

## 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>
		<b>Keynote pitch –Toyota H2 road vehicle success story</b>	<i>Tomokazu Hayashi, Head of R&amp;D, Quality &amp; Regulatory Compliance, and Manufacturing Hydrogen Factory Europe</i>
08:40 – 09:00	#1	<i>Key aspects and learnings to the success of the Toyota H2 powered vehicle and recommendations to the aviation sector.</i>	
09:00 – 10:40	<b>Session-1: Roadmap for Certification</b>		
		<i>H2 Certification Roadmap. A joint presentation by EASA, FAA and CAA UK</i>	<i>Javier Castillo (EASA)</i>
09:00 – 09:20	#2	<i>In a joint presentation EASA, FAA and CAA UK will present the vision for enabling harmonisation and certification of H2 powered aircraft</i>	<i>Catalin Fotache (FAA)</i>
			<i>Helen Leadbetter (CAA UK)</i>
09:20 – 09:40	#3	<i>AZEA – Engaging the aviation ecosystem for the timely adaptation of the regulatory framework to support certification of H2 technologies</i>	<i>Beatrice Toussaint, AIRBUS</i>
		<i>Proposal of a standardisation roadmap and sufficiency of the certification framework. Recommendations to the regulators</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>	
		<i>Standards as enablers and as result of evolving technology. Role of the SDOs and recommendations to the roadmap</i>	
10:10 – 10:40	<b>Debate. Q&amp;A Session-1</b>		
10:40 – 11:00	<b>Coffee Break &amp; group photo (foyer)</b>		
11:00 – 13:10	<b>Session-2: Technology and Certification readiness</b>		
		<i>“International White Paper”</i>	
11:00 – 11:20	#4	<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>	<i>Linda Brussaard (EASA)</i>
			<i>Catalin Fotache (FAA)</i>
			<i>Helen Leadbetter (CAA UK)</i>
11:20 – 11:40	#5	<i>Clean Aviation – Enablers for a successful path in a multidimensional ecosystem. Recommendations from Clean Aviation for a successful technological and certification roadmap in a multidimensional industrial ecosystem</i>	<i>Paolo Trinchieri (Clean Aviation)</i>
11:40 – 12:00	#6	<i>Airbus – Technology/requirements/MoC/standards. “Chicken and egg” dilemma. Airbus vision</i>	
		<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>	<i>Jean-Philippe Tarres &amp; Beatrice Toussaint (Airbus)</i>

CONCERTO – CRL & TRL for disruptive technologies and products. New Concept			
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	Joël Jezegou (CONCERTO)
APUS – Flight Conditions and PtF for innovative products. Safety of Flight.			
12:20 – 12:40	#8	The path of maturing and flight testing an innovative prototype aircraft. The experience of APUS and learning points.	Stefan Radek & Erik Braun (APUS). Marco Capaccio (EASA)
12:40 – 13:10	Debate. Q&A Session-2		
13:10 – 14:00	Lunch Break		
14:00 – 16:10	Session-3: Technology bricks and Hazards		
H2 Storage and distribution – MTU			
14:00 – 14:20	#9	Technology and the specific hazards related to H2 Storage and distribution.	Nicolas Yernaux (MTU)
H2 Direct Burn – Rolls-Royce & DLR			
14:20 – 14:40	#10	Technology and the specific hazards related to H2 Burn in a gas turbine	Thomas Frank (Rolls-Royce)
H2 Fuel Cell – POWERCELL			
14:40 – 15:00	#11	Technology and the specific hazards related to Fuel Cell Systems	Stefan Bohatsch (POWERCELL)
Cranfield University – Technology bricks & Challenges. Importance of research			
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.	Guy Gratton (Cranfield University)
H2 Hazards – Overview; Fire & explosion risk; crashworthiness – EASA			
15:20 – 15:40	#13	The Regulator outlook to the H2 Hazards with focus on fire & explosion risks and on crashworthiness.	Linda Brussaard, Emily Lewis, Remi Deletain (EASA)
15:40 – 16:10	Debate. Q&A Session-3		
16:10 – 16:30	Networking Coffee Break		
16:30 – 17:30	Session-4: Common learning path and Synergies.		
EASA highlights on common learning path, competency acquisition and synergies			
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.	Javier Castillo & Douriya Ouguenoune (EASA)
16:50 – 17:20	Debate. Final Q&A. All topics		
17:20 – 17:30	Workshop takeaways and Conclusion remarks		Colin Hancock, Head of Department Policy, Innovation & Knowledge (EASA)
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	End of Workshop		