



FROM INNOVATION TO SOLUTION

SESAR UPDATE

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8 November 2016



#SIDS2016
@SESAR_JU

founding members



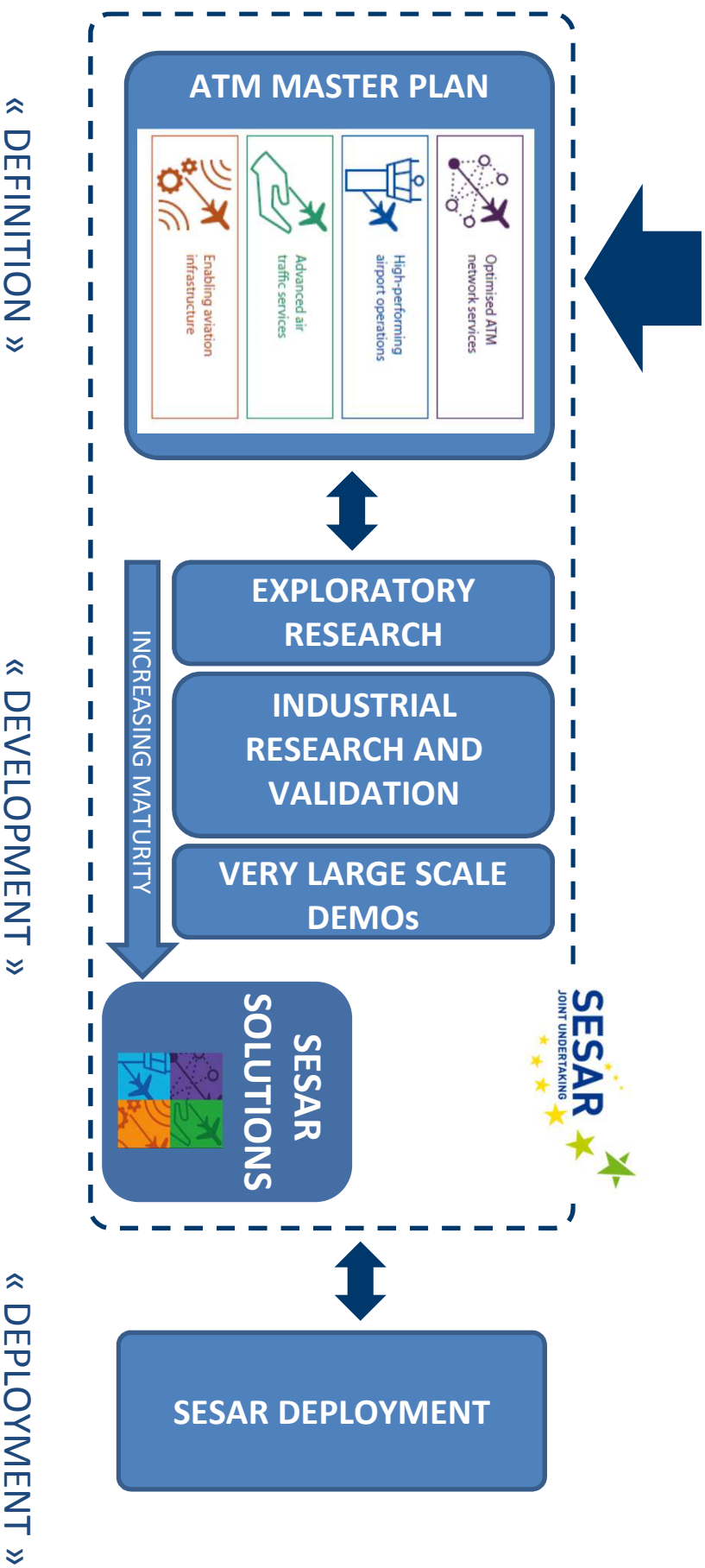
EUROPEAN UNION



EUROCONTROL

Bigger picture

SINGLE EUROPEAN SKY



SESAR 1 lessons learnt

- Research networks and projects demonstrated their scientific value;
- Challenge remains to transfer long-term research results into SESAR industrial research activities;
- More efforts are needed to strengthen links between ATM research community and SESAR stakeholders.



