

Designing the future of aviation



FUTURE SKY

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FSS in Final Approach

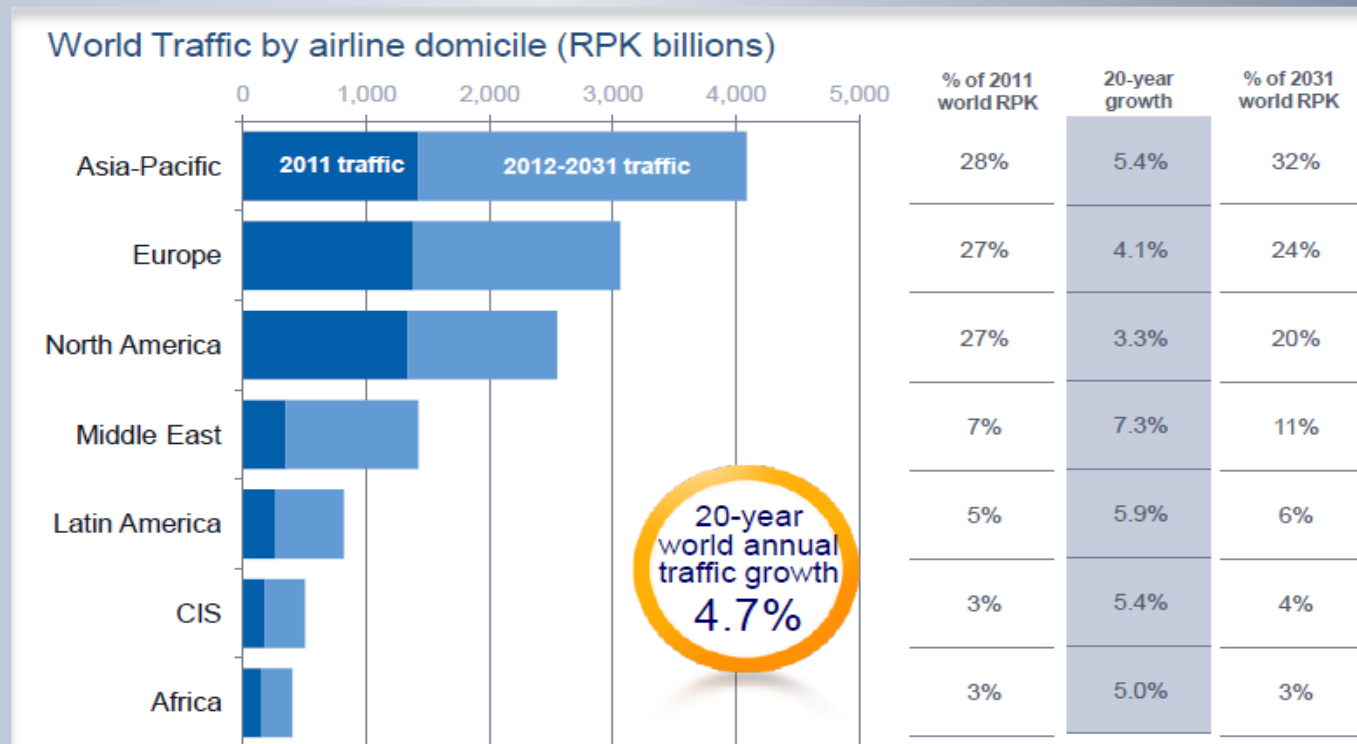
Eurocontrol HQ, 6-7 November 2018



Association of
European Research Establishments in Aeronautics

The thrilling context : A persistent growth of air traffic

Asia-Pacific airlines to lead in world traffic by 2031



Source: Airbus

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Challenges linked to Aviation Growth



