A H2020 PROJECT
SUPPORTING IOS STANDARDISATION

GOAL 1
The alignment of all IOS-related forces within Europe to support a common IOS Standardisation Strategy, aiming at a formal standardisation process of the IOS.

GOAL 2
The definition and implementation of sustainable IOS Standardisation Activities supporting both, formal standardisation of stable IOS versions as well as extensions of IOS, if possible within existing structures that survive the lifespan of single projects.

OBJECTIVE 1
To build-up a consensus across key stakeholders (i.e., end-users organisations, tool providers, research organisations) and projects on a common IOS Standardisation Strategy

OBJECTIVE 2
To define a concrete model for sustainable IOS Standardisation Activities

OBJECTIVE 3
To support implementation of sustainable IOS Standardisation Activities within sustainable structures, that have a far longer lifespan than a single project

OBJECTIVE 4
To get commitment from key stakeholders for supporting common IOS Standardisation Strategy and its implementation

OBJECTIVE 5
To generalise findings of IOS Standardisation Activities to update the ARTEMIS/PROSE Strategic Agenda for Standardisation, and to support further Standardisation Activities within ARTEMIS/ECSEL

Coordinator:

Partners:

Associated partners: (To be confirmed)

Duration:
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780,000 Euro
(similar to Support Actions)
CPS require multiple engineering competences across various engineering disciplines. The development of such systems is a huge challenge, also because of the heterogeneity of engineering tools involved in development platforms across the development lifecycle.

In order to overcome this challenge, past and ongoing EU research projects have developed the basis for an International Open Standard for Development Tool Interoperability, the so-called Interoperability Specification (IOS).

**EXPECTED OVERALL IMPACTS**

A common, European wide open Interoperability Specification for the development of critical cyber-physical systems will overcome this issue and will therefore lead to several improvements like:

- Reduce the cost of the system design from 2012 levels by 15%,
- Achieve 15% reduction in development cycles - especially in sectors requiring qualification or certification - from 2012 levels,
- Manage a complexity increase of 25% with 10% effort reduction, compared with 2012,
- Reduce the effort and time required for re-validation and recertification of systems after making changes by 15%, compared with 2012 levels,
- Achieve cross-sectorial reusability of Embedded Systems devices and architecture platforms (for example, for interoperable software components for automotive, railways, aerospace and manufacturing) that will be developed using the ARTEMIS JU results.
OVERVIEW AND GOALS

GOAL 1
The alignment of all IOS-related forces within Europe to support a common IOS Standardisation Strategy, aiming at a formal standardisation process of the IOS.

GOAL 2
The definition and implementation of sustainable IOS Standardisation Activities supporting both, formal standardisation of ‘stable’ IOS versions as well as extensions of IOS, if possible within existing structures that survive the lifespan of single projects.