Synergies with ESIF: state of play at Clean Sky 2 JU









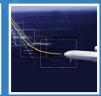
















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MLE workshop – Madrid- 11/01/18

Innovation Takes Off





Clean Sky the PPP in aeronautics

Aeronautics: a sector of excellence of Europe

- 500B € turnover in the EU
- 530 000 jobs top-ranking worldwide
- 4% annual growth of air transport doubling of air traffic outlook
- Global competition (USA, Russia, China) need to act at EU level to accelerate R&I and be competitive

Clean Sky: a "Joint Technology Initiative"

- Focus on environmental targets and competitiveness for aeronautics
- Integrated technologies, industry-led, up to full scale demonstrators
- Clean Sky 2 (H2020): 4 B€ total funding
 - 1.8M EU funds, 2.25M private contribution



Clean Sky - PPP in aeronautics

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- JTI crucial to develop iintegrated technologies, industry-led, up to full scale demonstrators
- Clean Sky 2 (H2020): 4 B€ total funding
 1.8 B€ EU funds, 2.25 B€ private contribution
- Main European programme for greening aviation and to support Paris COP21 goals
 - Biggest environmental benefit is coming from greening technologies and developing low-carbon fuels
 - Complemented by efficient operations (SESAR) and economic measures (ETS, ICAO Global MBM)



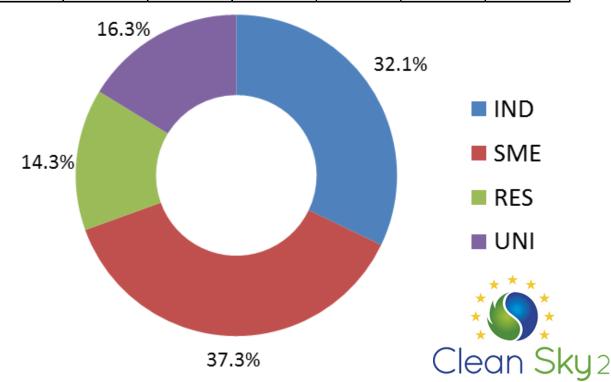


Overall Participation to Date

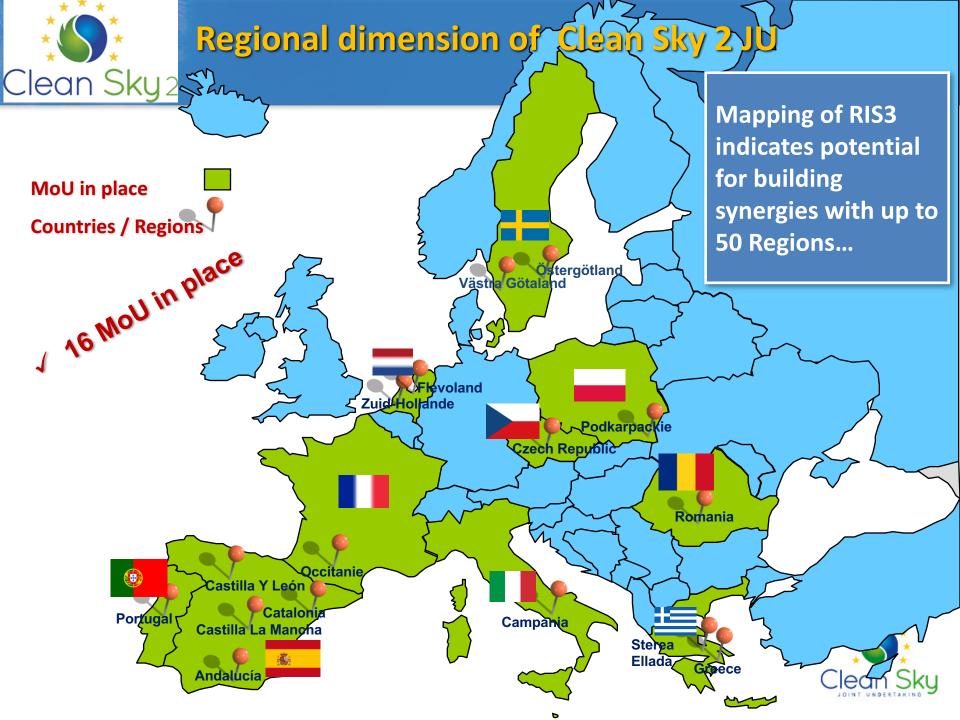
Participations in winning proposals in open calls up to November 2017

| Type of Organisation | LPA | REG | FRC | AIR | ENG | SYS | TE | TOTAL |
|----------------------|-----|-----|-----|-----|-----|-----|----|-------|
| IND | 59 | 18 | 28 | 58 | 41 | 49 | 0 | 253 |
| SME | 47 | 18 | 27 | 85 | 30 | 47 | 7 | 261 |
| RES | 57 | 14 | 24 | 69 | 22 | 40 | 8 | 234 |
| UNI | 46 | 20 | 13 | 49 | 37 | 20 | 2 | 187 |
| Total | 209 | 70 | 92 | 261 | 130 | 156 | 17 | 935 |

