



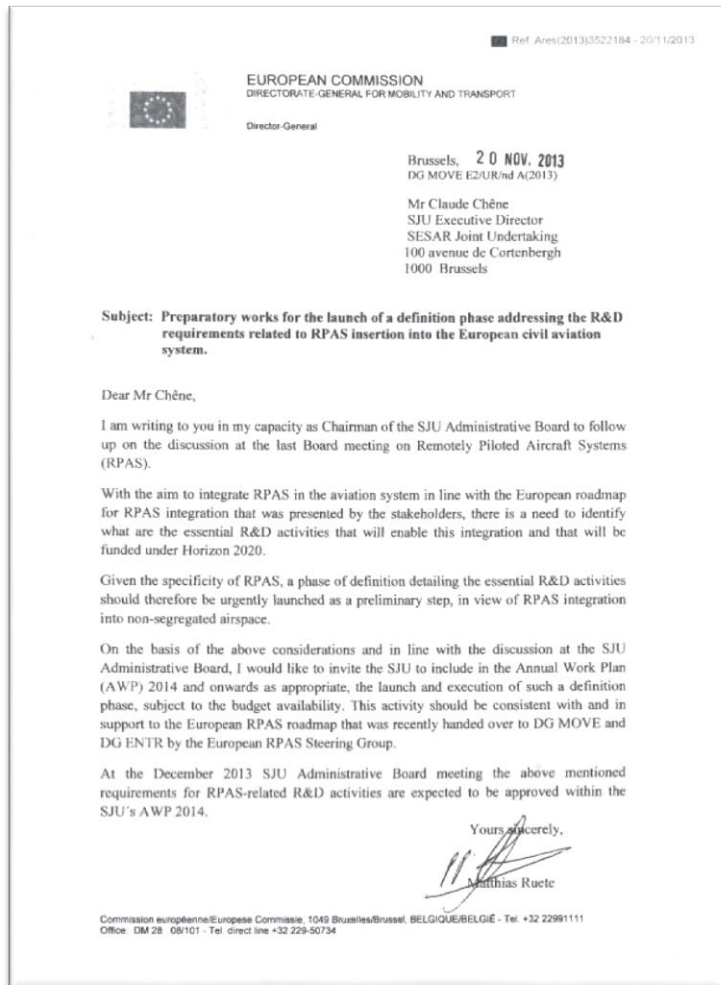
FROM INNOVATION TO SOLUTION

SESAR 2020 RPAS Definition Phase Progress Report

Workshop 03

Mandat

Address the R&D requirements related to RPAS integration into the European civil aviation system



- Aim: integrate RPAS in the aviation system
- In line with the European Roadmap for RPAS integration
- Identify what are the essential R&D activities
- Funded under Horizon 2020



Requirements & Challenges

- Requirements for RPAS integration are linked to the European ATM Master Plan and the ICAO Global Plan/ASBU timeline
- RPAS will have to fit into the ATM system (and not the reverse), with required adaptations to enable the safe integration of unmanned systems
- RPAS will have to prove to be as safe as current manned vehicle operations and, their behaviour in operations, to be equivalent to manned aviation, in particular for air traffic control
- Thus, RPAS integration into the Aviation System shall comply with:
 - existing and consider future regulations and procedures developments
 - the SESAR CONOPS(trjectory management)
 - ATC rules/procedures
 - capability requirements applicable to the airspace within which they operate

And not to:

- impact negatively the operations of the current system and its performance
- compromise existing aviation safety levels nor increase risk levels.

The way RPAS operations will be conducted, as regard to ATM operations has to be equivalent to manned aircraft



SESAR RPAS Definition Phase

The RPAS Definition Phase will result in the following activities:

- Regulatory and Business Framework
- Performance Requirements and Assessment
- Operational Changes in ATM
- Enabling Systems
- Validation Needs
- SESAR RPAS R&D Programme requirements and outline
- Input to the EU ATM Master Plan

