

Introduction to IAEG[®]

International Aerospace Environmental Group



IAEG[®]

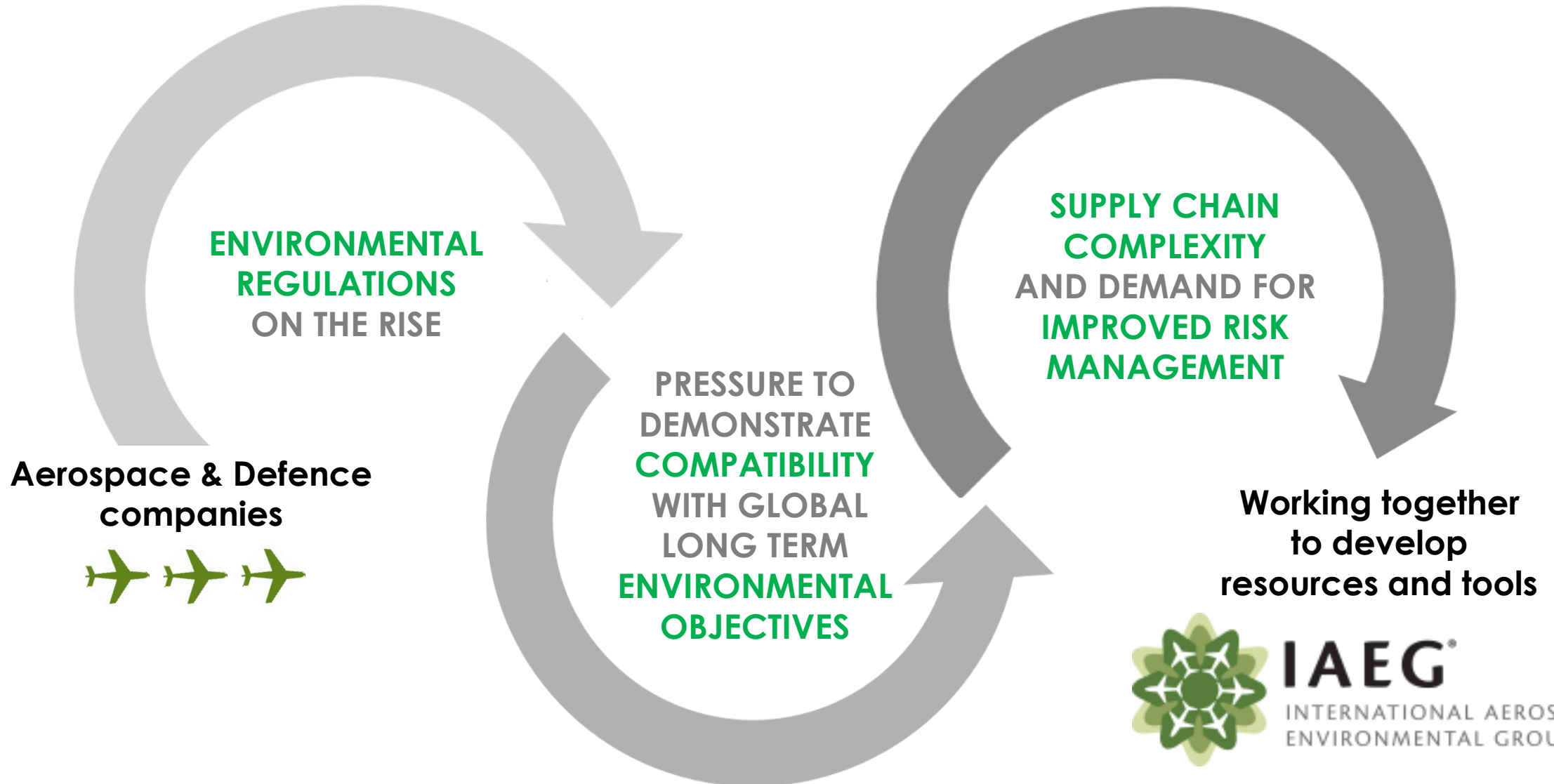
INTERNATIONAL AEROSPACE
ENVIRONMENTAL GROUP[®]

© 2019 IAEG[®]

The International Aerospace Environmental Group[®] ("IAEG[®]") is the owner of this material. This material may not be used for any purpose other than that for which it is provided without the express written consent of IAEG[™]. IAEG[™] will accept no liability either directly or indirectly for damages from any use of this material including without limitation any indirect, incidental, special and consequential damages, loss of data, income, profit or goodwill, loss of or damage to property or claims of third parties. IAEG[™] reserves the right to add to, change or delete its content or any part thereof without notice.

