

# POSC Caesar Association (PCA) Status and Plans

**2021 MIMSOA Open Meeting**

**Online meeting 2021-03-10**

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# POSC Caesar Association (PCA)

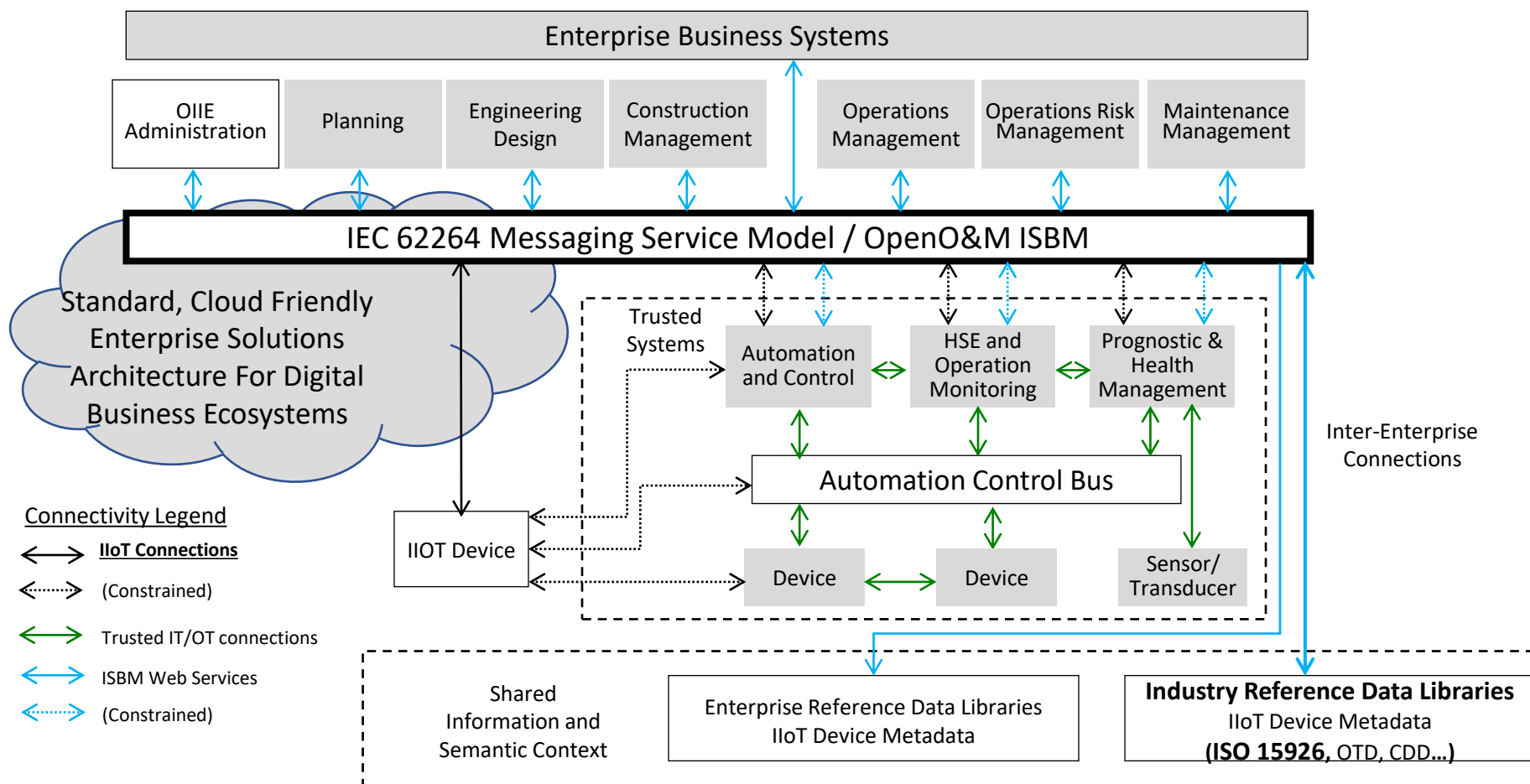
**Vision:** Connecting all information in the industrial energy sector

