TACKLING GLOBAL ISSUES TOGETHER
Dear IAEG Members, as we close on 2020 and begin to look ahead to 2021, the global COVID-19 situation continues to evolve. The pandemic significantly impacted our daily lives, families, communities and businesses this year. We adjusted and sacrificed much to keep ourselves healthy, and others safe. We adapted and learned new ways of interacting.

While these times have been challenging, I am so inspired by the strength and resilience of IAEG. I am proud of the way our membership continued to advance work group activities despite the challenge—with flexibility, courage, and a caring heart.

All these accomplishments would not be possible without the dedication and commitment of many. Thank you to the Work Group leads for your creativity, keeping projects on track and facilitating the collaboration which is the core of IAEG’s work. Thanks to the IAEG Board and Officers who work diligently to ensure strong governance, compliance, infrastructure to execute our objectives, and planning for our future. Thank you to our management partners at SAE, especially Becky and Amanda who keep us running, and all our vendors who support our organization and activities. Thanks to IAEG’s Program Director, Christer Hellstrand, for his dedication and enthusiastic support to all.

And last, but certainly not least, thanks to our global members—your commitment to IAEG during these trying times makes all the difference.

This year, IAEG will be celebrating its 10-year anniversary. Over the course of the year we will reflect on all that IAEG has accomplished and the vision for future IAEG efforts. While IAEG will not be holding any in-person meeting in the first half of 2021, we remain hopeful that we may be able to gather together before the year is out if the COVID-19 situation improves. My very best wishes to you for a successful year ahead. Please stay safe and healthy.

Sally Gestautas
Board Chair
WG1 remains committed to supporting the increasing needs of aerospace and defense (AD) companies to obtain product-related chemical data from the industry’s global supply chain. Using the IPC-1754 standard and IAEG support tools, AD companies can efficiently obtain declaration data to identify substance dependencies, and use that data to support their compliance and supply risk management needs.”

TIM SHEEHAN
Raytheon Technologies, Work Group Leader

Materials and Substances Declaration

WG1

2020 Accomplishments

• Published Aerospace & Defense – Declarable Substance List (AD-DSL) v4.0
• Completed AD-DSL v4.1 update
• Published Aerospace & Defense – Substance Reporting Tool (AD-SRT) v1.2
• Completed AD-SRT v1.2.1 update
• Completed Materials and Substances Declaration Contract Terms
• Completed Materials and Substances Declaration Process Considerations
• Declaration Process Support Document v2 Refinement

2021 Goals

• Publish AD-DSL v4.1
• Publish AD-DSL v5.0
• Publish AD-SRT v1.2.1
• Publish AD-SRT v2.0
• Release Internal Materials and Substances Declaration Contract Terms
• Publish Materials and Substances Declaration Process Considerations
• Publish Declaration Process Support Document v2

Industry experts collaborate to determine relevant data elements (IPC 1754)
Maintenance of Aerospace and Defense Declarable Substance List (AD-DSL), incorporating the latest regulatory updates
Replacement Technologies

WG2 enables Aerospace and Defence companies to collaborate on projects which seek alternatives for EU REACh affected applications and propose standards that suppliers can follow to produce EU REACh compliant solutions.

LAURA WILKINSON
Rolls Royce, Work Group Leader

2020 Accomplishments

- Completion of Corrosion Inhibiting Epoxy Primer Project. The CIEP project yielded a screening specification detailing a set of product requirements available to support an initial evaluation of potential EU REACh compliant coatings
- Completion of the first phase of Bond Primer Project. The team has collectively developed minimum acceptance and performance specifications for EU REACh compliant bond primer and adhesive systems
- Completion of the Hard Chrome Plating and publication of an external report
- Collaboration with SAE to publish AMS2461 – Plating, Zinc-Nickel Alloy (12 to 16% Ni) as an alternative plating to cadmium plating on industry standard parts and finalized proposal for electrical connectors to carry out performance testing on alternatives to cadmium plating
- The Non-Chromated Chemical Conversion Coating team published internal performance reports (corrosion and electrical contact resistance) on the first 3 solutions tested in 2019. Started paint adhesion testing on these same solutions and also started performance testing (corrosion and electrical contact resistance) on 3 more solutions

2021 Goals

- Launch phase two of the Bond Primer Project which will look to test EU REACh compliant bond primer and adhesive systems against the criteria set out in phase one
- Completion of electrical connector testing for the Cadmium Plating project
- Complete the Anodise Seal project with publication of an internal technical report
- Finalize all performance tests and publish final reports for the Chromate Conversion Coating project
- Launch a new project to investigate EU REACh compliant fuel tank coatings

Collaboration by industry experts to jointly develop qualified material substitutions
Cost sharing and common industry solutions developed for voluntary unilateral consideration and use

IAEG 2020 YEAR-END REPORT
2020 Accomplishments

• Completed engagement to develop methodology, user guide and reporting tool for Scope 3 Purchased Goods & Services and Capital Goods emissions categories
• Developed annual maintenance and review process for keeping the tool up to date and aligned with evolving expectations around reporting
• Expanded testing of Scope 3 tool to the wider IAEG membership through a beta test and feedback survey

2021 Goals

• Launch Scope 3 tool
• Develop communications and engagement plan for Scope 3 tool package
• Review and evaluate global policies addressing Greenhouse Gas (GHG) management and disclosure as well as climate requirements relevant to IAEG members companies

WG3 is developing the first guidance and reporting tool for the aerospace & defense industry and its value chain for reporting Scope 3 Purchased Goods & Services and Capital Goods greenhouse gas emissions categories, which may be relevant to many companies in our sector. As expectations expand for emissions management and disclosure, WG3 is providing industry-specific resources and guidance to tackle climate change.”

