

The IEEE defines interoperability as:

the ability of two or more systems or components to **exchange** information and to **use** the **information** that has been exchanged.

James A. O'Brien/George M. Marakas [MIS] define interoperability as:

Being able to accomplish end-user applications **using different types of computer systems:**

operating systems
and application software
interconnected by different types
of local and wide area networks.

Konformität

Vorhandensein spezifizierter/
Eigenschaften **von Komponenten:**

Generell überprüfbar (z.B. CE)

Interoperabilität

Faktische / Semantische
Kooperationsfähigkeit

von Systemen aus (konformen) Komponenten:

Scenario – orientierte Prüfung

Prof. Dr. H. Steusloff

E-Energy Jahreskongress 2009
Gesprächsforum "Interoperabilität und Systemarchitektur"

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Syntactic Interoperability

- * Two or more systems capable of communicating/exchanging **data**.
- * Required for any attempts of further interoperability.
- * Two or more systems capable of exchanging information:

Common data interpretation context needed!

Semantic Interoperability

- * Ability to automatically interpret the information exchanged
- * meaningfully and accurately
- * in order to produce useful results
- as defined by the end users of both systems:

Common formalized knowledge base needed!

Brussels, 3.7.2009
COM(2009) 324 final

WHITE PAPER

Modernising ICT Standardisation in the EU - The Way Forward

http://ec.europa.eu/enterprise/newsroom/cf/itemlongdetail.cfm?item_id=3263&tpa_id=133&lang=en

„Alongside the traditional standard setting organisations, **specialised and mostly global fora and consortia** have become more active and several have emerged as **world-leading ICT standards development bodies**, such as those responsible for the standards covering the internet and the world wide web.“

The Commission suggests **enabling the referencing of specific fora and consortia standards** in relevant EU legislation and policies subject to a positive evaluation of the standard and the forum or consortium processes with regard to the attributes list as described in Chapter 2.1.

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Kooperation mit Foren und Konsortien

“It is expected that better cooperation with ICT fora and consortia and especially increased coordination between them and the formal standardisation organisations **will reduce the risk of fragmentation, duplication and conflicting standards** in the ICT domain.”

“Slow uptake and fragmented solutions present special reasons for concern in **services of major societal interest** such as e-government, e-learning and e-health.” (+ EEnergy)

“These cooperation and coordination efforts will **increase interoperability** and thus increase market uptake of innovative solutions.”

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Interoperabilität bei Beschaffung („Procurement“) heterogener Systeme: Integrationsfähigkeit, Wettbewerb

“Public authorities need to be able to
**define their ICT strategies and architectures, including
*interoperability between organisations,***
and will procure ICT systems/services and products or components
thereof, that meet their requirements.”

„Council Decision 87/95/EEC emphasises the importance of
Interoperability and encourages reference to **functional standards**
to achieve that objective. It also includes a provision to depart
from this rule when justified. **However, Council Decision 87/95/EEC is
outdated since it focuses on *products and not on the notion of
services and applications*** as used today.“

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Interoperabilität bei der Beschaffung („Procurement“) heterogener Systeme:

“The Commission suggests updating the public procurement provisions of Council Decision 87/95/EEC so that public authorities can more easily acquire **ICT services, applications and products** that fulfil their specific requirements and in particular an **adequate level of interoperability.**”

“The Commission suggests clarifying that when they are defined within the context of ICT strategies, architectures and interoperability frameworks, **the implementation of standardised interfaces can be made a requirement** in public procurement procedures, provided the principles of openness, fairness, objectivity and non discrimination and the public procurement directives are applied.“

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ITU introduces standards conformity and interoperability programme

Initiative will boost market confidence in ICT products

Geneva, 3 November, 2009

ITU will implement measures that will give purchasers of ICT equipment a much clearer picture of that equipment's ability to interoperate with other ICT devices. A key component of this new conformity and interoperability programme will be a global database that will log products declaring conformity to ITU standards (ITU-T Recommendations).

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