

IAEG LIFT Newsletter

2022 - Issue 2



Message from Work Group 11 Board Sponsor

In the prior IAEG LiFT newsletter (2022 – Issue 1), IAEG's Chair, Bruno Costes, noted IAEG's scope extension to Environmental, Social and Governance (ESG) to ensure effectiveness in addressing business-critical ESG topics throughout the aerospace value stream. As a result, IAEG formed Work Group 11 Aerospace Industry ESG Engagement (WG11) which focuses on establishing an industry voluntary framework for supplier ESG assessment and implementing an enduring rhythm of supply base communication and education addressing material, environmental and social topics.

The impetus for this new working group was grounded in

- the increasing number of global laws requiring supply chain environmental and social due diligence (duty of care laws);
- 2. supply chain themes in ESG reporting and ratings frameworks; and
- 3. demonstrating ESG stewardship as an industry. The signals around us are clear and increasing that it is time for our industry to collaborate within IAEG's compliance controls to establish a voluntary approach to addressing these WG11 drivers in an efficient and effective manner.

WG11 is approaching a significant milestone for sourcing a 3rd Party Solution Provider to implement a voluntary industry standard for supplier ESG assessment. In addition to completing the sourcing process within IAEG, it is even more important that IAEG members are actively socializing the effort and business value within their companies and having critical conversations with decision makers about contractually committing. We welcome active dialogue with IAEG members and requests for supporting socialization materials.

Looking beyond the WG11 sourcing milestone is our opportunity to demonstrate industry level ESG stewardship. We can make positive impact through communication and education within our supply base by elevating above

foundational due diligence compliance obligations and supply chain themes in ESG reporting. Industry level analysis of supplier ESG assessment results coupled with identifying material, social and environmental topics within procurement categories and global regions, will inform WG11's supply base engagement campaign. By distilling complex topics, linking resources to enable business process transformation, and aligning on voluntary messaging driven by us, we can measure and communicate the maturation of sustainable aerospace.

We are energized by the extent of IAEG member engagement in WG11 and the opportunity before us to transform how we address sustainability in our industry supply base. We are actively seeking change agents addressing supply chain sustainability in IAEG member companies.

Contact the IAEG Board of Directors WG11 Sponsors to learn more - Olivier Barret, Dave Graeber.

Dave Graeber, The Boeing Company

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Chief Editor: Marie Baillon, Rolls-Royce

SPOTLIGHT ON WORK GROUP 11

IAEG amended its certificate of incorporation at the end of 2021 to bring the wider Environmental, Social, and Governance (ESG) topic into its scope of work activities. Work Group 11 for the AEROSPACE INDUSTRY ESG ENGAGEMENT, which has already been formed and is making fast progress, will be the focus of this second issue of the LIFT Newsletter in 2022.

WG11 is strengthening IAEG Vision 2025 by contributing to the pillars of *Fostering Sustainability* and *Engaging the Supply Chain*. Let's explore these topics in the following articles.



Vision: Reusable Sustainability Assessments

Wherever your organization is in the Aerospace and Defence supply chain, imagine sharing a cost-effective voluntary standard to:

- Understand and assess your Environment, Social, and Governance (ESG) practices
- Drive ESG due diligence compliance obligations
- Promote sustainability reporting transparency

Satisfy customer and investor supply chain stewardship expectations

IAEG Work Group 11 is producing a sectorial framework for ESG engagement by the end of 2022. Work Group 11 also plans to build a knowledge-sharing community for the Aerospace and Defence supply chain.

Using a standardized tool, a supplier could report on its ESG compliance to all Aerospace and Defence stakeholders! For IAEG members, having a common tool would reduce costs and enable faster progress. For the industry as a whole, assessments become reusable and unnecessary duplicated efforts avoided...waste reduced.

What ESG engagement means to our members?

Our member company executives and leaders shared their thoughts during the WG11 Leadership Summit focused on Supply Chain ESG Stewardship & Voluntary Assessment Standard.

Read more about the key themes they identified:

https://www.iaeg.com/binaries/content/assets/iaeg/iaeg-wg11_esg-takes-centerstage.pdf

Ways of working

ESG is a very wide topic and Work Group 11 developed a streamlined method to tackle it.

