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Jean-Jacques Dordain

ESA's Recent Achievements

A great deal has been happening in the space world, particularly in the European context, since I last addressed the Bulletin's readers. The last year has been a very busy and important one for ESA missions, especially within the Scientific Programme. We have launched SMART-1, which went into orbit around the Moon on 15 November, we are already orbiting Mars with Mars Express, we have launched Rosetta towards the comet, and the Huygens Probe will be landing on Saturn's largest moon, Titan, in mid-January. We have sent two European astronauts for stays onboard the International Space Station (ISS) during the year. We have also been preparing the Ariane-5 ECA launcher for a new qualification flight in January 2005.

We also continue to work hard on exploiting the vast amounts of data that our satellites are providing. We have 17 scientific satellites currently operating. On the applications side, ERS-2 and Envisat continue to provide crucial and timely Earth-observation and environmental data in this era of serious concern about global warming. In early September, ESA hosted the 2004 Envisat and ERS Symposium and there were more than one thousand scientists in attendance from 53 countries, showing that the data from our satellites are being used by scientists not only from Europe, but from all over the World.

The political perception of space has improved a great deal in the last year, thanks in large part to the benefits that these data from our satellites are seen to be providing.

The New Member States

A concrete example of the changing political perception is the fact that ESA has recently acquired two new Member States,

with Luxembourg having signed an accession Agreement in June, and Greece in July. They will become full working members of the Agency next year and we very much look forward to their active participation. The implications of their joining and of further possible future enlargement of the Agency's membership are addressed in detail in one of the articles in this issue of the Bulletin.

ESA and the European Union

ESA's institutional relationship with the European Union has also progressed substantially in 2004, with the Framework Agreement signed in November having been in force since May this year. This Agreement provides the foundation on which to build joint activities with the EC. Moreover, the new EU Treaty includes space among the Union's competences, which is major step forward in that space is now regarded as a serious issue for Europe's citizens and no longer just the playground of a few inquisitive scientists and wily engineers. ESA is mentioned in the new Treaty and this is highly important, because it represents the first step towards what in Agenda 2007 I have called 'legitimacy among the European Union institutions'. It is a small step for now, but a 'giant leap' for the future. In fact, the Commission's White Paper on Space has taken some of its inspiration from Agenda 2007.

The latest step towards a closer working relationship between ESA and the EC is the setting up of a joint Secretariat, which is already busy preparing for the first meeting of the joint Space Council, scheduled for 25 November this year. This will be a very important event, because it will be the first time that the EC and ESA Councils meet together to discuss space policy and the future of space in Europe.

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Progress in Implementing Agenda 2007

Apart from the highly successful missions and the closer relationship with the EU already mentioned, we have also made good progress towards achieving the other objectives that I set for the strategic reform of the Agency in Agenda 2007, published in October last year (ESA BR-213).

In addition to maintaining the momentum of its ongoing scientific and applications programmes, the Agency has to be open to change if it is to remain an optimised organisation in an environment that increasingly needs its services, skills and knowhow. As a leading-edge R&D organisation, it needs to adapt continuously to respond to the emergence of new user communities, the introduction of new commercial and public services, the arrival of new operators, and the growing dependence of Europe's citizens on space-enabled systems and services.

In this context, solid progress has been made through the launching of several new initiatives. I was concerned by the fact that the majority of ESA's activities were becoming too much driven by decisions taken some years ago and I have therefore tried to open new doors by setting three priorities for the future.

The first one is in telecommunications. Telecommunications is a very important field for us because it is one of increasing demand, not only from the public sector, but also for telemedicine and safety and security related applications. Increased demand for commercial broadband telecommunications services is also driving an acceleration of the space telecommunications initiative, and here satellites can make a significant contribution. Telecommunications is also a domain in which European industry has already had a lot of success, not only via the space manufacturing industry, but also the telecommunications operators, two of the largest of which are SES Global, based

in Luxembourg, and Eutelsat, which has its headquarters in Paris.

The second priority is Global Monitoring for Environment and Security, or GMES. The environment and security are two of the biggest concerns of Europe's citizens, and ESA has been working with the European Commission during the last three years to build an implementation plan. The time has now come to implement that plan, based on the concrete results that we have already achieved in Earth Observation, especially with ERS and Envisat.

Together, the GMES and Telecommunications initiatives provide the foundation upon which further developments responding to the demands of the European security and defence policy can be built.

The third priority on the list is Exploration. It is a very important priority for our future for many reasons, providing the basis for enhanced scientific benefits as well as for robust European participation in future large international cooperative space programmes beyond the lifetime of the ISS. Europe has always been highly successful in this domain, as our scientific missions have proved time and time again, and it is one that has a new momentum, created in part by the latest initiative of President Bush. Europe is going to the Moon, we are orbiting Mars, we are orbiting Saturn, and we are about to land on Titan. So we are not building our future on dreams, we are building it on results.

The GMES preparatory activities were approved at the last meeting of the Agency's Earth Observation Programme Board, and on the Exploration side the Declaration for the Aurora Programme has been opened for subscription and we are making progress in attracting more contributions. We are also currently busy securing agreement from the Member States for the planned preparatory activities in Telecommunications.