Noise

New aircraft and usages

Emissions / Climate Impact

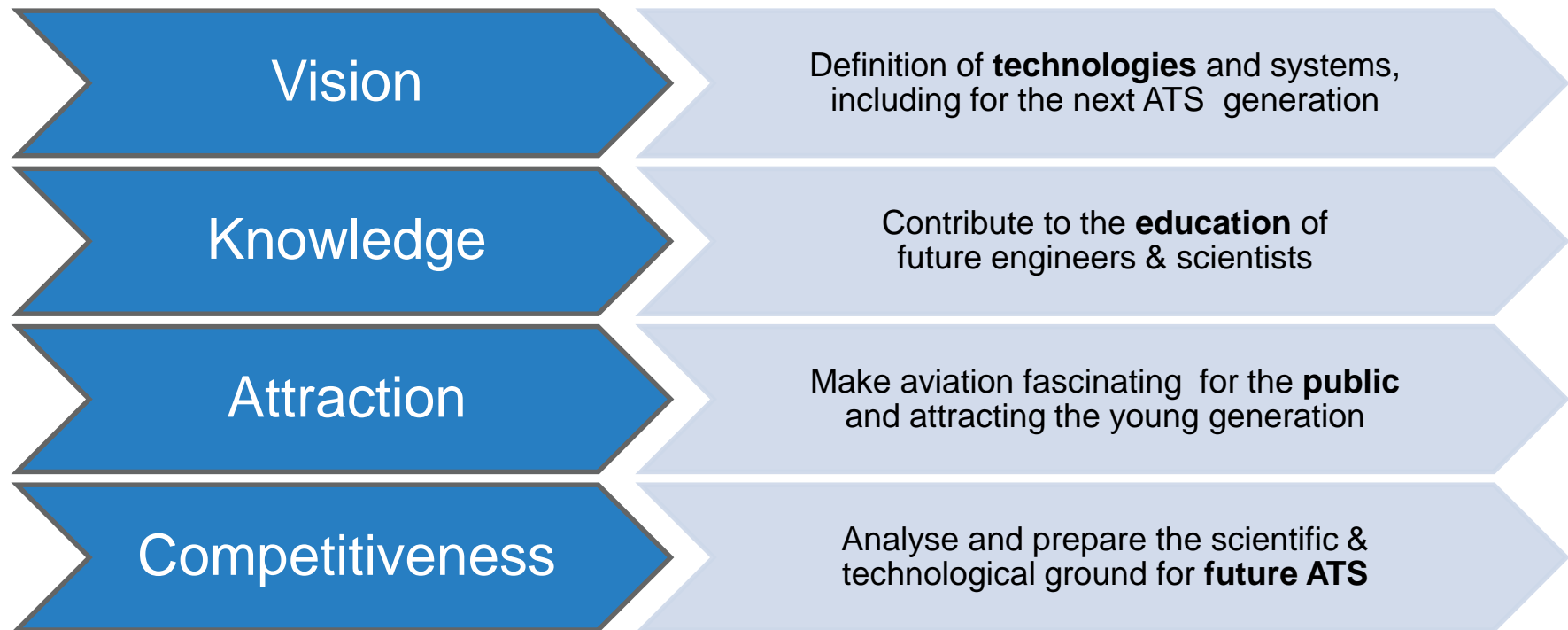
Ground Processes / Multimodality

Future Sky, an EREA initiative

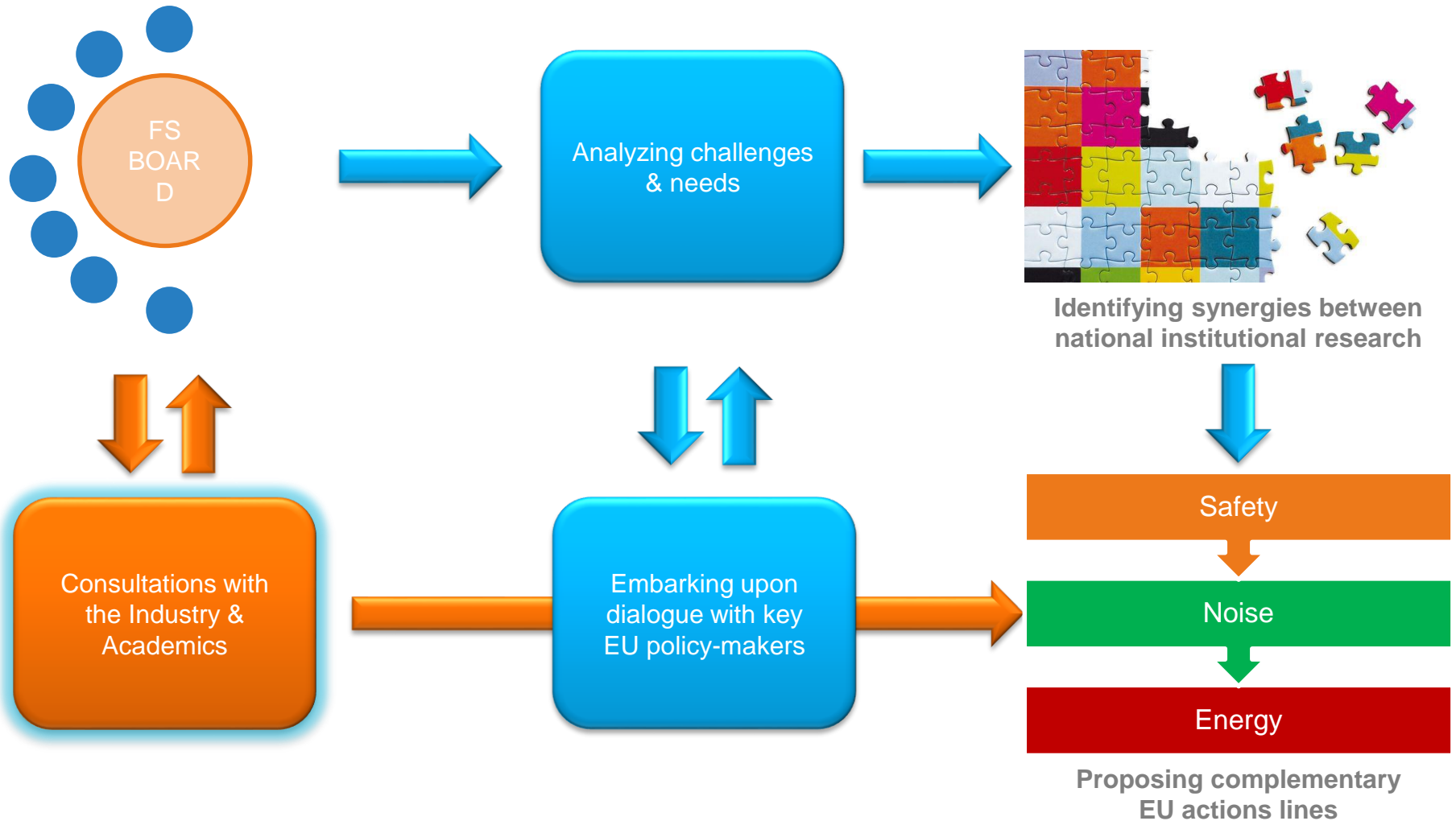
- Future Sky is an EREA initiative started in 2014
- It aims at addressing the main challenges of EU Aviation toward 2050

