Supporting Development, Extensions and Standardization for a Multi-Standard

Jürgen Niehaus, SafeTRANS
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IOS – Interoperability Specification

Industrial Workflows

Enable New Engineering Methods

Open Integration Platform

Tool Layer

Users get better ways of working

- Standardized Interoperability Specification
- Connect tools to expose & link data

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IOS is a success story of ARTEMIS-IA

- **ARTEMIS-IA strategy: „Think Big“**
  - Large Scale Flagship Projects with excellent results, joining large number of partners (LE, SMEs, Research) from different domains cooperating towards the same goals

- **ARTEMIS-IA strategy: Strategic Research Agenda**
  - Proof of the feasibility and success of the ARTEMIS-IA strategy of having series of projects move along a pre-defined Research Agenda, building up on each others results

- **ARTEMIS-IA strategy: Build up an Innovation Ecosystem**
  - Projects have been incubated in and were coordinated by ARTEMIS-IA Working Groups and ARTEMIS-IA Centers of Innovation Excellence

- **ARTEMIS-IA strategy: Support Standardization**
  - Results work towards ARTEMIS-IA goal of Standardization
IOS – Structure and Future Activities

But how do you do this without a single standardization body?

- Specification, Implementation, and any other information about IOS parts is scattered amongst various projects and existing standards
  - What is the current, most recent 'version' of a specific IOS part?
  - How do different parts fit together?
  - Are there parallel developments in different projects?
- What maturity does a specific part of the IOS have?
  - Are implementations available?
  - What use cases have been performed with them?
- Who are the experts for a specific part of the IOS? Which organisation uses/supports/maintains this part of the IOS?
  - ...

- In the past, this worked reasonably well, because the number of projects was small. This is no longer the case.
The need

Interoperability Specification (IOS)

Sustainable Structure as a Forum (Platform) for all Stakeholders to Coordinate Activities

- A single place where all information about IOS is collected and available for all Stakeholders (IOS Repository / Database)
- Open to all stakeholders

Incubate new projects and provide means for sustainable achievement of project results

- Sustainable, beyond the lifetime of a single project
- Hosted within existing structures

Enable and support coordinated standardisation

- IOS Coordination Forum

Standardisation Body 1

Standardisation Body 2

Standardisation Body ...
CP-SETIS

• **H2020 Support Action**, incubated by ARTEMIS-IA WG
  Standardization

  – Partners:

  – Associated Partners:

• **Goal**

  – Propose Structure and Mode of Operation of ICF

  – Find matching host organization

  – Support implementation of ICF within that host

  – Update and publish a new version of the ARTEMIS-IA Strategic Agenda for Standardization, incorporating handling of ‘Multi-Standards’
Status

• **IOS-Database prototype installed**
  – Available to registered users end of February

• **Proposal for installing ICF has been presented to ARTEMIS-IA Steering Board**
  – Proposal is currently refined

• **Negotiations and Discussions** are about to be finished with
  – Major Stakeholders
  – Standardization Bodies

• **ICF is planned to be up and running** by May 2017
Summary

- Interoperability Specification (IOS) is a success story of ARTEMIS-IA
- Multi-Standards like IOS raise new challenges wrt. their formal standardization
- Coordination Forums like ICF are a solution to overcome these challenges
  - Specifically for IOS, the IOS Communication Forum is planned to start in May
  - IOS Database will be available End of February
- Handling of Multi-Standards (with IOS as a case study) will be described in the updated ARTEMIS-IA Strategic Agenda for Standardization
THANK YOU FOR YOUR ATTENTION