



# Regional Best Practice from Apulia Region: Nurturing the Adriatic Space Ecosystem

Membership



European Aerospace  
Cluster Partnership

**ANTONIO ZILLI**, [antonio.zilli@dtascarl.it](mailto:antonio.zilli@dtascarl.it)  
Apulian Cluster for Aerospace Technology

Co-Chair of NEREUS WG-Clusters



**NEREUS Workshop**  
Aerospace and Defence Meeting  
Central Europe Rzeszow  
10th May 2017

# Space competence and capabilities

Companies	<ul style="list-style-type: none"> <li>• Planetek Italia, GAP, Enginsoft (space data management, space-enabled services)</li> <li>• Sitael, IMT (Satellite design and manufacturing)</li> </ul>
Research organizations	<ul style="list-style-type: none"> <li>• Consiglio Nazionale delle Ricerche (CNR),</li> <li>• Agenzia Nazionale per le nuove tecnologie (ENEA),</li> <li>• Politecnico di Bari,</li> <li>• Università of Bari,</li> <li>• Università del Salento</li> </ul>

## Space-enabled service:

- Innovative EO services for the territories and infrastructure (i.e. territory and coastal monitoring, crisis prevention and controlling; agriculture...)
- Security of GNSS signal for RPAS navigation application

## Microsatellite for In Orbit Demonstration and Validation mission

### Most relevant satellite programmes with Apulian components

- COSMO-SkyMed (on board and ground software)
- CALET (HV system), ASTRO-H (HV system, Hard X-ray Imager)



# Mission of the Cluster

- Overall mission is to boost the competitiveness of the Apulian aerospace industry by**
- **Promoting and participating in national and European research and development initiatives,**
  - **Supporting the creation and exploitation of relationships between the regional aerospace system with the European one,**
  - **contributing to the regional and national aerospace development plans,**
  - **Identifying new professional competence needs and defining education programmes to extend regional human capital,**
  - **supporting internationalization of the regional system.**