IAEG[®] OVERVIEW





Founding Members



IAEG was founded in 2011 with a vision to advance innovative environmental solutions for the aerospace and defence industry. Starting with 11 Founding members, now at 50 members, this collaboration forum is designed to address pertinent environmental issues that all member companies face. As we have grown, we have found tremendous value and synergy in working these non-proprietary issues together, for the betterment of the industry at large.

Sally Gestautas | Board Chair

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



WHY JOIN IAEG® ?



#NETWORKING

To get involved in a **network** comprised of over 50 aerospace and defense companies and their **health, safety, environmental and supply chain executives**

#INDUSTRY SOLUTIONS

To ensure industry **solutions** address unique **aerospace and defense industry issues**

#INFORMATION ON REGULATIONS

To access **information** developed on **substance regulations**, including comprehensive educational materials on **environmental regulations and developments**

#GOOD PRACTICES

To share **good practices** and **environmental solutions**

#COST REDUCTION

To **minimize** administrative burdens and compliance **costs**



IAEG MEMBER COMPANIES (AS OF 12/31/2018)

Airbus	Bombardier Inc	Granta Design Ltd	Israel Aerospace Industries Ltd	Raytheon Company	SurTec International GmbH
Airbus Defence & Space GmbH	Cobham	Gulfstream Aerospace Corp	Lockheed Martin Corp	Rockwell Collins	TetraTech
Airbus Helicopter	Dassault Aviation	Hangsterfer's Laboratories Inc	Meggitt	Rolls-Royce	Textron Aviation
Arconic	Dassault Systems Enovia Corp	Harris Corporation	Mitsubishi Aircraft Co	Saab AB	Thales
ASCO Industries	DXC technology	Honda Aircraft Company LLC	National Quality Assurance	Safechem Europe GmbH	UTC (Pratt & Whitney)
Assent Compliance Inc	Embraer	Honeywell Engines Systems & Services	Northrup Grumman	Safran SA	Zaki Surface Treatment Consulting LLC
BAE Systems	ERM	Huntsman Advanced Materials	Papros	Sauriau SAS	Zodiac Aerospace
Bergeson & Campbell PC	GE Aviation		Ramboll Environment & Health	Spirit AeroSystems Inc	3M Deutschland GmbH
Boeing Co	GKN Aerospace			SR Technics Switzerland Ltd	

*Merged with Safran SA in 2018

[WE KNOW]

GLOBAL REGULATIONS & STANDARDS

- SUBSTANCES MANAGEMENT
- ENVIRONMENTAL REPORTING
- ENVIRONMENTAL MANAGEMENT
- ENVIRONMENTAL PERFORMANCE
- SUPPLY CHAIN RISKS
- ...



