WORK PROGRAMME

FOR 2021 AND BEYOND
# Table of Contents

## About ASD-STAN

ASD-STAN in a nutshell .................................................................................................................. 2
Our deliverables .............................................................................................................................. 3
10 domains of activity ................................................................................................................... 6
ASD-STAN Technical Authority .................................................................................................. 7

## Our work programme

Domain D01 “Programme Management and System Engineering” ............................................. 9
Domain D02 “Electrical” .............................................................................................................. 12
Domain D03 “Mechanical” ........................................................................................................ 19
Domain D04 “Material” ............................................................................................................. 22
Domain D05 “Autonomous Flying” ............................................................................................ 26
Domain D06 “Quality and Safety Management” ....................................................................... 29
Domain D07 “Digital Projects” ................................................................................................ 32
Domain D08 “Propulsion Systems” .......................................................................................... 34
Domain D09 “Environment” ..................................................................................................... 35
Domain D12 “Cabin” ............................................................................................................... 36

## Join us as a member

Benefits of ASD-STAN membership ....................................................................................... 39
Categories of membership ......................................................................................................... 40
Our members .............................................................................................................................. 41
About ASD-STAN

ASD-STAN is an industrial non-profit association (AISBL) that develops and maintains European standards for the European aerospace & defence industry.

ASD-STAN in a nutshell

As an associated body of CEN (European Committee for Standardization), ASD-STAN is the sole provider of European Norms (EN) and harmonised European norms (hEN) for the aerospace industry.

To enhance the competitiveness of the European aerospace industry, ASD-STAN established a protocol with CEN to shorten the European standardization process. As such, ASD-STAN publishes projected-EN standards (ASD-STAN prEN), which are technically identical to the final European Norm (EN). Our cooperation with CEN ensures compliance with the openness and transparency requirements for standard development included in the Regulation (EU) 1025/2012, WTO/TBT Agreement, and the relevant provisions of CEN-CENELEC Internal Regulations.

To date ASD-STAN has published 2550+ European Standards (EN) and has more than 500 undergoing projects, which are in the process of being published as EN standards.

Our values of openness, transparency, consensus and balance are at the core of our Working Groups. By bringing together experts and industry from all across Europe, we guarantee the safety of our standards by having Original Equipment Manufacturers (OEMs) and Type Certificate (TC) holders chairing our Working Groups and Domains.
Our deliverables

**ASD-STAN projected European Norm (ASD-STAN prEN)**

The ASD-STAN prEN (projected European Norm) is an early publication of the CEN EN. ASD-STAN prENs are technically identical to the future EN publications by CEN members. All the European Standards (EN) that are comprised between EN 2000 and EN 9999 originate from ASD-STAN. Lastly, ASD-STAN prEN publications can be used for training and/or certification purposes.
After 6 months an ASD-STAN prEN is transformed into its final EN form. The transformation process is shown in the graph below:

Once ratified, an EN results in:

- Publication of a publicly available standard - owned, maintained, and distributed by 34 European National Standardization Bodies;
- Withdrawal of all competing National Standards by the National Standardization Bodies within six months;
- Incorporation into European legislation thereby re-enforcing its worth;
- Certification by ASD-CERT at a much-reduced cost to the industry.

**ASD-STAN Technical Report (TR)**

A TR is an informative document that provides information on the technical content of standardization work.

A TR is published when the subject covered is still under technical development and requires wider exposure, but still needs to be laid down for further development.

The TR is an informative publication containing collected data of a different kind, which currently cannot be published as European Standard (EN). A TR may include, for example, data obtained from a survey carried out among members, data on work in other organizations, or data on the “state-of-the-art” in relation to national standards on a particular subject.
The ASD-STAN Technical Report process is described in the below graph:

ASD-STAN TRs are not transformed into CEN TR and are part of the 5 years periodic review process.
10 domains of activity

We manage standardization projects in 10 domains, sub-divided into 45 active working groups:
ASD-SPAN Technical Authority

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Our work programme

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1 This document was created with the support of ASD-STAN experts
Domain D01 “Programme Management and System Engineering”

Contacts:

- Domain Technical Coordinator: Gilles Beuzelin, Framatome, France
- Domain Secretariat: Marina Epis, BNAE, France
- Executive Managers: Paul-Alexander Cramers, Vanessza Hegykozi, ASD-STAN

Domain scope:

The D01 Domain addresses the processes contributing to the delivery of a given system and its associated enabling systems required for production and logistical support to aerospace programmes. The objective of the D01 domain is to optimise the development of programme management and systems engineering best practices.

The operational target readership for the programme management includes, but is not limited to; programme breakdown structures, development logic with synchronisation reviews (project and systems maturity reviews), risks, cost estimation, configuration and other areas that fall under the responsibility of the Programme Management Team.

The operational target audience for Systems Engineering technical processes includes, but is not limited to: the expression of needs from a stakeholder’s point of view, the definition of the system during various stages of design maturity, system security & safety, industrialisation practices from the system definition to the production end of life, the relationship with the production process, the capabilities of the logistic system to support the system, and how to ensure that the system complies with Qualification and Certification processes.

Both the Programme Management and the Systems Engineering practices are interlinked and shall cover the full life cycle (from the idea to disposal) of the system required. Domain D01 is currently comprises six active Working Groups.

Active Working Groups:

- **D01/WG11 “System definition and realization”**
  Convener: Gilles Beuzelin, Framatome, France

Scope:

ASD-STAN Working Group D01/WG11 works on standardizing the life cycle process of a product (tangible or intangible) – development, industrialization and production – from the analysis of operational needs to operational qualifications (potentially including certification). Examples of published standard by D01/WG01:

- ASD-STAN prEN 9215 “Programme Management – Design justification and qualification - A guide to drawing up the design justification plan and of the design justification file” (to be published in 2021)
• **D01/WG12** “Programme phasing and planning”  
  Convener: Gilles Beuzelin, Framatome, France

**Scope:**
ASD-STAN Working Group D01/WG12 works on standardizing common repositories between the various actors intended to coordinate (synchronisation and sequencing) all the activities of a programme.

**New projects for 2021 and beyond**
ASD-STAN prEN 92xx “Programme management – Programme execution logic”

• **D01/WG13** “Configuration management”  
  Convener: Gilles Beuzelin, Framatome, France

**Scope:**
ASD-STAN Working Group D01/WG13 works on standardizing configuration management. It consists of managing the technical description of a system (and its various components), as well as managing all the changes made during the evolution of the system and the set of processes that ensure a product’s compliance with the requirements throughout its life cycle.

**Main standardization activities:**

ASD-STAN prEN 9223-100 (P1) “Programme Management — Configuration Management — Part 100: A guide for the application of the principles of configuration management”

- Part 101: Configuration identification
- Part 102: Configuration status accounting
- Part 103: Configuration Verifications, Reviews and Audits
- Part 104: Configuration Control
- Part 105: Glossary

**New projects for 2021 and beyond**
Next projects planned for 2021 is the revision of ASD-STAN prEN 9223 series dealing with Configuration Management (part 100 to 105)

New project planned for 2021 is the realization of “Part 106: Configuration planning guide”

• **D01/WG14** “Risk management”  
  Convener: Gilles Beuzelin, Framatome, France

**Scope:**
ASD-STAN Working Group D01/WG14 works on standardizing the risk management (integral part of programme management). It should be implemented right from the start of the project feasibility phase and continue through to material disposal. The goal is to contribute to an appropriate definition of programme objectives (costs, schedules and performances ...) and to continuously ensure that they are met or enhanced, despite any events likely to affect the programme through its lifecycle.
New projects for 2021 and beyond

- **D01/WG15** “ILS and Obsolescence Management”  
  Convener: Gilles Beuzelin, Framatome, France

**Scope:**  
ASD-STAN Working Group D01/WG15 focuses on creating standards on the topic of Integrated Logistics Support (ILS); a set of techniques used for defining the support system that will be associated with the main system. ILS standards for support systems are developed during the design of a system or as soon as the need for the user is identified. ILS support aims to influence the definition of the main system to achieve better readiness while controlling the overall cost of ownership.

