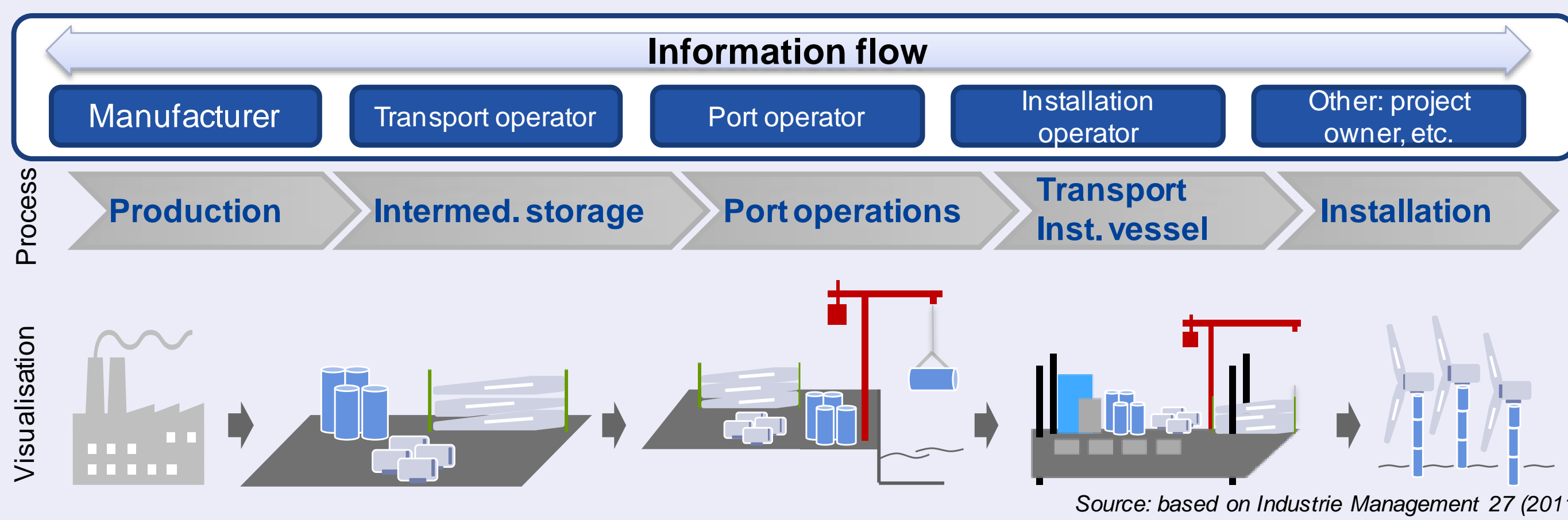


Abstract

Currently, the working group "Offshore wind energy — Supply chain information flow" within the DIN Deutsches Institut für Normung e. V. standardization committee "offshore wind energy" is developing an international standard (ISO standard) for exchanging logistics information. The working group "logistics" transfers innovative solutions and already existing best practice approaches for a standardized exchange of logistics information to an international standard. Due to the relevance of this topic the BLG took the lead for this standardization project (ISO 29404). In particular this presentation will show potentials and challenges of standardization.

This poster presentation will provide information about the current state of the international standardization project. On the one hand it will show the approach of the standard from a technical perspective. On the other hand it will illustrate the potentials of standardization from the perspective of the entire offshore supply chain.

Motivation and Objectives



Motivation

- Cost saving potential by improving the information flow between all involved parties
- Exchange of planning information and status information may improve operational decisions

Objective

- Contribution to actual standardization processes
- Transfer of logistics knowledge in order to provide comprehensive standards
- Focusing offshore wind logistics and corresponding informational requirements

Methods and results

Benefits of standardization

- Cost savings - Standards help optimizing operations
- Enhanced customer satisfaction - Standards help improving quality
- Standards help increasing stakeholders scope of influence
- Environmental benefits - Standards help reducing negative impacts on the environment
- Access to new markets - Standards help preventing trade barriers
- Increased market share - Standards help increasing productivity
- Dissemination of innovation and research results

