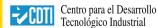


# Synergies between H2020 and ESIF: Clean Sky pilot case

Juan Francisco Reyes Sánchez CDTI

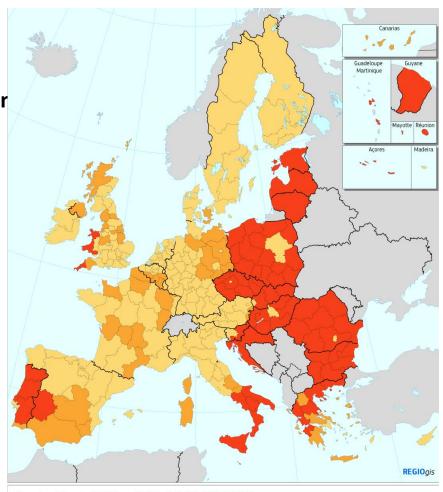






### **Cohesion Policy + ESIF basics**

- Based on EU Treaty and aiming at 'economic, social and territorial cohesior and 'reducing disparities'
- 5 funds for Cohesion Policy:
  - European Regional Development Fund (ERDF) incl. INTERREG
  - European Social Fund (ESF)
  - Cohesion Fund (CF)
  - European Agricultural Fund for Rural Development (EAFRD)
  - European Maritime and Fisheries Fund (EMFF)
- Around € 450 billion for 2014-2020 in over 450 programmes
- concentrated in less developed regions
- Shared Management



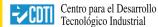
Structural Funds (ERDF and ESF) eligibility 2014-2020

Lategory
Less developed regions (GDP/head < 75% of EU-27 average)
Transition regions (GDP/head between >= 75% and < 90% of EU-27 average)

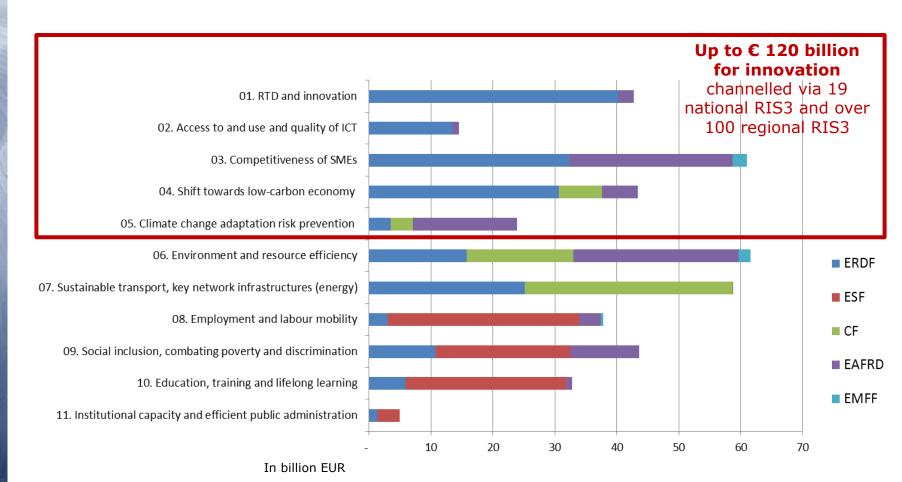
More developed regions (GDP/head >= 90% of EU-27 average) (14/1U/2U16)







### **ESIF** funding per thematic objective:

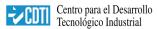


Source: Final ESIF partnership agreements as of December 2014

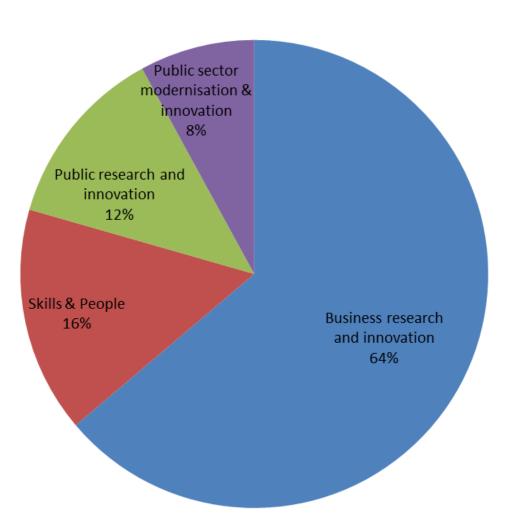
(14/10/2016)







