■ ATA e-Business Program Overview

S1000D User Forum
Sept. 10-12, 2018
New Orleans

Paul Conn
Director, Electronic Data Standards

ATA e-BUSINESS PROGRAM

Effective Information Sharing through Industrywide Collaboration

ATA e-Business Program

- International standards program for information exchange in the Civil Aviation industry
- Support engineering, maintenance, materiel management, configuration management, flight operations, and data security
- Open membership
  - 106 Member companies
  - 800 Individual active participants
  - 35 Countries
- Neutral/consensus-based environment
- Administered by Airlines for America, formerly Air Transport Association (non profit)
- http://www.ataebiz.org
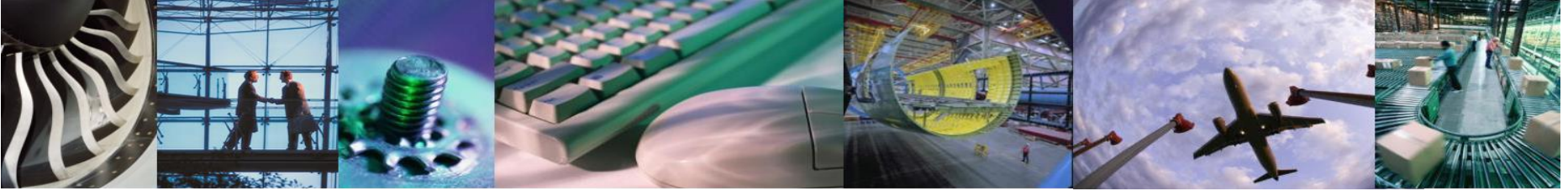
Vision

Enable the seamless exchange and availability of digital information throughout the civil aviation industry.
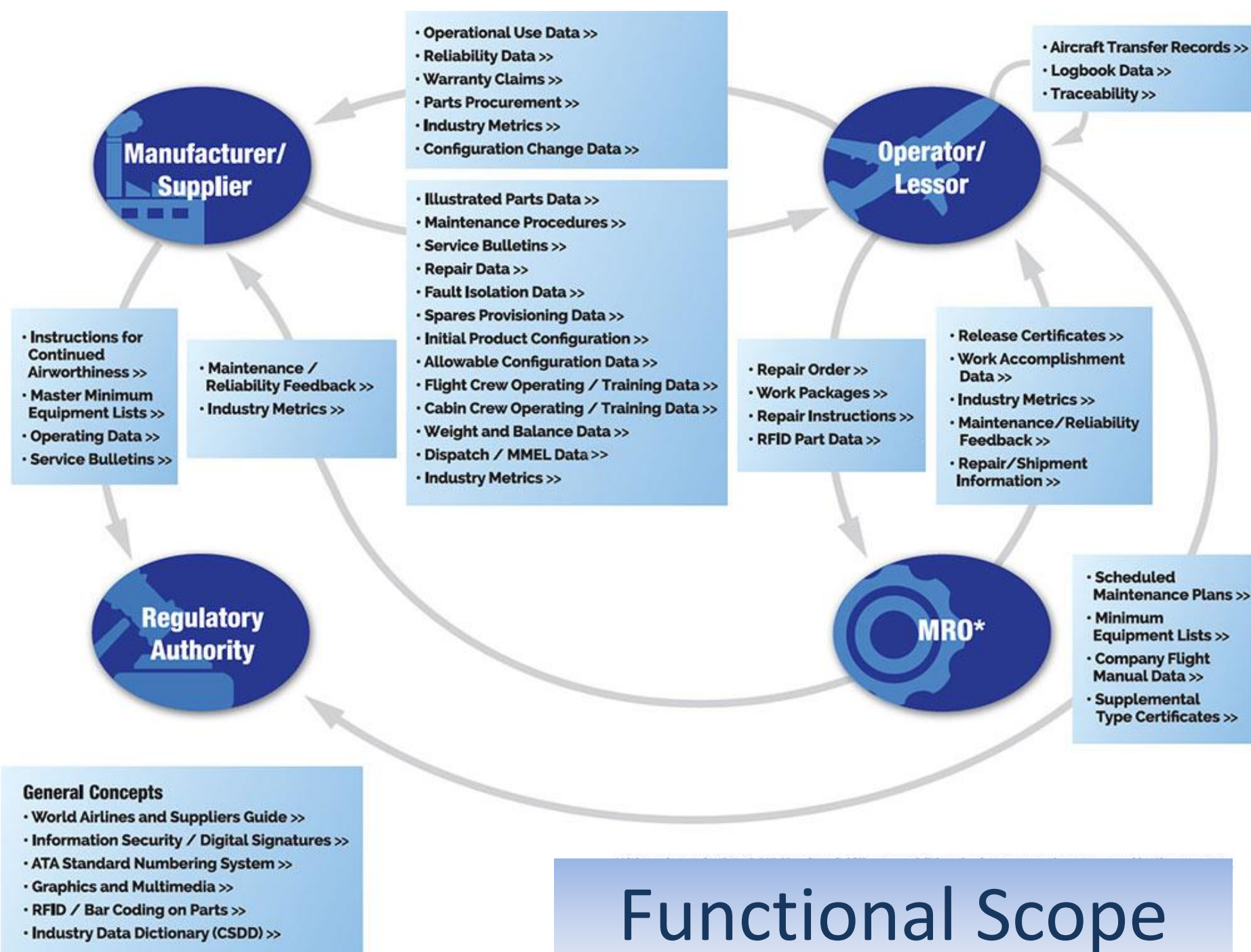
Mission