There is not intend to define a separate RPAS SESAR Programme for R&D



The *Easy Way*

The *Hard Way*

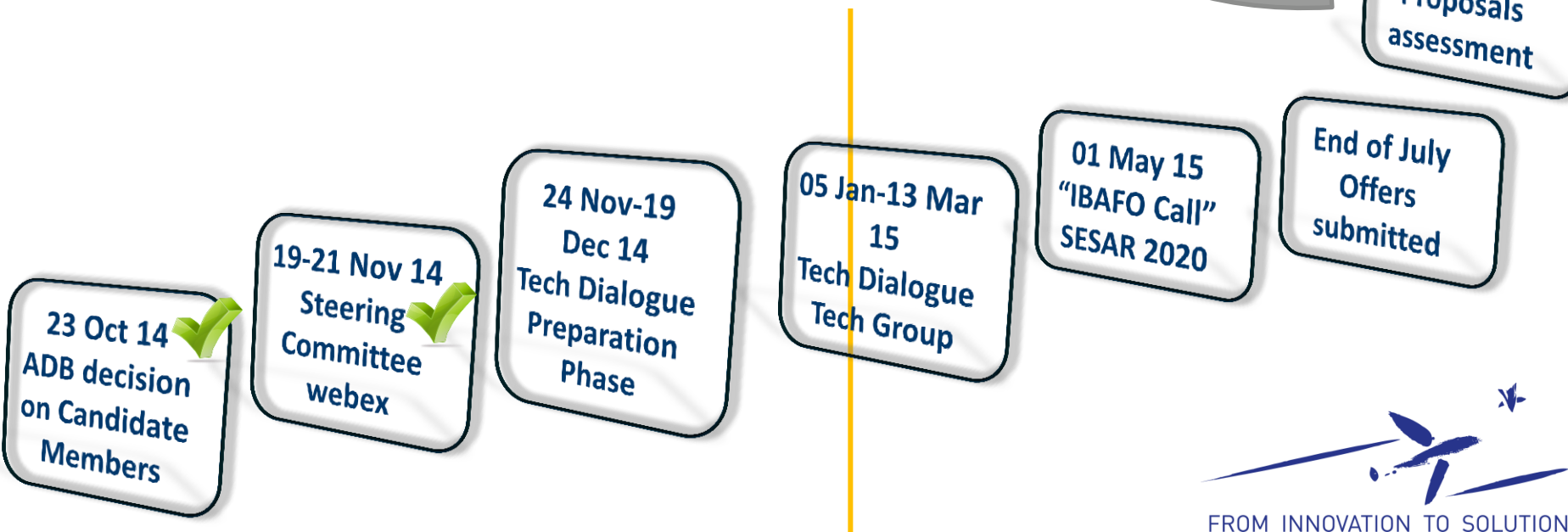
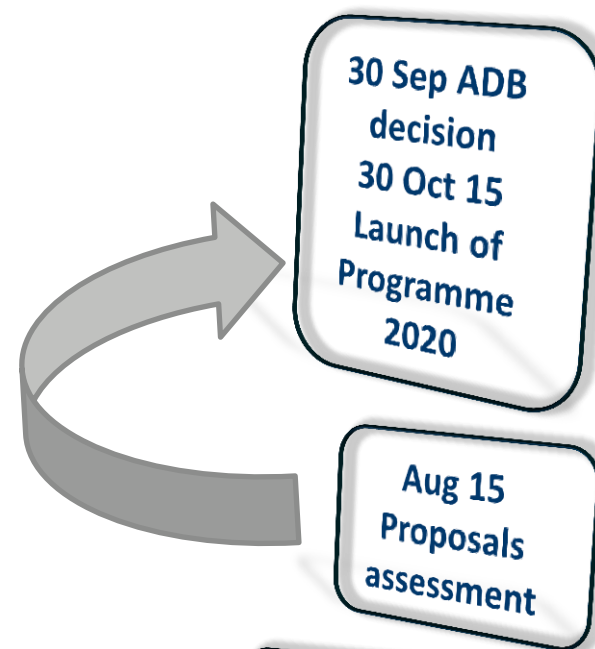
... or how do we get there?

