PRODEX USER GUIDE

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Contents		
Section 1	Intro	luction
	1.1	General
	1.2	Participation
	1.3	Points of Contact 1.3.1 PRODEX Applications
	1.4	Finance 1.4.1 General 1.4.2 The Currency used
Section 2	The (Organisation
	2.1	General
	2.2	The PRODEX office within ESA
	2.3	Responsibility 2.3.1 Organisation and interactions 2.3.1.1 The Agency 2.3.1.2 The PRODEX office 2.3.1.3 Institutes and universities 2.3.1.4 Industry 2.3.1.5 National authorities

- Section 3 Contracts and Purchase Orders
 - 3.1 Contracts

- 3.1.1 Potential tenderers
- 3.1.2 Tender procedures
- 3.1.3 Approval Committees
- 3.1.4 Contract types
- 3.1.5 Contract procedures
- 3.1.6 The tender evaluation process
- 3.1.7 Changes in requirements and CCN's
- 3.2 Purchase Orders
 - 3.2.1 Property of purchased and produced goods
 - 3.2.2 Financial limits for Purchase Orders
 - 3.2.3 Types of Purchase Orders
 - 3.2.4 Placing a Purchase Order

3.3 Payment of invoices

- 3.3.1 Payment of local and national taxes
- 3.3.2 Electronic invoicing

Section 4 PRODEX Institute Agreements

- 4.1. General
 - 4.1.1 Preparation of the financial plan
 - 4.1.2 Reimbursement of institute expenditure
- Section 5 Life cycle of the Project or Experiment
 - 5.1 Announcement of Opportunity
 - 5.2 ESA selection
 - 5.3 PRODEX approval
 - 5.4 Stages of a project (Hardware)
 - 5.4.1 Phase A
 - 5.4.2 Phase B
 - 5.4.3 Phase C &D
 - 5.4.4 Phase E & F
 - 5.5 Data Analysis Phase

Section 6

- 6.1 Acronyms
- 6.2 Annexes

Annex 1 - PRODEX Interaction Principles Annex 2 - PRODEX Institute Agreement Annex 3 – Appendices to PRODEX Experiment Arrangement

Section 1 Introduction

1.1 General

With the entry into force of its Convention on 30th October 1980, the European Space Agency (ESA) acquired its legal existence. The Agency groups in a single body the complete range of European space activities, which had up until that time been conducted by ESRO (European Space Research Organisation) and ELDO (European Launcher Development Organisation) in their respective fields of satellite development and launcher construction.

The seventeen member states of ESA are today :

Austria Belgium Denmark Finland France Germany Greece Ireland Italy Luxembourg The Netherlands Norway Portugal Spain Sweden Switzerland United Kingdom

The Agency's purpose as described in its Convention, is to provide for and to promote, for exclusively peaceful purposes, cooperation among European States in space research and technology and their space applications, with a view to them being used for scientific purposes and for space application systems.

In June 1986, the ESA Council adopted a Resolution on the execution of the Scientific Experiment Development Programme (PRODEX), and subsequently, several Member States established the basic contract for the performance of this programme through a Declaration (ESA/C/LXXV/Dec. 1 (final)), and a set of Implementing Rules (see ESA/C(93)76).

The acronym PRODEX comes from the French PROgramme de DÉveloppement d'EXpériences scientifiques.

The main objectives of the programme are:

To improve the relations between scientific and industrial circles

To provide funding for the industrial development of scientific instruments or experiments proposed by institutes or universities.

Before a project can be financed and managed through the PRODEX programme, it must be selected by ESA for one of its programmes in the various fields of research (Space science, Life and material sciences, Earth Observation, etc) and obtain the approval from the particular PRODEX Member State in which the scientific and industrial will be performed.

PRODEX has been a very successful programme. Each year since its inception the number of projects has grown and in recent years an increasing number of these experiments have been completed and flown on space missions.

1.2 Participation.

The development of instruments and experiments funded under the PRODEX programme is strictly limited to work carried out by the institutes, universities and industry of the Member State or Cooperating State subscribing to the programme. To date six of the ESA Member States, plus a non-Member State, subscribe to the PRODEX programme. They are, in order of joining:

Switzerland	08 Oct 86
Ireland	31 Aug 87
Belgium	29 Jun 88
Norway	29 Jun 89
Austria	27 Jun 91
Denmark	23 Jun 94
Hungary	23 Jan 98
Czech Republic	13 June 2000

A Member or Cooperating State may join in the PRODEX programme after unanimous agreement of the other PRODEX Participating States. For a Cooperating State, this must also be followed by a unanimous agreement at Council's level.