Provide the aviation industry with benchmark information standards in support of aircraft maintenance and operations.

We are committed to evolving shared standards and promoting implementation to contribute to increased business agility and reduced costs, while maintaining the highest levels of safety.
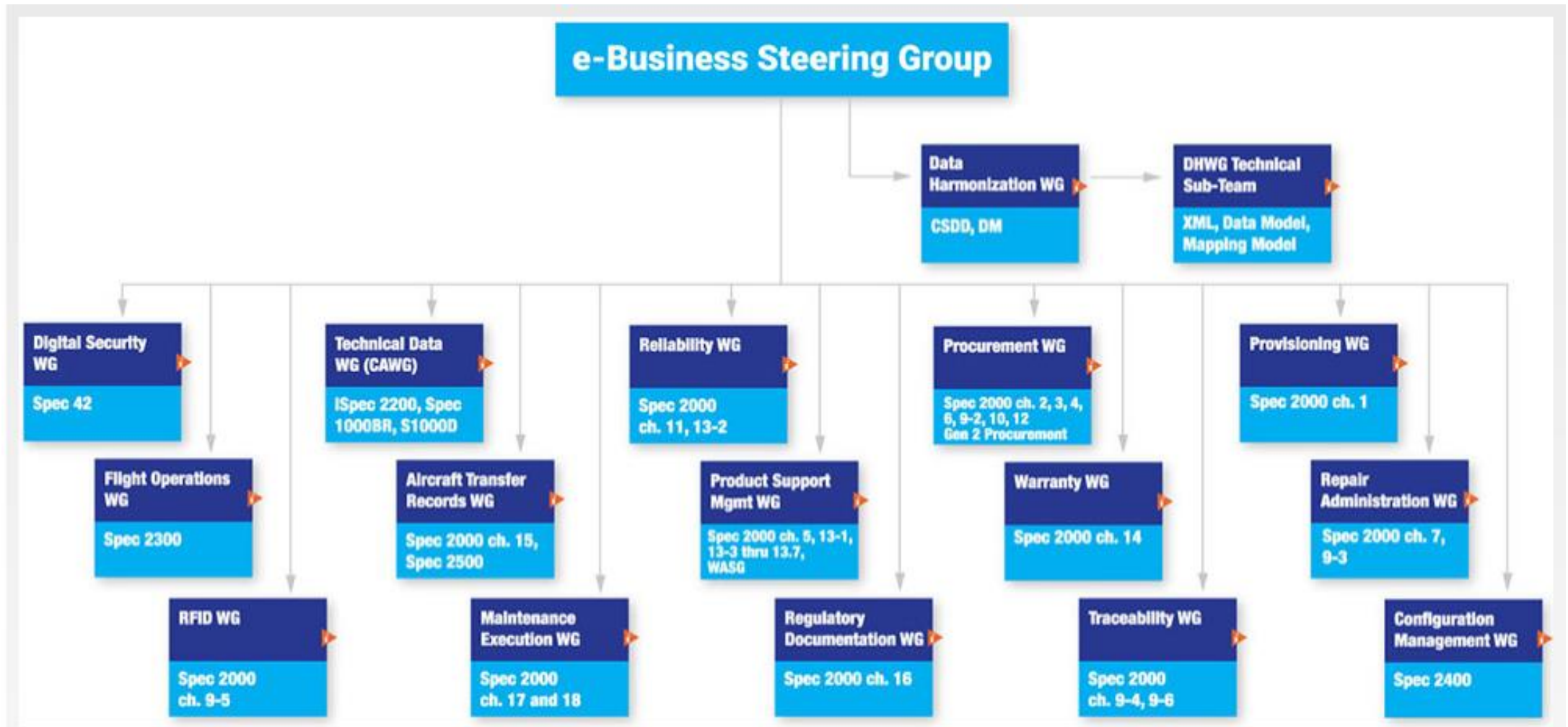
ATA e-Business Program History