**Value proposition:** Information connection will reduce cost by at least 20%

**Purpose:** PCA improves business efficiency within the industrial energy sector by connecting information

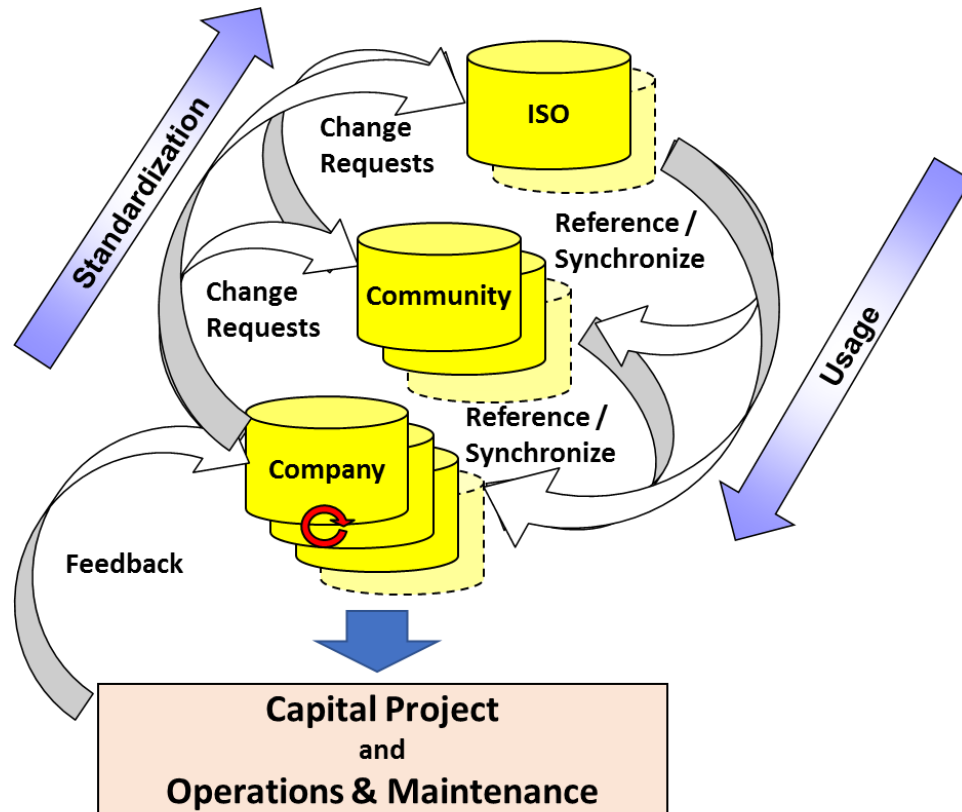
PCA is a Norwegian based standardization organization that collaborates globally

