

COTER-IV-010

# 72nd plenary session 28-29 November 2007

# OPINION of the Committee of the Regions on the

### GREEN PAPER ON SATELLITE NAVIGATION APPLICATIONS

#### THE COMMITTEE OF THE REGIONS

- considers Europe's own satellite navigation system, Galileo, essential, given that the project has significant strategic importance in terms of economic, social and security development;
- is convinced that the Galileo system will significantly contribute to the creation of growth and jobs under the revised Lisbon agenda and, in doing so, enhance territorial cohesion;
- believes that Galileo will contribute to better management of <u>all forms of transport</u> in towns and regions. It will be possible to more accurately prepare flooding and other crisis management models, to coordinate rescue operations and monitor environmental change. In combination with infrastructure and underground mapping systems, the system will facilitate planning for territorial development and construction projects, notably increase mobility for the disabled, and so on. The European satellite navigation system will provide momentum for continued innovation;
- stresses that Galileo has the potential to be a real incubator for achieving the Lisbon Strategy goals;
- thinks that it would be highly appropriate to create a European agency charged with supporting the development of applications and promoting the Galileo project. This agency should have venture capital at its disposal to support SMEs in the development of applications;
- believes that a Europe-wide system of promotion, incentives and training should be created, because only a coordinated approach can have the desired effect;
- is ready to assume the role of intermediary and coordinator between the European Commission, the relevant bodies for the Galileo system and local and regional authorities

CdR 96/2007 fin EN/o

Mr Petr Osvald (CZ/PES) Member of the town assembly of the City of Plze $\check{\text{n}}$ 

# Reference document

Green paper on Satellite Navigation Applications COM(2006) 769 final

#### I. RECOMMENDATIONS

#### THE COMMITTEE OF THE REGIONS

#### Key messages

- 1. The quality of all our decisions depends on how accurately we can determine our position in space and time;
- 2. considers Europe's own satellite navigation system, Galileo, essential, given that the project has significant strategic importance in terms of economic, social and security development. Soon, navigation systems will become an integral part of our lives, just like mobile phones or the Internet. Although we mainly see it used at the moment in transport, in combination with peripheral systems (maps, etc.), it will also greatly influence a range of our other activities from urban and rural planning to environmental protection, crisis management, construction and agriculture;
- 3. believes that it would be strategically, as well as politically and economically detrimental for European regions to be dependent on another power's military system (GPS USA, GLONAS Russia, Compass/Beidou China);
- 4. is convinced that the Galileo system will significantly contribute to the creation of growth and jobs under the revised Lisbon agenda and, in doing so, enhance territorial cohesion;
- 5. expects that Galileo will become a new instrument encouraging further growth and increasing European regions' competitiveness. It will contribute to better management of <u>all forms of transport</u> in towns and regions. It will be possible to more accurately prepare flooding and other crisis management models, to coordinate rescue operations and monitor environmental change. In combination with infrastructure and underground mapping systems, the system will facilitate planning for territorial development and construction projects, notably increase mobility for the disabled, and so on. The European satellite navigation system will provide momentum for continued innovation;

#### Relevance for the Committee of the Regions

6. is aware that the Galileo programme represents an important step for the development of European regions. The goals of the initiative are in line with the <u>CoR</u> key priorities. Thanks to Galileo, benefits can be achieved such as greater security and reduced congestion for all forms of transport, improved monitoring of the environment and changes to it, better prevention of crisis situations, improved coordination of crisis management and better targeted, quicker and more effective intervention. GNSS will improve the quality of spatial planning, the preparation and construction and monitoring of building work, increase mobility for the disabled and reduce breakdowns in energy infrastructures. If enough attention, effort

and coordination are given to the preparation and operation of Galileo, this project will launch a new wave of innovation, research, development and application of new technologies in industry as well as everyday life. It will thus become a powerful instrument for raising competitiveness both in individual European regions and the EU as a whole;

