Joint Action on Health Information

Interoperability of health information systems and supporting digital assets - WP10 DRAFT PROPOSAL

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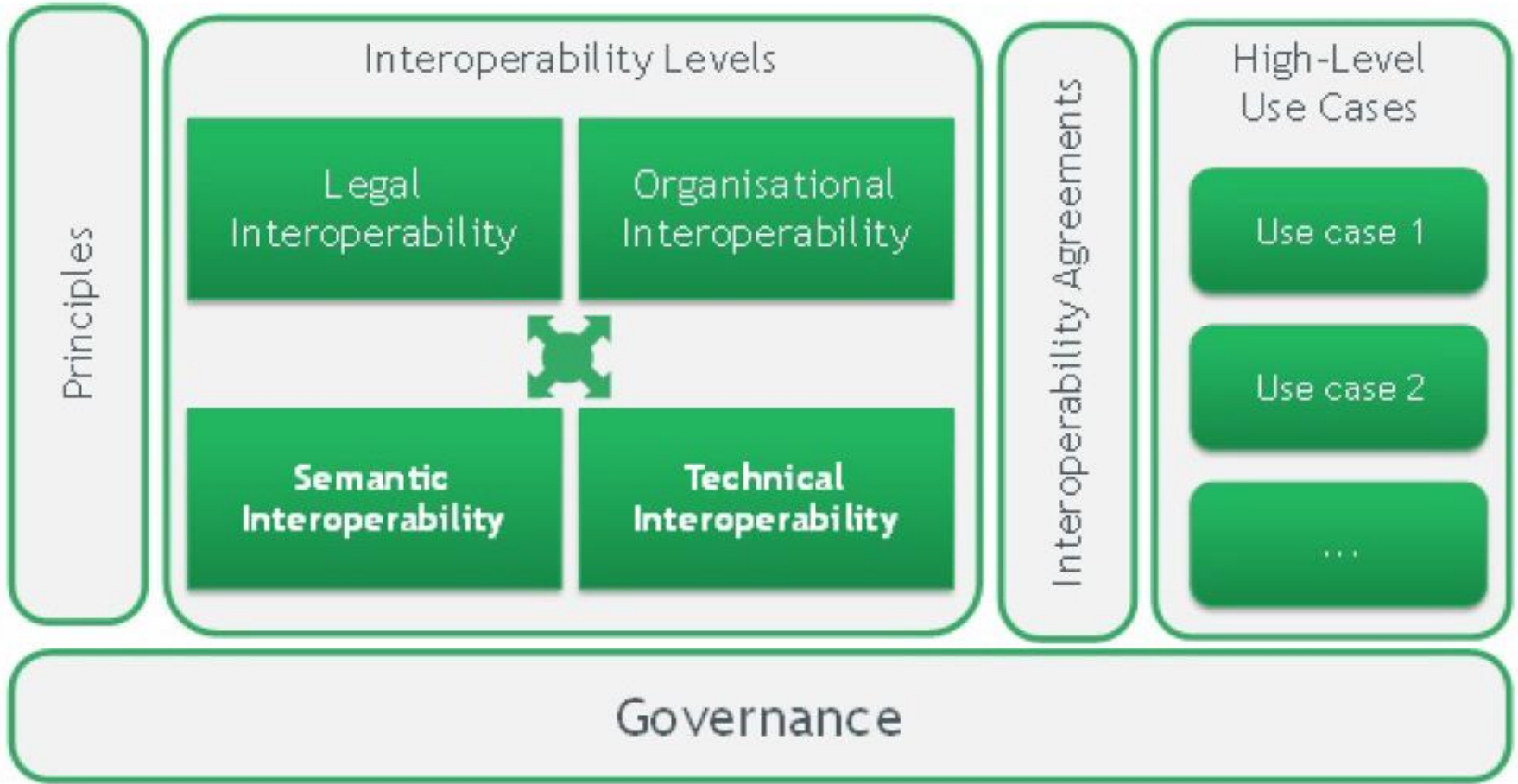
Interoperability

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

European Interoperability Framework (EIF)
- the ability of organisations to interact towards mutually beneficial goals, involving the sharing of information and knowledge between these organisations, through the business processes they support, by means of the exchange of data between their ICT systems

EIF describe four "vertical" interoperability layers:
- legal,
- organisational/process,
- semantic,
- technical,
- a background layer – interoperability governance.