1.3 Points of Contact

For the Agency, the Head of the PRODEX office is the point of contact with research institutions and industries involved in the developments that are eligible for PRODEX funding.

The Head of the PRODEX office is:

Mr Michel Lazerges, SRE-MR European Space Research and Technology Centre (ESTEC) P. O. Box 299 2200 AG NOORDWIJK The Netherlands Tel: +31 71 5654364 Fax : +31 71 565 4693 The PRODEX office at ESTEC consists of :

Michel Lazerges	Head of the PRODEX office	Tel : +31 71 565 4364
Véronique Dowson	Programme Controller	Tel : +31 71 565 3243
Yvonne Zandbergen	Administrative Assistant	Tel: + 31 71 565 3101
Cristina Bramanti	Experiment System Engineer	Tel : +31 71 565 8882
Sara Gidlund	Experiment Coordinator	Tel: +31 71 5655735

The PRODEX team is also reachable by electronic mail (e-mail) at the following addresses:

michel.lazerges@esa.int
veronique.dowson@esa.int
yvonne.zandbergen@esa.int
cristina.bramanti@esa.int
sara.gidlund@esa.int

The PRODEX office fax number is: +31 71 565 4693

In each participating State a point of contact has been established by the delegations to act as the coordinator of activities within that country:

Belgium:	Mr P. Coquay Federal Science Policy Office Avenue Louise 231 Louizalaan 1050 Brussels Belgium Tel +32 2 238 35 86 e-mail: pierre.coquay@belspo.be	Fax +32 2 230 59 12
Switzerland:	Mr O. Botta Swiss Space Office (SSO) Hallwylstrasse 4 3003 Berne Switzerland Tel. +41 31 322 99 67 Oliver.botta@sbf.admin.ch	Fax +41 322 78 54
Ireland:	Dr. Bryan Rodgers International Technology Programme Enterprise Ireland 4500 Atlantic Avenue Westpark, Shannon Co. Clare Ireland Tel +353 61 777003 e-mail: bryan.rodgers@enterprise-ire	Fax +353 87 7521550

Norway:	Mr Bo Andersen Norwegian Space Centre (NSC) P.O. Box 113 Skoeyen 0131 Oslo Norway. Tel + 47 22 51 18 00 e-mail: bo.andersen@spacecentre.nc	Fax + 47 22 51 18 01
Austria:	Mr. A. Peter Austrian Research Promotion Agence Sensengasse 1 1090 Vienna AUSTRIA Tel +43 5 77 55-0 e-mail: andre.peter@ffg.at	Fax +43 5 77 55 97900
Denmark: 1.3.1 PRODEX App	Mrs. Cecilie Tornøe Danish Agency of Science, Technolo 40 Bredgade 1260 Kobenhaven K. Denmark Tel +45 7231 8284 e-mail: ct@fi.dk plications	ogy and Innovation Fax 45 3544 6201

Each participating country has developed its own method of application for PRODEX funding and approval. A PRODEX application form can be obtained from the national points of contact (see Section 1.3).

1.4 Finance

1.4.1 General

ESA is financed by the Member States which contribute to the budgets for its mandatory activities on the basis of their average national income calculated over the past three years.

Additionally, many of the Agency's major programmes are optional and Member States contribute to these to the extent that they are interested. PRODEX is one of the optional programmes of the Agency.

Each participating States must commit themselves to the PRODEX programme for a 5 year period, by providing an annual budget to fund existing projects or a budget to be used for new activities, upon selection, together with a budget indication for the next 4 year period.

1.4.2 The currency used

The EURO (EUR) is at present used for all budget and accounting purposes, inclusive for non-EURO countries.

Section 2 The Organisation

2.1 General

For administrative purposes, the PRODEX programme is presently under the Science Directorate, however the activities managed and financed through PRODEX may form part of any other Directorates activities. The PRODEX programme currently has projects, instrument developments and experiments in the following areas:

Space Science Earth Observation Life & Material Sciences

2.2 The PRODEX office within ESA

To provide the necessary support to the programme the Agency has set up in 1989 a small PRODEX office in The Netherlands on the ESA - ESTEC site. The PRODEX office handles the day to day management and monitoring of the programme.

The PRODEX office interfaces the other departments and divisions of ESA, to provide services which include, placement of contracts and purchase orders, administration and control of the annual budget, payment of suppliers invoices, specialist support, use of consultants, technical and financial management of the experiment or instrument development, etc.

