

Procedure file

Basic information	
COD - Ordinary legislative procedure (ex-codecision procedure) Regulation	2013/0164(COD) Procedure completed
Copernicus Programme 2014-2020	
Repealing Regulation (EU) No 911/2010 Repealed by	2009/0070(COD) 2018/0236(COD)
Subject	
3.30.03.06 Communications by satellite	
3.40.05 Aeronautical industry, aerospace industry	
3.50.03 European space policy	
3.50.20 Scientific and technological cooperation and agreements	

Key players			
European Parliament	Committee responsible	Rapporteur	Appointed
	ITRE Industry, Research and Energy	S&D PRODI Vittorio	03/09/2013
		Shadow rapporteur	
		PPE DATI Rachida	
		ALDE ROHDE Jens	
		Verts/ALE ANDERSDOTTER Amelia	
	ECR TOŠENOVSKÝ Evžen		
	Committee for opinion	Rapporteur for opinion	Appointed
	BUDG Budgets		27/06/2013
		PPE CARVALHO Maria da Graça	
	ENVI Environment, Public Health and Food Safety		19/09/2013
		PPE GARDINI Elisabetta	
Council of the European Union	Council configuration	Meeting	Date
	Agriculture and Fisheries	3307	24/03/2014
	Competitiveness (Internal Market, Industry, Research and Space)	3276	03/12/2013
	Competitiveness (Internal Market, Industry, Research and Space)	3258	26/09/2013
European Commission	Commission DG	Commissioner	
	Internal Market, Industry, Entrepreneurship and SMEs	TAJANI Antonio	

Key events			
01/07/2013	Committee referral announced in Parliament, 1st reading		
26/09/2013	Debate in Council	3258	
28/11/2013	Vote in committee, 1st reading		

03/12/2013	Debate in Council	3276	Summary
14/01/2014	Committee report tabled for plenary, 1st reading	A7-0027/2014	Summary
12/03/2014	Results of vote in Parliament		
12/03/2014	Decision by Parliament, 1st reading	T7-0227/2014	Summary
24/03/2014	Act adopted by Council after Parliament's 1st reading		
03/04/2014	Final act signed		
03/04/2014	End of procedure in Parliament		
24/04/2014	Final act published in Official Journal		

Technical information

Procedure reference	2013/0164(COD)
Procedure type	COD - Ordinary legislative procedure (ex-codecision procedure)
Procedure subtype	Legislation
Legislative instrument	Regulation
	Repealing Regulation (EU) No 911/2010 2009/0070(COD) Repealed by 2018/0236(COD)
Legal basis	Treaty on the Functioning of the EU TFEU 189
Other legal basis	Rules of Procedure EP 159
Stage reached in procedure	Procedure completed
Committee dossier	ITRE/7/13114

Documentation gateway

Legislative proposal		COM(2013)0312	29/05/2013	EC	Summary
Document attached to the procedure		SWD(2013)0190	29/05/2013	EC	
Document attached to the procedure		SWD(2013)0191	29/05/2013	EC	
Committee draft report		PE519.768	09/10/2013	EP	
Economic and Social Committee: opinion, report		CES5084/2013	16/10/2013	ESC	
Amendments tabled in committee		PE522.817	24/10/2013	EP	
Committee opinion	BUDG	PE519.692	15/11/2013	EP	
Committee opinion	ENVI	PE519.791	28/11/2013	EP	
Committee report tabled for plenary, 1st reading/single reading		A7-0027/2014	14/01/2014	EP	Summary
Text adopted by Parliament, 1st reading/single reading		T7-0227/2014	12/03/2014	EP	Summary
Draft final act		00144/2013/LEX	03/04/2014	CSL	
Commission response to text adopted in plenary		SP(2014)455	10/06/2014	EC	

Follow-up document		COM(2017)0617	23/10/2017	EC	Summary
Follow-up document		SWD(2017)0347	23/10/2017	EC	

Additional information

National parliaments	IPEX
European Commission	EUR-Lex

Final act

[Regulation 2014/377](#)

[OJ L 122 24.04.2014, p. 0044](#) Summary

Final legislative act with provisions for delegated acts

Copernicus Programme 2014-2020

PURPOSE: to establish the Copernicus Programme and repealing [Regulation \(EU\) No 911/2010](#).

PROPOSED ACT: Regulation of the European Parliament and of the Council.

ROLE OF THE EUROPEAN PARLIAMENT: the European Parliament decides in accordance with the ordinary legislative procedure and on an equal footing with the Council.