DIN

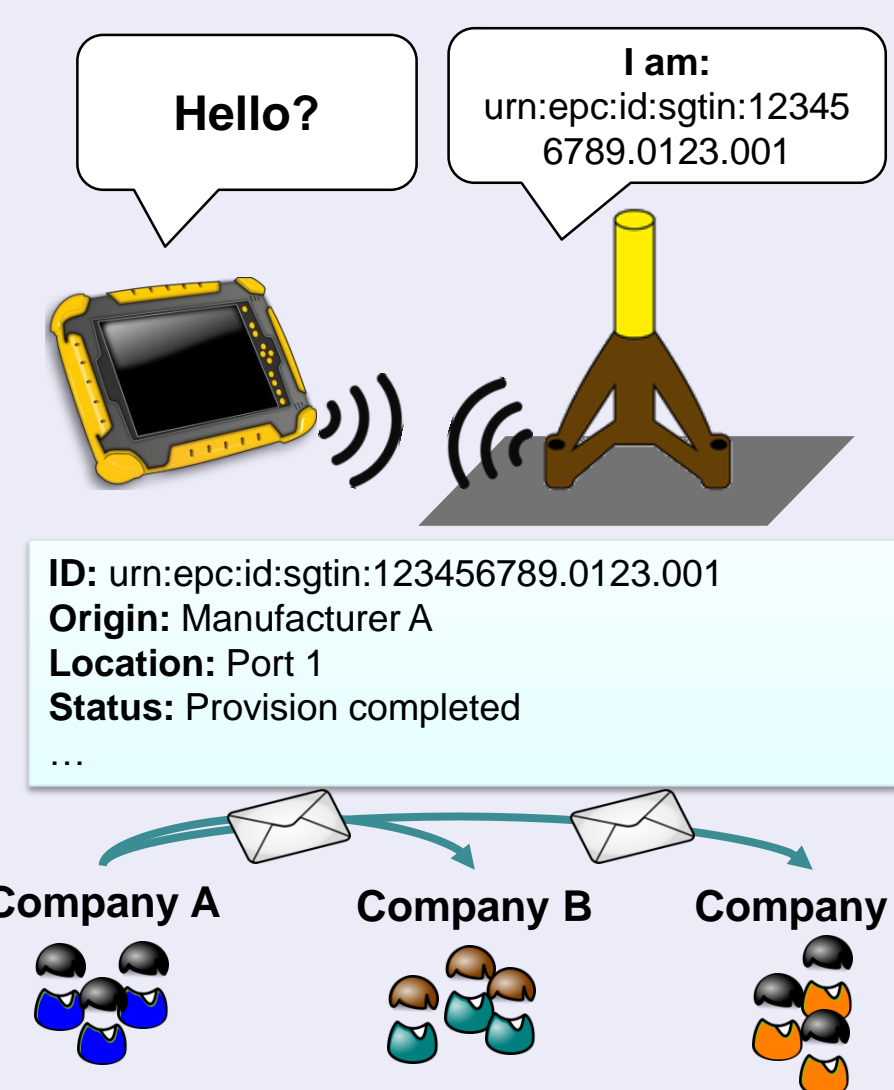
NA 132 Normenstelle Schiffs- und Meerestechnik

- Standardization committee offshore wind energy
 - Communication (NA 132-02-12-01 AK)
 - Entry-level qualifications (NA 132-02-12-02 AK)
 - Emergency management/Communication (NA 132-02-12-03 AK)
 - Technical equipment (NA 132-02-12-04 AK)
 - Working and living conditions (NA 132-02-12-06 AK)
 - Logistics in offshore wind energy (NA 132-02-12-05 AK)

ISO

ISO/TC 8/WG 3 Special offshore structures and support vessels

- Ships and marine technology — Offshore wind energy — Ports and marine operations
- Ships and marine technology — Offshore wind energy — Supply chain information flow