SESAR 2020

THE SESAR 2020 PROGRAMME STRUCTURE



FROM INNOVATION TO SOLUTION

Exploratory research calls

H2020 open calls: not limited to SJU Members

- **ER-1** (20,6 Meuro)
ATM excellent science & outreach and
ATM applications oriented research
- **ER-2** (9 Meuro)
Remotely-piloted aircraft systems
(RPAS) in very low-level (VLL) drone
operations
- **ER-3** (10 Meuro)
Transversal activities, including
knowledge transfer networks (KTN)
and ATM applications oriented topics
- **ER-4** (40 Meuro)
ATM excellent science & outreach and
ATM applications oriented research



ER-1: exploratory research topics

ATM excellent science and outreach:

- ER-01-2015 - Automation in ATM
- ER-02-2015 - Data science in ATM
- ER-03-2015 - Information management in ATM
- ER-04-2015 - Environment and meteorology in ATM
- ER-05-2015 - Economics and legal change in ATM

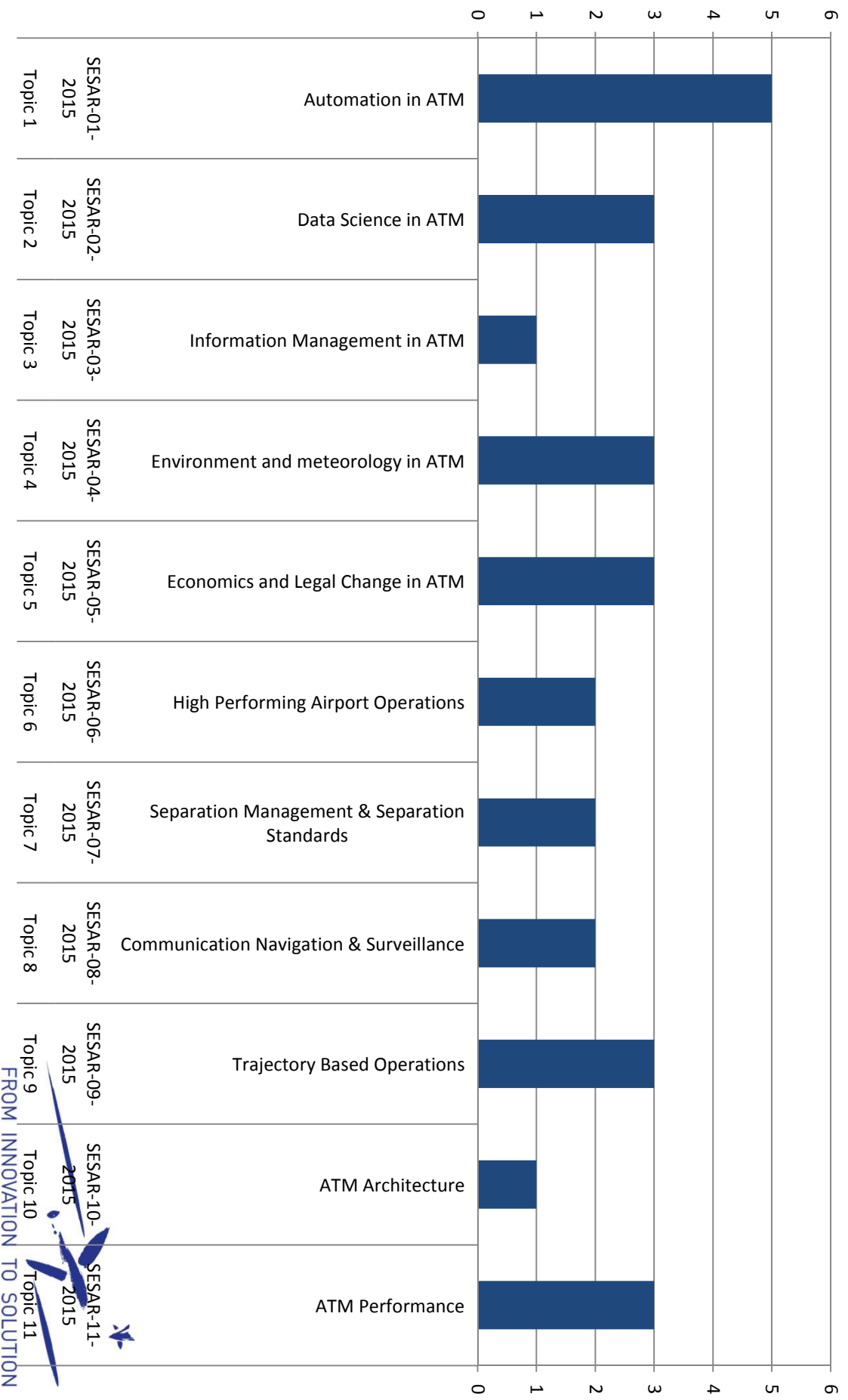
ATM application-oriented research:

- ER-06-2015 – High-performing airport operations
- ER-07-2015 - Separation management and separation standards
- ER-08-2015 - Communications, navigation and surveillance
- ER-09-2015 – Trajectory-based operations
- ER-10-2015 - ATM architecture
- ER-11-2015 - ATM performance