- 7. stresses that Galileo has the potential to be a real incubator for achieving the Lisbon Strategy goals. For this to happen, however, it is essential that not only Member States but also all European regions are actively involved in this process. Its success depends on the level of inclusion and involvement of local and regional partners. In the regions, Galileo will create a raft of new and interesting business opportunities for local and regional stakeholders such as SMEs. Among other things, it will deepen partnerships between local and regional governments, businesses, science and research institutes and citizens in the regions. If all aspects of the Galileo project are implemented in a balanced way not only in the old EU Member States but also in the new ones, which should be integrated much more effectively into the project, it will become one of the leading instruments for strengthening territorial cohesion across the EU;
- 8. notes that, despite the fact that Galileo will offer its basic services to the mass market free of charge, services with a higher guaranteed reliability and precision will be subject to a fee. For the strengthening of territorial cohesion, it is important that less developed European regions are not disadvantaged in this regard and are actively involved in the whole process from the very beginning. In particular they should be guaranteed access to the system and applications;

Responses to questions raised by the Green Paper

Concerning Question 1 – on measures for accelerating the market introduction of GNSS applications, the appropriateness of the legal framework and the need for further developing it as well as the role of public authorities:

9. In the transport sector, many Community technical regulations need to be revised so that their requirements conform to the standards of the Galileo system and avoid any conflicts. Only then will it be possible to guarantee the required level of interoperability between the different systems and applications. One of the important factors for speeding up the introduction of safe navigation system applications into the market will be rigorous certification of compatibility with the Galileo system according to the revised Community technical regulations, and the definition of basic technical requirements for trackside and other safety equipment using satellite navigation. In general, it will be necessary to demonstrate the safety of the system as part of the certification process. The certification authority must be a specialised body with the necessary competence and authority to carry out this work (with a distinction being made between the national and European levels). It is also necessary to decide whether other systems or applications will be submitted for certification in relation to the various components of the Galileo system (including the EGNOS system);

- 10. New technologies bring with them new risks. That is why it is essential to continue to continue work, for example, in the areas of the prevention and defence against deliberate attacks and to examine carefully issues of accountability (public and private);
- In the land survey, energy, water, telecommunications and other sectors, certification and 11. updating of map data need to be ensured by harmonising access to individual bodies. The Global Monitoring for Environment and Security (GMES) programme considerably improves local and regional authorities' access to data and the harmonisation of data as such. It is important to clarify the link between GMES and the INSPIRE directive (Directive 2007/2/EC establishing an Infrastructure for Spatial Information in the European Community) and the method and conditions (e.g. intellectual property, limitations on and conditions of use) under which public authorities will be able to access the data held to provide to private bodies The local and regional level, too, should be able to benefit from GMES, and this should be taken into consideration when developing the initiative and applications. In particular, any additional costs for local and regional authorities arising from adaptations of existing databases that may be required, for example by harmonising existing data or changes to data interfaces, should be offset by appropriate financial mechanisms so as to avoid the local and regional level, which is in possession of much of these data, being left alone to bear the costs. Moreover, appropriate account must be taken of the security aspects and data protection requirements – in some cases we are talking about very detailed data;
- 12. Development should begin of reasonably priced applications to improve mobility for the disabled;
  - Concerning Question 2 perception of the current legal framework concerning data protection issues as applied to services using GNSS and the need for further measures for responding to specific privacy issues:
- 13. New technologies increase the need to responsibly resolve privacy issues and examine them in more detail, not least concerning applications aimed at ensuring protection from illegal acts or those dealing with crisis management. Emphasis should be placed on preventing and countering misuse of the information and data collected;
- 14. The limits between potential commercial exploitation of each application and protection of personal data (tracking goods, customers, employees, etc.) must be defined. Applications should be submitted for specific privacy certification and measures must be taken to avoid abuse of the data collected. The majority of the information that could infringe personal privacy is generated by individuals themselves without their knowledge as a side effect of using these products. Therefore it is necessary to assess applications for the potential to create such dangerous side effects;

