

## Benefits for citizens and society

### Space Industry views

President Buzek (EP), President Van Rompuy (ECouncil), President Barroso (ECommission), President Bresso, Vice president Tajani, Prime minister Pawlak, DG JJ Dordain, Mr. Prodi, ladies and gentlemen,

#### Great achievements for Europe

I couldn't agree more on what was said about the great achievements of Europe in Space.

Thanks to the continuous support of member States, of the European Space Agency and of the European Commission, Europe is highly regarded in our domain.

1. Science and exploration: Europe-led Space science missions provide outstanding results and European instruments are at the cutting edge of Space technologies. Compared internationally, we create excellent value for money!
2. International Space Station: Europe is a key contributor to the ISS through the Columbus laboratory and the ATV for re-supply and orbit control. It's autonomous capabilities of rendez-vous and docking are worldwide unmatched. This and the automated re-fuelling capabilities are at the top of the list of what US wants to achieve next!
3. Transportation: It would be pointless here to recount the success story of Ariane, today the world market leader of launch services for telecommunications satellites.
4. Telecommunications: The European Space industry has been able to position itself as the leader on the commercial and open market of telecommunication satellites.
5. Earth Observation and remote sensing: Europe is active in all segments of this activity and here as well we are leader on the export markets.
6. In meteorology: Where Europe and the world benefit from the world-class performance of its Europe made satellites.

7. In Space based navigation: With EGNOS today and tomorrow Galileo, Europe will be setting the new standards and enter the small club of autonomous powers in this domain.

Europe has demonstrated its capability to be highly innovative, creative and competitive in the high tech fields of all Space related domains. We are today in a strong and enviable position, but what about tomorrow?

We notice a growing dynamism worldwide!

Our current strong position is not a given. Space continues to be a very attractive and active sector worldwide. Looking at it a little closer:

1. **United States:** pursue their **policy of Space dominance** and maintain their total Space budgets at an indisputable high level both in civil and military fields. Engaging developments of new, highly powerful transportation systems, stimulating the commercial sector to invest in Space, based on long term commitments for the purchase of Space based services, etc... NASA budget still represents over 0,15% of the USA Gross Domestic Product.
2. **Russia:** getting **back as a first rank Space power**, with an ambitious agenda fixed at the highest political level. With 0,25% of its GDP invested in Space activities, Russia is indisputably the nation making the biggest efforts in Space.
3. **India:** **consistently investing in all civil Space applications** with the **aim of acquiring full and total autonomy** in all Space technologies, including Space exploration. India comparable to the United States.
4. **China:** With a **dramatic uprising**, active in all sectors, including manned flight. China today has become the most active nation in civil institutional Space lately. In 2010, China launched 15 out of 34 civil institutional satellites worldwide (44% of the total, accounting for 68% of the total mass, meaning that the Chinese satellites are not micro-sats!)

Among the current 6 major Space powers, Europe, with a total civil Space budget of some 0,03% of its overall GDP is by far the one making the smallest investments in civil Space.

**For all Space actors, Space is more than just an enabling technology**, it is more than just an economic sector like the others, Space is considered as **a major stake for autonomy and sovereignty** for the implementation of public policies, would it be for civil, security or defence purposes.

Do we still have a vision?

This raises the question of the vision of Europe in Space. Or more precisely, does Europe still have a vision? Let us have a look to the different areas:

1. **Space Transportation:** For any Space faring nation, Space policy starts with autonomous access to Space. Europe was once convinced of that and developed Ariane, which has become THE European success story. But today, the situation is not so shining. The current autonomy policy, based on the commercial market carrying 80% of the burden, is at its limits. Europe must define a new strategy. We are still far from a consensus among member States on the objectives to be achieved. Once a new European policy is defined, its implementation will raise a number of subsequent issues: How will it be funded? Which roles for ESA, member States, EU, Arianespace, industry? None of these are easy questions! And in the short term the clock is ticking and the sustainability of the system must be ensured, which not only implies support to production but also urgently needs financial backing of agreed future developments, like eg A5 Midlife Evolution.
2. **In Space telecommunications:** The very good results achieved by the European industry on the commercial market must not make us forget that Europe is suffering a growing technological gap, and consequently a growing dependence from non-European suppliers. Despite repetitive declarations of intention to grasp this issue at political level, still little is being done. This hampers the competitiveness of industry, but it is never too late! The needs have been clearly assessed and roadmaps are available. We know what should be done. This is not out of reach neither technologically nor financially.
3. **In Earth Observation and Security:** GMES was once an EU flagship programme! Now doomed by budgetary uncertainties... Should I remind here the past investments (more than 3.2B€!) already made by ESA, member States, European Commission and industry? This programme needs to be sustained by the Commission, not because GMES is a space programme but because GMES has been set up as a political decision, to serve crucial public policy objectives and because the Commission is the adequate institutional body to aggregate, structure and develop the demand in this domain. Space needs reliable partners and long term commitments.

