

S1000D


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S-Series Technical Perspective

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Abstract

The next generation of the AIA/ASD S-Series Specifications will adopt a common way for defining and managing data in order to enable seamless information flows in between the specifications. This presentation describes the intended way forward, and how technologies such as UML (Unified Modeling Language), PLCS (Product Life Cycled Support) and DEXs (Data Exchange Specifications) will be used to enable this vision.

Agenda

- Current Situation
- Vision
- Strategy

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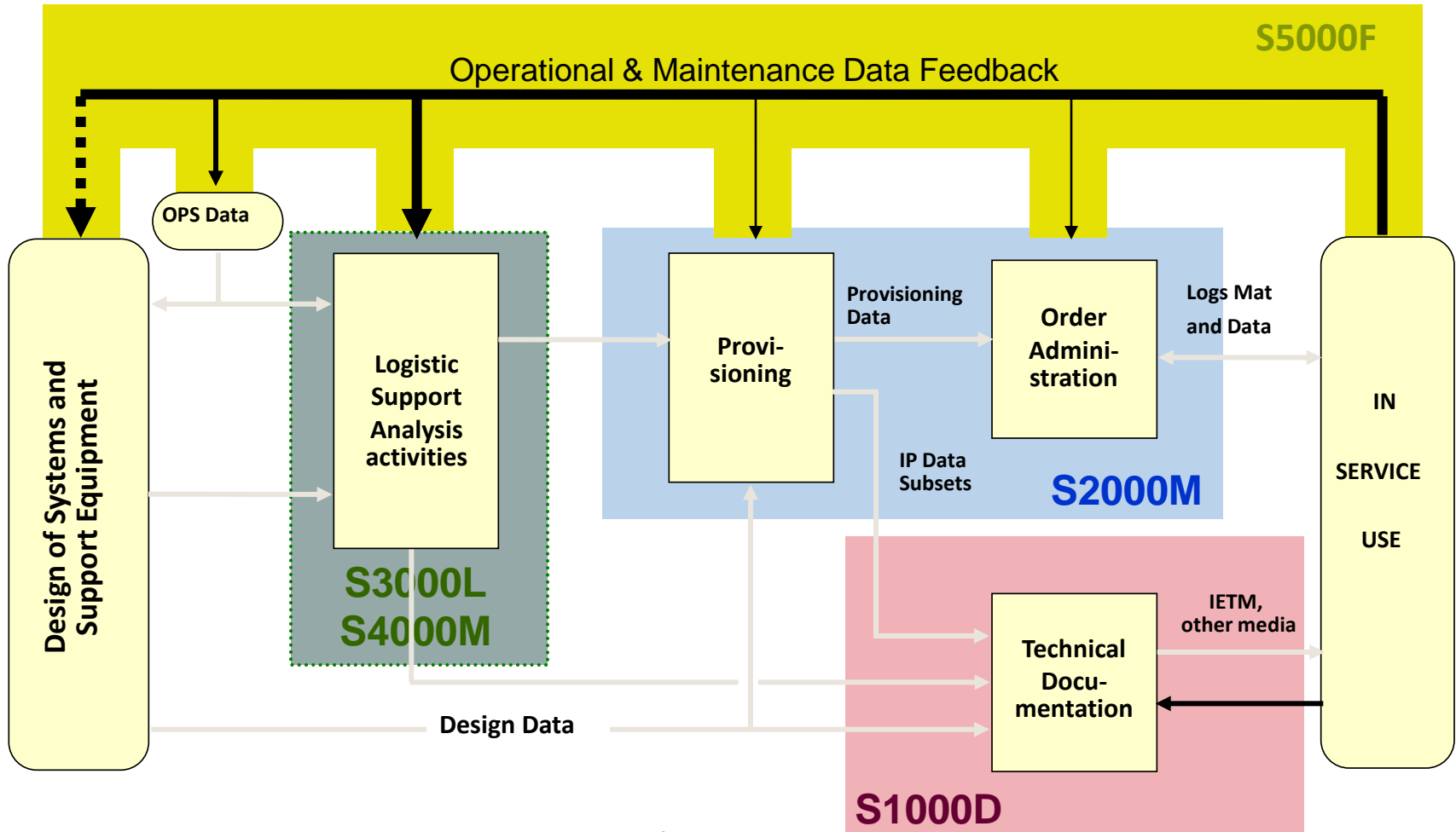