#### **ESIF Innovation Investments 2014-2020**



#### **ERDF & ESF allocations:**

- Business research & innovation:
   EUR 60 billion
- Skills & People:
   EUR 14.5 billion
- Public research & innovation:
   EUR 11.7 billion
- Public sector modernisation & innovation:

**EUR 7.4 billion** 





#### ... of which EUR 60 billion ESIF for business R&I

Thematic: energy efficieny, low carbon, climate, intelligent transport, smart grids, ehealth, ICT industry 19%

Innovation

processes and infrastructures 7%

General: technology
transfer,
cooperation
projects, business
cluster, private R&I
infrastructures and
activities
19%
Large firms

SME research, innovation, incubation, support services, capacities, entrpreneurship, digitisation, creative industries 55%  SME research, innovation, incubation, support services, capacities, entrepreneurship, digitisation, creative industries:

EUR 32.3 billion

 Thematic innovation demand: energy efficiency, low carbon, climate, intelligent transport, smart grids, e-health, ICT:

EUR 11.4 billion

Innovation support system: technology transfer, cooperation projects, clusters, private R&I infrastructures and activities:

EUR 11.2 billion

Large firms innovation processes, activities and infrastructures:

EUR 4.3 billion



# Europe 2020 strategy Origins of RIS<sup>3</sup>

#### **Research & innovation policy:**

Technological / scientific specialisation (centres of excellence, ...), impact on growth?

Five Union objectives: employment, innovation, education, social inclusion and climate/energy

#### **Industry policy:**

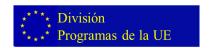
Cluster, sector analysis, Demand side innovation

support: Lead Market
Initiative







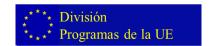






### **Concept of synergies**

- Improve the quality of national & regional innovation policies, including type of support measures
- **Enhance the impact of investments,** incl. "durability", links btw. projects, building on previous projects of other instruments
- Amplify projects / initiatives by joining forces under different funds to generate critical mass: cumulation / alternative funding
- > Strengthen cooperation and complementarity across Europe by teaming up different capacities in leading and lagging regions thanks to smart specialisation
- Strengthen cooperation between innovation actors and policies relevant for innovation (skilled & creative people, research, enterprises, investors, market access, different Ministries and departments and on different levels, legal and administrative framework conditions...)

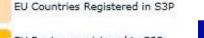




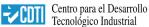
### What does the EU NOT accept as synergies?

 NO substituting of national or regional or private cofunding to projects or programmes by money from the other instruments

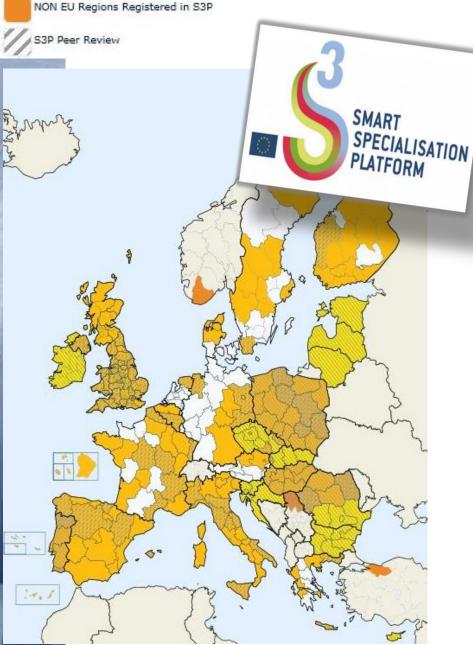
- NO diversion of funding away from the purpose of the respective instrument / operational programme (e.g. smart specialisation strategy)
- NO simple "run for the money": Maximising the acquisition of additional funding from Horizon2020 or ESIF is no good objective, as this has no durable impact on growth and jobs and creates "grant dependency".