Total number of single entities: 498 from 27 countries







Synergies with ESIF – state of play

- √ 16 MoU in place (ongoing talks with more Regions)
- √ 10 MS covered
- ✓ 3 MoU at National Level (PT RO CZ)
- ✓ 3 MoU with EU-13 (RO-CZ and Podkarpackie in PL)
- ✓ Not only traditional aeronautics Regions
- ✓ RIS3 mapping shows a potential for cooperation with over 50 MS/Regions with aeronautics and clean mobility RIS3 related priorities
- ✓ Intermediate results from the CS2JU action plan show a potential for wider and deeper cooperation on synergies with Member States and Regions



Potential for Regional cooperation

Many other priorities/areas (not only aeronautics-specific) and many other MS/Regions are relevant for building synergies with Clean Sky...

Mechatronics production Industries Environmental intermodality CO technologies equipment Cybersecurity efficiency emission modelling products conception/production/recycling components system embedded aereonautical Aeronautics composites ICT Aviation high-grade connected carbon low digital captors Composite New future activities development M2M Sustainable coatings Hydraulics data cloud lasting Internet big plastics combination Capital etc Mechatronic electronic Intelligent engineered Information Transport sensor Applied Service Schemistry Green service metals machines Biofuel Smart demand industry mechanical tech engineering industrial light Advanced logistics Mobility automation Metal facilities Energy technology electrotechnics connecting applications Ecomobility



Clean Sky cooperation with Regions: objectives

- Contribute to enhance European dimension of "Aeronautics Regions" and Regions willing to invest in the sector "think global – act local"
- Contribute to underpin RIS3 priorities and regional efforts in aviation/aeronautics and correlated RIS3 areas
- Link RIS3 and projects to the industrial roadmap of the largest European R&I Programme in aeronautics
- Ensure more coordination on investments and use of large-scale research infrastructures in aeronautics
- Leverage effect from synergies between ESIF, EU Programmes and other National/Regional funds



How to enagege in a cooperation MoU objectives

- MoU to take up a bilateral commitment to work towards common objectives and to set the scene of a cooperation
- Based on a Regional analysis (RIS3, regional capabilities, stakeholders participation/interest in Clean Sky, potential to complement the Programme via ESIF/Regional funds)
- MS/Regions take a commitment to support the cooperation with Clean Sky and to plan/design ESIF-Regional funded schemes to support complementarities





5 Scenarios for Synergies

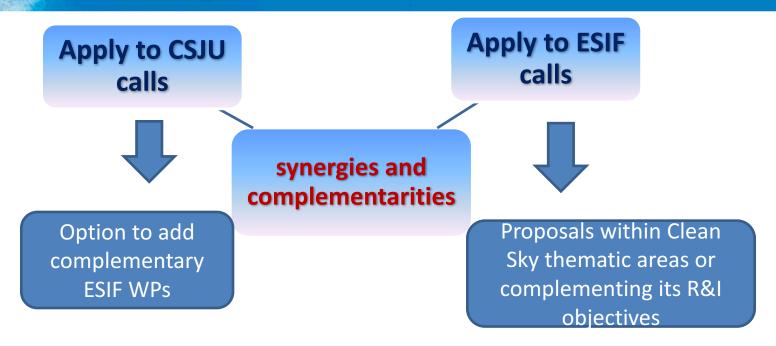
- ✓ Upstream support
- ✓ Parallel funding
- ✓ Sequential funding / downstream support
- ✓ Thematic calls
- √ "Seal of Excellence" type "CSJU synergy label"







Objectives and the approach to synergies



- More coordination/integration between OPs and H2020 to meet high R&D challenges in aviation while enhancing regional capabilities/supply chain... a key driver for EU 13
- More European level and targeted ESIF projects linked to Clean Sky R&I roadmap
- Support via ESIF a more strategic role of regional stakeholders at "Membership" level in Clean Sky → increased leverage effect
- Search local competences and boost SMEs to aviation key R&I via ESIF support
- Integration of ESIF activities in Clean Sky for more impact and market uptake lean Sky