Innovation
Environment
Defence
Forum
Aerospace
Solutions
Synergy

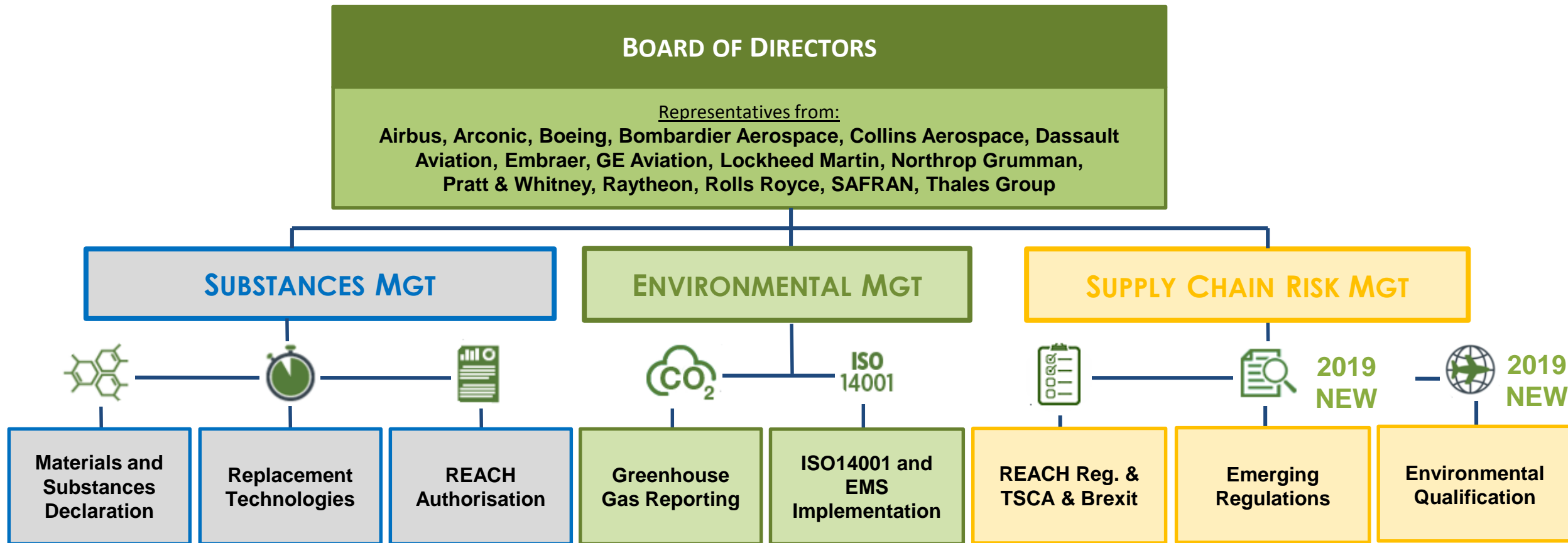
[WE ACT]

SUBSTANCES MGT

ENVIRONMENTAL MGT

**SUPPLY CHAIN RISK
MGT**

Chair: Sally Gestautas, *Raytheon*
Vice Chair: Pending
COO: Bruno Costes, *Airbus*



[AGILE APPROACH TO FIT GLOBAL MEMBERSHIP]

- **VIRTUAL MEETINGS**

Regular Work Group meetings

Monthly meetings to update membership on Work Group activities

Dedicated meetings: Board, Executive, Strategic, Compliance, Finance, Communication, Recruiting

- **WEBINARS**

Training sessions

Supply chain engagements

- **FACE TO FACE BIENNIAL MEETINGS**

Board meeting

Plenary membership session

Work Group sessions

Exchange of Good Practices

Exhibitions (supplier, other)

[MEMBERSHIP OVERVIEW]

IAEG welcomes new members!

Aerospace Companies are eligible for IAEG membership as long as they meet IAEG's eligibility requirements and agree to abide by a Membership Compliance Program instituted by the Board of Directors.

[MEMBERSHIP LEVELS]

Full Member – To qualify as a Full Member, an applicant must be an aerospace company.

\$15 000 or \$20 000 / year

Liaison Member – Any interested company, corporation, trade association, consulting company, or university may join IAEG as a Liaison Member.