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CURRENT SITUATION

ILS Overall Business Process and the S-Series



Current situation

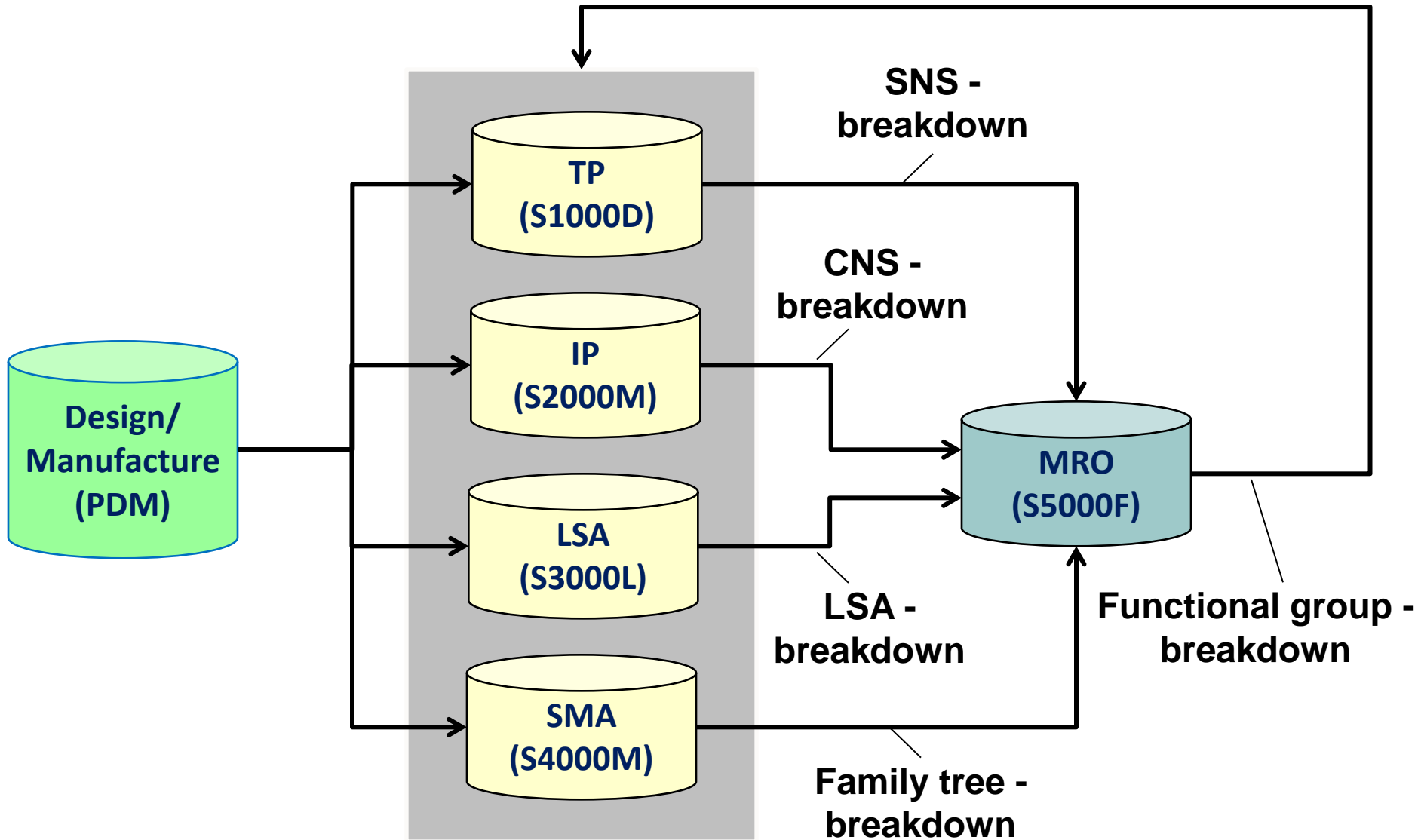
- Representation of Data differs in between the respective Specifications
 - S1000D – XML Schemas
 - S2000M – EDI based transactions
 - S3000L – ISO 10303-239 EXPRESS
 - S4000M – No data model defined

