

Interoperability

Revisiting a definition

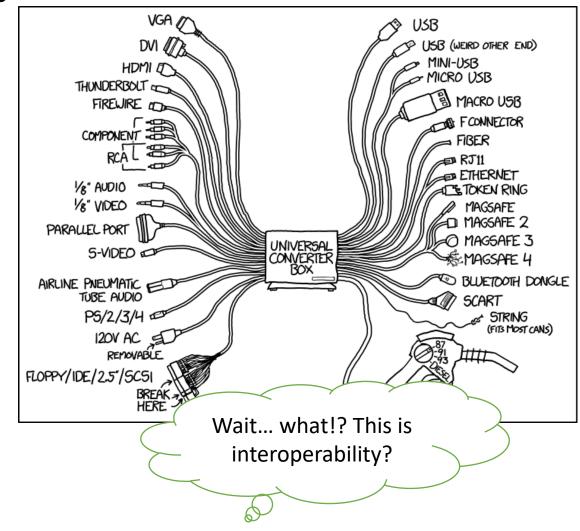
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Why revisit the definition of interoperability?

in·ter·op·er·a·bil·i·ty <u>in-tər- ä-p(ə-)rə- bi-lə-tē</u>

: ability of a system (such as a weapons system) to work with or use the parts or equipment of another system (Meriam Webster)

Interoperability: the degree to which two products, programs, etc. can be used together, or the quality of being able to be used together (Cambridge Dictionary)

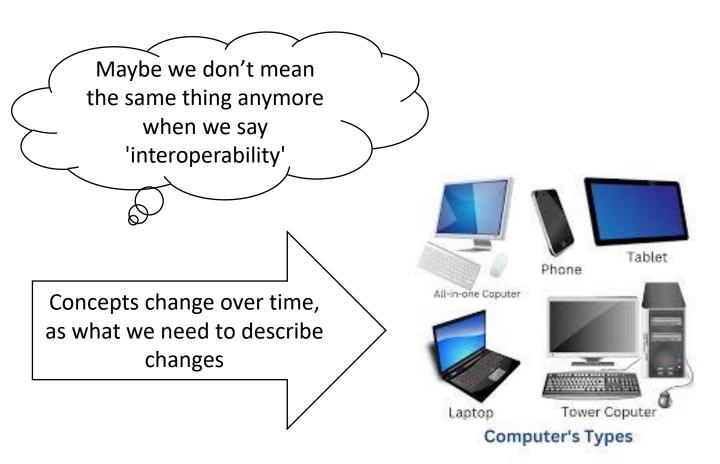




What we did



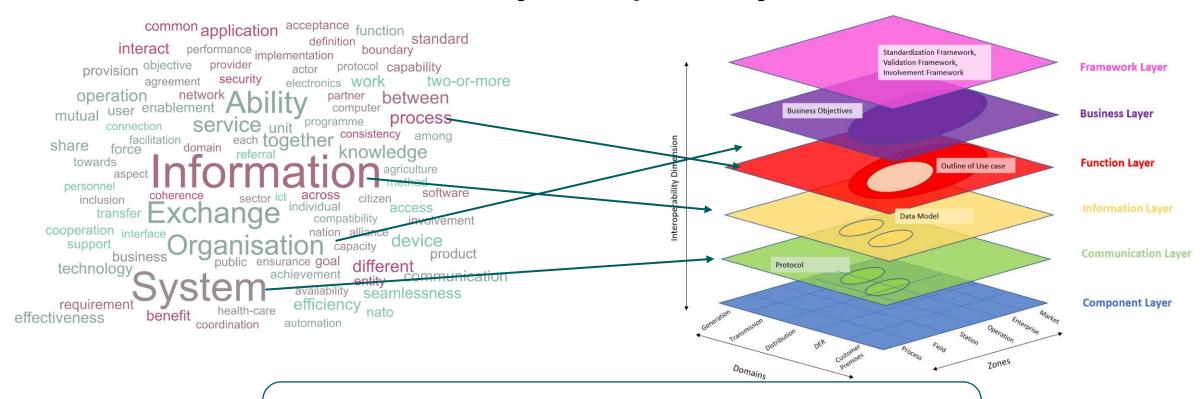
Computer (1949)



Computer (2025)



Can we uncover what we meant by interoperability



Definitions seem to emphasize 3 of the 6 layers: interoperability goes beyond components and information



New definition.

"Interoperability refers to the ability of diverse systems, organisations, and individuals to work together seamlessly through shared understanding and mutual compatibility. It is an emergent property that arises from the continuous development and refinement of standards, collaboration among stakeholders, and the dissemination of knowledge across technical, organisational, and societal boundaries."

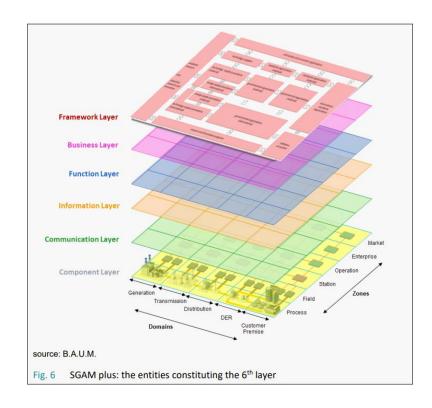
Open for peer review.
Please leave feedback





Implication of the new definition

- Conceptual frameworks like the SGAM need to be expanded with an additional layer accounting for social and organizational interoperability.
 - Looking beyond the traditional definition of (technical) interoperability.
 - This new layer shall assess a broader set of interactions including governance and communities.
 - Need for communities needs to be accounted for in order to deliver the right polices.





Implication of the new definition

2. Interoperability literacy needs to be promoted.

Achieving interoperability requires not only technical alignment but also social buy in.

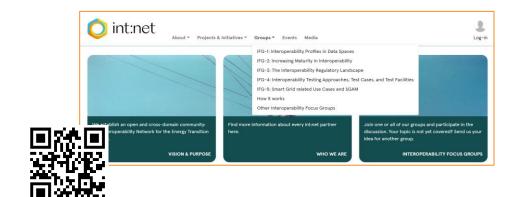
Final users taking the right decisions may include training programs and creation of KS platforms/tools.



int:net Summer School on "Governance in Energy Interoperability"

23 Jun 2025 - 27 Jun 2025

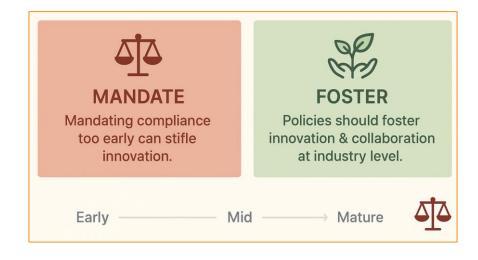
Vienna, Austria





Implication of the new definition

- 3. We need the right policies: Mandate where appropriate, foster where possible.
- Mandating compliance can prevent innovation.
 Policies should foster innovation and collaboration.
- Only once a solution has proven to work mandating can be useful, to prevent a mandate vacuum.







Thank you for your attention.