BACKGROUND: Copernicus is the new name of the European Earth Observation Programme, GMES (Global Monitoring for Environment and Security) which was established as an EU programme by the GMES Regulation (EU) No 911/2010. It covers all the activities for ensuring an uninterrupted provision of accurate and reliable data and information on environmental issues and security matters to users in charge of policy making, implementation and monitoring, in the EU and its Member States.

Copernicus aims at providing Europe with a continuous, independent and reliable access to observation data and information.

Responsibility for funding the exploitation and the renewal of space infrastructure developed with EU and intergovernmental funds cannot be optimally achieved by individual Member States because of the costs incurred.

For the services with a pan-European or global coverage, Member States cannot sufficiently achieve the objectives of the proposed action, as the inputs from different Member States have to be aggregated at European level.

The provision of other services (e.g. emergency maps or thematic land monitoring maps of a more limited geographical scope) can be better achieved at EU level for two reasons.

1. A more coherent and centralised management of input data, from space based or in situ sensors will allow for economies of scale;
2. An uncoordinated provision of Earth observation services at Member State level would lead to duplications and would render the monitoring of the implementation of EU environmental legislation on the basis of transparent and objective criteria difficult or even impossible.

Action at EU level thus leads to a clear added value.

IMPACT ASSESSMENT: the Commission has carried out a consultation process since 2006 and the progressive implementation of the GMES since 2010. Various consultations have confirmed the interest and the need for the Copernicus programme.

An impact assessment was undertaken in 2011 and the main conclusions were published in [SEC\(2011\)867 final](#) of 28 June 2011, which accompanies the Commission proposal on the Multiannual Financial Framework.

The impact assessment has now been adapted to take account of the financial issues and the ownership transfer. In view of an ownership transfer, options will need to be assessed, taking account relevant factors including the operation of the satellites; legal ownership of the data; data access conditions; and the value of the assets.

These options will only be considered if disadvantages of EU ownership seem to outweigh its advantages.

The option of a data purchase scheme could also be considered.

LEGAL BASIS: Article 189 of the Treaty on the Functioning of the European Union.

CONTENT: the proposal focuses on the following main aspects:

1. Change of name into Copernicus;
2. Governance of GMES in its operational phase, with a view to allowing the Commission to delegate activities to a number of operators;
3. Funding over 2014-2020.

Change of name: the acronym 'GMES' should be changed to 'Copernicus' in order to facilitate the communication with the public at large. The Commission has registered the trademark so that it can be used by the Union institutions and licensed to other interested users, in particular the providers of core services.

Objectives: the objectives of the Copernicus programme are to provide accurate and reliable information in the field of the environment and security, tailored to the needs of users and supporting other Unions policies, in particular relating to :

- the internal market,
- transport,
- environment,
- energy,
- civil protection,
- cooperation with third countries,
- humanitarian aid.

Capacity and infrastructure: in order to attain its objectives, the Copernicus programme should rely on an autonomous Unions capacity for space-borne observations and provide operational services in the field of environment, civil protection and security. It should also make use of the available in-situ data provided, namely, by the Member States. The provision of operational services depends on the well-functioning and safety of the Copernicus space component.

Scope of the Copernicus services: the Copernicus services shall include:

1. Operational services:

- air quality monitoring systems;
- marine monitoring service which shall provide information on the state and dynamics of physical ocean and marine ecosystems for the global ocean and the European regional areas;
- land monitoring service (soil, water, forests as well as in general implementation of environment, agriculture, development, energy, urban planning, infrastructure and transport policies);
- climate change monitoring service (provision of Essential Climate Variables (ECVs), climate analyses and projections at temporal and spatial scales relevant to adaptation and mitigation strategies for the various Unions sectorial and societal benefit areas);
- emergency response service shall provide information for emergency response in relation to different types of disasters, including meteorological hazards, geophysical hazards, deliberate and accidental man-made disasters;
- security service shall provide information in particular for border and maritime surveillance, risk assessment and early warning systems.

2. Development activities consisting in improving the quality and performance of operational services, including their evolution and adaptation;

3. Support activities consisting in measures to promote the use of operational services by users and downstream applications, as well as communication and dissemination activities.

Governance: the Commission shall have the overall responsibility for the programme. It shall define the priorities and objectives of the programme and oversee its implementation, in particular with respect to the cost, schedule and performance. Taking into account the partnership dimension of Copernicus and in order to avoid duplication of technical expertise, the implementation of the programme should be delegated to entities with the appropriate technical and professional capacity.

The Commission may entrust, in part or in full, where duly justified by the special nature of the action and specific expertise of the Union body the implementation tasks to competent Union bodies. Among such agencies are:

- the European Environment Agency (EEA);
- the European Agency for the Management of Operational Cooperation at the External Borders of the Member States of the European Union (FRONTEX);
- the European Maritime Safety Agency (EMSA);
- the European Union Satellite Centre (EUSC).