\$5 000 / year

For more information visit www.iaeg.com

Meetings

2019 April 8 - 12
San Diego, California, USA



2019 September 23 - 26



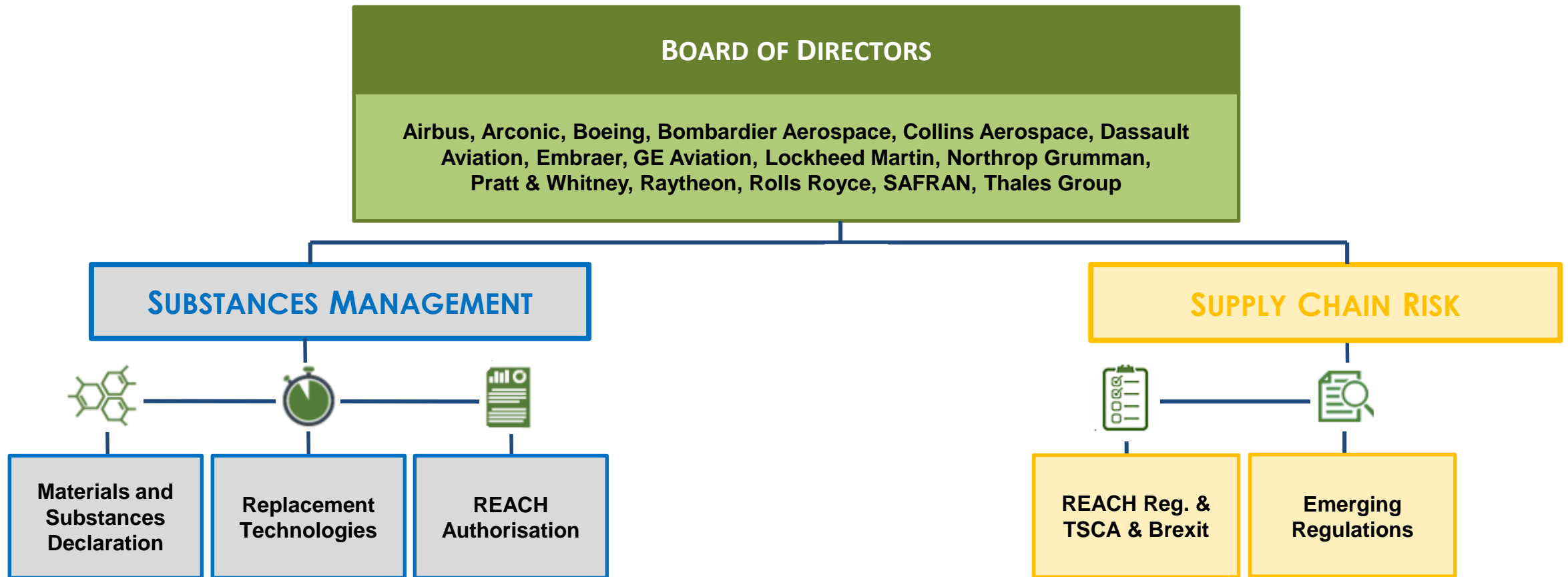
The background features a dark blue sky with a large, dark, billowing cloud in the lower-left corner. A green globe is positioned in the lower-right, with a black silhouette of a commercial airplane flying over it. The text 'FOCUS ON IAEG® WORK TOPICS' is centered horizontally across the middle of the image.