- **D01/WG16** “Reliability, availability, maintainability and safety (RAMS)”  
  Convener: Gilles Beuzelin, Framatome, France

**Scope:**  
The success of a programme is reliant on optimising the trade-off between the product’s production lead-time, cost, and the expected technical and operational performance required (for given conditions). RAMS (Reliability, Availability, Maintainability, Safety) are inherent product or system attributes that should be considered throughout its lifecycle. In this context, RAMS management of the products is a key activity which cannot be separated from other product performance control or programme management methods.
Domain D02 “Electrical”

Contacts:
- Domain Technical Coordinator: Didier Dejardin, Dassault Aviation, France
- Domain Secretariat: Philippe Thomas, BNAE, France
- Executive Manager: Paul-Alexander Cramers, Vanessza Hegykozi, ASD-STAN

Domain scope:
The ASD-STAN Domain D02 "Electrical" covers the European standardization activities in the field of electrical parts, components and systems for aerospace applications.

The Domain develops and maintains European Standards (ENs) for electrical cables, stripping tools, connectors, contacts, accessories and crimping tools, protection system (circuit breakers, etc.), optical components and much more for the aerospace industry through its 10 active working groups. Furthermore, our D02 “HVDC group” defines the strategy and the standardization activities related to the use of HVDC for applications in aircrafts and aerospace constructions, which will be handled by the different working groups of ASD-STAN D02 Electrical domain.

The participants in ASD-STAN D02 “Electrical” domain are all experts from the major OEMs and suppliers from the European aerospace industry.

Active Working Groups:
- **D02 High-Voltage Direct Current (HVDC) group**  
  Convener: Christian Donadille, Airbus, France

Scope:
The present move to more-electric aircraft systems (A380, B787, A350) involves replacing hydraulic and pneumatic powered systems by electric powered ones (e.g. bleedless, starter APU) and will require a significant power increase. These more-electric (non-propulsion) aircraft systems are implemented using the present 230VAC and in the future using +/-270VDC voltage systems. This tendency and the new eco-efficient rules brought forward the importance of creating a specific group focusing on HVDC strategy within the ASD-STAN Electrical domain. The ASD-STAN group on High Voltage defines the strategy of implementing new systems and further developing associated components to be handled by the different working groups of ASD-STAN/D02 “Electrical”.

The group will start by covering voltage levels ranging from 270V DC to 1500V DC (e.g. E-FanX on BAE 146), including 800V DC level (e.g. City Airbus and PopUp). However, in the future, our HVDC group’s work could potentially evolve to cover much higher voltage levels of up to multi-thousands of volts (i.e. 3 to 5 kV) that will be that will be required for propulsion systems on commercial aircrafts. The access to this strategic group is limited to the OEMs, TC holders, system designers and regulators.
**D02/WG01 “Electrical Network”**  
Convener: Paul Miller, Rolls-Royce, UK

**Scope:**
ASD-STAN Working Group D02/WG01 represents the interests for the European standardization activities in the field of electrical networks for aerospace applications. ASD-STAN’s D02/WG01 defines the requirements for Characteristics of Aircraft Electrical Supplies, Aircraft Electrical Power Systems, Testing Methods for Aircraft Wiring systems, Electrical Bonding methods of aircraft structures and equipment, as well as Electrical System Load Analysis documents. In addition, it is the focal point for the standardization activities supporting the up to multi-kV future electrical power systems that are envisaged for aircraft propulsion and will lead ASD-STAN HVDC related work.

**Main standardization activities:**
- EN3371 “Electrical Bonding – Technical Specification” published as full EN
- EN3830 “Electrical System Load Analysis” completed Formal CEN vote
- D02/WG01 is currently drafting a Technical Report on High Voltage Systems under the umbrella of the ASD-STAN HVDC group

**New projects for 2021 and beyond**
In the upcoming months, D02/WG01 will work on updating EN2282 "Characteristics of aircraft electrical supplies" and EN2283 “Testing of Aircraft Wiring”.

**D02/WG02 “Cables & Stripping Tools”**  
Convener: Pierre Baena, Airbus, France

**Scope:**
The ASD-STAN Working Group D02/WG02 represents the interests for the European standardization activities in the field of “Wires and Cables and associated stripping tools” for aerospace applications. Its work covers the different models of cables (e.g. single conductor, multiconductor, coaxial) as well as their nature (e.g. copper, aluminium, coated or unclad) and models of electrical conductors (e.g. stranded conductors, braided strands, solid conductors) used for the distribution of electricity in aircrafts for various applications (e.g. data bus, transmission line) and according to the environment (e.g. low pressure, high temperature). This Working Group covers the distribution of signals and power and as such is also working on topics related to high voltage. However, fibre optic cables are not covered by this working group (see instead D02/WG10 “Optical Components”). The various types of documents this working group produced are the following:

- Technical specifications and standards for cable characteristics
- Technical specifications and standards for conductor characteristics
- Standards for test methods for cables and conductors
- Standards for cable markings
- Standard for stripping cables

**New projects for 2021 and beyond**
D02/WG02 will be working on the following projects for the upcoming months:
- Cable Fire resistant test methods (EN 3475-408 and 3475-417)
- Laser marking for cable printing
- EN 4650: Wire and cable marking process, UV Laser
- EN 3838: Requirements and tests on user-applied markings on cables
The Working group supports and contributes to the electrification strategies cascading from D02/WG01 and sustain the highest standardization product level (i.e. prepare identification of products and test methods to support Higher voltage needs) also coordinates with the SAE relevant committees.

- **D02/WG03** “Elements of Connection (Connectors, Contacts, Rear Accessories, Crimping Tools)”
  Convener: Steffen Ohde, Airbus, Germany

**Scope:**
The ASD-STAN Working Group D02/WG03 represents the interests for the European standardization activities in the field of electrical connectors for aerospace applications. The Working group covers the different models of connectors (e.g. rectangular, circular, coaxial, quadrax) as well as the various models of associated contacts for the distribution of electricity in aeronautical constructions (e.g. coaxial, quadrax, solder, crimp) for diverse applications (e.g. ethernet, high frequency transmission,...) and depending on the environment (e.g. engine, landing gear,...). The Working group also covers accessories (e.g. backshell, grommet, fittings) and contacts (e.g. barrel, chamfer, flange) as well as crimping tools. Although the working group activities cover the distribution of signals and power, Optical connectors and contacts are not covered by this working group. Lastly, D02/WG03 is involved at the domain level on ASD-STAN’s activities on the topic of High Voltage (HVDC). The various types of documents this working group produce are the following:

- Technical specifications and standards for contact characteristics
- Technical specifications and standards for connector characteristics
- Standards for test methods on contacts and electrical connectors

**Main standardization activities:**
- **EN 3155-xxx "Electrical contacts":** This standard series contains one Technical Specification (TS) and more than 80 standard products, describing the technical performance and design of all contacts used in EN specified elements of connection.

- **EN 4873-xxx “Hand crimping tools”:** Airbus and RENNSTEIG initiated a project to develop a European standard for hand crimp tools as counterpart to the famous US based M22520 standard for those tools.