Other Copernicus operators: the selection of entities (the operators) to whom the Commission may entrust implementation tasks, should follow a transparent procedure based on justified on objective grounds and shall not give rise to a conflict of interests. Given the particular nature of the tasks involved, an ad-hoc procedure based on a call for expression of interest was chosen to identify the potential operators best suited to be entrusted with indirect management of the Copernicus programme.

The operators of the Copernicus programme should be subject to supervision by the Commission, whilst enjoying the necessary autonomy to implement the tasks they were entrusted with. They should submit an annual work programme to the Commission with an annual implementation report.

Ownership: the question of ownership of the Copernicus space component assets is important and cannot be considered in isolation from the rights and responsibilities that such ownership confers upon the owner. The owner has the fullest possible rights including the right of use, transfer and disposal. The Union or a specifically designated body or fund shall be the owner of all tangible and intangible assets created or developed under the Copernicus programme subject to agreements concluded with third parties, wherever appropriate, with regard to existing ownership rights.

The Commission shall adopt delegated acts to establish the terms and conditions of any subsequent transfer of ownership from the Union.

Copernicus Data: Copernicus data and information shall be made available on a full, open and free-of-charge basis, subject to the following limitations:

- licensing conditions attached third party data and information;
- dissemination formats, characteristics and distribution means;
- security interests and external relations of the Union or its Member States;
- risk of disruption, for safety or technical reasons, of the system producing Copernicus data and information.

Limitations and conditions of access and use have also been established.

International cooperation: the Union, represented by the Commission, may enter into agreements with the European Free Trade Association (EFTA) countries which are Contracting

Parties to the EEA Agreement; the candidate countries, as well as potential candidate countries; Switzerland, other third countries and international organisations. Third countries or international organisations may provide financial support or contributions in kind to the programme.

Evaluation: by 30 June 2018 at the latest, an evaluation report shall be established by the Commission on the achievement of the objectives of all the tasks financed by the Copernicus programme at the level of their results and impacts and their European added value.

Repeal: Regulation (EU) No 911/2010 is repealed in order to establish an appropriate framework for governance and funding and to ensure a fully operational Copernicus programme from 2014 onwards.

BUDGETARY IMPLICATION: the financial statement accompanying this proposal for a Regulation sets out indicative budget appropriations, which are compatible with the multiannual financial framework 2014-2020, with a maximum level of commitments of EUR 3,786 million, in 2011 prices, equivalent to EUR 4,291 million in current prices.

Until the end of 2013, Copernicus is funded by the FP7 Space theme and the GMES and its Initial Operations programme.

DELEGATED ACTS: the Commission may adopt delegated acts in accordance with Article 290 of the TFEU concerning:

- the establishment of the data requirements necessary for the operational services;
- the conditions and procedures as regards access to, registration and use of Copernicus data and information, including the formats, characteristic and dissemination means;
- the conditions and procedures for the transmission and use of satellite data transmitted to receiving stations not part of the Copernicus programme;
- the conditions and procedures for the archiving of Copernicus data and information;
- the specific technical criteria necessary to prevent the disruption of the Copernicus data and information system, including priority of access;
- the criteria for the restriction of dissemination of Copernicus data and information due to conflicting rights or security interests;
- the criteria for the performance of the security assessment.

The Commission shall carry out appropriate consultations during its preparatory work, including at expert level. When preparing and drawing up delegated acts, it should ensure a simultaneous, timely and appropriate transmission of relevant documents to the European Parliament and to the Council.

Copernicus Programme 2014-2020

The Council agreed on a general approach concerning the "Copernicus programme", the space programme for monitoring the Earth from the space, with a view to entering into negotiations with the European Parliament for its timely adoption.

Copernicus shall be a civil, user driven programme under civil control, building on the existing national and European capacities, as well as ensuring continuity with the activities achieved under the Global Monitoring for Environment and Security (GMES).

Copernicus shall consist of the following components:

- a service component ensuring delivery of information in the following areas: atmosphere monitoring, climate change monitoring, emergency management, land monitoring, marine monitoring and security;
- a space component ensuring sustainable spaceborne observations for the service areas referred to in the Regulation;
- an in-situ component ensuring coordinated access to observations through airborne, seaborne and ground-based installations for the service areas referred to in the Regulation.

The maximum amount allocated by the Union to implement the activities shall be EUR 3 786 million at 2011 prices for the period from 1 January 2014 to 31 December 2020.

The amount shall be broken down in the following categories of expenditure at 2011 prices:

- for the activities under the service component, EUR 791 711 million;
- for the activities under the space component, EUR 2 994.289 million, including a maximum amount of EUR 26.5 million for the other activities referred to in the Regulation.

