10 September 2003

REPORT

on European space policy – Green Paper
(2003/2092(INI))

Committee on Industry, External Trade, Research and Energy

Rapporteur: Guido Bodrato
At the sitting of 15 May 2003 the President of Parliament announced that the Committee on Industry, External Trade, Research and Energy had been authorised to draw up an own-initiative report, pursuant to Rule 163 of the Rules of Procedure, on European space policy – Green Paper, and that the Committee on Regional Policy, Transport and Tourism and the Committee on Foreign Affairs, Human Rights, Common Security and Defence Policy had been asked for their opinions.

The Committee on Industry, External Trade, Research and Energy had appointed Guido Bodrato rapporteur at its meeting of 20 March 2003.

It considered the draft report at its meetings of 10 July and 9 September 2003.

At the latter meeting it adopted the motion for a resolution by 39 votes to 2.

The following were present for the vote: Yves Piétrasanta (acting chairman), Jaime Valdivelso de Cué (vice-chairman), Guido Bodrato (rapporteur), Gordon J. Adam (for Eryl Margaret McNally), Sir Robert Atkins, María del Pilar Ayuso González (for Concepción Ferrer), Ward Beysen (for Marco Cappato), Gérard Caudron, Giles Bryan Chichester, Willy C.E.H. De Clercq, Carlo Fatuzzo (for Michel Hansenne), Colette Flesch, Christos Folias (for Bashir Khanbhai), Cristina García-Orcey Tormo (for Peter Michael Mombaur), Norbert Glante, Alfred Gomolka (for Angelika Niebler), Malcolm Harbour (for Godelieve Quisthoudt-Rowohl), Hans Karlsson, Efstratios Korakas (for Konstantinos Alyssandrakis under Rule 153(2)), Hans Kronberger (for Daniela Raschhofer under Rule 153(2)), Werner Langen, Peter Liese (for Christian Foldberg Rovsing), Rolf Linkohr, Marjo Matikainen-Kallström, Ana Clara Maria Miranda de Lage, Elizabeth Montfort, Bill Newton Dunn (for Nicholas Clegg), Giuseppe Nisticò (for Paul Rübig), Reino Paasilinna, Paolo Pastorelli, Samuli Pohjamo (for Elly Plooij-van Gorsel), John Purvis, Alexander Radwan (for Umberto Scapagnini), Imelda Mary Read, Jacques Santer (for W.G. van Velzen), Gilles Savary (for Mechthild Rothe), Konrad K. Schwaiger, Esko Olavi Seppänen, Alejo Vidal-Quadras Roca, Dominique Vlasto and Olga Zrihen Zaari.

The opinion of the Committee on Regional Policy, Transport and Tourism is attached; the Committee on Foreign Affairs, Human Rights, Common Security and Defence Policy decided on 18 June 2003 not to deliver an opinion.

The report was tabled on 10 September 2003.
MOTION FOR A EUROPEAN PARLIAMENT RESOLUTION

on European space policy – Green Paper (2003/2092(INI))

The European Parliament,

– having regard to the Commission Green Paper on European Space Policy (COM(2003) 17),

– having regard to the conclusions issued following the Thessaloniki European Council of 19 and 20 June 2003,

– having regard to the draft Treaty establishing a Constitution for Europe, adopted by the Convention on the future of Europe on 12 June 2003,

– having regard to the agreement reached by the ESA member countries at the interministerial meeting of 26 May 2003,

– having regard to the resolution adopted by the ‘Competitiveness’ Council on 13 May 2003,


– having regard to the Commission communication on industrial policy in an enlarged Europe (COM(2002) 714),

– having regard to the sixth framework programme for research and technological development¹,

– having regard to its resolutions of 17 January 2002², 3 October 2001³ and 7 February 2002⁴,

– having regard to United Nations General Assembly Resolution 49/74, adopted on 15 December 1994, on ‘Prevention of an arms race in outer space’, and in particular Article 4 thereof,

– having regard to Rule 163 of its Rules of Procedure,

– having regard to the report of the Committee on Industry, External Trade, Research and Energy and the opinion of the Committee on Regional Policy, Transport and Tourism (A5-0294/2003),

