EVALUATION AND FITNESS CHECK (FC) ROADMAP			
TITLE OF THE EVALUATION/FC	Interim evaluation of the Copernicus programme		
LEAD DG – RESPONSIBLE UNIT	DG GROW- DIRECTORATE I- UNIT I2	**DATE OF THIS ROADMAP**	15/12/2016
TYPE OF EVALUATION	Evaluation Interim	**PLANNED START DATE** **PLANNED COMPLETION DATE**	Q3/ 2016 Q3/ 2017
		PLANNING CALENDAR	http://ec.europa.eu/smart-regulation/evaluation/index_en.htm
This indicative roadmap is provided for information purposes only and is subject to change.			

A. Purpose

(A.1) Purpose

The Copernicus evaluation, 3 years after the launch of the Programme, aims at assessing its implementation status, the achievements of its objectives (in terms of efficiency, effectiveness, coherence, relevance, sustainability and EU value added), the development and evolution of all its components, in order to fine-tune the measures for a successful implementation of the programme in the following years of activity. The evaluation shall include a performance assessment of the organisational structure and the scope of services deployed and an assessment of a possible involvement of relevant European agencies (including the European GNSS Agency). The evaluation will be finalised, in line with the Copernicus regulation, by the end of 2017, after the publication of the EU Space strategy for Europe planned for adoption in the last quarter of 2016, and before the finalisation of a proposal for a new Multiannual Financial Framework. As such, it might also provide relevant inputs for future legislative proposals and for the long- term evolution of EU space programmes. It will be supported by an external study.

(A.2) Justification

The evaluation is required by Art. 32 of the Reg. No 377/2014 of 3 April 2014 (Copernicus Regulation). It is also necessary to adequately plan possible future legislative proposals, compatible with the long-time frameworks required by space activities.

B. Content and subject of the evaluation

(B.1) Subject area

The evaluation will be performed on the Copernicus Programme as established by the Regulation 377/2014 repealing Reg. 911/2010 (GMES). Copernicus, the EU programme for Earth observation and monitoring, is one of the EU Space flagship initiatives, structured in different and complementary elements:

- the space infrastructure, (the "Sentinels" satellites and a ground segment where space borne data are processed, distributed and archived);
- 6 services providing data products and information (Emergency management, Land, Atmosphere, Marine environment, Security and Climate change) and
- in-situ sensors (air, land and sea-based).

The evaluation will assess the satisfaction of Copernicus core users, namely the EU Institutions and bodies, European, national, regional or local authorities in charge of the definition, implementation, enforcement or monitoring of a public service or policy. Other users are: the scientific community (as universities, research or education organisations); commercial and private users, NGOs, and international organisations.

Implementation agreements have been concluded with the following European agencies and bodies: ESA, EUMETSAT, ECMWF, EEA, Mercator Océan, FRONTEX and EMSA. An agreement with the EU satellite centre is under finalisation. The Commission undertakes directly some of the tasks relying on its Joint Research Centre.

The Copernicus programme builds on existing European and national capacities and aims to complement them by new assets developed in common. It fosters better exploitation of the industrial potential of policies of innovation, research and technological development in the field of Earth observation, and should be, inter alia, a key tool to support biodiversity, ecosystem management, and climate change mitigation and adaptation.

(B.2) Original objectives of the intervention

Copernicus' overall mission is to monitor the Earth:

- to support the protection of the environment, civil protection and civil security;
- to ensure European independent access to environmental knowledge and key technologies for earth observation and geo-information services;
- to maximize socio-economic benefits, supporting the Europe 2020 strategy;
- to foster the development of a competitive European space and services industries and to maximise opportunities for European enterprises to provide innovative Earth observation systems and services;
- to support and contribute to European policies and foster global initiatives such as GEOSS.

(B.3) How the objectives were to be achieved

To achieve the main objectives (first of all by setting up the appropriate infrastructure of governance), specific objectives were originally set, together with related result indicators, as mentioned in the Regulation:

- Delivering accurate and reliable data and information to users, on a long-term and sustainable basis;
- providing sustainable and reliable access to space borne data and information from an independent European observation capacity and building on existing European and national assets and capabilities;
- providing a sustainable and reliable access to in-situ data relying on European, national and international capacities and networks.

Result indicators include:

- information made available with the respective service-level delivery requirements for the environment, civil protection and civil security;
- increased demand for data and information measured by number of users, volume of accessed data and added value information, increased number of downstream services, widening of distribution in the MS;
- use of data by the EU Institutions, bodies, international organisations, European, national, regional and local authorities and their level of satisfaction;
- booster market penetration, expansion of existing markets and creation of new ones and competitiveness of the European downstream sector
- sustained availability of Copernicus data supporting Copernicus services.

