

## **EUCLID INSTRUMENT DEVELOPMENT PLAN TEMPLATE:**

### **1. INTRODUCTION**

The objective of the instruments development plan is to define the approach, methods, procedures, resources and organization to co-ordinate and manage all technical activities necessary to specify, design, verify, operate and maintain the Euclid instruments in conformance with the Euclid Science Requirement Document and Euclid Experiment Interface Document – Part A.

### **2. APPLICABLE AND REFERENCE DOCUMENTS**

### **3. EUCLID INSTRUMENTS OVERVIEW**

- 3.1 Instruments Objectives, Definition and Constraints
- 3.2 Project phases, review and detailed planning (schedule)
- 3.3 Development approach
- 3.4 Critical issues

### **4. SYSTEM ENGINEERING APPROACH**

- 4.1 System engineering input
  - 4.1.1 Documents
  - 4.1.2 Furnished equipment, hardware and software
  - 4.1.3 Means and Facilities
- 4.2 System engineering output
  - 4.2.1 System engineering approach
  - 4.2.2 System design activities, output and deliverables
  - 4.2.3 Engineering activities
  - 4.2.4 Model Philosophy
  - 4.2.5 Margin Policy
- 4.3 System engineering team responsibilities and organization
  - 4.3.1 Overview of Consortium organization
  - 4.3.2 Instrument engineering organization
  - 4.3.3 Key engineering role and responsibilities
  - 4.3.4 Cooperative work organization
- 4.4 System engineering interfaces

### **5. IMPLEMENTATION PLANS**

- 5.1 Procurement Plan
- 5.2 Assembly, Integration, Verification and Calibration Plan
- 5.3 Technology Development Plan
- 5.4 Software Development Plan
- 5.5 Risk management plan

## **EUCLID INSTRUMENT MANAGEMENT PLAN TEMPLATE:**

1. INTRODUCTION
2. APPLICABLE AND REFERENCE DOCUMENT
3. OBJECTIVE AND CONSTRAINTS OF THE CONSORTIUM ACTIVITIES
4. CONSORTIUM ORGANIZATION
  - 2.1 Consortium Organization Structure
  - 2.2 Key personal, responsible officers and interface
  - 2.2 Communication, Meeting and Reporting
  - 2.3 Reviews
5. CONSORTIUM ACTIVITIES BREAKDOWN STRUCTURE
  - 5.1. Product Tree (PT)
  - 5.2. Work Breakdown Structure (WBS)
  - 5.3. Work Package Description (WPD)
  - 5.3. Consortium Organization Breakdown Structure (OBS)
6. CONFIGURATION, INFORMATION AND DOCUMENTATION MANAGEMENT
  - 6.1. Configuration Management
  - 6.2. Information Documentation Management
7. COST AND SCHEDULE MANAGEMENT
  - 7.1. Schedule control technique
  - 7.2. Schedule reporting
  - 7.3. Cost estimating, planning and control
8. RISK MANAGEMENT

## **EUCLID PRODUCT ASSURANCE PLAN TEMPLATE:**

### **1. INTRODUCTION**

Introduce the purpose, objective and the reason prompting its preparation.

Note: For example: programme or project reference and phase.

### **2. APPLICABLE AND REFERENCE DOCUMENTS**

List the applicable and reference documents in support of the generation of the document.

### **3. PRODUCT ASSURANCE MANAGEMENT**

#### **3.1 Product Assurance Planning**

Describe the organization (including responsibilities and authorities), the activities, processes and procedures to be applied by the supplier to fulfil the applicable product assurance planning requirements defined in clause 5.1 of ECSS-Q-ST-10C.

#### **3.2 Product Assurance Implementation**

Describe the activities, processes and procedures to be applied by the supplier to fulfil the applicable product assurance implementation requirements defined in clause 5.2 of ECSS-Q-ST-10C.