Current situation

- Definitions of Data Elements differs in between the respective Specification
 - S1000D – timeLimitInfo
 - S2000M – Authorized life (AUL)
 - S3000L – Operational_authorized_life
 - S4000M – Limitation

Current situation

- Breakdown structures differs in between the respective specification
 - S1000D – “Standard Numbering System”
 - S2000M – “Catalogue Sequence Numbers”
 - S3000L – “Breakdown Element Identifiers”



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VISION

Vision

- Seamless information flows in between the specifications
- Enable a consolidated data set

Vision

- Common Data Elements and Data Definitions
- Common Data Structures
- Data Representation

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STRATEGY

ASD - CPSC
Customer & Product
Support Committee

AIA
Product Support
Committee

**The ILS Spec
Council**

**The S2000M
Steering Group**

**The S3000L
Steering Group**

**The S4000M
Steering Group**

**The S5000F
Steering Group**

The Data Model and Exchange Working Group

**S1000D
Council**

**The S1000D
Steering Committee**

DMEWG

- Common Data Model
- S9000D - Dictionary for the suite of S-specifications
- Data Exchange Specifications (DEXs) based on existing Product Data standards

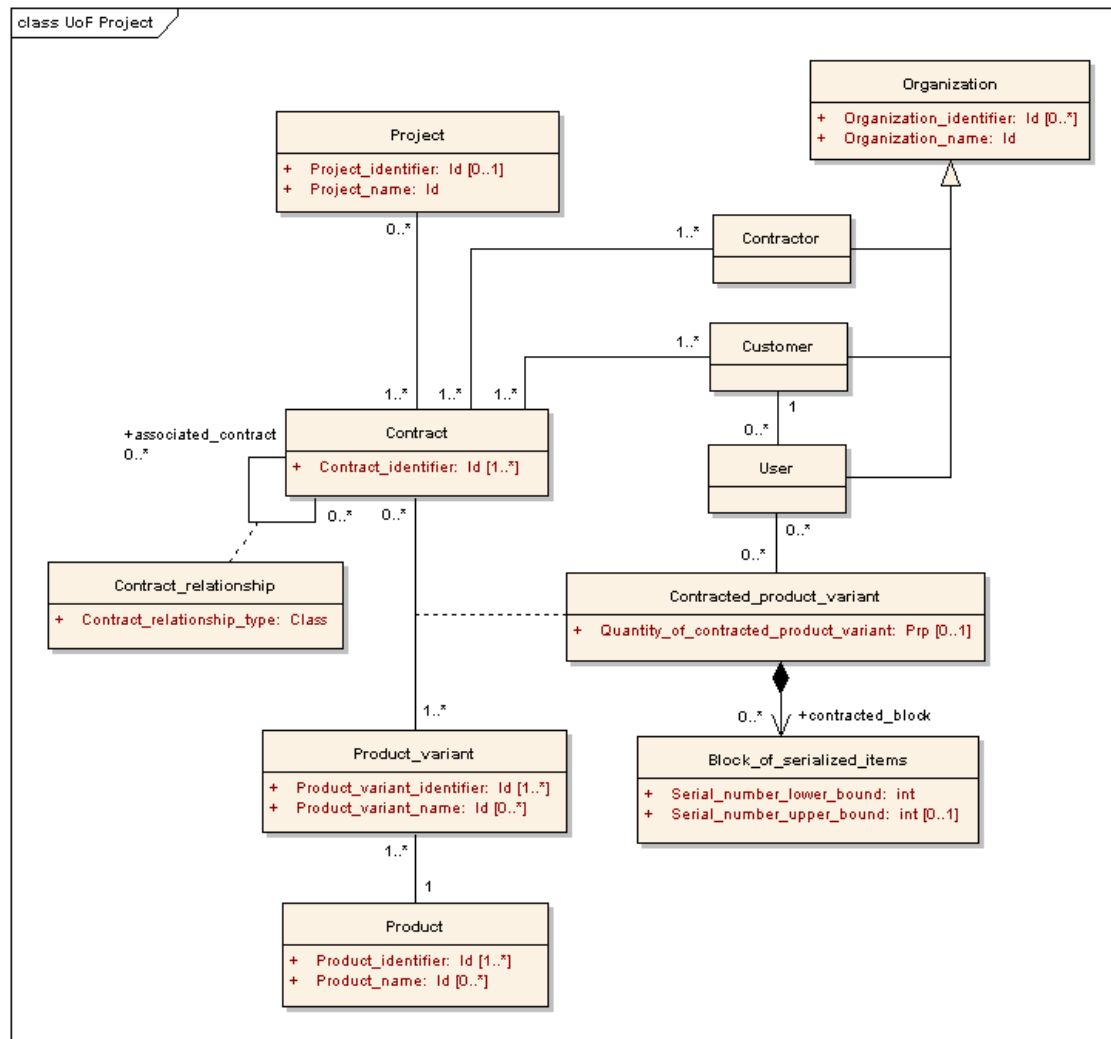
Common Data Model

- The common data model must include all data elements that are common to more than one ASD/AIA S-series specification. Data that are just delivered from one spec to e.g. the customer, but are neither used by another spec nor matches any feedback data, can be excluded.