ERIN WILLIAMSON
Northrop Grumman, Work Group Leader
### 2020 Accomplishments

- Completed February 2020 Additions to EU REACh Annex XIV (Banned Substances) mapping
- Completed Preliminary Mapping and began Formulator Interviews for a subset of 9th Recommendation Substances of Very High Concern (SVHCs)
- Completed additional mapping of Bisphenol A
- Issued two revisions to WG5 SVHC Matrix (detailed tracking tool for all EU REACh Candidate List & Annex XIV SVHCs)

### 2021 Goals

- Develop additional Supply Chain Mapping reports based on established priorities, including critical 9th Recommendation SVHCs, lead compounds from the 7th & 9th Recommendation lists, and anticipated 10th Recommendation SVHCs

By working together, WG5 member companies better understand their risk associated with EU REACh Annex XIV substances. And they are better prepared to address them.”

ALAN THOMPSON
The Boeing Company, Work Group Deputy Leader

Industry collaboration to determine material obsolescence risks due to EU REACh regulations
Input to formation of cost sharing A&D consortia for creation of applications for authorization
An effective Environmental Management System (EMS) is an extremely valuable asset, helping businesses to remain informed on regulatory requirements, improve environmental performance, manage risk, support business continuity and quality, and reduce costs. The WG7 EMS Maturity Framework was enriched this year with implementation guidance in the form of 'one pagers', which provide resources and real world examples for each element of an EMS at the Foundation, Advanced, and Leading maturity level. The easily navigable document with its interactive features can be very useful for organisations that want to improve within their current maturity level, or to help them evolve into the next level. A number of companies have already started adopting the framework in 2020, for example to establish and deploy EMS requirements for their suppliers, or to evaluate and develop the maturity of the environmental management of small and medium sized affiliates.

CINDY KLÖHN
Airbus, Work Group Leader

2020 Accomplishments
- Published EMS Maturity Framework translations in French, Portuguese, German and Spanish
- Published Resources and Examples for the EMS Maturity Framework implementation
- Developed awareness video and verification tool kit

2021 Goals
- Publish Resources and Examples in French, Portuguese, German and Spanish
- Provide awareness video with translations
- Publish verification tool kit and communication materials
- Facilitate integration with WG10 Environmental Qualification Plan for Suppliers (EQPS) next steps

Provide sectorial guidance on ISO 14001 implementation
Risk based Maturity Framework developed for implementation of a suitable EMS for Small and Medium sized companies, based on ISO 14001

IAEG 2020 YEAR-END REPORT
The regulatory alerts provided by IAEG have been an additional resource that is helpful in summarizing emerging regulations and determining the potential impacts to the aerospace and defense industry. Having a solution provider that is experienced in identifying and summarizing emerging regulations is also a benefit.

LISA BROWN
Lockheed Martin, Work Group Leader

The involvement of WG9 team members, as well as support from the service provider and the update of the prioritization tool, have allowed to increase responsiveness and efficiency to deliver Regulatory Alerts relevant for aerospace and defence industry.

MICHEL RENAULT
Thales Group, Deputy Work Group Leader

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2020 Accomplishments

- Australian Industrial Chemicals Introduction Scheme (AICIS) under the Industrial Chemicals Act 2019
- China Ministry of Ecology and Environment (MEE) Order 12
- EU Prior Informed Consent (PIC) Regulation
- South Korea REACH Update
- US EPA Toxic Substance Control Act (TSCA) Fee Obligations for Risk Evaluations

2021 Goals

- Issue regulatory alerts and supply chain fact sheets based on evaluation and prioritization
- UK REACH
- EU Waste Framework Directive
- Taiwan Toxic and Concerned Chemical Substances Control Act (TCCSCA) – PENDING
- Biocidal Products
- EU REACH Annex XVII Disocyanate Restrictions – PENDING
- Issued Countries of Interest Survey

Provide updates on global emerging regulations in 30 prioritized countries, provided by 3rd party
Regulatory alerts developed for member companies for their supply chain
Welcome to our IAEG new 2021 members

ATR Leonardo MW Ltd.