FOCUS ON IAEG® WORK TOPICS

Chair: Sally Gestautas, *Raytheon*

Vice Chair: Pending

COO: Bruno Costes, *Airbus*



2019
NEW



SUBSTANCES AT RISK

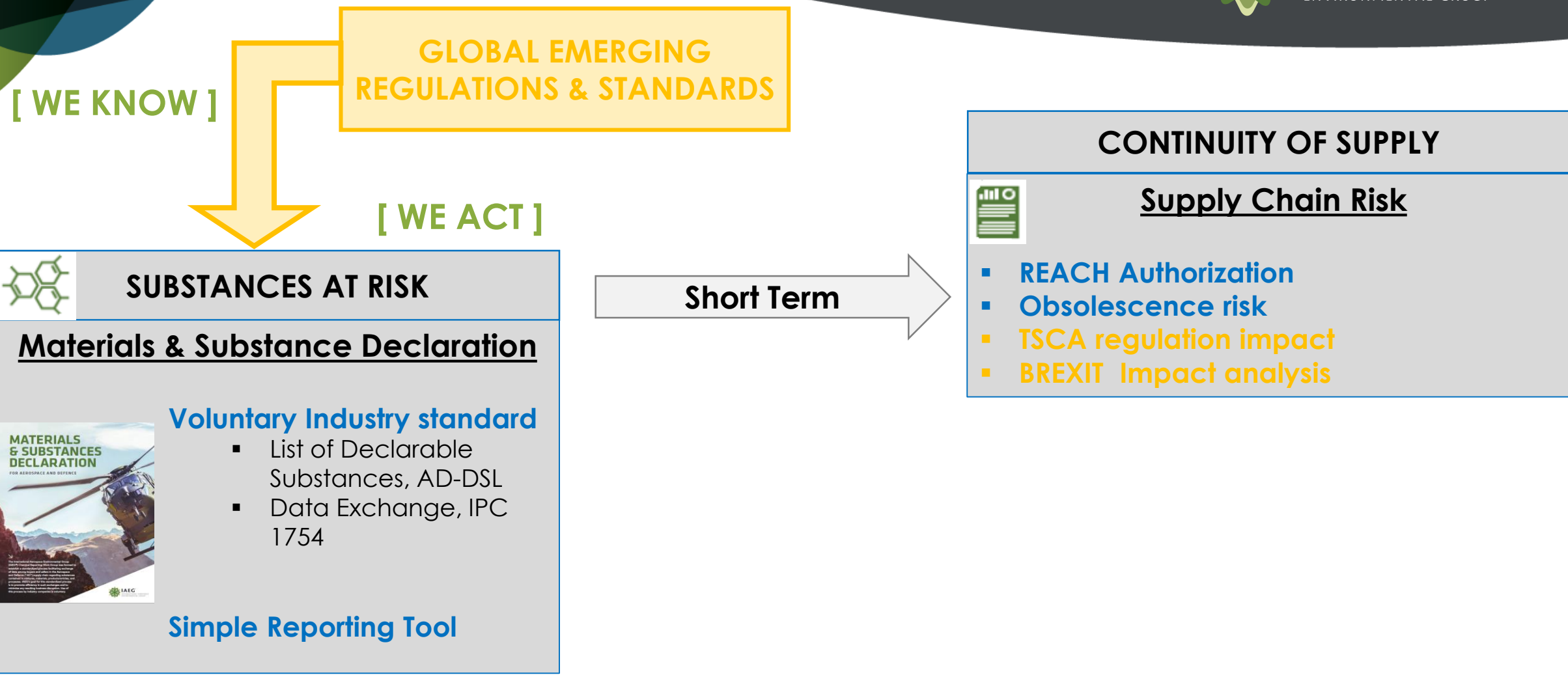
Materials & Substance Declaration



Voluntary Industry standard

- List of Declarable Substances, AD-DSL
- Data Exchange, IPC 1754

Simple Reporting Tool





 **SUBSTANCES AT RISK**

Materials & Substance Declaration




Voluntary Industry standard

- List of Declarable Substances, AD-DSL
- Data Exchange, IPC 1754

Simple Reporting Tool

Short Term


CONTINUITY OF SUPPLY

 Supply Chain Risk

- REACH Authorization
- Obsolescence risk
- TSCA regulation impact
- BREXIT Impact analysis