2.3 Responsibility

The overall functioning of the programme has been achieved by clearly defining the roles and responsibilities of all parties involved.

2.3.1 Organization and interactions

The interactions between the PRODEX office, industry and the research institutes are shown in Annex 1 under the form of a simplified scheme.

2.3.1.1 The Agency.

The Agency is responsible for:

- Evaluating and selecting according to its rules and procedures, the instruments or experiments proposed by the institutes and universities and to inform in due time the participating states of those proposals selected within their territory.
- Collecting the contributions of each member state and managing the budget.
- Determining the total projected instrument or experiment cost and ensuring that the money is spent within the territory of the relevant participating state.
- Providing support to the PRODEX programme.
- Reporting the status of the PRODEX programme to Council and other deliberating organizations.

2.3.1.2 The PRODEX office

The PRODEX office's main responsibility is to:

- Coordinate and monitor the activities between the scientists and industry, as well as to ensure that the activities are carried out according to the Agency's rules and procedures.

During the development of an experiment or instrument, a close working relationship is formed between industry and the institutes/universities. Once contracts have been placed, the role of the PRODEX office is focused on settlement of conflicts, major reviews, change requests to the specification and various acceptance meetings.

2.3.1.3 Institutes and Universities

The selected Principal Investigator (PI) and Co-Investigators (CoI) for an approved experiment or instrument, are responsible for:

- Defining the objectives and specifications of the approved experiment or instrument and drafting the corresponding statement of work (SOW).
- Delivering the said experiment or instrument to the Agency.

The PI or CoI may name a person responsible under his supervision, for the day to day activities.

When necessary and if requested by the PI or CoI, the PRODEX office may secure the services of an independent development manager to assist with the experiment or instrument development; such services however request the approval of the participating State concerned and are financed out of the total approved project budget.

2.3.1.4 Industry

The development of both hardware and software under the PRODEX programme is normally carried out through competitive tenders restricted to the industries of the participating State, in which the experiment or instrument will be developed. The successful industrial contractor is responsible for the work and activities defined in the contract.

2.3.1.5 National authorities

The national authorities are responsible for the approval of the PRODEX projects.

Section 3 Contracts and Purchase Orders

The Agency is responsible for the PRODEX financial budget and accountable to the member states for all programme expenditure. As with all other optional and mandatory programmes within the Agency, payments for equipment or services can only be made if a prior commitment for the payment has been made by the Agency. At present two mechanisms exist for making such a commitment: the Contract or Purchase Order.

3.1 Contracts

A Contract is defined by ESA as:

"An agreement, the subject of which is the delivery of supplies or services to or for the Agency, including any amendment to it".

The Agency cannot place a contract unless sufficient budget in terms of Contract Authority has been guaranteed by the member state.

The Agency is responsible for the placement of all PRODEX related hardware and software contracts. The contracts division at ESTEC follows standard Agency procedures for the placement of tenders, negotiation meetings and the subsequent contracts. (see also the brochure "How to do business with ESA" [ESA BR68])

In recent years, the late selection of experiments by the Agency has resulted in relatively short development periods. Exceptionally, under these circumstances, when it is not possible to finalize a contract quickly, the Agency may issue either a letter of intent or a Preliminary Authorization To Proceed (PATP), in order to start the tasks. Although some objectives are set up by the Agency in a letter of intent, actual payments to suppliers can only be made after signature of both parties for either a Contract or a PATP.

3.1.1 Potential Tenderers

The Agency maintains a "bidders list" of all approved potential tenderers. Tenders are limited to those. To be included on this list, a company, institution or organisation must submit information on their legal, financial and professional status.

PRODEX Invitations To Tender are further restricted to the tenderers of the state that provides the funding for the project. They can be extended to organisations in other member and non-member states, but then only with the prior approval from funding participating State.

3.1.2 Tender Procedures

Direct negotiation remains exceptional and is in principle restricted to cases where only one source exists to carry out the work. This process requests prior approval of the national Delegation concerned.

For a small contract, to limit technical and administrative efforts, the PRODEX programme may sometimes accept an "Unsolicited Proposal" from just one industry. After the subsequent evaluation and negotiation of the offer, a contract may be awarded, subject to approval by the Heads of Contracts and Finance Departments.

3.1.3 Approval Committees

For large value contracts, formal approval in the form of an ESA procurement or contract proposal is required from either the Adjudication Committee (AC) or the Industrial Policy Committee (IPC). Both the AC and IPC, hold regular meetings throughout the year. Providing all issues are agreed in advance with the IPC representatives of that country, approval is usually a formality. The PRODEX office will prepare all procurement or contract proposals and advise the projects or experiments on their status.

