

A satellite image of Greece and surrounding regions, showing the country's coastline, islands, and inland terrain. The image is taken from a high angle, showing the Mediterranean Sea to the south and east, and the Balkan Peninsula to the north. The land is a mix of green and brown, indicating vegetation and bare earth. The sea is a deep blue. The text is overlaid on the upper left portion of the image.

Enlarging ESA?

– After the Accession of Luxembourg
and Greece

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The European Space Agency's Council recently approved the accession of Luxembourg and Greece to the Agency's Convention, making them ESA Member States. The arrival of two new members demonstrates growing interest in the Agency's activities. Apart from opening up new development opportunities for the Agency, these accessions represent new challenges for it, particularly regarding the implementation of its industrial policy. More generally, they raise the question of the future evolution of ESA's membership and operations in light of the enlargement of the European Union.

Europe as a political entity came into being historically out of the determination of six States to work more closely together by setting up the European Community over 40 years ago. It was gradually enlarged through the admission of nine further countries to become the European Union. It has very recently been enlarged again, with the addition of 10 new members: on 1 May 2004, several former Soviet bloc countries also joined the Union's institutions. Their representatives now sit in the European Parliament, and each of them has nominated one of the members of the European Commission. This is a very



Mrs Erna Hennicot-Schoepges, Minister for Culture, Higher Education and Research of the Grand Duchy of Luxembourg, and Mr Jean-Jacques Dordain, Director General of ESA, sign the Agreement on Luxembourg's accession to the ESA Convention, in Paris on 6 May 2004 (copyright ESA/S. Corvaja)



Mr Dimitris Sioufas (right), Greece's Minister for Development, and Mr Jean-Jacques Dordain, ESA's Director General, having signed the Agreement on Greece's accession to the ESA Convention, in Paris on 19 July 2004 (copyright ESA/S. Corvaja)

significant event and illustrates the reconciliation of Europe, which was divided up at the end of the Second World War by the Yalta Conference. Above all, it marks the end of the Cold War and the confrontation, fortunately mainly virtual, which mobilised the two blocs one against the another for half a century.

ESA did not follow the same original political integration path that the EU embodies. It was formed later, on an intergovernmental basis. It has thus played

its part in the scientific and technological cooperation of a number of the same States for 30 years in the key area of space. Its achievements and successes have endowed this other Europe with both strategic autonomy and an advanced industrial sector. The question therefore very naturally arises of whether the Agency should take the same direction as the EU. Should ESA likewise expand to the East?

As a contribution to this debate, this article examines one by one the provisions

made by the founders of the Agency to enable it to cooperate with potential partners, as well as the arrangements for taking in new members. It also gives a brief historical overview of the various stages that have brought the European Space Agency to its present configuration. In particular, this article examines the way in which, during each part of the process, the objectives of the Agency's characteristic industrial policy have been preserved. Lastly, it looks at the specific situation of the EU's 10 new Member States in the light of these developments.

The Agency's Convention

The ESA Convention, the outcome of a Ministerial Conference held in Brussels in 1975, entered into force on 30 October 1980. From the start, its visionary founders paid careful attention to the aspect of international cooperation.

Thus, Article XIV of the Convention lays down the principle of the Agency's *cooperation* with other organisations and institutions, whether international or belonging to non-member States. Such cooperation may take the form of specific agreements. It may take the form of participation in one or more Agency programmes. It may also translate into granting Associate Membership to a non-member State, which would then undertake to contribute at least to the studies of future projects included in the Agency's basic mandatory activities.

Moreover, Article XXII lays down the arrangements for *accession* to the Agency's Convention. As this involves acceding to a Treaty, obviously only a government can take such an initiative. A request for accession by a State is submitted to Council, which will of course decide by unanimity of its members.

Cooperation and Accession

Since the Convention entered into force, a large number of cooperation agreements have been concluded by the Agency, in the spirit of the provisions of Article XIV, with the organisations of non-European States and/or international organisations. The most recent of these, and one of the most important in terms of the prospects it

opens up, is the cooperation and partnership agreement negotiated with the Russian Federation, which was the first agreement of its kind.