### **4. QUALITY ASSURANCE**

Describe the activities, processes and procedures to be applied by the supplier to fulfil the applicable quality assurance requirements.

### **5. DEPENDABILITY**

Describe the activities, processes and procedures to be applied by the supplier to fulfil the applicable dependability requirements.

### **6. SAFETY**

Describe the activities, processes and procedures to be applied by the supplier to fulfil the applicable safety requirements.

### **7. EEE COMPONENTS**

Describe the activities, processes and procedures to be applied by the supplier to fulfil the applicable EEE Component requirements.

### **8. MATERIALS AND PROCESSES**

Describe the activities, processes and procedures to be applied by the supplier to fulfil the applicable Material and Processes requirements.

## 9. SOFTWARE PRODUCT ASSURANCE

Describe the activities, processes and procedures to be applied by the supplier to fulfil the applicable Software product assurance requirements.

## 10. OTHER PRODUCT ASSURANCE REQUIREMENTS

Describe the activities, processes and procedures to be applied by the supplier to fulfil all other applicable Product Assurance requirements not covered in the clause A.2.1<3> to clause A.2.1<9> (e.g. Off-The-Shelf, Customer Furnished equipment).

Note: The order of the sections is not mandatory.

## **EUCLID MISSION CONSORTIUM FINANCIAL PLAN TEMPLATE:**

1. INTRODUCTION
2. APPLICABLE AND REFERENCE DOCUMENTS
3. COST BREAKDOWN

The Financial Plan shall contain the breakdown of the full consortium costs for each participating country as well as for the total development, as a function of the development cycle. In particular, the cost for the Definition phase shall be made explicit.

- 3.1. Instruments
  - 3.1.1. Instruments development
  - 3.1.2. Instruments integration, tests and ground calibration
  - 3.1.3. Support to instruments operations
- 3.2. Science Ground Segment
  - 3.2.1. Contribution to Science Operations (e.g. in-flight calibration)
  - 3.2.2. Data processing and science analysis
- 3.3. Cost summary

## 4. QUALIFICATION AND EXPERIENCE

Provide a brief description of the qualification and experience of the Consortium managers.

## 5. CONTACT DETAILS

Provide the contact details of the Consortium managers.

## 6. LETTERS OF ENDORSEMENT

Attach the signed Letters of Endorsement from the relevant national funding agencies, indicating the financial and manpower commitment for the Definition phase and the agreements for the full mission contribution.