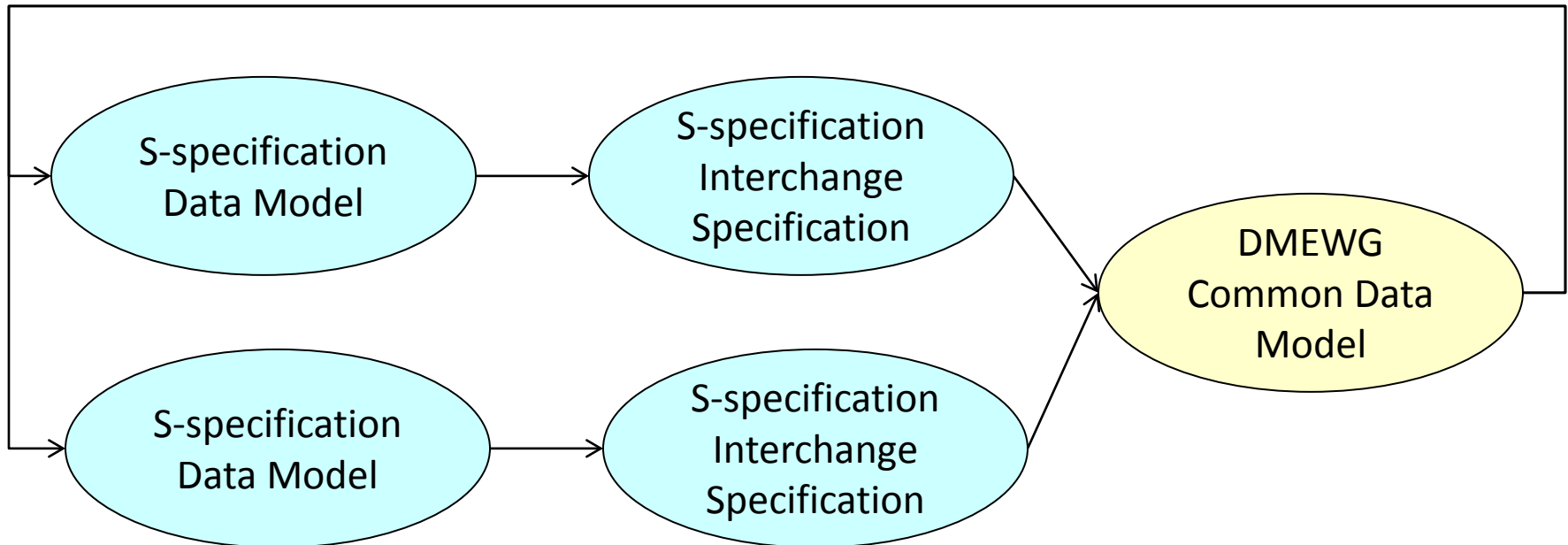
Common Data Model

- UML (Unified Modeling Language)
 - OMGs (Object Management Group) most-used specification, and models not only application structure, behavior, and architecture, but also business process and data structure.
 - UML consists of a set of different modeling techniques of which S-series specifications only uses one, namely the UML class model.
 - A class model defines a static view of the information (classes, attributes and relationships) that is needed to support the business processes.

UML Class Diagram



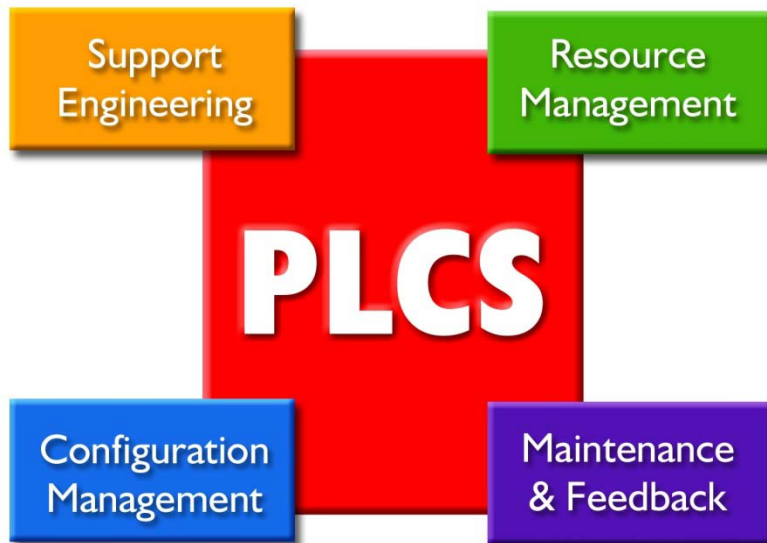
Common Data Model - Process



S9000D

- Definitions of Terms which can:
 - Be referenced from Individual Specifications
 - Be included as definitions in the Data Models
 - Be used as Reference Data in Data Exchanges