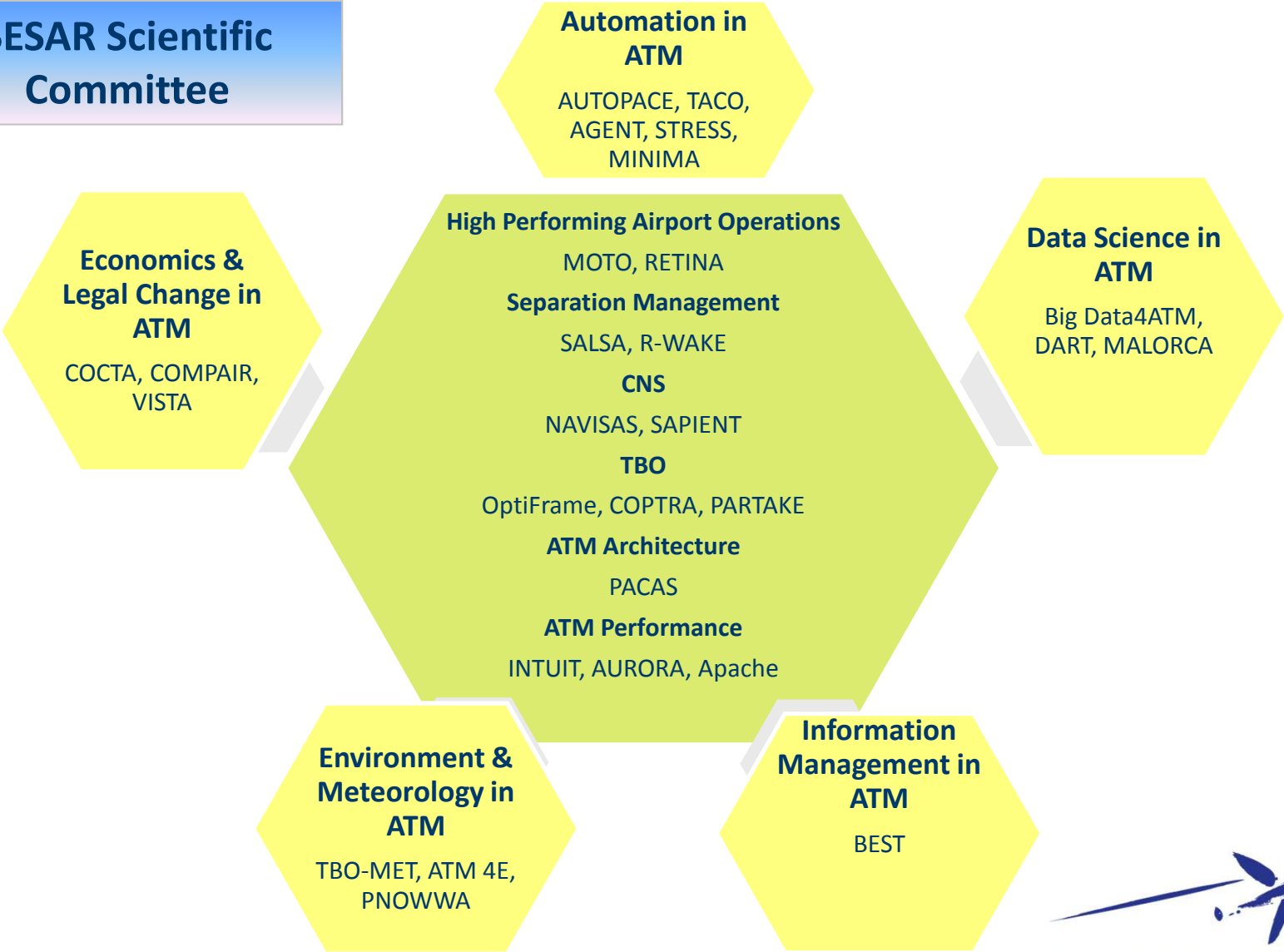
Selected projects per topic

Exploratory research: Projects per topic



S2020 Exploratory research today

SESAR Scientific Committee



FROM INNOVATION TO SOLUTION

ER-1 call observations

- **Highly competitive** with high quality proposals **building upon WP-E results**;
- **Innovative research** questions and challenges addressed;
- Fully in-line with **SESAR 2020 vision** for the future evolution of the European ATM.