A. whereas space is strategically important for Europe, particularly in terms of its security and independent access to information, which are essential for scientific progress and political decision-making, and whereas an organised space sector vital in order to attain the goals entailed in the knowledge-based economy, not least on account of the resulting

scientific, technological, and industrial repercussions in a context that must encompass the enlarged Union,

B. whereas the space sector as a whole is insufficiently profitable to make it into a powerful, investing and innovating industry capable of realising the strategic importance accorded it by the Commission; calling, therefore, on the Commission to carry out a more detailed analysis of this low profitability with a view to the effects it may have on Europe’s position in a world context, and to take appropriate measures,

C. whereas Europe has a fund of excellence in terms of research and productive capacity in virtually all branches of space-related activity, accumulated through the achievements of the ESA, the national agencies and European industry in particular,

D. whereas space will continue to act as a decisive stimulus for political and technological cooperation and whereas international cooperation is implemented using the resources and skills that can be mobilised,

E. whereas the prospects for the European space sector have been jeopardised by a slowdown in the programmes under the umbrella of the international space station (ISS), a decline in demand for telecommunications satellites, slack institutional demand and keen and distorted international competition as regards launchers,

F. whereas the direct and indirect input of the public sector will remain central to the development of space programmes because investment in the basic infrastructure (particularly scientific, navigation, weather and observation satellites), launchers, and manned flights in particular anyway rests on public demand,

G. whereas there is a growing gap between the public budgets allocated to space policy in the United States and Europe in both civil and military spheres,

H. whereas the Convention has proposed in Article 150 of its draft Treaty that a specific role be assigned to European space policy, thus prefiguring a legal basis for a ‘Community’ approach that will consolidate the strategy set in motion by the Galileo programme,

I. whereas the European agency for armaments and strategic research provided for in the Convention’s Article 207 will serve to implement structured cooperation among the Member States in the defence technology sector, thereby helping to create an environment conducive to a more competitive European industry, especially in the space sector, working in collaboration with the ESA where research, technological development and boosting industrial supply, and independence as regards strategic technologies are concerned,

J. whereas there should be no use of space for weapons of aggression, in line with the United Nations General Assembly resolution ‘Prevention of an arms race in outer space’, and in particular Article 4 thereof,

K. whereas the boost to be given to European space policy, as set out in the Green Paper, again implies a need for the Commission to redefine the relationship between the Union and the ESA by recognising
• the role falling to the ESA as an agency which plans and manages intergovernmental measures and as regards carrying out tasks delegated by the Union, continuing to build up an up-to-date supply of technologies and scientific and industrial know-how,

• as well as the role falling to the Union in the sphere of international negotiations, standardisation, and security, and by virtue of joint initiatives that could take the form of a European space programme that is in keeping with Union requirements and policies reflecting the interests of the European public,

L. having regard to the proposal for a framework agreement between the European Community and the European Space Agency, which constitutes a major step towards cooperation between the EC and the ESA with a view to promoting the peaceful use of space, recognising that the two parties have complementary, mutually reinforcing strengths that will prevent duplication of effort, thus bringing demand for and supply of space systems together within a strategic partnership,

1. Welcomes the efforts made by the Commission since 1999 to foster discussion on the gradual introduction of a Community space policy; welcomes in particular the speed with which the Commission has acted upon Parliament’s requests (resolution of 17 January 2002) and published the Green Paper; eagerly awaits the publication of the results of the consultations conducted on the basis of the Green Paper and the publication of the White Paper, scheduled to take place by the end of 2003;

2. Welcomes the fact that the Convention’s proposed Article 150 assigns a specific role to the Union in space policy, creating the possibility of promoting joint initiatives to aid research and technological development and coordinate the efforts needed in order to explore and exploit space, and urges the Intergovernmental Conference to take up this proposal as it stands;

3. Reaffirms the need for Europe to play a leading role on the international stage and be able to gain access to space through its own efforts and to develop the necessary technologies, actively involving the countries which have joined the Union; emphasises in this connection the fact that independent access to space for Europe is fully in keeping with the Lisbon process seeking to make Europe the world’s most competitive area through the acquisition and development of a high level of industrial and technological know-how;

4. Points to the danger that the unprecedented crisis in the space sector, which is undermining the organisation of space-related industries, will exacerbate the distortion already existing on the world market;

