

CP-SETIS' Results Workshop and ICF Transition Event

Workshop at DIF 2017



Programme I

CP-SETIS Results

- 10:30 Welcome coffee
- 11:00–11:15 **Introduction and CP-SETIS overview**
Jürgen Niehaus
- 11:15–11:45 **IOS-Database – An open repository for the IOS Specification**
Christian El Salloum, AVL
- 11:45–12:30 **ICF: The IOS Cooperation Forum**
Frédéric Loiret, KTH
- 12:30–13:00 **Standardization Agenda**
Erwin Schoitsch, AIT
- 13:00–14:00 Lunch



Programme II

ICF Transition Workshop

- 14:00–15:45** **Projects and Project Ideas**
Some Existing Projects
Project Ideas
Coffee break
- 15:45–16:30** **Open discussions of project ideas**
All participants
- 16:30–17:00** **Way forward and next steps**
Moderator: Jürgen Niehaus



CP-SETIS OVERVIEW



IOS – Interoperability Specification

- **Challenge: Integrating large numbers of heterogeneous development tools into Systems Engineering Environments**
- **Solution pursued in ARTEMIS-IA: Develop Open Standard for Development Tool Interoperability (IOS – Interoperability Specification)**
 - Since the very first days of the ARTEMIS JU, this challenge has been a **major concern of many ARTEMIS-IA members**
 - Large scale **flagship projects** centered around this topic
 - Main development line: iFEST, CESAR, MBAT, CRYSTAL
 - Additional contributions: SAFE, HOLIDES, EMC2, ENABLE-S3 and others
 - Most of these **projects were incubated** (ie., conceived and prepared) **by ARTEMIS-IA members**, meeting within „**Project Incubation Workshops**“ organized by **ARTEMIS-IA Working Groups** (ie., on Tool Platforms, Standardization, etc.) and/or **ARTEMIS-IA CoIEs** (EICOSE).

