

## EASA Certification Roadmap on H2 — International Workshop

### AGENDA

EASA HQ, Cologne, Germany

Meeting room: 0-M-CO-10 / 11 / 12 / 13 / 14 (Airbus)

**December 17, 2024**

TIME	TITLE / SPEAKER	
08:00 – 08:30	<b>Morning Coffee and networking</b>	
08:30 – 08:40	<b>Welcome and introduction of the Workshop Agenda</b> <i>Rachel Daeschler, EASA Certification Director</i>	<i>Rachel Daeschler, EASA Certification Director</i>
08:40 – 09:00	<b>#1 Keynote pitch –Toyota H2 road vehicle success story</b> <i>Key aspects and learnings to the success of the Toyota H2 powered vehicle and recommendations to the aviation sector.</i>	<i>Tomokazu Hayashi, Head of R&amp;D, Quality &amp; Regulatory Compliance, and Manufacturing Hydrogen Factory Europe</i>
09:00 – 10:40	<b>Session-1: Roadmap for Certification</b>	
09:00 – 09:20	<b>#2</b> <i>H2 Certification Roadmap. A joint presentation by EASA, FAA and CAA UK</i> In a joint presentation EASA, FAA and CAA UK will present the vision for enabling harmonisation and certification of H2 powered aircraft	<i>Javier Castillo (EASA)</i> <i>Catalin Fotache (FAA)</i> <i>Helen Leadbetter (CAA UK)</i>
09:20 – 09:40	<b>#3</b> <i>AZEA – Engaging the aviation ecosystem for the timely adaptation of the regulatory framework to support certification of H2 technologies</i> Proposal of a standardisation roadmap and sufficiency of the certification framework. Recommendations to the regulators	<i>Beatrice Toussaint, AIRBUS)</i> <i>Joan Serra (GAMA)</i> <i>Jonathan Archer (SAE)</i> <i>Esther Hoyas (EUROCAE)</i>
09:40 – 10:10	<i>SDO role and perspective</i> Standards as enablers and as result of evolving technology. Role of the SDOs and recommendations to the roadmap	
10:10 – 10:40	<i>Debate. Q&amp;A Session-1</i>	
10:40 – 11:00	<b>Coffee Break &amp; group photo (foyer)</b>	
11:00 – 13:10	<b>Session-2: Technology and Certification readiness</b>	
11:00 – 11:20	<b>#4</b> <i>“International White Paper”</i> Introduction to a “International White Paper” on H2 technologies for aviation. Outline of some of the key aspects and challenges. Exploration of the possible paths for certifying a H2 aeronautical product. Type Certification boundaries. Recommendations.	<i>Linda Brussaard (EASA)</i> <i>Catalin Fotache (FAA)</i> <i>Helen Leadbetter (CAA UK)</i>
11:20 – 11:40	<b>#5</b> <i>Clean Aviation – Enablers for a successful path in a multidimensional ecosystem.</i> Recommendations from Clean Aviation for a successful technological and certification roadmap in a multidimensional industrial ecosystem	<i>Paolo Trinchieri (Clean Aviation)</i>
11:40 – 12:00	<b>#6</b> <i>Airbus – Technology/requirements/MoC/standards. “Chicken and egg” dilemma. Airbus vision</i> H2 technology is called to be the concept to decarbonize commercial aviation in the future. Airbus will present their reflections and recommendations to resolve the complex equation regarding the Technology/requirements/MoC/standards	<i>Jean-Philippe Tarres &amp; Beatrice Toussaint (Airbus)</i>

<i>CONCERTO – CRL &amp; TRL for disruptive technologies and products. New Concept</i>		
12:00 – 12:20	#7	Authority involvement on development of innovative products. CRL & TRL concept as new paradigm on the engaging between OEM and Certification Authority <i>Joël Jezegou (CONCERTO)</i>
<i>APUS – Flight Conditions and PtF for innovative products. Safety of Flight.</i>		
12:20 – 12:40	#8	The path of maturing and flight testing an innovative prototype aircraft. The experience of APUS and learning points. <i>Stefan Radek &amp; Erik Braun (APUS). Marco Capaccio (EASA)</i>
12:40 – 13:10	<i>Debate. Q&amp;A Session-2</i>	
13:10 – 14:00	<b>Lunch Break</b>	
14:00 – 16:10	<b>Session-3: Technology bricks and Hazards</b>	
<i>H2 Storage and distribution – MTU</i>		
14:00 – 14:20	#9	Technology and the specific hazards related to H2 Storage and distribution. <i>Nicolas Yernaux (MTU)</i>
<i>H2 Direct Burn – Rolls-Royce &amp; DLR</i>		
14:20 – 14:40	#10	Technology and the specific hazards related to H2 Burn in a gas turbine <i>Thomas Frank (Rolls-Royce)</i>
<i>H2 Fuel Cell – POWERCELL</i>		
14:40 – 15:00	#11	Technology and the specific hazards related to Fuel Cell Systems <i>Stefan Bohatsch (POWERCELL)</i>
<i>Cranfield University – Technology bricks &amp; Challenges. Importance of research</i>		
15:00 – 15:20	#12	Research and understanding the technology around H2 and defining the correct design parameters for complex trade-offs is key. Cranfield University is deploying efforts in this area and they will present the main conclusions and recommendations of today. <i>Guy Gratton (Cranfield University)</i>
<i>H2 Hazards – Overview; Fire &amp; explosion risk; crashworthiness – EASA</i>		
15:20 – 15:40	#13	The Regulator outlook to the H2 Hazards with focus on fire & explosion risks and on crashworthiness. <i>Linda Brussaard, Emily Lewis, Remi Deletain (EASA)</i>
15:40 – 16:10	<i>Debate. Q&amp;A Session-3</i>	
16:10 – 16:30	<b>Networking Coffee Break</b>	
16:30 – 17:30	<b>Session-4: Common learning path and Synergies.</b>	
<i>EASA highlights on common learning path, competency acquisition and synergies</i>		
16:30 – 16:50	#14	Raising awareness on the benefits and the importance of working collaboratively, sharing knowledge and competency acquisition on the common denominators. Highlighting synergic potentialities. <i>Javier Castillo &amp; Douriya Ouguenoune (EASA)</i>
16:50 – 17:20	<b>Debate. Final Q&amp;A. All topics</b>	
17:20 – 17:30	<b>Workshop takeaways and Conclusion remarks</b> <i>Colin Hancock, Head of Department Policy, Innovation &amp; Knowledge</i> <i>Colin Hancock, Head of Department Policy, Innovation &amp; Knowledge (EASA)</i>	
<b>End of Workshop</b>		