Design and Application of the unIT-e² Project Use Case Methodology Adrian Ostermann, P. Dossow, V. Ziemsky FfE Munich, GER 80995 München, aostermann@ffe.de

The Project unIT-e²

- 29 partners from automotive, energy, IT, charging infrastructure & science
- Stakeholders along the entire value chain from EV to the energy system
- Focus on user-friendly, large-scale implementation of intelligent charging concepts
- Aim of project: holistic and interoperable solutions for
 further ramp-up of E-Mobility and its market and grid integration
- Demonstration of solutions in four German-wide large field trials

Challenges

- Many players with different, specific domain knowledge
- Consistent overall understanding needed for holistic solutions
- Differing perception of roles and obligations
- Lack of agreement on what to be tested and implemented
- Limited project time requires fast and effective approach

-> unIT-e² Use Case Methodology

Deduction of two use case "levels": Business and Technical Use Case (BUC/TUC) Standardized templates for description and visualization for BUC & TUC



- Adapt existing methods and standards
 - Experience from previous projects
 - Systematic description

• Uniform level of detail

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- Use of icons & visual representation
- Text: as little as possible, as much as necessary

- Use case identification		Business Use Case	
		Who is involved?	Who gets added value?
◇←○ → ○→□	Basic concept	What are the relationships?	Which laws must be considered?
	Process and system description	Technical Use Case	
✓ ✓ ✓ ✓		Necessary components?	What information is exchanged?
		How are processes designed?	Which standards/norms exist?
 Identification of 25 BUC Categorization by incentive signal Different TUC for one BUC possible Systematic assessment of the combination possibilities of use cases 			
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