

ASD SSG Newsletter

December 2022 Issue



AeroSpace and Defence Industries Association of Europe (ASD) is the European association representing the interests of industries in the aeronautics, space, defence and security sectors. [Link](#)

ASD Strategic Standardisation Group (SSG) is the governance group in charge of Aerospace and Defence digital interoperability. [Link](#)

IDENTIFYING THE SET OF STANDARDS REQUIRED FOR AEROSPACE AND DEFENCE DIGITAL INTEROPERABILITY.

• **Communications**

- AIA-ASD Meeting in Washington
- IPS User Forum in Vienna
- IPS council feedback & DoD Training
- STEP AP242 Day in Munich
- GPDIS & PLM Roadmap in Scottsdale
- PDTEurope & PLM Roadmap in Gothenburg
- Boost Industry Day
- Gaia-X Summit in Paris

• **STEP Development**

- ISO TC 184/SC4 workshop in Hamamatsu Japan
- AP242 edition 3
- AP243 - MoSSEC

• **MBx Implementor Forum Round Table**

- 50th CAx IF test round
- PDM IF in Paris

• **LOTAR Workshop in Charleston**

- PDES Board Meeting
- PDES Technical Advisory Meeting

• **Next events**

- ASD-SSG Workshop in London

AIA-ASD meeting in Arlington (VA) 28th of October 2022



With the objective to continue and enforce the collaboration between AIA (Aerospace Industries Association) and ASD SSG, a meeting was organized in the premises of the AIA in Arlington, with additional remote participation. Gery MRAS (Boeing, AIA director of lifecycle management), Lynn WILLIAMS (Boeing, chair of the Product Support Committee), Nathaniel PHILLIPS (AIA) welcomed Phil WILLIAMS (TDI, SSG vice-chair) and Jean-Pierre SOUZY (Airbus, SSG chair) an animated two-hour debate with a dozen American and European specialists in Interoperability Standards connected remotely followed.

The context of international tensions with Russia and China was the opportunity to highlight the interest of the S-Series standards for Defence industries, and the efforts from AIA for their adoption by the Department of Defence. Fruitful exchanges were related to Digital Engineering Interoperability (White Paper from AIA and recommendations from the Aerospace & Defence PLM Action Group), Engineering Measurement Framework (AIA Technical Paper) and the challenge for both associations to ensure the transfer of knowledge between senior experienced managers and junior engineers.

Actions were taken, like the refresh of the Memorandum of Understanding having established the basis of the cooperation between AIA and ASD SSG, the continuation of the LOTAR co-leadership between American and European experts and the proposal to identify focal points on both sides to work on SMART (machine-readable) Standards.

IPS User Forum in Vienna 17th - 20th October 2022



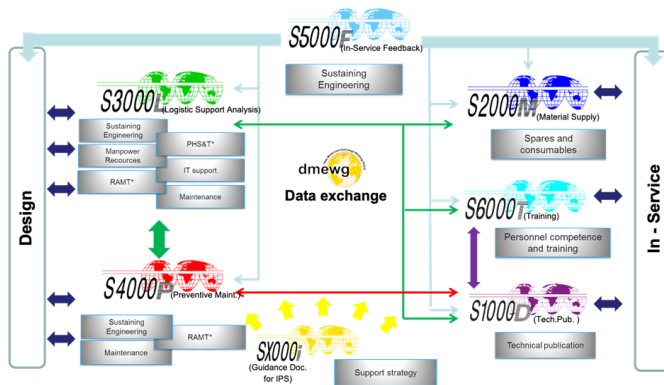
Presented by

- Ramon Somoza **SX000i**
- Daan de Lange **S4000P**
- Peter Eichmüller **S3000L**
- Jose Carlos Lafuente Rodriguez **S2000M**
- Achim Besel **S1000D**
- Peter Hellekant **S6000T**
- Ramon Somoza **S5000F**
- Phil Williams **Moderator**

After a couple years under the Covid cloud, the Integrated Product Support User Forum finally took place in the city of Vienna. Some 300+ participants travelled from Europe, the USA, Australia and the Far East to hear from the IPS Council regarding the latest developments with the S-Series. Practitioners held workshops, the new “Bike Example” was unveiled to an appreciative audience and most importantly of all, our community came together to share experiences, renew old acquaintances, meet new business partners, and reaffirm the growing importance of interoperability and collaboration.

For 2023, the User Forum recombines with the formal S1000D Forum hosted by the AIA at the Sawgrass Golf course in Florida in September, all are welcome!