# Inter-Enterprise OIE Digital Ecosystem



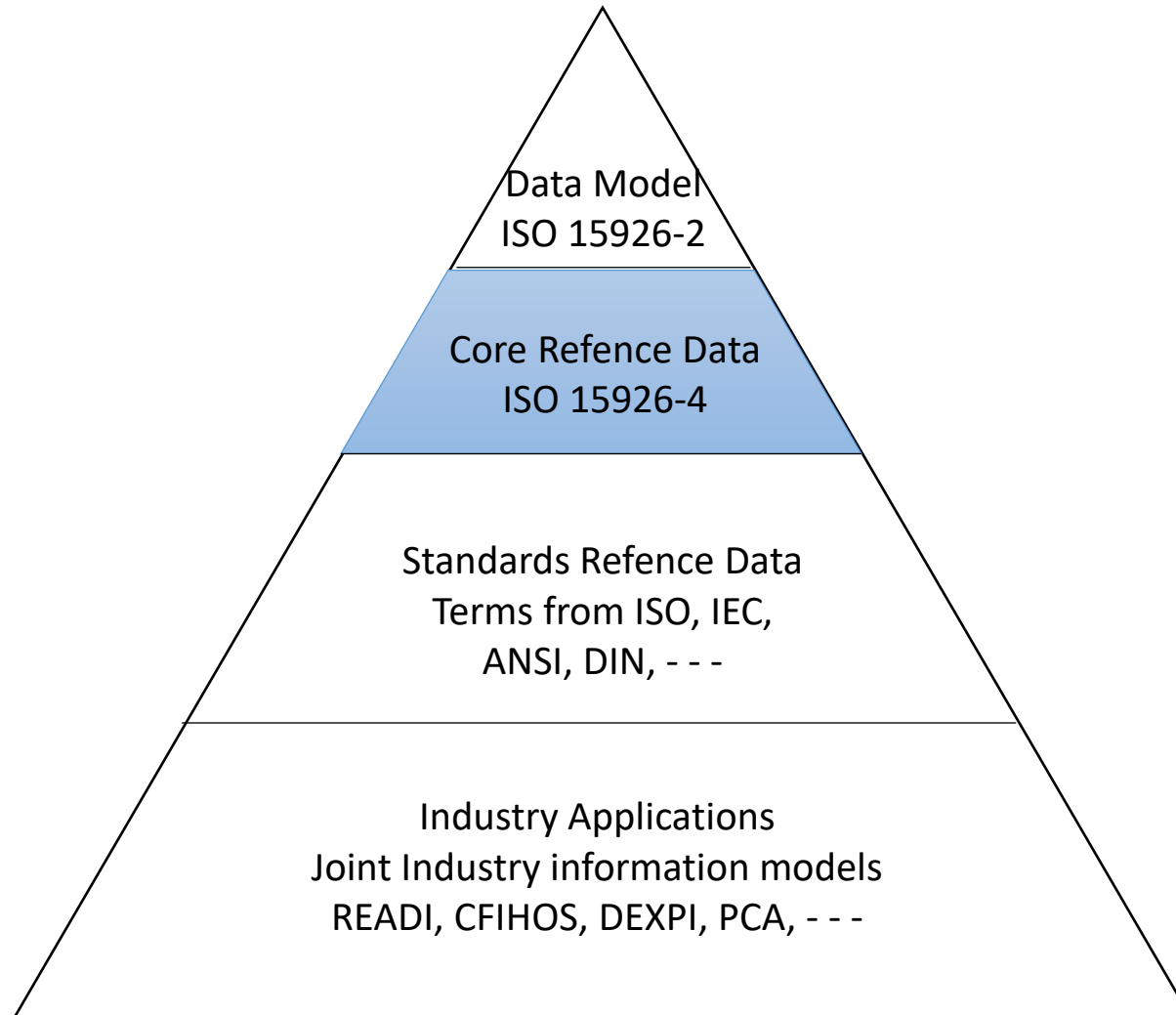


# ISO 15926 Reference data architecture



- ISO Standards and reference data libraries
  - Generic and technically stable parts
  - ISO allows standards in databases
  - Freely available standards in databases can be negotiated
- Community, e. g. PCA, specifications, ontologies and reference data:
  - Limited to an area, e. g. the Norwegian Continental Shelf
  - Using fast developing technologies
  - Testing for later ISO standardization
- Company specifications and reference data:
  - Company internal specifications and reference data
  - Proposals for standardization