# Actions of the Cluster

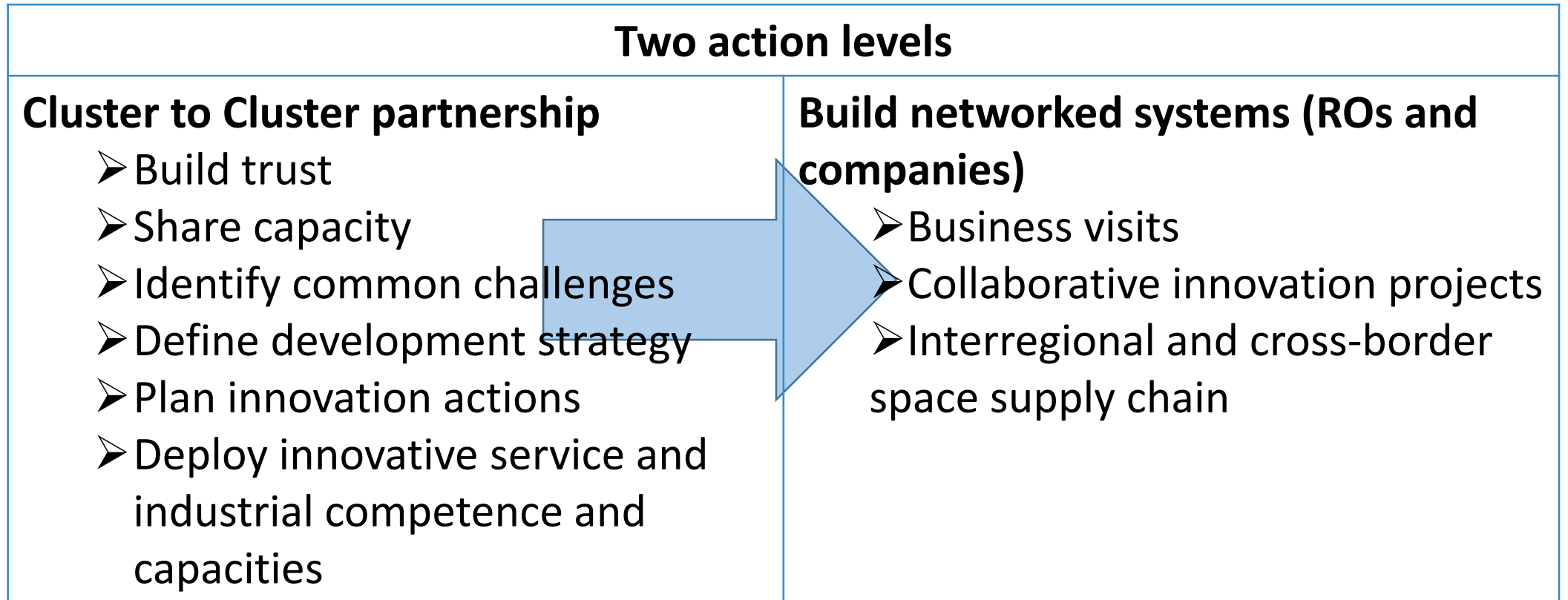
## Action lines

- Memberships, MoUs and collaboration with
  - EACP, NEREUS, ESA, other aerospace clusters through European projects
- Actions with regional and national scopes
  - Toward regional and national government (also through CTNA)
  - Research and innovation themes
    - Services for situation awareness based on satellite and aerial (RPAS & payload) data
    - Big data infrastructures, data fusion systems
  - Research infrastructures
    - Laboratory on Situation Awareness technologies (from RPAS and payload development, flight missions, to data computing) leveraging also local aeroportual infrastructure dedicated to industrial experimentation (Grottaglie Airport)

# The Adriatic perspective

- **Vision:** space technologies can support the increase of the wellness in the Adriatic & Ionian Macro-region in terms of **quality of employment, technological skills, innovation capacity**, providing as output **higher quality of the environment**
- **Mission:** nurturing an Adriatic Space Eco-system
- **Objectives:**
  - An Adriatic Space Network connecting academic and industrial organizations,
  - Experimenting EO applications in territorial and sea management scenarios,
  - Increase market opportunities for EO applications,
  - Promote and support participation into satellite programmes.

# Cluster to Cluster Collaboration development framework



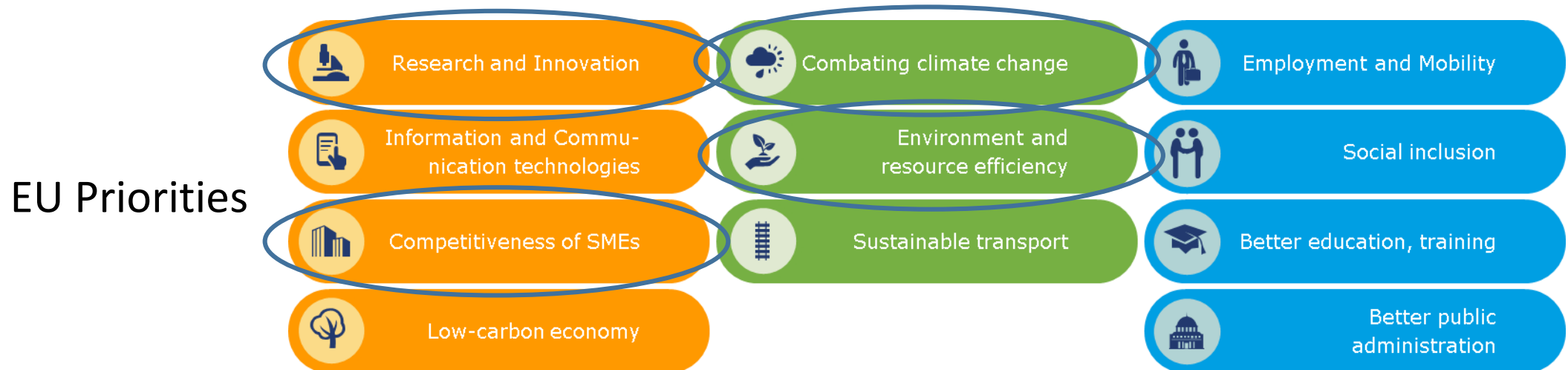
# Cluster to Cluster Collaboration development framework

- Establish cooperation with analogous partners toward a common objective
  - Business visits, European scenario sharing, trust building
  
- Signing Memorandum of Understanding for common objectives:
  - **Strengthen industrial collaboration in two fields:**
    - **space-enabled service development and provision**
    - **microsatellite design and development**
  