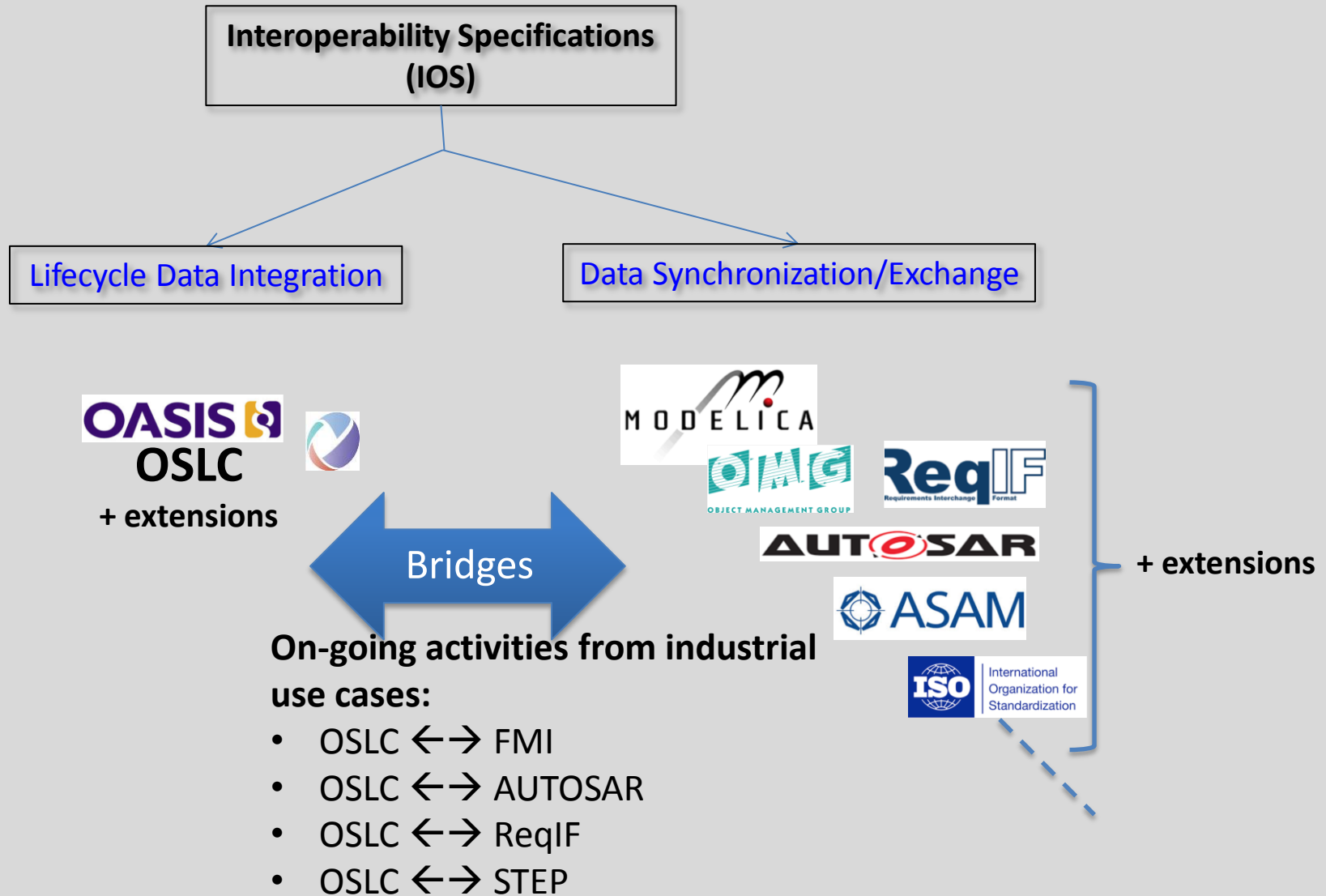


IOS – Structure and Future Activities

- **IOS is not a single standard**
 - IOS is a **set of specifications**, covering a large spectrum of industrial development processes
 - IOS builds upon **existing standards and specifications**, wherever possible
 - Like OSLC, FMI/FMU, ReqIF,...
 - IOS contains **extensions** to existing standards and specifications
 - IOS contains **bridges** between existing standards and specifications.



IOS – Structure and Future Activities



IOS – Structure and Future Activities

- **IOS is not a single standard**
 - IOS is a **set of specifications**, covering a large spectrum of industrial development processes
 - IOS builds upon **existing standards and specifications**, wherever possible
 - Like OSLC, FMI/FMU, ReqIF,...
 - IOS contains **extensions** to existing standards and specifications
 - IOS contains **bridges** between existing standards and specifications.
- **Thus, IOS can not easily be mapped to a single standardization body**



IOS – Structure and Future Activities

- **IOS is not a single standard**
 - IOS is a **set of specifications**, covering a large spectrum of industrial development processes
 - IOS builds upon **existing standards and specifications**, wherever possible
 - Like OSLC, FMI/FMU, ReqIF,...
 - IOS contains **extensions** to existing standards and specifications
 - IOS contains **bridges** between existing standards and specifications.
- **Thus, IOS can not easily be mapped to a single standardization body**
- **Future projects and ARTEMIS-IA members activities are expected to**
 - **extend the IOS specifications**
 - develop **tools and tool-chains (Engineering Environments)** using the IOS
 - Drive **formal standardization of IOS**



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



CP-SETIS



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

– Partners:



– Associated Partners:

