



**COUNCIL OF
THE EUROPEAN UNION**



Council Resolution Taking forward the European Space Policy

*2891st COMPETITIVENESS
(INTERNAL MARKET, INDUSTRY and RESEARCH) Council meeting
Brussels, 26 September 2008*

The Council adopted the following resolution ¹:

"THE COUNCIL

HAVING REGARD to the Framework Agreement between the European Community and the European Space Agency, which entered into force in May 2004, and to the increasing cooperation between the two parties,

RECALLING the orientations of the 'Space Council' meetings of 25 November 2004, 7 June 2005 and 28 November 2005,

EMPHASISING the Resolution of the 'Space Council' on 22 May 2007 which welcomed and supported the European Space Policy and established the policy base for space in Europe,

NOTING that the Resolution invited the European Commission, the ESA Director General and the European Union and ESA Member States, to monitor and evaluate the implementation of the policy within the scope of the Framework Agreement, including the implementation of the key issues defined in the annexes of the Resolution,

¹ The resolution is also approved by the European Space Agency council of ministers.

P R E S S

NOTING that the Member States, on the basis of the European Space Policy Implementation Plan, have identified as priorities two programmatic areas for action which are the successful implementation of both GALILEO and GMES (Global Monitoring for Environment and Security), as well as a number of horizontal issues,

RECOGNISING the significant progress made in these areas as set out in the joint ESA-EC progress report, and WELCOMING the progress made in the setting-up of an international relations strategy for space in Europe,

REAFFIRMS in this context the importance for Europe to maintain an autonomous access to space, a world-class scientific programme, its leading satellite applications services in operational meteorology and commercial communications, and a sustained and innovative technology base,

UNDERLINES the importance to strengthen EC-ESA coordination of space technology development programmes, in particular on critical space technologies for European strategic non-dependence,

RECALLS the discussions among European ministers in charge of space at their informal meeting in Kourou, the space port of Europe, on 21 and 22 July 2008,

I - A vision for Europe in space

RECOGNISING that the European Space Policy established the vision to strengthen Europe as a world-class space leader responding to the needs of European policies and objectives, in terms of applications, services and related infrastructures, contributing to its societal, cultural, economic and scientific influence, developing its industrial and scientific potential and assuring its political and technological autonomy in a reasoned, coherent and realistic manner;

RECOGNISING that this policy, based on the EU, ESA and their respective Member States involved in the European Space Programme, should continue to be implemented and further developed, maintaining ambitious goals within the capacities made available for research and operational applications;

EMPHASISING that all of Europe's space activities contribute to the goals of, and fully respect the principles set out by, the United Nations' "Outer Space Treaty", in particular:

- the exploration and use of outer space for the benefit and in the interests of all countries and the recognition of outer space as a province of all mankind,
- the use of outer space for exclusively peaceful purposes,
- the promotion of international co-operation in the exploration and use of outer space,

and that Europe supports the on-going efforts of the United Nations' Committee on the Peaceful Uses of Outer Space (COPUOS) on the mitigation and prevention of space debris;

UNDERLINING the importance of reinforcing public support for the development of space technologies, ensuring complementarities of actions and maximising synergies with non-space developments;

RECOGNISING that the European Union, ESA and their respective Member States are the three key actors of the European Space Policy, and HIGHLIGHTING that the European Union is taking increased responsibilities for space matters, especially related to space applications, consistent with those of a global actor and bringing an added-value to ESA and Member States while respecting roles and responsibilities of each of them,

CONSIDERING that, in these conditions and in the framework of the European Space Policy, the European Union, as well as ESA and their respective Member States, are main space actors, and they will develop Europe as a leading space power on the international scene. In this context, IDENTIFIES the following issues to be addressed:

- In line with the international relations strategy, promoting a coherent approach to international cooperation in space programmes in view of their global nature, while recognising that Europe should be able to face global competition. Solar System exploration, Earth environment and sustainable development are the priority domains for implementing international cooperation;
- Ensuring for all the EU and ESA Member States an open and equitable access to the benefits of space activities in terms of public policies, scientific data, technological development, industrial activities and services;
- Strengthening the existing mechanisms to coordinate European expertise and investments in space funded from Community, intergovernmental and national sources as well as setting-up the mechanisms to improve synergies between civil and defence space programmes, while respecting the specific requirements of both sectors, including their decision competences and finance schemes;
- Guaranteeing the continuity of autonomous, reliable and cost-efficient access to space at affordable conditions for the EU, ESA and their respective Member States, based on both the availability of a set of adequate and competitive world-class launchers and an operational European space port;
- Federating through the EU, based on the policy needs of the EU, and of ESA and EU Member States, their demand for space applications, through a transparent process enabling the EU to identify user requirements, to establish priorities, and to ensure the continuity of services. Maintenance of the necessary tools to provide these services, including their funding, should be executed in partnership with the stakeholders concerned and the operators when appropriate;
- Promoting the development of an appropriate regulatory framework to ease the swift emergence of innovative and competitive downstream services, in particular with the objective of guaranteeing sustained access to spectrum for all space-based applications;
- Organising the governance of space in line with the Resolution of the 4th Space Council and with the political ambitions of EU, ESA and their respective Member States, in particular the optimisation of the decision-making process in the field of space in the Council of the European Union as well as in other EU institutions;