The recitals have also been examined in depth at a technical level. They add that:

- In order to attain its objectives, the Copernicus programme should rely on an autonomous Unions capacity for space borne observations and provide operational services in the field of environment, civil protection and security, fully respecting national mandates on official warnings.
- The evolution of the space component should be based on an analysis of options to meet the evolving users needs, including procurement from national/public missions and commercial providers in Europe, specification of new dedicated missions, international agreements ensuring access to non-European missions, and the European Earth observation market.

Copernicus Programme 2014-2020

The Committee on Industry, Research and Energy adopted the report by Vittorio PRODI (S&D, IT) on the proposal for a regulation of the European Parliament and of the Council establishing the Copernicus Programme and repealing Regulation (EU) No 911/2010.

The committee recommended that Parliaments position adopted in first reading following the ordinary legislative procedure should amend the Commission proposal as follows:

Scope: the Copernicus programme must ensure continuity with the activities achieved under the GMES programme and shall comprise the

following:

- a service component ensuring access to information in the following areas: atmosphere monitoring, climate change monitoring, emergency management, land monitoring, marine monitoring and security;
- a space component ensuring sustainable space-borne observations for the service areas referred to above;
- an in-situ component ensuring coordinated access to observations through airborne, seaborne and ground-based installations, including unmanned ones, for the service areas referred to in point (a) and calibration and validation activities for space-borne observations.

Objectives: Copernicus shall contribute both to monitoring and protection of the environment and provision of support to civil protection and civil security efforts and also to fostering the development of a strong and balanced space industry across the Union.

With regard to monitoring and protection of the environment, Members stressed the need for reliable data, supplied on a long term, continuous and sustainable basis. With regard to the development of a European space industry, Members stressed the need for completion of the dedicated space infrastructure in terms of satellites deployed and data produced, taking into account the available budget.

Copernicus operation: Members detailed the different components of Copernicus:

1) Services: this will include the atmosphere monitoring service providing information on air quality on a European scale and the observation of forest canopies, and waste flows. There shall be no priority among the services. Services shall be operated in accordance with the subsidiarity and proportionality principles, fully respecting existing national mandates. Therefore, they shall enable the development of decentralised downstream services which shall integrate at European level, existing space, in-situ and reference data in Member States to avoid duplication. The report made provision for certain activities in order to ensure the evolution of the services and their public-sector uptake.

2) Space component: this must provide space-borne observations, serving primarily the operational services above. The Copernicus space component shall include the following activities:

- tasking of the satellites, monitoring and control of the satellites, reception and processing, archiving and dissemination of data, and permanent calibration and validation;
- activities in response to evolving needs of the users
- protection of satellites against the risk of collision

3) In-situ component: this will include coordination and harmonisation of the collection and provision of in-situ data and the identification and addressing of gaps in the in-situ observations that cannot be filled by existing infrastructure and networks.

Financial envelope: whilst not amending the amount set out in the proposal (EUR 3 786 million in 2011 prices) Members proposed an allocation in percentage terms between the specific objectives of Copernicus, these being delivering the operational services in accordance to users needs and providing a sustainable and reliable access to space-borne observations.

The report added that where it proves necessary to deviate from the allocation for a specific objective by more than 5 percentage points, the Commission shall be empowered to adopt delegated acts in to amend that allocation.

Forms of Union funding: Union funding may take the following legal forms: (i) delegation agreements; (ii) grants; (iii) public procurement contracts. Genuine competition, transparency and equal treatment shall be ensured in the provision of funding by the Union. The report added that the Commission shall report to the European Parliament and to the Council on the allocation of Union funds, the evaluation process and results of the procurement tenders and of the contracts concluded.

Role of the Commission: the Commission shall have overall responsibility for the Copernicus programme. It shall define the priorities and objectives of the programme and oversee its implementation, in particular with respect to cost, schedule and performance and security interests and shall provide to the Member States and the European Parliament all relevant information pertaining to the programme through a yearly report on the implementation results.

The report contains additional provisions on the Commissions activities in this regard. The Commission may adopt implementing acts to promote the convergence of Member States in the use of Copernicus data. It shall ensure the complementarity and consistency of the Copernicus programme by creating the appropriate links with relevant Union policies, instruments, programmes and actions to ensure that they benefit from Copernicus services.

The Commission must also:

- take adequate measures to ensure the full participation of private resources in support of the Copernicus programme;
- support a wide-ranging information campaign for local authorities of Copernicus data and services;
- adopt a work programme through implementing act.

