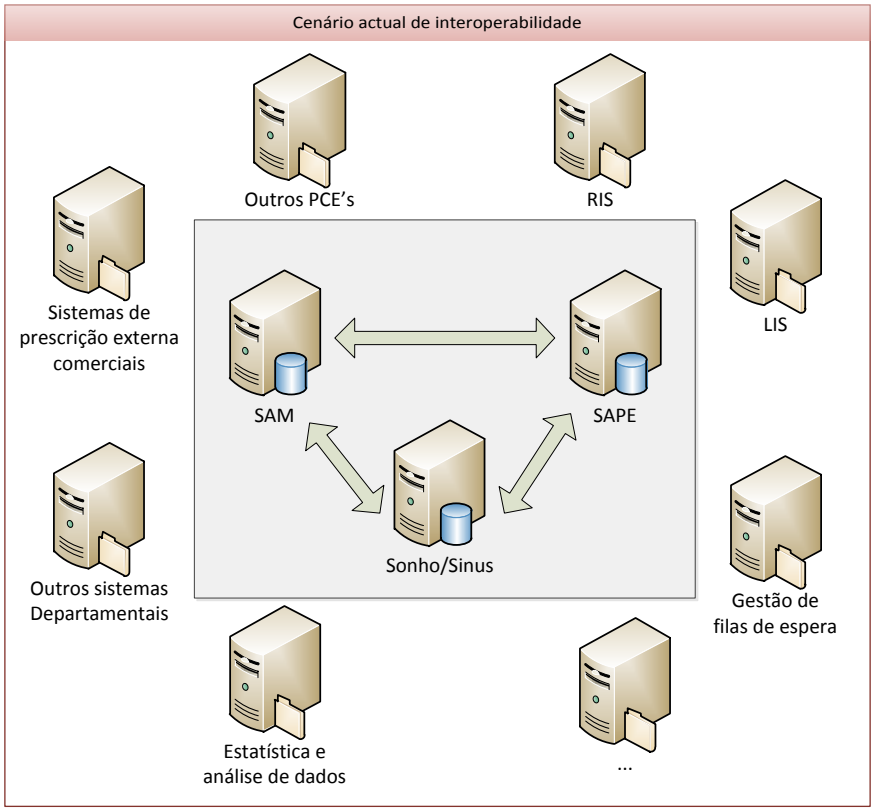
- Developing Semantic Catalogues (CPARA V3, CPAL, SNOMED CT release center – Pathology-Oncology RefSet)