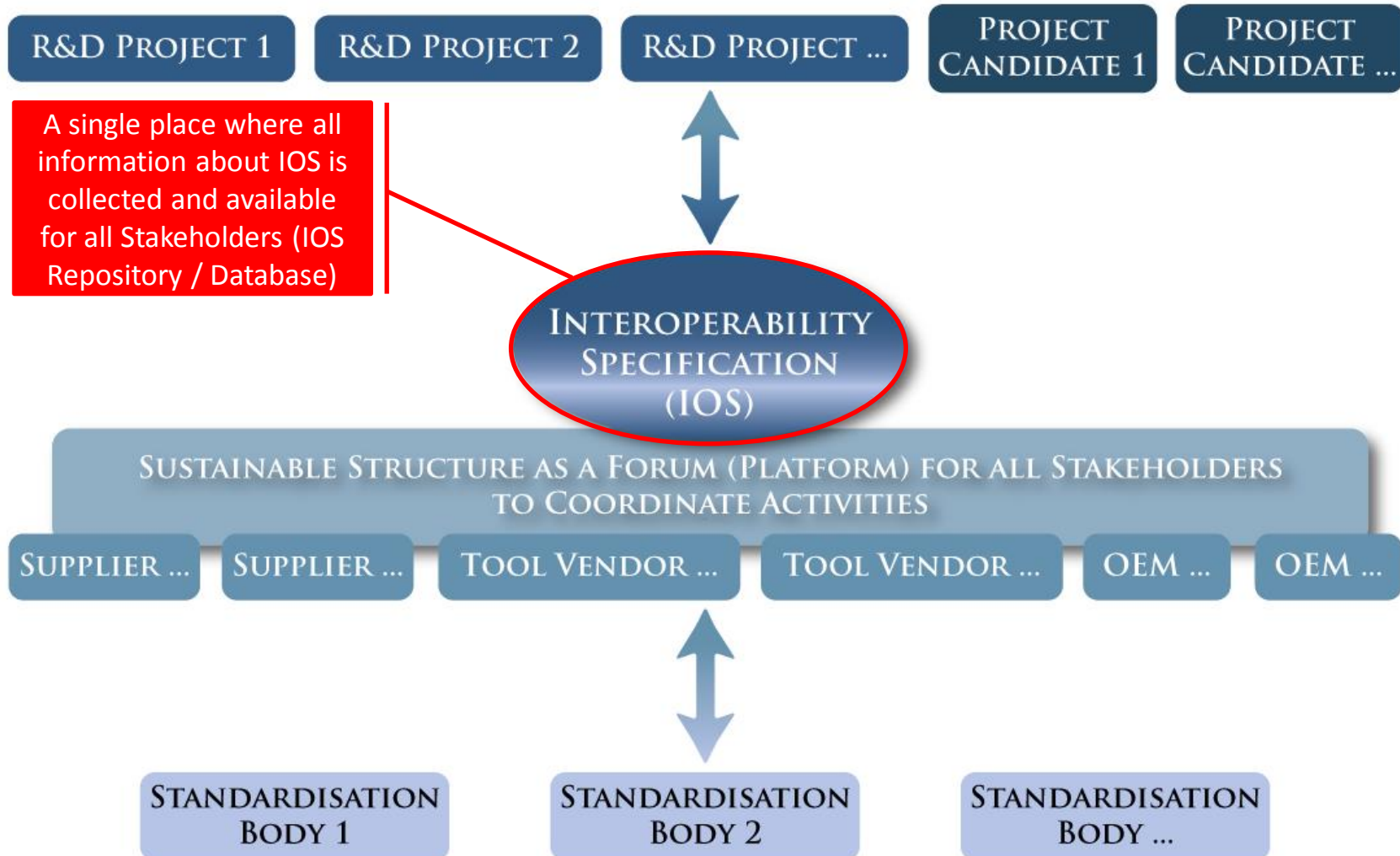


- **Main Goals:**

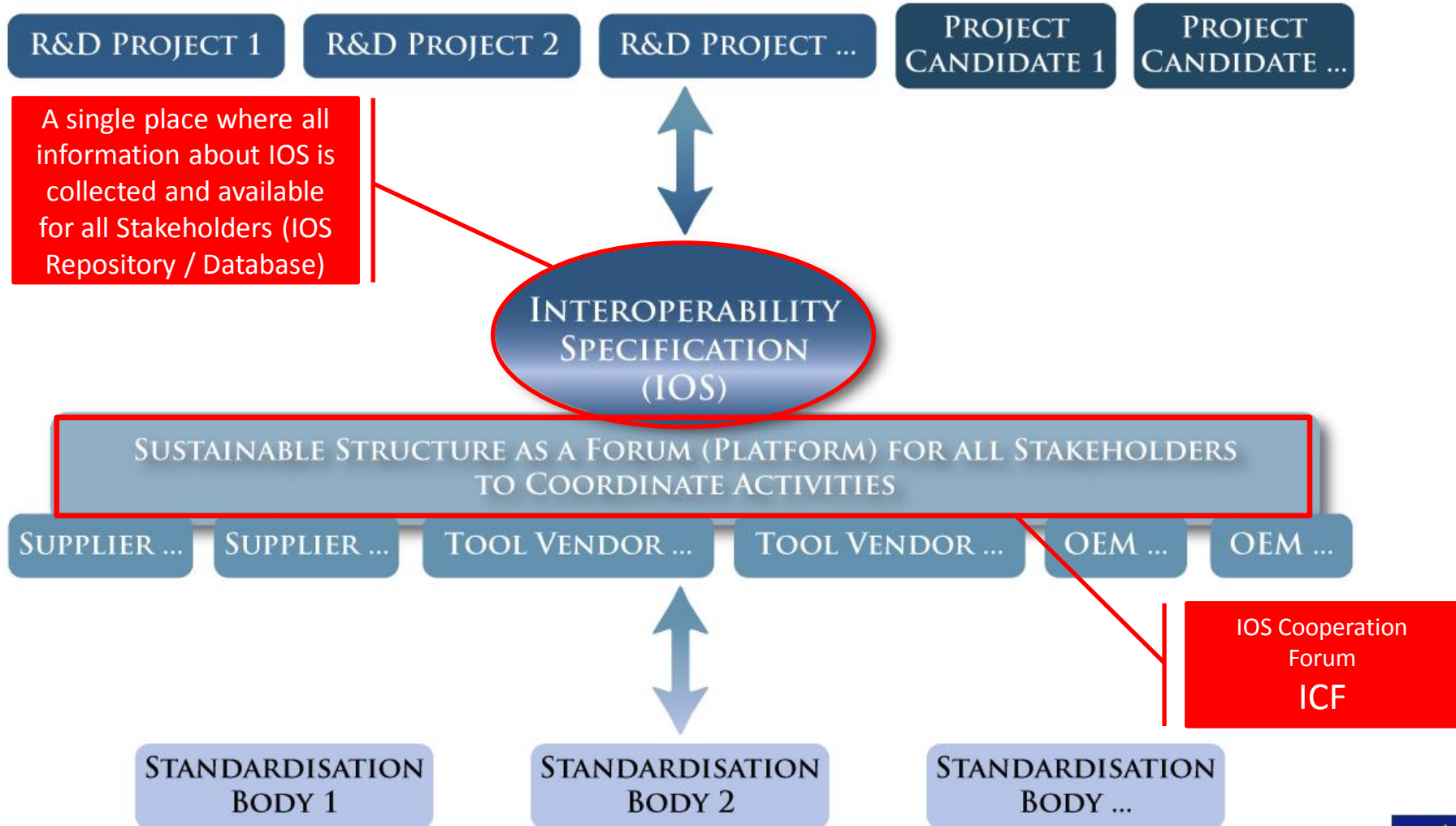
- Create a **sustainable structure to further standardization activities** in the area of Interoperability of Systems Engineering Tools, based upon the IOS (Interoperability Specification), a multi-standard that resulted from a multitude of past and on-going large scale R&D projects
- update and publish a new version of the **ARTEMIS-IA Strategic Agenda for Standardization**