3.1.4 Contract Types

The type of contract is chosen according to the activities that are to be carried out. The common types available are:

-Fixed Price contracts, including:
-Firm Fixed price contracts (FFP),
-Fixed Price with price variation contracts, and
-Fixed Unit Price contract.

-Ceiling Price contracts to be converted into fixed price contracts, and

-Cost Reimbursement contracts (CR).

The various types of contracts are described in the "General clauses and conditions for ESA contracts", available from the Contracts Department of the Agency.

Normally the Agency places FFP contracts.

3.1.5 Contract Procedures

The basis of any PRODEX contract is the Statement of Work (SOW) which takes into consideration the requirements of the:

- Agency
- PRODEX office
- Principal Investigator and or Co-Investigator or their representative
- ESA project team

The PI or CoI is responsible for the draft version of the SOW, the PRODEX office will advise on the correct format of the document.

If it is necessary to seek approval of either the AC or IPC, prior to issuing an Invitation to Tender (ITT) or a Request For Quotation (RFQ), the SOW must be reviewed and approved by a Tender Evaluation Board (TEB). In general, a TEB is required in all cases of competitive tender actions and in direct negotiation cases that require IPC approval.

3.1.6 The Tender Evaluation Process

The tender evaluation process is designed to:

Assess the relative quality of the tenders received in order to select the most suitable contractor.

Identify the strong and weak points in the technical and programmatic solutions proposed for the purposes of negotiating with the selected contractor.

The Agency's tender evaluation rules and procedures apply to all competitive tender action's for which a procurement proposal has been submitted to the IPC. For competitive tenders not requiring IPC approval and for non-competitive tenders a simplified procedure may be followed.

The rules and procedures are defined in the document ESA DA/CTR-RP1 available from the ESA Contracts Department.

Prior to the evaluation of any offers and tenders, the PRODEX office and the contracts officer agree on the evaluation criteria to be used for each tender submission. Once approved, the evaluation criteria are binding.

Evaluation criteria can include for example:

- Understanding of and compliance with the requirements
- Quality and suitability of the proposed programme of work
- Company background and experience
- Management planning and costing
- Compliance with tender conditions.

Each criteria is given a weighting factor. Although the evaluation criteria are known to all members of the TEB, the weighting factors are not disclosed to the other TEB members until marking has been completed. The overall price is not an evaluation criteria, but the final assessment is based on the best combination of technical quality and price.

The members of the TEB are ESA staff qualified in technical and administrative disciplines. The TEB is chaired by the PRODEX office and consists of representatives from:

- the PRODEX office
- ESA technical specialists
- the ESA project team
- the Contracts department.

The TEB is normally limited to a maximum of 7 members. Representatives from the institute/university or other outside bodies are invited to attend TEB meetings as non-voting experts.

The TEB will review and evaluate any acceptable tenders submitted by Industry. All participants in a TEB, including the non-voting experts are required to sign a declaration of secrecy and non-commercial interest.

Following clarification of an offer and subsequent negotiation meeting(s) with a tenderer, a contract may be placed subject to the approval of the Head of contracts and budget officer. This entire process may take several months and the planning of activities should take this into account. If direct negotiation is approved it may be possible to start the activities during the RFQ period with a PATP. But, as a general principle, activities can never be officially authorized prior to submission of an acceptable proposal.

3.1.7 Changes in Requirements and Contract Change Notices

Once a contract has been placed, changes are to be avoided since they usually lead to a claim for either a price increase or a delay in the schedule. In any case, changes of the technical specification, of the requirements or of the delivery dates must be agreed through a formal Contract Change Notice (CCN). It is normal for the PI or CoI to initially discuss any technical changes directly with the supplier. Yet, ESA accepts no financial liability unless a CCN has been submitted by industry or by ESA's Contract Department and approved by all parties.

When a large number of technical changes are expected, to avoid raising many

CCN's, the PRODEX office uses a change request form. Change requests are initiated by the Institute and circulated to the supplier to assess any impact upon the price and schedule and then to the Agency for provisional approval or rejection. When a number of these change requests are provisionally approved, they can then be combined into one single CCN.

Unless specifically excluded, "Clause 28" to a contract sets a penalty charge for any late deliveries. Penalty charges are deducted automatically from payments.