In parallel, certain non-member European States expressed interest in establishing a cooperative relationship with the Agency in order to participate in European space activities while developing their national industry. Thus, *Austria* and *Norway*, which began by taking part in certain optional Agency programmes, obtained in 1979 and 1981, respectively, Associate Membership, in line with Article XIV of the Convention. The cooperation agreement concluded to that end offered them the possibility, after three years, of ending it or renewing it or else changing its nature and considering an application to accede to the Agency's Convention. Once the cooperation agreement had been renewed, each country confirmed its wish to accede to the Convention. The ensuing negotiations having reached a positive conclusion, the ESA Council, in accordance with Article XXII, approved the accession of Austria and Norway as from 1 January 1987.

On that same date, Council also conferred Associate Membership on Finland, which had in previous years already taken part in activities relating to the Meteosat programme and Earth observation. That cooperation agreement was renewed in 1991 and 1993, after which Finland too confirmed its wish to accede to the Agency's Convention. Following negotiations to that end and with Council's approval, Finland became ESA's 14th Member State, as from 1 January 1995.

New Members

Because of the way in which they occurred, this trio of accessions to the Agency's Convention established a kind of de facto precedent according to which obtaining Associate Membership is a prerequisite to accession. In fact, this transition is not provided for in the ESA Convention which, and justifiably so, deals with cooperation and accession in separate articles. This situation was confirmed in 1999 when *Portugal*, which had previously taken part in certain activities under the

ARTES telecommunications programme, but did not have Associate Membership, expressed the wish to accede to the Agency's Convention in turn.

For the first time, a non-member State, which had no links with ESA via a Cooperation Agreement and was thus less familiar with Agency procedures and programmes, was making a 'direct' request to accede to the Agency – in full compliance, it must be said, with the terms of the ESA Convention. This was bound to raise particular problems, especially regarding the inclusion of Portuguese firms in activities developed by the Agency and the application of industrial policy. These particular issues are given more general consideration below. Eventually, after the customary negotiations, in which these concerns were taken into account, the ESA Council approved, in November 2000, the accession of Portugal, which thereby became the 15th State to be party to the Convention.

Lately, a fairly similar scenario occurred in the case of *Luxembourg*, followed by *Greece*.

Greece had signed a cooperation agreement with ESA in January 2001, which enabled it to participate in activities under the ARTES, GMES and GSTP programmes, and also familiarise itself with the Agency's operational procedures. In July 2003, Greece placed its first telecommunications satellite (HellasSat 1) in orbit, confirming the priority it would be attaching to space technology. In September of the same year, the Greek government officially applied for accession. On the basis of an expert report and the outcome of the negotiations, the ESA Council approved Greece's accession, in March 2004.

As to Luxembourg, it had signed a Cooperation Agreement with ESA in September 2000, enabling it to join the ARTES programme activities. In December 2003, Luxembourg's government officially applied to accede to the Agency's Convention. After negotiations, this was also approved by the ESA Council in March 2004. According to the sequence of the official signing ceremonies,

Luxembourg became the 16th and Greece the 17th ESA Member State. In both these countries, accession to the Convention has still to be ratified by the respective Parliamentary Assemblies.

Historically, the Agency's composition has thus followed an evolutionary pattern, the cooperation established by Article XIV constituting a kind of springboard for subsequent accession pursuant to Article XXII. All the latest States that are parties to the Convention are also members of the EU. At present, following these latest accessions, the European Space Agency shares with the European Union a common base of 15 'historical' members. This is sure to have implications for the future relationship between the two institutions, as will be explained below.

Industrial Policy

Formulating and implementing industrial policy constitutes one of the Agency's four basic objectives, as set out in Article II of the Convention. The industrial policy in question is described further in Article VII, which makes particular reference to the necessary competitiveness of European industry and to the advantages of free competitive bidding. That same article also lays down the principle that all Member States should participate equitably in the implementation of programmes according to the financial contribution of each country. This constitutes the principle of 'industrial return' on a geographical basis, a provision subject to rules that are adapted at various intervals and approved by Council by a two-thirds majority. It is of interest to examine how this essential feature of the system introduced by the Agency, and which most distinguishes it from other organisations, has been maintained throughout its successive enlargements.