Concerning Question 3 – on whether the overall research effort in Europe is commensurate with the general objective of ensuring Europe's competitiveness in state-of-the-art technology, increased research effort and exploitation of research results:

- 15. Common interests and priorities need to be defined and efforts to support development, research and scientific activities and in particular their financing need to be linked. For establishing the next strategy it would be advisable to analyse the recommendations of science and research already carried out as part of the Galileo Joint Undertaking (GJ), European Space Agency (ESA) and EU framework programmes. The new strategy also needs to take into account the role of local and regional authorities, which could themselves find numerous applications for satellite navigation systems and in particular initiate and stimulate interest in research and development in these areas in the regions;
- 16. To identify new applications at local <u>and regional</u> level, local and regional authorities could set up forms of collaboration and research with universities, creating valuable synergy that would improve research through direct observations on the ground;
- 17. End-users should both play an <u>increasing</u> role in the development of applications. The effort to develop applications should not be unilateral, i.e. from technology firms. Scope should be given to the future end-users of these products so that technology firms can create tailor-made applications for them. It is often more effective to have a clear idea of the destination for a product at the moment when it is first conceived, and so have a more precise definition, than adapt a universal application later. In addition, functional coherence between the existing and already operational systems needs to be supported;

Concerning Question 4 – on support for competence centres and training programmes and the manner in which public authorities should stimulate SMEs:

- 18. A Europe-wide system of promotion, incentives and training should be created, because only a coordinated approach can have the desired effect. The Committee of the Regions should be an important element for this system as it can support the involvement of the local and regional authorities in this activity. It is essential that this system operates as closely as possible to the citizens, users (local and regional authorities will themselves be major endusers) and companies which will create actual applications. While it is obvious that SMEs will have an important role in the development of this system, large companies that can play a role in guaranteeing compatibility with other systems that they operate (such as energy companies, mobile phone providers, etc.) should also not be forgotten;
- 19. It would be highly appropriate to create a European agency charged with supporting the development of applications and promoting the Galileo project. This agency should have venture capital at its disposal to support SMEs in the development of applications. The agency should have a contact point in each country and work together not only with national bodies but also with local and regional authorities as well as business and research

associations. The EU should not only be responsible for the creation of the system as such, but also for its applications and promoting the project. The GSA could also fulfil this role, however, it cannot under its existing remit;

- 20. As the European satellite navigation system project has no clearly defined timetable or a study on its economic benefits and profitability, it is very difficult for companies that develop applications to obtain bank loans. The creation of a financial instrument specifically dedicated to this project is therefore of the utmost importance. It would be useful to reflect further on the idea of sharing applications. Given the importance of the project as a whole for achieving the Lisbon Strategy objectives, it is neither appropriate nor sufficient to use solely the Seventh Framework Programme and so on for financial support;
- 21. It would be very useful to organise seminars and training, in which local and regional authorities could participate, because they have close links to the end-users of the applications as well as to SMEs and the general public. The Committee of the Regions could play a coordinating role;

Concerning Question 5 – on the most important cooperation and particular sector of the world that needs to be targeted:

22. The discussions aimed at ensuring compatibility and interoperability of the Galileo, Glonass, Compass and GPS systems (and others) must be supported as well as international coordination of work relative to the various applications, particularly with regard to ensuring cross-border interoperability. It is important not only to ensure the compatibility of the systems but also, as far as possible, the compatibility of the applications. Furthermore, greater attention should be paid to cooperation in the development of systems guarding society against terrorist attacks and all other forms of criminality;

Concerning Question 6 – on whether standards should be established for satellite navigation devices and services, and at which level:

