

EEAG Meeting

29th – 30th March 2017

SINTEF, Oslo, Norway



Avionics Systems Hosted on a distributed modular electronics Large scale dEmonstrator for multiple tYpe of aircraft

QUALITY AND REPEATABILITY IN PHOTONICS

Summary Presentation



This project has received funding from the European Union's Seventh Framework Programme for research, technological development and demonstration under grant agreement no ACP2-GA-2013-605442. This document is the property of the ASHLEY consortium and shall not be distributed or reproduced without the formal approval of the ASHLEY Steering Committee.

"CONFIDENTIAL" - Only for members of the consortium (including the Commission Services)

- ❑ The EEAG Meeting Team
- ❑ Introduction
- ❑ Objectives of the Meeting
- ❑ Conclusions



This document is produced under the grant agreement no ACP2-GA-2013-605442.

It is the property of the ASHLEY consortium and shall not be distributed or reproduced without the formal approval of the ASHLEY Steering Committee.

“CONFIDENTIAL” - Only for members of the consortium (including the Commission Services)

The EEAG Meeting Team



- **Alessio CIPULLO** (Airbus UK) - Chair & Meeting Coordinator
 - **Marina ALMEIDA** (ISQ) – Overall Organisation Focal Point
 - **Patrick SCHITTEKAT** (SINTEF) – Local Organisation Focal Point
 - **Marie-Anne DE-SMET** (Airbus France)
 - **Marion O’FARRELL** (SINTEF)
 - **Chris WOOD** (Airbus UK)
- } Technical Steering Group
- **Alain BENSOUSSAN** (ISROS/IRT)
 - **Olivier GILARD** (CNES)
 - **Thierry MARET** (Thales)
 - **Francois ROSALA** (AdvEOTec)
- } Contributors / Presenters



This document is produced under the grant agreement no ACP2-GA-2013-605442.

It is the property of the ASHLEY consortium and shall not be distributed or reproduced without the formal approval of the ASHLEY Steering Committee.

“CONFIDENTIAL” - Only for members of the consortium (including the Commission Services)

What are the key Photonics Technologies within ASHLEY ?

- Optically-Powered Electrical Sensors
- Passive Optical Fibre Sensors
- Optical Interrogation Systems
- Interface of Photonic Technologies with IMA2G*



**IMA2G = Integrated Modular Avionics 2nd Generation*

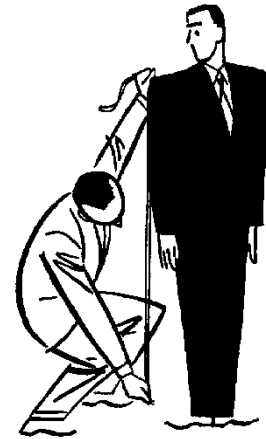
This document is produced under the grant agreement no ACP2-GA-2013-605442.

It is the property of the ASHLEY consortium and shall not be distributed or reproduced without the formal approval of the ASHLEY Steering Committee.

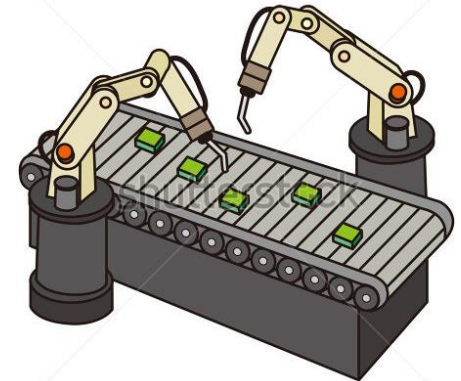
“CONFIDENTIAL” - Only for members of the consortium (including the Commission Services)

Why QUALITY AND REPEATABILITY IN PHOTONICS ?

- **TODAY**, Tailor-made Procedures often used to ensure Quality Levels



- **TOMORROW**, more Automation and Standardisation will be Necessary



How to Achieve the desired Targets of QUALITY AND REPEATABILITY IN PHOTONICS ?

To ENABLE **Large Scale Industrial Deployment:**

Necessary to Tackle the Key Challenges across the
End-to-end Product Lifecycle !



This document is produced under the grant agreement no ACP2-GA-2013-605442.

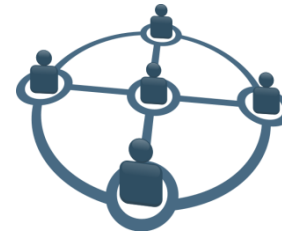
It is the property of the ASHLEY consortium and shall not be distributed or reproduced without the formal approval of the ASHLEY Steering Committee.

“CONFIDENTIAL” - Only for members of the consortium (including the Commission Services)

1. To initiate a **Network** of Expertise
2. To share the appropriate **Top-Level Roadmaps**
3. To capture **Initial Feedback and Ideas** based on Expertise and Background of the participants
4. To introduce **ISROS** (International Society on the Reliability of Optoelectronics for Systems) (<http://www.isros.org/>) and **Next Steps** after this meeting

The key objectives of the meeting were fully met:

1. **Expertise Network v1.0** created



2. **Key Drivers and Challenges** identified to achieve the Quality and Repeatability target with reference to the Roadmaps



3. **Next Steps and Actions** defined (link with ISROS activities)



A number of key themes were identified to be further progressed, including:

1. Promote a stronger **Collaboration** across the whole chain, from R&D to In-service;
2. Enhance **Education and Training** related to Photonic to grow the next generation of Photonics “workforce”;
3. Drive towards **Standardisation** as a key mean to sustain future wider deployment of Photonic technologies;
4. Fully understand the **Failure Mechanisms** of the Photonic technologies of interest as a key enabler to reliable solutions;
5. Ensure the **Sustainability of the Supply Chain** in the long term;
6. ...

***Avionics Systems Hosted on
a distributed modular electronics Large scale dEmonstrator
for multiple tYpe of aircraft***

Call identifier: FP7-AAT-2013-RTD-1

This project has received funding from the European Union's Seventh Framework Programme for research, technological development and demonstration under grant agreement no ACP2-GA-2013-605442.