- Developing adequate EU instruments and funding schemes, taking into account the specificities of the space sector, the need to strengthen its overall and its industry's competitiveness and the necessity of a balanced industrial structure; and allowing appropriate long-term Community investment for space related research and for the operation of sustainable space-based applications for the benefit of Europe and its citizens, in particular by examining all space-related policy consequences within the framework of the next financial perspective;
- Strengthening the cooperation with developing countries;

UNDERLINES the added value for EU and ESA Member States' ministers in charge of space to meet as frequently as useful to address the main political issues on the basis of an appropriate roadmap;

II - Current Priorities

WELCOMES the following significant advances in the GALILEO and GMES programmes:

- the successful launch and in-orbit validation of GIOVE-B, allowing to demonstrate critical new technologies needed for the performance of the Galileo system;
- the conclusions of the EU Council in November 2007 and the subsequent adoption by the European Parliament and the Council of the Regulation on the further implementation of the European GNSS programmes, clarifying the public governance of the Galileo deployment phase and the EGNOS operations and the implications of the actions for GALILEO funding;
- the decision by ESA Member States to initiate the GMES Space Component programme; the conclusion of the EC-ESA agreement providing the Community contribution to this programme; and the provision by EC of initial operational funding through the implementation of a GMES preparatory action in 2008;
- the demonstration at the Lille GMES Forum of pre-operational GMES services;
- the launch of the GMES and Africa partnership through the "Lisbon Process on GMES and Africa" with a view to serving the African users;
- the proposal on the fundamental architecture of GMES described in the Munich roadmap;

REAFFIRMS the continuing priority to implement both GALILEO and GMES rapidly.

A. GALILEO

RECOGNISING that Galileo constitutes the first flagship space programme of the EU;

INVITES the Commission to take into consideration and analyse past difficulties in order to reap the full benefits of this experience;

LOOKS FORWARD the creation of the Galileo Inter-Institutional Panel;

UNDERLINES the need for increased coordination between the European Commission, ESA and their respective Member States, in relation to R&D for satellite navigation systems, services and applications;

HIGHLIGHTS the continued co-operation with international partners on issues of system compatibility and interoperability;

INVITES the Commission to address the legal implications of the European Community becoming the owner of those tangible and intangible assets it has funded related to space applications, such as those of the Galileo and EGNOS programmes, in particular with respect to liability issues.

B. GMES

RECALLING that GMES is a user-driven initiative that should maximise the use of existing space and non-space Earth Observation centres, capacities and services in Europe, including EUMETSAT, the EU Satellite Centre ...;

STRESSES that the in-situ Earth observation infrastructures which Member States support, together with space observation infrastructures, represent a major contribution to the Earth observation capacities and should be made available to GMES on a permanent basis;

HIGHLIGHTS that data and service continuity is indispensable and that such continuity must be guaranteed by the European Union, in particular through long-term funding, based on partnerships for the various GMES components;

REAFFIRMS the role of ESA as development and procurement agency for the dedicated GMES Sentinel missions, and as coordinator for the whole GMES Space Component, including contributions made available by Member States, EUMETSAT and further GMES partners;

INVITES the Commission to define an adequate GMES legal framework, involving the Council General Secretariat where appropriate, and to explore the implications of certification of satellite remote sensed data;

STRESSES that many GMES information services have the nature of a European public good and must be made available according to a full and open access principle, subject to some constraints such as security;

IDENTIFIES the need to elaborate an action plan leading to the setting-up of an EU GMES programme, aiming at securing the continuity of GMES services and of the critical observation data which they require. This action plan should include:

