



ISO 10303 (STEP) AP 239 ed. 3
Application Protocol for Product Life Cycle Support (PLCS)
AP 239 ed. 3 project report



**AIA-ASD Collaboration call on Interoperability and data standards,
30 January 2019**

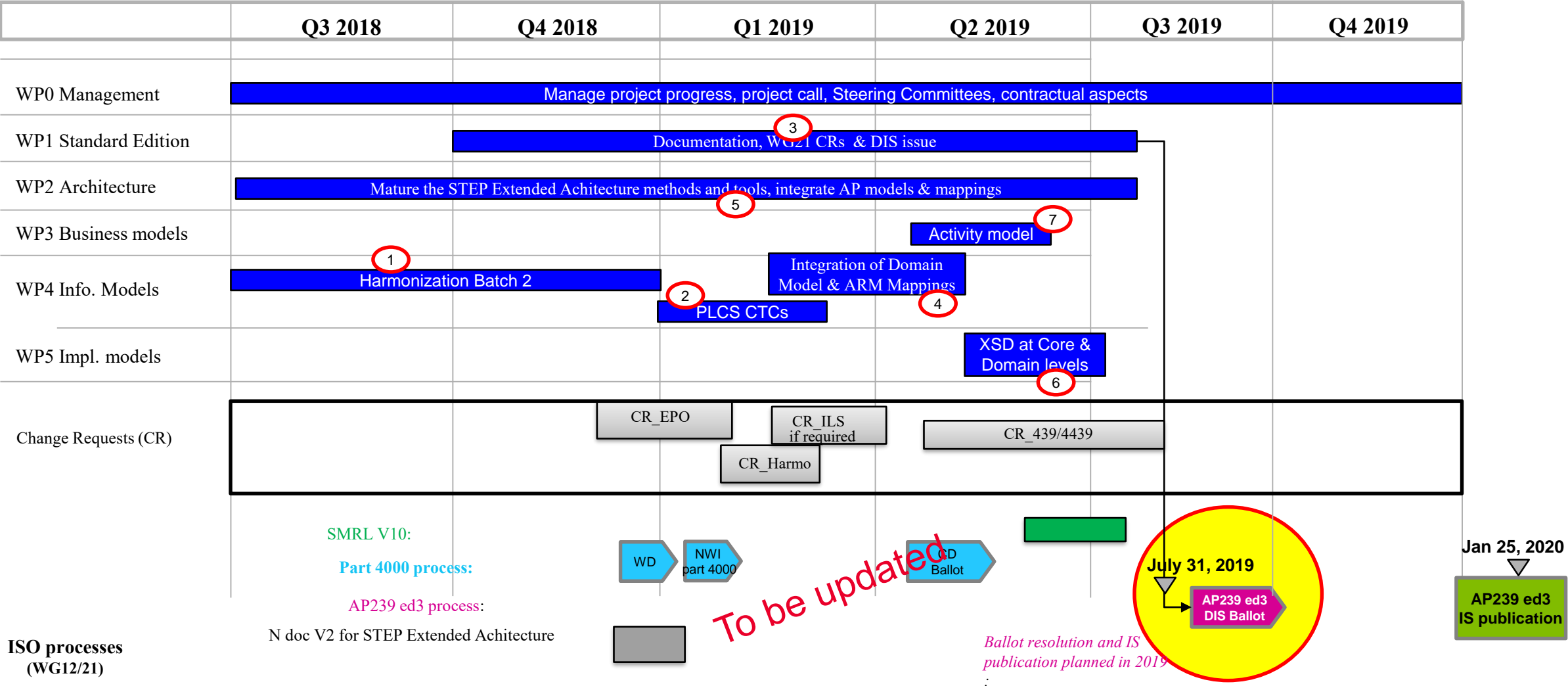
Prepared by Yves Baudier (AFNeT) & Rick Zuray (Boeing), project co-leaders

Key industrial requirements for AP239 ed3

- **A single ISO AP239 ed3, convergence of AP239 ed2 and OASIS PLCS**
 - OASIS PLCS PSM back to ISO
 - Implementation model of OASIS PLCS PSM
- **Finalization of the harmonization with AP242 ed2, supporting a common scope and an End to End PLM digital thread (incl. Product management data and V&V)**
 - Ref: Harmonization specification (2016)
- **Overarching standard for Integrated Logistic Support specifications (AIA-ASD S-Series and SAE GEIA-STD0007)**