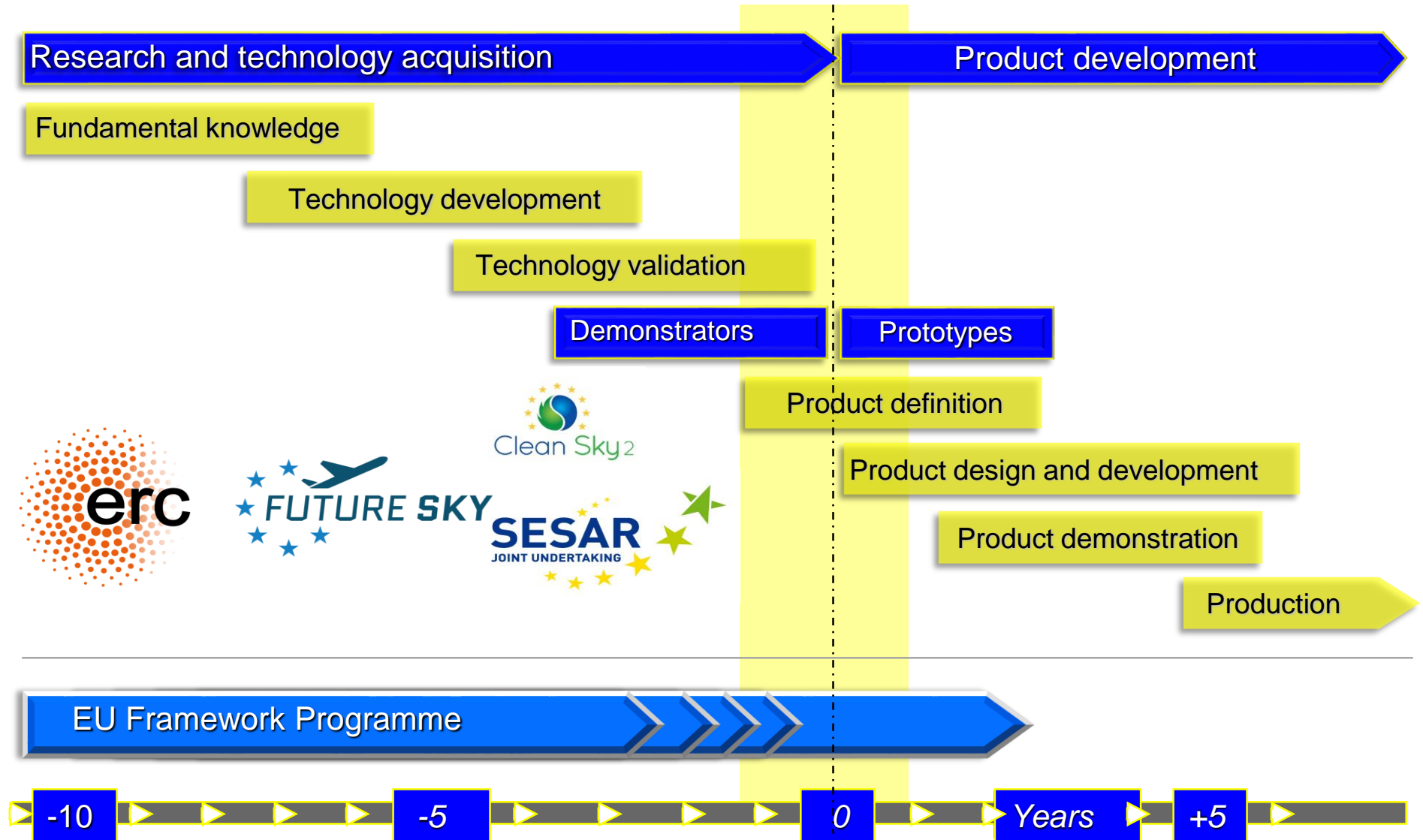
- Future Sky
 - ✓ Provides recommendations to the European policy-makers and associated bodies
 - ✓ Coordinates the research effort of its members toward a greater efficiency
 - ✓ Initiates and bridges research projects between academics and the industry

