

EXPLANATORY MEMORANDUM

1. CONTEXT OF THE PROPOSAL

• Reasons for and objectives of the proposal

EGNOS, the European Geostationary Navigation Overlay System, makes existing open satellite navigation signals suitable for safety critical applications in transports, such as flying and landing aircrafts where little or no ground based radio assistance equipment is available.

EGNOS with Galileo are the two satellite navigation programmes of the European Union, regulated by the GNSS Regulation[[1]](#footnote-1).

Cooperation on satellite navigation between European Neighbourhood Policy South countries[[2]](#footnote-2) and EU is framed in the EuroMed transport cooperation. Within the European Neighbourhood Policy[[3]](#footnote-3), the EuroMed transport cooperation builds on the framework launched in Barcelona (1995) and evolved, since 2008, into the Union for the Mediterranean (UfM) according to the Joint Declaration[[4]](#footnote-4) adopted at the heads of state or government meeting.

Article 2(5), third paragraph of the Regulation (EU) 1285/2013 ("GNSS" Regulation)[[5]](#footnote-5) stipulates that the geographical coverage of the European Geostationary Navigation Overlay Service (EGNOS) system may be extended to countries of the European Neighbourhood Policy (ENP), subject to the technical feasibility and on the basis of international agreements. Such extensions shall not delay the extension of the geographical coverage of EGNOS throughout the Member States' territories located in Europe.

The EGNOS extension to ENP South countries corresponds to those criteria and will follow the initial actions taken with the installation of some EGNOS ground stations outside of Europe. It has the double aim to strengthen EGNOS coverage to the periphery of EU and to provide coverage to ENP South countries to enable user adoption.

The EGNOS extension to ENP South countries will not delay the extension of the geographical coverage of EGNOS throughout the EU. On the contrary, it will contribute to a better coverage of the regions South/Southeast/Southwest of the EU, and in particular to improve coverage in the Portuguese/Spanish islands in the Atlantic Ocean, as well as to Cyprus, Greece, Malta, Italy.

An analysis carried out by the European Space Agency in 2015[[6]](#footnote-6) reinforced by industry's offer of 2017 for the development of EGNOS Version 3, confirmed the technical feasibility of such extension and concluded that three EGNOS ground stations would suffice to cover the entire airspace of the ENP South countries.

Since 2009, the concerned Commission departments have been working in coordination with the European External Action Service (EEAS) towards the extension of the EGNOS coverage to the southern Mediterranean area (i.e. the ENP South countries) and the introduction there of EGNOS Safety-of-Life (SoL) Service in aviation and other transport domains. Extending the EGNOS coverage is a win-win initiative. For the EU it will strengthen ties with neighbouring partners and create market access opportunities for its industry while the ENP South countries which will get access to EGNOS with very marginal cost compared to the EU public investment made so far.

Significant progress has been made over the years and significant interest has been demonstrated from the transport authorities of the ENP South countries. They consider the EGNOS Safety-of-Life Service as an effective means to comply with International Civil Aviation Organization (ICAO) requirements and they believe it provides an enabling technology for new services and applications in other transport and non-transport domains.

Six of the ENP South countries have thus formally expressed in 2014-16 at the highest political level, their interest in entering such EGNOS international agreement with EU[[7]](#footnote-7).

It is opportune that the EU responds positively to ENP South countries' expectation to receive EGNOS Safety-of-Life (SoL) Service. The strategic aspect of such an EGNOS extension is becoming ever more evident in the light of the activities of other providers of Global Navigation Satellite Systems in the region.

A specific bilateral international agreement on EGNOS with each individual ENP South country will lay down the appropriate schemes of governance, define the roles and responsibility of each Party and decide upon financial responsibilities for the development and operations of the infrastructure needed for the provision of EGNOS-based services in each ENP South country.

The security-related aspects of an EGNOS extension to ENP South countries, including EEAS assessment of the geopolitical situation in the region, have been taken into account in this Recommendation. The security aspects will continue to be monitored and followed up during the negotiation and deployment phases. This includes the choice of the sites for the deployment of EGNOS ground infrastructure as well as their protection during the operational phase of EGNOS in ENP South countries.

• Consistency with existing policy provisions in the policy area

EGNOS extension to ENP South countries is included in the Regional Transport Action Plan 2014-20 and was included in the Union for the Mediterranean resolution in 2013 and 2014.

An extended coverage of EGNOS Safety-of-Life Service across the Northern African and Middle Eastern territories will offer high level of safety in landing procedures, even at smaller, regional and touristic destinations, therefore it will harmonise the safety level between EU and ENP South countries and as consequence increase the adoption of EGNOS by airlines flying across the two regions.

Last but not least, the EGNOS extension to ENP South countries is coherent with other similar EGNOS extensions or EGNOS-based systems, namely the similar extension to Ukraine[[8]](#footnote-8) and establishment of independent Satellite Based Augmentation Service systems based on EGNOS technology in Africa, starting with 17 ASECNA countries[[9]](#footnote-9). EGNOS will therefore ensure a homogeneous coverage across European and African continents, enabling safer flights and landings.