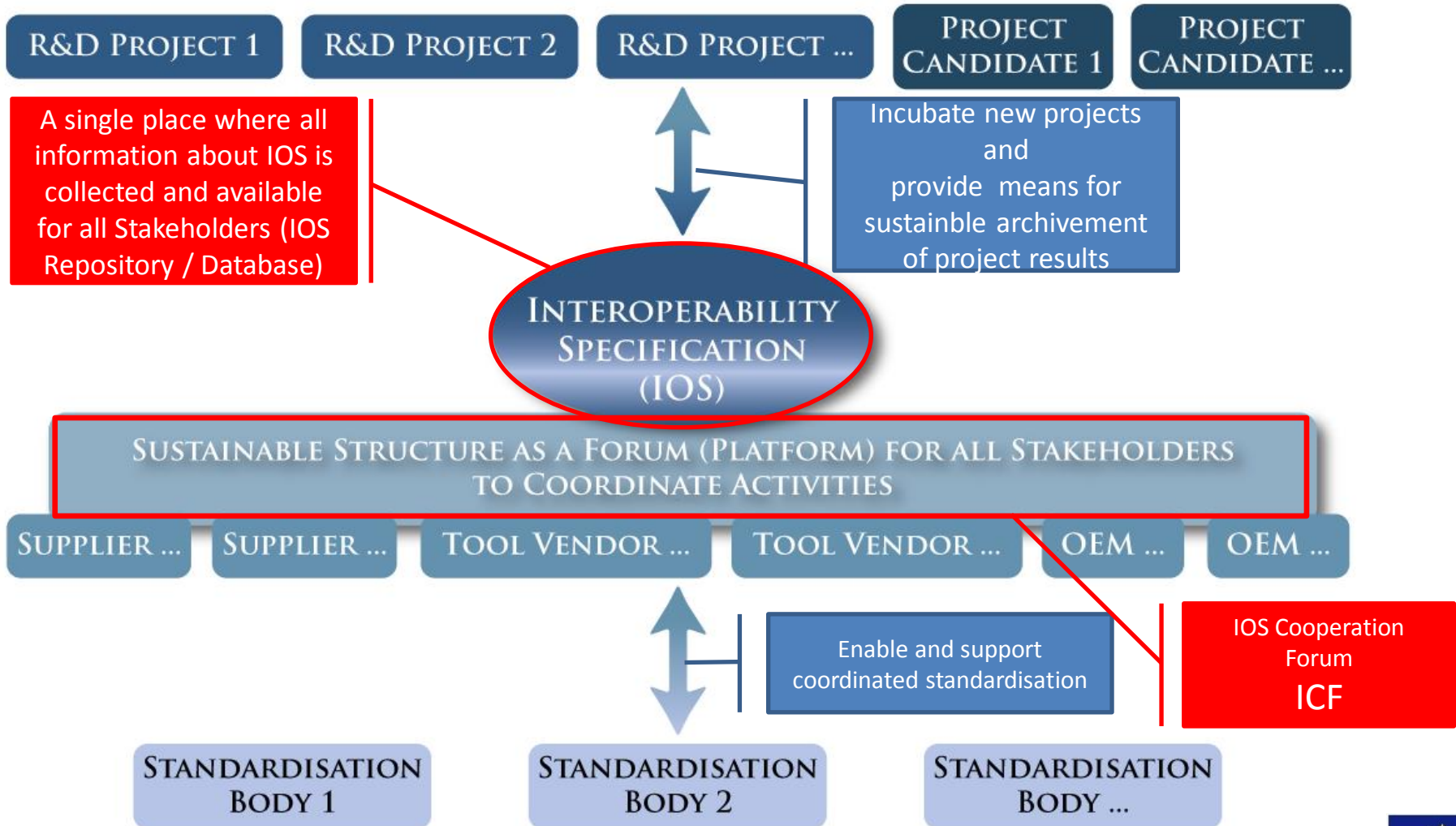
The need



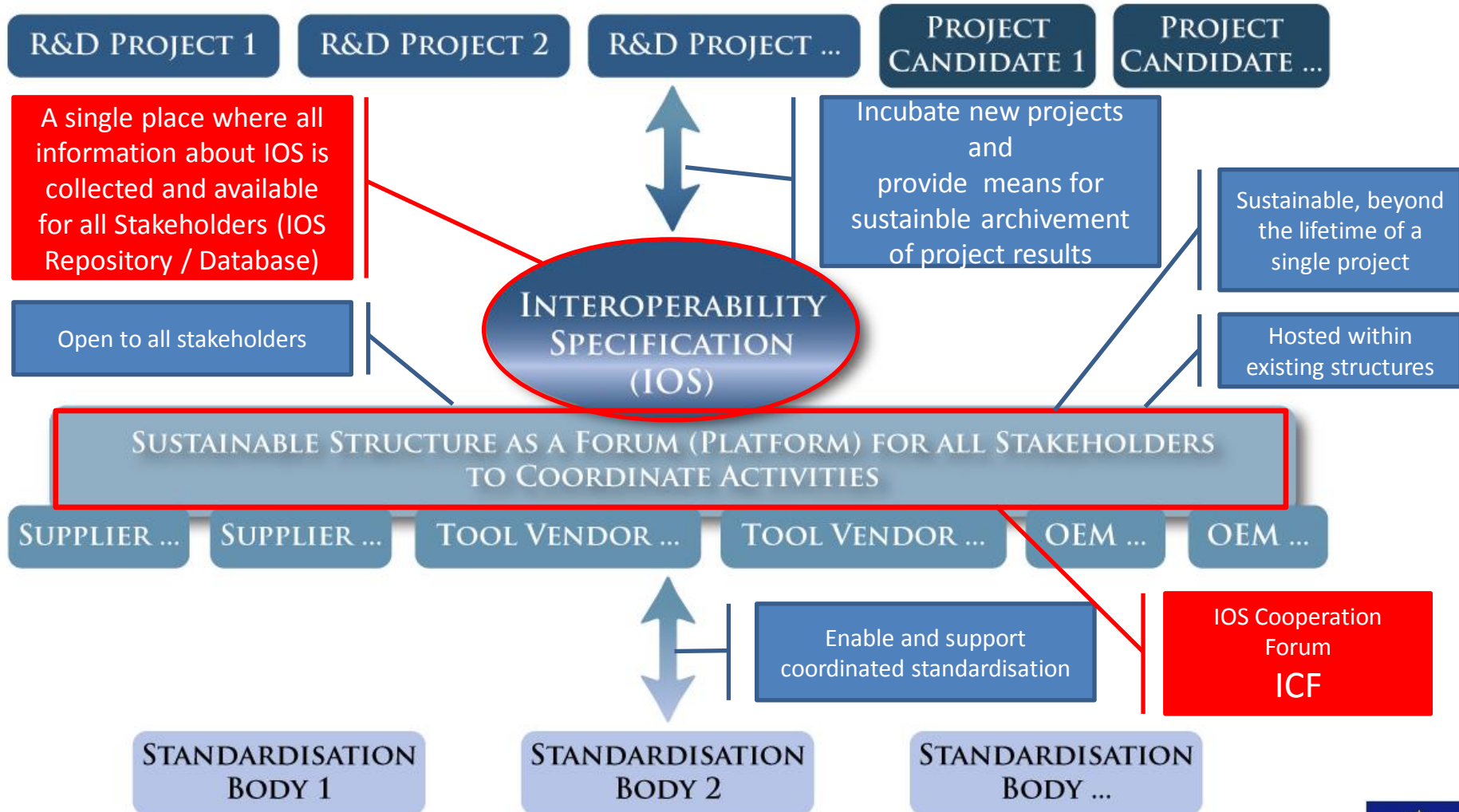
The need



The need



The need



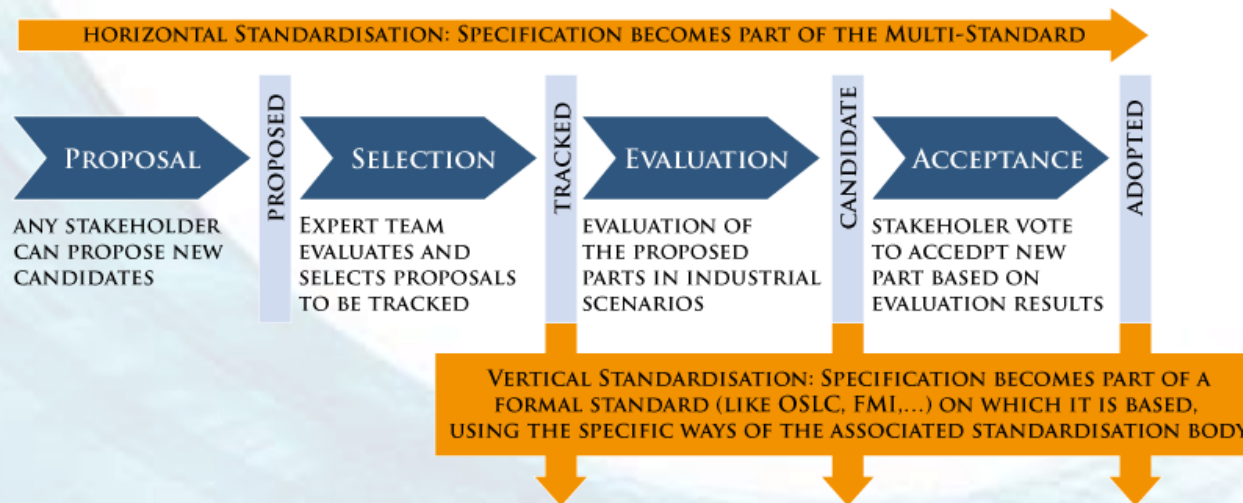
ICF – IOS Cooperation Forum

- A sustainable organizational structure, where Stakeholders can meet to plan and cooperate on their IOS related activities
- Will be anchored within the ARTEMIS Industrial Association