Future Sky, a comprehensive ambition in line with FlightPath 2050



A collaborative ecosystem

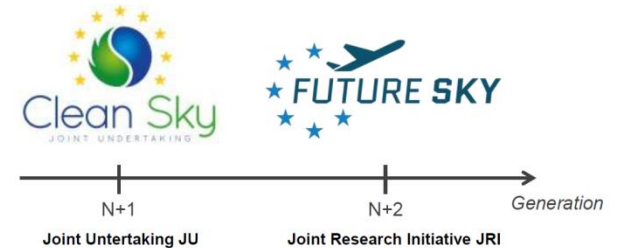




Achievements 2014-2017

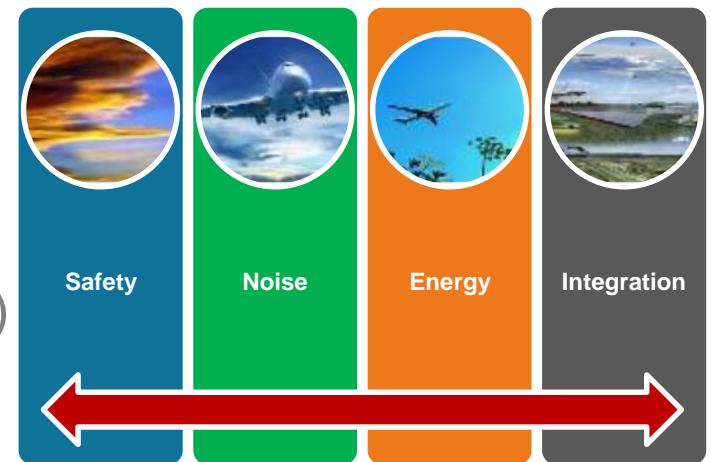
Policy level

- Initial positioning of Future Sky at “N+2”
- Promotion of “Joint Research Initiatives”
- Identification of 4 major challenges



Operational level (programmes & projects)

- **FS Safety** supported by the EC as a JRI (2015)
- **FS Noise** a more inclusive strategy (2017)
 - **ANIMA** (EREA labelled, impact)
 - **ARTEM** (EREA labelled, technology)
 - **RUMBLE** (EREA compliant, supersonic)



Current developments (2018 – 2019)

Proposing new innovative RIAs in line with the EC WP and FS priorities

- FS Energy **MACBETH**
“Multidisciplinary And Collaborative Boosting of Electric Thrust for Hybrid-electric aircraft”
- FS Energy **IMOTHEP**
“Investigation and Maturation Of Technologies for Hybrid Electric Propulsion”
- FS Noise & Energy **DELPHINE**
Distributed ELectric Propulsion integrated techNologies - pollutINg Emissions reduction”

Contributing to a shared vision of EU Research priorities with **roadmaps**



The Future of Future Sky

Enlarging and updating the scope with new challenges

Pending talks are considering several options which ought to be discussed and considered with other key players

- Security for Aviation
- Circular Aviation
- Mobility (*under consideration*)

Enlarging and updating the role of Future Sky

- **Roadmaps**, a positive momentum for **Vision** and **Competitiveness**
- **Educational and Training** initiatives likely to be fostered for **Knowledge** and **Attraction**
- **“Let my people know”** – Need to raise further awareness about Future Sky

Adapting Future Sky in the renewed context of **Horizon Europe**

- Reconsidering Future Sky to match the expectations of the **forthcoming Commission**
- **Securing a dedicated governance** for upstream research oriented onto **disruptive and applied bottom-up ideas**

More than ever, Future Sky intends remaining

**the Joint Research Initiative for
green and seamless air mobility**

thank you for your attention
www.ereea.org