C. Scope of the evaluation/FC

(C.1) Topics covered

The evaluation will assess Copernicus first achievements in the areas corresponding to the objectives described above, from the start of the Programme (April 2014) to April 2017, as well as the first Programme's key results and impact to the extent possible at this early stage. It will cover:

1. The space component (infrastructures, including the satellites and the ground segment) development and operation;

2. The service component development and operation, data and information availability for the environment, civil protection and civil security and their uptake by Union, national, regional and local institutions, bodies and authorities;

3. User uptake, downstream service development and product distribution across users; market penetration of Copernicus enabled data and products, including expansion of existing markets and creation of new markets; competitiveness of European downstream operators.

4. The impacts of the Copernicus data and information policy on stakeholders, downstream users, business as well as on national and private investments in Earth observation infrastructures.

5. The management and governance structure performance will also be assessed together with the financial implementation.

6. Development of the international cooperation activity.

(C.2) Questions/issues to be examined

Specific attention will be paid to the usual assessment of the relevance, effectiveness, efficiency, coherence and EU added value of the programme, the evaluation will support a quantitative and qualitative assessment of actual costs and economic, social and environmental benefits, including impacts on business. Taking in consideration the specific nature of the programme, originally designed to tackle major societal challenges, like environmental issues, civil protection and security, the evaluation will also assess Copernicus' complementarity and coordination with other related European or international initiatives.

Questions to be addressed in the evaluation include the following:

Effectiveness:

- To what extent has the Copernicus and its components achieved its objectives and implemented the tasks set out in its mandate? What are the key factors influencing/restricting progress?
- How appropriate is the balance of activities in relation to different Copernicus components considering the needs of the different service components and stakeholders?
- How effective is the Copernicus and its components work against its core objectives, across all the 6 service components and across all activities, i.e. does it consistently perform with the same quality level? How effective has the Copernicus and its components been in anticipating and dealing with evolving user requirements?

Efficiency:

- What are the costs and benefits associated with the implementation of Copernicus? To what extent are the costs proportionate to the benefits? What are the key drivers for those costs and benefits?
- To what extent have Copernicus and its components been efficient in implementing the tasks set out in their mandate?
- To what extent are the internal mechanisms for programming, monitoring, reporting and evaluating Copernicus and its components adequate for ensuring accountability and appropriate assessment of the overall performance of the programme?

Relevance:

- How far are the Copernicus' tasks/components/services and resources aligned with key EU political priorities?
- Which Copernicus tasks are absolutely essential to deliver on these priorities?
- Which Copernicus tasks are necessary to continue implementing existing and evolving obligations under the Treaties and EU legislative framework?
- Which Copernicus tasks, if any, have become redundant / negative priorities?
- Are the objectives set out in the Copernicus regulation still appropriate given current user needs?
- How relevant is Copernicus to EU citizens?

Coherence/Complementary/Cooperation:

- Are there any issues of internal coherence in the Copernicus Regulation?
- To what extent is Copernicus acting in cooperation with the European Commission services, the Member States, and other agencies and bodies to ensure complementarity and avoid duplication of efforts?
- To what extent are the different Copernicus services cooperating and what procedures are in place to ensure complementarity and avoid duplication of efforts?
- To what extent are the procedures and mechanisms put in place effective to ensure that Copernicus cooperation activities are coherent with the policies and activities of its stakeholders?

EU added value of Copernicus:

- What has been the EU added value of Copernicus?
- What would be the most likely consequences at the EU level of stopping Copernicus?

(C.3) Other tasks

The evaluation will also include an extensive stakeholders consultation (see below) and a special survey on the involvement of relevant agencies, as required by the Regulation 377/2014 (Art.32,§1)

D. Evidence base

(D.1) Evidence from monitoring

A broad array of monitoring and reporting tools and modalities have been put in place to actively track the performance of Copernicus: a continuous communication with the delegated entities, who are met at regular (monthly and quarterly) intervals; quarterly and annual reports of the activities, validated by the Commission as

for the correct execution of the agreements with delegated bodies, and by the User Forum and Copernicus Committee meeting quarterly (including in the configuration of the security board). The annual Copernicus work programme is elaborated, analysed, discussed, modified and approved in cooperation with other DGs and Services of the Commission and with the User Forum and Copernicus Committee. A network of Copernicus delegated bodies has been created by the Commission, to better manage all implementation issues, including cross-cutting issues like communications. Regular meetings and workshops with industrial stakeholders are organised to control the upstream, midstream and downstream sectors' developments and evolution of needs. The procurement board, chaired by the Commission meets regularly to control and approve the related procedures.