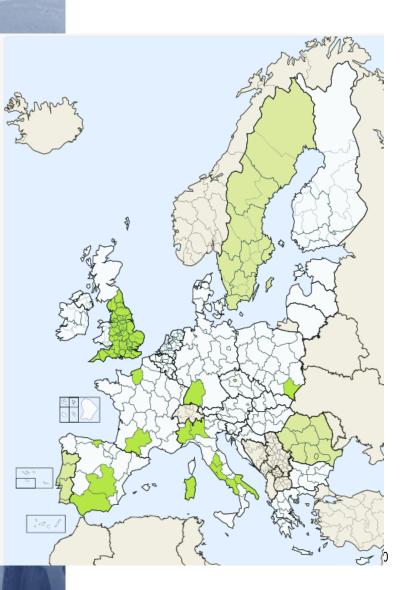
#### **154 EU regions** (from 19MS)

#### + 15 countries at national level

- 52 regional and 16 national strategies peer-reviewed
- Thematic seminars & conferences
- Pilot action for Synergies in new MS: Stairway2Excellence
- RIS3 guide for policy-makers
- Mapping of specialisations: Eye@RIS3
- Regional profling
- Web-site, Newsletter ...

http://s3platform.jrc.ec.europa







### Eye@RIS3:

#### database for RIS3 priorities

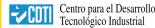
- Enable Regions and Member States to position themselves,
- •To find their unique niches
- •To seek out potential partners for collaboration
- •Approx. 31 countries and 196 regions and 1350 priorities

http://s3platform.jrc.ec.europa.eu/map









### **Europe's largest Aeronautics Research Programme ever**

- Stemming from long-term objectives defined by ACARE Advisory
   Council for aeronautical research in Europe
- Integrated breakthrough technologies, up to full scale demonstr
- CS1 started in 2008 within FP7, up to 2017; continued on in 2014 with CS2 in H2020, up to 2024
- Environmental objectives for CS1: CO2 and noise;
   Environment, competitiveness and mobility for CS2
- CS1: 1.8 B€ value; CS2: 4 B€







The Founding Regulation of Clean Sky 2 JU requests to "develop close interactions with ESIF and contribute to strenghten regional R&I...":

CS2 SR Sub-WG established on interfacing with national/regional Programmes, led by CDTI.

RIS3: Thematic concentration

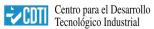
Synergies and complementarity

Combination of funding H2020 & ESIF

Cooperation with AirTN NG

Support to the supply chain, SMEs, ... from a certain Region







División

Programas de la UE

Preliminary search in RIS3 with aeronautics or correlated area

22 Clean Sky related priorities identified, with the support of AirTN NG

- in 16 Regions
- and 5 Countries

RIS3 Approx. 31 countries and 196 regions and 1350 priorities

http://s3platform.jrc.ec.europa.eu/map (14/10/2016)







Can apply

· No funding



#### 3.1.1 Austria

Responsible organisation Federal Ministry for Transport, Innovation and Technology

Contact ingrid.kernstock@bmvit.gv.at

Strategy

**Aviation strategy board Aviation research strategy** 

Name: Strategic advisory board (RTI-aviation) Name: Research and Innovation in the aviation sector: leverag

international markets

Description: Dialogues for the future held at regular interval Date of publishing: 11.01.2015 between manufactures, researchers, developers and univer. Date of update: Dec 2020

Contact: Ingrid Kernstock, ingrid.kernstock@bmvit.qv.at Availability: http://www.bmvit.qv.at/innovation/luftfahrt/strategie

Main areas covered: Research, Technology and Innovation in of air transportation and aeronautics

#### Programme/programme-like activit

Name Take Off - Research & Innovation Program for Aviation

Funding by Austrian Federal Ministry for Transport, Innovation and Technology (BMVIT)

Managed by

Contact Ingrid Kernstock

Duration Jan 2015 - Jan 2020 Extension likely

Programme priorities

#### Programme objectives

In line with ACARE Flightpath 2050 goals, the new strategy promotes four measures to be deployed within the framework of a five-year action plan. These are:

- 1. Build strategic partnerships;
- 2. Strengthen Austria's competencies and skills in R&I;
- 3. Foster visibility and market uptake:
- 4. Facilitate excellent qualification.

Each of these four measures contains a bundle of subordinated tasks to be carried out via public funding programmes and accompanying activities. In 2020, a comprehensive strategy evaluation will be conducted. Take Off 2015 - 2020, with focus on:

- System Integration (Humans, Organisations, Technologies);
- Strategic Partnerships (National, Transnational, International);
- Capacity and Resource Creation (Traffic. Production. Staff);
- Knowledge Development & Sharing (Topic, Process, Application).

#### Target groups

The economic significance of Austria's aviation sector is a given. Considering both the air transportation sector (Airlines, ANSP's and Airports) and the aeronautics industry, Austria has 225 R&I intensive companies. In addition, there are about 40 academic and non-academic research institutes. All these stakeholders constitute the R&I intensive aviation sector in Austria.

