



FORWARD

Fostering research excellence in EU outermost regions

Co-creation and implementation of thematic working groups
Ver. 01/06/2020



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 824550.

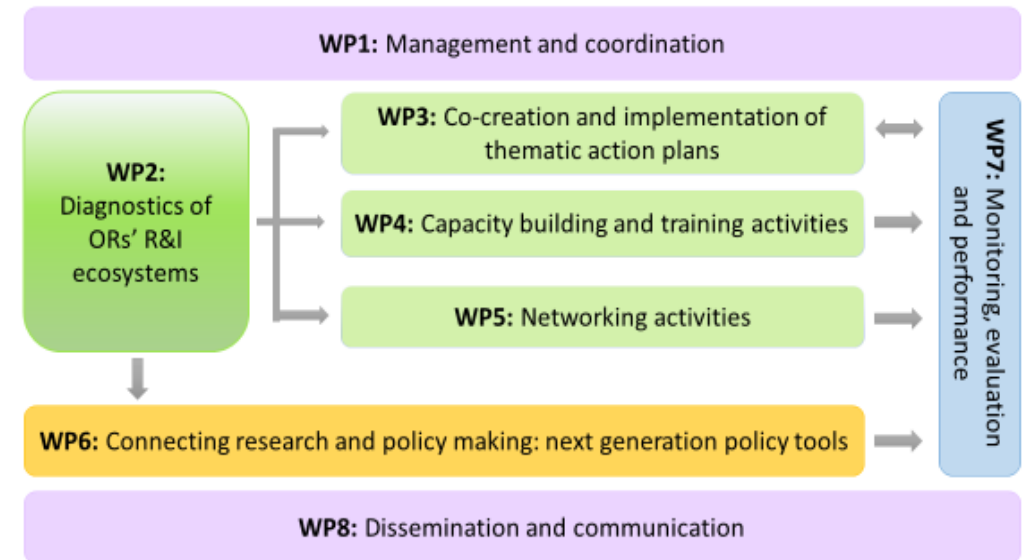


Forward project

FORWARD 'Fostering research excellence in EU outermost regions' is a project funded by the European Commission under the Horizon 2020 programme.

Overall objectives :

- ✓ Improve ORs' **excellence in research** and their **innovation potential**
- ✓ Improve their participation in **EU research and innovation funded projects**
- ✓ Link research activities with **territorial development**



FORWARD work packages



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 824550.



forward

R&I thematic working groups

TWG1	Health, applied Medical Technologies, Diagnostics and Therapies
TWG2	Social sciences and social innovation
TWG3	Tourism, eco-tourism, nature tourism, cultural tourism
TWG4	Earth, space & universe sciences
TWG5	Information and Communications Technology
TWG6	Climate change and Energy transition
TWG7	Agriculture, applied life sciences, biotechnology, and bio-systems engineering
TWG8	Biodiversity conservation and restoration
TWG9	Marine sciences & technologies



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 824550.



forward

Benefits of participation in Forward Thematic working Groups

R&I researchers from the ORs, Other EU regions and Third Countries, could **benefit** from:

1. gain visibility in an international quadruple-helix network,
2. training and networking activities,
3. new tenders opportunities and international partners,
4. elaboration of EU project proposals,
5. multidisciplinary collaboration,
6. the co-creation and implementation of thematic work action plans



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 824550.



forward

Building inter-regional Thematic Working Groups



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 824550.



