

# Management Requirements for “NHS - Future Hospital Initiative”

Appendix 3 to Contract

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# 1 INTRODUCTION

The “Management Requirements” (MR) document provides a set of guidelines to the Contractor in charge of the Demonstration Project for the management of the project during its life-cycle, i.e. from the Kick-off Meeting, which precedes the signature of the Contract, until the Final Review.

The guidelines provided below may be followed in part by the Tenderer and reflected in the Outline and Full Proposals for Phase 1 and Phase 2 depending on the specific tailoring that applies for the activities that are proposed.

## 2 MILESTONE REVIEW MEETINGS (MRM) AND ASSOCIATED DELIVERABLE DOCUMENTS

The following paragraphs describe the sequence of Milestone Review Meetings (MRM) that will mark the implementation of the project. Through the sequence of MRMs, ESA will monitor the progress of the contractual activities, assess the quality and completeness of the deliverables and, when relevant, will authorise the relevant milestone payments.

For each of the review meetings indicated below, the Management Requirements do also provide guidelines on:

- Their main purpose
- The applicable deliverables

Each of the MRMs shall be attended at least by the Project Manager.

The documentation supporting each milestone review meeting shall be delivered to ESA no later than five (5) working days before the meeting takes place.

Besides the review meetings indicated below, additional technical meetings can be envisaged if required by the specific implementation approach proposed by the Contractor (e.g. in case of an AGILE approach this is quite often required).

The following documents shall be delivered at the different MRMs, as specified in section 4. of this document:

- i. **Requirements Document (RD)**  
The purpose of the Requirements Document is to make sure that all the user’s needs are listed and agreed. These needs are turned into measurable requirements which can be later tested by the Contractor in the System Verification Document
- ii. **System and Service Architecture (SSA)**  
The purpose of the System and Service Architecture document is to specify the overall pilot system starting from the high level architecture down to its constituent building blocks. The SSA shall describe the extent of development and/or integration of hardware, software and content elements and choice of the most appropriate system to be used in the project.
- iii. **System Verification Document (SVD)**  
The purpose of the System Verification Document is to plan the repeatable tests which will show how the system meets the requirements set out in the Requirements Document. Once the tests have been planned they will be run by the Contractor and the results recorded and presented to ESA

iv. **Pilot Utilisation (PilUP)**

The Pilot Utilisation Plan is a practical guide to how the pilot shall be run. It demonstrates that the Contractor has thought about the practical consequences of taking the product and services to the field. The Pilot stage of the project is one of the most hectic parts of the project and it's easy to lose track of the objectives when trying to solve urgent issues. That is where the Key Performance Indicators (KPIs) come in. They help keeping the team focussed on what things are important, like getting great customer feedback scores and making sure that the product/service is used as much as possible during the Pilot

v. **Project Web Page (PWP)**

The Project Web Page is intended for publication on the ESA Business Applications portal and shall not contain any proprietary information. Whenever relevant, the Contractor shall provide an updated version of the "Current Status" paragraph of the Project Web Page.

vi. **Final Report (FREP)**

The Final Report shall present in about 20-30 pages (pictures, Index and Appendix included) an overview of the activities carried out during the project. It is "the business visiting card" of the project presenting in a concise way the business idea and the service developed by the project, the main activities carried out during the project, highlighting the pilot results and the intended commercial roll-out strategy, the achievements and lessons learnt, any other relevant/important topics and it shall include a brochure of the product/service. The Final Report is intended for general audience and publication. Therefore, it shall not contain any sensitive information, nor complex technical details. It should provide some highly interesting or impactful pictures (e.g. users while they utilise the system during the pilot stage) and graphs, diagrams or tables as needed

The templates to be used for the deliverable documents of the different MRMs, as well as the draft Agendas for the MRM, can be found at this URL:

<https://business.esa.int/documents>

### **3 MILESTONE REVIEW MEETINGS (MRM)**

The following MRMs typically apply to a Demonstration Project that follows a waterfall development approach. The Contractor can follow an alternative approach, providing it is properly described in the Full Proposal and agreed by ESA.