IPS council feedback & DoD Training



The Integrated Product Support Council travelled to Washington in November to follow up the Stockholm meeting earlier in the year. This was an opportunity to coordinate the activities of the individual S-Series specifications, with a particular focus on planning for the next block release of the same in 2024 and a reaffirmation of the close ties between the AIA and ASD.

In addition, the trip to Washington allowed the Council to meet with senior members of the USA's Department of Defence, DoD, during a workshop arranged by the Product Support Council of the AIA. Over 2 days, the DoD learnt of the development of the S-Series, how they are produced and managed, the growing community of users and most importantly of all, our American colleagues were able to ask questions of our assembled experts.

With NATO and the USA DoD joining the fold, it seems the S-Series have crossed the Rubicon, there is no turning back from this world of Integrated Product Support.

ISO TC184 SC4 workshop in Japan



The 84th Plenary meeting of ISO TC 184/SC 4 is in the books and it was an exciting week for the Committee. I would first like to recognize the return to in person meetings and our hosts with the Japanese National Standards Body and the experts at the Manufacturing Science and Technology Center. Restarting the in person meeting experience after two years of virtual meetings is a deliberate activity that took a ton of work and I want to thank this group for taking on the challenge to be our first National Standards Body host in the Committee's return to in person.

The team did a great work that has occurred during the course of this year. SC 4 is now operating on a stable version of the ISO10303 SMRL hosted by ISO Jira/GIT. WG 3 is using the repository as well for some of their content. JWG 24 has an approved Committee Specific Procedure in place for managing ISO standards in database format utilizing the IEC Common Data Dictionary and WG 13 continues to build out the ISO8000 Data quality series with new content. ISO10303-238 and ISO10303-242 are now at the same level with the SMRL having achieved integration with SMRL V9 and more to come as we move toward a streamlined ISO 10303 with fewer documents and more model based thinking in the standard.

AFNeT prostep ivip AP242 day in Munich 20th October 2022



This year due to Covid restriction during last years a physical meeting was again able. BMW hosted the event in their IT Center.

50 persons from several branches (automotive, railway, aerospace) and IT vendors and 10 people participated remotely. During the event multiple industry use cases were presented by BMW; Airbus & Boeing.

In addition the status of the STEP AP242 standard development was provided.

The event also provided a great opportunity for networking to discuss with other participants about future developments.

During the event several IT vendors presented their STEP roadmaps, i.e. interfaces and examples.

Published presentations are available from [AFNeT](#) web page.



Boost Industrie days in Paris, 13th and 14th December 2022



This year, for its 10th anniversary, Boost-Industrie was a real success thanks to the interventions of a dozen sectors including: the new French sector on Digital Trust, Aeronautics, Pharmaceuticals, Agri-food, Construction, Smart-Manufacturing, Automotive, Nuclear and Mining & Metallurgy.

Following the Summit which took place on 17 and 18 November, the intervention of Hubert Tardieu (Independent Member of the Board of Directors; first

Chairman of the Gaia-X Association Board of Directors) on the 2022 Gaia-X results and future the outlook. The Data Space projects teams for the Aeronautics, agri-food industry, construction, smart-manufacturing, Green-Deal project and GFXS have presented ambitious projects.

This year we also made the link to our future ecology in a changing world and for which the industry must provide answers. Decarbonization, responsible digital technology and energy sobriety were therefore at the heart of the debates throughout the conference. We are convinced that digital and ecological are not mutually exclusive, for example, the water sector uses artificial intelligence IoT and the digital twin to reduce leakage.

What is certain is that 'Responsible' must be the watchword in all projects, and it is by working together with cross-fertilisation, that we will achieve this.

The main lesson of Boost-Industrie remains more than ever the strength of the collective and transversality, which reflect the DNA of AFNeT and ATLAS.

<https://www.afnet.fr/boost-industrie/>

STEP AP242 (ed3) published!