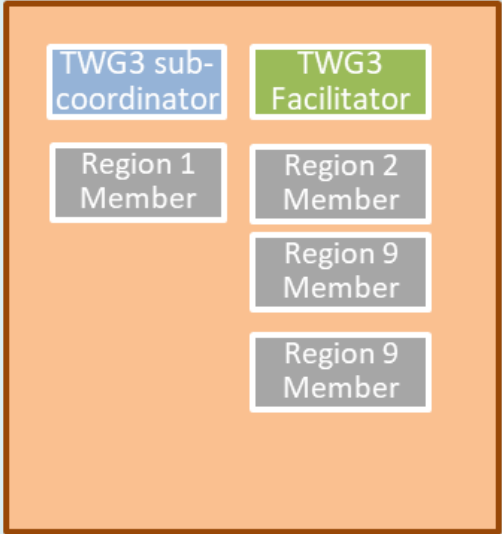
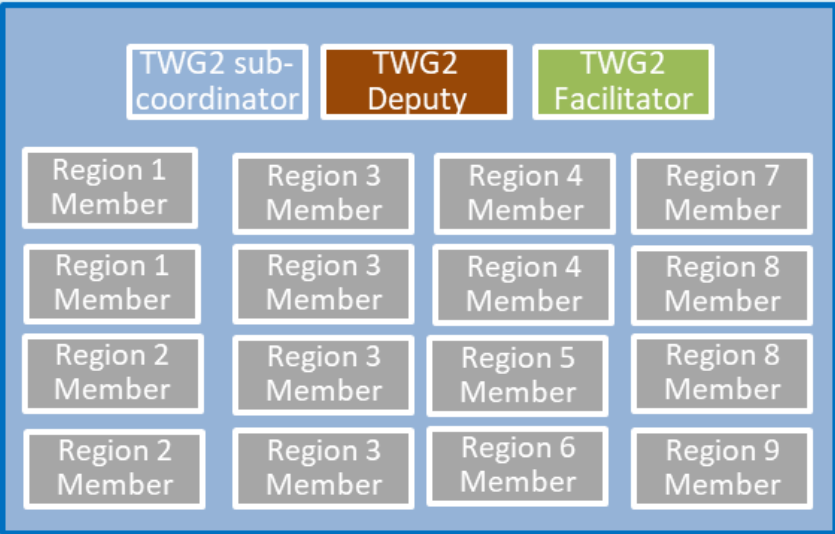
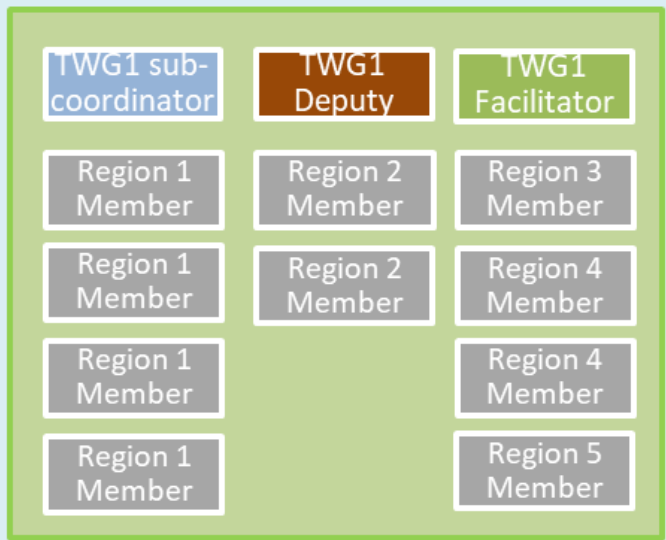
forward

Building inter-regional Thematic Working Groups

Steering Committee
(GOBCAN, FRCT, ARDITI, NEXA, CTM, CTG, REG GUA, COMSM and CDM)

WP 3 Leader & T3.2 Leader
(ITC and Synergile)

9 Regional Coordinators of R&I Community
(GOBCAN, FRCT, ARDITI, NEXA, CTM, CTG, REG GUA, COMSM and CDM)



ULL, ULPGC, PLOCAN, ITC, IAC, UAac, CCIA, UMa, UR, UA, UG, GDI, Synergile, CCISM, CE

Thematic Working Groups Roles



Sub-coordinator: 1 per thematic group

- R&I profile proposed by the Forward R&I partners among their members.
- Selected/ approved by the Steering Committee within the candidates provided by the Regional Coordinators of R&I Communities.