- 1. WG11 set to understand the different aspects of Environment, Social, and Governance topics and to list a range of activities for each of these aspects reflecting the various levels of ESG maturity. With this approach, the WG11 members drew on their knowledge and expertise to gather approximately 100 ESG compliance requirements and reporting objectives. These requirements have been checked for consistency with the Global Reporting Initiative (GRI) and reviewed against data protection considerations.
- With these requirements in hand, WG11 built a proposal that has been sent out to selected suppliers for bids. The pre-selection of suppliers has been a collaborative effort of the work group considering recommendations from member companies.
- 3. WG11 is now in the process of evaluating the supplier proposals. WG11 aims to deliver a fair and thorough assessment of the proposals, reviewing the cost versus technical aspects while accounting for differences in business models. Upon selection, the supplier will deliver a solution that covers the catalogue of ESG requirements that remains concurrent with emerging standards and regulations.

In parallel with the development of this solution, WG11 plans to establish a global community focused on spreading ESG awareness and knowledge across the Aerospace and Defence supply chain using information sharing tools, such as webinars and LinkedIn postings.

WG11 member's perspective

What is your ESG expertise or interest?

As a Native American woman, with a long history of environmental work and as a supply chain professional, I am very grateful for the opportunity to be working with IAEG. I am able to lend my voice and contribute to finding the common ground between the Native American environmental protection protocols and needs of industry.

Twylia Westling, Lead Procurement Agent, Boeing Global Services

What are you excited to see in WG11?

Implementation of a tool that is at the right time for planetary benefits that draws an aviation community together to work for mutual good. Benefits are not only financial but also environmental. I also like to see the group growing and the fact that very senior people from a range of companies are committed.

What is your ESG expertise or interest?

I was Industrial champion for sustainable aviation for Scotland for a 3-month contract to look at how we can look after employment and R&D in Scotland today and tomorrow on the theme of sustainable aviation. I completed a micro credentials on Systems Thinking - Climate Change and Sustainable Decision Making and would highly recommend this. My portfolio at Spirit covers internal and external initiatives in different areas of the business / consortia and partners. My personal interest is people based with special attention on emerging talent. I think our journey to a sustainable future would be catalyzed with an injection of lenses from the social science disciplines.

Athena Wu, R&T engineer, Spirit AeroSystems

IAEG AWARDS













Congratulations to our award recipients, who were recognized for their outstanding contribution to an IAEG Working Group or to the organization as a whole.

Click here to see the list of honorees.

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IAEG IN ACTION

Work Group 2: Advancing Replacement Technologies for the Aerospace and Defense Industry

For the past several years, the <u>IAEG WG2 Replacement Technologies Work Group</u> (WG2) has operated a framework to enable cross-industry collaboration on technical exchange and research and development projects. Through an annual assessment of member company replacement technology priorities, WG2 aims to identify and launch material replacement projects which will have the biggest impact to the Aerospace and Defense (A&D) industry, human health, and the environment. WG2 is currently coordinating five projects to investigate technologies affected by global chemical regulations and restrictions, including REACH, to identify potential alternatives that could be introduced to the A&D industry. Recent project accomplishments include:

- Cadmium Plating Replacements Led by Jack Watson (Raytheon Technologies Corporation) and Nestor Gonzalez-Pereyra (The Boeing Company)
 - Project Description: Determine REACH-compliant alternatives for cadmium plating on industry standard parts including fasteners and electrical connectors.
 - Recent Accomplishments: Testing of cadmium plating alternatives is being completed for connectors and will resume later this summer. The project team is leveraging the results of industry whitepapers and presentations to inform future testing needs for cadmium plating alternatives for fasteners, including a whitepaper that is being developed by the National Aerospace Standards Committee (NASC).
- Bond Primer Phase 2 (Hexavalent Chromium Alternatives) Led by Paul Guthrie (Raytheon Technologies Corporation)
 - Project Description: Non-chromated bond primer replacements for A&D applications.
 - Recent Accomplishments: The project team has developed the test matrix and is collaborating with non-chromated bond primer suppliers on their testing capabilities.
- Chemical Conversion Coatings (CCC) (Hexavalent Chromium alternatives) -Led by Francois Corman (Safran Aerotechnics) and Kevin Bordage (Raytheon Technologies Corporation)

- Project Description: Technical exchange on performance test results with non-chromated CCC solutions.
- Recent Accomplishments: CC coating and paint coating testing for nonchromated alternatives has been completed, and wet paint adhesion testing is underway with two suppliers.
- Fuel Tank Coatings (Hexavalent Chromium Alternatives) Led by Stephen McLaughlin (Spirit AeroSystems, Inc.)
 - Project Description: Technical exchange on requirements and test data for hexavalent chrome-free integral fuel tank coatings.
 - Recent Accomplishments: Participating IAEG Member Companies have exchanged information on current qualified materials and technical requirements for fuel tank coatings, as well as testing that they have carried out to date on any chrome-free fuel tank coatings. The project team has approached A&D coating manufacturers globally to determine their desire to participate in the project by supplying detailed test data on their chrome-free fuel tank coating offerings. Six of these coating manufacturers have signed up to support the project.
- Corrosion Inhibiting Primers (Hexavalent Chromium Alternatives) Led by
 Bree Sharratt (Viking)
 - Project Description: This project is currently being launched and will include technical information exchange and evaluation of nonchromated corrosion inhibiting primers for protection of lightweight alloys.