- An approach for the overall GMES governance and all its components, identifying the relevant actors with their role and responsibilities, and based on a series of GMES partnerships, as well as arrangements for appropriate participation of ESA Member States which are not members of the EU;
- A plan for sustainable funding of GMES, based on an assessment of the overall financing needs for GMES and the definition of the budgetary strategy at national and European levels, taking into account the three successive stages: R&D stage to be funded from R&D appropriations, transition stage with mixed R&D and operational funding, operational stage with dedicated funding for operations involving the users;
- The definition of operational service delivery mechanisms for each GMES service, including identification of their operators;
- The definition between the EU and Member States of a process to formalise their commitments to contribute to GMES through existing *in-situ* observation and service infrastructures;

- The identification of the role of the GEO initiative and other intergovernmental or multilateral initiatives, such as CEOS, in accessing the whole range of data available, as well as the contribution of GMES to these international endeavours;
- A process to establish a comprehensive data policy for all data generated by the GMES system, including appropriate labelling and a data security policy which will ensure that all sensitive data is fully protected and kept confidential.

WELCOMES

- the proposal of the European Commission for a new preparatory action in the Preliminary Draft Budget for 2009, paving the way for a future funding of the operational phase of GMES;
- the intention of the Commission to address all of these issues in a Communication to be adopted by the end of October 2008, having consulted with the main stakeholders, in particular agreeing with ESA an overall programmatic approach for the GMES Space Component ;
- the intention of the ESA DG, having consulted with ESA Member States and the Commission, to submit a proposal for the GMES Space Component Segment 2 programme for subscription to the ESA Council at Ministerial level in November 2008.

III - New priorities within the European Space Policy

HIGHLIGHTS that the European Council welcomed on 14 March 2008 the joint report from the High Representative and the European Commission on Climate Change and International Security which in particular recalled that the majority of UN emergency appeals for humanitarian aid in 2007 were climate related, and identified the multiplier effect of climate change on security risks;

RECALLS that the European Council asked the Council of the European Union to submit recommendations on appropriate follow-up action in the field;

IDENTIFIES the following four priority areas in the implementation of the European Space Policy for the coming period.

A. SPACE AND CLIMATE CHANGE

CONSIDERING that climate challenges facing humanity are of global concern, and that the EU is adapting its policies to address them;

EMPHASISES the objective to improve the qualitative and quantitative understanding of the extent of climate change and of its consequences and the need to continue and expand the European contributions to this understanding and related modelling, in order to provide the evidence base for key decisions to be taken in environment policy;

RECOGNISES the unique contribution of space programmes which, through their global observation capacity and long-term coverage, provide the series of data requested by the scientific community for research into climate change, while complementing other observation and measurement tools;

RECOGNISES the contribution of the ESA Living Planet Programme and the national Earth science space missions, of EUMETSAT operational programmes, and of the GMES Space Component infrastructure to the collection of observations enabling Europe to derive time series of climate parameters and to understand the major climate processes;

CALLS FOR the scientific community, in conjunction with the European Commission, ESA and EUMETSAT, to define how the range of GMES services and European space observation archives can contribute most effectively to the provision of data including Essential Climate Variables for scientific research;

INVITES the Commission to conduct a study to assess the needs for full access to standardised data and for increased computing power, and the means to fulfil them, taking into account existing capacities and networking in Europe,

WELCOMES the joint preparation by ESA and EUMETSAT of a programme proposal for Meteosat Third Generation (MTG) to be submitted to the ESA Council at Ministerial level in November 2008 and subsequently to the EUMETSAT Council; its central role being in operational meteorology, MTG will also contribute to GMES, to the monitoring of climate and thus to the detection of global climate change.

B. CONTRIBUTION OF SPACE TO THE LISBON STRATEGY

EMPHASISES that space, as a high tech R&D domain and through the economic exploitation of its results, can contribute to reaching the Lisbon goals so as to fulfil the economic, educational, social and environmental ambitions of the EU and the expectations of its citizens, and so as to achieve the objectives for growth and employment by providing new business opportunities and innovative solutions for various services, throughout Europe, thus contributing to territorial cohesion;

CONSIDERS that, with the adoption by the European Parliament and Council on 18 December 2006 of the Community Seventh Framework Programme for Research, Technological Development and Demonstration and its new thematic chapter Space as part of the Cooperation Specific Programme, space has been recognised by the EU as one of the priorities and key building blocks of the European knowledge-based society;

UNDERLINES that space applications, such as satellite telecommunications, the EGNOS and GALILEO systems and GMES, are expected to create substantial global market opportunities, especially for SMEs, through the development of value-added downstream services; and that the EU, ESA and their respective Member States must accordingly maximise the value they secure from these space assets. This growth should be promoted to accelerate the emergence of economic opportunities and the development of services seamlessly integrating navigation, observation and communications satellite systems and combining them with terrestrial networks. To achieve this requires appropriate regulatory framework, sustained access to radio-spectrum for space applications, and development of standards in relevant areas;

TAKES NOTE that space activities could thus be considered for inclusion into the Lead Market Initiative.

