

Action 2019-1-19: Favouring the Usage of Copernicus in Regional Problematics

Outcome statements

September 2022

This action was financed by the European Commission in the framework of the FPCUP project. To carry out this action, CNES has chosen to work with SERTIT, Copernicus Relay in the French Grand Est Region.

Objective of the Action and Activities carried out

Focused on the French Grand Est region (NE France), the objective of this action was to favour the user uptake of Copernicus data and associated services (core or downstream) in regional problematics in particular those linked to territorial and environment management within the framework of climate change adaptation.

Therefore, the following activities have been carried out:

- an assessment of the situation through the census of regional initiatives linked to Copernicus (events, projects, opportunities)
- a compilation of demonstration products related to regional or local problematics identified as of prime interest for the users; these real cases examples were used to raise awareness, to convince users, to stimulate discussions, and to identify information requirements that can be met through the contribution of Copernicus and EO techniques.
- the promotion of Copernicus through the participation to regional events on water management, geographical information, science dissemination, and the organization of training sessions (Sentinel-2 for water management, EO applications)
- the collection of user needs through interactions and dialogue with public actors involved in policies deployment, monitoring and evaluation (international agreements, EU directives, national laws) in the fields of regional territories management, risk management, environmental and climate change adaptation, or with private actors from business sectors of the ecosystem;

Outcomes and Results of the Action

The following results and outcomes of this action can be highlighted:

- a 'Copernicus regional catalog' for the Grand Est region has been elaborated gathering 21 information sheets on Copernicus related initiatives (events, projects, opportunities);
- the knowledge of EO, Copernicus data and services, and downstream applications, have been clearly improved in the users and stakeholders communities through the participation to four regional events, the realization of training sessions, the dialogue conducted with the users and required to collect their needs, these activities being facilitated by showing a compilation of local / regional convincing examples (demonstration products);

- a contribution to the local ecosystem development and to start-up service offers integrating EO technics which led to the setting up and acceptance of a project within the French 'Plan de Relance' in the field of Space applications Grand Est component;
- through interactions with local /regional authorities and entities involved in territory / urban / environment / risk management and climate change adaptation problematics, and also with actors from the ecosystem, a range of 38 user needs has been collected, such as: situation assessment and monitoring (water resources and quality, wetlands, sensitive areas), evaluation of on-going measures in territorial and urban planning (urban developments and (zero)land take monitoring), support of decision making in the domains of climate change adaptation (urban heat islands / climate zones / greenery, ...) and biodiversity preservation (assessment and monitoring of the green/blue/dark infrastructure and associated connectivity from regional to city scale), in forest management (including phyto-sanitary threats), in risk prevention / preparation (risk areas and assets) and monitoring (flood, fire, terrain movement, mudflows); the scales of work and the precision (levels of detail) expected, are depending on the interlocutors and their respective thematics; prioritization and definition of 'generic' products that could satisfy a large majority of actors is not immediate and would require a more detailed critical review of the needs;
- the collected needs led to a first formalization of more than fifty potential Copernicus and EO derived information likely to meet these requirements in the various thematic and business sectors of investigation; furtherly, based on these results and to prepare for possible adoption of these products (or a selected subset), this action could be completed by a detailed (joint)specification of these expected products/services, by setting-up demonstrators to verify their adequacy, and by establishing costs and economic model with suggested scenarios (and/or possible frameworks) for financing and perenisation;
- the dialogue conducted with the users and the needs collected have highlighted the fact that 'objective' and 'coherent' indicators (i.e. whatever the scale considered) are required in order to settle debates, to establish policies and evaluate them and also to facilitate the comparisons and observations to be made, by the various specialists (spatial and urban planners, environmental / risk / basin managers, etc.) with their counterparts in charge of the same problematic at the inter-territorial, inter-regional or international (cross border) level.

Results indicators of this action are:

- Number of meetings and users encountered : 12 meetings, 36 users encountered
- Number of information sheets compiled in the Copernicus regional catalog: 21
- Number of expressed and collected user needs : 38 (which led to a formalization of 53 potential Copernicus and EO derived products)