Completed WG2 project reports are available on <u>IAEG.com</u> and include:

- IAEG® WG2 Technical Exchange Hard Chrome Plating Chromate Free Alternative Processes in Aerospace Applications
- IAEG® WG2 Technical Exchange Project Summary Report, Non Chrome 6
 Anodize Seal

For questions on the WG2 replacement technologies, please contact <u>Christer</u> Hellstrand.

Keynote Speakers at IAEG Spring Virtual Face-to-Face

IAEG strives to bring value to its members and the Face-to-Face meetings are an occasion to attract keynote speakers to present their organization and share their perspective on relevant topics such as chemical stewardship and supply chain impact of regulatory developments.

Our thanks to WG1 for hosting the following discussion during the Spring virtual Face-to-Face. Presentations are available to all IAEG members on the <u>Member's only</u> <u>website</u>. Please contact <u>Ally Rames</u> or <u>Mussie Pietros</u> for further information.



Mr. Josef E. Denzel is a Senior Expert in Environmental Affairs, Product Compliance & Stewardship at Airbus Defence & Space, and Vice Chair of ASD REACH & Chemical Management Working Group and Chair of the ASD Sub Working Group on Substance Reporting.

ASD is the Aerospace and Defence Industries association of Europe, with direct company members active in 17 countries. Its membership accounted for €230 billion in revenue in 2020.

The development of the SCIP (Substances of Concern in Products) database over the last two years has been fast paced and adjusting to industry feedback. Implementation of the reporting requirements from the WFD (Waste Framework Directive) (Directive (EU) 2018/851, Article 9), has been gradual but is now in place in most EU member states. Reflecting on these changes, ASD updated its sectorial guidance. At the IAEG Virtual Face-to-Face this April, Mr Denzel presented the key changes in the guidance on behalf of ASD.

The highlights are:

- The importance of uniform supply chain communication. The guidance contains examples of WFD/SCIP communication in the supply chain.
- An analysis of the SCIP-dissemination module considering different search criteria.
- The concern over the handling of Confidential Business Information / classified data, in particular in the case of Military/ Dual use articles subject to export control regulation(s).

 A study of the impact of the different approaches in WFD transpositions between Member States.

The ASD guidance is available here:

ASD Sectoral Guidance for WFD-SCIP implementation0505.pdf (asd-europe.org)

ASD also developed a leaflet:

ASD SCIP Guide in brief.pdf (asd-europe.org)



Mr. Raj Takhar is a Senior Subject Matter Expert on Materials
Reporting (Europe) at Assent and has been working extensively on
substance reporting throughout his career. His earlier contribution was
notably as part of IAEG WG1 working on the development of the IPC1754 standard. More recently as part of Assent's effort to develop
compatible solutions with the SCIP/WFD requirements, Mr. Takhar
took part in the SCIP IT User Group.

Assent is a solution provider, guiding companies towards product compliance via standardized collection, management, and analysis of data for a variety of reporting requirements — including REACH, RoHS and TSCA.

Mr. Takhar joined the IAEG Virtual Face-to-Face this April as a guest speaker to present key aspects of UK REACH in contrast with EU REACH.

The two regulatory frameworks operate independently from each other since UK REACH came into effect on 1 January 2021. Efforts have been made to minimize disruption to the supply chain with UK REACH mirroring EU REACH as far as possible, and with the use of transitional measures. Both regulations also use IUCLID-based systems to submit required compliance information.

Divergences start to appear when looking into the details of the substance lists: Candidate List, Annex XIV (Authorizations) and Annex XVII (Restrictions), with different substances added. Further regulatory developments on both sides will increase future misalignment. For example, the UK government is looking at reducing the burden of reporting. In the EU, the Green Deal established EU Chemical Sustainability Strategy (EU CSS) which proposes an overhaul of EU REACH with a draft expected to be released in Q4, 2022.



The proposed changes to the REACH and POP (Persistent organic pollutants) regulations could have a significant impact on the automotive industry. Mr. Timo Unger shared his insights on behalf of the Hyundai Motor Group.