- **REACH compatible standards:** To respect the European regulations regarding REACH, several standards were updated to restrict the use of hexavalent chromium compounds during the manufacturing process or in the final product. Therefore, new classes V and Z (both zinc-nickel plating’s) were introduced in standards like EN3645 and EN3660.
New projects for 2021 and beyond

D02/WG03 will be working on the following projects for the upcoming months:
- Discussing the specific requirements for standard parts and the influence of test methods and installation concepts in aircrafts for voltage levels of 270V (HVDC)

- **D02/WG04 “Relays, Switches, Push-Buttons”**
  Convener: Tony Barnett, Barnbrook Systems, UK

  **Scope:**
  The ASD-STAN Working Group D02/WG04 represents the interests for the European standardization activities in the field of electrical connectors for aerospace applications. The Working Group covers electromagnetic relays as well as switches and their associated accessories (e.g. relay contactor, pushes button switches) used in aeronautical constructions. Lastly, D02/WG04 is involved at D02 domain level on ASD-STAN’s activities on the topic of High Voltage (HVDC). The Working Group produces the following types of documents:
  - Test method standards for relays and switches.

- **D02/WG05 “Protection Devices”**
  Convener: Dominique-Robert Meux, Crouzet, France

  **Scope:**
  ASD-STAN’s Working Group D02/WG05 represents the interests for the European standardization activities in the field of protection of electrical equipment for aerospace applications. The Working group covers the different types of electromechanical circuit breakers (e.g. thermal, magnetic) used in aeronautical construction for the protection of electrical equipment in the event of an anomaly (e.g. arc faults). However, D02/WG05 does not cover other protection systems such as fuses. Lastly, D02/WG05 is involved at the domain level on ASD-STAN’s activities on the topic of High Voltage (HVDC). The various types of documents this working group produce are the following:
  - Technical specifications and standards for circuit breakers characteristics
  - Standards for test methods on circuit breakers

New projects for 2021 and beyond

- Update EN 3773 / 3774 / 3661 / 3662 (Circuit breakers)
- Update EN 2995 and 2996 (Circuit breakers) for vibrations
- EN 2995 Full FASTON for signal contact blades
- Technical Report (TR) for probability of failure modes of circuit breakers
- Update 3841-100 (test method for FASTON)
• **D02/WG06** “Exterior and cockpit lighting (Lamps, LED, etc.)”
  **Convener:** Lieven Desmet, Airbus Helicopters, Germany

**Scope:**
ASD-STAN’s Working Group D02/WG06 represents the interests for the European standardization activities in the field of exterior and cockpit lighting for aerospace applications. In the past, the work of D02/WG06 was responsible for lighting standardization projects for both “Exterior” and “Cabin”. However, as most recent projects of this Working Group mostly focused on cabin lighting only, in 2018, the work and experts of D02/WG06 was transferred to ASD-STAN Working Group D12/WG04 “Displays, projection and interior lighting” and the scope of D02/WG06 was redefined to only cover “exterior and cockpit lighting”.

**New projects for 2021 and beyond**
- LED lighting
- New lighting systems using laser
- Outboard laser projections

• **D02/WG07** “Batteries”

**Scope:**
ASD-STAN Working Group D02/WG07 represents the interests for the European standardization activities in the field of batteries for aerospace applications. The Working Group is currently dormant and can be reactivated upon request.

• **D02/WG08** “Installation technologies”
  **Convener:** Rolf Cordes, Airbus, Germany

**Scope:**
The ASD-STAN Working Group D02/WG08 represents the interests for the European standardization activities in the field of electrical installation technologies for aerospace applications. ASD-STAN’s D02/WG08 work covers the techniques, recommendations and the parts which make it possible to ensure that the data and power distribution parts of the electrical and optical systems of aeronautical and space constructions are attached (e.g. cable ties, terminal lugs) and protected (e.g. sleeves and sleeving for flame resistance, fluids) in the event of an external aggression. The various types of documents this working group produce are the following:

- Characteristics and test method standards for harness wiring hoops, lugs, and protective sheaths.
- Characteristics standards for aircraft bonding braids and sleeves.

**Main standardization activities:**
- EN 2591 series “Aerospace series — Elements of electrical and optical connection — Test methods”
- EN 3197 “Aerospace series — Design and installation of aircraft electrical and optical interconnection systems”
- EN 4708 series “Aerospace series — Sleewing, heat-shrinkable, for binding, insulation and identification”
- EN 4840 series “Aerospace series — Heat shrinkable moulded shapes”
- EN 6049 series “Aerospace series — Electrical cables, installation — Protection sleeve in meta-aramid fibres”
- EN 6059 series “Aerospace series — Electrical cables, installation — Protection sleeves — Test methods”

**New projects for 2021 and beyond**

In the coming months, D02/WG08 will be following the ongoing discussions on test methods and installation rules:

- EN 2591-217 (P2) "Aerospace series — Elements of electrical and optical connection; Test methods — Part 217: Voltage drop under specified current for terminal lugs and in-line splices"
- EN 3197 (P5) “Aerospace series — Design and installation of aircraft electrical and optical interconnection systems”
- EN 4708-003 (P1) “Aerospace series — Sleewing, heat-shrinkable, for binding, insulation and identification — Part 002: General”
- EN 6059-505 (P1) “Aerospace series — Electrical cables, installation — Protection sleeves — Test methods — Part 505: Lightning strike”

- **D02/WG10 “Optical Components”**
  Convener: Stéphane Formont, Thales, France

**Scope:**

ASD-STAN Working Group D02/WG10 represents the interests for the European standardization activities in the field of optical components for aerospace applications. ASD-STAN’s D02/WG10 covers fibre optic cables, the different types of optical fibres (e.g. single mode and MT) as well as the various connectors and associated contact accessories (e.g. physical contact, non-contact expanded beam termini) used for distribution of high-speed data in aeronautical constructions. The various types of documents this working group produce are the following:

- Technical specifications and standards for optical fibre cables
- Test methods standards for optical fibre cables as well as associated contacts and connectors
- Handbook for optical fibres applications in aerospace

**Main standardization activities under discussion:**

- EN 2591 series “Aerospace series - Elements of electrical and optical connection — Test methods”
- EN 3745 series “Aerospace series - Fibres and cables, optical, aircraft use – Test methods”
- prEN 3745-412: “Humidity resistance”
- EN 4869 series (Expanded beam termini, fibre optic nonphysical contact) in EN 3645 standard parts -100/ -101/ -102/ -103/ -104
- EN 4733 series (Connectors, optical, rectangular, modular, operating temperature 125° C, for EN XXXX-10X MT contacts) -001 / -002 / -003
- EN 4734 series (Mechanical transfer contact, fibre optic contact Multi connectors) in parts -101/ -102/ -103/ -104
New projects for 2021 and beyond

In the upcoming months, D02/WG10 will be working on the following projects:

Finalize EN 3745-xxx and 2591-xxx series and manage the process deployment on almost all standards and new studies to come:

- Ribbon cables (Multi fibre): single and multimode
- Expanded beam connectors: Single and Multi-mode as well as Single and Multi-pin
- Optical connectors for ribbon fibres: Single and Multi-mode in EN 4645
- Optical fibre: Improvement of transceiver data rate (>>10Gb/s) implies to normalize new 50/125 GI fibre-based cables able to handle such data rates (cables based on OM2, OM3 or OM4)

- **D02/WG12 “Modular & Open Avionics Architecture (MOAA)”**
  Convenor: Christian Kulig, Airbus Defence and Space, Germany

**Scope:**

ASD-STAN Working Group D02/WG12 represents the interests for the European standardization activities in the field of “Modular and Open Avionics Architectures (MOAA)”. For this working Group, the standardization of integrated modular Avionics architectures (IMA) is the priority objective. The project ASAAC (Allied Standard Avionics Architecture Council) – a trilateral research- and technology project from Germany, France and Greece – was one of the most important projects for the development and validation of the efficiency of IMA-architectures internationally until 2004. Standards and corresponding guidelines of an open Avionics architecture based on integrated modular Avionics were defined and documented. D02/WG12 converted those documents into European Standards and NATO STANAGs. The Current activity of D02/WG12 is to maintain the EN 4660 series (Aerospace series – Modular and Open Avionics Architectures).