Deputy: 1 per thematic group (optional)

- Selected by the sub-coordinator, as a substitute or assistant, probably within its own organization.



Facilitator: 1 per thematic group

- Management profile proposed by the Forward partners among their members.
- Selected/ approved by the Steering Committee within the candidates.

Members: as many as possible

- R&I profile proposed by the Forward R&I partners among their members.

Other:

- Regional thematic experts: Representatives from regional universities, R&I centres, companies, administration, clusters,...
- Multisectoral and intersectoral experts
- Representatives from European and Third Countries' institutions and European Experts, who operate in the strategic domain



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 824550.



Thematic Working Groups Roles



Sub-coordinator: 1 per thematic group

- Chair person of the TWG; management of TWG, web-meetings and online communication tools;
- Writing Thematic Action Plan;
- Coordination with TWG Regional Contact Points and other members of the group, in order to share and integrate the contributions from each region.
- Coordination of WP5 Networking activities in the TWG;
- Communication within other TWG and Forward coordination team;
- Reporting data for each event / activity, writing a yearly narrative report.



Deputy: 1 per thematic group

Supporting / replacing sub-coordinator when necessary



Facilitator: 1 per thematic group

Supporting sub-coordinator / deputy, facilitating the management and tasks.



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 824550.




forward

Members Selection Criteria

Thematic Working Groups

- At least 3 ORs involved: minimum 5 members from 3 different organizations.

Sub-coordinator

- Belonging to FORWARD partner institution.
- R&I profile with expertise in the thematic.
- Expertise in European R&I projects, coordination or WP leadership.
- Highly motivated.
- CV  link to an online profile (Must be in English).

Ex. Evaluation criteria

In the last 5 years:

1. Most relevant articles related to the TWG published
2. Research projects managed as PI related to the TWG subsidised by official bodies
3. Participation in research projects related to the TWG subsidised by official bodies
4. Doctoral theses directed (concluded)
5. Patents obtained
6. National/International mobility experience

Members

- Initial members: Identified by the R&I regional institutions.
- New members:
 - Local members validated by its Regional Coordinator of R&I Community.
 - International members validated by Sub-coordinator.



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 824550.



forward

Thematic Working Groups Organization

Specific training: (All sub-coordinators and deputies). Presentation of the FORWARD project and the thematic shortlisted + Introduction of the sub coordinators. Training on a common methodology **(online) – June 2020**

Individual Kick-off meeting: (each TGW, sub-coordinator, deputy and members) presentation of the FORWARD project. Introduction of the members **(online) – June 2020**

3 Transregional meetings: All sub-coordinators (if not available can be replaced by the deputy)

2 meetings with the Advisory Board: Each sub-coordinator (if not available can be replaced by the deputy)

At least 2 transregional thematic meetings: Each sub-coordinator + deputy + International Experts + Regional Contact Points + other regional stakeholders **(online)**

Several regional workshops: Each Regional Coordinator of R&I + experts + other regional stakeholders



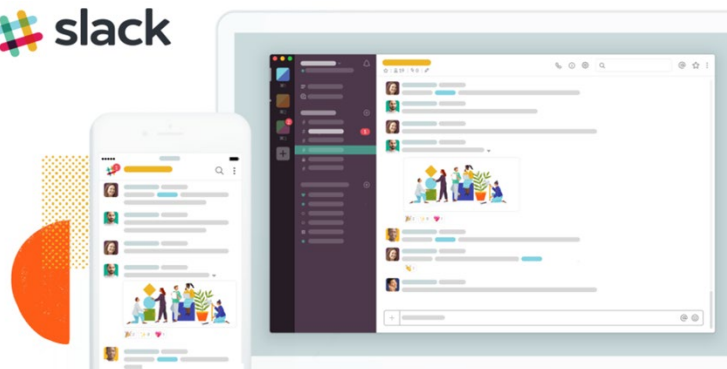
This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 824550.



forward

Thematic Working Group Communication Tools

FORUM/ CHAT/ ...



