

Check against delivery

Conference "From ISA to ISA²", Brussels, 3rd March 2016

Speech by Michal Boni, MEP

What is the real reason of the importance of the interoperability in general, especially ISA² (square) project ?

The future of the economy, all kinds of developments is related to the digital game changer in Europe in coming years. There are two key drivers: adequate infrastructure as fast internet, High Performance Computing Centres, storages - and the possibilities and rules for data processing and sharing. Those two key drivers require - the proper interoperability and standarization and as a result can guarantee the connectivity. There is no possibility to have Internet of Things or Internet of Everything for everybody, Industry 4.0, car connected business, the shift paradigm in the healthcare area, the overcoming of geoblocking and making the portability one of the issue supporting digital platforms - without connectivity based on the interoperability.

But, on the other hand - there is no possibility to improve and modernize all kinds of public services, also administrative services - without using the interoperable digital tools and interoperable and standarized solutions. This is the opportunity: to establish the new model of public services, more transparent, more efficient, more simplified, more interactive, more user friendly. And first of all - oriented on citizens' and business needs. The transparency of the governing is the added value and can involve people to the decision making processes and give them the real possibility to participate in the public affairs. This is the new opportunity for participatory democracy. But, open government and citizens and business involvement in public area can be possible under one key condition: the interoperability, which will be able to guarantee the real connectivity.

There are six key digital technologies to watch - due to the last Report "Digital Dividends" made by the World Bank. And they have the potential to change completely the model of the economy, the public and the private life. There are: Fifth- generation (5G) mobile phones, the Artificial Intelligence, Robotics, Autonomous vehicles, Internet of Things, and 3 D printing. Could you imagine the global development of those key technologies - without interoperability ???

So, the interoperability is fundamental background for the effective and efficient connectivity. Interoperability is the heart of the connectivity. And the connectivity is the background for inclusive, innovative, efficient digital technologies in service to all public goals.

I want to emphasize three key questions related to the interoperability.

Firstly, what does the interoperability mean?

Interoperability is the ability of different information technology systems and software applications to communicate, exchange the data, and use the information that has been exchanged. Data exchange schema and standards should permit data to be shared across. There are three levels of information technology at the interoperability area:

1. Foundational: interoperability allows data exchange from one information technology system to be received by another and does not require the ability for the receiving information technology system to interpret the data.
2. Structural: interoperability is an intermediate level that defines the structure or format of data exchange (i.e., the message format standards) where the uniform movement of data is preserved and unaltered. Structural interoperability defines the syntax of the data exchange. It ensures that data exchanges between information technology systems can be interpreted at the data field level.
3. Semantic: interoperability provides interoperability at the higher level, which is the ability of two or more systems and elements to exchange information and to use the information that has been exchanged. Semantic interoperability takes advantage of both the structuring of the data exchange and the codification of the data including vocabulary so that the receiving information technology systems can interpret the data.

- The key is – to have standardisation, which ensures interoperability, lowers costs and enhanced safety. European Standards are developed by business and other stakeholders.
- Some facts: 2772 is a sum of years of experience of all EU institutions working on standards; 1 billion euros is the annual cost of standardization in Europe (out of which 20-25 mln euros are coming from the EU); there are 60.000 experts across Europe working on standards.
- Interoperability is a crucial factor in the success of modern technologies, and it is market demand that has ensured that interoperability holds a prominent position in standardization. Complex products and systems are often based on multiple standards from several standards-making organizations.
- In addition, standards themselves need to be designed and tested to ensure that products and services complying with them do indeed achieve interoperability.
- The ISA2 Programme will support and promote:

A) work done with Member State administrations, with standardisation organisations and with other partners to foster interoperability and the use of standards.

B) the assessment, update and promotion of existing common specifications and standards and the development, establishment and promotion of new common specifications and standards through the Union's standardisation platforms and in cooperation with European or international standardisation organisations as appropriate;

C) the needs and requirements of the European SMEs which should be performed as quickly and as efficiently as possible.

Secondly, why it is so important at the European level, as a European solution?

- At European level, many Union policy areas depend on interoperability for their successful implementation, such as the internal market, environment, home affairs and justice, customs and taxation, health, electronic identity and public procurement. Many new solutions, many new opportunities would become useless without key pillars of digital

development. One of those pillars is the idea, legislative framework and practical schemes of the interoperability.