ESA: the report contains a new Article on the European Space Agency. The latter shall conclude a delegation agreement with the Commission and be responsible for (i) the development and procurement of the Copernicus system space component; (ii) organisation of a procurement process for entrusting the operation of the dedicated missions to a suitable entity with the exception of missions operated by EUMETSAT. The delegation agreement shall be referred to the Copernicus Committee for consultation and communicated to the European Parliament.

Public procurement: the report contains a new chapter on public procurement setting out the general principles regarding the objectives of the procurement procedure including sub-contracting. The principles of open access and fair competition throughout the industrial supply chain must be observed.

Data protection: Copernicus data and information shall be made available on a full, open and free-of-charge basis, particularly for emergency situations and for development aid purposes. No later than 1 January 2017 the Commission shall, in consultation with all relevant stakeholders, conduct a review of the impact of this data policy on the European data and service market. If appropriate, the review may lead to a revision of the data policy.

"User Forum": the Commission may be assisted by a dedicated body, the "User Forum", bringing together representatives of mid and end

users, independent experts etc. The European Parliament, the Council and the Copernicus Committee shall be fully informed about its proceedings.

Dedicated network for Copernicus data distribution: to promote and facilitate the use of Earth observation technologies both by local authorities and by SMEs, the Commission shall be assisted by a dedicated network for Copernicus data distribution, including national and regional bodies to support the use of earth observation technologies by local authorities and SMEs.

International agreements concluded by the Union may provide for the involvement, as appropriate, of representatives of third countries or international organisations in the work of Copernicus Committee under the conditions laid down in its rules of procedure.

Evaluation report: by 1 January 2017 at the latest, an evaluation report shall be established by the Commission on the achievement of the objectives of all the tasks financed by the Copernicus programme. The evaluation shall include an analysis of the impact of Article 14 on the European data and services market, and if appropriate be accompanied by proposals to amend this Regulation. The results of the evaluation report shall form the basis for a Commission proposal for a revision of this Regulation, to be submitted no later than 1 January 2020.

Copernicus Programme 2014-2020

The European Parliament adopted by 640 to 32 votes with 7 abstentions, a legislative resolution on the proposal for a regulation of the European Parliament and of the Council establishing the Copernicus Programme and repealing Regulation (EU) No 911/2010.

Parliament adopted its position at first reading following the ordinary legislative procedure. The amendments adopted in plenary are the result of an agreement negotiated between the European Parliament and the Council. They modify the proposal as follows:

Scope: Copernicus is a civil, user driven programme under civil control, building on the existing national and European capacities, as well as ensuring continuity with the activities achieved under the Global Monitoring for Environment and Security.

It consists of the following components:

- a service component ensuring access to information in the following areas: i) atmosphere monitoring, ii) marine monitoring, iii) land monitoring, iv) climate change monitoring, v) emergency management, vi) security;
- a space component ensuring sustainable space-borne observations for the service areas referred to above;
- an in-situ component ensuring coordinated access to observations through airborne, seaborne and ground-based installations for the service areas referred to above.

Appropriate links and interfaces between the components referred to shall be established.

Objectives: the objectives of Copernicus are redefined as follows:

1. monitoring the Earth to support the protection of the environment and the efforts of civil protection and civil security;
2. maximising socio-economic benefits, thereby supporting the Europe 2020 strategy and its objectives of smart, sustainable and inclusive growth by promoting the use of Earth observation in applications and services;
3. fostering the development of a competitive European space and services industry and maximising opportunities for European enterprises to develop and provide innovative Earth observation systems and services;
4. ensuring autonomous access to environmental knowledge and key technologies for Earth observation and geoinformation services, thereby enabling Europe to achieve independent decision-making and action;
5. supporting and contributing to European policies and fostering global initiatives, such as GEOSS.

These objectives were detailed as part of the specific objectives focusing on the needs of end-users of Copernicus. The achievement of the objectives would be measured by indicators of the results specified in the proposal in particular progress observed in terms of increased users and data.

Components: the different components of Copernicus were detailed as follows:

1) component services: among other things, Copernicus should focus on monitoring the atmosphere and the marine and terrestrial environment. Regarding monitoring of the marine environment, the focus would be on oceans and marine ecosystems, and the monitoring of waste flows, marine environmental, coastal and polar regions, and of marine resources as well as meteorological forecasting and climate monitoring. The land monitoring service would include information on land use, cryosphere, climate change and biogeophysical variables, including their dynamics.

The provision of the services referred should in any case take account of the principles of subsidiarity and proportionality and should be carried out, where appropriate, decentralised, integrated at the European level data and space capabilities, in-situ and reference, existing in the Member States, so as to avoid any duplication.