Allocated work

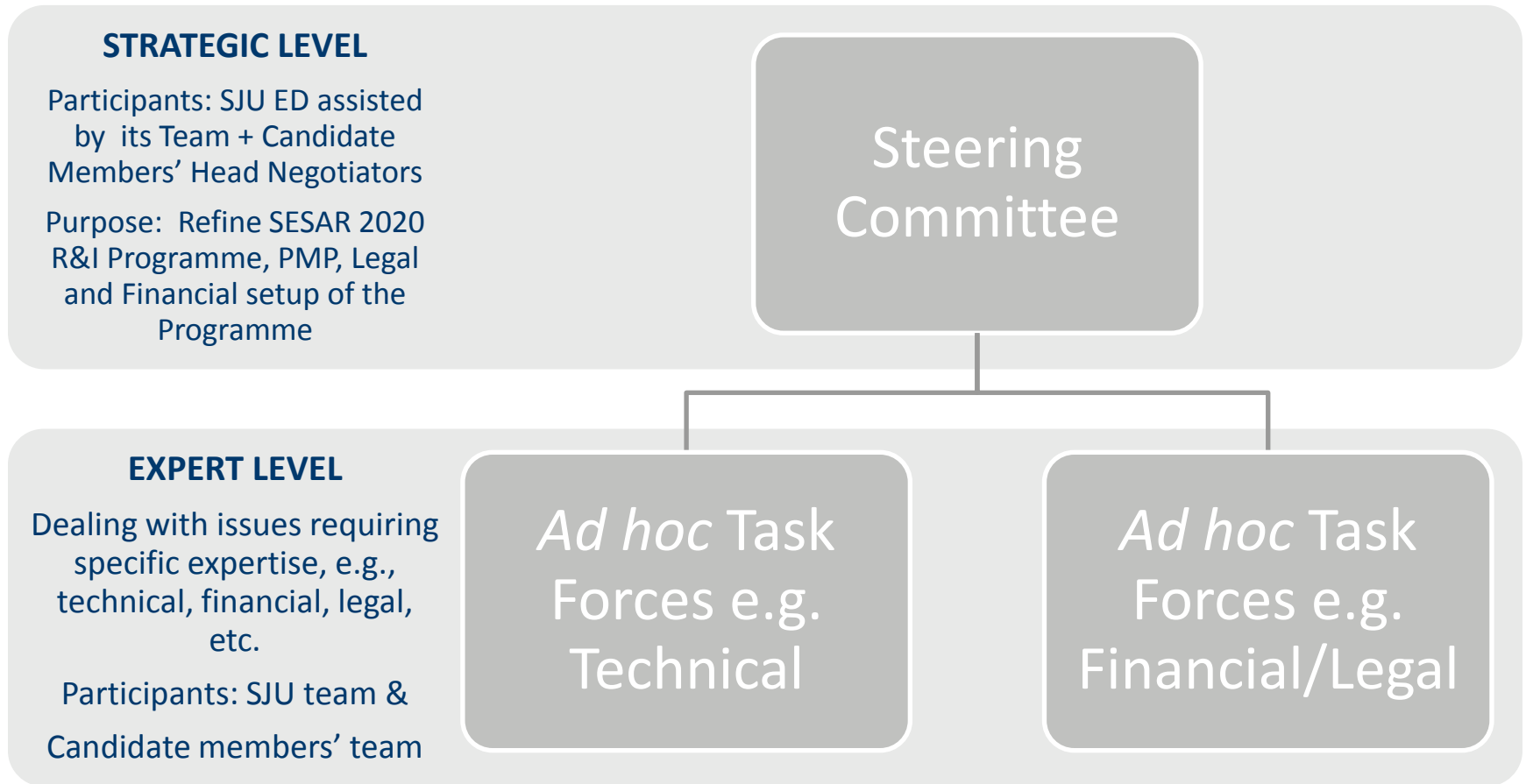
- Act. # 1 - IFR/VFR & BVLOS - D&A (2013-2018) - *Saab*
- Act. # 2 - IFR/VFR & (B)VLOS - Comms C2 data link - *Honeywell*
- Act. # 3 - IFR/VFR & BVLOS - Airspace Access and Airport Operations - *CANSO*
- Act. # 4 - IFR/VFR & (B)VLOS - Contingency (2014-2018) - *Airbus*
- Act. # 5 - IFR/VFR and BVLOS - Human Factors (2014-2019) - *Eurocontrol*
- Act. # 6 - Security (2013-2018) - *SESAR JU*
- Act. # 7 - Demonstrations of best practices (2013-2016) - *SESAR JU*



Building SESAR 2020



Steering the Dialogue & Negotiations



Exceptional bilateral discussions between the SJU & candidate members may be organised at *Strategic level and/or Expert level*

covering specific elements of the proposal submitted by the candidate member which are specific to the latter or which the candidate member is not able to share with the other candidate members



SESAR RPAS Definition Phase – Next Steps

- Input to the EU ATM Master Plan
- SESAR RPAS Market Study



Thank you for your attention