5. Welcomes the decisions of the ESA Council regarding Ariane and reorganisation of the European space sector;

6. Welcomes the agreement reached on the Galileo satellite navigation programme but draws the Commission’s attention to the time-frame laid down, given the importance of the Galileo programme for public security, improvements in airspace management and the effective introduction of a single European sky, ground transportation (in particular future applications including the pricing of infrastructure use, speed limits, satellite positioning, etc.) and environmental and regional policy and calls on the industry to develop specific services for the use of the Galileo programme in order to fulfil its joint responsibility for
the success of the project;

7. Draws attention to the value of using satellite technologies and their maritime applications to strengthen maritime safety and security rules by equipping ships with the Automated Identification System (AIS) for such purposes as surveillance on the high seas and in coastal waters, pollution detection, positioning of vessels, etc.;

8. Urges the Commission to speed up the GMES initiative and to foster and organise demand for earth observation satellite services, steering and integrating the supply of satellite data as regards the environment and security to enable Europe to have its own strategy, its own management body and its own resources (as regards observation, weather forecasting, reliable telecommunications, data collection, forecasting, analysis, emergency calls, etc.), not least in view of the growing international interest;

9. Believes that the development of telecommunications, whether terrestrial or satellite, could be encouraged (for instance by making use of the Structural Funds) in the countries about to join the EU; considers in particular that satellite telecommunications could be an extremely useful means of overcoming exclusion from the information society (the ‘digital divide’) and calls on the Member States and the Commission to continue to invest resources, particularly with a view to enlargement of the Union and in connection with the policy of cooperation between the Union and the countries on the southern shore of the Mediterranean;

10. Calls on the Commission to probe more deeply into the common policies (on transport, research and technology, agriculture, the environment, and security) for which space policy provides support and which constitute the key areas of public demand, bearing in mind that it is impossible to ignore the fact that, no matter what part of the world might be concerned, that investment in space policy needs public resources but that this could be enhanced by involving the private sector. In particular, the Commission should investigate the potential for more novel and cheaper space concepts, by the offer of a prize, such as the one being offered in the USA for a successful sub-orbital passenger flight;

11. Draws attention to the importance of international cooperation, especially as regards research, assistance to orbiting space vehicles and interplanetary flights; considers it essential for the Union to pursue scientific cooperation at the technical level and economic space policy cooperation with the United States, Russia (and Ukraine), China, and Japan; considers that in due course, developing countries should be involved in such cooperation; as regards cooperation with the United States, considers it important to reactivating the activities and projects under the umbrella of the international space station, strengthening Europe’s weight within the ISS to match the Union’s technological industrial capabilities with its ambitions; as regards cooperation with Russia, believes that Europe must become involved in installing the Soyuz system at the European base at Kourou with a view not least to ensuring the availability of a manned capsule, which could open up the opportunity for Europe to be a full partner in international manned flight projects;

with a view to more open international cooperation, believes that encouragement should be given to efforts to find out about and explore Mars, the planet that is closest to Earth and is also the most appealing, in that it is capable of attracting the scientific interest of professionals while also stimulating curiosity and a desire to learn more among much
broader sections of the population;

12. Points out, as regards international agreements, that the quality of collaboration depends on the scientific and technological know-how that can be brought to bear and the scale of the resources that can be contributed;

13. Points to the need to remove the obstacles and trade barriers preventing European firms from gaining access to the market and freely exporting products with US components; believes that cooperation between the Union and the United States will be impossible to develop to the full unless the market is genuinely liberalised;

14. Is concerned that many highly important technologies in the space industry are being developed or exist solely in the USA, and that dependence on these American technologies is thus increasing; calls on the Commission to look, together with the industry, at appropriate measures to respond to this problem;

15. Welcomes the Commission’s proposal to the Council regarding the framework agreement redefining the space policy role that the ESA should play when Europe has a space programme (of which Galileo is the first example), tackling the problem of differing responsibilities and recognising that the ESA has achieved valuable results in organising research and technological and industrial supply in Europe, with a view to the gradual integration of the technical know-how built up in Europe both by the ESA and by the national agencies in a network of centres working on European programmes; calls on the Commission clarify the institutional demand in the various fields of Union policy;