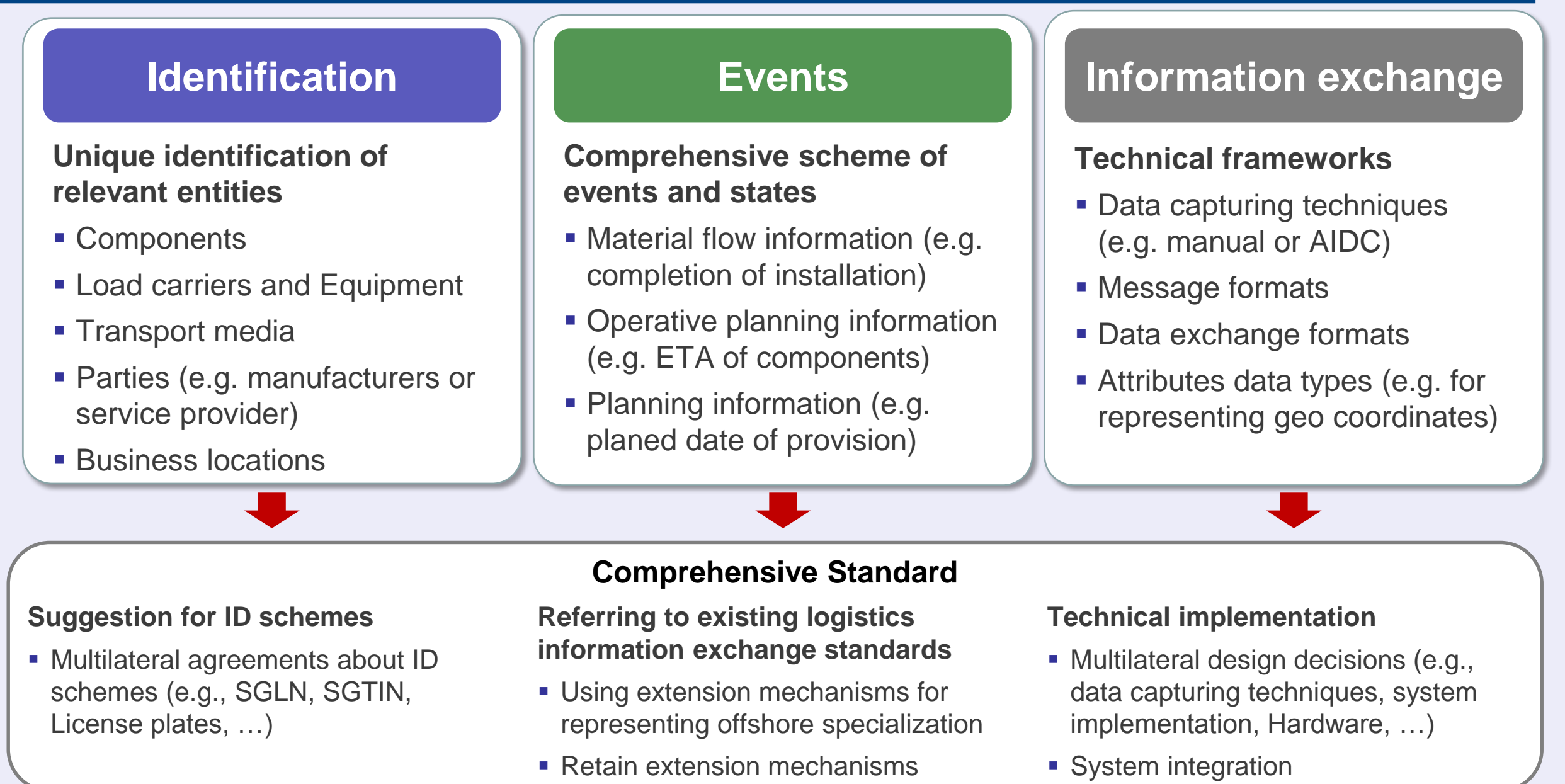
- Consistent identification of components**
 - Avoiding ambiguities along the supply chain
 - Referring to unique numbering systems
 - Multilateral agreement on identifiers
- Events**
 - Representing planning and material flow events
 - Clear semantic for basic events
- Information exchange**
 - Homogeneous data formats
 - Consistent information flow along partners

Objectives of a supply chain information standard in the offshore wind industry

- Exchange of standardized information about basic material flow events
- Enabling the exchange of information about planned and actual events (e.g., provision of a component at the port)
- Coverage of different informational needs (e.g., logistics service providers, project owners or port operators)
- Offering homogeneous data formats providing interoperability between different implementations
- Usage of logistics data for company internal processes (e.g., inventory management) as well as usage for the coordination of supply chain processes
- Adaptability of the standard for specific supply chains

Elements of a comprehensive standard for offshore wind supply chains

- Unique identification of logistics objects (e.g., components or transport media) - Suggestion of suitable identification schemes
- Description of data formats for basic events and corresponding data fields
- Referring to existing logistics information exchange techniques
- Providing extension mechanisms in order to allow an adaptation to specific supply chain characteristics
- Open for different kinds of technological solutions (e.g., bar code, RFID, etc.)



Conclusions

	intra-organizational	inter-organizational
Identification	<ul style="list-style-type: none"> Avoiding misallocations Inventory management 	<ul style="list-style-type: none"> Harmonic information Uniform numbering system
Events	<ul style="list-style-type: none"> Transparency of own processes Uniform numbering system 	<ul style="list-style-type: none"> Transparency along supply chain Defined and reliable information Expandability and individualization
Information exchange	<ul style="list-style-type: none"> Secured intra organizational provision of information Information for documentation 	<ul style="list-style-type: none"> Transparency of processes Flexible adjustment of plans Shorter time of reaction

State of the project

- ISO Standard is currently under development (DIS stage)
- Ongoing evaluation of the developed standard
 - Meeting with international experts
 - Continuous investigations of actual developments and standards
- Formation of a maintenance group for updating the developed standards

Invitation to an expert survey

We would like to invite you to take part in our online expert survey, which addresses the standardisation of supply chain information flows in offshore logistics. This survey is a part of the research project LogOff-Transfer.



References

- Schweizer, A.; Beinke, T.; Scholz-Reiter, B.: Das Logistiknetzwerk der Offshore-Windenergie. In: Industrie Management, 27 (2011) 6, S. 13-16