#### **3.1 Negotiation Meeting (NM)**

The purpose of the Negotiation Meeting (NM) is to confirm that all points of clarification and negotiation raised by ESA have been successfully addressed, to discuss and agree on the project planning via the Project Bar Chart (PBC), to negotiate the contract and to review the activities for the next MRM.

The NM is also the opportunity for the team to meet the ESA Technical Officer and create the basis for an effective working cooperation during the rest of the project.

#### **3.2 Design Review (DR)**

Between the NM and the Design Review (DR) the Contractor shall finalise the User Needs and the User Requirements in cooperation with the pilot users, and identify a mature set of System Requirements. Needs and Requirements will be described in the Requirement Document (RD).

The RD and SSA are the key deliverable of the DR milestone.

Additional deliverables of the DR are:

- The **Project Web Page (PWP)**

In preparation of the DR, the Contractor may organise a **User Workshop** inviting the pilot Users and Customers, with the objective to consolidate and validate the RD.

### 3.3 Acceptance Test (AT)

At the end of the development and integration activities and prior to starting the deployment of the pilot-demonstration system, the Contractor shall set up an Acceptance Test (AT) MRM devoted to demonstrate that the system/service is compliant with the set of requirements agreed at the DR.

The SVD and the PilUP are the key deliverables of the AT milestone.

During the AT, a subset of the tests agreed with ESA will be repeated in-front-of the ESA Technical Officer and the results will be attached to the minutes of the AT meeting.

Whenever practical, the verification session with ESA can take place via a web conference (e.g. WebEx) during which the contractor shall follow a test plan which involves navigating the user interface. This part of the verification session shall be documented via a video/screengrab to be added to the minutes of the milestone meeting.

The successful completion of the AT will kick-off the activities for the deployment of the pilot-demonstration system.

### 3.4 Final Review (FR)

At the Final Review (FR) the Contractor shall present a global overview of the activities carried out during the project and summarise (within the PilUP document) the outcome of the pilot stage, including conclusions and recommendations gathered from the Contractor and the pilot users. At the FR the Contractor shall also present the action plan associated with the service operational/commercial deployment, as applicable.

The key deliverables of the FR Review Milestone are:

- **The Final Report (FREP)**, in which the Contractor, in about 25 pages, shall present a summary of the activities carried out in the frame of the project. This document shall not contain commercially sensitive information
- **Summary and Achievements (S&A)** shall provide a concise overview of the project and its main achievements. This document will be used internally by ESA, and whenever needed for reporting to the National Delegations of the ESA Member States
- **The Final Data Package (FDP)**, consisting in an archive containing the latest version of all deliverables (BP, RD, PWP, SSA, SVD, PilUP, FREP, PBC, S&A), and the collection of Digital Media (DM) consisting of digital video, brochure and pictures aimed for the branding and marketing of the product(s) and service(s) developed

As part of the FR, a bilateral discussion between the project team and ESA about what worked and what not in the context of the project shall be carried out. The main points shall be recorded as part of the Minutes of the Meeting of the FR.

## 4 ADDITIONAL REQUIREMENTS

### 4.1 Document Confidentiality

All deliverable documents produced in the frame of the project and marked as “Proprietary Information” will be treated in confidence (see Clause 52.2 of the ESA General Clauses and Conditions). Project Web Page and the Final Report shall not contain any “Proprietary Information”, since they are intended for public dissemination.

### 4.2 Contractor Project Manager

The nominated Project Manager (PM) shall be responsible for the management and execution of all work to be performed and for the coordination and control of the work within the project team. The PM will be the official point of contact with the Agency during the execution of the work.

During the contract execution, the PM shall notify the Agency of any critical risk that may arise, analysing the cause, assessing the potential impacts on the project in terms of time, objectives and scope and formulating in the shortest possible time a mitigation strategy.