• Consistency with other Union policies

European satellite navigation systems are important elements in the European Union's policy to ensure the full integration of land, sea and air transport infrastructure for safe, seamless, economic and environmentally friendly navigation. The systems have been promoted internationally inter alia through cooperation agreements signed on satellite navigation with countries including Morocco, Ukraine, the USA, Norway, Switzerland and South Korea.

In air traffic management (ATM), all ENP South countries aim at complying with ICAO requirements in terms of Performance based Navigation (PBN). EGNOS is an important enabler for the modernisation of ATM in Europe and the implementation of Single European Sky. The extension to ENP South will contribute to defragmentation of aviation navigation services across the Mediterranean. The ENP South coverage of EGNOS will also contribute to the creating of an integrated Euro-Mediterranean transport area covering nearly one billion people in EU and its neighbouring countries.

2. LEGAL BASIS, SUBSIDIARITY AND PROPORTIONALITY

• Legal basis

Articles 218(3), 218(4) of the Treaty on the Functioning of the European Union.

• Subsidiarity (for non-exclusive competence)

The objectives of the proposal cannot be achieved by the Member States because the EGNOS satellite navigation programme is a European initiative managed by the European Commission. In this respect, the scope of an agreement to be negotiated cannot be limited to any single Member State or a group of Member States but affects the EU as a whole.

Any alternative solution (such a network of bilateral relations between EU Member States and each ENP South country) would bear a high risk of inefficiencies, delays and contradictions which could quickly translate into higher costs to be borne by the Union budget. Failing to implement the cooperation between the EU and individual ENP South countries on the provision of EGNOS services would represent a missed opportunity for the EU industry, and would from a strategic point of view weaken the EU’s stance in the ENP South region.

Article 29 of the Regulation 1285/2013 provides that the Union may enter into agreements with third countries and international organisations in the context of the programmes in accordance with the procedure laid down in Article 218 of the TFEU.

• Proportionality

The establishment of the agreement is proportional to the envisaged aims.

• Choice of the instrument

Article 29 of the Regulation 1285/2013 explicitly provides for the conclusion by the Union of international agreements in the context of EGNOS. Furthermore, Article 2(5) third subparagraph of the Regulation expressly provides for the possibility of the extension of the geographical coverage of the EGNOS system to other regions of the world, specifying among others that such extensions could concern countries of the European Neighbourhood Policy (ENP). It also specifies that this is done through an international agreement provided the extension is technically feasible.

3. RESULTS OF EX-POST EVALUATIONS, STAKEHOLDER CONSULTATIONS AND IMPACT ASSESSMENTS

• Stakeholder consultations

The use of SBAS like EGNOS in ENP South countries has been evaluated from a socio-economic perspective as well from a technical point of view. The results of the analysis have been shared and discussed with ENP South stakeholders and authorities on several occasions across years of cooperation on the topic.

From 2007 until 2015 the EuroMed GNSS I and II projects funded by Commission installed some EGNOS ground infrastructure to provide a minimum of coverage and execute technical, know-how transfer, capacity-building tests and trials with local civil aviation authorities, airspace users and air navigation service providers to experiment landing procedures and evaluate benefits. In this context a regulatory analysis was also performed, which identified the aviation-specific, ICAO regulatory framework on which service provision will be based, as well as detailed per-country satellite navigation strategy and implementation plans.

A cost benefit analysis (CBA) per country was also performed which confirmed positive net benefits of extending EGNOS to the ENP South countries, underlying the positive effects of EGNOS for each ENP South country in aviation and multimodal domains. The CBA estimated that net benefits would reach more than €1 billion for the ENP South region. These analyses were performed with full involvement of ENP South counterparts and results have been shared and discussed with ENP South countries representatives and stakeholders in several workshops. Conclusions of all EuroMed GNSS working groups in 2013, 2012 and 2011 requested the Commission to complete the EGNOS coverage of ENP South airspace.

The EU upstream space industry will benefit from the market related to the deployment of ground infrastructure and the EU downstream industry (for EGNOS applications) will benefit from the availability of a larger market. Technical cooperation and ties among EU transport authorities/stakeholders and their ENP South counterparts will also be strengthened with mutual benefit and long term strategic impact.

It has also been confirmed that the EGNOS extension to ENP South countries shall not delay the completion of the geographical coverage of the EGNOS system throughout the EU Member States' territories located in Europe.

• Collection and use of expertise

*Scientific/expertise domains concerned*

Satellite navigation experts, experts in domains concerned by the utilisation of precise satellite positioning (aviation, maritime, rail, road, agriculture, land management, etc.)

*Methodology used*

Extensive consultation and interaction with relevant authorities, counterparts and users across two projects funded under EuroMed programme (EuroMed GNSS I, 2007-11 and EuroMed GNSS II, 2012-15). Analysis and research performed by industrial consortia, EU/Member State and ENP South countries agencies.

*Main organisations/experts consulted*

Ministries of transport, civil aviation authorities, airports, airlines of all the ENP South countries. The European Space Agency, the European Satellite Services Provider, the European GNSS Agency (GSA), the European External Action Service (EEAS), space industry/satellite navigation and aviation experts and industry from both EU and ENP South countries (e.g. the Algerian Space Agency).