16. Calls upon the Commission to establish the necessary international cooperation to develop in-orbit servicing and further calls upon the ESA to establish a research, development and demonstration programme on in-orbit servicing as a matter of priority, given its potential strategic advantage for the European space sector;

17. Considers that the Convention’s approach regarding a European agency for Armaments, Research and Military Capabilities, which would be open to all Member States in accordance with the structured cooperation method, could help to bring about the industrial and technological organisation of space in cooperation with the ESA and in accordance with the principle of non-duplication of responsibilities and organisational structures; emphasises the dual nature of space activities and the need to take advantage of synergies between civil and military activities so as to reduce research costs and improve the competitiveness of commercial launches; favours development of the activities of the new agency while bearing in mind the United Nations General Assembly resolution on prevention of an arms race in outer space;

18. Draws attention to the valuable role which the military use of satellite systems can play in peacekeeping operations;

19. Calls on the Commission and the Member States, when laying down policies to encourage research and investment in the most advanced technologies, and when the next research framework programme is drawn up, to focus particular attention on the space sector on account of its strategic role from the point of view of a variety of industries including the future space-tourism industry; calls for the guaranteed level of SME participation to apply to the space-sector also and for encouragement to be given to support measures, such as
business incubators and investment and support funds for start-ups, aimed at SMEs;

20. Points to the need to retain an Aeronautics and Space heading in the Union’s future research budgets, on the basis of the priorities set out in the previous paragraph; considers, however, that this should be without prejudice to the entry of a specific Space budget heading to cover the funding of European programmes in both civil and military spheres;

21. Calls, while recognising the pioneering role of European space science, for greater attention to be paid to skills development for human resources and for stronger and more continuous support to be provided for basic research, not least with a view to creating and securing long-term jobs and generating new interest in the scientific professions among young people;

22. Reaffirms its proposal, already submitted a number of times, for a European Space Conference to be convened in 2005 in order to widen and deepen the ways in which Europe can operate in this area;

23. Instructs its President to forward this resolution to the Commission and Council.
EXPLANATORY STATEMENT

INTRODUCTION

Space is a focus of interest for the European institutions, which consider it to be strategically important both from a scientific perspective and from the point of view of technological progress and economic and trading competition.

Bearing in mind that the knowledge-based economy is the model to aim for, exploration and exploitation of space involve a high concentration of science, advanced technologies, and qualified human resources that can contribute decisively to innovation and the competitiveness of European industry.

Europe’s space protagonist has been the ESA, which has acted as an intergovernmental body to coordinate the activities of the Member States and played a guiding role in space research and applications.

ROLE OF THE UNION

In recent years, however, the question has been how a space policy can best be pursued at Union level, given the ever-changing context and the scale of international cooperation.

The problems of space and the aerospace industry have been discussed by the ESA Council and subsequently spelt out in a joint Commission-ESA document, later incorporated in a Commission communication to Parliament. It was against this background that the space sector has been identified as a priority field under the sixth framework programme for research and technological development.

Parliament, the Council, and the Commission have several times stated their intention of launching a European satellite navigation project to enable Europe to compete with the United States (GPS) and Russia (GLONASS), and of setting up an environmental and security monitoring system (GMES), this being crucial to the success of the common environmental policy. Parliament has expressed strong support for Galileo, which will enable European industry to gain access to a rapidly expanding world market with a particularly high skill level and give a powerful boost to the space system as a whole.

When it adopted the Alyssandrakis report, and later the Langenhagen and Glante reports, Parliament delivered its reasoned opinion on the guidelines proposed by the Commission in agreement with the Council. The rapporteur would draw attention to those reports, as regards the need both to consolidate the bases for space-related activities and to exploit the advantages – for society and the economic system – deriving from scientific and economic development, as well as to the practical results achieved by the Galileo project.

REASONS FOR THE GREEN PAPER

The Green Paper places space policy in a global context undergoing great change and sets out to increase its effectiveness. The greater emphasis on the importance of European space policy is due to the fact that two contrasting trends have become more marked.

Firstly, Community activities, which have found expression most significantly in Galileo,
have assumed a more concrete form. Europe’s institutional responsibilities for security and frequencies (which cannot be delegated to the ESA) have been clarified, and the challenges regarding security and defence have likewise become more apparent.