23. It would be desirable to set in place coordination at the European level so that GNSS applications could be assessed not only for safety considerations but also for their compatibility and interoperability. We find it unfortunate to see incompatible applications developed at national or regional level, as is currently the case for national toll collection systems. Furthermore, it would appropriate to work out a single framework to allow a common approach to be defined in relation to the introduction of measures aiming to guarantee the trouble-free operation of the localisation function of the Galileo system (equipped with a level of integrity with regard to safety conforming to appropriate standards), by taking account of factors which can influence its operation at the local level and other levels required for precision in the localisation. As a matter of urgency, where the level of responsibility falls in the area of "regulated public services" will need to be determined on the

European and national levels so that the project can function in a coordinated and comparable way in all the Member States;

Concerning Question 7 – on which safety applications require certification, whether the Galileo infrastructure safety-related requirements are sufficient to constitute the basis for system certification, including infrastructure lifetime and the issue of responsibility:

- 24. Certification is required particularly for those systems and applications taking advantage of guaranteed Galileo services (and in particular all safety-related applications), where it is necessary to proceed in accordance with the appropriate standards. For these services, the transparency of these requirements also needs to be guaranteed to avoid misuse;
- 25. In order to show that a certain level of integrity concerning safety of the system is achieved, it would be advisable to adopt the necessary measures applicable to all stages of the life cycle of the device. In general, the issue of the manufacturer's and system operator's responsibility in the event of breakdown or operational failure needs to be resolved;

Concerning Question 8 – on better coordination of spectrum at the international and European level and whether measures should be adopted regarding potential sources of interference:

26. The problem of ensuring compatibility of the Galileo system with other GNSS systems needs to be furthered considered, not least to ensure that they do not interfere with each other;

Responses to Questions 9 and 10 have already been covered in the replies to the previous questions.

Recommendations and position of the Committee of the Regions

- 27. understands and supports the intention of the European Commission and the European Parliament to finance the completion of the Galileo system within the current financial perspectives, because it offers the best and only feasible response to the present situation, even at the cost of renegotiation and the minimum changes needed for the immediate continuation of the project. The Committee alerts the Council and European Commission to the fact that the success of the system as a whole depends very much on how quickly it is implemented;
- draws the attention of the Council and European Commission to the need for quickly finding a method for financing the completion of the project from European public resources and to agree without delay on the location of the GSA agency and its new roles, resulting from changes in the financing of the system, preferably by the end of 2007;
- 29. invites the Council and European Commission to define a precise and realistic timetable, in particular the date for the introduction of the Galileo system into service, as well as

monitoring this scrupulously and ensuring it is upheld. Every effort should be made to avoid further delays;

- 30. points out to the Council and European Commission that the development of different applications must be carried out at the same time as the preparations and the launch of the Galileo system so that it can be fully utilised as soon as it comes into operation and no further delays are caused by applications being developed only afterwards. Preparation of the applications and their end users must therefore be given the same attention and support as the navigation system itself;
- 31. advises the Council and the European Commission that it is not enough to adopt only a national approach for the success of the project, there must be a regional approach too. Local and regional authorities must play their own important and unique role in the preparation process, introduction of the system, development of applications and promotion. To this end, the Committee of the Regions is ready to assume the role of intermediary and coordinator between the European Commission, the relevant bodies for the Galileo system and local and regional authorities.

Brussels, 28 November 2007.

The President of the Committee of the Regions

Michel Delebarre

The Secretary-General of the Committee of the Regions

Gerhard Stahl

## II. PROCEDURE

Title:	Green paper on Satellite Navigation Applications
Reference document(s)	COM(2006) 769 final
Legal basis	
Procedural basis	
European Commission letter	8.12.2006
Date of Bureau/President's decision	9.1.2007
Commission responsible	Commission for Territorial Cohesion Policy
Rapporteur	Mr Petr Osvald (CZ/PES)
	Member of the town assembly of the City of Plzen
Analysis	
Discussed in commission	14.9.2007
Date adopted by commission	14.9.2007
Result of the vote in commission	By a majority
Date adopted in plenary	28.11.2007
Previous Committee opinions	