PT IN ACTION

Changing the world one **API** at a time

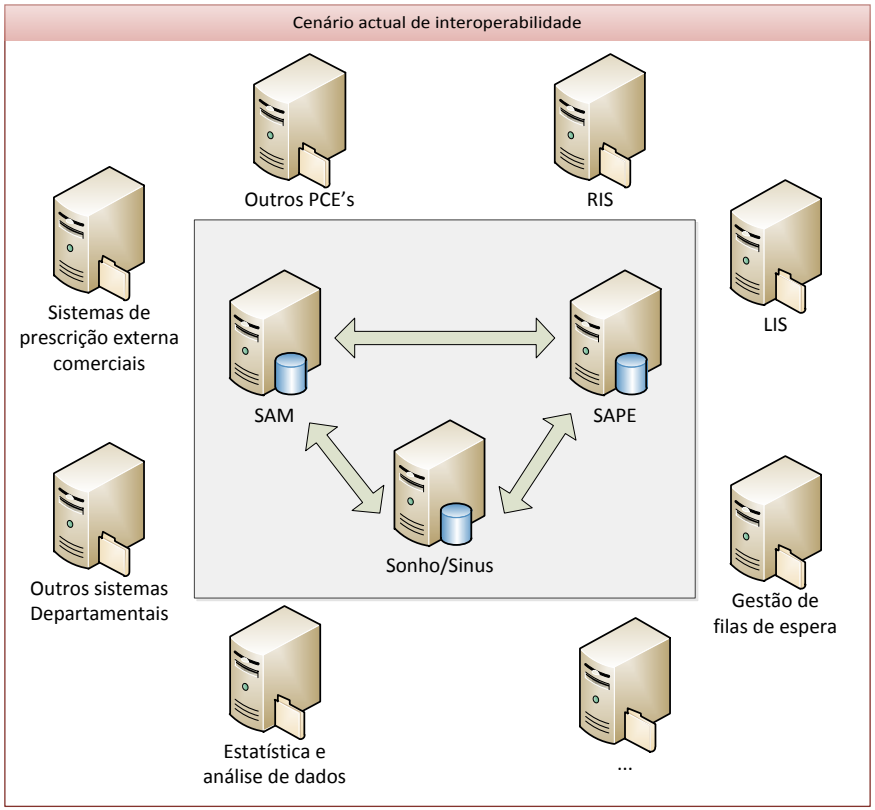
Current situation

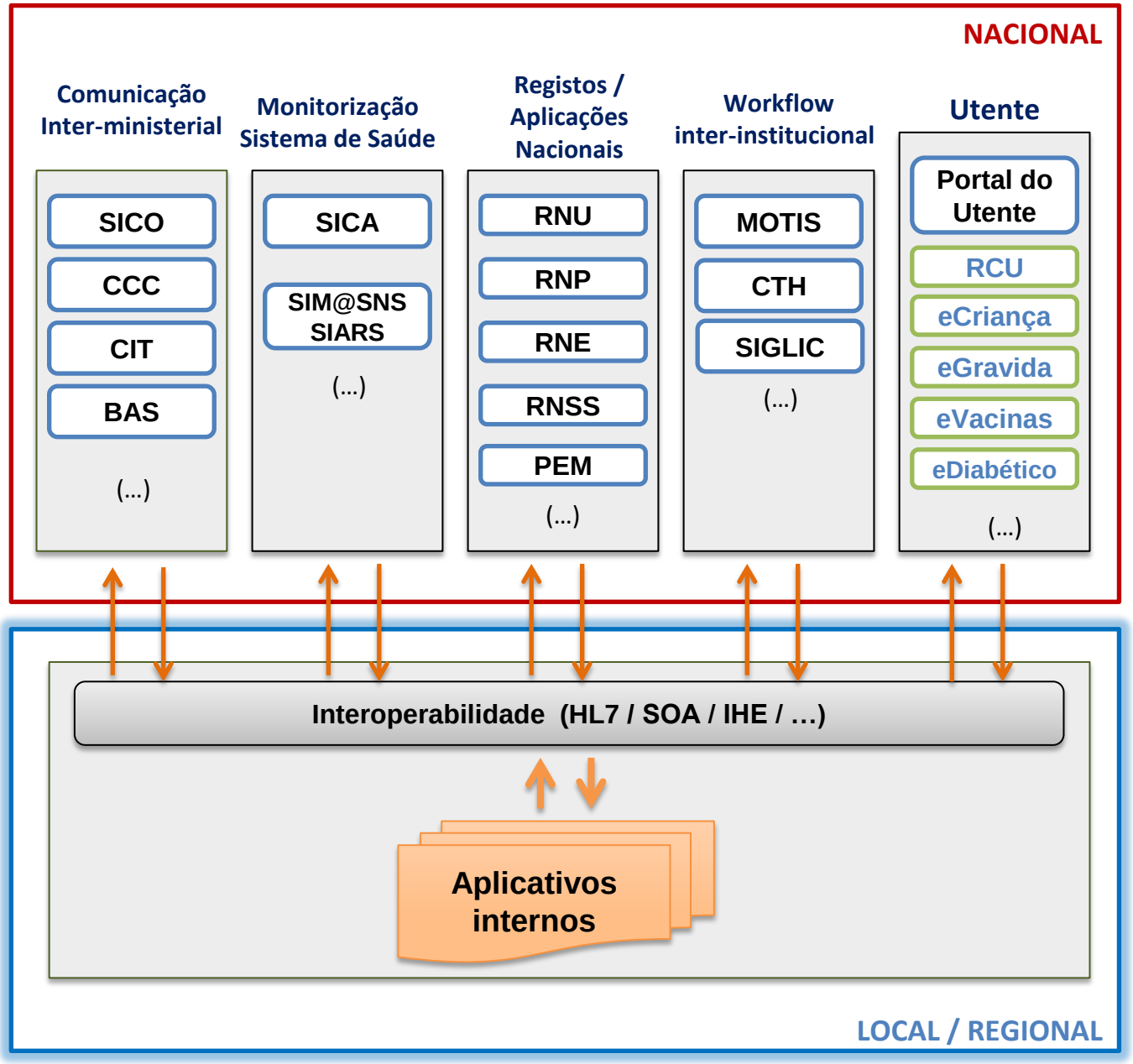
- DB Links
- Low standard adoption and awareness
- Low flexibility and reusability