**Main standardization activities:**

In 2019, the following standards were published:

- EN 4660-00x (P2) “Aerospace series - Modular and Open Avionics Architectures”, Part 003: Communications/Network; Part 004: Packaging; Part 005: Software

**New projects for 2021 and beyond**

- Revision of Parts 001 and 002/further work on EN4660 series depending on funding from the German Ministry of Defence
- New topic in discussion: standard for a transmission protocol for fast avionics networks.
Domain D03 “Mechanical”

Contacts:
- Domain Technical Coordinator: Dean Rogers, Airbus, UK
- Domain Secretariat: Dorothée Kretschmar, DIN NL, Germany
- Executive Manager: Paul-Alexander Cramers, Vanessza Hegykozi, ASD-STAN

Domain scope:
The ASD-STAN Domain D03 "Mechanical" covers the European standardization activities in the field of parts and technical requirements for aerospace mechanical systems, (e.g. bearings, rods, bushes, vibration isolators), fasteners (e.g. bolts, nuts, screws, washers, high-locks, quick fasteners, rivets), and fluid systems (e.g. couplings & fittings, clamps, flexible hoses, tubes).

The domain D03 prepare, update and revise standards and maintain them by users’ feedback and formulate the opinion of the aerospace sector on standards established by other authorized standardization development organizations.

Active Working Groups:
- **D03/WG01 “Parts of Mechanical Systems”**
  Convener: Markus Horst, Airbus, Germany

Scope:
The ASD-STAN Working Group D03/WG01 represents the interests for the European standardization activities in the field of parts of mechanical systems for aerospace applications. It prepares ASD-STAN prEN standards, EN-standardization projects and comments as well as participates in other European and International projects. The Working Group provides interested stakeholders the opportunity to actively work on standardization procedures, contribute their ideas and suggestions and take part in the information exchange between national experts. D03/WG01 is responsible for the standardization of bearings, rods, bushes, vibration isolators and other mechanical parts of systems.

The Working group is currently working on about 35 standards, mainly spherical bearings, tie rods and rod ends.

Main standardization activities:
Ongoing update of 6000 series standards to make them in line with the official ASD-STAN process in the way to become EN standards. All, especially old Airbus internally published standards which are going back to the 1970s, need to be transformed into the EN standards.

New projects for 2021 and beyond
- Update of Material Comparison List
- Creating an online catalogue for bearings
- Update on REACH conform standards
• **D03/WG02 “Fasteners”**  
  Convener: Jürgen Rösing, Howmet Fastening Systems, Germany

**Scope:**  
The ASD-STAN Working Group D03/WG02 represents the interests for the European standardization activities in the field of mechanical fasteners for aerospace applications. The Working Group provides interested stakeholders the opportunity to actively work on standardization procedures, contribute their ideas and suggestions and take part in the information exchange between national experts. D03/WG02 is responsible for the standardization of all kind of mechanical fasteners like bolts, nuts, screws, washers, pins, quick fasteners, rivets.

**Main standardization activities:**  
ASD-STAN Working Group D03/WG02 maintains and updates all relevant standards for all kind of mechanical fasteners used in aerospace. D03/WG02 is collaborating with D04/WG06 regarding the update of coating standards and with D03/WG04 generating a new kind of modular fastener standard system.

**New projects for 2021 and beyond**  
- Reduce and merge amount of existing standards  
- Support D03/WG04 in generating modular fastener standards.

• **D03/WG03 “Fluids Systems”**  
  Convener: Ulrich Müller, Airbus, Germany

**Scope:**  
The ASD-STAN Working Group D03/WG03 represents the interests for the European standardization activities in the field of parts of fluid system components for aerospace applications. The Working Group provides interested stakeholders the opportunity to actively work on standardization procedures, contribute their ideas and suggestions and take part in the information exchange between national experts. D03/WG03 is responsible for the standardization of tubes, ducts, fittings, couplings, caps, plugs and clamping devices.

**Main standardization activities:**  
Ongoing update of 6000 series standards to make them in line with the official ASD-STAN process in the way to become EN standards. All, especially current Airbus internally published standards which were developed in 1970s, need to be transformed into EN.

**New projects for 2021 and beyond**  
In the upcoming months, D03/WG03 will be working on the development of:  
- New fitting designs standards comply with the needs of hydrogen technology.  
- Technical and product standards reflecting new manufacturing processes (e.g. additive layer manufacturing ALM)  
- Standards for local power generation (e.g. Hydraulic Power Packs)
D03/WG04 “New product standards, REACH compatible”
Convener: Thomas Becke, Airbus Helicopters, Germany

Scope:
The ASD-STAN working group D03/WG04 represents interests for the European standardization activities in the field of European aerospace standards fulfilling the requirements of the Regulation (EC) No 1907/2006 - Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH). It prepares EN standardization projects and comments as well as participates in other European projects. The working committee provides interested stakeholders the opportunity to actively work on standardization procedures, contribute their ideas and suggestions and take part in the information exchange between national experts.

Main standardization activities:
Coordination with D03/WG02 for work and documents from the EN 7000 series.

New projects for 2021 and beyond
In the upcoming year, the Working Group will continue transforming French and German national standards into REACH compatible ENs, including the main document "Configuration master".
Domain D04 “Material”

Contacts:
- Domain Technical Coordinator: Alain Viola, Safran, France
- Domain Secretariat: Philippe Thomas, BNAE, France
- Executive Manager: Paul-Alexander Cramers, Vanessza Hegykozi, ASD-STAN

Domain scope:
ASD-STAN Domain D04 covers the European standardization activities in the field of materials for aerospace applications. Its work covers metallic materials (aluminium, steel, titanium, superalloys), non-metallic materials (elastomers, composites, sealants) as well as processes (surface treatments, welding and brazing, additive manufacturing). The Domain D04 is responsible for the coordination of the Domain related sector work and promoting the development of new innovative European standards for the Aerospace industry.

The Standardization Committee provides all interested groups the opportunity to actively work on standardization procedures, contribute their ideas and suggestions and take part in the information exchange between European and International Experts.

Active Working Groups:
- D04/WG03 “Steels”
  Convener: Thomas Garaix, Ugitech, France

Scope:
ASD-STAN Working Group D04/WG03 “Steels”, prepares, coordinates, and revises documents related to Corrosion and Heat Resistant Steels, Carbon, Low Alloy Steels and Alloys such as Stainless Steels. The Working Group activities shall provide the opportunity for sharing and exchanging knowledge and ideas to metals suppliers, users, and interested stakeholders that will result in the publication of specifications to serve all the supply chain of the aerospace industry.

Main standardization activities:
Revision of designation of steel grades.
Revision of tensile test requirements (EN 2002-001).

New projects for 2021 and beyond
Specification for higher diameter bars made of Steel (36NiCrMo16) and specification for a non-standardized aerospace Steel grade 4116N (1.4116).
• **D04/WG04 “Welding / Brazing”**  
Convener: Thibaut Larrouy, Safran Helicopter Engines, France

**Scope:**  
ASD-STAN Working Group D04/WG04 “Welding and brazing”, prepares, coordinates, and revises documents related to the definition of standards on welding, brazing and structural soldering for aerospace applications, specifying requirements concerning qualification of personnel, procedures, design; quality requirements for inspection, testing, equipment qualification and ground support equipment.