# Reference Data Development

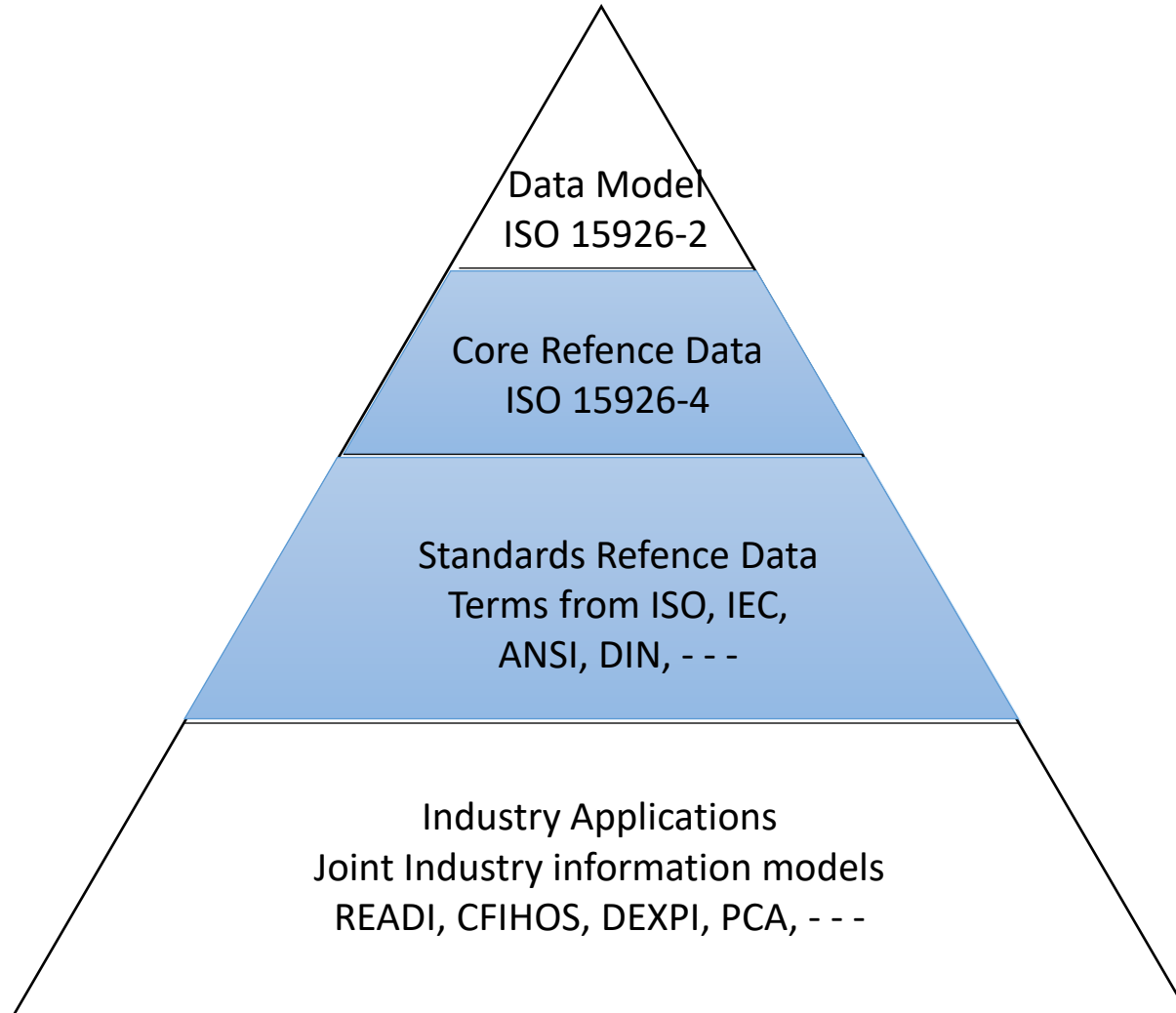


- Development of the Data Model and the Reference Data Library (RDL) stated in 1994
  - Cooperation with PISTEP UK and USPI NL
- The PCA RDL has over 50 000 Reference Data Items (RDIs) (Terms)
- The PCA RDL is used all over the world
  - Five continents
  - Translated to both Russian and Chinese
- ISO 15926-4 ed. 1: *Initial reference data* was published by ISO in 2007.
  - Generated from the PCA database
  - 11 000 RDIs
- ISO 15926-4 *Core reference data* ed. 2: was published in 2019.
  - Error corrections
  - UoM according to ISO 80 000
- **The ISO/TS 15926-4 *Core reference data* ed. 3 project was approved in May 2020**
  - **Two-year project based on PCA RDL 2**
  - **Include Core Reference Data from PCA, DEXPI and CFIHOS**
  - **22 000 RDIs**

# Extensions and improvements in PCA RDL 2: Core reference data

- Improvements in RDL 2 includes results from projects and maintenance activities from 2006 to 2020
  - Consistent naming and definitions
  - Reference to other RDIs in text definition
  - Reference to source
  - Improve specialization and classification
  - Rules for use of entity types inanimate\_physical\_object and functional\_object
  - Divided the RDL into smaller and different types of modules
  - Implemented ISO 80000 for UoM (Replace ISO 31)
  - Extended the Part 4 RDL from about 11 000 Reference Data Items (RDIs) to about 22 000 RDIs.
- Aligned with:
  - CFIHOS (Draft completed, QA necessary)
  - DEXPI (Completed)
  - MIMOSA ISDD (Started)
- PCA RDL 2 is based on ISO 15926-2: Data model – Not developed for semantic reasoning

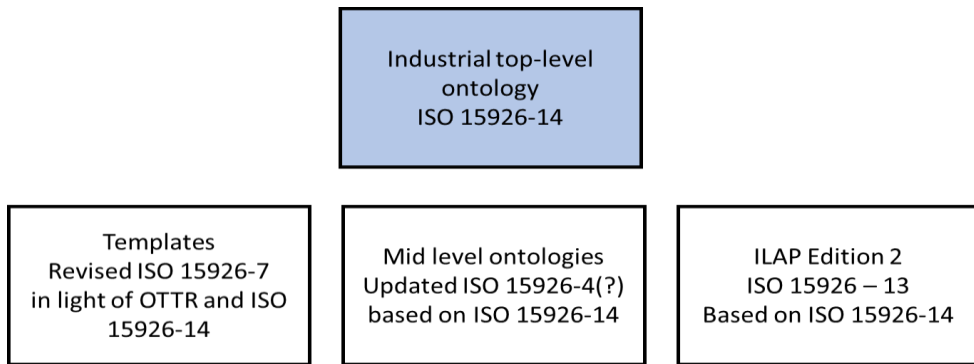
# Plans for PCA



- Include Standards Reference Data in PCA RDL 2 in cooperation with:
  - NORSOK
  - [MIMOSA](#)
  - Other interested standards organizations like [ISO TC 67](#)
  - IPR issues must be resolved
- Establish an ISO 15026-14 based RDL in cooperation with:
  - READI
  - Other interested parties
  - [This RDL supports semantic reasoning](#)
- Establish a Reference Data Service for maintenance and enhancements



# Develop ISO 15926-14 Industrial Top-Level Ontology



MIMOSA will be invited

- Based on ISO/TR 15926-14
- Scope
  - Improve relations
  - Improve definitions
  - Improve and complete the modelling examples (actual industrial use cases)
- Align with:
  - The joint ISO/IEC work on Data architecture for digital twins
  - The ISO/TC 184/SC4 work on Core industrial data set of terms
  - ISO/IEC 21838-2: Basic Formal Ontology (BFO)
- Improve mapping to ISO 15926-2

Thank you for your attention