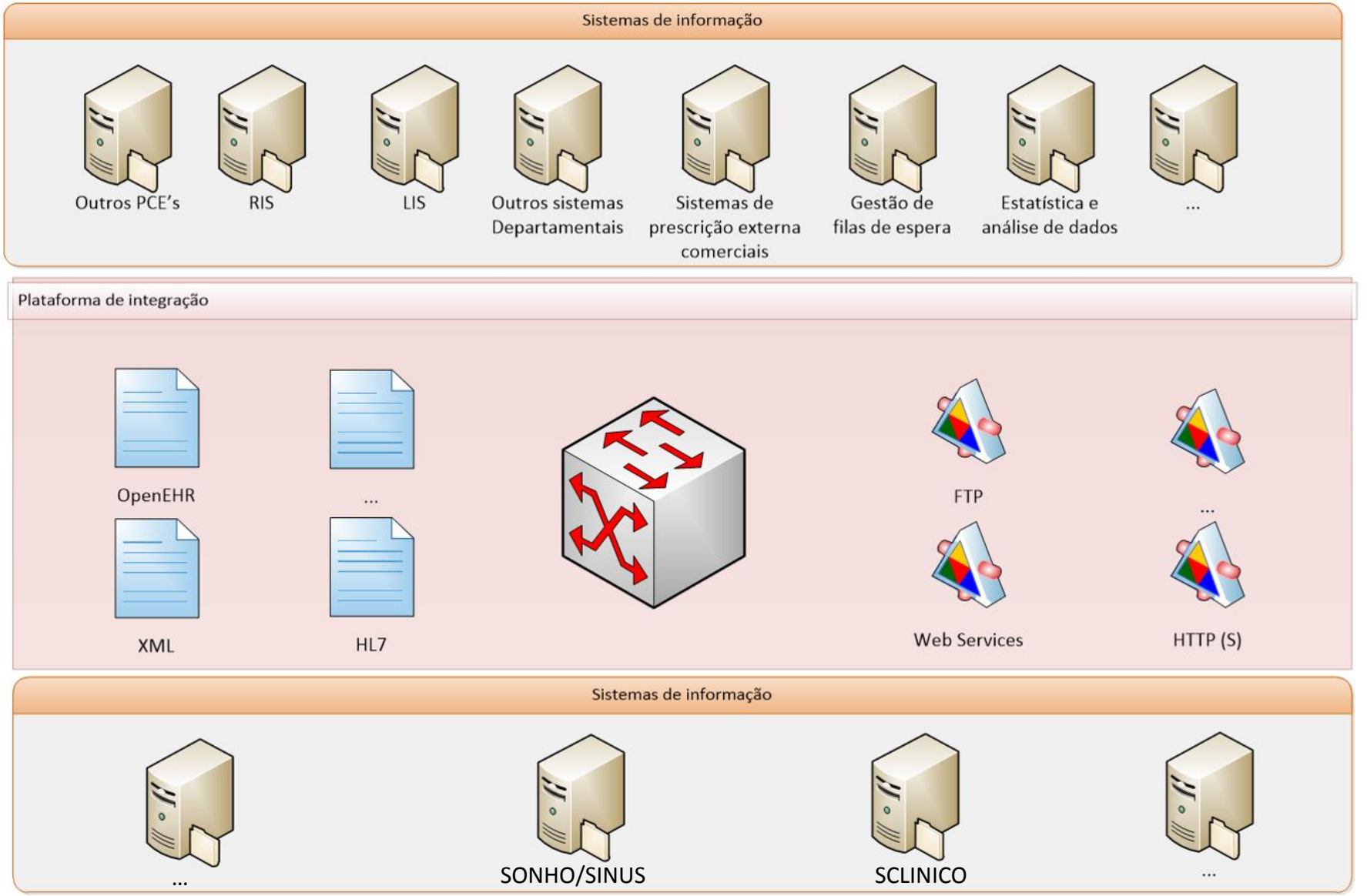
Current situation - IMPACTS

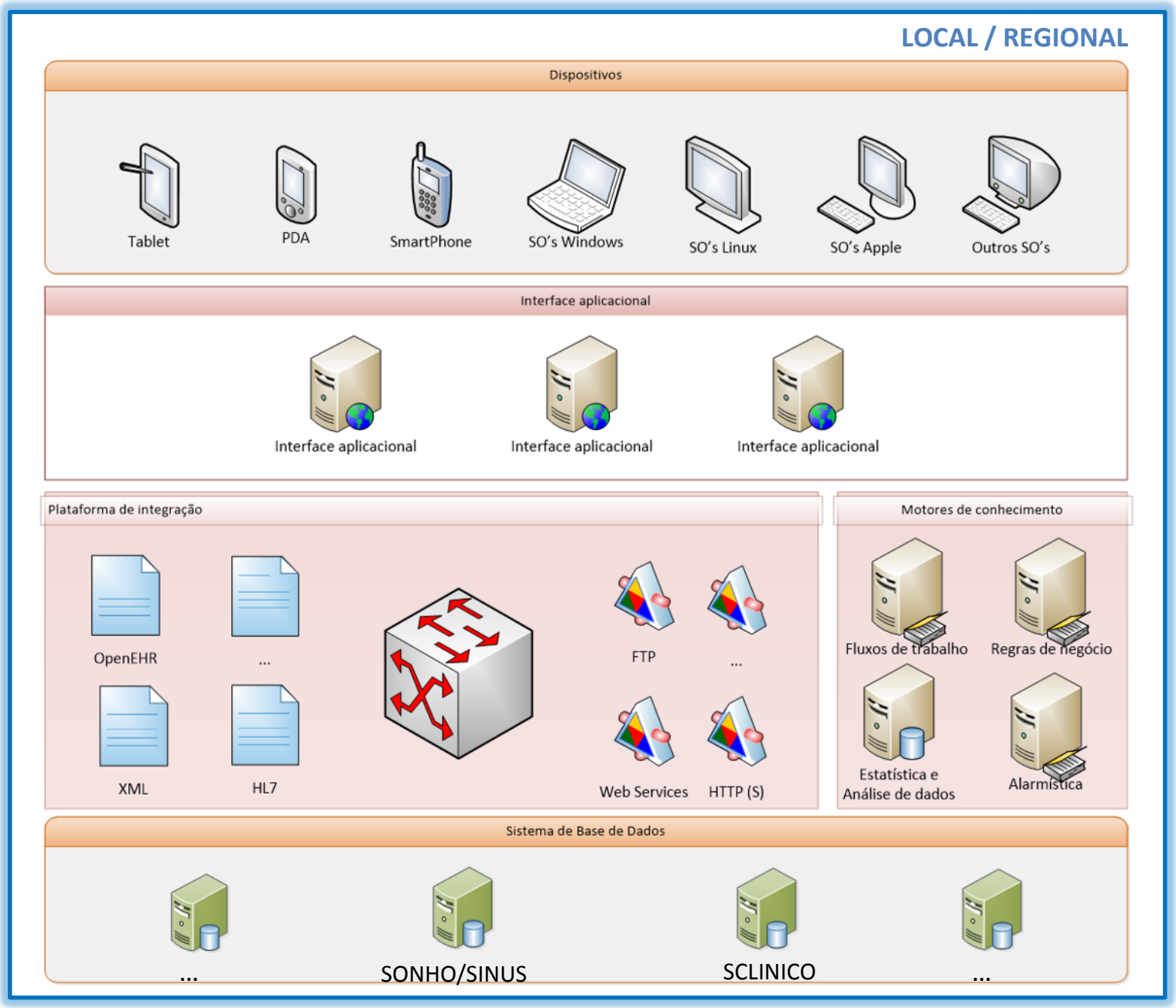
- System Overload
- Diminished ability to manage and regulate
- Evolution (replacement) constraints
- High maintenance costs



