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COMMISSION STAFF WORKING DOCUMENT

EXECUTIVE SUMMARY OF THE IMPACT ASSESSMENT

Accompanying the document

**Proposal for a Directive of the European Parliament and of the Council
on the dissemination of Earth observation satellite data for commercial purposes**

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Disclaimer: This executive summary commits only the Commission's services involved in its preparation and does not prejudge the final form of any decision to be taken by the Commission.

1. PROBLEM DEFINITION

(a) Background

The present Impact Assessment examines the obstacles to market development that stem from the fact that high resolution satellite data (HRSD) today is regulated in different ways by EU Member States, and the options to overcome those obstacles to the free circulation of satellite data, while preserving security interests.

The stakeholders' consultation, including data resellers and value-adding service providers (VAS), revealed that at present the development of the HRSD market is thwarted by the lack of transparency, predictability and equal treatment which is the result of fragmented regulatory frameworks applicable to HRSD in Member States. At present, there is no such a thing as a common market for HRSD.

(b) Most affected businesses

Data-providers: While they perceive market development as an opportunity, a more transparent framework that opens the possibility for others to enter the data provision business could be a threat. Yet on the other hand, their business is affected negatively by the existing or pending regulatory barriers as these mainly occur on the stage of dissemination of HRSD from data providers to data resellers and VAS.

Data resellers/VAS: Their business is constrained by the effects of a fragmented regulatory framework for HRSD limiting the free circulation of HRSD. By far the majority among them (99%) are SMEs/micros particularly well equipped, due to their flexibility, to innovate on the basis of the raw data and provide a wide range of services and products based on HRSD.

End users businesses: They are affected by the constraints experienced by data resellers in terms of (timely) availability of HRSD.

(c) Need for public intervention

Three Member States (i.e. Germany, France and Italy) have so far developed civil or dual-use satellite systems that are capable of generating HRSD and have put in place regulatory regimes to enable the distribution of potentially sensitive data to the commercial market.

However given the lack of a consistent approach, these individual frameworks contain gaps and differences which constrain the development of HRSD market. At least two more countries, United Kingdom and Spain, will develop HRSD technological capabilities in the nearest future. Others may follow. As the number of Member States with HRSD capacity increases; the emergence of ever more fragmented regulatory frameworks is likely to aggravate the described problems.

Control of HRSD distribution is necessary for security reasons. Member States which have jurisdiction over high resolution satellite systems have put in place different regulatory frameworks to control HRSD which have a negative impact on the development of HRSD market and also can lead to security shortcomings. There is consensus that public intervention at EU-level to approximate certain core aspects of these regulatory frameworks can alleviate these problems.

2. ANALYSIS OF SUBSIDIARITY

The problems identified hinder the development of an EU internal market in the domain of satellite data. Consultations lead to the conclusion that an internal market for HRSD does not exist today. The basis for EU action is Article 114 TFEU, which deals with the approximation

of laws of the Member States in order to achieve the objectives of Article 26 TFUE, namely, the proper functioning of the internal market.

The choice of Article 114 TFUE is justified by the need to delimit the internal market in HRSD and ensure the free circulation of satellite data based products and services across EU.

The Union action envisaged in this report complies also with the subsidiarity principle for the following reasons:

- National initiative alone will not ensure a coherent legal framework for the dissemination of satellite data. A coherent framework can only be achieved by concerted action by Member States within the EU or action at EU level.
- An EU approach is the only way that will allow private businesses in the value chain to benefit from the opportunities offered by the EU internal market by creating a transparent, predictable and fair legal framework guaranteeing the principle of free circulation.

The options envisaged, relying on a flexible approach of a limited alignment of key regulatory elements, do not go beyond what is strictly necessary to attain the goal of the initiative. Therefore, it can be confirmed that the initiative also complies with the principle of proportionality.

3. OBJECTIVES

The general policy objective of this initiative is to foster growth of the Earth observation (EO) markets in Europe, in particular the services market, to foster competitiveness of the EU EO-sector and to foster the competitiveness of EO-user-businesses in Europe. More specifically it seeks to facilitate the dissemination of HRSD in Europe while fully safeguarding security interests, to establish a more reliable access to HRSD, a good and sufficient level of information on accessibility of HRSD for VAS/data-resellers and customer businesses, and to facilitate competition at data provider level. These objectives all aim to foster the internal market on HRSD. The operational objective is to establish the core elements needed for the realization of the full commercial potential of HRSD and in particular to facilitate the dissemination and access to HRSD:

- by introducing a common definition of HRSD, specifying which satellite data could be security relevant and which is “business-ready”,
- by introducing common standards on transparency, predictability/legal certainty and fair treatment and;
- by introducing common standards on efficiency and business-friendly implementation in particular with respect to the procedures to follow.