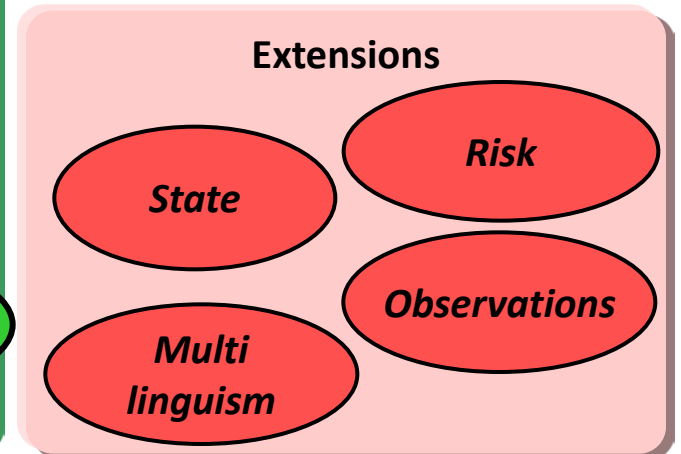
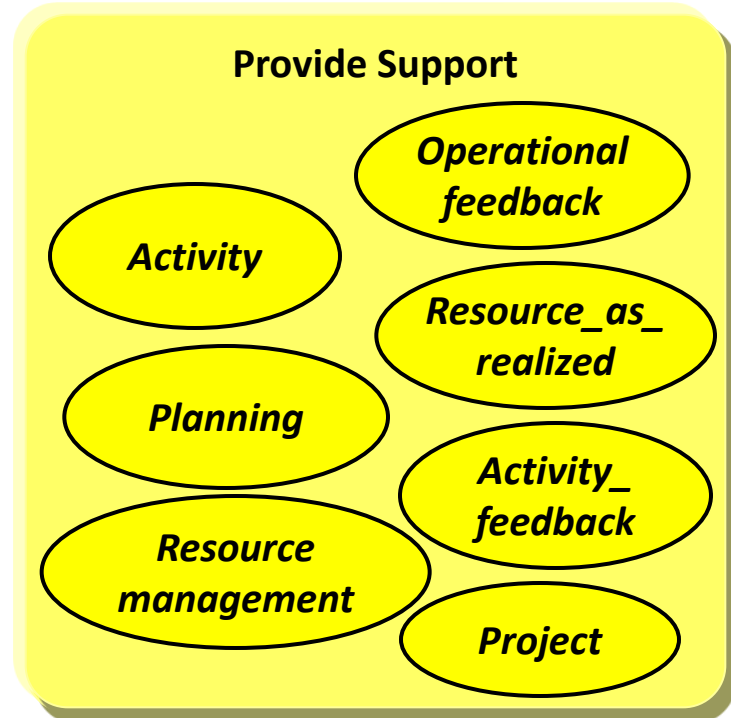
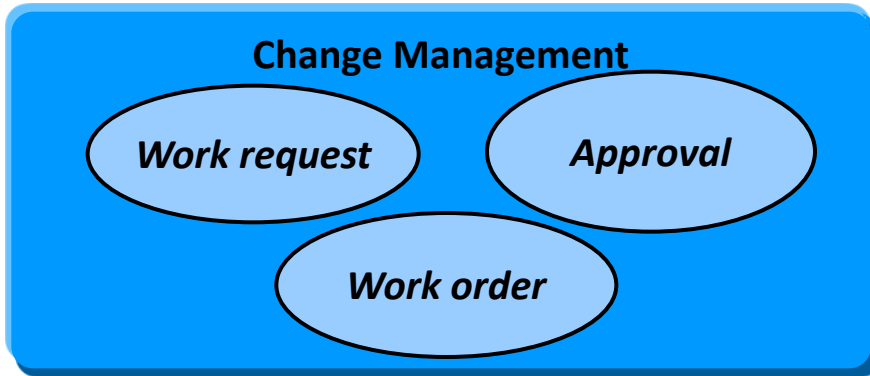
Data Exchange and Data Representation



- A joint industry and government initiative to accelerate development of new standards for product support information
- An international project to produce an approved ISO standard within 4 years; commenced November 1999
- PLCS will ensure support information is aligned to the evolving product definition over the entire life cycle
- PLCS extends ISO 10303 STEP - the STandard for Exchange of Product model data