- Beginning – late 1950s
  - Spec 100 – Technical Publication Standard
    - 2000 – Spec 100 evolved into ATA iSpec 2200
  - Spec 200 – Materiel Data Standard (IBM Punch Cards)
    - 1987 – Spec 200 evolved into ATA Spec 2000
  - ATA granted licenses to AECMA to develop S1000D (based on ATA 100) and Spec 2000M (based on ATA 2000)
- ATA Standards Expanded and Evolved
  - Changing business needs
  - Technological advances
- Today
  - Broad suite of industry standards and data definitions
  - Long list of adopters
  - Standards deeply embedded in industry systems and processes

Manufacturer/Supplier

Operator/Lessor

- Aircraft Transfer Records >>
- Logbook Data >>
- Traceability >>

- Operational Use Data >>
- Reliability Data >>
- Warranty Claims >>
- Parts Procurement >>
- Industry Metrics >>
- Configuration Change Data >>

- Illustrated Parts Data >>
- Maintenance Procedures >>
- Service Bulletins >>
- Repair Data >>
- Fault Isolation Data >>
- Spares Provisioning Data >>
- Initial Product Configuration >>
- Allowable Configuration Data >>
- Flight Crew Operating / Training Data >>
- Cabin Crew Operating / Training Data >>
- Weight and Balance Data >>
- Dispatch / MMEL Data >>
- Industry Metrics >>

- Instructions for Continued Airworthiness >>
- Master Minimum Equipment Lists >>
- Operating Data >>
- Service Bulletins >>

- Maintenance / Reliability Feedback >>
- Industry Metrics >>

- Repair Order >>
- Work Packages >>
- Repair Instructions >>
- RFID Part Data >>

- Release Certificates >>
- Work Accomplishment Data >>
- Industry Metrics >>
- Maintenance/Reliability Feedback >>
- Repair/Shipment Information >>

Regulatory Authority

MRO*

- Scheduled Maintenance Plans >>
- Minimum Equipment Lists >>
- Company Flight Manual Data >>
- Supplemental Type Certificates >>

General Concepts
- World Airlines and Suppliers Guide >>
- Information Security / Digital Signatures >>
- ATA Standard Numbering System >>
- Graphics and Multimedia >>
- RFID / Bar Coding on Parts >>
- Industry Data Dictionary (CSDD) >>

Functional Scope

e-Business Steering Group

Data Harmonization WG
CSDD, DM

DHWG Technical Sub-Team
XML, Data Model, Mapping Model

Digital Security WG
Spec 42

Technical Data WG (CAWG)
iSpec 2200, Spec 1000BR, S1000D

Reliability WG
Spec 2000 ch. 11, 13-2

Procurement WG
Spec 2000 ch. 2, 3, 4, 6, 9-2, 10, 12 Gen 2 Procurement

Provisioning WG
Spec 2000 ch. 1

Flight Operations WG
Spec 2300

Aircraft Transfer Records WG
Spec 2000 ch. 15, Spec 2500

Product Support Mgmt WG
Spec 2000 ch. 5, 13-1, 13-3 thru 13.7, WASG

Warranty WG
Spec 2000 ch. 14

Repair Administration WG
Spec 2000 ch. 7, 9-3

RFID WG
Spec 2000 ch. 9-5

Maintenance Execution WG
Spec 2000 ch. 17 and 18

Regulatory Documentation WG
Spec 2000 ch. 16

Traceability WG
Spec 2000 ch. 9-4, 9-6

Configuration Management WG
Spec 2400

ATA e-Business Standards

Common Support Data Dictionary (CSDD)

iSpec 2200 - Information Standards for Aviation Maint.