**Main standardization activities:**  
Revision of EN 3879 (technical specification for filler metals for welding) undergoing for the future replacement by EN 4877-001 (technical specification for filler metals for welding) and EN 4877-002 (list of authorized metals).

**New projects for 2021 and beyond**  
Revision of EN 3875 “technical specification for filler metals for brazing”.

• **D04/WG05 “Test Methods”**  
Convener: Vacant

**Scope:**  
ASD-STAN Working Group D04/WG05 represents the interest for the European standardization activities in the field of test methods of materials for aerospace applications. The Working Group is responsible for the definition of standards on general mechanical, physical and chemical testing of aerospace materials. General non-metallic or metallic test standards are written by D04/WG05. Test standards on one specific material only, with an existing ASD-STAN/D04/Working Group will be written by the existing Working Group that covers the specific material. The WG prepares ASD-STAN prEN standards, EN-standardization projects and comments as well as participates in other European and International projects.

**Main standardization activities:**  
The Working Group is drafting the first editions of:

- EN 4860 “Aerospace series — Environmental testing — Test Xb: Abrasion of markings, letterings, surfaces and materials caused by rubbing of fingertips and hand”
- EN 4876 “Aerospace series — Environmental testing — Durability of the displays by general usage”

The Working Group is revising:

- EN 6072:2010 “Aerospace series — Metallic materials — Test methods - Constant amplitude fatigue testing”
- ASD-STAN prEN 3874 (P1) “Test methods for metallic materials - Constant amplitude force-controlled low cycle fatigue testing”
New projects for 2021 and beyond
The Working Group will be checking the possibility to work on:

- EN 2824 series “Aerospace series — Determination of the smoke gas characteristics of cabin interior materials under pyrolytic decomposition”
- Revision of ASD-STAN prEN 3703 (P1) “Heat release rate for materials and products under the influence of radiating heat and flames - Test method”

- D04/WG06 “Surface Treatments”
  Convener: Véronique Marcel, Safran, France

Scope:
ASD-STAN Working Group D04/WG06 “Surface treatments” prepares, coordinates, and revises documents related to surface treatment processes, organic and inorganic coating products (including paints, varnishes, dry lubricants), coating methods and coating test methods. The Working Group writes standards on specification for definitions and general test methods for processes.

Main standardization activities:
Revision of EN 4474 (coating method for an Aluminium-based coating) and EN 6118 (Pure-aluminium coating) and EN 2516 (passivation).

New projects for 2021 and beyond
Specification for a chemical conversion coating onto magnesium.

- D04/WG08 “Composites”
  Convener: open vacancy

Scope:
ASD-STAN Working Group D04/WG08 “Composite” is responsible for developing and maintaining European standards for the use of composite materials in aerospace applications, including material and performance specifications as well as test methods. The Working Group scope includes the following topics: CMC (ceramic matrix composites), MMC (metal matrix composites), OMC (organic matrix composites), adhesives, honeycombs, test methods for non-metallic materials that are allocated to D04/WG08. Excluded topic: pure ceramics, anaerobic polymerisable compounds, pure textiles, aircraft glazing.

Main standardization activities:
Revisions of EN 2559 “Carbon fibre preimpregnates - Test method for the determination of the resin and fibre content and the mass of fibre per unit area”

New projects for 2021 and beyond
No projects.
• **D04/WG11 “Super Alloy”**  
  Convener: Marie-Agnes Mace, Aubert & Duval, France

**Scope:**  
ASD-STAN Working Group D04/WG11 “Superalloys” prepares, coordinates, and revises documents related to nickel or cobalt based alloys.

**Main standardization activities:**  
Editorial review of material standard prEN 2302 “Aerospace series — Heat resisting nickel base alloy Ni-Cr20Co3Fe3 — Rm ≥ 650 MPa — Sheets and strips, cold rolled — 0,25 mm < a ≤ 3 mm”.

**New projects for 2021 and beyond**  
No project.

• **D04/WG14 “Additive Manufacturing”**  
  Convener: Christoph Heine, Airbus, Germany

**Scope:**  
ASD-STAN Working Group D04/WG14 represents the European standardization activities in the field of additive manufacturing for aerospace applications. It prepares ASD-STAN prEN standards, EN standardization projects and participates in other European and international projects. The Working Group provides interested stakeholders the opportunity to actively work on standardization procedures, contribute their ideas and suggestions and take part in the information exchange between national experts.

**Main standardization activities:**  
prEN 4879-001 “AM-Mechanical properties of metallic products by power bed fusion”

**New projects for 2021 and beyond**  
Currently being defined.

• **D04/WG15 “Non-Destructive Testing »**  
  Convener: open vacancy

**Scope:**  
ASD-STAN Working Group D04/WG15 represents the interests for the European standardization activities in the field of Non-Destructive Testings for aerospace applications. The Group prepares ASD-STAN prEN standards, EN-standardization projects, as well as participates in other European and International projects. The Working Group provides interested stakeholders the opportunity to actively work on standardization procedures, contribute their ideas and suggestions and take part in the information exchange between national experts.

**Main standardization activities:**  
ASD-STAN prEN 4179 “Aerospace Series - Qualification and approval of personnel for non-destructive testing. This document establishes the minimum requirements for the qualification and certification of personnel performing non-destructive testing (NDT), non-destructive inspection (NDI), or non-
destructive evaluation (NDE) in the aerospace manufacturing, service, maintenance and overhaul industries”

EN4179 is recognised by the EASA - European Union Aviation Safety Agency via AMC 145.A.30(f) and AMC M.A.606(f) to be used for qualification of NDT personnel. The EN4179 should be used for the Training, Qualification and Certification of NDT personnel.
Domain D05 “Autonomous Flying”

Contacts:
- Domain Technical Coordinator: Fredrik Nordström, Airbus, Germany
- Domain Secretariat: Josef Saurer, DIN, Germany
- Executive Manager: Paul-Alexander Cramers, ASD-STAN

Domain scope:
The Domain D05 represents the interests for the European standardization activities in the field of aircraft, which are entirely autonomously or remotely controlled. This domain activity covers the open category of such systems as defined by the EASA Opinion 01/2018 issued in February 2018. It prepares ASD-STAN prEN standards, EN-standardization projects and comments as well as participates in other European and International projects.

Active Working Groups:
- **D05/WG08 UAS Unmanned Aircraft Systems**
  Convener: Christophe Mazel, Fédération Professionnelle du Drone Civil, France

Scope:
The Working Group represents interests for the European standardization activities in the field of unmanned aircraft systems (UAS) including, but not limited to, classification, design, manufacture, operation (including maintenance) and safety management of UAS operations.

As Unmanned Aircraft Systems (UAS) rapidly became a very significant component of both the civilian and military domain, the necessity for a detailed regulation on the matter has become an urgent issue for lawmakers to respond to the European civil society’s concerns about privacy, security, and safety impacts. To answer those concerns, the European Commission has published two regulations targeting the production of UAS and their operations by users: Commission Delegated Regulation (EU) 2019/945 of March 12, 2019 setting the requirements imposed to unmanned aircraft systems and Commission Implementing Regulation (EU) 2019/947 of May 24, 2019 on the rules and procedures for the operation of unmanned aircraft.