Following the positive ballot in September 2022, STEP AP242 edition 3 is now published on ISO website: *ISO 10303-242:2022 - Industrial automation systems and integration - Product data representation and exchange - Part 242: Application protocol: Managed model-based 3D engineering*

ISO 10303-242 specifies the application protocol for Managed model based 3d engineering:

- products of automotive, aerospace and other mechanical manufacturers and of their suppliers, including parts, assemblies of parts, tools, assemblies of tools, and raw materials;
- engineering and product data for the purpose of long-term archiving and retrieval;
- product data management
- process planning
- mechanical design
- message
- interface
- mating
- kinematics
- analysis management
- composite design
- electrical harness assembly design
- additive manufacturing part design
- requirements management

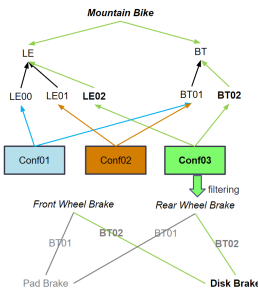
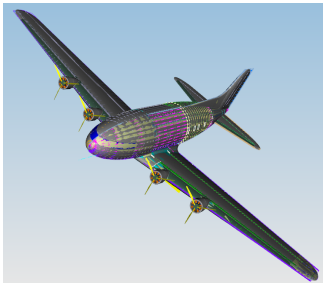
Publication date : 2022-12

Number of pages : 33

Technical Committee : ISO/TC 184/SC 4 Industrial data
ICS : 25.040.40 Industrial process measurement and control

<https://www.iso.org/standard/84667.html>

PDM-IF workshop 5th and 6th December 2022



The PDM-IF is conducted jointly by [prostep ivip](#) and [AFNeT](#) associations. It enables strategic exchange of information and experiences for users and system vendors.

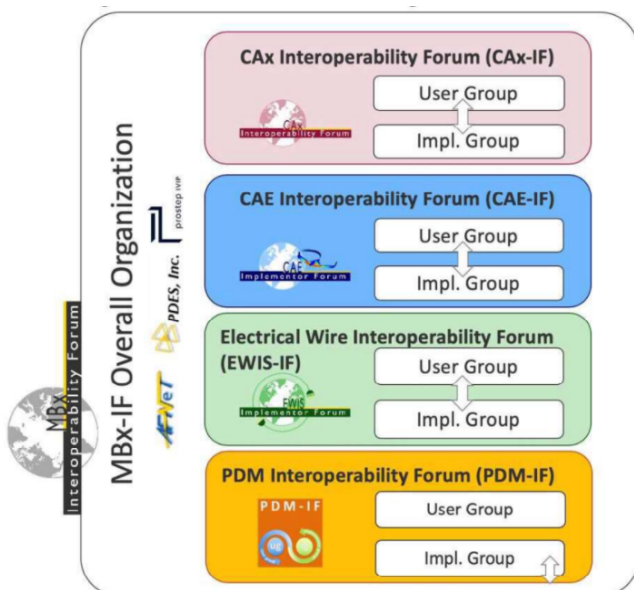
Joint tests by developers as well as agreed best practices for users are the foundation for the interoperability of standards-based solutions. One of the main tasks performed by the PDM-IF is therefore drawing up best practices for implementing PDM2PDM collaboration scenarios, as well as CAD and PDM interoperability cases, based on the STEP AP242 XML Domain Model.

The December workshop is the closure of the Test Round 14 and preparation of next test rounds, the following use cases were reviewed during the two day:

- As Designed/ As Planned
- Mirrored parts
- Alternative Geometries
- Product configuration based on specifications
- Product structure validation properties
- Work order for design change management
- As manufactured measurements based on part and requirement specifications
- Delta exchange
- Flexible parts

In addition, there was a presentation of a questionnaire fulfilled by users and vendors on PDM-IF on interest, advantages and axis of improvement..

MBx-IF roundtable 22nd September 2022



The [MBx Interoperability](#) Forum is a joint testing effort between AFNeT, PDES, Inc. and prostep ivip associations.

The objective of the forum is to accelerate ISO 10303 STEP translator development. In its current version, the MBx IF hosts 4 Interoperability Forums, based on a same structure, made of:

- a User Group: industry members are gathering and defining use cases, test cases and shared priorities of tests by the vendors,
- an Implementer Group: PLM editors and integrators are running interoperability test rounds.

The role of the [CAx IF](#) is the Computer Aided Design, Manufacturing, Inspection interoperability, based on STEP AP242.

The role of the [EWIS IF](#) is the Electrical Wiring Interconnection System interoperability based on STEP AP242 ed2.

The role of the [PDM IF](#) is the Product Data Management interoperability, based on the STEP AP242 XML.

The role of the [CAE IF](#) is the CAE interoperability,



(focused first on Structural Analysis), based on AP209 ed2.

The MBx IF ensures that users' requirements are satisfied. Every 6 months, a roundtable is organised. During this event, the following PLM vendors present their STEP solutions for CAD, PDM and EWIS topics: Autodesk, Dassault Systèmes, Siemens, CoreTechnologies, Datakit, Elysium, Jotne, Kubotec, Open Design Alliance, PDTEC, prostep, T Systems

The 22nd September roundtable was the first roundtable where the PDM-IF presented their results at the same time as CAX-IF & EWIS-IF presentation. The CAX-IF presented its 50th test round results. Congratulations on this achievement!