iSpec 2200 Extract - ATA Standard Numbering System

S1000D, International Specification for Tech. Publications

Spec 1000BR - Civil Aviation S1000D Business Rules

Spec 2000 - Provisioning (ch. 1)

Spec 2000 - Procurement Planning (ch. 2)

Spec 2000 - Materiel Management (ch. 3 – 4, 6)

Spec 2000 - Repair Order Administration (ch. 7)

Spec 2000 - Automated ID& Data Capture (ch. 9)

Spec 2000 - Reliability Data Collection and Exch. (ch. 11)

Spec 2000 - Airline Inventory Redistribution System (ch.12)

Spec 2000 - Industry Metrics (ch. 13)

Spec 2000 - Warranty Claims (ch. 14)

Spec 2000 - Aircraft Transfer Parts List (ch. 15)

Spec 2000 - Authorized Release Certificate (ch. 16)

Spec 2000 - Electronic Logbook (ch. 17)

Spec 2000 – Electronic Work Package (ch. 18)

Spec 2300 - Data Exchange Standard for Flight Ops

Spec 2400 – Allowable Configuration Data Exchange Std

Spec 2500: Aircraft Transfer Records

Spec 42 - Aviation Industry Stds for Digital Info. Security

World Airlines and Suppliers Guide (WASG)

Spec 100 - Manufacturers Technical Data

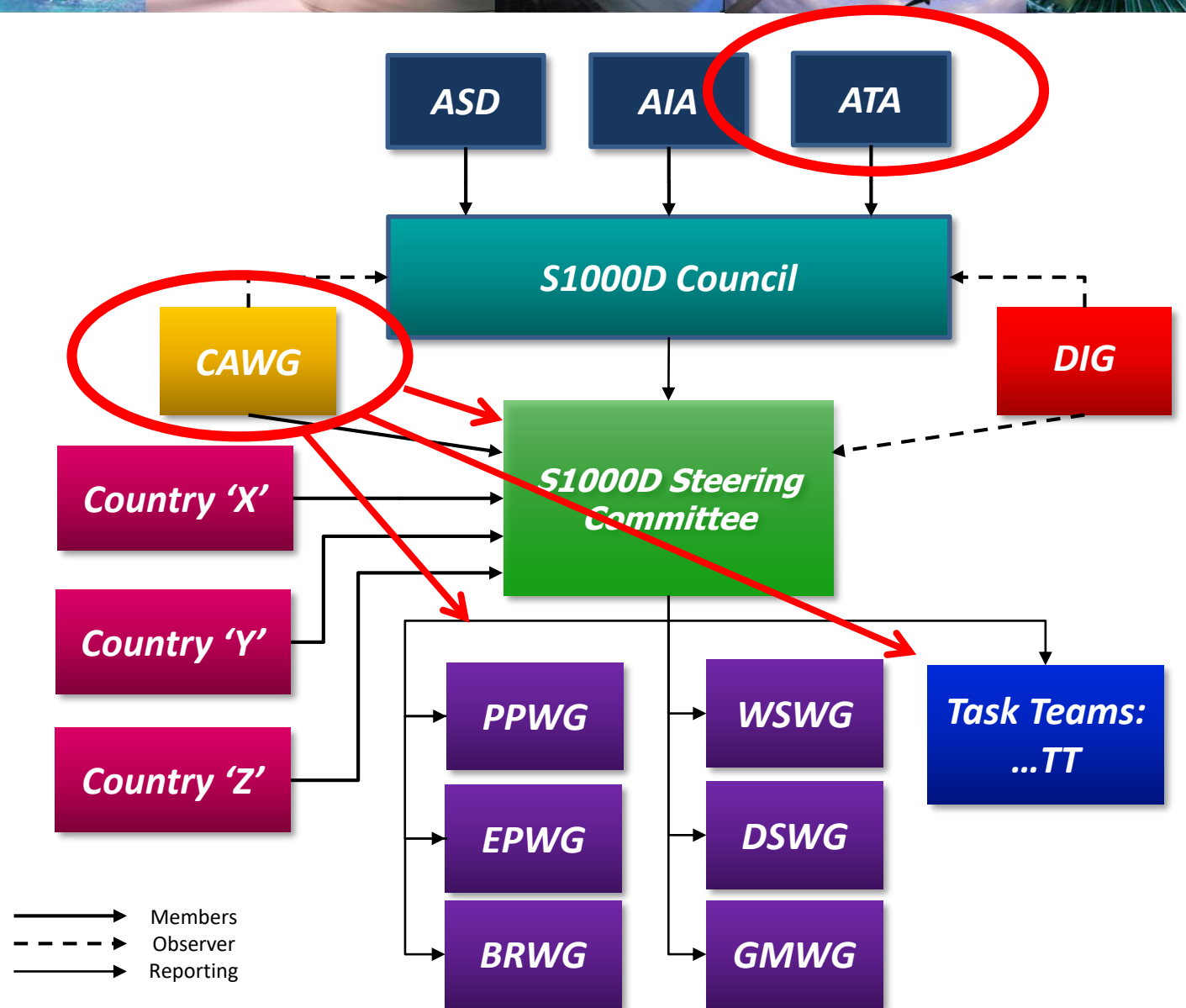Spec 101 - Ground Equipment Technical Data