#### **Eligible Applicants**

#### Allowed to apply Partners from other countries

- Large enterprises
- Universities
- Universities of applied sciences
- Competence centres
- Research facilities
- Start-ups
- NPOs

#### Types of supporting measures

R & T Activities	Education Activities	Studies	Transfer and Dis-	Networkin Activities	Staff Exchange	Other: Living Research

#### Technology readiness level covered within the programme

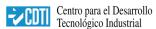


#### **National calls for funding**

	Take Off call 2016	Take Off Call 2017	
Start date	17/10/2016	10/2017	
End date	20/02/2017	02/2018	
Typical period	4	4	
Topics to be announced in the call	Not yet available	not yet available	
Overall call budget	7 MEUR	6 - 8 MEUR	
Typical project funding	600 KEUR	600 KEUR	
Restrictions from programme information	at least two cooperating entities	at least two cooperating entities	
Web link / contact	vera.eichberger@ffg.at	vera.eichberger@ffg.at	







### Clean Sky: a pragmatic approach to synergies

- Go "local" and talk to Regions and Managing Authorities (essential) discuss RIS3 priorities, Operational Programmes, analyse local capabilities and involve stakeholders
- Discuss ESIF instruments under preparation and advice how to design instruments to foster synergies with Clean Sky
- Flexible approach and tailored-made forms of cooperation by using an MoU to set the general framework and set the scene of the cooperation

(14/10/201



### MoU model



The model MoU can be adapted to MS/Region needs, level of commitment and expectations (a tailored made approach)

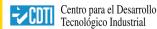
The model contains annotations to the MS/Region, an effective tool to agree a cooperation and make thing start quickly and with the needed political endorsement

#### Summary content:

- Commitment to explore synergies through its respective Programmes and mechanisms
- Indicate the MS/Region policy framework and OP to support R&I / aeronautics RIS3 may mention "aeronautics" as priority or a correlated area (transport, mobility, materials, Co2 reduction etc)
- Indicate the ESIF funding schemes which will be devoted to stimulate synergies with Clean Sky or agree to jointly discuss its design
- Agree a pilot-phase and implementation via a WG with stakeholders (Clean Sky Members, SMEs, aero clusters etc) involvement as appropriate
- Exchange information under NDA amd porticipation to events







# 5 scenarios for synergy

#### 1. Upstream support

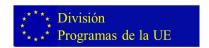
ESIF support for developing capabilities/skills / infrastructures of its local stakeholders in view of planned participation to Clean Sky calls .

#### 2. Sequential funding / downstream support

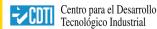
Clean Sky beneficiary proposing a <u>continuation</u> / spin-off / amplification of their projects

#### 3. Parallel funding

Applicant to Clean Sky calls proposing in parallel a separate set of "complementary activities" which will be <u>separately evaluated</u> and may be granted a "synergy label." Applicable to the Clean Sky call for proposals.







# 5 scenarios for synergy

### 4. "Seal of Excellence" type – "CSJU synergy label"

If technically appropriate, <u>top ranked proposals</u> (above threshold) in a Clean Sky Call (highly scored) could be supported by Clean Sky with a synergy label for a separate, parallel ESIF funding

#### 5. Thematic approach

ESIF support to complement Clean Sky Programme through definition in line with RIS3 priorities of appropriate R&I themes/topics not addressed in Clean Sky but contributing to its overall objectives.





# Bilateral cooperation – MoU

### 11 MoU signed up to date:

- Midi-Pyrénées (FR)
- Andalusia (ES)
- Romania (State level)
- Campania (IT)
- Catalonia (ES)
- Flevoland (NL)
- Västra Götaland and Östergötland (SE)
- Czech Republic (State level)
- Castilla La Mancha (ES)
- Zuid-Holland (NL)



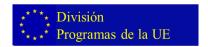




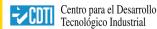
# Bilateral cooperation – MoU

Next MoUs in the pipeline:

- South West England
- Portugal ( National level)
- more under negotiations and consideration depending on JU resources and absorption capacity







# **Pilot Projects**

### 2 pilot projects in Catalonia:

- 1. **Project "Shearen"** funded by Catalonian Innovation Agency sequential to the JU project "**Greenbarrels"** in **SAGE 2** engines ground test
- Shearen aims at supporting additional process qualification steps toward it use in critical parts manufacturing for engine
- Amplification of impact and results with the Clean Sky Member to continue maturation of technology developed in the JU project due to its potential for material and tooling savings