Scope for PLCS

Requirements



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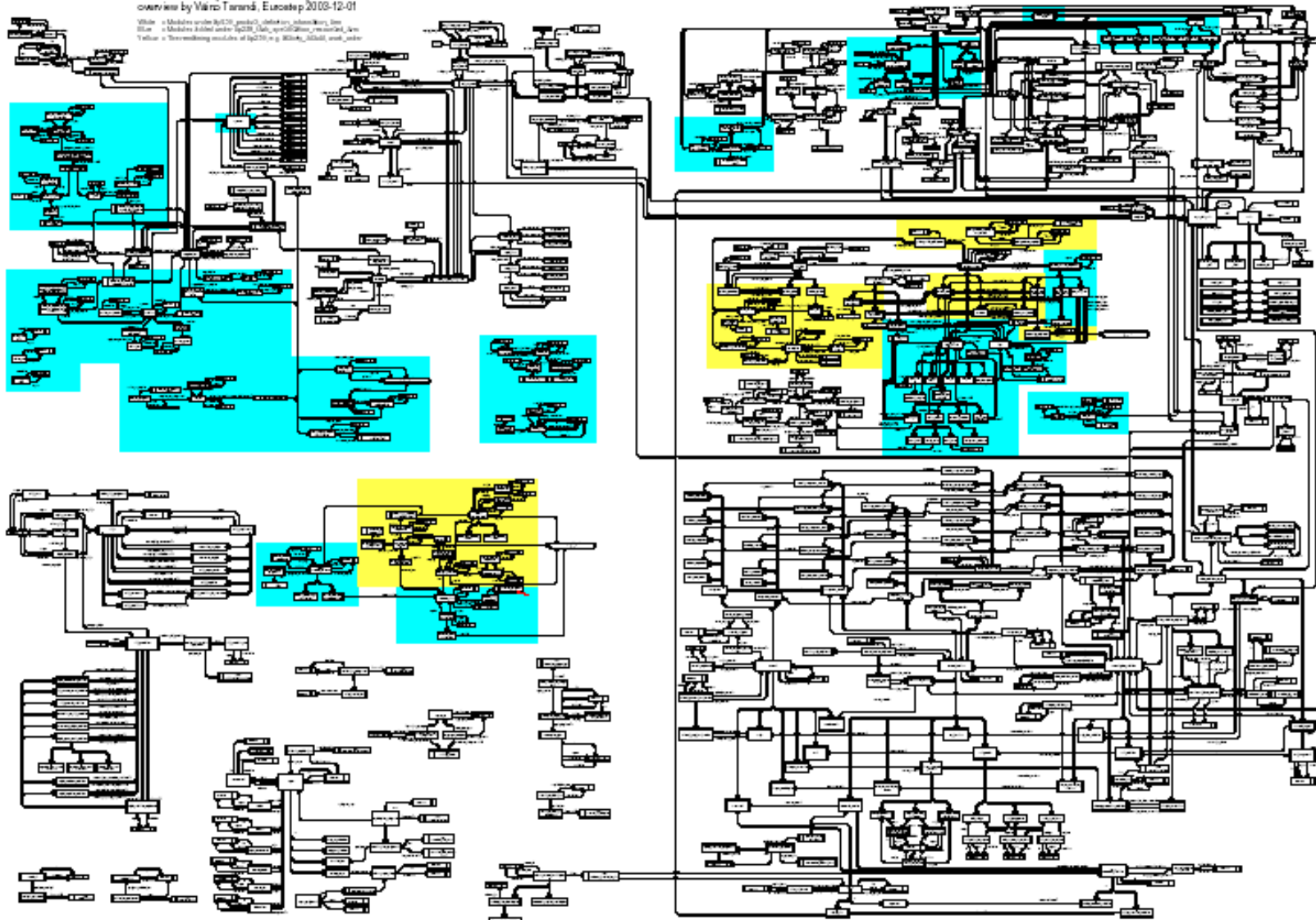
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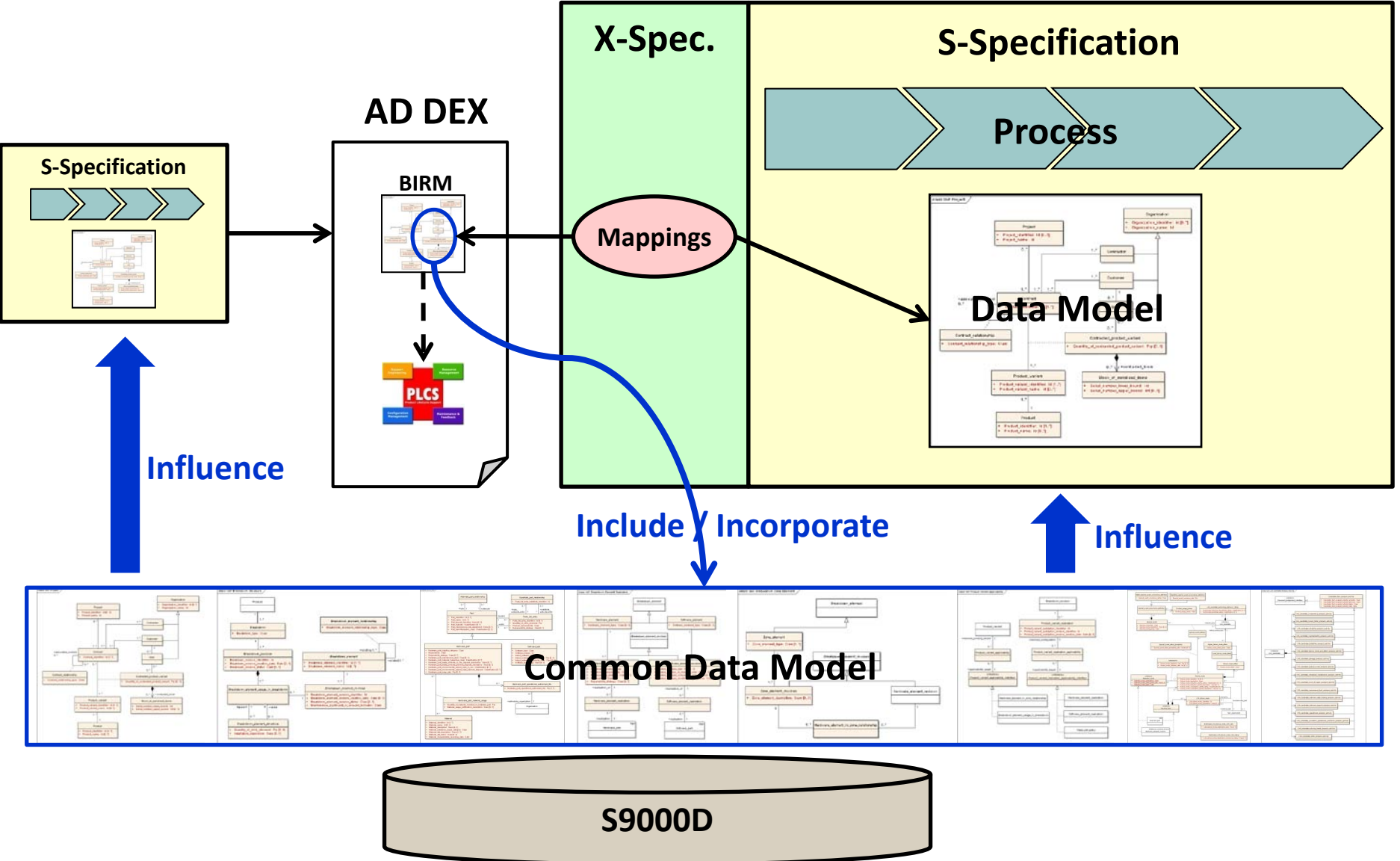
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PLCS (AP 130, ISO 10003)
OWNER: IATA by Václav Tarančík, E.Leasap 2008-12-01

White = Modules under Isp20, grade 0, defined in subcategory
Blue = Modules added under Isp20, but not in Isp20, reserved for
Yellow = The remaining modules of Isp20, e.g. Isp20, Isp20, work_order



S-Specifications Technical Architecture



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QUESTIONS !