A Transition Period

It quickly became apparent, from the moment Austria and Norway acceded to the Agency's Convention, that it would not be possible for the 'fair return' explicitly provided for in the Agency's industrial policy to be made immediately available to the new members. The general consensus

Luxembourg, to the bottom right in this image of the Benelux countries, as seen by ESA's Envisat environmental satellite

was that such an objective could only be reached after several years. To take up the challenge of including their national firms in the activities of ESA's mandatory programmes, *special measures* were adopted by Council to help them, admittedly not without provoking criticism on the part of certain other Members, who considered their own returns insufficient.

Having learned lessons from that experience, it was agreed, when subsequently negotiating Finland's accession, that instead of special measures, a transition period would be created between the date on which its accession came into force and the date on which a full guaranteed return for Finland was to apply. For the first time, a clause departing from the general regime would form an integral part of the accession agreement. Certain specific measures applicable for the benefit of Finnish firms only would, for instance, enable industrial contracts to be awarded in the framework of the Agency's basic activities and science programme following direct negotiations. Implementing this derogation arrangement turned out to be problematical at times, although it had by the end of 1999 successfully contributed to attaining the objective set for Finland.

Portugal, on the other hand, had not yet established any particular relationship with the European space industry at the time of its accession. Swift integration of Portuguese firms was precisely one of the objectives fixed by its authorities. A six-year transition period, set up on a basis similar to that for Finland, was proposed. During that period, a portion of Portugal's contribution to ESA's mandatory activities, and thus part of its guaranteed return, would be kept separate in a special account. It would be used subsequently only to support initiatives aimed at helping Portuguese firms adapt to the Agency's activities and requirements. At the end of this transition period, the return system would be fully applied, without however making provision for any compensation for the previous period, whether it had been balanced or not.



A similar set of accompanying measures, applicable to the Agency's basic activities and science programme, was eventually agreed with Greece and Luxembourg and incorporated in the accession agreement itself. It provides, over a period of six years, for specific support for their national firms prior to full application of the return rules to which all Member States are subject.

A Joint Task Force

Essentially, the transitional arrangements, as they apply to the latest Member States, provide for a portion of a country's contribution to mandatory activities to be used directly for funding those activities intended to help national firms adapt to the Agency's requirements.

Thereafter, the difference between the ideal theoretical return that would result from a contribution to mandatory activities and the amount thus set aside will serve to cover contracts in the area of mandatory activities.

It has been agreed that no industrial-return guarantees will be given in relation to mandatory activities, and no provision made for any compensation at the end of

the transition period. Any statistical records for that period will be discarded and subsequent industrial-return evaluations will follow the method applied to all the Member States.

A Joint Task Force, composed of representatives of a Member State and the Agency, will make recommendations to the ESA Director General on the implementation of these transitional provisions, the progress of which it will monitor on a regular basis. It will have responsibility for evaluating proposals for activities, selecting those with the most potential, ensuring the necessary resources are made available to enable national industry to take part in normal Agency procurement procedures, and encouraging the development of long-term relationships with European industrial partners.

Funding earmarked for these activities could, for example, cover contracts with industrial firms and research and training institutes, as well as the organisation of workshops. These contracts will follow the Agency's rules and procedures.

As can be seen from the above, the Agency has so far succeeded, on the

accession of several new members, in keeping intact the essential principles of its Convention, in particular the industrial-return arrangements, which the firms of each Member State benefit from in proportion to the size of individual national contributions to the Agency's budget. However, there is a considerable risk that any new increase in the number of partners could get in the way of the various decision-making mechanisms that exist at present, or even cause them to grind to a halt. For instance, the intergovernmental system calls for unanimity. The Agency has generally been able to get round that, thanks to the mechanism applicable to optional programmes, which, once they are decided in principle, bring together only those countries wishing to participate in them. Would such a Europe 'à la carte' still be possible after an institutional *rapprochement* between the Agency and an EU itself already enlarged to 25 members?