Mid & Long Term

NEW ALTERNATIVE TECHNOLOGIES

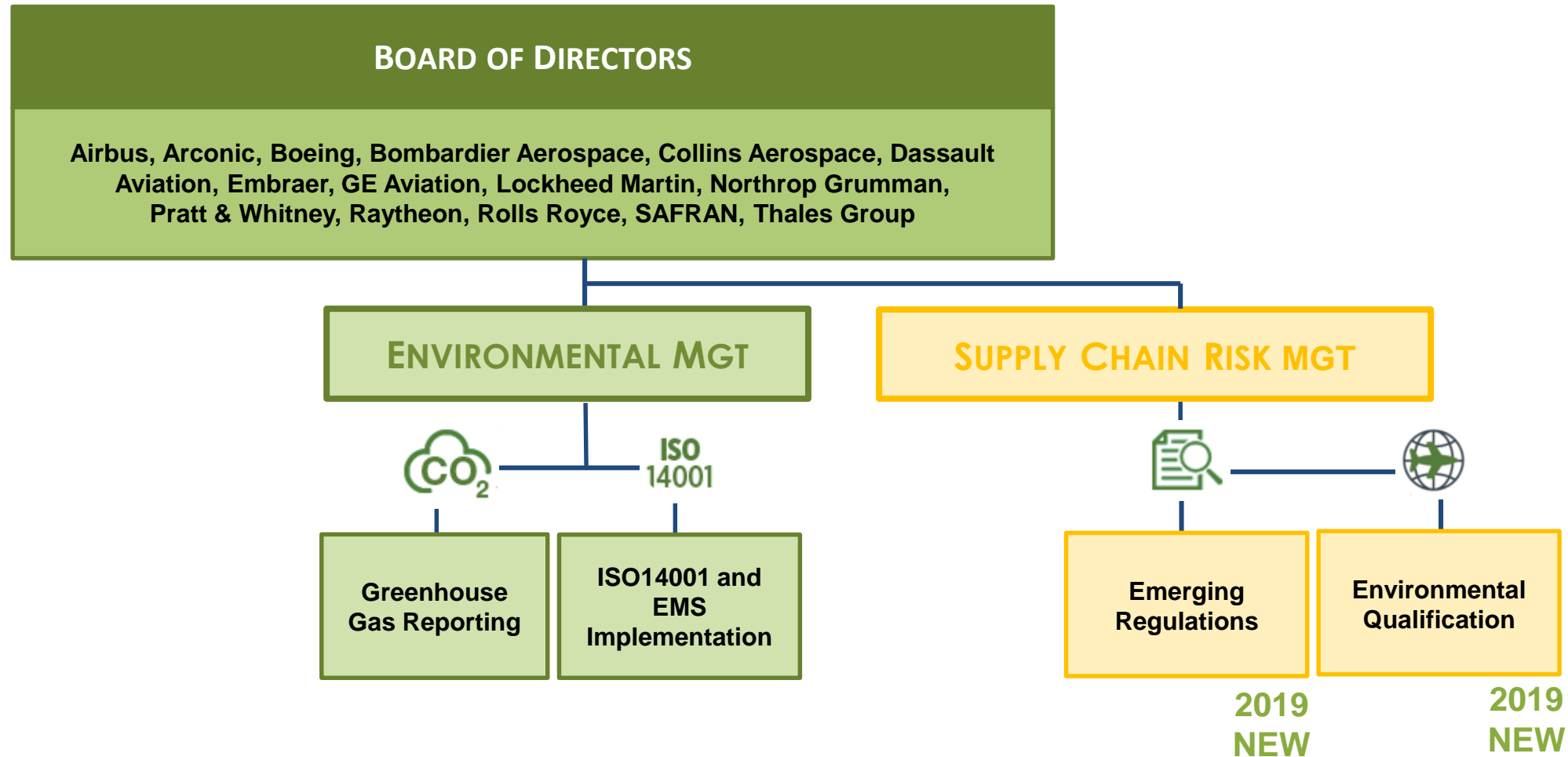
 Replacement Technologies

- R&D Collaboration
 - Cd plating
- Technical Exchange
 - Hard Chrome Plating
 - Chromate Bonding Primer
 - Corrosion Inhibiting Epoxy Primer
 - Chromate Conversion Coating
 - Anodize Seal

Chair: Sally Gestautas, *Raytheon*

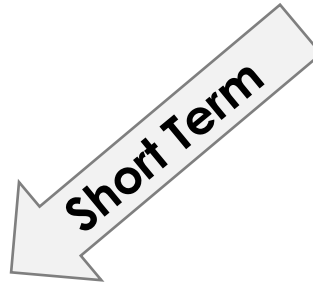
Vice Chair: Pending

COO: Bruno Costes, *Airbus*



[WE KNOW]

GLOBAL EMERGING
REGULATIONS & STANDARDS



[WE ACT]

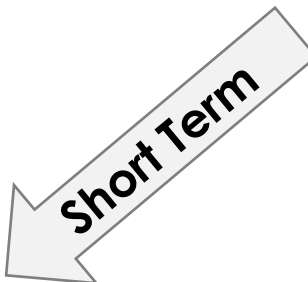


SUPPLY CHAIN COMMUNICATION

- Supply chain risk assessment – fact sheet
- Supply chain webinars

[WE KNOW]

**GLOBAL EMERGING
REGULATIONS & STANDARDS**



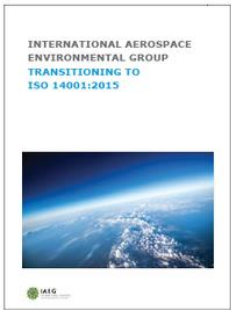
[WE ACT]