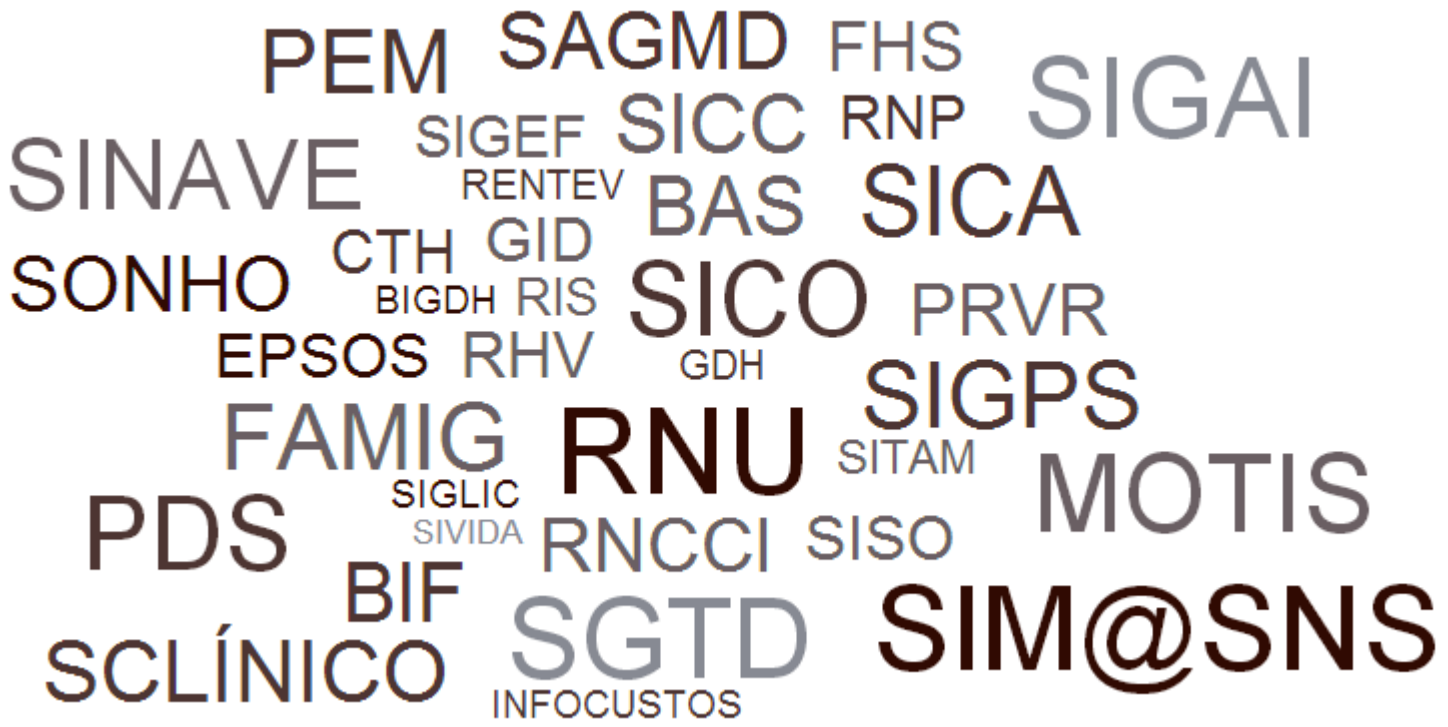

NACIONAL
Comunicação Inter-ministerial
SICO
CCC
CIT
BAS
(...)
Monitorização Sistema de Saúde
SICA
SIM@SNS SIARS
(...)
Registos / Aplicações Nacionais
RNU
RNP
RNE
RNSS
PEM
(...)
Workflow inter-institucional
MOTIS
CTH
SIGLIC
(...)
Utente
Portal do Utente
RCU
eCriança
eGravida
eVacinas
eDiabético
(...)
Interoperabilidade (HL7 / SOA / IHE / ...)
Aplicativos internos
LOCAL / REGIONAL

LOCAL / REGIONAL




LOCAL / REGIONAL
Dispositivos
Tablet
PDA
SmartPhone
SO's Windows
SO's Linux
SO's Apple
Outros SO's
Interface aplicacional
Interface aplicacional
Interface aplicacional
Interface aplicacional
Plataforma de integração
OpenEHR
...
XML
HL7
FTP
...
Web Services
HTTP (S)
Motores de conhecimento
Fluxos de trabalho
Regras de negócio
Estatística e Análise de dados
Alarmística
Sistema de Base de Dados
...
SONHO/SINUS
SCLINICO
...

Treat patient, “the tree and the forest”.



Let’s….

build it together.

Sharing is key!

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