- Create positive context
  - Meetings for sharing experiences
  - Informing ASI and ESA
  - Involving local authorities
  
- Promote collaborative Research and Innovation initiatives
  - Involving Ros and companies (as possible)

# Cluster to Cluster Collaboration development framework

## European Territorial Co-operation programmes

- European Territorial Cooperation (ETC), better known as Interreg, is one of the two goals of cohesion policy and provides a framework for the implementation of **joint actions and policy exchanges** between national, regional and local actors from different Member States. The overarching objective of European Territorial Cooperation (ETC) is to promote a **harmonious economic, social and territorial development** of the Union as a whole. Interreg is built around three strands of cooperation: cross-border (Interreg A), transnational (Interreg B) and interregional (Interreg C).
- (Source: www. <http://ec.europa.eu>)





# Cluster to Cluster Collaboration development framework

1. DTA - Corallia/Si-Cluster (INTERREG Greece-Italy)
  - ✓ 2 Collaborative innovation initiatives submitted in ADRION Programme (in evaluation phase)
  - ✓ 2 Collaborative innovation initiatives submitted in INTERREG Greece-Italy Programme (in evaluation phase)
2. DTA - Albanian space system (IPA Cross-border Cooperation Programme Italy-Albania-Montenegro)
  - ✓ No aerospace Cluster organization yet
  - ✓ Building collaboration with the Minister for Scientific Research for creating local aerospace cluster

# Cluster to Cluster Collaboration development framework

## Innovation project strategy:

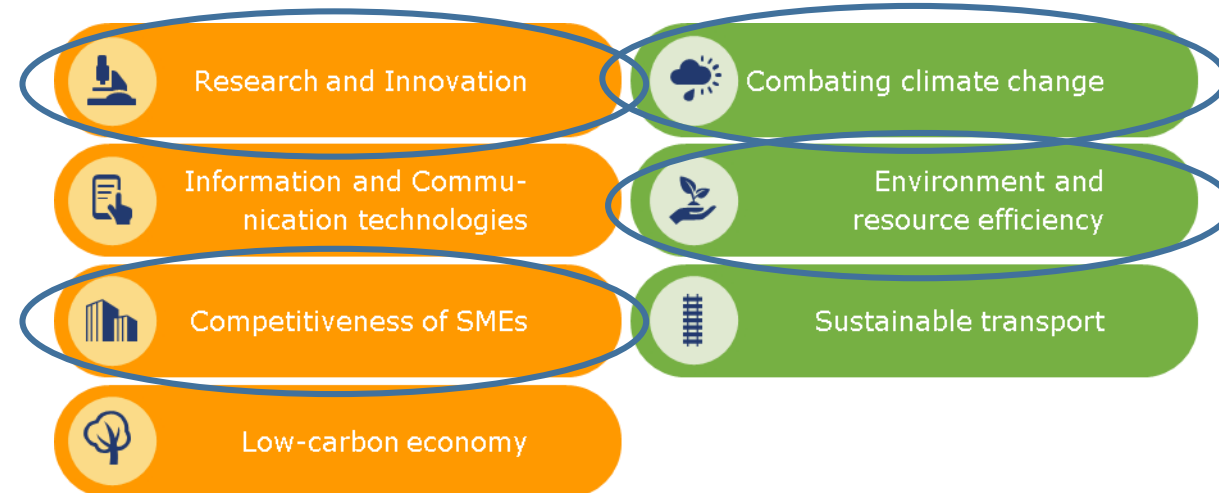
- Building space competence and capabilities maps
- Building common space development strategies
- Building trust among regional systems

- Create cooperation opportunities
- Select common challenges
- Develop innovative solutions

Cluster to  
Cluster level

Networked  
system

## EU priorities



## Concluding remarks

- Clusters are the best players to establish cooperation between complex regional systems
- European frameworks can be used to achieve specific programme results **AND** to build and exploit collaborative relationships
- European (and national) space associations and institutes are effective trust-building systems
- *Integrated (space) supply chains in the Adriatic basin will come with projects*



- Thank you for attention
- Antonio Zilli
- [antonio.zilli@dtascarl.it](mailto:antonio.zilli@dtascarl.it)
- [www.dtascarl.it](http://www.dtascarl.it)