Updated Scenario 1 schedule

1 Priority order



ISO AP239 ed3 project: Contractual status & Technical progress

Batch 1
(AFNeT contracts
2017)

Component	Related CTC	i	j	k
Classification	Common Resources	Done	Done	Done
Date and Time	Common Resources	Done	Done	Done
Effectivity	Common Resources	Done	Done	Started
Identification, Name and Description	Common Resources	Done	Done	Started
Property	Common Resources	Done	Done	Started
Condition	Common Resources	Done	Done	Started
Person, Organization, and Address	Management Resources	Done	Started	Started
Activity	Activity	Done	Done	Started
Requirement, V&V Management	Requirement Management + Planned and evaluated characteristics	Done	Done	Started
Individual Part	Individual part	Done	Done	Started
Work Management	Work management	Done	Done	Started
State	Common Resources	Done	Done	Done

Done
Started
Not started

Target:
CTC SysML models (i)
+ ARM mappings (j)
+ Technical documentation
(k) done and presented to
ISO TC 184/WG 12,
material needed for Change
Requests available
by end of Feb. 2019

AFNeT contracts
(2018)

Product Data Management	Product Data Management	Started	Started	Started
Analysis	Analysis	Done	Done	Started
Interface	Interface	Started	Started	Started
Document Management	Document Management	Done	Done	Started
Breakdown	Breakdown	Done	Done	Started

Batch 2

PDES contracts
(2018-2019)

Delta change	Delta change	Started	Started	Started
Product Specification Configuration and Product Effectivity	Product specification and configuration	Started	Started	Started
Message	Message	Started	Started	Started
Approval Certification	Management Resources	Started	Started	Started
Information Rights	Management resources	Started	Started	Started
Planned and evaluated characteristics	Planned and evaluated characteristics	Started	Started	Started
Contract and Project	Management Resources	Started	Started	Started
Reference Data (final version)		Started	Started	Started

Planned
Q1 2019

PDES Batch
2 contracts
now in place!

To be funded

PLCS-specific CTCs: Planning & Scheduling, Risk, Probability, Task description, Resources, Slot, Observation.
Domain model and its mapping to Core Model.

AP239 ed3 PLCS specific

Next steps/actions

- **Batch 3** covers activities to be carried out from March to July 2019 to **deliver ISO AP239 ed3 Draft International Standard (DIS)**.
- **Expected results:**
 - PLCS-specific CTCs
 - CR-ILS (should not be needed, TBC)
 - Domain model
 - Activity model
 - XSD
 - DIS documentation
- **Evaluation of funding needed** to support Batch 3 contracts: **200 K\$**
- **AIA and ASD members interested in AP239 ed3 and willing to support are invited to contact project leaders,**
 - Rick Zuray for AIA & PDES, Inc.,
 - Yves Baudier for ASD & AFNeT.

AIA and ASD role in regards to AP239 ed3

- **AP239 ed3 stakeholders are AIA members and/or ASD members (Boeing, LOGSA, Airbus, ...)**
- **This ISO project is managed by two associations: AFNeT and PDES, Inc.**
 - Gather stakeholders requirements, assess progress, manage resources and contract experts.
- **AIA and ASD monitor progress and plan to adopt AP239 ed3 as overarching interoperability standard for A&D product life cycle support, from logistic support design to operations, feedback and disposal.**
 - Statement published by ASD SSG, January 2018

Support of ISO STEP AP239 (PLCS) ed3 project - January 2018

The ASD SSG supports the development of ISO STEP AP239 PLCS ed3 as the targeted overarching interoperability standard for A&D product life cycle support, from logistic support design to operations, feedback and disposal.

This standard should support the interoperability of Integrated Logistic Support (ILS) information as specified in AIA-ASD S-Series Specifications and/or in the SAE GEIA-STD-0007, and should allow adaptation to specific requirements and national legal contexts.

AP239 PLCS ed3 contributes to the SSG “Through Life Cycle Interoperability” vision (see related SSG report), thanks to the harmonization of the STEP Core Information Model within the frame of the STEP enhanced architecture. Interoperability between AP242 ed2 and AP239 ed3 should be a first demonstration of this vision.

ASD SSG invites the European A&D companies to contribute to this initiative and provide the necessary resources to develop the AP239 ed3 DIS by the end of 2018.