Measures have also been introduced to allow the evolution of the services referred to and their adoption by the public sector.

2) Copernicus space component: on space matters, the component of Copernicus consists mainly of:

- the provision of spaceborne observations, including operation of dedicated missions;
- activities in response to evolving needs of the users, including identification of observation gaps and specification of new dedicated missions on the basis of user requirements, developments aiming at modernising and complementing the dedicated missions, including design and procurement of new elements of the related space infrastructure;
- protection of satellites against the risk of collision and tracking objects in orbit;
- safe decommissioning of the satellites at the end of life.

3) Copernicus in situ component: the in situ component shall also cover the coordination and harmonisation of the collection and provision of in

situ data or identification of gaps in the in situ observations that cannot be filled by existing infrastructure and networks, including at global level, and addressing those gaps, while respecting the principle of subsidiarity

N.B. the Commission may entrust, in part or in full, the activities of the in situ component to the service operators referred to or, when overall coordination is required, to the European Environment Agency.

Financial envelope: the financial envelope for the implementation of the activities of Copernicus is set at EUR 4 291,48 million for the period from 2014 to 2020 allocated as follows:

- EUR 897 415 millions for Copernicus in situ services;
- EUR 3 394 065 millions for the Copernicus space component including a maximum amount of EUR 26.5 million for the protection of satellites against the risk of collision.

The Commission may re-allocate funds from one category of expenditure to another, up to a ceiling of 10% of the total amount. A specific procedure is foreseen to this effect.

Governance of Copernicus: a new chapter on governance specified the roles and tasks attributed to the Commission as well as ESA and other partners involved in the project.

1) Role of the Commission: the Commission shall have overall responsibility for Copernicus and for the coordination among its different components. It shall manage the funds allocated under this Regulation and oversee the implementation of Copernicus. It shall also be responsible for:

- managing, on behalf of the Union, relationships with third countries and international organisations;
- facilitating coordinated contributions of Member States;
- supporting the development of Copernicus services and ensuring the complementarity, consistency and links between Copernicus and other relevant Union policies, instruments, programmes and actions;
- promoting a long-term stable investment environment;
- ensuring decision-making in its areas of competence by the most appropriate procedure; providing to the Member States and the European Parliament, in a timely manner, all relevant information pertaining to Copernicus, in particular in terms of risk management, overall cost, annual operating costs of each significant item of Copernicus infrastructure.

2) Role of the ESA: the Commission shall conclude a delegation agreement with ESA entrusting it with a series of tasks including the overall system architecture for the Copernicus space component, the management of allocated funds and the development of new dedicated missions, except those operated by EUMETSAT, as well as a scheme for access to contributing mission data by Copernicus services and the conditions of use of commercial satellite data.

The Commission shall also conclude a delegation agreement with EUMETSAT entrusting it with a certain number of tasks.

3) Service operators: the Commission may also entrust the service component implementation tasks, by means of delegation agreements or contractual arrangements, to certain Union agencies such as the European Environment Agency (EEA), the European Agency for the Management of Operational Cooperation at the External Borders of the Member States of the European Union (FRONTEX), the European Maritime Safety Agency (EMSA) or other relevant agencies.

Work programme for Copernicus: the Commission may adopt an annual work programme, including an implementation plan which shall detail actions pertaining to the Copernicus, and be forward-looking, taking into account evolving user needs and technological developments.

Public procurement: a new chapter has been added on public procurement. This chapter details in particular the principles guiding public procurement or recourse to subcontracting in the framework of Copernicus. Among other things, the principles of fair and open competition shall be applied throughout the industrial supply chain, as well as in tender calls, clear communication of the applicable procurement rules, selection and award criteria and any other relevant information allowing a level-playing field for all potential Copernicus bidders.

Specific objectives have also been introduced into procurement procedures to avoid possible abuse of dominant position and reliance on a single supplier.

Likewise, a series of specific provisions relating to public procurement have been fixed to guarantee:

- the establishment of fair conditions of competition;
- the security of information;
- the reliability of supply;
- the rules applicable to conditional stage-payment contracts;
- the cost-reimbursement contracts;
- amendments;
- subcontracting.

Principles and conditions of access to data: the chapter dealing with Copernicus data has also been revised to establish the general framework of Copernicus information policy. The underlying principles shall be the following:

- promoting the use and sharing of Copernicus data and Copernicus information;
- strengthening European Earth observation markets, in particular the downstream sector, with a view to enabling growth and job creation;
- contributing to the sustainability and continuity of the provision of Copernicus data and Copernicus information;

- supporting the European research, technology and innovation communities.

Dedicated mission data and Copernicus information shall be made available through Copernicus dissemination platforms, under technical conditions pre-defined in the regulation.