Bringing SMEs to technology innovation

- Foster exploitation and market uptake of projects output by the Clean Sky Industrial Members
- Widen the supply chain, attract competences also from other sectors (e.g automotive, systems) and keep SMEs growing and jobs in Europe
- Search for local competences and link SMEs and clusters to the Programme activities
- Cooperate with MS/Regions on RIS3 and National Programmes, a more coordinated approach is necessary, Clean Sky should be the catalyst and guide



Examples of ESIF complementary calls

1. Czech Republic National Call Complementary to Clean Sky 2*

- Competent Authority: Ministry of Industry and Trade (MoU party)
- Publication: 30 November 2017
- Deadline for project submission: 30. 4. 2018
- Allocation of the call: 400M CZK (15,5 M Euro)
- Eligible applicant: consortia (LE, SME and possibly RO)
- Priorities/Areas: refers to Clean Sky 2 Work Plan (scope and objectives)

2. Andalucía Regional call:

- Agency IDEA (MoU party) launched in July 2017 within an open competitive R&D call a scheme with a reserved budget for Clean Sky 2 complementary projects
- Proposals with a Clean Sky positive evaluation and labelled projects eligible under the call
- 3-4 complementary proposals already labelled by Clean Sky, more complementarities under assessment
- ESIF funded pilots expected soon..

Examples of ESIF project under MoU

At EU level:

Clean Sky 2 Core Partner Proposal in FRC-02-01 "RoRCraft" (Helicopters Platform)

Core Partners: INCAS + ROMAERO + IAR Brasov (from Romania)

In Romania:

MoU with Clean Sky signed in 2016

National Call: Synergies with H2020 and international R&D programs Funding additional/complementary activities from Clean Sky 2 calls Clean Sky evaluation/Synergy Label – according to the MoU

Selected ESIF project:

Project: "RoRCraft CompAct"

Budget value: 1.982 M Euro / 1.977 M Euro

Duration 2017 - 2020



Examples of ESIF project under MoU

Scope: Advanced design, manufacturing and testing technologies for LifeRCraft demonstrator

WP5 – Hybrid Structures – Design, Tooling and Manuf. Technologies

- 5.1 Advanced Design for Hybrid Helicopter Structures
- 5.2 Advanced Tooling and Manufacturing Technologies

WP6 – Multibody Systems Simulations for Helicopter Crash Scenarios. Advanced Ground Testing

- 6.1 Testing for structural health global characterization of hybrid structures
- 6.2 Safety analysis using Multibody Systems Simulations for Helicopter Crash Scenarios





Policy level: COMPET Council conclusions

1st December COMPET Council conclusions "From Interim Evaluation of Horizon 2020 towards the ninth Framework Programme":

Some highlights:

- R&I partnerships are an important element of EU R&I policy;
- PPPs should be based on EU added value, transparency, openness, impact, leverage effect, long-term fin commitment of all parties, flexibility, coherence and complementarity with EU, national and regional initiatives;
- Invites the MS to ensure the coordination of relevant national policies and resources towards agreed priorities of partnerships
- Synergies and complementarities between the FP and ESIF. Regulations of next FP, ESIF, state aid and other EU Programmes should be designed from the beginning with synergies, coherence, compatibility and complementarity..







What could be improved

- H2020/ ESIF have different rules... e.g applying different funding rates to R&I complementary projects affects technical consistency
- Make use where appropriate in ESIF funding schemes of H2020 evaluations and quality labels certifications such as "Clean Sky label"
- RIS3 often too wide, too many priorities identified → hesitation to launch thematic calls/funding schemes
- Establish in RIS3 and OPs more structured links and cooperation with European R&I initiatives such as Joint Undertakings → take commitments and design specific instruments
- Set key indicators in the OPs to monitor synergies in the relevant
 RIS3 priorities



Where to find more information

- Dedicated webpage on CSJU cooperation on synergies with MS/Regions with RIS3 mapping, regional statistics, how to engage in a cooperation: http://www.cleansky.eu/structural-funds-and-regions
- A successful brochure dedicated to CSJU cooperation on synergies and showing the first CS2 complementary projects
 - foreword by R-J Smits
- ➤ Conference on synergies at Aerospace event "ILA" Berlin on 26th April 2018

http://www.cleansky.eu/event/ila-berlin-2018



Come and join us! Thank you!

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