ONLINE MEETINGS



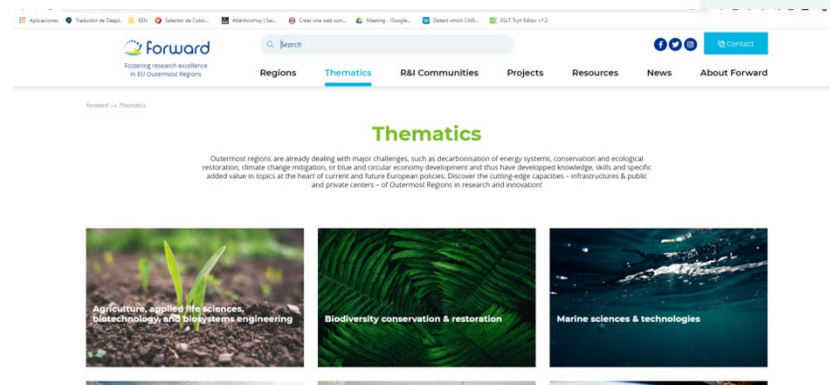
SHARE DOCUMENTS



Google Drive



WEB



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 824550.



R&I thematic



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 824550.



Identification of R&I thematic

Nine **R&I common thematic among ORs** were detected from the diagnosis of ORs research and innovation ecosystems, based on:

- RIS3 domains (according to FORWARD proposal).
- Ranking on total EU Contribution (including domains with only 1 OR involved)
- Ranking of the different fields of expertise (at least 2 ORs, FP + other EU funds)
- Potential fields of cooperation between the OR
- Alignment with the Horizon Europe pillars



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 824550.



forward

TWG1	Health, applied Medical Technologies, Diagnostics and Therapies Horizon Europe Pillar 1 , Pillar 2 (Cluster: civil security for society) and Pillar 3
TWG2	Social sciences and social innovation Horizon Europe Pillar 1, Pillar 2 (Cluster: Culture, creativity and inclusive society) & (Cluster: civil security for society) and Pillar 3
TWG3	Tourism, eco-tourism, nature tourism, cultural tourism Horizon Europe Pillar 1, Pillar 2 (Cluster: Culture, creativity and inclusive society) & (Cluster: civil security for society) and Pillar 3
TWG4	Earth, space & universe sciences Horizon Europe Pillar 1, Pillar 2 (Cluster: Industry, digital and <u>space</u>) & (Cluster: civil security for society)
TWG5	Information and Communications Technology Horizon Europe Pillar 1, Pillar 2 (Cluster: Industry, <u>digital</u> and space) & (Cluster: civil security for society) and Pillar 3
TWG6	Climate change and Energy transition Horizon Europe Pillar 1, Pillar 2 (Cluster: Climate, energy and mobility) & (Cluster: civil security for society) and Pillar 3
TWG7	Agriculture, applied life sciences, biotechnology, and bio-systems engineering Horizon Europe Pillar 1, Pillar 2 (Cluster: Food, bioeconomy, natural resources, agriculture and environment) & (Cluster: civil security for society) and Pillar 3
TWG8	Biodiversity conservation and restoration Horizon Europe Pillar 1, Pillar 2 (Cluster: Food, bioeconomy, natural resources, agriculture and environment) & (Cluster: civil security for society) and Pillar 3
TWG9	Marine sciences & technologies Horizon Europe Pillar 1, Pillar 2 (Cluster: Food, bioeconomy, natural resources, agriculture and environment) & (Cluster: civil security for society) and Pillar 3



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 824550.



1) Health and applied medical technologies, diagnostics and therapies

The development and fostering of a stronger health system is important for ORs regions due to their distance from Continental Europe and isolation. Likewise, ORs can contribute to the development of R&I related with tropical disease and so on, and being an strategic referent for Third Countries neighbors because of their geographic location and their geostrategic positioning.