On the other hand, the space sector – especially the European space sector – has been hit by a crisis which has greatly worsened the situation, on account of the difficulties on the telecommunications market and the keen competition as regards launchers, to the point of endangering the very survival of a sector that had secured a substantial international presence. This unprecedented crisis led Parliament to adopt a resolution (just before the ESA Council meeting in May 2003) calling on the Council to address itself as a matter of urgency to the financial and technical difficulties of the space sector. Parliament was anxious to prevent one of the twin foundations of European space policy from being weakened, as this would undermine European space policy as such.

In the same resolution it also called on the Member States to rise above their disagreements over the common endeavour, which had held up the launch of the Galileo programme.

The ESA Council has responded favourably to both these requests.

**PRIORITY DECISIONS**

In addition to discussing the problems of space, the Green Paper raises questions about the decisions to be taken to ensure that European space policy has a future. The questions revolve around the relationship between Europe’s ambitions and the resources needed to provide an industrial fabric affording access to the technologies essential for achieving the above goal.

Some of the questions will have to be answered by the Commission itself in the White Paper, among other things in the light of the consultations (workshops) that have taken place. Other questions, however, are addressed to Parliament because they relate to the role that Europe intends to play and the priority decisions to be taken, proceeding from awareness of the geopolitical significance of space.

The proposed Constitution which the Convention has sent to the Intergovernmental Conference contains very important provisions that establish a specific legal basis for European space policy.

Article 150 stipulates that ‘the Union shall draw up a European space policy’ to promote scientific and technical progress, industrial competitiveness, and the implementation of its policies. ‘To this end, it may promote joint initiatives, support research and technological development and coordinate the efforts needed for the exploration and exploitation of space’ and establish ‘the necessary measures, which may take the form of a European space programme’.

In the section on the common security and defence policy, the task assigned to the European Agency for Armaments, Research and Military Capabilities under Article 207 is to support defence technology research and coordinate and plan joint research activities and the study of technical solutions meeting future operational needs.

The Agency, which, according to the Convention proposal, would be placed under the authority of the Council, would be open to all Member States wishing to participate and
operate in accordance with the ‘structured cooperation’ method.

Article I-3(1) and (4) of the Convention proposal state that ‘The Union’s aim is to promote peace, its values and the well-being of its peoples’ and that, in its relations with the wider world, the Union shall ‘contribute to peace, security, [and] the sustainable development of the earth …’. It has to be admitted that the dividing line between the concept of security and the concept of defence (of individuals and of the planet) is very fine. On the other hand, security has become a vital issue for Europe as well.

At this point it is necessary to mention to space strategy of the United States, the only power that uses space to further a global strategy, for military and intelligence purposes and to help protect the commercial interests of its industry. US space supremacy is built, as well as on research and defence policies which act as a powerful driving force for American firms, on a system for protecting companies that produce strategic components for military use, which gives rise to some objections. Official US space expenditure was equivalent in 2001 to more than 60% of the world market in manufactured goods, compared with 14% for Europe. The comparison becomes even more striking if what is being measured is the ratio between civil and military spending.

Despite the disparity in resources and the fact that it cannot benefit from a domestic market capable of generating demand for space systems, Europe has developed industrial capabilities and research excellence that have enabled it (before the crisis of recent years) to conquer a substantial market share, even in areas in which there is international competition.

There are a number of established facts which might usefully be stressed.

Independence as regards access to space is vital if a European space policy is to be implemented; in addition to launchers (whose significance is twofold), the policy has to do with the ability to develop space infrastructure, since the entire infrastructure sector is strategically important for both scientific and application purposes.

It is also necessary to focus on development of a carrying capability, while recognising that the need for independent access to space can be met by means of a ‘flexible’ response, making use to some extent of the capabilities of non-member countries (Russia) on a commercial basis or under cooperation agreements.

However, to secure advantageous agreements with international partners, whereby cooperation would not be based on a superior-underling relationship, it is necessary to have solid technological bases and the appropriate skills to contribute.

Furthermore, to establish balanced relations, trading and market access rules need to be harmonised.

Europe must continue to take part in American (NASA) space science programmes and in manned flights, which today are organised entirely under the umbrella of the international space station, an extraordinary example of space cooperation for strictly scientific and peaceful purposes.