 **SUPPLY CHAIN COMMUNICATION**

- Supply chain risk assessment – fact sheet
- Supply chain webinars

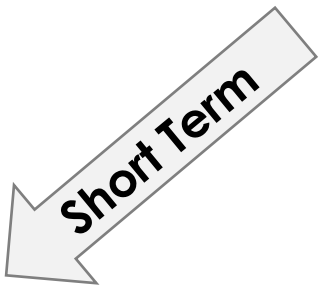
ISO 14001 **ENVIRONMENTAL MANAGEMENT**

- ISO 14001:2015 transition document
- Tiered-approach to help small & medium companies implementing an EMS




[WE KNOW]

**GLOBAL EMERGING
REGULATIONS & STANDARDS**



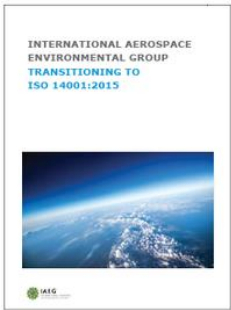
[WE ACT]


 **SUPPLY CHAIN COMMUNICATION**

- Supply chain risk assessment – fact sheet
- Supply chain webinars

ISO 14001 **ENVIRONMENTAL MANAGEMENT**

- ISO 14001:2015 transition document
- Tiered-approach to help small & medium companies implementing an EMS



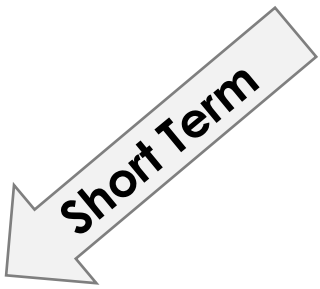
 **ENVIRONMENTAL REPORTING**

- GHG Supplemental Guidance
- Scope 3 Indirect GHG Accounting Guidance

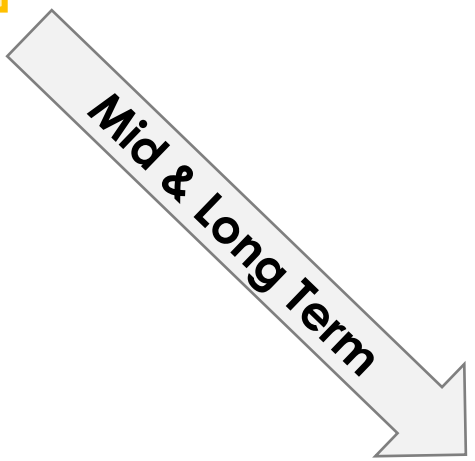



[WE KNOW]

GLOBAL EMERGING
REGULATIONS & STANDARDS




[WE ACT]




 **SUPPLY CHAIN COMMUNICATION**


- Supply chain risk assessment – fact sheet
- Supply chain webinars

 **ENVIRONMENTAL MANAGEMENT**

- ISO 14001:2015 transition document
- Tiered-approach to help small & medium companies implementing an EMS

 **ENVIRONMENTAL REPORTING**

- GHG Supplemental Guidance
- Scope 3 Indirect GHG Accounting Guidance

 **ENVIRONMENTAL QUALIFICATION**

Supply Chain Environmental performance and risk mitigation

- Common requirements
- Common evaluation and auditing scheme
- Common database

-  **Increasing environmental complex laws & regulations**
 - French Devoir de Vigilance
 - ISO 14001:2015
 - Substances regulations,..
-  **Existing contractual obligations for supply chain to comply with new laws or standards**
-  **No ready way to assess a suppliers' ability to comply with the material declaration requirements driven by REACH.**



Need for an effective and efficient way of demonstrating compliance by suppliers




Need for a common assessment tool



*Interdependence of the Aerospace
Supply Chain*

OBJECTIVES

Creation of an Environmental Qualification Program capable of :

-  **Evaluating** the environmental performance & risks of the aerospace supply chain
-  **Driving continuous improvement** of the environmental performance of the aerospace supply chain
-  **Reducing costs** and minimizing administrative burden through sectorial aerospace approach