Some scientific domains of expertise and policy objectives are:

- Study of tropical diseases
- Development of tools for diagnosis
- Monitoring and treatment of diseases
- Pharmacology
- Public health and Clinical medicine
- Regenerative medicine
- Epidemiology and health risk management
- Health and demographic change
- Obesity, diabetes and metabolic diseases prevention
- Nutrition and health education
- One health approach
- Study of tropical infectious diseases



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 824550.



forward

2) Social science and social innovation

Given their diversity and common social problems, the ORs are increasingly engaged in a process of **social change** to reduce fragility and develop new “enablers” for sustainable economic development. Some of the underlying areas of research and services are:

- Methods and tools for social regulation or methods for analysing and understanding social relations
- Initial and continuing training
- Education and training policies
- The fostering of entrepreneurship
- Ecosystem of interconnected applications (ICT)
- Database management
- Sharing Economy
- Social integration
- Psychology and Occupational psychology
- Sociology
- Negotiation skills
- Ergonomics
- Global History
- Cultural heritage
- Colonial & postcolonial societies & economies
- Island/small economies
- Vulnerability and sustainability of small island economies
- Island metabolism
- Regional innovation systems & policies
- Multicultural societies
- Learning in multilingual context
- Migration
- Silver economy
- Social inequalities and inclusion
- Gender studies and equality
- Environmental law
- Environmental justice
- Ecotones



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 824550.



forward

3) Tourism, eco-tourism, nature tourism, cultural tourism

Tourism is an important economic sector in the ORs, in terms of economic development and job creation, and is included in the RIS3 priorities of the smart specialization strategy in many ORs regions (Canary Islands, Madeira, Açores, Réunion...). Due to its impact, it is important to improve our services and knowledge in relation with the ecosystem and the environmental sustainability, in a way to preserve our territories from massive tourism and its impact.

Some scientific domains of expertise and policy objectives are:

- Improving the competitiveness and productivity of the ORs tourism product
- Productive diversification based on tourism
- Sustainable leadership in tourism
- Reduce the production and improve the valorization of waste induced by tourism activities
- Cultural services
- Social integration
- Employment, training and human resources in tourism
- Innovation in design for the tourism sector
- Strategic planning of tourists destinations
- Touristic demand predictions
- Smart planning of touristic routes at destination



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 824550.



forward

4) Earth, space & universe science

ORs are facing different kinds of geological threats, like volcanic activity, forest fires, or relevant seismic activity. ORs have also some of the most privileged sites for astronomical observation. The ORs contribute to the development of Earth system, Space & Universe Sciences in the EU due to its geostrategic positioning, as several projects are implemented in the ORs on this field.

Some fields of research/expertise are:

- Astrophysical research and astrophysical instrumentation.
- Astrobiology, Astroinformatics and Geoinformatics.
- Aerospace engineering and monitoring.
- Earth observations satellites and remote sensing.
- Natural risks related to climate change, meteorology, land cover change, soil erosion, etc.
- Physics of earth's interior, seismology, volcanology.
- Very large data bases: archiving, handling and analysis.



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 824550.



forward

5) Information & communications technology

Due to their multidisciplinary nature, ICT plays a transversal role in all thematic areas, such as application or integration, which gives them flexibility and agility in positioning innovation in the market, with great impact. This area should be looked at for its involvement in a significant variety and consequent impact on the regional and global economy. A key area at local, regional, national and global levels is e-government.

Some scientific domains of expertise and policy objectives are:

- Economic development
- Public administration
- Network infrastructure: full broadband coverage of high speed.
- Inclusion (a collective awareness platform about poverty support measures)
- Digital growth: widespread use of advanced IS services by companies and citizens
- Digital Single Market
- Education
- Health (telemedicine for remote islands)
- Biodiversity
- Ocean and maritime
- Climate change management
- Tourism



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 824550.



forward

6) Climate change & Energy transition

ORs are especially vulnerable to global warming, in particular, to the rise in sea level and extreme weather conditions. Likewise, the ORs disperse and isolated geographical location in the globe provides an unique opportunity to study its interactions with land and atmosphere. Observations that are organized on a systematic basis for process understanding and model development, or other research or demonstration purposes. ORs have excellent renewable energy resources but they are not being used to their full extent for technical, economic and legislative barriers. Legislative barriers are mostly at national level. Moreover, the situation among ORs is heterogeneous.