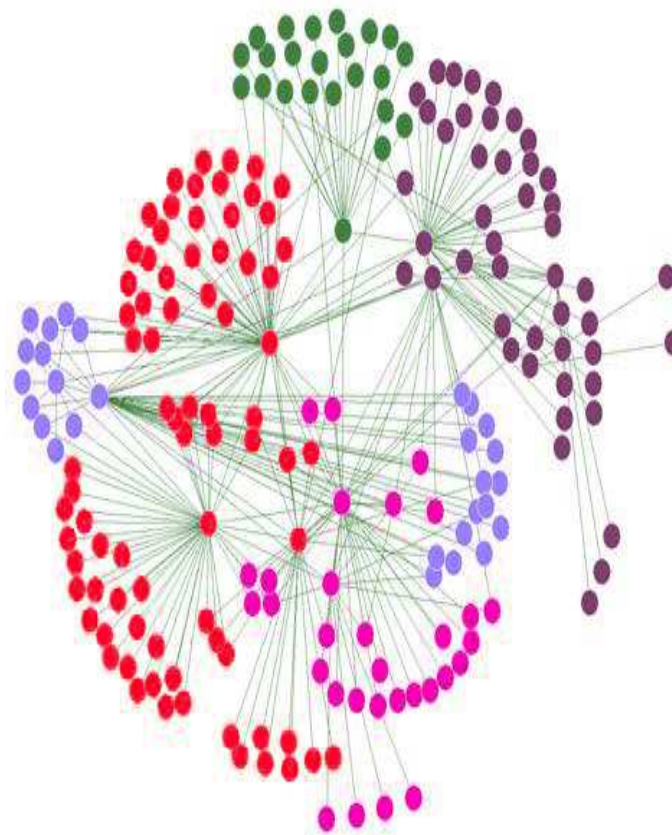
ER-2: deadline extended

- **Extended deadline:**
15th November 2016
- **Scope:** Operations of unmanned aircraft Systems (UAS) and RPAS in very low level (VLL), including the visual line of sight (B-LOS) operations, as well as visual flight rules (VFR) environments
- **More information:**
http://ec.europa.eu/research/participants/data/ref/h2020/other/call_fiches/jtis/h2020-call-doc-er-sesar-ju-2016_en.pdf



ER-3 Part 1: Knowledge transfer network (KNT)

- Support the SJU by focussing on the **assessment, transfer, communication** and **sharing of research results** among the ATM community.
- Support and encourage **collaborative research** on future and emerging innovative ideas, expertise and knowledge for the benefit of the future evolution of the European ATM system and its people.
- Include the organisation and management of **interdisciplinary or 'themed' network activities** and **PhD research activities** based around key ATM research subjects



ER-3 Part 2: ATM applications oriented research

Supports new concepts for ATM beyond those identified in the ATM Master Plan, as well as matures new concepts for ATM, emerging technologies and methods to the level required to feed into SESAR 2020 industrial research.

- Advanced air traffic services
- Optimized ATM network management - advanced airspace management, dynamic capacity balancing etc.
- Enabling aviation Infrastructure - the use or adaptation of new technologies being developed outside ATM to support ATM CNS needs , lightweight and/or low-cost devices suitable for airspace users, such general aviation,
- ATM operations, architecture, performance and validation



ER-4: ATM excellent science/applications oriented research

Covers two topic areas:

- **ATM excellent science and outreach/applications**
- **ATM applications oriented research**

IMPORTANT!

Topics will be defined based on gaps identified and initial results of ER-1 projects and SESAR industrial research (Wave 1).



Want to know more?



The screenshot displays the European Commission Research & Innovation Participant Portal. The header includes the European Commission logo and the text "RESEARCH & INNOVATION Participant Portal". The navigation menu contains "HOME", "FUNDING OPPORTUNITIES", "HOW TO PARTICIPATE", "EXPERTS", "SUPPORT", a search bar, and a "LOGIN" button. The main content area features a sidebar with "EU Programmes 2014-2020" and a list of topics including "H2020", "3rd Health Programme", "Asylum, Migration and Integration Fund", "Consumer Programme", and "COSME". The main content area displays a call for proposals titled "CALL: SESAR 2020 RPAS EXPLORATORY RESEARCH CALL" with a call identifier of "H2020-SESAR-2016-1" and a publication date of "28 June 2016". Below this, there is a section for "Horizon 2020" with details: "Pillar: Societal Challenges", "Work Programme Year: H2020-JTI-SESAR-2016", and "Work Programme Part: SESAR Work Plan 2016". A "Call summary" section is also visible, starting with the "Scene Setter" text: "The growing drone market shows significant potential for Europe. The development of the drone industry is dependent on the ability of drones to operate in all areas of airspace, including at very low levels."

All call information:

<https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/index.html>



Scientific Committee

- New Scientific Committee important part of SESAR governance.
- Not only limited to ER but advises on all scientific matters
- Selection process completed
- Notifications to be issued before year-end
- 1st meeting in January 2017





Thanks for your attention