## ANNEX

Provide filled in cost template

	2011	2012	2013	2014	2015	2016	2017	2018	2019	Resource Sub Total	TOTAL	TOTAL with contingency	Comment
<b>National Management</b>	0	0	0	0	0	0	0	0	0		0	0	To include ECoPI, National PM
Workpackage#1													
Resource#1	0	0	0	0	0	0	0	0	0	0			
Resource#2	0	0	0	0	0	0	0	0	0	0			
Resource#n	0	0	0	0	0	0	0	0	0	0			
Workpackage#n													
Resource#1	0	0	0	0	0	0	0	0	0	0			
Resource#2	0	0	0	0	0	0	0	0	0	0			
Resource#n	0	0	0	0	0	0	0	0	0	0			
<b>Science Team</b>	0	0	0	0	0	0	0	0	0		0	0	To include CoPI, scientist
Workpackage#1													
Resource#1	0	0	0	0	0	0	0	0	0	0			
Resource#2	0	0	0	0	0	0	0	0	0	0			
Resource#n	0	0	0	0	0	0	0	0	0	0			
Workpackage#n													
Resource#1	0	0	0	0	0	0	0	0	0	0			
Resource#2	0	0	0	0	0	0	0	0	0	0			
Resource#n	0	0	0	0	0	0	0	0	0	0			
<b>Institute Management</b>	0	0	0	0	0	0	0	0	0		0	0	To include Project management, Project control, configuration control, project secretary
Workpackage#1													
Resource#1	0	0	0	0	0	0	0	0	0	0			
Resource#2	0	0	0	0	0	0	0	0	0	0			
Resource#n	0	0	0	0	0	0	0	0	0	0			
Workpackage#n													
Resource#1	0	0	0	0	0	0	0	0	0	0			
Resource#2	0	0	0	0	0	0	0	0	0	0			
Resource#n	0	0	0	0	0	0	0	0	0	0			
<b>Product Assurance</b>	0	0	0	0	0	0	0	0	0		0	0	
Workpackage#1													
Resource#1	0	0	0	0	0	0	0	0	0	0			
Resource#2	0	0	0	0	0	0	0	0	0	0			
Resource#n	0	0	0	0	0	0	0	0	0	0			
Workpackage#n													
Resource#1	0	0	0	0	0	0	0	0	0	0			
Resource#2	0	0	0	0	0	0	0	0	0	0			
Resource#n	0	0	0	0	0	0	0	0	0	0			
<b>Engineering</b>	0	0	0	0	0	0	0	0	0		0	0	To include Engineering co-ordination, optical design, structural design, thermal design, etc
Workpackage#1													
Resource#1	0	0	0	0	0	0	0	0	0	0			
Resource#2	0	0	0	0	0	0	0	0	0	0			
Resource#n	0	0	0	0	0	0	0	0	0	0			
Workpackage#n													
Resource#1	0	0	0	0	0	0	0	0	0	0			
Resource#2	0	0	0	0	0	0	0	0	0	0			
Resource#n	0	0	0	0	0	0	0	0	0	0			
<b>AIV</b>	0	0	0	0	0	0	0	0	0		0	0	
Model#1													
Workpackage#1													
Resource#1	0	0	0	0	0	0	0	0	0	0			
Resource#2	0	0	0	0	0	0	0	0	0	0			
Resource#n	0	0	0	0	0	0	0	0	0	0			
Workpackage#n													
Resource#1	0	0	0	0	0	0	0	0	0	0			
Resource#2	0	0	0	0	0	0	0	0	0	0			
Resource#n	0	0	0	0	0	0	0	0	0	0			
Model#n													
Workpackage#1													
Resource#1	0	0	0	0	0	0	0	0	0	0			
Resource#2	0	0	0	0	0	0	0	0	0	0			
Resource#n	0	0	0	0	0	0	0	0	0	0			
Workpackage#n													
Resource#1	0	0	0	0	0	0	0	0	0	0			
Resource#2	0	0	0	0	0	0	0	0	0	0			
Resource#n	0	0	0	0	0	0	0	0	0	0			
<b>Other Direct Costs</b>	0	0	0	0	0	0	0	0	0		0	0	
Workpackage#1	0	0	0	0	0	0	0	0	0	0			
Workpackage#2	0	0	0	0	0	0	0	0	0	0			
Workpackage#n	0	0	0	0	0	0	0	0	0	0			
<b>Configured Item#1</b>	0	0	0	0	0	0	0	0	0		0	0	For each configured hardware item on the Product Tree (incl GSE)
Model#1	0	0	0	0	0	0	0	0	0	0			
Model#2	0	0	0	0	0	0	0	0	0	0			
Model#n	0	0	0	0	0	0	0	0	0	0			
<b>Configured Item#2</b>	0	0	0	0	0	0	0	0	0		0	0	For each configured hardware item on the Product Tree (incl GSE)
<b>Configured Item#3</b>	0	0	0	0	0	0	0	0	0		0	0	For each configured hardware item on the Product Tree (incl GSE)
<b>Configured Item#4</b>	0	0	0	0	0	0	0	0	0		0	0	For each configured hardware item on the Product Tree (incl GSE)
<b>Configured Item#n</b>	0	0	0	0	0	0	0	0	0		0	0	For each configured hardware item on the Product Tree (incl GSE)
<b>TOTAL</b>	0	0	0	0	0	0	0	0	0		0	0	