3.2 Purchase Orders

The Contract procedure is complex and often time consuming, particularly for the purchasing of low cost equipment or services, in these cases a Purchase Order is often more appropriate, simpler and quicker.

Although ESA Purchase Orders are contractual in nature, the method by which they are processed is subjected to less stringent rules than the contractual procedure.

3.2.1 Property of purchased and produced goods

All hardware and software purchased through and paid for by the PRODEX programme remains the property of the Agency for a period of five years after delivery of the supply. Afterwards the ownership is automatically transferred to the institute or university.

All equipment and assets produced under the PRODEX programme shall remain the property of the Agency for a period of 5 years after delivery, under the terms provided for in Article 7 of the PRODEX Implementing Rules (ESA/C(93)76).

During the initial five year period, the assets are made available to the university or institute free of charge under their responsibility. The cost of any repairs to the equipment shall be borne by the party causing the damage, even if liability for such damage rests with another party.

3.2.2 Financial limits for purchase orders

Single purchase orders are limited to a maximum value of 49'999 €.

Order requests relating to development work or studies for more than 50'000 €, must be submitted to the Head of Contracts Department who decides whether a purchase order is more appropriate than a contract to handle the type of purchases requested.

3.2.3 Types of purchase orders

Purchase orders may be used for:

-Supplies or goods, including software licences, made up of standard items available on the market at known prices;

-Services which can be defined in general terms and which are available at standard market rates, and for the provision of on-site services, including minor construction work;

-Purchases relating to development work or studies of modest scope within set financial limits.

3.2.4 Placing a purchase order

The PRODEX office, with the assistance of the Agency's Purchasing office can recommend types of equipment or suppliers, but experience has shown that the PI or CoI usually favour a particular product. Therefore it is more usual that they negotiate directly with suppliers for the goods or services. However, to ensure a high geographical return a national supplier or agent should always be chosen. If the service or goods cannot be procured nationally, purchases may exceptionally be placed in another country with the approval of the relevant delegation.

While negotiating with the supplier, the following should be considered:

Prices and discounts Hourly rates (where applicable) Terms of delivery Transport and packaging arrangements Payment conditions Conditions relating to returns and replacements After sale services and maintenance.

"The cheapest price is not necessarily the best deal."

Once a supplier has been chosen and a firm quotation received, all paperwork should be sent to the PRODEX office for processing.

Quotations should be made in EURO. Any currency exchange charges, for non-EURO countries, will be deducted from the overall project budget.

To avoid any confusion, it is useful to explain to the supplier that the actual purchase order will be prepared and sent by the Agency within a few weeks. Invoices must be sent to the ESTEC Payments office. Equipment will be delivered directly to the purchaser.

Disputes arising after delivery should be negotiated directly between the purchaser and the supplier. If this fails, the Agency may be able to assist through its Legal and Contracts affairs office. Invoices can only be paid against a valid Agency purchase order or contract.

3.3.1 Payment of Local and National taxes

The Agency has a special agreement with each of the member states and is exempt from the payment of local and national taxes (VAT) for supplies, equipment and services. All invoices are settled in full (including any taxes), 30 days after they have been registered by the Agency. Taxes are reclaimed from the respective governments annually. The sums recovered are again available to the project.

For the purchase of low cost items, consumables, etc., the effort required in paperwork would not justify to apply the procedure mentioned above. In such circumstances, a limit of liability Purchase Order will be placed directly with the institute or university, allowing them to procure miscellaneous materials or services connected to the project. The institute or university is responsible for the payment of invoices and reimbursed at a later date by the Agency. The Agency will reimburse the purchaser on the basis of the actual expenditures, including taxes, charging the total cost to the project budget.

3.3.2 Electronic Invoicing

Paper invoices are no more accepted by the Agency. It has now become mandatory to use the ESA INVOICING SYSTEM (esa-p) for submitting invoices. The obvious benefits of instant communication have been linked to other improvements, e.g. Automatic transfer between systems by using standard formats, the elimination of queries by installing validation checks at point of entry; the use of electronic signatures for internal approval and the visibility to the originator about what has happened to their invoice.

Section 4 PRODEX Institute Agreement.

4.1 General

The PRODEX Institute Agreement provides a formal and binding relationship between ESA and the research institute involved in the project. The Agreement is signed by the Director General of the Agency, the Head of the institute or university and the PI or CoI.

The Institute Agreement, as defined in Annex 2, is used in the preparation and placement of any financial commitments made by the Agency towards the university or institute.