Some scientific domains of expertise and policy objectives are:

- Climatology and climate change
- Forecasting and integration of variable renewables in isolated electricity grids
- Energy efficiency, both thermal and electric, including bioclimatic architecture
- Integration of variable renewables in (isolated) electricity grids
- Small -and medium scale stand- alone energy systems
- Smart grids, including micro- and mini-grids and hybrid systems
- Transport electrification/descarbonisation
- “New” renewable energies such as high enthalpy geothermal energy, off-shore wind energy, wave energy, ocean thermal energy conversion...
- Energy storage



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 824550.



forward

7) Agriculture, applied life sciences, biotechnology, and biosystems engineering

The nine ORs significant areas linked to resources (agriculture, forestry...) offering opportunities for developing for example the **circular economy** and making them important players in governance. Their rich biodiversity – a buffer against storm and flood surges, is also the basis for key economic sectors.

Some scientific domains of expertise and policy objectives are:

- Water treatment and waste water management
- Agroecology and Valorization of bioresources (phytopharmacy and Phytocosmetics)
- Quality of agrofood, food supplements and food security.
- Renewal of the agri-food industries by developing specific expertise and products
- Bioproducts and Biosystems engineering
- Bioeconomy
- Micro-organisms, Pathology and molecular genetics: development of genome innovations for selecting varieties adapted to tropical production



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 824550.



forward

8) Biodiversity conservation & restoration

OR are among the most ecologically vulnerable territories of the Union. Indeed, their small size, isolation and high level of endemic biodiversity, make them particularly exposed to anthropogenic and climate-change induced dynamics threatening natural ecosystems on a global scale and the communities which rely on them. It is also a way to turn a threat into an opportunity by positioning outermost regions as living labs of biodiversity conservation and restoration.

Some scientific domains of expertise and policy objectives are:

- Biodiversity, Ecology & Conservation of species and ecosystems
- Biogeography and evolutionary processes
- Terrestrial ecology
- Invasive alien species and other environmental risks
- Evolution and Interactions in Caribbean, Macaronesian and Indian Ocean Area, and Amazonian systems
- Conservation of natural heritage & Understanding of heritage and landscape
- Biosphere conservation, social-environmental conflicts, greening of public action



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 824550.



forward

9) Marine sciences & technologies

The nine ORs significant exclusive economic zones linked to marine resources (aquaculture, biodiversity, fisheries...) and are in the front line of climate change, which threaten the use of seas, ocean and coasts and calls for innovative and technological solutions, offering opportunities for developing the **blue economy** and making them important players in international ocean governance.

Some scientific domains of expertise and policy objectives are:

- Aquaculture and fisheries
- Biodiversity, marine ecology and Conservation, Coral reef health...
- Desalination systems for water scarcity affected regions with high insolation
- Marine spatial planning and management of marine resources and ecosystems
- Marine renewable energies, hydrogen, off-shore wind energy, wave energy, floating solar panels , ocean thermal energy
- Marine multiuse platforms
- Maritime-tourist sector
- Science and technologies of the sea
- Oceanography



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 824550.



forward

FORWARD project

Sources consulted:

- [Forward website](#)
- [The Outermost Regions, European territory in the wider world \(European Commission, 2017\)](#)
- [2019 ERC Evaluation panels and keywords](#)
- [Eye@RIS3: Innovation Priorities in Europe](#)
- [Developing Horizon Europe](#)
- [Sustainable Development Goal](#)



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 824550.



forward

How to join Forward TWG? Deadline: until 10th June

[Registration Form](#)



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 824550.