In addition to that, *The Regulation No 377/2014, Art. 32.4 also allows the Commission to "request a Member State to provide a specific evaluation of the actions and the linked projects financed under this Regulation or, where appropriate, to supply it with the information and assistance required to undertake an evaluation of such projects".*

(D.2) Previous evaluations and other reports

- Ex post evaluation of GMES Initial Operations programme, PAs and FP7-funded GMES space component http://bookshop.europa.eu/en/ex-post-evaluation-of-the-european-earth-monitoring-programme-gmes-and-its-initial-operations-2011-2013-pbET0116321/;
- Analysis of the consequences of the EU's environmental framework on space activities and options toward promoting greener space activities in Europe;
- Study to examine the GDP impact of space activities in EU;
- Study to achieve an increase in scientific exploitation of data from European space missions;
- Assessment of the international competition and state of the internal market for space based applications and services;
- Socio-economic impacts from space activities in the EU in 2015 and beyond; the competitiveness of the European sector in the domain of access to space;
- The socio economic impact of Copernicus; engaging with public authorities, the civil society and the private sector for Copernicus user uptake;
- User requirements and service specifications;
- Draft Technical Specifications for the Space component and the Service Component
- Towards a European operational observing system to monitor fossil CO2 emissions, (final report from expert group);
- *Satellite monitoring of land, forest and agriculture http://bookshop.europa.eu/en/satellite-monitoring-of-land-forests-and-agriculture.-pbKJ0115972/;*
- *Space market uptake in Europe http://bookshop.europa.eu/en/space-market-uptake-in-europe-pbQA0216011/;*
- *Copernicus user uptake http://bookshop.europa.eu/en/copernicus-user-uptake-pbET0216197/;*
- *Evaluation of socio-economic impacts from space activities in the EU http://bookshop.europa.eu/en/evaluation-of-socio-economic-impacts-from-space-activities-in-the-eu-pbNB0114637/?CatalogCategoryID=IVgKABstwUIAAAEjqpEY4e5L;*
- Final evaluation of space research under the seventh framework programme for research, technological development and demonstration

http://bookshop.europa.eu/en/final-evaluation-of-space-research-under-the-seventh-framework-programme-for-research-technological-development-and-demonstration-pbNB0114005/?CatalogCategoryID=IVgKABstwUIAAAEjqpEY4e5L;

- Note in preparation for Copernicus impact assessment http://bookshop.europa.eu/en/note-in-preparation-for-copernicus-impact-assessment-pbNB0114344/?CatalogCategoryID=IVgKABstwUIAAAEjqpEY4e5L;
- Support to the implementation of the European earth monitoring programme (GMES) and its initial operations (2011-2013) http://bookshop.europa.eu/en/support-to-the-implementation-of-the-european-earth-monitoring-programme-gmes-and-its-initial-operations-2011-2013--pbNB0114341/?CatalogCategoryID=IVgKABstwUIAAAEjqpEY4e5L.

(D.3) Evidence from assessing the implementation and application of legislation (complaints, infringement procedures)

N/A

(D.4) Consultation

The evaluation will be supported by a comprehensive stakeholder consultation strategy, encompassing a number of different consultation tools, including targeted consultations of key stakeholders with surveys and interviews. Relevant input received on Copernicus through the recent open public consultation on the future space strategy for Europe ((COM) 2016 705) will also feed into the evaluation. The stakeholders of Copernicus include: User communities (both external and internal; members of the consultative body "User Forum"; the Copernicus Committee where all Member States and participating countries meet quarterly to discuss the programme developments; delegated bodies (ESA, EUMETSAT, JRC, EEA, ECMWF, MERCATOR OCEAN, FRONTEX, EMSA) charged with implementation tasks; the industry from the upstream, medium and downstream sectors, i.e. from the space infrastructure to the market applications; and regional and local governments as well as some International Institutions. Considering the close links with research activities, consultation activities will also address universities and research centres with space-related interests and relevant agencies will also be involved.

Targeted stakeholder consultations (including questionnaires) will be announced through the Copernicus website, as well as the delegated bodies' websites, and will also be discussed during the User Forum' and the Copernicus Committee' meeting.

(D.5) Further evidence to be gathered

In order to gather evidence a study will be commissioned to an external consultant. The study results will be available by the 2d quarter of 2017.

E. Other relevant information/ remarks

-