4.1.1 Preparation of the financial plan

The institute or university is required to submit a financial plan for the implementation of the project and to update this plan annually. Three major elements make up the overall budget and need to be identified in the financial plan.

I) To be bought

This includes the purchase from outside suppliers of dedicated items and equipment, necessary to carry out the project.

II) To be developed by the institute

This includes development work to be carried out at the institute. This may include hardware and/or software to run the experiment and to calibrate data obtained during flight.

III) To be developed by industry

This covers the contracts to be placed with industry to deliver flight hardware, software or technical support.

The overall financial plan should include a payment schedule for each calendar year. Actual expenditure and cost to completion is reviewed annually and the financial plan adjusted accordingly. Past expenditures should reflect the actual payment situation and should be verified annually against the records of the PRODEX office.

Separate financial plans are required for the institute activities and for purchases. The latter should give a breakdown of the major items of equipment to be bought. The former one should estimate the costs associated with the following:

Salaries Functioning costs Travels Miscellaneous equipment Consumable Any specific institute overheads.

If necessary, PRODEX budgets are automatically updated each year to take inflation into consideration. Therefore, financial plans must be established in economic conditions of the current year (without adjustment for inflation).

An example of a financial plan matrix layout that has proved to be suitable is given in Annex 3.

4.1.2 Reimbursement of institute expenditure

The reimbursement of institute or university expenditure, associated with a PRODEX project, can only be made if prior commitment to reimburse the costs has been made. One method of expenditure reimbursement that has proven to be flexible and convenient has been the placement of a Limit of Liability agreement through a PRODEX Arrangement for services, travel and miscellaneous expenses (see section 3.3.1). The Limit of Liability agreement is based upon:

- Signed Institute Agreement
- An approved financial plan
- Description and objectives of the project
- List of tasks to be carried out by the institute or university.

Upon completion of the project the financial plan shall be finalized and all expenditure verified with the PRODEX office records.

Section 5 Life cycle of the project or experiment

5.1 Announcement of opportunity

The start of a project or experiment begins with the ESA announcement of opportunity or, exceptionally, with the submission of an unsolicited proposal. Periodically ESA calls upon the European science community to respond with ideas, or for a willingness to participate in future space developments and space related activities.

During the pre-submission period, conferences and seminars are held to answer questions and explain the objectives behind the opportunity

5.2 ESA Selection

The responses to each Announcement of Opportunity are peer reviewed to assess the benefits, viability and merits of each submission. The relevant Programme Boards or Committees select the best and most promising ones, provided they can guarantee the necessary funding for the entire project. Sources of funding vary from country to country.

Unsolicited proposals are reviewed by the Advisory Committee of the relevant Directorate, and approved by the Programme Board or Committee in charge. The project must be of interest for ESA and the necessary funding granted.

5.3 PRODEX approval

Selected projects from PRODEX Participating States can apply for PRODEX funding at their national delegation.

A PRODEX application form can be obtained from the national points of contact (see section 1.3).

A project financed by PRODEX is divided into various logical stages, called Phases, like any other project of the Agency. Each phase is designed to end with a major milestone in the development, such as proof of concept, equipment delivery, launch, etc.

Typically the phases are: Phase A, B, C, D, E & F. For convenience the Agency sometimes refers to a combined phase such as Phase C/D, where the activities are logically linked together.

5.4.1 Phase A

Phase A is a relatively low cost paper exercise, designed to expand the basic idea and confirm that the project is feasible.

During Phase A, the PI shall define the overall experiment plan. CoIs may be necessary to avoid experiment duplication, share the work loads, or be responsible for the development of sub-systems, algorithm's, data interpretation packages etc.

CoIs are normally responsible for financing their own activities and may apply for funding through the PRODEX programme, in case their member state is a PRODEX participant.

5.4.2 Phase B

The main purpose of Phase B is to convert the conceptual idea into a prototype model upon which further investigations can be performed to confirm the feasibility of the concept, before going to the expense of building space qualified hardware. The initial prototype models sometimes referred to as Engineering Models (EM), can use non-space qualified materials or procedures. They are not constrained by either weight or size restrictions, but they should prove the functionality of any special components or materials that would eventually be incorporated into a flight model. Following testing and acceptance of the hardware or software, the project is ready to move onto the next phase.

5.4.3 Phase C & D

Phases C and D are usually combined. The purpose of Phase C & D is to convert the outcome of Phase B into a fully space qualified model that would be suitable for either space activities on board the actual flight or as ground equipment or software to control a particular activity.

5.4.4 Phases E& F

Phases E & F are associated with the launch campaign and the post launch activities.