New Recommended Practises have been published in November 2022:

- [AP242](#) Ed.3 Domain Model XML Product & Assembly Structure
- [AP242](#) Ed.3 Domain Model XML Kinematics

PDES Offsite LOTAR Workshop 18th - 23th September 2022 in Charleston



After 2,5 years we had the chance to meet for the first time face-2-face at Mount Pleasant/Charleston in South Carolina.

It was a very good opportunity to discuss face-2-face with colleagues and other working groups. New participants from Bell Flight joined the discussions.

Parallel to this event the **PDES board** met where the participants had the opportunity to visit B787 Final Assembly line.

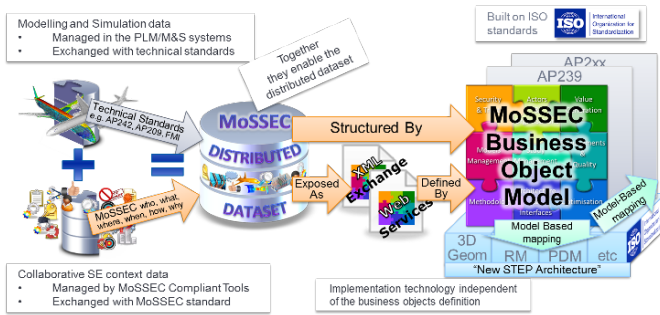
The event was closed by the PDES Technical Advisory Committee (TAC). AFNet & prostep ivip presented their engagement and the PDES activities were reviewed.

Lockheed Martin explained how they retired their mainframe (servers) and migrated their content toward STEP database to fulfil requests of aircraft operators.

During the evening session, Greg Weaver from Gulfstream presented their success story about digitalizing 2D and legacy data. They explained that it is now possible for them to make extended searches on drawings and Bill of Materials (e.g.: part number, serial number, etc.).



STEP AP243 - MoSSEC



Increasing understanding of the need to manage complexity at many major engineering organisations has led to a high level of interest in the MoSSEC (Modelling and Simulation information in a collaborative Systems Engineering Context) ISO 10303-243 standard. Its nature is to provide an enterprise level, collaborative metadata layer to record context and thus increase knowledge, improve decision making, reduce lead times and improve traceability throughout the product life cycle.

This is being progressed on many fronts, but a key event to note will be a MoSSEC workshop, taking place at the INCOSE International Workshop in Torrance, California at the end of January. This will be an open forum with some work in progress presentations, discussions and calls for input and collaboration. It will take place on Monday 30th January from 10:30 local time (apologies for the inconvenient timing for European virtual attendees; this was dictated by room availability at a very busy event).

<https://www.incose.org/iw2023/event-schedule>

In particular the Interoperability Forum will be launched here, with initially monthly meetings to gather input, comment, questions and reports on progress on MoSSEC implementation in the systems engineering community. We hope to increase knowledge exponentially via this approach and to gather input for the documentation that is clearly needed for MoSSEC.

We hope to see many of you there!

GPDIS 2022



PLM Roadmap 27th September
[GPDIS](#) 28th - 30th September

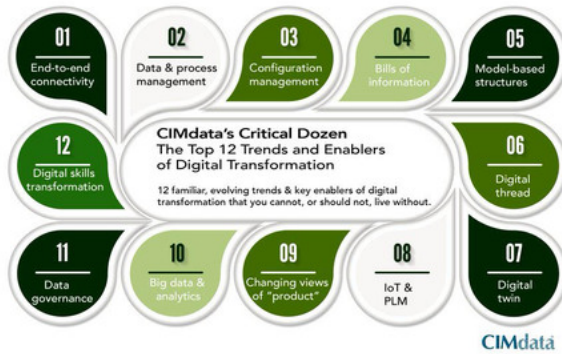
The topic of discussion was on data resilience for sustainability, with several tracks covering model-based system engineering, emerging technologies, developments and operations, 3D-model based definition, and digital twins.

As Airbus representative, Kyle Hall presented the MoSSEC standard and its importance to the industry (MoSSEC is an ISO STEP standard for exchanging model metadata).

Other key elements of interest: Northrop Grumman indicated interest in joining the MoSSEC development team alongside Airbus & Boeing.

Through this event, Airbus showed its ambition to lead the deployment of a common metadata language for Engineering. However, we would like to extend our presence to this summit in 2023 with more Airbus representatives.

