Committee on the Peaceful Uses of Outer Space
Scientific and Technical Subcommittee
Fifty-fourth session
Vienna, 30 January-10 February 2017

International cooperation in the peaceful uses of outer space: activities of Member States

I. Introduction

1. In the report on its fifty-third session, the Scientific and Technical Subcommittee of the Committee on the Peaceful Uses of Outer Space recommended that the Secretariat continue to invite Member States to submit annual reports on their space activities (A/AC.105/1109, para. 36).

2. In a note verbale dated 29 July 2015, the Secretary-General invited Member States to submit their reports by 17 October 2016. The present note was prepared by the Secretariat on the basis of reports received in response to that invitation.

II. Reply received from a Member State

Portugal

[Original: English]
[28 October 2016]

Overview: a brief history of the Portuguese space sector

Participation by Portugal in the space sector has been mainly characterized by an increasing involvement with the main European institutional space organizations, including the European Space Agency (ESA).

1989 — Portugal becomes a State member of the European Organization for the Exploitation of Meteorological Satellites (EUMETSAT)

1993 — Launch of PoSAT-1, the first Portuguese satellite

1996 — Portugal becomes an ESA cooperating State

1997 — Portugal subscribes to the Advanced Research in Telecommunications Systems (ARTES) and GNSS programmes
2000 — Portugal becomes an ESA member State and joins the European Southern Observatory
2001-2007 — Portugal Incentive Scheme task force is set up within ESA
2003 — The Portuguese Space Office is set up within the Office for International Relations in Science and Higher Education of the Ministry of Science of Portugal (GRICES)
2007 — The European Space Policy is adopted by the Space Council
2009 — The Foundation for Science and Technology (FCT) Space Office is established
2009 — The Treaty of Lisbon enters into force
2012 — The EUMETSAT satellite application facility LandSaf starts

**Portuguese participation in optional space programmes of the European Space Agency**

ESA activities fall into two categories: mandatory and optional. Programmes carried out under the general budget and under the science programme budget are mandatory; they include the agency’s basic activities (studies on future projects, technology research, shared technical investments, information systems and training programmes). Besides the ESA mandatory programmes, Portugal participates in several optional programmes, encompassing an investment of around 100 million euros in the period between 2000 and 2014, shared among most space programmatic areas.

![Pie Chart](image)

*Figure 1 - Portuguese participation in ESA optional programme, with an overall budget of around 100 M€ (2000-2014)*

**Portuguese participation in EUMETSAT and European Union space programmes**

As a State member of EUMETSAT, Portugal participates in the Meteosat Third Generation programme and Polar System Second Generation programme. As a European Union member State, Portugal participates in the Galileo and European Earth Observation Programme (Copernicus) programmes.
Portuguese space community — the main players

The main actors in the Portuguese space community can be divided into two main categories, namely research and industry, which can be tracked in the Portuguese Space Catalogue, accessible online at the following link: www.fct.pt/apoios/cooptrans/espaco/docs/Portuguese_Space_Catalogue. An updated version of the catalogue is expected to be published during 2017.

Other space activities

FP7 and H2020 projects

Figure 2 illustrates the evolution of the Portuguese participation in the H2020 Space Work Programme, which supports the major European Space flagships, namely COPERNICUS, GALILEO and Space Surveillance and Tracking (SST).

![PT Space - total received](image)

Figure 2 – Space projects under FP7 and H2020 – Total return in percentage and absolute terms

There has been an evolution of Portuguese participation in the H2020 space work programme, which supports the major European space flagship programmes, namely Copernicus, Galileo and Space Surveillance and Tracking (SST).

Research fellowships, national research projects and infrastructure

Since 2000, FCT has funded 98 research fellowships under the scientific domain Earth and space sciences. Since 2008, FCT has also funded 22 projects in Earth and space sciences and in astronomy and astrophysics.

Regarding space infrastructures, Portugal hosts key ground infrastructures, including the Santa Maria site (Azores) (comprising an ESA tracking station since 2008 (ESTRACK network), Earth observation capabilities (Radarsat-2 and Sentinel-1), a GNSS sensor station since 2014 and an oil spill detection service for the European Maritime Safety Agency), the EUMETSAT land surface analysis satellite application facility, the ESA European Shock-Tube for High-Enthalpy Research (ESTHER) and a thermodynamics laboratory operated by ISQ (a Portuguese private entity).
European Space Agency and the Committee on the Peaceful Uses of Outer Space

Portugal participated actively in the meetings of the different ESA programme boards and committees and in the Committee on the Peaceful Uses of Outer Space, as well as in the Scientific and Technical Subcommittee and the Legal Subcommittee of that Committee. It also participated in several working groups, namely in the Working Group on the Long-term Sustainability of Outer Space Activities (as Co-Chair of an expert group), the Working Group on Space Debris and the Expert Group on Space Weather.