5.5 Data Analysis Phase

The ultimate stage of a project is the analysis of the data to reach a scientific conclusion. Analysis of data may take place at any stage of the experiment, prior to flight, in-flight and post flight.

Section 6

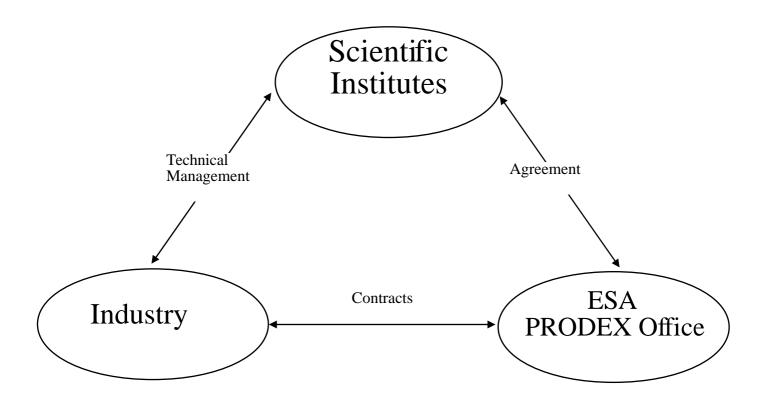
6.1 Acronyms

PRODEX	PROgramme de DÉveloppement d'EXpériences scientifiques
EURO	European Currency Unit
ELDO	European Launcher Development Organisation
ESA	European Space Agency
ESRO	European Space Research Organisation
ESTEC	European Space Research and Technology Centre
EFIS	ESA Finance Invoicing System
E-mail	Electronic Mail
PATP	Preliminary Authorization to Proceed
RFQ	Request for Quotation
ITT	Invitation To Tender
TEB	Tender Evaluation Board
IPC	Industrial Policy Committee
AC	Adjudication Committee
FFP	Firm Fixed Price
CR	Cost Reimbursement

6.2 Annexes

Annex 1 - PRODEX Interaction Principles Annex 2 - PRODEX Institute Agreement Annex 3 – Appendices to PRODEX Experiment Arrangement Annex 1

PRODEX Interaction Principles



Annex 2

PRODEX INSTITUTE AGREEMENT

- 1. The Institute shall define the objectives and content of the projects to be developed, shall manage its execution and shall name a person in charge.
- 2. The Institute shall be responsible for the delivery of the scientific instrument or experiment to the Agency.
- 3. The Institute shall prepare a financial plan for the project. The plan shall contain expenditure estimates in the following categories: Contracts with Industry, Purchase of Equipment and Miscellaneous. Major expenditures should be itemised whenever possible.

If associated activities as defined in the footnote of article 2 of the PRODEX Implementing Rules ESA/C(93)76 are included, they should be itemised and identified separately in the financial plan.

Subject to the approval of the project as a whole or of part of it by the relevant Delegation, the PRODEX application form shall be forwarded to the Agency not later than two months before the start of the project activities to be financed under PRODEX.

4. For budgetary purposes an update of the financial plan shall be prepared each year.

The Agency will pay on sight against receipt of a request for payment, which corresponds, to the financial plan approved for the specific PRODEX project. The Institute will be responsible for ensuring that the amount claimed has been properly incurred on the project.

- 5. Industrial contracts necessary for the development of the instrument or experiment shall be concluded and managed by the Agency in cooperation with the Institute. The following shall apply:
 - a. Specifications and statements of work governing such contracts shall be prepared and, if necessary, updated by the Institute and agreed by the Agency.
 - b. Industrial contracts shall be concluded and managed in accordance with the provisions of the Implementing Rules of the PRODEX Programme.
 - c. The Agency's General Clauses and Conditions shall apply to such contracts.
 - d. The industrial contract shall be managed under the Agency's PRODEX Programme Office. When necessary, the Agency shall secure the services of an independent development manager. Such contracts shall be funded from the PRODEX budget.
 - e. The PRODEX Programme Office shall invite the Institute to participate in the evaluation of the industrial proposals, progress meetings, and reviews with the industrial contractors, except in cases the Institute is directly involved in the industrial activities.
 - f. Where goods or services delivered under contract are deemed to be acceptable by the PRODEX Programme Office, in accordance with the terms of the relevant contract, the Institute will be invited to agree to their acceptance. This being the case the Agency shall accept the goods or services concerned.