- The European project ISA 2, approved by the Commission, Council and the Parliament will support the solutions, which ensure the open cohesion way of transferring the data in the framework for administrative services oriented at business, administration and civic society associations and activities. It is impossible to imagine the modern cooperation with deficits at the area of simplified in the technical and semantic dimensions possibilities for exchanging all kinds of data. EP insisted on the social and economic aspects of interoperability, such as:

- Delivering public services in way that presents the digital divide,
- Being inclusive in their construction by creating communities around the solutions and frameworks,
- Ensuring a maximum of synergies with other Union initiatives, EP focused also on taking into account the particular needs of citizens, SMEs and micro enterprises when they act as end users of the solutions developed by the ISA2 Programme.

Thirdly, how to ensure the interoperability in the developing digital revolution?

- In a world of converging yet diverse technologies, complex ICT systems must communicate and interwork on all levels – this is interoperability.

- ISA2 as a new programme, based on earlier experiences of ISA programmes, should be a central point of reference and an instrument enabling the ICT-based modernization of the public sector in Europe and, consequently, a valuable contribution to achieve the digital single market.

- There is no “silver bullet” to achieving interoperability, nor is there an optimal level of interoperability that can be applied to all ICT situations. Rather, a case-by-case analysis of the market and incentive structures, technological landscape, and involvement of governments, among other things, is necessary to understand what approaches may be most useful to a given technology or industry.

- Europe has a role to play, primarily to ensure that the needs and requirements of the European SMEs are met as quickly and as efficiently as possible.

When I was looking at the programme of today conference - it was clear that our way to improve the interoperability in Europe is related to efforts made by particular Member States. There are many experiences and good practices, which can and need to be disseminated. They are related to many areas, to the public services. One of the key area for the future development and at the same time important for consumers is - healthcare area. What are the relations between healthcare area changes and interoperability ?

Example: interoperability in eHealth I

-Healthcare systems are increasingly dependent on information and communication to deliver high-quality care to European patients.

- The impact of standards is particularly important as standards may provide for a technical means to tackle the lack of harmonisation at other levels, e.g. legal and institutional, across Member States;

- While eHealth tools and services are now widespread and have been revolutionising the healthcare sector in recent years - all those: health authorities, hospitals, or doctors have selected and implemented their own individual systems. This situation require to ensure that these systems are able to communicate with each other. And it would offer significant benefits in healthcare across the EU.

- The absence of regulations or standards that mandate interoperability among mHealth solutions and devices - limits the scope of innovation and economies of scale to be achieved. It has also a negative impact on ease of use and limits scalability. **The lack of the proper interoperability at the European level is one of the key barriers** - all kinds of interoperability: cross border, semantic, legal, organizational, technical.

- We need an action, which contribute to the development of an appropriate EU-wide framework for standards, interoperability testing, and certification of eHealth systems.

- We should continue initiating the cross-border solutions, that are key to the improvement of interoperability, establishment of open standards for interoperability, especially for healthcare systems interoperability in the EU (checking the possibilities of healthcare support in the area of interoperability in the EU project - ISA 2, checking what kind of solutions we need at the legislative level and what kind of actions and practical implementations are required). It should be crucial, both at the EU level and in Member States, to ensure interoperability of mHealth solutions by means of the Electronic Health Records. In general, it also requires portability,
- We should strive for a joint vision on interoperability architecture related to eHealth and provide guidance on architecture domains where EU Member States share a common interest.
- The action should build on the many relevant elements that have been developed by existing EU Commission-funded eHealth projects such as [epSOS](#), [CALLIOPE](#), [HITCH](#), [eHR-QTN](#), [NetC@rds](#), [Antilope](#), [SemanticHealth](#), [SmartPersonalHealth](#) and also more horizontal projects.

And the final point: as we can see: there is no way forward to use the digital potential, there is no future without Interoperability as a some kind of guarantee for digital by default.

So, to all of you : best wishes and be successful! Because the significance of your successes at the area of the interoperability implementation - will have the impact for our: as entrepreneurs, as workers, as users, as citizens, as consumers, as patients: successes in many areas!

Thank you for your attention!