It must provide its expertise to help develop new infrastructure designs, among other things.
assist new interplanetary missions, consolidating the cooperation already begun with Russia (Soyuz-Kourou).

These forms of participation cannot be assessed solely according to financial criteria, because the scientific, technological, and industrial repercussions must also be taken into account.

**PROBLEM OF RESOURCES**

As has already been noted, the space sector everywhere rests on public demand, given the marginal nature of private demand, confined to communications, the cost of fixed capital equipment and its maintenance, and the magnitude of the risks involved. No private investor could afford to invest directly in launchers, let alone in space flight. The technological fields are all costly, and market volumes are limited.

Official demand in support of space applications for citizens, especially in the areas of meteorology, telecommunications, public security, and agricultural and fisheries policies, depends in any case on the aims of European space policy and also on developments in the wake of the plan to set up a defence agency operating on the basis of structured cooperation among those Member States which decide to take part.

Regarding the main European programmes, which have begun with Galileo, the GMES initiative, relating to continuous environmental monitoring and disaster prevention, needs to be speeded up so as to generate potential demand. GMES has dual environmental and security uses, and its applications cover both civil and defence-related demand.

The ambition underlying European space policy must be backed by the necessary resources, originating from official demand for services, research, ESA programmes, and the market. The goal of doubling the space budget in ten years, to some extent restoring the balance between the civil and security components, would not, in any event, close the gap in relation to the United States: the end result would be that the European system would have less than half the resources currently available to the American system.

The problem of the relationship between the Union and the ESA also arises in this connection, as well as in connection with the new definition of roles necessitated by the pride of place that will have to be accorded to European space policy.

The ESA programme has a stable budget, and member countries, which agree on the various projects, jointly contribute resources, encouraged to do so by the fair return. If the ESA budget were to be reduced to any extent, an equivalent increase in the resources provided by the EU for common space programmes would not offset the loss. The Commission must also determine whether the aims that the Union intends to pursue through a ‘Community’ policy (under enhanced cooperation programmes, to which it is doubtful that the fair return rule could apply) might entail different resource management methods. Another question relates to the form of cooperation between the ESA and the Union, a key aspect of a space strategy that must take advantage of the basic research and advanced technology experience and the concentration of professional expertise to be found in the ESA, which at the same time has to be fitted into the prospect opened up by the Convention’s proposal for a European space programme.
14 July 2003

OPINION OF THE COMMITTEE ON REGIONAL POLICY, TRANSPORT AND TOURISM

for the Committee on Industry, External Trade, Research and Energy

on European Space Policy

Draftsman: Christine de Veyrac

PROCEDURE

The Committee on Regional Policy, Transport and Tourism appointed Christine de Veyrac draftsman at its meeting of 24 April 2003.

It considered the draft opinion at its meetings of 10 June 2003 and 8 July 2003.

At the latter meeting it adopted the following conclusions by 32 votes to 5, with 3 abstentions.

The following were present for the vote: Rijk van Dam (vice-chairman and acting chairman), Gilles Savary (vice-chairman), Christine de Veyrac (draftsman), Sylviane H. Ainardi, Rolf Berend, Philip Charles Bradbourn, Felipe Camisón Asensio, Jean-Maurice Dehousse (for Bernard Poignant), Jan Dhaene, Den Dover (for James Nicholson), Alain Esclópë, Giovanni Claudio Fava, Jacqueline Foster, Mathieu J.H. Grosch, Catherine Guy-Quint (for Ewa Hedkvist Petersen), Konstantinos Hatzidakis, Georg Jarzembowski, Giorgio Lisi, Nelly Maes, Emmanouil Mastorakis, Erik Meijer, Bill Miller (for Brian Simpson), Enrique Monsonís Domingo, Francesco Musotto, Peter Pex, Joaquim Piscarreta (for Luigi Cocilovo), Samuli Pohjamo, Reinhard Rack, Carlos Ripoll y Martinez de Bedoya, Dana Rosemary Scallon, Agnes Schierhuber (for Dieter-Lebrecht Koch), Ingo Schmitt, Renate Sommer, Dirk Sterckx, Hannes Swoboda (for Wilhelm Ernst Piecyk), Joaquim Vairinhos, Ari Vatanen, Herman Vermeer, Mark Francis Watts and Brigitte Wenzel-Perillo (for Sérgio Marques).
CONCLUSIONS