Congratulations to our IAEG 2020 Award Winners

Congratulations to both the nominees and winners! Members were nominated by their peers for their outstanding contribution to an IAEG Work Group or the organization overall, specifically relating to their contributions to IAEG’s efficiency & effectiveness, strategic development, and customer value. This year’s winners are:

Ben Bolt, Boeing – for Contribution to IAEG Work Group 1
Nicole Micelotta, Northrop Grumman – for Contribution to the IAEG Organization with work on the Lift Newsletter
Mussie Pietros, GE Aviation – for Contribution to IAEG Work Group 1
Erin Williamson, Northrop Grumman – for Contribution to IAEG Work Group 3
Heather Daniels, Lockheed Martin, and;
Sophie LePennec, Thales – for Contribution to the IAEG Organization in the Strategic Planning Committee

Looking forward to celebrating IAEG’s 10-Year Anniversary

Did you know IAEG will mark a major milestone in 2021 – our 10-year anniversary! Over the course of the coming year we hope to reflect on the highlights of IAEG & re-commit to our vision and mission going forward. To highlight this accomplishment, you’ll notice IAEG using an updated 10-YEAR ANNIVERSARY brand throughout the year (below).

Making a scene in 2021

We are working hard to improve our IAEG social media presence in 2021 and are looking forward to engaging with the work groups to contribute to our communications campaign. Time to tell more folks what IAEG has been up to.

Although the COVID-19 pandemic is making us work in very different ways this year, the IAEG communications channels have been very active:

Message from Communications Officer

Michele Lewis
Communications Officer

Although the COVID-19 pandemic is making us work in very different ways this year, the IAEG communications channels have been very active:
A RECOGNIZED BODY FOR AEROSPACE & DEFENSE

LEADING EDGE SOLUTIONS ACROSS THE VALUE CHAIN

TACKLE CLIMATE CHANGE

CHAMPION CHEMICAL STEWARDSHIP

ENGAGE SUPPLY CHAIN

FOSTER ENVIRONMENTAL SUSTAINABILITY

RESPONSIBLE & SUSTAINABLE AEROSPACE INDUSTRY
WE'RE JUST GETTING STARTED
The International Aerospace Environmental Group (IAEG) is a non-profit organization of nearly 50 global aerospace companies who collaborate to deliver innovative solutions to benefit the global aerospace industry. IAEG serves as a collective space for industry leaders to develop voluntary consensus standards and solutions for environmental and chemical regulatory and sustainability challenges that all member companies face.

For 10 years, members have worked together to tackle climate change, champion chemical stewardship, engage the supply chain and foster environmental sustainability. IAEG endeavors to contribute to a responsible and sustainable aerospace industry. Every year we publish multiple regulatory alerts, topical reports, and factsheets. All resources are public and intended to share information on industry-wide opportunities for the promotion and adoption of global environmental requirements.

In addition, IAEG provides opportunities for wider education on environmental issues and the supply chain via our meeting agendas and bespoke seminars. IAEG is the only global aerospace organization collaborating across the industry to address environmental and sustainability aerospace challenges. With almost 50 member companies, IAEG represents more than half the global aerospace industry. In 2021 and beyond, we will expand and accelerate our impact on the industry and in the world. We’re just getting started. Join us, as we change the future of aerospace.

For more information on IAEG and to see a full list of members, visit our website today.

**REVENUE FOOTPRINT**

$400 BILLION OUT OF AN APPROXIMATE $700 BILLION INDUSTRIAL BASE*

**EMPLOYMENT FOOTPRINT**

SLIGHTLY OVER 1 MILLION OUT OF A ROUGHLY 2 MILLION INDUSTRIAL BASE*

*Deloitte, 2014 Global aerospace and defense sector financial report

**SOLUTIONS**

COMPLEX AND INNOVATIVE PRODUCTS THAT LAST DECADES IN THE MARKETPLACE

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**IAEG MEMBER COMPANIES (AS OF JANUARY 31ST, 2021)**

**IAEG Full Members**

- Airbus SAS
- ATR
- BAE Systems
- Boeing
- Bombardier
- Dassault Aviation
- De Havilland Aircraft of Canada Limited
- Embraer
- GE Aviation
- GKN Aerospace
- Gulfstream
- Honda Aircraft Company, LLC
- Honeywell
- Howmet Aerospace
- Huntsman Advanced Materials
- Israel Aerospace Industry
- L3Harris Technologies, Inc.
- Leonardo Company
- Lockheed Martin
- Meggitt PLC
- Northrop Grumman
- Raytheon Technologies
- Rolls-Royce
- SAAB AB
- SAFRAN
- Spirit AeroSystems
- Textron Inc (Beechcraft)
- Thales
- 3M Deutschland GmbH (Haufe Discovery)

**IAEG Liaison Members**

- Airbus Defence and Space GmbH
- Airbus Helicopters (Salamander)
- Assent Compliance Inc.
- BHC, Inc.
- Dassault Systemes Enovia
- DXC.technology
- Granta Design Ltd
- Granta Design Ltd
- Haley & Aldrich
- Hangsterfer’s Laboratories, Inc.
- National Quality Assurance
- Nobilus
- Ramboll Environment & Health
- Risk & Policy Analysts Ltd
- SAFEChem Europe GmbH
- Souiau SAS
- Tetra Tech
- Yordas Group

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**IAEG 10-YEAR ANNIVERSARY**