C. SPACE AND SECURITY

HIGHLIGHTS the important contribution of space to the CFSP/ESDP including the Petersberg tasks, and thus to the security of European citizens;

RECALLS that space assets have become indispensable for our economy and that their security must thus be ensured; UNDERLINES the need for Europe, in line with its ambition to strengthen its status as world-class space leader, to develop a European capability for the monitoring and surveillance of its space infrastructure and of space debris, initially based on existing national and European assets, taking benefit of relationships which may be established with other partner nations and their capabilities;

CONSIDERS that, taking into account the international and political nature of this capability, the European Union will take, liaising with ESA and their respective Member States, an active role to set up progressively this capability and an appropriate governance structure;

UNDERLINES the need for Europe to have the ability to detect non-compliance with implementation of international treaties and obligations, being a key instrument to safeguard and promote European values;

WELCOMES, within the decision competences and finance schemes of the existing framework, the setting up of the structured dialogue among European institutional actors in response to the 2007 Space Council Resolution, with the aim of achieving a substantial increase in the coordination of space, security and defence related activities, including the European Commission, the General Secretariat of the Council, the European Defence Agency, ESA and Member States;

RECALLING that GMES relies on some dual use observation capacities and that GALILEO, GMES and satellite communications systems will provide services which may be of interest for some security applications;

RECOGNISES that the uses made by any military users of Galileo or GMES must be consistent with the principle that Galileo and GMES are civil systems under civil control, and consequently that any change to this principle would require examination in the framework of the Title V/TEU and in particular Articles 17 and 23 thereof, as well as in the framework of the ESA Convention;

HIGHLIGHTS the need to:

- define the way and means to improve the coordination between civilian and defence space programmes in long-term arrangements;
- develop a capacity to meet European user needs for comprehensive situational awareness of the space environment through a coordinated activity within Europe, and possibly with other partners;
- recognise Europe's dependence on overseas suppliers for selected critical space technologies and components, establish mitigation strategies to ensure guaranteed European access, and take practical steps to pursue reduction of Europe's dependence.

UNDERLINES the benefits of drawing on existing capacities and infrastructures at national as well as European level;

TAKES NOTE of the intention of the ESA DG to submit a proposal for a programme on space situational awareness, for subscription at the ESA Council at Ministerial level in November 2008, setting the basis for the operational capability and respecting the roles of the European Defence Agency and of the EU and ESA Member States;

D. SPACE EXPLORATION

WELCOMES the successful launch of the ESA Columbus laboratory and the successful demonstrations of the Automated Transfer Vehicle "Jules Verne" as truly European technology development projects and crucial elements for ensuring European access to the International Space Station ISS and its sustained utilisation;

AFFIRMS that space exploration is a political and global endeavour and that Europe should undertake its action within a worldwide programme, without any monopoly or appropriation by one country; the different actors taking part with their own capacities and priorities;

HIGHLIGHTS the need for Europe to develop a common vision and long-term strategic planning for exploration, ensuring key positions for Europe, therefore based on its domains of excellence; thus the necessary political dialogue with the other states involved in the worldwide exploration programme has to be further developed and promoted on the international scene by the European Union, ESA and their respective Member States, each one in its own role, and in close coordination among each other;

WELCOMES the proposal by the Commission to organise a high level political conference on a long term global vision for space exploration, opening a public debate on the European role in this global endeavour, and based on appropriate preparatory studies coordinated by ESA to assess the European domains of excellence, and elaborate different scenarios for a European contribution with associated costs and planning;

TAKES NOTE of the Global Exploration Strategy outlining the global coordination of the major powers' plans for human and robotic exploration, including the possibility, at a later stage, of a human expedition to Mars;

AFFIRMS that Europe, building on its successful track record in exploration over a number of decades, in which science has been the key driver, is committed to playing a significant role in the international enterprise to explore the Solar system and to develop a deep understanding of the conditions for life to function beyond our planet and **ACKNOWLEDGES** the fact that establishing Europe as a fundamental pillar of these activities will be achieved only through sustained investment;

REALISES that the technologies to be developed must be assessed carefully with a perspective of taking key decisions, and **HIGHLIGHTS** that these may have a lasting impact on the perception of Europe's scientific and technological capabilities in the world and the self-perception of European citizens;

UNDERLINES the value of space exploration for inspiring young Europeans to choose a career in science and technology and to strengthen these capabilities in Europe."