WP10 draft tasks

- T10.1: Legal and organisational levels of interoperability as well as interoperability governance – mapping, tools and guidelines

- T10.2: Semantic and technical interoperability – overview and coordination

- T10.3: Interoperability consultation platform - communication

- T10.4: Health information interoperability enablers – action plan (or recommendation as actionable items to be implemented by national HISs)

- T10.5. Piloting several key interoperability assets

T10.1: Legal and organisational levels of interoperability as well as interoperability governance – mapping, tools and guidelines

Identify governance structures and good regulatory practices for interoperability coordination through literature search, surveys, focus groups, F2F meetings and continuous cooperation with external experts in the field of interoperability as well as medical, public health and health policy legislation.

- Provide **tools in form of recommendations and guidelines** that will ensure taking into account all interoperability dimensions when drafting and implementing future legislative instruments (e.g. building upon a model of patient registry-focused PARENT JA guidelines and tools)
- **Map national and cross-border business processes** involving production, exchange and use of health information and their implementation in the different Member States.
- **Recommend chosen available EU digital assets** supporting interoperability for re-use in health information optimisation (e.g. using EXPAND registry of interoperability assets and other sources).
- **Develop assessment and comparison tools** based on these findings and, in the second version, guidelines on how to better align and simplify them.
- **Review and evaluate available technical solutions** and digital services for federated data sharing and analysis.
- **Define fair access to health information for surveillance and health policy**: Identification of key issues in the application of the coming European General Data Protection Regulation (EU-2016/679) in May 2018 with regard to the use of health information databases for epidemiological surveillance and public health research.

T10.2: Semantic and technical interoperability – overview and coordination

Since semantic and technical interoperability dimensions are "core" part of other work packages' scope, this work of the WP6 will require coordination with other WPs dealing with these topics in detail.

- **Stakeholders' requirements analysis**: archetypical use cases that should frame the design of the data architecture and the kind of outputs that the infrastructure should provide (meta-information, datasets for research, surveillance and monitoring outputs, etc.)
- **Mapping out existing architectures** pertinent to the objectives of the JA, with specific focus on distributed architectures.
- **Proper architecture design** developed upon the previous learning, including how the architecture and processes should be designed to deal with privacy, data transfer, data linkage, semantic harmonization, quality assurance and reporting

T10.3: Interoperability consultation platform - communication

Communication platform promoting the importance and benefits of interoperability.

Special attention to the cooperation and communication with the ISA unit at the Directorate General for Informatics of the European Commission that has developed, in a form of a Communication, a new European Interoperability Framework (EIF) and other relevant stakeholders, e.g. with:

- JRC offices in Ispra for INSPIRE Directive implementation authority and others)

- EUROSTAT

- WHO EHII

- EGHI and HSPA

- …

T10.4: Health information interoperability enablers – action plan (to be implemented by national HISs)

Identify, organise and present **key interoperability enablers as interoperability solutions** (e.g. services and tools, standards and specifications) that are necessary for the efficient and effective delivery of health information and services across Member States in the form of a **Health Information Systems' Interoperability Action Plan** (HISIAP).

Why not suggest contained in the HISIAP, a new Health Information Directive?
- such as INSPIRE Directive for environmental data

T10.5. Piloting several key interoperability assets

Designing, piloting and sharing digital services **(e.g. pilot EU DW)** which, according to EIF, i.e., a part of the Communication (COM(2017)134) from EC:

Piloting **electronic health record keeping and internal data sharing** in health systems across the EU.

Piloting **cases as a proof of concept,** that respond to objectives: health, health determinants and health care performance monitoring, and comparative effectiveness research.

Piloting the incorporation of **geographical information on pollutant risk facilities** into morbidity and mortality analyses.

WP10 draft deliverables

No.	Deliverable Title	Benef.	Type	Dissemination Level	Due Date (in Months)
D6.1	HIS Interoperability Report	Welsh Gov.	Report	Public	24
D6.2	Interoperability assessment and comparison tool	CIPH	Tool	Phase 1: JA Partners countries Phase 2: Public	30
D6.3	Interoperability consultation platform	CIPH	Platform	During the JA: JA Partners and APG After the JA: Public or as a part of ERIC	36 (and a continuous in form of body in future ERIC)
D6.4	Health information interoperability action plan	CIPH	Action Plan	Public	36
D6.5.	Digital services pilots	ISS	Services / Assets	Public	12 (start of work) until 36

WP10 draft milestones

Milestone Number	Milestone Title	Lead beneficiary	Type	Due Date (in Months)	Means of verification
MS6.1	National and cross-border business processes	Welsh Gov.	Report	24	National and cross-border business processes mapped for Task 6.1
MS6.2	Stakeholders' requirements, semantic design and architectures	ISCIII	Report	18	Stakeholders' requirements analysis conducted for Task 6.2.
MS6.3	Consultation platform and Action Plan	CIPH	Report	12	Platform established for Tasks 6.3. and 6.4.
MS6.4	Digital services pilots	ISS	Report	36	Digital services tested for Task 6.5.

Thank you!

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