

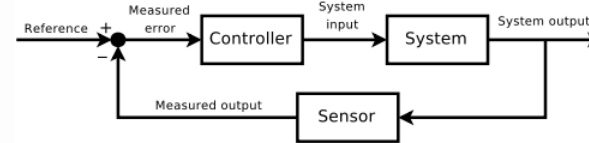
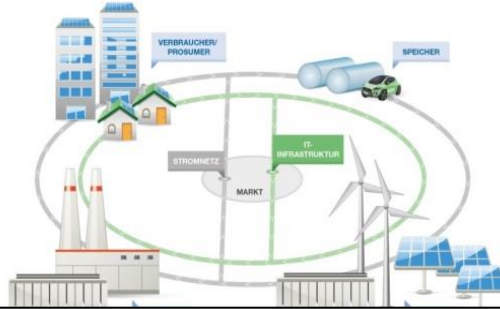
IES – Integrating the Energy System

Interoperability for the Smart Energy Domain

Angela Berger, Technology Platform Smart Grids Austria

The energy system is becoming more complex ...

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... automation and new operating functionalities due to growing amounts of data...

... decentralisation and increasing integration ...

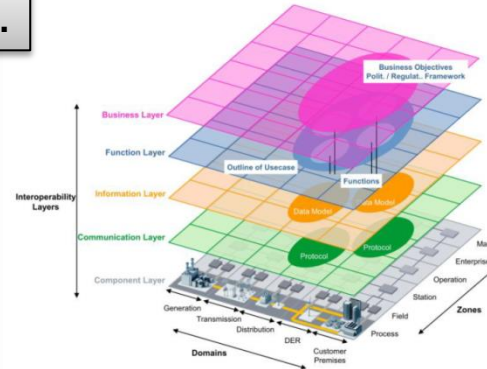
Smart energy meter will not be compulsory



The 'smart energy meter' will not be compulsory in the Netherlands. Minister of economic affairs Maria van der Hoeven backed down after consumer groups raised privacy concerns.

By Wilmar Heck

... ICT interconnection with the consumer (smart meter, smart home, etc.) ...



SGAM - Smart Grid Architecture Model

Quelle: SG-CG/M490

(2014), *Overview of SG-CG Methodologies*, available at: http://ftp.cenelec.eu/EN/EuropeanStandardization/HotTopics/SmartGrids/SGC_G_Methodology_Overview.pdf

The Technology Platform Smart Grids Austria



The Technology Platform Austria ...

- connects industries
- promotes innovation
- has a systemic approach towards the power industry
- fosters Austria as an innovation and business location
- is technologically and vendor-neutral
- acts politically independent

Platform members

- Technology suppliers
- Power industry
- Regulator
- R&D



*The **Technology Platform Smart Grids Austria** has become a competent and valuable partner for ministries, public authorities and international experts over the last few years.*