ATA, ASD, AIA Collaboration

ATA e-Business Standards

ASD-AIA ILS Standards
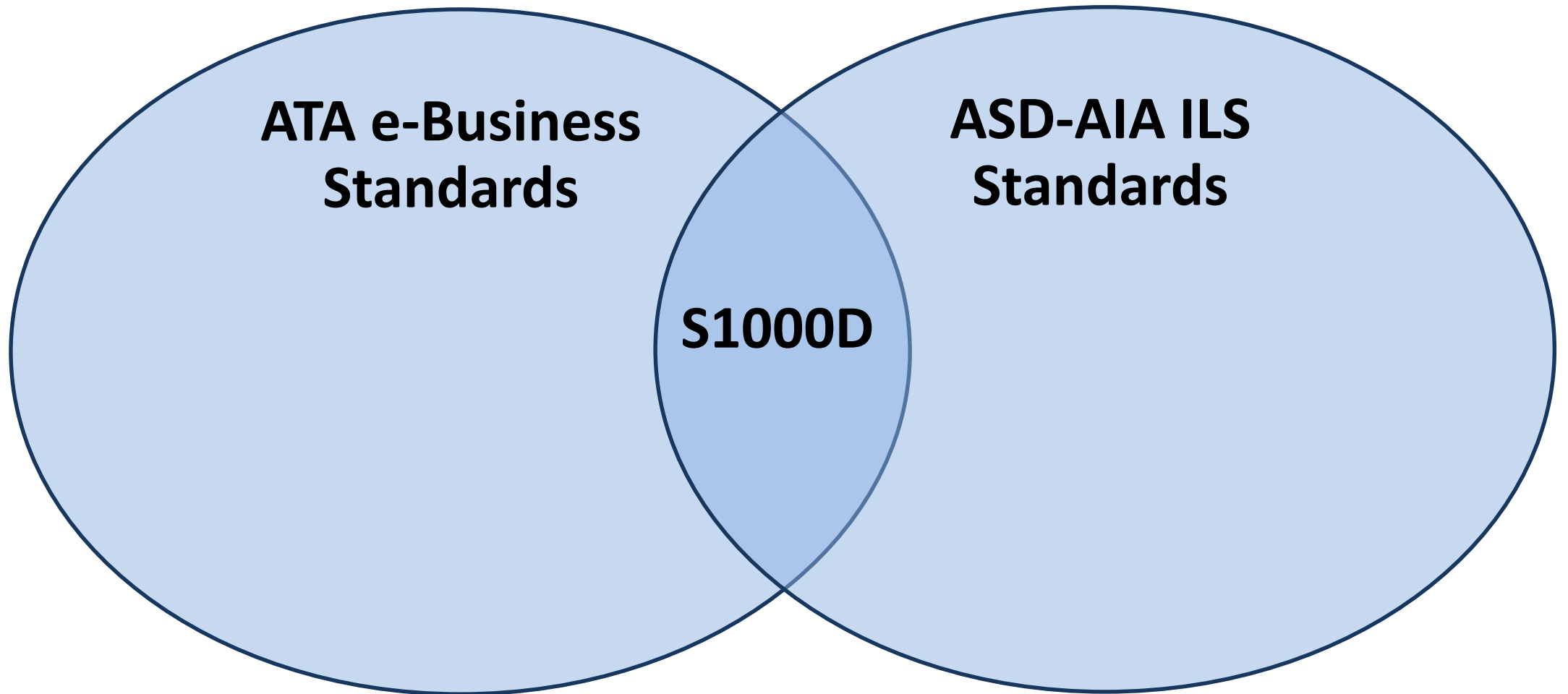
S1000D

S1000D International Organization

ATA e-Business Standards

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ATA Technical Data Working Group

ATA Spec 1000BR_4.1

Civil Aviation Business Rules for S1000D issue 4.1

Revision 2018.1

1000BR

ATA e-Business Program

ATA Spec 1000BR_4.2

Civil Aviation Business Rules for S1000D issue 4.2
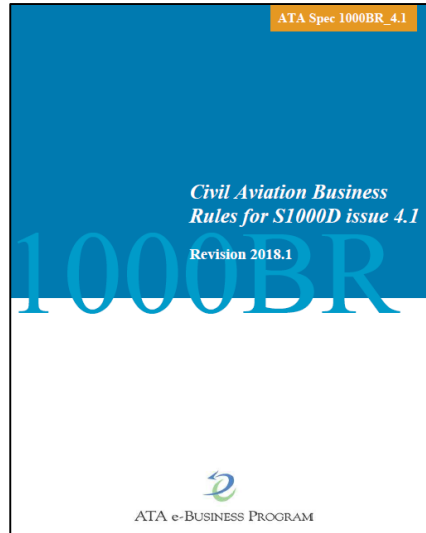
Revision 2018.1

1000BR

ATA e-Business Program

ATA Spec 1000BR_4.1

- Layered BR approach
  - General Civil Aviation Business Rules
    - Business Rules for all BRDPs
    - Civil Aviation configurable attribute values
    - General Civil Aviation BREX DM
  - Component Maintenance Publication BRs for all BRDPs
    - Business Rules for all BRDPs
    - CMP Layout rules and examples
    - CMP-specific Civil Aviation BREX DM

ATA Spec 1000BR_4.2