The Chemical Strategy for Sustainability (CSS) as part of the EU Green Deal is pushing for a different approach to REACH restrictions. Some key aspects are:

- Hazard based regulation
- Restrictions applying to group of substances rather than substance by substance restrictions
- Essential use criteria for exemptions

Taking the example of the PFAS substances scheduled for restriction in 2024, a group restriction would cover ~4,800 chemicals that are used in hundreds of automotive applications.

The first challenge is that no suitable substitutes are available today for many substances across this group. Where alternatives are available, the substitution timescales are incompatible with the restriction timeline. The substitution process in the automotive industry is complex and requires physical testing of products against durability, temperature, humidity, crash etc. and changes in the part design are sometimes required. These activities span 3 to 5 years depending on the complexity of the part, which would force the automotive industry to apply for 'Essential Uses' exemptions.

The second challenge is knowing where the substances are used in the supply chain. The automotive IMDS reporting tool (International Material Data System) implements a minimum reporting threshold and any substances considered as impurities would be unknown. The complexity of the automotive supply chain and the variety of applications means it is not possible to tackle this unknown via a system-based investigation, leading instead to individual component testing.

In the face of these challenges, the automotive industry is coming together and using its available substance inventory to perform impact assessments for key substances proposed under REACH and POP restrictions such as PFHxA substances, Dechlorane Plus (DP) or Medium-chain Chlorinated Paraffins (MCCP) and publishes position papers to defend the industry's interests.



Yordas is a leading international provider of scientific and technical services, regulatory advice, sustainability services and training to industry in the fields of chemicals management and risk assessment.

Mr. Jude Norman Arokianathar, Regulatory Consultant, presented to IAEG on behalf of Yordas an overview of Per- and Polyfluoroalkyl Substances (PFAS) and its impact to Aerospace & Defense (A&D).

PFAS represent a family of over 12,000 substances that can be defined as fluorinated substances with at least one fully fluorinated methyl (–CF₃) or methylene group (–CF₂ –).

PFAS substances have been widely used in a variety of products and industrial applications since the 1940s such as: elastomeric seals for turbine engines; paints and coating; propellant system; and firefighting foams to name just a few.

They are a concern to human and ecological health due to their mobility, persistence, bioaccumulation and toxicity. Because of these concerns, we are seeing activities via both global conventions and legislation that seek to eliminate or restrict their uses. for examples, measures have been implemented via the Stockholm Convention and Rotterdam Convention and also in various legislation across different regions and countries such as the EU, the United States, Canada, Japan, China, Singapore, Australia and New Zealand.

More PFAS legislation is coming, and Yordas will be closely monitoring these developments to promote compliance.

IAEG ONLINE

Liaison corner

Our Liaison Member social media communication program continues with IAEG postings from SAFECHEM announcing a webinar on how solvent cleaning is helping aviation reach new heights of sustainability and Haley & Aldrich on how companies can address PFAS challenges with an enterprise-level strategy.

Liaison members who are interested in posting on the IAEG LinkedIn page, please contact <u>Elie Haddad</u> or <u>Richard Starkey</u>. IAEG-relevant postings can include events that liaison members host, educational and technical information, spotlights on liaison members, awards or accolades of liaison members, and podcasts. They must avoid sales content.

We welcome our new liaison member Cap Gemini to IAEG.

LinkedIn Favorites

The Communication Team is excited to share with you the IAEG Cameo interviews of our Work Group Leads and Officers.



<u>Laura Wilkinson</u>
Former IAEG Work Group 2 Lead



Rachel Becker

IAEG Business Administrator & Work

Group 5 Board Sponsor



Mussie Pietros

IAEG Work Group 1 Lead



Heather Daniels

IAEG Treasurer



Joe McCarthy

IAEG Work Group 5 Lead



Michel Renault

IAEG Work Group 9 Deputy Lead



Steven Shestag
Vice Chair of the Executive Committee

UPCOMING EVENT

Face-to-Face Meeting

IAEG Fall 2022 Face-to-Face Meeting is scheduled for **Monday**, **October 24 2022 through Thursday**, **October 27**, **2022**, followed by a Face-to-Face Board of Directors Meeting on **Friday**, **October 28**, **2002** in Toulouse, FRANCE.

The registration details will be forthcoming.

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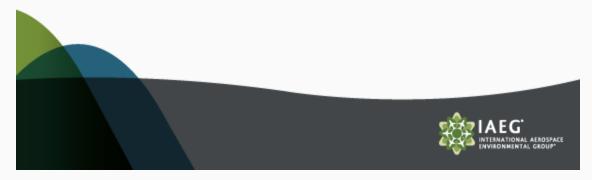
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