# **Pilot Projects**

- **2. Project "Dryforming"** funded by Catalan Innovation Agency presented as a <u>complementary activity to a winning proposal</u> within the Clean Sky 2<sup>nd</sup> call for proposal
- "Dryfomring" is building and amplifies the JU funded project
   "Cofrare" in Airframes ITD on developing composite fuselage
- Amplification of impact and results with the Clean Sky Member to meet affordable way to produce this components for a Regional Aircraft



# Thematic calls





# The Midi Pyrenees test case

Phase 1: bilateral exchanges CSJU – Region on the technical objectives of the regional call under the MoU

Phase 2: the CSJU exchanges with its Members and proposes a set of thematic objectives in some Clean Sky related technical areas (avionics/elec. aircrafts, embedded systems) of common interest

Phase 3: the Region accepts the thematic objectives and integrate them in full in its regional call "Easynov" as "Clean Sky thematic objectives"

Phase 4: CSJU is invited by the Region to take part to the evaluation process based on an NDA regime





### Implementation of other MoU: a few examples

- 1. Romanian national call on H2020 synergies "complement" planned for publication on 15th June 2016 with closure on 29<sup>th</sup> July
- The call will support complementary activities which have already been evaluated by Clean Sky and with a synergy label
- Calls also open to Clean Sky Core Partners from Romania to propose activities complementing those being executed with JU funds
- RO administration will seek the CSJU participation in the evaluation as expert/advisory to support the evaluation process for "Clean 5ky synergies", validation

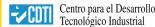


### Implementation of other MoU

- 2. Andalucia R&D call expected for launch in June 2016
- The call will specifically refer to supporting projects and complementary activities already evaluated by Clean Sky JU and with a Clean Sky synergy label
- 3. Campania R&I thematic call including aeronautics RIS3 priority
- The Midi Pyrenee model should be followed in terms of agreeing with the Region the technical areas and thematic objectives to be integrated in the Regional call
- Also agreing mechanisms to support complementary activities already evaluated and being awarded a Clean Sky synergy label





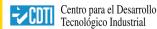


### Implementation of other MoU

- 4. Czech Republic: recent modification of the Operational Programme "EIC" (monitoring committee decision of 13<sup>th</sup> May) to add a section on synergies following the signature of the MoU with the Ministry of Industry and Trade and a successful workshop with stakeholders
- The Managing Authority may decide to support good quality projects (SME Instrument, CLEAN SKY 2...) where not funded under those instruments: an important policy "step forward"
- The Ministry has requested now the support of the CSJU to draw up an "action plan" to implement the above: a synergy call by end of summer and a possible aeronautics thematic call under consideration







## Conclusions

- Joint Technology Initiatives are potentially well placed for contributing to efficient synergies H2020/ ESIF
- Linking to a long-term Technical Programme and a credible industrial strategy is a plus for achieving synergies
- The exchanges with Clean Sky (key interlocutor in aeronautics R&I) allow more strategic approach by MS/Regions in drawing their plans based on its existing capabilities and reinforce its European dimension
- SMEs support policy and its internationalization through ESIF are perfectly in line with Clean Sky objectives – a shared goal
- Interest shown also by Central-Eastern Europe MS in working with Clean Sky on synergies is important, it also raises more interest of stakeholders in applying to H2020







#### **Links and documents:**

- Cohesion Policy & European Structural and Investment Funds http://ec.europa.eu/regional policy/index.cfm/en/
- Horizon 2020: <a href="http://ec.europa.eu/research/horizon2020/index\_en.cfm?pg=h2020-documents">http://ec.europa.eu/research/horizon2020/index\_en.cfm?pg=h2020-documents</a>
- > S3Platform, including RIS3 data base and Stairway to Excellence pilot project: <a href="http://s3platform.jrc.ec.europa">http://s3platform.jrc.ec.europa</a>
- Vanguard Initiative: <a href="http://www.s3vanguardinitiative.eu/">http://www.s3vanguardinitiative.eu/</a>
- http://www.cleansky.eu/content/page/synergies-structural-funds





### **THANKS!**

## **Juan Francisco Reyes**

juanfrancisco.reyes@cdti.es