Fundamental rights

There are no consequences for protection of fundamental rights.

4. BUDGETARY IMPLICATIONS

The capital expenditures related to the implementation of infrastructure for the provision of SBAS in each ENP South countries based on EGNOS will be covered from Union funds, in particular those financing the EU Neighbourhood Policy. The incremental operational expenditures related to the exploitation of the SBAS in each ENP South country based on EGNOS, will be funded by each ENP South country.

There are no budgetary implications resulting from this agreement for the Union budget allocated to the European GNSS programmes. In line with Art 2 (5) last paragraph of Regulation (EU) 1285/2013, the cost of such extension will not be covered by the resources allocated to Galileo and EGNOS programmes.

Recommendation for a

COUNCIL DECISION

authorising the opening of negotiations on an agreement between the European Union and each individual European Neighbourhood Policy South country for the purpose of agreeing the terms and conditions for extending the provision of the European Geostationary Navigation Overlay Service (EGNOS) over European Neighbourhood Policy

THE COUNCIL OF THE EUROPEAN UNION,

Having regard to the Treaty on Functioning of the European Union, and in particular Article 218 (3) and (4) thereof,

Having regard to the recommendation from the European Commission,

Whereas

(1) the conditions of Art. 2(5) of Regulation (EU) No 1285/2013 are met, in terms of technical feasibility and assurance that no delay is being incurred in the geographical coverage of the EGNOS system throughout the Member States territories,

(2) Regulation (EU) No 1285/2013 provides that the Union is the owner of all tangible and intangible assets created or developed under the EGNOS programme, that the Union may enter into agreements with third countries and international organisations under this programme and that the cost of any extension of the coverage of the EGNOS system outside Europe would not be covered by budgetary resources allocated under this Regulation,

negotiations should be opened with a view to concluding an agreement with each individual European Neighbourhood Policy (ENP) South Country laying down the terms and conditions for the provision of Satellite Based Augmentation Services (SBAS) in ENP South Countries based on the European Geostationary Navigation Overlay Service (EGNOS).

HAS ADOPTED THIS DECISION:

Article 1

The Commission is hereby authorised to negotiate, on behalf of the Union, an international agreement with each ENP South Country on the terms and conditions for the provision of Satellite Based Augmentation Services (SBAS) in ENP South countries based on the EGNOS system.

Article 2

The negotiating directives are set out in the Annex.

Article 3

The negotiations shall be conducted in consultation with the [to be added by the Council: name of the Committee composed of representatives of the Member States].

Article 4

This Decision is addressed to the Commission.

Done at Brussels,

For the Council

The President

1. *EGNOS system* refers to the space and ground infrastructure, hardware and software that enable the provision of *EGNOS Safety of Life (SoL) signal*. EGNOS SoL signal becomes an *EGNOS service* when local Civil Aviation Authority authorise it according to international aviation requirements. *EGNOS programme* refers to the management of both EGNOS system and service, entrusted to the European Commission. [↑](#footnote-ref-1)
2. Currently: Morocco, Algeria, Tunisia, Libya, Egypt, Syria, Jordan, Palestine\*, Israel, Lebanon. As defined in annex 1 of the Regulation (EU) N°232/2014 of the European Parliament and of the Council of 11 March 2014 establishing a European Neighborhood Instrument. (\*)This designation shall not be considered as recognition of a State of Palestine and it is without prejudice to the individual positions of the Member States on this issue. [↑](#footnote-ref-2)
3. JOINT COMMUNICATION TO THE EUROPEAN PARLIAMENT, THE COUNCIL,

   THE EUROPEAN ECONOMIC AND SOCIAL COMMITTEE AND THE COMMITTEE OF THE REGIONS Review of the European Neighbourhood Policy, JOIN(2015) 50 final. [↑](#footnote-ref-3)
4. <http://ufmsecretariat.org/wp-content/uploads/2012/09/ufm_paris_declaration1.pdf> [↑](#footnote-ref-4)
5. REGULATION (EU) No 1285/2013 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 11 December 2013 on the implementation and exploitation of European satellite navigation systems and repealing Council Regulation (EC) No 876/2002 and Regulation (EC) No 683/2008 of the European Parliament and of the Council. [↑](#footnote-ref-5)
6. ESA, EGNOS Project Office (EPO), FWC-2 WP-STA-004, 12 March 2015. [↑](#footnote-ref-6)
7. Algeria, Tunisia, Libya, Jordan, Lebanon, Israel wrote letters to members of the College. [↑](#footnote-ref-7)
8. On 12 April 2018, the Council of the European Union has adopted a decision (6934/18) authorising the Commission to open negotiations on an international agreement with Ukraine for EGNOS extension to its airspace. [↑](#footnote-ref-8)
9. Commission has signed on 8 December 2016 a cooperation agreement between the European Union and the Agency for Aerial Navigation Safety in Africa and Madagascar (ASECNA) on the development of satellite navigation and the provision of associated services in ASECNA's area for the benefit of civil aviation.. [↑](#footnote-ref-9)