Interoperability of connected systems

Best Practice Example: Healthcare

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Standards

profiling and testing

eHealth projects

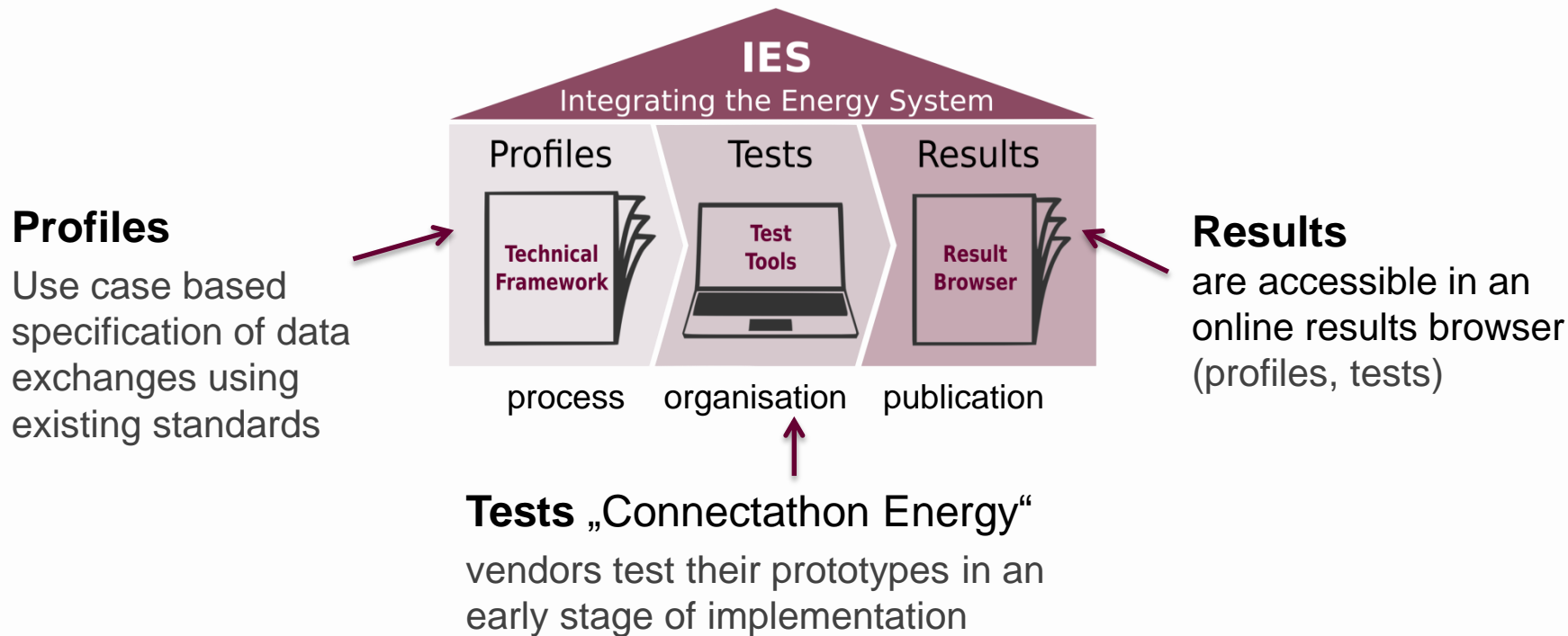


IHE (www.ihe.net) is a common initiative by vendors and users to standardise data exchange processes between IT-systems in the healthcare sector

The Translation into the energy Domain

Three pillars of the IES process

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IES: Synergies and Know-How Transfer

Connection of proofed concepts

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- Adaption of the IHE process with the IEC 62559 Use Case Methodology and SGAM
- Proofed usage of the test platform 'Gazelle' for the energy sector
- IHE serves as worldwide reference for the established processes

The R&D Project **IES Austria** Objectives and Highlights

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- Development of processes to ensure interoperability of ICT systems in the energy sector
- ✓ Transfer of established processes from healthcare into the energy domain
- ✓ Availability of an open source test platform for interoperability tests in the energy sector
- ✓ Proof of Concept – Connectathon Energy



IES Dissemination European Activities

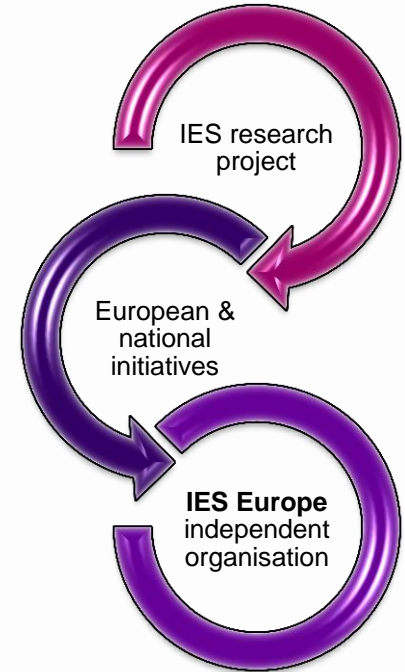


- **European Strategic Energy Technology Plan (SET-Plan Activity 4)**
Activity A4-IA0-5 of the SET-Plan Implementation Plan
[‘Increase the resilience and security of the energy system’](#)
- **International Smart Grid Action Network (ISGAN)**
[Annex 6](#) on Power Systems - Transmission & Distribution Power Systems
IES Europe as part of the Annex 6 Discussion paper
- **ETIP SNET Webinar about IES project**
<https://www.etip-snet.eu/events/etipsnet-webinars/>
- **Era NET Smart Energy Systems**
Possible cooperation for certain European projects

Next Steps for the Initiative **IES Europe**

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- Kick-off IES Europe today 30.1.2019
- Find „IES Ambassadors“ for the IES processes – using support from IES Austria
- Establish IES organisations in your country – to achieve a critical mass of profiles and tests
- Organize together the next international Connectathon Energy 2020



Working with IES Processes

Concept for getting started



- Find „First Movers“ to use the methodology –
 - R&D Projects on national or european level
 - R&D Programms on national level e.g. Germany, Austria
 - „Real Live Use Cases“ from initiatives
- IES Austria can support the processes
 - Instruction of the IES-methodology
 - Support for the creation of the technical frameworks
 - Adaption of the existing testing environment
 - Organisation and execution of the test events
- All Initiatives come to a Connectathon Energy 2020

Interoperability is a key factor for the transition of the energy system

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„Become part of IES Europe“

Angela Berger

Project lead IES

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