One Europe, Several Models

The EU reflects a completely original model of political integration. It is a supra-national body, and this entails a partial loss of sovereignty on the part of its Member States. For example, the governments of the countries that have opted for the euro have, possibly to the surprise of some, relinquished for the sake of the community institutions, their sovereign right to mint their own currencies. These institutions will gradually be taking more and more majority decisions.

As this article has shown, ESA embodies the European space sector on an intergovernmental basis, and does so with evident success. Its members take sovereign decisions on what they agree they will do together, on a case-by-case basis. This of course implies unanimity and the difficulties inherent in consensus-seeking. In particular, in the case of ESA, the cooperation involves a very high technological and industrial content, which tends to encourage countries to push their national interests and hence slow down decision-making procedures.

The recent *rapprochement* between the EU and the Agency, formalised by a Framework Agreement, translates the

concern of each party to enjoy the assets of the other: political clout on the one side, technological and scientific know-how on the other. The 'cohabitation' of the two models is not something new. It is in fact inherent to the construction of Europe, as illustrated by the Schengen Accords or the single currency, which do not yet involve all EU Member States. It is intended, in the draft Treaty establishing a Constitution for Europe, to place closer or structured cooperation on a more formal footing, in line with the intergovernmental method, between only the countries that so wish.

A Common Basis

Historically, the membership of the Agency has, as described above, been built up as part of a gradual process, which has only recently led to the EU and the Agency having a common base of 15 'historical' members.

In view of the interest that some of the new EU members have shown in space, the Agency wished to respond as early as 2001 to their concern with establishing closer ties. It proposed a 'Plan for European Cooperating States (PECS)', which provides for a special status for these potential candidates for future accession. Notwithstanding their lack of industrial backing, they can take part in certain Agency projects by making a limited contribution, and thus become better acquainted with ESA. Hungary and the Czech Republic have already become involved in this process; Poland and Romania may follow.

Moreover, the EU - with at the time 15 members - and the Agency have formalised their cooperation with the Galileo satellite navigation and positioning programme, which they are funding in equal share. The 10 enlargement States, now in the EU, were also invited to join the Agency's GalileoSat programme in order to take part in the development and validation of the in-orbit phase and ground segment associated with the future constellation. The state of their industrial structures and lack of financial resources could, however, be an obstacle in terms of their concern with obtaining a fair share of the work, a basic assertion of entitlement under the Agency system.

Convergence ?

There is a risk that the difficulties now being faced in the framework of Galileo - the first programme to embody a new sharing of roles between the EU and the Agency - could mount up with subsequent joint programmes, such as the GMES initiative (Global Monitoring for Environment and Security) or the action being taken to bridge, by means of satellites, what is generally referred to as the 'digital divide', i.e. unequal access to broadband services. In each case, the enlargement countries will be full partners in the EU's decision-making mechanisms. Can the Agency, for its part, continue ignoring them in the long term?

As can be seen, a specific mechanism might be needed to enable ESA to meet more satisfactorily requests for greater cooperation on the part of the so-called 'enlargement countries'. The PECS arrangements, set up before the accession of those countries to the EU, might quickly prove to be inadequate; some countries are already finding them too complex, and for others the cooperation they offer is too restrictive.

An eminently political question arises out of these mainly technical considerations: if, as set out in its Convention, the Agency and its constituent countries aim to build together a European space science and technology sector, can they do so without ensuring a certain harmony with the efforts being made by the same partners to obtain, through the EU, broadly integrated political structures? In other words, can the potentially many and varied forms of European construction avoid converging in the long term? A political question begs a political answer: it will be for the Member States, the essential stakeholders in this dual-edged strategy, to decide. How can ESA reap the political advantages of taking in the enlargement countries, in line with arrangements to be agreed, without creating unrealistic expectations? How can it avoid the pitfalls of blocked decision-making processes and paralysis of a system as many as 25-strong? This is a tough challenge for ESA and for governments always highly preoccupied with national interests..... r