4. POLICY OPTIONS

This impact assessment identifies three options – in addition to the baseline scenario – that seek to achieve the objectives by setting up a legal framework for the handling and dissemination of high-resolution Earth observation data in the European Union:

Option 1: Baseline scenario

Option 2: Recommendations and guidelines (OMC)

Option 3: Basic legislative instrument

Option 4: Extended legislative instrument

Option 1 would entail that no common framework would be established and as more Member States acquire HRSD capacity and establish their own national ones further fragmentation is likely to occur.

Option 2, the Open Method of Coordination (OMC), could be used to coordinate national policies in the field of HRSD in order to achieve common objectives.

This option would seek to establish a coherent legal framework for HRSD in Member States, while the Commission would have a coordination role.

However, this process might take a long time before producing its effects.

Similar results can be achieved by a recommendation issued by the COM which could also result from an OMC, though a vast majority of Member States have explicitly stated during the consultation process their lack of confidence in the efficiency of this option on security grounds and the lack of guarantees for reciprocity compliance.

For these reasons, a Commission recommendation was discarded from the options.

Option 3 involves legislative action at EU level for the approximation of essential components of the national regulatory frameworks applicable to HRSD distribution:

This legislative action would cover:

- The establishment of common technical parameters defining HRSD;
- The elaboration of common criteria for a screening procedure, to be further specified by Member States in order to determine whether HRSD needs to undergo an authorisation procedure;
- The definition of certain standards for an authorisation procedure;
- The introduction of the principle of free circulation of HRSD controlled at first dissemination by another Member State of the EU in accordance to the applicable procedures, as far as the scope of the screening/authorization is respected.

Option 4 is based on the same elements as option 3 but also includes the establishment of common criteria for licensing for HRSD providers (licences to be issued by national authorities). The common criteria would include:

- The technical and organizational measures to prevent access to unauthorized third parties to the installations used for receiving, processing or storing data produced by a high-performance earth remote sensing system;
- The measures to protect the inadvertent disclosure of HRSD to unauthorised parties when data provider transmits data between different facilities under its control or to another data provider;
- The measures to secure dissemination of the data generated by a high-performance earth remote sensing system;
- Security clearance requirements for personnel having access to command facilities used for receiving, processing, storing and delivering HRSD.

5. ASSESSMENT OF IMPACTS

In contrast to option 1, options 2, 3 and 4 aim at establishing a coherent and clear legal framework for HRSD across Europe based upon a number of core elements, the difference laying in the type of instrument chosen and the scope of the EU intervention envisaged. They

would however differ in terms of efficiency and effectiveness, administrative burden and the timing.

Options 2 – 4 would have positive economic impacts due to higher level of transparency, legal certainty and business predictability. They will generate positive effects for the establishment and exercise of businesses, fostering the emergence of an internal market for HRSD, enhancing the competitiveness of EU businesses in relation to competitors from third countries, an issue of special relevance for the most vulnerable segment of the HRSD business sector – SMEs/micros.

Besides direct job growth in the data reseller/value-adding-service (VAS) businesses and data providing businesses, additional job growth at other levels of the value chain is probable (i.e. HRSD user businesses, satellite manufacturers and operators), as a result of higher quality services and more competitive prices. Furthermore additional indirect job growth is also expected, as the creation of 1 new job in the space industry leads up to 5 new jobs in other sectors.

Another issue that should be highlighted in particular in terms of impacts is the importance of a coherent HRSD policy for improvements in policy areas, where HRSD products and services are heavily in use, e.g. security and defence, local and regional planning, environmental and climate monitoring or emergency services. To give an example discussed during the consultation, a considerable share of the HRSD products and services is used in environmental monitoring. Therefore any improvement as to the quality of these services could foster the achievement for example of the ambitious EU climate change goals by providing cost-efficient and precise worldwide monitoring of greenhouse gases and biomass.

A proper-functioning of the EU internal market for HRSD will also have a positive impact on the availability of data that may be used for other socially commendable objectives for example, educational or research applications.