- 6. The assets produced under PRODEX projects shall be the property of the Agency under the terms provided for in Article 7 of the PRODEX Implementing Rules (ESA/C(93)76).
- 7. Damage of any kind caused to personnel of the Agency or the Institute or to personnel appointed by them, participating in activities relating to implementation of the present Agreement, shall be borne by the party employing the victim. Each party shall guarantee the other party against any legal claims brought by the victim, or the latter's heirs or social security scheme. These provisions shall apply even if liability for the damage rests with the other party, except in respect of gross negligence or a wilful act or omission by that party.

In the event of damage of any kind being caused to equipment or the facilities, the cost of repairing such equipment or facilities shall be borne by the party suffering the damage, even if the liability for such damage rests with the other party, except in respect of gross negligence of a wilful act or omission by that party.

- 8. Any difficulty or dispute arising out of the implementation of the terms of the present Arrangement shall be submitted to the Agency's Director General and to the representative of the participating State concerned in the ESA Council who shall endeavour to settle it jointly. Failing such a settlement, the matter shall be settled in accordance with Article XVII of the ESA Convention.
- 9. All correspondence (e.g. financial plans, requests for payment, general matters, etc.) concerning the implementation of this Arrangement shall be addressed to the PRODEX programme manager with copies to the Delegation.
- 10. The parties involved shall settle any modification to this Agreement in writing.

- 11. The present Agreement shall enter into force on the date of its signature by both parties and shall be in force for the duration of the period covered in the financial plan subject to the signature by both parties.
- 12. However the absence of project activities within 6 months after entering into force under the terms provided for in Article 11 invalidates the present Agreement

Date:

Date:

The Rector / The Director of the Institute The Principal Investigator

Date:

Jean-Jacques DORDAIN ESA Director General

Annex 3- Appendices to PRODEX Experiment Arrangement

PRODEX Experiment Arrangement

Guideline for the preparation of its Appendices 1 (Work Description) and 2 (Financial Plan)

Part I: The Work Description. Appendix 1

1) Work Description:

The Work Description is to identify the Project, i.e. the work in execution of which reimbursable cost will be incurred by the Institute during the term of the Implementation Contract.

Length: One page should be sufficient but it should not be regarded as a firm limit.

2) Distinctions as to 'who' and 'when':

The work to be carried out by the Institute and to be paid for by ESA under the Implementation Contract (the Project) is to be clearly separated from the work to be carried out by others e.g. industry (if the latter is mentioned at all).

Project activities to be carried out during the term specified in the Implementation Contract must be clearly separated from work outside said term (if the latter is mentioned at all).

3) Compatibility with other Applicable Documents:

Subject to 1)- 2) above the Work Description must correspond to the work description submitted to the relevant national authority in support of the Financial Plan, and be covered by the Institute Agreement.

Part II: The Financial Plan. Appendix 2 (see table 1)

1) Content

The Financial Plan's minimum content will encompass:

- a) Title of the Project and identification of the Institute
- b) Cost categories such as:
 - Salaries and names of employees
 - Travel
 - Miscellaneous
 - Overheads
 - Equipment ≤ 5000 Euro
 - etc..
- c) Amounts.
- d) Time periods

[Ideally this Appendix will be a copy of the document which was approved by the Delegation.]

2) Equipment > 5000 Euro.

This category should not be integrated in the Financial Plan below (table 1), but listed under equipment to be purchased via PRODEX (table 2), since the equipment can be purchased via the PRODEX Office by Purchase Order, hence saving the VAT cost for the Institute. (See table 2)

Work Description

<u>Appendix 1</u>

Overall Objective (mission):

Role of the Institute (Principal / Co-Investigator for ...):

Project term (to be) covered by the Implementation Contract:

Brief description of Main Tasks:

Project output at the end of the term specified in the Implementation Contract in terms of :

- hardware:

- software:

- documents:

Major Milestones (if any):

Appendix 2

FINANCIAL PLAN PROJECT NAME - INSTITUTE

Starting date: dd/mm/y Ending date: dd/mm/y

	YEAR 1	YEAR 2
INSTITUTE COSTS:		
Salaries -please indicate		
employee(s) name(s)		
Travel		
Overheads		
Small Equipment (<5000 €)		
Etc		
SUBTOTAL		
TOTAL{subtotal Year1 +Year2 etc.)		

TOTAL (subtotal Year1 + Year2 etc.) TABLE 1: Financial Plan

Equipment to be Purchase via PRODEX: $> 5000 \in$

- Item 1	price
- Item 2	price
- Etc	
TOTAL	

TABLE 2: Equipment