- Layered BR approach
  - General Civil Aviation Business Rules
    - Business Rules for all BRDPs
    - Civil Aviation configurable attribute values
    - Civil Aviation specific Information Codes
    - General Civil Aviation element/attribute usage tables
    - General Civil Aviation BREX DM
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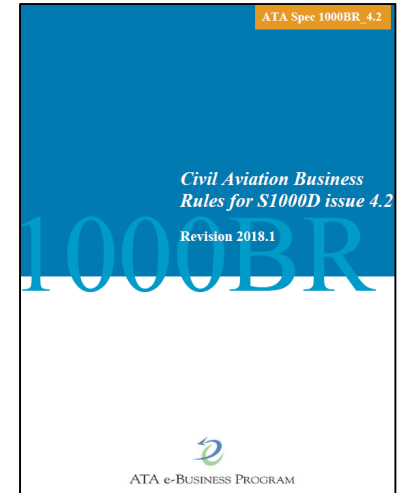
ATA Spec 1000BR

- Future plans
  - Publish 2018.2 revisions for 4.1 and 4.2
    - Updates to Civil Aviation configurable attribute values
    - Updates to Civil Aviation information codes
    - Updates to CMP business rules
    - Updates to CMP layout rules
    - Updates to CMP element/attribute usage tables
    - Updates to CMP BREX DM
  - Next year:
    - BRs for Scheduled Maintenance Data ICAs
    - BRs for Component Service Bulletin data
    - Begin work on Spec 1000BR_4.3

ATA e-Business Program

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