The proposal also fixes the conditions and limitations of Copernicus data and Copernicus information access and use, in particular the principle of the setting by the Commission of a series of technical measures for the transmission and use of dedicated mission data, the archiving of data and the licensing conditions.

Sensitive data: as some Copernicus data and Copernicus information, including high-resolution images, may have an impact on the security of the Union or its Member States, in duly justified cases, the Council should be empowered to adopt the measures in order to deal with risks and threats to the security of the Union or its Member States.

Intellectual property: the Union should be the owner of all tangible and intangible assets created or developed under Copernicus. In order to comply fully with any fundamental rights relating to ownership, the necessary arrangements should be made with existing owners. Such ownership by the Union should be without prejudice to the possibility for the Union to make those assets available to third parties or to dispose of them. In particular, the Union should be able to transfer the ownership of, or license the intellectual property rights arising from, work under Copernicus in the interest of a strong uptake of Copernicus services by downstream users.

International cooperation: the international coordination of observation systems and related exchanges of data may be addressed by Copernicus, in order to strengthen its global dimension and complementarity taking account of existing international agreements and coordination processes.

User Forum: it is foreseen that the Copernicus Committee shall set up the 'User Forum', as a working group to advise it on user requirements aspects.

Evaluation report: by 31 December 2017, an evaluation report shall be established by the Commission on the achievement of the objectives of all the tasks financed by Copernicus. The evaluation shall address the continued relevance of all objectives, as well as the contribution of the measures to the objectives described in Article 4, the performance of the organisational structure and the scope of services deployed. The evaluation shall focus in particular on maintaining the relevance of all objectives and include an assessment of possible involvement of relevant European agencies (including the European GNSS Agency) and if appropriate be accompanied by relevant legislative proposals. The report shall assess the impacts of the Copernicus data and Copernicus information policy, on stakeholders, downstream users, the influence on business as well as on national and private investments in Earth observation infrastructures.

Copernicus Programme 2014-2020

PURPOSE: to establish the Copernicus programme (Global Monitoring for Environment and Security).

LEGISLATIVE ACT: Regulation (EU) No 377/2014 of the European Parliament and of the Council establishing the Copernicus Programme and repealing Regulation (EU) No 911/2010

CONTENT: Copernicus is the new name of the European Earth Observation Programme, GMES (Global Monitoring for Environment and Security) established under [Regulation \(EU\) No 911/2010](#). This Regulation establishes Copernicus, the Union Earth observation and monitoring programme, and lays down the rules for its implementation. Copernicus is a civil, user driven programme under civil control, building on the existing national and European capacities, as well as ensuring continuity with the activities achieved under the Global Monitoring for Environment and Security.

It consists of the following components:

- a service component ensuring delivery of information in the following six areas: atmosphere monitoring, marine environment monitoring, land monitoring, climate change, emergency management and security;
- a space component ensuring sustainable spaceborne observations for the service areas referred to above;
- an in situ component ensuring coordinated access to observations through airborne, seaborne and ground-based installations for the six service areas.

Appropriate links and interfaces between these components will be established.

Objectives

General objectives are as follows:

- monitoring the Earth to support the protection of the environment and the efforts of civil protection and civil security;
- maximising socio-economic benefits, thereby supporting the Europe 2020 strategy by promoting the use of Earth observation in applications and services;
- fostering the development of a competitive European space and services industry and maximising opportunities for European enterprises to develop innovative Earth observation systems and services;
- ensuring autonomous access to environmental knowledge and key technologies for Earth observation and geoinformation services;
- supporting European policies and fostering global initiatives, such as GEOSS.

In order to attain the general objectives, Copernicus shall have the following specific objectives: (a) delivering accurate and reliable data and information to Copernicus users; (b) providing access to spaceborne data and information from an autonomous European Earth observation capacity with consistent technical specifications; (c) providing access to in situ data, relying, in particular, on existing capacities operated at European and national levels, and on global observation systems and networks.

Measurement of objectives: these result indicators will be used: (i) Copernicus data made available in accordance with the respective

service-level delivery requirements for the environment, civil protection and civil security; (ii) increased demand for Copernicus data measured by the progression in number of users, etc.; (iii) use of Copernicus data by Union institutions, international organisations and European, national, regional or local authorities; (iv) market penetration; (v) sustained availability of Copernicus data supporting its services.

Financial envelope: for the implementation of the activities relating to the service, space and in-situ components, the financial envelope is set at EUR 4 291.48 million in current prices for the period from 1 January 2014 to 31 December 2020.