The European Commission has therefore requested the European Committee for Standardization (CEN) to deliver an EU harmonized standard to address the DRI requirements. Acting as the Technical body of CEN for Aerospace, ASD-STAN is therefore developing under “D05/WG08 UAS” set of standards (the EN4709 series) laying down technical specifications and/or the verification methods ensuring the compliance with regulatory requirements set by Chapter II of Regulation (EU) 2019/945.

Currently, the work of ASD-STAN D05/WG08 “UAS” focuses on the “Open” Category of UAVs. The “Open” category refers to all the drones used by hobbyists or professionals when the operations remain simple and safe for the public, which currently represent the biggest market share of drones in terms of volume. The manufacturers who are targeting this market will have the possibility to
“mark” their product with the class number identified in the OPEN category from C0 to C4, depending of the usage and the performances of the drone system. With this CE marking process, in short term the manufacturer will have a clear quality label to promote their product on the European market and the customers (remote pilots) will be allowed to fly with a simple registration to the authority. Over time, all the new drones’ designs that fall into the “Open” category will have to be marked with the level of compliance expected by the regulation to fly in Europe. The D05/WG08 is collaborating intensively with regulators (EC, EASA) and key industrial stakeholders to achieve its goal to deliver the UAS standards for CE marking. Furthermore, the Working Group experts are liaising with their counterparts at ASTM to ensure the technical compatibility of both standards.

Main standardization activities:
EN 4709 series — UAS product requirements, CE marking and operating rules for the Open category (harmonized European standards)

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<tr>
<th>Reference</th>
<th>Description</th>
<th>Status</th>
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<tr>
<td>prEN 4709-001</td>
<td>Aerospace series - Unmanned Aircraft Systems — Part 001: Product requirements and verification</td>
<td>Public Enquiry planned early 2021</td>
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<tr>
<td>prEN 4709-002</td>
<td>Aerospace series - Unmanned Aircraft Systems - Part 002: Direct Remote identification</td>
<td>Public Enquiry launched 3 Dec 2020</td>
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<td>prEN 4709-003</td>
<td>Aerospace series - Unmanned Aircraft Systems - Part 003: Geo-awareness requirements</td>
<td>Public Enquiry launched 3 Dec 2020</td>
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<td>prEN 4709-004</td>
<td>Aerospace series - Unmanned Aircraft Systems - Part 004: Lighting requirements</td>
<td>Public Enquiry launched 3 Dec 2020</td>
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New projects for 2021 and beyond
New standards and revisions to take into consideration products and low risk operations in the Specific category (class C5 & C6).
Domain D06 “Quality and Safety Management”

Contacts:

- Domain Technical Coordinator: Fabrizio DIDO, Safran Landing Systems, France
- Domain Secretariat: Marina Epis, BNAE, France
- Executive Manager: Paul-Alexander Cramers, Vanessza Hegykozi, ASD-STAN

Domain scope:

The ASD-STAN D06 Domain “Quality and Safety Management” covers both aspects of Quality and Safety, the latter mainly meant as Certification.

The D06 addresses the development and maintenance of all Quality and Safety related documents in the area of Organisation and product assurance. It defines their respective objectives, policies, requirements, and implementation standards to achieve the defined “Quality” and “Safety” objectives throughout the complete life cycle of the products.

For the “Quality” part the domain mirrors the activities of the International Aerospace Quality Group “IAQG” and represents the European sector (EAQG) of IAQG to define the European position on the IAQG initiatives. IAQG develops standards, partly as extension to existing quality management systems, to implement initiatives that make significant improvements in quality and reductions in cost throughout the value stream by establishing and maintaining dynamic cooperation, based on trust, between international aerospace companies. The objectives of IAQG, covered in the ASD-STAN domain are:

- To establish commonality of aviation, space, and defence quality systems, “as documented” and “as applied”;
- To establish and implement a process of continuous improvement to bring initiatives to life (e.g. Industry expectations, lean manufacturing, performance metrics);
- To establish methods to share best practices in the aviation, space and defence industry;
- To coordinate initiatives and activities with regulatory/government agencies and other industry stakeholders, aiming at the consideration of respective standards as acceptable means of compliance.

For the “Safety” part, under the umbrella of the ASD Airworthiness Committee, the domain acts through the development of standards and their publication process in the field of the Design Organization Approval. Within this context and in the overall field of the “DOA Think Tank” activities, some European Norms have been already published and other are under development. Discussions were started with EASA to consider them as Acceptable Means of Compliance.

A common set of requirements are prepared within EASA, EAQG and the aerospace industry to progress towards the common goal of “simplification” via minimum requirements, guidance materials and the creation of industry standards.
**Active Working Groups:**

- **D06/WG01** EAQG European Aerospace Quality Group  
  Convener: Jörg Werner, Airbus, EAQG

**Scope:**  
This working group is a mirror committee that covers the IAQG initiatives ballot and publication processes for Europe (EN 9100 series). IAQG is responsible for the development of the 9100 series of quality management standards. In Europe, the ballot and publication processes are managed by ASD-STAN.

**Main standardization activities:**

- ASD-STAN prEN 9104-1 “Requirements for Aerospace QMS Certification / Registration Programs”
- ASD-STAN prEN 9104-3 “Requirements for Aerospace Auditor Competency and Training Courses”

**New projects for 2021 and beyond**

- Update of ASD-STAN prEN 9103 - Aerospace Series - Quality Management Systems - Variation Management of Key Characteristics
- Update of ASD-STAN prEN 9114 - Direct Ship Guidance for Aerospace Companies
- Update of ASD-STAN prEN 9145 - Aerospace Series - Requirements for Advanced Product Quality Planning and Production Part Approval Process
- New ASD-STAN prEN 9147 - Management of unsalvageable items
- New ASD-STAN prEN 9163 - Certificate of Conformance requirement

- **D06/WG04** Design Organisation Approval (DOA)  
  Convener: Gilles Fontaine, Airbus, France / Vice-convener: S. Boussu, Airbus, France

**Scope:**  
As European Aerospace Industry initiative, with an objective to ease the interface between DOA Holders and their design Suppliers as regards to specific topics that often generate challenges when complying with the relevant sections of EASA Part 21 DOA, the ASD Airworthiness Committee gave the mission to the DOA Think Tank to develop DOA guidelines.

The ASD-STAN Working Group D06/WG04 is a mirror committee to cover the DOA Think Tank initiatives (to develop DOA guidelines) ballot and publication processes (prEN 925x series or TR 925x series).

**Main standardization activities:**

**ASD-STAN TR 925x “Competence Management”**

Terms of Reference agreed by ASD Airworthiness Committee issued in April 2019.

WG activities put on hold in March 2020 due to resources issue in the context of Covid-19 pandemic.

The scope of this standard: management of competence in the Engineering domain in organisations designing products, parts and appliances.

Purpose is to:
- Provide guidance regarding assessment, recognition and maintenance of Engineering competence within Approved Design Organization, including subsequent recognition in cascade within their design suppliers;
- Share best practices among European Aerospace Industry;
- Use common principles for design supplier surveillance.
EASA agreed in principle to recognize the following D06/WG04 DOA standards to be used to demonstrate compliance with EASA Part 21 relevant requirements:

- ASD-STAN prEN 9250 “Test organisations — General requirements for test process and capabilities”
- ASD-STAN prEN 9251 “Flammability Test Organisations Specific requirements for test process and capabilities”
- ASD-STAN prEN 9252 “Repair design management and approval”
- ASD-STAN prEN 9255 “Acceptance of supplier’s design capabilities and management of Design Organisation authorisations”

**New projects for 2021 and beyond**

✓ Ongoing discussions with EASA for the formal recognition of the following standards should be set up:

- TR / prEN 9250 “Aerospace series - Test organisations - General requirements for test process and capabilities”
- TR / prEN 9251 “Aerospace series - Flammability Test Organisations Qualification Standard”
- TR / prEN 9252 “Aerospace series - Repair design management and approval”
- TR/ prEN 9255 “Aerospace series - Acceptance of supplier’s design capabilities and management of Design Organisation authorisations”

✓ TR 925x “Competence Management” drafting should be resumed with a target to get a mature draft by the end of this year to launch the ballot in Quarter 1/2022.