The Committee on Regional Policy, Transport and Tourism calls on the Committee on Industry, External Trade, Research and Energy, as the committee responsible, to incorporate the following points in its motion for a resolution:

General points

1. Emphasises that, if Europe is to be stable and prosperous, it must endow itself with the means of guaranteeing its security and that space represents one of those means;

2. Emphasises the vital importance of Europe continuing to participate in space exploration; welcomes, therefore, the agreement reached on 27 May 2003 in the Council of Ministers by the European Space Agency (ESA) on the Galileo satellite navigation systems programme and Ariane; draws attention to the delays to be made good and the major effort required to ensure that the deadlines laid down for Galileo will be met;

3. Reiterates the need to ensure that Europe enjoys independent access to space, in particular in the light of Europe’s technological and industrial expertise in this area, and, in that connection, hopes that the considerations set out in the Green Paper will lead to the establishment of a genuine industrial space policy;

4. Expresses concern at the problems encountered by the space industry with Ariane and Galileo, problems which highlight the limits to the current institutional framework and the need for a new organisational model;

5. Calls for the European Space Agency to become the space agency of the European Union with the task of analysing needs and devising and developing space programmes;

6. Draws attention to the unprecedented crisis currently affecting the satellite industry and the repercussions of that crisis, in particular for launcher policy; awaits with impatience the communication to be presented by the European Commission on launchers;

7. Supports the European Commission in its efforts to take full account of space when drawing up and implementing Union policies and, with that aim in view, to establish a stable institutional framework;

8. Calls on the European Commission to analyse more systematically ways in which space policies could be matched to the needs of European Union policies (transport, agriculture, environment, common security, etc.) and to make proposals;
9. Draws attention to the valuable role which the military use of satellite systems can play in peacekeeping operations;

10. Welcomes the proposals submitted by the Convention instructing the European Union to draw up a European space policy by implementing a European space programme, and fully expects a place to be found for these in the future European Constitution;

11. Emphasises that any European space programme must be developed in close cooperation with the European Space Agency and in consultation with all the groups concerned, including SMUs, with a view to increasing the range of applications of the innovations stemming from space policy;

12. Emphasises that any space policy will have a specific impact on fundamental research and on applied or technological research;

13. Insists that space must be dealt with at the right level of competence, viz. shared European Union and Member State competence;

14. Emphasises the need to prepare the European Space Agency (ESA) and its institutions for the emergence of a European space policy, drawing a distinction between its purely intergovernmental tasks and its future role in managing Community initiatives and programmes, with a view to avoiding the decision-making problems which have affected the Galileo programme;

15. Proposes that the European Union consider a programme of crewed flights that could be achieved at reasonable cost, since all polls show that crewed flights are the most popular feature of space activity;

16. Is concerned at the lack of interest on the part of young people in science-based occupations, and hopes to encourage careers in those occupations by making them more attractive; draws attention, in that connection, to the low profile of European bodies and their programmes, with NASA sometimes enjoying higher recognition levels than the European Space Agency itself;

17. Reaffirms its proposal, already submitted a number of times, for a European Space Conference to be convened in 2005 in order to widen and deepen the ways in which Europe can operate in this area;
**Transport**

18. Draws attention to the important part played by the Galileo programme in land transport, in particular future applications including the pricing of infrastructure use, speed limits, satellite positioning, etc., as well as its potential in the aviation sector and for improving airspace management in Europe and the effective introduction of a single European sky;

19. Draws attention to the value of using satellite technologies and their maritime applications to strengthen maritime safety and security rules by equipping ships with the Automated Identification System (AIS) for such purposes as surveillance on the high seas and in coastal waters, pollution detection, positioning of vessels, etc.;

20. Emphasises the benefits which would accrue in the transport sphere from the establishment of a European satellite database;

**Regional cohesion, regional planning and sustainable development**

21. Draws attention to the potential of satellite technologies, in particular Global Monitoring for Environment and Security (GMES), for sustainable development and regional planning purposes, e.g. in monitoring flood plains, drought, earthquakes, the atmosphere, climate, etc.;

22. Points out that space represents an instrument for cohesion, since it offers a link with the most distant regions of the Union, thereby reducing the ‘digital divide’.