

# **PRODEX Programme**

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1. Objectives and Governing Rules of the PRODEX Programme
2. Implementation
3. PRODEX Office

# PROgramme de Développement d' EXpériences scientifiques

## **PRODEX**

### Scientific Experiment Development Programme

Optional programme under the responsibility of the  
Directorate of Science and Robotic Exploration (D/SRE)

Legally governed by:

- Resolution (ESA/C/LXXIV/Res.5)
- PRODEX Declaration (ESA/C/LXXV/Dec.1, rev. 24 (Final))
- Implementing Rules (ESA/C/PRODEX(2002)2)

# Objectives (1/2)

- to provide *funding for the development of scientific instruments or experiments* proposed by institutes or universities in the Participating States for use in the context of the scientific space programmes and missions of the Agency or of its Member States;
- to allow for the *participation of institutes or universities* located in the Participating States in the *execution of national scientific space programmes or missions of Member States* which have been considered by the Agency as meeting the overall objectives of its own programmes;
- to allow for the *participation of the same* in the *execution of national scientific space programmes or missions of non-Member States* which have concluded co-operation agreements or arrangements with the Agency, as approved by the Council, and which have been considered by the Agency as meeting the overall objectives of its own programmes;
- to foster relationships between scientific and industrial circles.

## Objectives (2/2)

- PRODEX activities shall be carried out through contracts placed with industry, institutes or universities of the Participating State.
- The activities are defined as:
  - **experiment hardware** such as breadboard models, engineering models, flight and flight spare models, specific ground support equipment, and related software development;
  - **experiment software** development for the operation of a scientific mission or flight experiment;
  - **data exploitation** in the framework of scientific programmes or missions;
  - **temporary staff** hired by institutes or universities of the participating States for the purpose of the execution of the project(s), including travel cost associated with the performance of the institutes' or universities' project tasks.

# Rules – Controlling Body

The Council shall :

- (a) monitor and control the execution of PRODEX and take all decisions related to it;
- (b) approve the annual budget of the programme;
- (c) take all necessary decisions concerning any reorientation of the objectives of the programme.

# Rules – Financial

- Each participating State shall provide the Agency, over a period of five years, with a **financial contribution** broken down into annual slices
- Any **under-spent** amount on each annual slice shall **automatically be carried forward** to the following year;
- Any **over-spent** amount recorded at the end of the financial year shall give rise to a **corresponding block** on expenditure for the following year;
- The Agency shall **charge for the costs** it incurs in managing the programme activities (run at around 10% per year);
- Each participating State may notify the Agency of increased financial contribution during the course of any period of five years of the execution of the programme.

# Rules - Management

- The Agency is responsible for the overall technical and financial management of the Programme.
- The Agency shall make **accessible the available facilities and services of the Agency** as required to perform the approved activities (ref. ESA/C(99)11, add.1).
- The **industrial contracts** for the development of selected PRODEX instruments or experiments shall be **awarded to the industry or other entities of the participating States** which fund the corresponding work.
- As a rule, **fifty per cent** of the overall external expenditure of PRODEX for each participating State will be **allocated to its own industry** over the period of the financial commitment (five years).
- The PRODEX programme shall be treated in the industrial return statistics of the Agency as a programme with a **guaranteed return of 1**.



# Rules - Ownership

- As a rule, the Agency, acting on behalf of the participating States, shall be the owner of the equipment produced under PRODEX for a period of 5 years after delivery.
- During that time however, the equipment funded by a participating State may be put at the disposal, free of charge, of the institute or university selected for their development upon request of that participating State.
- After the time period of five years, this institute or university shall become the owner of the said instrument or experiment.

# Participating States

- Switzerland (1986)
- Ireland (1987)
- Belgium (1988)
- Norway (1989)
- Austria (1991)
- Denmark (1994)
- Czech Republic (2008) [2000-2004]
- Greece (2008)

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# Financial Implementation - ESA

- Every 5 years, renewal of the Declaration with national subscriptions. Next round in 2009!
  - Letter from D/SRE to request PRODEX budget for renewal of 5 year period (2011-2015)
  - Response from Delegations to D/SRE
  - Summary presented by PRODEX Office in Participating States mtg Nov 09
  - Implementation in revised Declaration (Dec09)
- Budget confirmation yearly at PRODEX Participating States meeting
- Budget control per country within PRODEX Office
- Budget control per project within PRODEX Office

# Approval - National

- Country informs scientific community about PRODEX programme and how to apply.
- Every country defines internal selection procedure [e.g. for CH: PRODEX Programme Committee (PPK)]
  - o Timeline for submission
  - o Proposal format (timeframe, work description, deliverables, budget)
  - o Evaluation criteria and evaluation committee
  - o Decision process
- Approval letter to PRODEX Office for each approved project, specifying:
  - o Project title – PI – Institute
  - o Project duration
  - o Budget allocation