✓ Resume discussions with EASA in the view to clear their adverse comments against prEN 9253 “Aerospace series – Surveillance of Design Suppliers” and to obtain their acceptance.

✓ Explore opportunity and feasibility to develop awareness/training material on Part 21 DOA and on SMS.

- **D06/WG05 Relation EN 9100 and Part21 (step1 DOA)**
  **Convener: vacant**

This Working group was started with the initial objective of identifying and creating an overall cross-matrix between paragraphs of the EN 9100 and the EASA Part 21. This activity went through almost all the 2019 and did not continue in 2020 due to a question on the overall scope of activity. In addition, the COVID-19 crisis significantly affected this WG which is still on hold.

The above correlation requires the involvement of the EN 9100 and DOA experts to properly assess the possibility of a correlation between EN 9100 and EASA Part 21. 2021 will define whether the overall COVID-19 situation will permit a restart of this activity.
Domain D07 “Digital Projects”

Contacts:
- Domain Technical Coordinator: Jean-Yves Delaunay, Airbus, France
- Domain Secretariat: Karim Benmeziane, BNAE, France
- Executive Manager: Paul-Alexander Cramers, Vanessza Hegykozi, ASD-STAN

Domain scope:
The Domain D07 “Digital Projects” represents interests for the European standardization activities in the field of Information and Data related technologies for aerospace applications. Examples are Archiving, Cybersecurity, Blockchain technologies or health monitoring. It prepares ASD-STAN prEN standards, EN-standardization projects and comments as well as participates in other European and International projects.

The Domain provides interested stakeholders the opportunity to actively work on standardization procedures, contribute their ideas and suggestions and take part in the information exchange between national experts.

Active Working Groups:
- D07/WG01 “LOng Term Archiving and Retrieval of Digital Technical Product Data (LOTAR)”
  Convener: Jean-Yves Delaunay, Airbus, France

Scope:
The ASD-STAN Working Group D07/WG01 represents the interests for the European standardization activities in the field of “LOTAR LOng Term Archiving and Retrieval of Digital Technical Product Data” for aerospace applications.

It prepares ASD-STAN prEN standards, EN-standardization projects and comments as well as participates in other European and International projects. The Working Group provides all interested stakeholders the opportunity to actively work on standardization procedures, contribute their ideas and suggestions and take part in the information exchange between National, European and International experts.

Main standardization activities:
- ASD-STAN prEN 9300-120 “Aerospace series - LOTAR - LOng Term Archiving and Retrieval of digital technical product documentation such as 3D CAD and PDM data - Part 120: CAD 3D explicit geometry with product and manufacturing information”
- ASD-STAN prEN 9300-121 “Aerospace series - LOTAR - LOng Term Archiving and Retrieval of digital technical product documentation such as 3D CAD and PDM data - Part 121: Semantic representation of CAD 3D Explicit Geometry with Product and Manufacturing Information”
- ASD-STAN prEN 9300-125 “Aerospace series - LOTAR - LOng Term Archiving and Retrieval of digital technical product documentation such as 3D CAD and PDM data - Part 125: Explicit CAD assembly structure with Graphic Product and Manufacturing on (PMI)”
New projects for 2021 and beyond
- EN / NAS 9300 -7xx: Electronic (PCB, PCA, etc)
- EN / NAS 9300-8xx: Mechanical transport elements (tubing, mechanical / hydraulic, ducting, etc)

- **D07/WG02 “Radio Frequency IDentification and connected devices (RFID)”**
  Convener: Philippe Canteau, Safran Aircraft Engines, France

**Scope:**
The ASD-STAN Working Group D07/WG02 represents the interests for the European standardization activities in the field of “Connected devices, including but not limited to Radio Frequency Identification technologies” for aerospace applications. The WG prepares ASD-STAN prEN standards, EN-standardization projects and comments as well as participates in other European and International projects. The Working Group provides all interested stakeholders the opportunity to actively work on standardization procedures, contribute their ideas and suggestions and take part in the information exchange between National, European and International experts.

**Main standardization activities:**
- ASD-STAN prEN 4817 “Aerospace series - passive UHF RFID tags intended for aircraft use”
- ASD-STAN prEN 4818 “Aerospace series - Passive HF RFID tags intended for aircraft use”
- ASD-STAN prEN 4819 “Aerospace series - Contact Memory Button (CMB) tags intended for aircraft use”

**New projects for 2021 and beyond**
Work is ongoing at French national level for the development of a standard on fixation of tags RFID. New Work Proposal (NWP) will be proposed in 2021. Also, development of a new standard has begun at national level for test method and success criteria for qualification of UHF passive RFID tag. New Work Proposal will be initiated by mid-2021.

- **D07/WG03 “Prognostics and Health Monitoring (PHM)”**
  Convener: Gilles Debache, Dassault-Aviation, France

**Scope:**
The purpose of ASD-STAN Working Group D07/WG03 is to harmonize the dialogue between manufacturers, prime contractors, owners and customers, in view of making it easier to draw up Built-In Tests specifications, share Built-In Tests architecture models and the Built-In Tests technical configuration of systems during the operational use phase.

**Main standardization activities:**
ASD-STAN prEN 9721 “Aerospace series — General recommendation for the BIT Architecture in an integrated system”

RG 722 is under final process within the French mirror group and will be transformed into European standard at ASD-STAN. This document provides recommendations on the centralization of health data for a fleet of systems, such as a fleet of aircraft as well as describing generic organization of support for the management of the fleet health record.
Domain D08 “Propulsion Systems”

**Domain Scope:**

The domain D08 was recently created and is open for any related standardization activity. A call for a Domain Technical Coordinator will be launched shortly.
Domain D09 “Environment”

Contacts:
- Domain Technical Coordinator: Gilles Goujon, Airbus Helicopters, France
- Domain Secretariat: Aurore Elfort, BNAE, France
- Executive Manager: Paul-Alexander Cramers, Vanessza Hegykozi, ASD-STAN

Domain scope:
The Domain D09 represents interests for the European standardization activities in the field of Environment. This domain covers standardization needs of such regulations and programmes as “REACH”.

Active Working Groups:
- **D09/WG01** “Chemical Substances Declaration Standards”
  Convener: Isabelle Manieri, Airbus Helicopters, France

Scope:
The ASD-STAN Working Group D09/WG01 represents the interests for the European standardization activities in the field of European aerospace standards on chemical substances declaration standards. The working committee provides interested stakeholders the opportunity to actively work on standardization procedures, contribute their ideas and suggestions and take part in the information exchange between national experts.

- **D09/WG02** “New product standards, REACH compatible”

Scope:
The working group has been transferred into ASD-STAN Domain D03 and became D03/WG04.
Domain D12 “Cabin”

Contacts:
- Domain Technical Coordinator: Ralf Schliwa, Airbus, Germany
- Domain Secretariat: Achim Schaub, DIN, Germany
- Executive Manager: Paul-Alexander Cramers, Vanessa Hegykozi, ASD-STAN

Domain scope:
This domain covers standardization projects related to aircraft cabin systems.