CIMdata PLM Roadmap & [PDTEurope](#) 18th & 19th October 2022 in Gothenburg



Webinar: CIMdata's Critical Dozen: The Top 12 Trends & Enablers for Digital Transformation
November 10 | 11:00 AM EST | 8:00 AM PST | 17:00 CET [LEARN MORE](#)

After postponed physical meetings during the last years due to Covid-19 around 200 people attended the event organized by CIMdata which took place at Lindholmen Conference Center in Gothenburg Sweden.

The day before Eurostep organized a small workshop with Dr. Erik Herog from Saab Aeronautics to discuss Federated PLM Systems:

- Data Linking
- Deployment of Standards
- Identity & Access Management

Participants were from aerospace, automotive, ship building, network system providers and universities.

During the 2 days an interesting [agenda](#) was moderated by CIMdata & Eurostep.

As an introduction Peter Biello talked about the “Critical Dozen” which should be taken into account during digital skill transformation.

Volvo Group presented their PLM transformation journey into the digital future.

The event also offers several IT vendors to present their portfolio.

ThyssenKrupp Steering (Presta) presented about Engineering Processes with System Lifecycle Management.

Kyle Hall presented about MoSSEC and the Importance of PLM Data Interoperability in a Future Sustainable and Connected World.

Siemens Energy talked about Digital transformation in customer service business at Siemens Energy. Very interesting were their experiences about the Industrial Metaverse. They also showed the challenges they have with historic data from several decades and former companies.

From Aerospace & Defence PLM Action Group 3 presentations were held:

- Robert Rencher - Digital Twin
- Kenny Swope & Jim Roche - A&D PLM Action Group





- Bernd Feldvoss - Global Collaboration

Erik Herzog from Saab Aeronautics presented about Federated PLM and usage of standards like for example OSLC for data linking.

From a completely different area a presentation of European Spallation Source was given including Digital Twin (Plant Layout BIM etc.).

Stefaan van Hooydonk from Global Curiosity Institute held a very inspiring talk about motivation of employees.

It was a great opportunity to talk and discuss with colleagues face-to-face again.

Gaia-X Summit in Paris



17th & 18th December 2022 the 3rd GaiaX Summit took place in Paris. [Presentations](#) & [videos](#) could be found on the event webpage.

300 people physically joined the event in Paris and around 4000 participated remotely.

During the first day a demo of Gaia-X implementation and Technology Showcases were presented. In the afternoon session several branches presented their status:

- Health
- Finance/Banking
- Energy/Sustainability
- Tourism

The second day focused on the lighthouse projects and as introduction Catherine Jestin Airbus CIO talked about Aerospace [Challenges](#) (Extended Enterprise, Sustainability etc.).

The following lighthouse projects were presented:

- Agdatahub
- Catena-X
- ELINOR-X
- EONA-X
- EuProGiant
- Mobility Data Space
- Smart Connected Supplier Network
- Structura-X

[Catena-X](#) establishes [First International Hub](#)

For our global way forward, we found strong partners in France. The PFA and GALIA will coordinate our new regional Hub in France.

For our global way forward, we found strong partners in France: During the Gaia-X Summit, the signing ceremony for the first Catena-X hub took place.



The two [associations](#)

- Plateforme Filière Automobile PFA, which represents 4000 companies in the automotive sector across the country, and
- GALIA, a long-time player in the field of data exchange standardization

...will represent Catena-X locally and connect companies, key players in the data economy and software development as well as use cases from the French automotive industry.

The automotive value chains are international. Integrating various international perspectives to the Catena-X Automotive Network will be gradually and strategically built up. To prepare for this the Catena-X Automotive Network e.V. is working on a strategic framework for global growth with committed partners that support and enable the regional roll-out of Catena-X as well as the decentralized implementation. The establishment of the first Catena-X-Hub in France is an important milestone in this endeavour and a precursor to a future international Catena-X hub network."

The goal of the French hub is to give visibility to the Catena-X data ecosystem in France, expand the network, develop new use cases for the local industrial community, and create synergies within the French ecosystem.

Next events:

- ASD SSG physical workshop in London (BAE Systems): 11th & 12th January 2023
- LOTAR March workshop in Toulouse: 20th to 23th March 2023
- prostep ivip Symposium in Stuttgart: 3th & 4th May 2023
- AFNeT Standards Days 2023: 8th & 9th June 2023
- ISO TC 184 Super Meeting in Paris, 11th to 17th June 2023