PROPOSED STRUCTURE



Create a sectorial set of criteria defining Environmental Performance

- EMS
- Chemical Mgt Disclosure
- Environmental Reporting & Perf



Create a process to evaluate/audit Environmental Performance

- Against the defined sectorial environmental criteria



Create an Aerospace Environmental Performance Database

- To store the self-evaluation or audits results

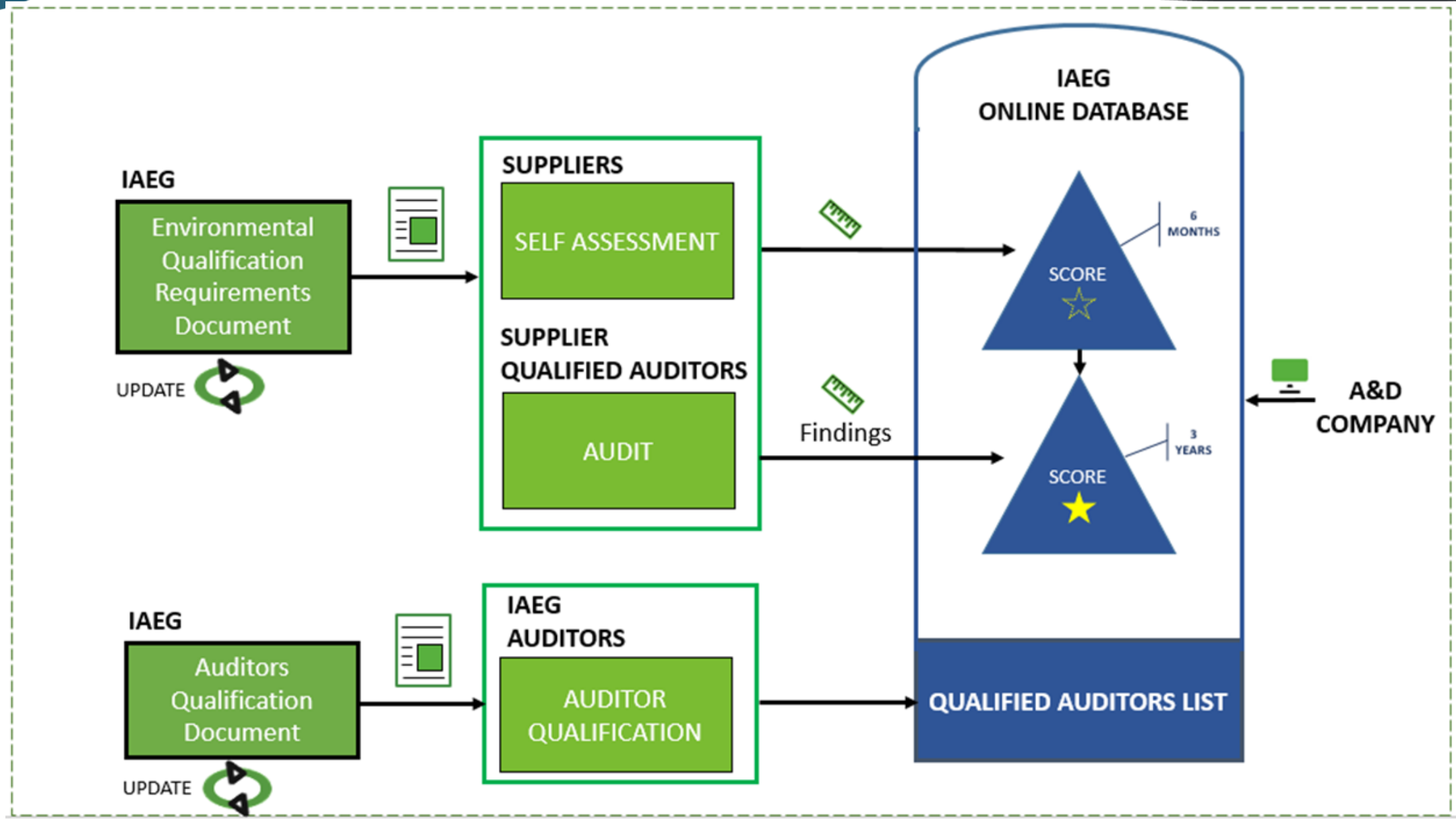


Manage the overall EQPS

- Project Management to reduce the risks within its scope

Note : Each company decides suppliers and terms of business in its unilateral business discretion.

ENVIRONMENTAL QUALIFICATION - HOW IT COULD WORK



THANK YOU