Active Working Groups:
- **D12/WG01 “Seats and Inflight Entertainment”**
  Convener: Peter Wiegmann, Airbus, Germany

Scope:
The ASD-STAN Working Group D12/WG01 caters to the development of European standardization activities relating to seats and inflight entertainment for the aerospace sector. The Working Group (WG) prepares ASD-STAN prEN Technical Reports, EN-standardization projects, and participates in other European and International projects. Stakeholders are offered the opportunity to actively work on standardization procedures, contribute their input and participate in the exchange of information with national experts.

Main standardization activities:
The Working group is working on the consensus draft for prEN 4888 “Aerospace Series - Commercial aircraft passenger seats - Reliability testing”. There are currently no projects covering Inflight Entertainment (IFE).

New projects for 2021 and beyond
ASD-STAN D12/WG01 will study the possibility to extend EN 4888 to consider business class seats in its second edition. Moreover, the WG will study the feasibility of creating standards for Inflight Entertainment.

- **D12/WG02 “Ditching Equipment”**
  Convener: Gavin Anthony, Gavins Ltd, UK

Scope:
The ASD-STAN Working Group D12/WG02 caters for the development of European standardization activities relating to ditching equipment and procedures for rotorcraft. The Work Group (WG) prepares ASD-STAN prEN Technical Reports, EN-standardization projects, and participates in other European and International projects. Stakeholders are offered the opportunity to actively work on standardization procedures, contribute their input and participate in the exchange of information with national experts.
Main standardization activities:
- ASD-STAN EN 4856 “Rotorcraft – Emergency Breathing Systems - Requirements, testing and marking”
- ASD-STAN prEN 4862 “Rotorcraft - Constant Wear Lifejackets - Requirements, testing and marking”
- ASD-STAN prEN 4863 “Rotorcraft – Immersion Suits – Requirements, testing and marking”
- ASD-STAN prEN 4886 “Rotorcraft – Life rafts for operations in hostile sea areas - Requirements, testing and marking”

New projects for 2021 and beyond
The Working Group runs two separate groups working in parallel: The plenary group focused primarily on the development of standards regarding lifejackets and immersion suits designed to be worn continuously during flight, the public enquiry on the committee draft expected to take place by 2021. Meanwhile, the subsidiary group is working on the development of standards that define the testing and marking requirements of life rafts for hostile environments (ASD-STAN prEN 4886).

The work for the revision of EN 4856 for Emergency Breathing Systems is already ongoing in order to harmonise it with other standards and to include any lessons learnt.

- D12/WG03 “Cabin monuments and supply systems”
  Convener: Thorsten Otto, Airbus, Germany

Scope:
The ASD-STAN Working Group D12/WG03 caters to the development of European standardization activities relating to cabin monuments and supply systems for the aerospace sector. The Working Group (WG) prepares ASD-STAN prEN, Technical Reports, EN-standardization projects, and participates in other European and International projects. Stakeholders are offered the opportunity to actively work on standardization procedures, contribute their input and participate in the exchange of information with national experts.

Main standardization activities:
Currently one ongoing project in D12/WG03: The Working Group is preparing the final version of the ASD-STAN prEN 4703 “Aerospace series - Test specification for verification of the permeability of electrical insulation”.

New projects for 2021 and beyond
Additional parts for the published EN 4885 series, Aerospace series - ECO efficiency of catering equipment:
- EN 4855-001 General conditions
- EN 4855-002 Oven equipment
- EN 4855-003 Chilling equipment
- EN 4855-004 Beverage makers

New projects will probably be discussed (e.g. regarding trash compactors).
• **D12/WG04 “Displays, projection and interior lighting”**
  Convener: Carsten Kohlmeier-Beckmann, Germany

**Scope:**
The ASD-STAN Working Group D12/WG04 caters to the development of European standardization activities relating to cabin displays, projection and interior lighting for the aerospace sector. The Working Group prepares ASD-STAN prEN Technical Reports, EN-standardization projects, and participates in other European and International projects. Stakeholders are offered the opportunity to actively work on standardization procedures, contribute their input and participate in the exchange of information with national experts. Exterior and cockpit lighting is managed by ASD-STAN D02/WG06 “Exterior and Cockpit Lighting.”

**Main standardization activities:**
- ASD-STAN TR 4885, “Jet lag and lighting - Biological effects and recommendations” has been published in 2020.
- WG has prepared the restart of the consensus draft work on ASD-STAN prEN 4828, “Aerospace series - Thermal drift of LED luminaires - Classification and measuring methods”.
- ASD-STAN TR 4896, “Aerospace series - UV radiation for aircraft cabin disinfection”

**New projects for 2021 and beyond**
ASD-STAN D12/WG04 is currently discussing the possibility of starting the following standardization projects:
- ASD-STAN TR on definition of large area light sources and displays
- EN on control architecture of cabin lighting
- EN on mechanical interfaces of lighting
- EN on luminaire material classification
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Join ASD-STAN as a member to influence the development of European aerospace standards!

Benefits of ASD-STAN membership

✓ Opportunity to shape the future benchmarks of the industry
✓ Network with industry leaders and decision-makers/regulators at ASD-STAN meetings
✓ Get exclusive information about future projects of aerospace standards
✓ Influence the contents of standards and ensure that your company’s specific needs are considered
✓ Harmonization of European programs through the use of ASD-STAN generated EN standards
✓ Contribute to the promotion of European standards at international level
✓ Share your expertise and participate in the improvement of the industry
✓ Recognize and influence requirements and trends
✓ Contribute to the development of standards that will ensure increased safety, quality assurance, rationalization, environmental protection, globalization, innovation, performance, communication, efficiency and interoperability of products and/or services.
Categories of membership

We have different membership categories that will suit your needs and the size of your organization:

- **Promoting Member: €55,000/year** - unlimited access to the Working Groups with unlimited numbers of experts-voting on the projects; 2 votes at the Board and General Assembly; free standards

- **Regular Member: €12,000/year** - unlimited access to the Working Groups with unlimited numbers of experts-voting on the projects; 1 vote at the Board and General Assembly; 30% discount on standards price

- **Associate member: €3,000/year** - right to attend specific Working Group meetings and participate on the projects’ consensus process (no direct voting) as well as to be invited to the Technical Authority and GA meetings. Limited number of experts can join the WGs. 10% discount on the standards’ prices

- **Independent expert contracts** for experts who want to participate in one of the ASD-STAN working groups, taking into account that the organisation the expert is representing is not a member of ASD-STAN as defined in Article 5.2 of our Statutes. The yearly contribution is currently set at €1,500/per expert/per working group
Our members

Groupement des Industries Françaises Aéronautiques et Spatiales
www.gifas.fr

Deutsches Insititut für Normung
www.din.de

Federazione Aziende Italiane per l’Aerospazio, la Difesa e la Sicurezza
www.aiad.it

Spanish Association of Defense, Aeronautics, Security and Space Technology Companies
www.tedae.org

Säkerhets Et Föfsvars Företagen
www.soff.se

UK Aerospace, Defence, Security & Space Industries
www.adsgroup.org.uk

European Aviation Safety Agency
www.easa.europe.eu

AIRBUS SE.
www.airbus.com

AeroSpace and Defence Industries Association of Europe
www.asd-europe.org
Did you know?

- 300K aluminium rivets per aircraft standardised using ASD-STAN prENs 6069, 6080, 6081, 6101

- 200K fasteners per aircraft manufactured using ASD-STAN prENs 6114 & 6115

- 100K Blind bolts per aircraft manufactured using ASD-STAN prENs 4613, 4614, 4538

- 200 bearings per aircraft manufactured using ASD-STAN prENs 4613, 4614, 4538

- 10K electrical connectors and circuit breakers per aircraft manufactured utilising the following standards: ASD-STAN prENs 2997, 3545, 3645, 3646 3841, 3661