- Supports two-dimensional Standardization of the Multi-Standard IOS



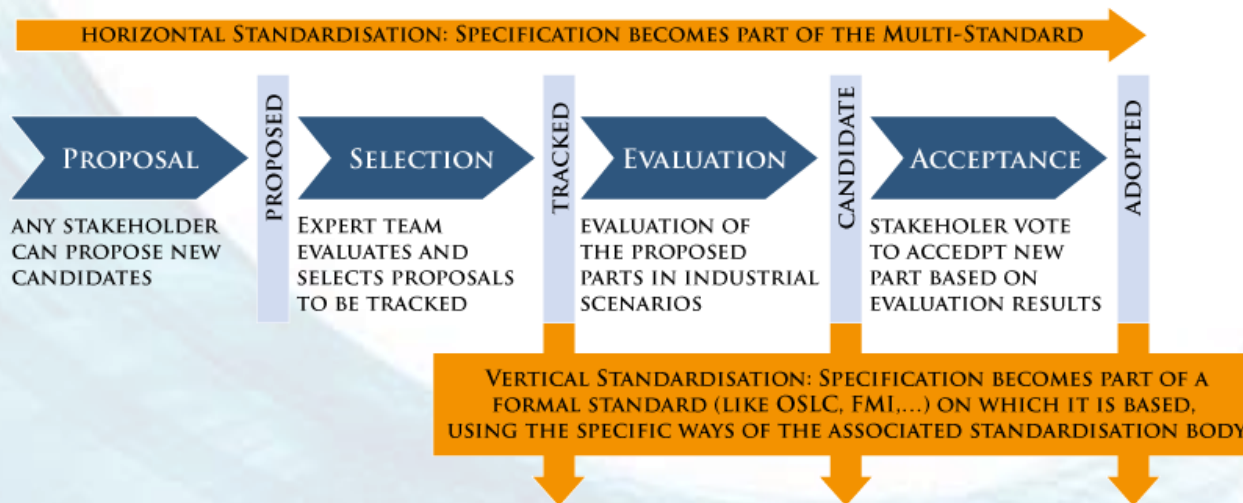
ICF – IOS Cooperation Forum

- A sustainable organizational structure, where Stakeholders can meet to plan and cooperate on their IOS related activities
- Will be anchored within the ARTEMIS Industrial Association
- Supports two-dimensional Standardization of the Multi-Standard IOS



ICF – IOS Cooperation Forum

- A sustainable organizational structure, where Stakeholders can meet to plan and cooperate on their IOS related activities
- Will be anchored within the ARTEMIS Industrial Association
- Supports two-dimensional Standardization of the Multi-Standard IOS



THANK YOU FOR YOUR ATTENTION