The three new initiatives have not been defined in isolation and they correspond to the priorities defined in the European Commission's White Paper on Space issued last November. The various preparatory activities have been also been proposed after active consultation with the EC and Member States in June this year. All of this means that we are much better placed today than one year ago in terms of preparing Europe's future in space.

In terms of ESA's internal operations also, we have made significant progress since the unanimous support in the December Council for my new organisational structure. In June, the Council also endorsed the Resolution on the next step in the reform of ESA's financial system, which will provide us with much greater budgetary flexibility year on year, not least in the way the geographical-return rules are applied. The many benefits that this will provide for the Agency's Industrial and Procurement Policy are described in more detail in one of the article's in this Bulletin.

New Directorate Structure and Directors

Europe's enlargement and the expansion of its areas of competence make it incumbent on ESA to meet ambitious, challenging objectives over the next four years. For ESA to succeed in meeting those objectives and the mission entrusted to it by its Member States, it was essential for me, in the context of Agenda 2007, to establish a new organisational structure.

The three main features of the new organisational structure are as follows:

- A collegial management with a strong Committee of Directors driving the organisation towards one ESA.
- A stronger relationship with the EU institutions through the creation of a Programme Directorate dedicated to EU

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and Industrial Programmes, in addition to the Earth Observation Programme Directorate in charge of GMES, and a Director General's Cabinet in Brussels.

- A streamlined relationship between the Programme Directorates and the Support Directorates, based on Project Plans constituting the basis for human, technical and financial resource planning.

Having fully supported this proposed new structure last December, in March the Council appointed the corresponding team of Directors:

- Volker Liebig : Earth Observation Programme (D/EOP)
- Giuseppe Viriglio : EU and Industrial Programmes (D/EUI)
- Jean-Pol Poncelet : External Relations (D/EXR)
- Daniel Sacotte : Human Spaceflight, Microgravity and Exploration Programmes (D/HME)
- Antonio Fabrizi : Launcher Programme (D/LAU)
- Gaele Winters : Operations and Infrastructure (D/OPS)
- Hans Kappler : Resources Management (D/RES)
- David Southwood : Science Programme (D/SCI)
- Michel Courtois : Technical and Quality Management (D/TEC).

We are already working very hard together to achieve the ambitious goals laid down in Agenda 2007!

What are the priorities for end-2004/early 2005?

In the light of the programmatic and financial developments in 2004, the objectives for 2007 are still the same, but I have found it necessary to change some of

the priorities associated with Agenda 2007 for the short term in what are deemed key areas for ESA's future. These revised priorities are as follows:

Priority 1: Further reinforce control over the ongoing large programmes, namely Ariane, the ISS and Galileo, in order to manage the associated risks, not all under the control of ESA, and not jeopardise the future because of the current risks.

Priority 2: Implement preparatory activities for the three priority initiatives for the future, namely GMES, Telecommunications and Exploration, and formulate the necessary high-quality programme proposals in order to convince all Member States of their value and maturity for decisions to be taken at the end of next year.

Priority 3: Renew ESA's ambitions in terms of the development of new technologies, as an innovation factor, as a competitiveness factor, and as a key to the consolidation of Europe's industrial capabilities, without which there would be no space activities. Agenda 2007 puts a lot of reliance on technology programmes, and there is no time to lose in putting in place a new way of defining and implementing those technology programmes.

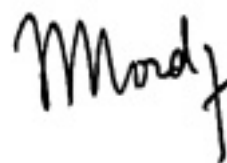
Priority 4: Develop a Long-Term Plan both as a strategic tool and an instrument for dialogue with Delegations. It must give clear priorities for the future, while taking into account the resources required for completing already approved programmes, including margins to cover a risk-management approach

Priority 5: Pursue the internal reform of ESA by prioritising objectives and by modifying reflection processes, in order to limit staff time and energy dedicated to this reform, yet still put in place corporate-level tools that are reliable enough to make sure that we can drive the overall organisation forward effectively and efficiently.

Major Events in the Coming Months

We have a lot of missions in the ESA calendar for next year, which will keep us extremely busy. After the imminent launch of Ariane-5 ECA, we have the descent and landing of Huygens on Titan in January. Then we have the launch of Cryosat in March, which is the first in the series of five Earth Explorer missions. ESA astronaut Roberto Vittori will visit the ISS in April, and the second of the Meteosat Second Generation spacecraft will be launched in June. Just a few months later, there will be the first launch of the ATV to the ISS in October, the launch of Venus Express also in October, and the MetOp-2 launch before the end of the year.

There are currently a number of niggling concerns within the Agency, especially surrounding the three major programmes, but I believe that with the progress that we have made in recent months we shall soon be able to put the present difficulties firmly behind us. The present may be a difficult time in space, but when you look to the menu of launches and missions that we have in store for 2005, as well as the prospects offered by our closer relationship with the EU, it is hard to see anything other than a bright future.



Jean-Jacques Dordain
Director General

THE SPACE DIMENSION

THE EUROPEAN SPACE AGENCY



ESA's remarkable record places it in the front rank of space organisations, generating enormous benefits for its Member States and their citizens. The Agency has been responsible for developing systems that are now accepted as everyday – and profitable – parts of our lives. In the decades ahead, ESA will be presented with even more challenges and opportunities to enhance the lives of millions of citizens through the transformation of Europe's economic, scientific and technological capabilities.

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