The following table was produced to give a short summary on the detailed impacts of the different options:

	Economic	Administrative cost/burden	Strategic and political	Social
Option 1: Baseline scenario	Obstacles to economic development of the sector due to: - lack of transparency - barriers to trade - lack of business predictability - lack of competition	No additional administrative burden.	Different approaches could have negative impact on security.	Job creation potential not fully exploited. Limited data availability for use and applications.
Option 2: Recommendations and guidelines¹	Positive economic impact due to higher level of transparency, business predictability and legal certainty (free circulation of HRSD). Positive effects for the establishment and exercise of businesses. Emergence of an HRSD internal market.	For Businesses: Less bureaucratic barriers for industry and less effort necessary to deal with national regulations. For Member States: There would be negligible additional administrative costs.	MS would align their legislations, strategic interests of the Union will feed this dialogue and there will be an improvement in the degree of protection of such interests.	Potential for considerable job creation. Better availability of HRSD for applications.

¹ However as the effectiveness and efficiency of the process under open method of coordination is uncertain, any outlook on the economic impact remains unclear.

Option 3: Basic legislative instrument	Similar as in option 2. In addition, option 3 likely to deliver solutions faster and would have an earlier impact on market than option 2 (even assuming that option 2 delivers best results).	For businesses, similar to option 2 but effects would be felt earlier. For Member States there would be limited administrative costs due to the transposition of the directive into national legislation.	Positive impact would be achieved faster and more certain than in option 2.	As option 2, but earlier impact.
Option 4: Extended legislative instrument	As option 2, plus more competition on data provider level of value chain. However, danger that the establishment of common but complex licencing criteria may generate unforeseen administrative difficulties as the market develops.	For businesses lower administrative burden if activities in more than one MS. As the directive would contain a further element, the cost of transposition would be higher than in option 3. It would also generate extra administrative costs for those MSs which have to adjust their mechanisms for controlling the activity of data providers	As option 3.	Enhanced supply of HRSD would boost utilisation of HRSD for the implementation of social and environmental policies.

Option 3 is the preferred option combining a good level in terms of economic, strategic and social benefits with a very high level of effectiveness and efficiency while at the same time leaving as much room as possible for MS for controlling the data-providing businesses in their territory.

6. MONITORING AND EVALUATION

Objectives		Indicators
General objective	<p>Fostering growth of the EU Earth observation market, in particular the services market.</p> <p>Fostering competitiveness of the EU Earth observation sector.</p> <p>Fostering the competitiveness of EO-user-businesses.</p>	<p>Evolution of EU Earth observation market turnover.</p> <p>Evolution in the number and size of business operators.</p> <p>Positive/negative business perception on HRSD internal market performance.</p>
Specific objective	<p>Better business conduct across MS for the dissemination of HRSD.</p> <p>More reliable access to HRSD.</p> <p>Good information on accessibility of HRSD for VAS/data-resellers and customers.</p> <p>Increasing competition on data provider level.</p> <p>Fostering internal market on HRSD.</p>	<p>Level of transparency and predictability of existing/evolving regulations.</p> <p>Monitor quota of finally rejected HRSD requests due to security reasons.</p> <p>Level of transparency and publicity of existing/evolving regulations</p> <p>Number of competitors, HRSD pricing</p> <p>Monitor quota of HRSD transactions to customers/VAS/data resellers with reference to their respective location: domestic, EU, third country.</p>

Operational objective	<p>Establish the core elements to use the full commercial potential of HRSD and in particular facilitating dissemination and access, by:</p> <ul style="list-style-type: none"> - Introducing as a basis a common notion of HRSD, - Common standards on transparency, predictability and fair treatment, - Common standards on efficiency and business friendly implementation in particular with respect to the procedures to follow. 	Chosen operational objectives allow monitoring by checking if the elements have been introduced in national law.
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The legislative instrument will provide for the regular monitoring of the implementation of the proposed initiative, especially as regards the operation of the procedures developed by the national authorities. The monitoring would require regular update by the national authorities (e.g. on an annual basis) through the submission to the Commission of the following aggregated statistics:

- number of businesses acting as data provider in different Member States;
- overall number of the data transactions screened (allowing to assess the market interest in HRSD);
- percentage of "non-sensitive" and "sensitive" requests allowing to draw conclusions about the overall effectiveness of the screening (the percentage of "sensitive" transactions can be used as an indicator for the efficiency of the filters applied by the data providers and can indicate the degree to which business needs are accommodated);
- percentage of domestic, cross-border (within EU) and worldwide business activities at data provider level;
- number of sensitive requests that are submitted for subsequent authorisation;
- percentage of denials of authorisation (allowing to draw conclusions on how efficient business needs are taken into consideration in the screening procedure).

The Commission will inform regularly the European Parliament and Council on the implementation of the directive and an evaluation of the new instrument would be carried out 3 years after the expiry of the transposition period. The evaluation would be based on the indicators in the table above and would seek to establish to what extent the instrument has fulfilled the objectives and whether there is a need for revision.