4. In Space exploration: After the tremendous success of Columbus, ATV, Rosetta, Huygens, we are today in a situation totally blocked on Exo-Mars. High level conferences are succeeding one each other, having in common a total absence of decisions made, and not even a clear affirmation of European ambitions in this domain. EC, once expected to take a political lead in international negotiations, maintain a complete lack of clarity about any possible provision for Space exploration in its Financial Framework proposal.
5. In Space Science: Clearly a domain of excellence of Europe with the outstanding successes of eg. XMM and Herschel-Planck. Today, hopefully, no European policy maker is suggesting reducing the efforts made in this area. But, over the last two decades, ESA Science budget has been kept almost flat in current economic conditions, not even providing for monetary erosion... Furthermore, scientific mission are at the cutting edge of technology. They are more and more ambitious to meet the needs of the scientific community and thus increasingly expensive. As a consequence, the adjustment is made on the frequency of missions. Is this Europe's vision for science?
6. In Space based navigation: EGNOS and Galileo are now on track after a long and painful decision making process. All they need now is consistency to complete the 30 satellite constellation and secure proper operation once deployed.

We feel that Europe needs Space to be stronger, "needs more Space"!

1. Space is a vivid sector, providing over 30.000 direct, highly qualified jobs on European soil, which generated last year almost 3 B€ worth of commercial business and exports.

2. On the international scene, Space provides for cooperation and leadership opportunities for Europe

3. Space is a key contributor to many European public policies, to name some:

- natural disaster relief: only Space is still operational when ground infrastructures have been destroyed,
- Environment monitoring: unique capability to provide long-term global data around the clock,
- Security & maritime surveillance: by providing permanent monitoring of large areas,
- Our contribution to natural resources management: which, in a globalised world, is becoming an issue of global concern, and not "only" for environmental reasons

All these potential contributions have been clearly identified and are not questioned any more. European Space Industry is ready to help implementation of such public policies as soon as they are decided and, of course, funded.

Finally, Space is also a key element for European autonomous access to information, a pre-condition for taking "healthy" decisions of European institutions. The demonstration of it's immense value has been made in recent crisis.

Our conclusion: Space is key to secure a sustainable world for our next generations and as such, it is key for Europe.

However, our Space Industry needs Europe to be stronger!

Like in all other Space faring nations, Space can only flourish on the ground of a sound and solid institutional basis.

In this respect, several conditions need to be met:

1. Bring "alive" the Lisbon Treaty:  
Implement the Space competence of the European Union. It is timely and opportune to properly address it now. The political implications of the sustainable deployment and operations of Space based infrastructures aiming at serving public policy objectives, need to be addressed & solved now. Galileo and GMES are two good examples.

What needs to be done then is to aggregate Europe-wide the institutional needs for the implementation of those policies. This need shall then be transformed in a structured demand addressable by economic agents. This is the mission as assigned to the European Union by the European Space Policy.

Finally, since Space ignores borders by sheer nature, we see EU as the right institution to voice Space related concerns of Europe on the international scene. Europe is stronger when it speaks with one voice.

2. Governance: Clarify the relations between ESA, EU and member States. Given the rich and successful heritage of ESA as a development agency, it is our view, that its intergovernmental structure should be preserved while at the same time making it the implementing body for the development of all EU led Space programmes.
3. Vision: Elaborate a European "Vision for Space" and underpin it with a long-term roadmap. Such vision shall set long term objectives and devise conditions to be met to actually achieve them. One of them is the existence of a sound, competent and vivid industrial base.

4. Industrial Policy: From this standpoint, we must salute the fact that the need for a space specific industrial policy is now broadly recognised. I will not elaborate on that here as a dedicated session will deal with this important issue, but I will just recall two prominent aspects:
  - Competitiveness: Today, European industry demonstrates its competitiveness on the commercial markets. But this is not a given. It must be relentlessly supported via consistent and targeted R&T programmes and through innovation to transform advanced technologies in performing products.
  - Procurement: European procurement rules must be adapted to the reality of markets. The reality is that Space markets are mostly captive worldwide, and I see no reason why Europe should be an exception.

## Conclusion

1. Space is an industrial project: The founders of Space in Europe had as primary objective to make a strong and sound European Space industry emerge. They have been successful, probably beyond expectations. **Such vision must be reinstated.** Space is not just a matter for scientists or researchers. Space markets are driven by public demand, needs and ambitions, which lead to a strong, competitive and sustainable industrial base.
2. Institutional customers: Institutions are more than just customers. They define the programmatic in line with the objectives they want to achieve and set rules and policies accordingly. Given the special nature, Industry needs competent customers, like eg ESA, knowing what they want and determined to get it.
3. Coordination: In time of financial crisis and budget shortfalls, a greater Europe-wide coordination is needed to make the most efficient use of taxpayer money and avoid unnecessary duplications.
4. Finally, in the short term future, **GMES must be reinstated** in the EC budget to secure its continuation. **Next comes the 2012 ESA Council at ministerial level.** European Space industry looks forward to a “brave” conference where key decisions will be made to sustain our current n°2 position worldwide.