### 4.3 Reporting - Minutes of Meetings (MOM)

Written Minutes of Meetings attended by ESA shall be prepared and made available by the Contractor, and have to be signed at the end of the meeting. The minutes shall clearly identify all agreements made and actions accepted together with, where relevant, an update of the Action Item List.

To establish a uniform and consistent procedure to identify the Action Items among the different ARTES projects, the Contractor shall keep track of the Action Items adopting the following action identification scheme:

#### *Action X.Y*

where *X* is the identifier of the meeting (0: Negotiation Meeting, 1: First MRM, 2: Second MRM, etc.), and *Y* is the Action number starting from 01 at each new meeting.

In case of urgent or critical problems, new Actions can be originated by the Agency and/or by the Contractor even outside the normal scheduled meetings.

### 4.4 Reporting - Monthly Progress Reports (MPR)

The Contractor shall provide, within the first five working days of each month, a concise status report summarising the main activities performed in the last month, a list of the activities planned to be performed in the coming month, and any potential problems in the development and commercialisation programme and the corrective action planned or taken by the Contractor.

Within the progress report, the updated Current Status paragraph to be inserted in the Project Web Page shall be provided. To the extent possible, the progress report and annexed documentation should be delivered in MS Word format by using the Distributed Project Collaboration Tool or as an attachment to email.

## 4.5 Electronic Documentation

All documentation shall be delivered in electronic form, using preferably MS Word or Adobe Acrobat format with all pictures and tables embedded in the document. The documentation shall not impose limitations on the ability to be commented and printed.

## 4.6 Distributed Project Collaboration Tool

During the execution of the project the web based project collaboration tool shall be used. This collaborative environment is intended to replace the usual electronic communication tools (e.g. E-Mail with attached document and/or FTP) within the project team and in the communication with ESA, as well as for recording and tracking Action Items. Credentials and guidelines for accessing the tool will be provided in due time, typically by the Negotiation Meeting.

## 4.7 List of Deliverables

The items that will be delivered during the project are summarised in the table below.

Table 1 List of deliverables

Each deliverable document shall include a title page reporting the project name, the contract number, the title of the document, a reference identifier, the author(s) and related organisation(s), the date of issue and the revision number.

Name	Deliverable	Initial Submission	Final Submission
MOM	Minutes of Meetings	NM	FR
RD	Requirements Document	with the proposal	FR
SSA	System and Service Architecture	with the proposal	FR
PilUP	Pilot-Demonstration Utilisation Plan	with the proposal	FR
SVD	System Verification Document	AT	AT
PWP	Project Web Page	DR	FR
FREP	Final Report	FR	
FDP	Final Data Package	FR	

Layout of Contract Closure Documentation  
 ESA/ESTEC Contract No. .... [INSERT NUMBER]  
 “[INSERT ACTIVITY TITLE]”,  
 hereinafter referred as the “Contract”

Section 1 - Parties, Contract Duration and Financial Information

Contractor	[CONTRACTOR NAME]	
Sub-Contractor(s) (state if not applicable)	[NAME AND COUNTRY]	
Contract Duration	From:	Phase 1 from:
	To:	to:
		Phase n from:
		to:
Total Contract Price (including all CCNs, Work Orders, Call of Orders)	EUR	
and Total Contract Value (in case of co-funding; state if not applicable)	EUR	
Broken down as follows:	Original Contract Price and original Contract Value (in case of co-funding; state if not applicable)	XXX EUR (XXX EUR)
	CCN x to n	EUR in total

Section 2 - Recapitulation of Deliverable Items

2.1 Items deliverable under the Contract

If any of the columns do not apply to the item in questions, please indicate “n/a”.

Table 2.1.1 - Items deliverable according to the Statement of Work

Type	Name / Title	Description	Location <sup>1</sup>	Property of	Rights granted / Specific IPR Conditions <sup>2</sup>
Documentation		According to the MANAGEMENT REQUIREMENTS list	n/a	n/a	
Hardware					
Software		Delivery at contractor point			
Other					

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<sup>1</sup> In case the item is not delivered to ESA, please indicate the location of the deliverable and the reason for non-delivery (e.g. loan agreement, waiver, future delivery, etc.)