# Contractual Implementation - ESA

*If project relates to non-ESA Programme*

- As soon as a project is nationally defined for a **non-ESA mission (before formal approval)**, PRODEX Office shall be requested to start the internal endorsement procedure.
- With the above request, PRODEX Office needs to receive a draft proposal, clearly identifying activities, responsible institute, mission and justification that these activities do not jeopardize participations in the ongoing ESA programmes.
- PRODEX Office will internally start the procedure to seek formal scientific endorsement by relevant advisory structure
- Timeline for Advisory Structure meetings need to be accounted for in starting date of the project
- Start of the project is subject to positive endorsement of advisory structure

# Contractual Implementation - ESA

*If new Institute for the PRODEX Programme*

- Implementation of **Institute Agreement** [ESA – institute]

*If nominal project – Institute known to PRODEX*

- Implementation of **PRODEX Experiment Arrangement (PEA)** [ESA/PRODEX and scientific institute]
- Implementation of industrial contract [ESA/PRODEX – industry], identifying scientific entity of country
- Respecting budget allocation from Delegation
- Cooperation with Directorate “accommodating” experiment/payload

# Reporting - ESA

- Bilateral meetings with PRODEX Delegations, once or twice per year :
  - Reporting on the financial and technical status of each project
  - Reporting on the PRODEX financial summary of country
  - Exchange on new envisaged PRODEX projects
- Yearly PRODEX Participants meeting at the occasion of last SPC in the year
- Ad hoc meetings with PRODEX Delegations on request



# Technical Implementation - ESA

## Projects with industrial contracts through ESA

- Agreed management approach with responsible ESA project team (SRE – EOP – HSF)
- Standard management follow-up, including formal reviews
- Dedicated technical responsible of PRODEX Office interacts with counterpart in project team
- Support by D/TEC experts according to need

# Technical Implementation - ESA

## Projects with industrial contracts through Institute

- Needs approval from PRODEX with justified reasons
- Delegation will be informed accordingly
- Agreed management approach with responsible ESA project team (SRE – EOP – HSF)
- SOW and specification need ESA approval/endorsement
- Evaluation – selection – negotiation with ESA participation
- Reduced project management follow-up
- Technical responsible of PRODEX Office interacts with counterpart in project team
- Support by D/TEC experts according to need

# Technical Implementation - ESA

## Projects with no industrial contracts

- Agreed management approach with responsible ESA project team
- SOW, proposal to be submitted to PRODEX Office
- Dedicated management follow-up by PRODEX Office
- Technical responsible of PRODEX Office interacts with counterpart in project team
- Support by D/TEC experts according to need

# Technical Implementation - ESA

## Projects for non-ESA missions

In principle, all identical as before with the following exceptions:

- Institutes have full responsibility for specifications and interfaces towards platform
- Management follow-up by PRODEX Office to be defined case by case
- Very limited support by D/TEC experts since mission mainly unknown

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## D/SRE Programme Management Support Office – B. Weymiens

Budget & Programme Financial  
Management Service

*B. Weymiens, p.i.*

Information Systems,  
Comm. & Educ. Support  
Service

*S. Ansari*

Project Control & Risk Mgmt  
Service

*Z. El Hamel*

PRODEX Office

*H. Schroeven-Deceuninck*

## PRODEX Office – H. Schroeven-Deceuninck

Veronique Dowson

*Assistant Programme Controller*

Cristina Bramanti

*Experiment System Engineer*

Hilal Caglayan

*Administrative Support*

Sara Gidlund

*Experiment Coordinator*

## Administrative staff

### Mrs. V. Dowson

- Overall administrative responsible
- Streamlining administration process in all countries/institutes
- Implementation Institute Agreements and PEAs
- Budget control per project

### Ms. H. Caglayan

- Processing Institute Contracts
- Processing Invoices
- Processing Purchase Orders



## Technical/Scientific staff

Ms. C. Bramanti

Ms. S. Gidlund

- Procurement Process Industrial Contracts
- Industrial contract follow-up: technical, programmatic, contractual
- Institute follow-up: technical/scientific depending type of project
- Liaison with technical support and project offices as needed

# Head of Office

Hilde Schroeven-Deceuninck

- Focal point internally & externally
- Overall management PRODEX
- Reporting Delegations & D/SRE management
- Management D/TEC support
- Definition Project implementation
- Participation in Major PRODEX Project Reviews
- Technical Officer for some critical projects

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