This amount is broken down in the following categories of expenditure in current prices:

- for the activities relating to service and in situ components, EUR 897,415 million;
- for the activities relating to the space component, EUR 3 394.065 million, including a maximum amount of EUR 26.5 million for protection of satellites against the risk of collision.

Governance: the Commission shall have overall responsibility for Copernicus and for the coordination among its different components, and shall manage the funds allocated and oversee the implementation of Copernicus including the setting of priorities, user involvement, cost, schedule, performance and procurement.

The Regulation contains provisions relating to the rules on public procurement. The Financial Regulation, and in particular the principles of open access and fair competition throughout the industrial supply chain, tendering on the basis of the provision of transparent and timely information, clear communication of the applicable procurement rules, selection and award criteria and any other relevant information allowing a level-playing field for all potential bidders, shall apply to Copernicus.

European Space Agency: Copernicus is based on a partnership between the Union, ESA and the Member States. The Commission shall conclude a delegation agreement with ESA entrusting it with certain specified tasks, including ensuring the technical coordination of the Copernicus space component. It will also rely on the European Organisation for the Exploitation of Meteorological Satellites (EUMETSAT) for the operation of dedicated missions in accordance with its expertise and mandate.

Ownership: the Union shall be the owner of all tangible and intangible assets created or developed under Copernicus. To that effect, agreements shall be concluded with third parties with regard to existing ownership rights. The Commission shall ensure the optimal use of the assets and in particular, it shall manage the intellectual property rights relating to Copernicus as effectively as possible.

Evaluation: by 31 December 2017, an evaluation report shall be established by the Commission on the achievement of the objectives of all the tasks financed by Copernicus at the level of their results and impacts, their European added value and on the efficiency of the use of resources.

ENTRY INTO FORCE: 25.04.2014.

APPLICATION: from 01.01.2014.

DELEGATED ACTS: the Commission may adopt delegated acts as in respect of the data requirements necessary for the evolution of operational services, the conditions and procedures regarding access to, registration and use of Copernicus data and Copernicus information, the specific technical criteria necessary to prevent the disruption of Copernicus data and Copernicus information and the criteria for the restriction of acquisition or dissemination of Copernicus data and Copernicus information due to conflicting rights. The European Parliament or the Council may raise objections in regard to a delegated act within two months of notification of that act (this period may be extended by two months). If the European Parliament or the Council make objections, the delegated act will not enter into force.

Copernicus Programme 2014-2020

This report highlights the main findings of the mid-term review of the European Earth monitoring program, Copernicus (2014-2020), three years into its implementation. It is based on an external study conducted on behalf of the Commission.

Main findings of the review: just three years after the launch of the first Sentinel satellite, Copernicus is producing tangible results that clearly demonstrate the added value of the EU action.

The programme is well on track and its original objectives have largely been achieved. The data volume, accuracy, reliability and quality are one of the most successful elements of Copernicus implementation. Today, Copernicus is one of the biggest data providers in the world.

The data gathering activity is efficient: high quality satellites have been successfully deployed on time and on budget, supplying high quality imaging. Enabling a vibrant ecosystem capable of transforming Copernicus data and information into innovative products and services will remain a clear priority during the next phase of the programme until 2020.

Outlook: on the basis of the assessment, the Commission reaches the following conclusions:

- the long-term stability of the programme and its free, full and open data policy must be ensured in order to provide predictability and planning certainty for businesses and users;
- Copernicus should remain a user-driven programme and its future evolution must keep up with the evolving requirements of the users;
- the Commission should plan a long-term vision for the programme, in order to give visibility and predictability to all partners in Copernicus, allowing them to invest, benefit and support, especially considering the shifting priorities of the programme;
- Copernicus services should continue to develop, addressing new challenges and new policy priorities related to the challenges of climate change and sustainable development, in order to monitor CO₂ and other greenhouse gas emissions, land use and forestry, or changes in the Arctic;
- enhancing the security dimension of Copernicus is also called for to improve the EU's capacity to respond to the evolving challenges of border controls and maritime surveillance and to explore how Copernicus could cover further security needs, including defence;
- the principle of partnerships under the coordination of the Commission should continue to drive the future development of the programme. For the period after 2020, the Commission might, however, explore further opportunities for streamlining and optimisation, and assess the need for involving new actors;
- new business models based on public-public partnerships, public-private partnerships or service-buy schemes could support a robust and sustainable European Earth observation capacity, which in turn is expected to stimulate further investments;

- future developments must strengthen international cooperation to enhance the scope and quality of Copernicus data and services. Efforts should be directed towards the consolidation of Copernicus as global standard in the geo-location data domain.

The next few years will therefore be crucial to consolidate the achievements and prepare the future adapting to the changing reality of the programme.