<sup>2</sup> e.g. IPR constraints, deliverable containing proprietary background information (see also 2.1.4 below)

No Fixed Asset has been acquired under the Contract by the Contractor and/or its Sub-Contractor(s).

Table 2.1.2 - Background Information used and delivered under the Contract (see Clause 57 of the General Clauses and Conditions)

The following background information has been incorporated in the deliverable(s):

Proprietary Information (title, description)	Owner (Contractor, Sub-Contractor(s), Third Party/ies)	Affected deliverable (which documents, hardware, software, etc.)	Description impact on ESA's rights to the deliverable <sup>3</sup>	Other/comments

Section 4 - Statement of Invention

**[OPTION 1: NO INVENTION]**

In accordance with the provisions of the above Contract, .....[Company] hereby certifies both on its own behalf and that of its Contractor/Subcontractor(s), that no Intellectual Property Right(s) has(ve) been registered in the course of or resulting from work undertaken for the purpose of this Contract; and that no inventions have been made in the course of or resulting from work undertaken for the purpose of this Contract that generated knowledge that could be registered as Intellectual Property Rights.

**[OPTION 2: INVENTION]**

In accordance with the provisions of the above Contract, .....[Company] hereby certifies both on its own behalf and that of its Contractor/Subcontractor(s) that the following Intellectual Property Right(s) has(ve) been registered in the course of or resulting from work undertaken for the purpose of this Contract.

.....

**[OPTION]:** In accordance with the provisions of the above Contract, .....[Company] hereby certifies both on its own behalf and that of its Contractor/Subcontractor(s) that the following

\_\_\_\_\_

<sup>3</sup> if not explicitly stated otherwise, the contractual stipulations shall prevail in case of conflict with the description provided in this table

inventions have been made in the course of or resulting from work undertaken for the purpose of this Contract but have not been registered as Intellectual Property Rights:

.....

[OPTION]: In accordance with the provisions of the above Contract, .....[Company] hereby certifies both on its own behalf and that of its Contractor/Subcontractor(s) that the following inventions have been made in the course of or resulting from work undertaken for the purpose of this Contract and are foreseen for and/or in the process of registration:

The Agency's rights on such registered and/or unregistered Intellectual Property Rights shall be in accordance with the ESA GCC Part II provisions as amended by the above Contract.

<p>The above statements provided in the various sections of this Annex A "Layout for Contract Closure Documentation" for ESA Contract No. <b>4000xxxxxx/xx/XX/XXX/xxx</b> <i>[insert the corresponding Contract number]</i> have been made after due verifications.</p> <p>The Contractor furthermore certifies that all its obligations with regard to Fixed Assets, if any, have been fulfilled.</p> <p>If required by ESA, an updated version shall be provided for incorporating amendments requested by ESA.</p>	
<p>Name of Contractor: <i>[insert Contractor name]</i></p>	
<p>Authorised signatory: <i>[insert Authorised signatory full name]</i></p>	<p><i>[signature of the Authorised signatory]</i></p>
<p>Date: <i>[insert date]</i></p>	

## ANNEX A. LIST OF ACRONYMS

ARTES	Advanced Research in Telecommunication Systems
AT	Acceptance Tests
DR	Design Review
ESA	European Space Agency
FDP	Final Data Package
FR	Final Review
FREP	Final Report
HW	Hardware
KPI	Key Performance Indicator
MOM	Minutes of Meetings
MR	Management Requirements
MRM	Milestone Review Meeting
NHS	National Health Service
NM	Negotiation Meeting
PBC	Project Bar Chart
PilUP	Pilot-Demonstration Utilisation Plan
PM	Project Manager
PWP	Project Web Page
RD	Requirements Document
S&A	Summary and Achievements
SSA	System and Service Architecture
SVD	System Verification Document
SW	Software