



## RPW Ground Segment

# ROC Software Validation Plan

ROC-GEN-SYS-PLN-00040-LES  
Iss.01, Rev.00

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## Change Record

Issue	Rev.	Date	Authors	Modifications
0	0	04/02/2016	X.Bonnin	First draft

## Acronym List

Acronym	Definition
CCSDS	Consultative Committee for Space Data Systems
CDF	Common Data Format
CUC	CCSDS Unsegmented time Code
HF	High Frequency
ICD	Interface Control Document
LF	Low Frequency
LL	Low Latency
MEB	Main Electronic Box
PA	Pre-Amplifier
RLLP	RPW Low Latency Pipeline
ROC	RPW Operation Centre
ROT	RPW Operation Toolkit
RPW	Radio and Plasma Waves instrument
SCM	Search Coil Magnetometer
SGS	Science Ground Segment
SGSE	Software Ground Support Equipment



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SOC	Science Operation Centre
TDS	Time Domain Sampler
THR	Thermal Noise and High Frequency Receivers
SWF	Snapshot Waveform
XML	eXtended Markup Language



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## 1 GENERAL

### 1.1 Scope of the Document

This document presents the software validation plan (SVP) for the RPW Operation Centre (ROC).

The SVP provides the definition of organizational aspects and management approach to the implementation of the validation tasks.

The objective of the SVP is to describe the approach to the implementation of the validation process for the ROC Software System (RSS), which gathers all of the software equipment of the ROC.

### 1.2 Applicable Documents

This document responds to the requirements of the documents listed in the following table:

Mark	Reference/Iss/Rev	Title of the document	Authors	Date
AD1	ROC-GEN-MGT-PLN-00026-LES/1/3	ROC Project Management Plan (PMP)	Yvonne de Conchy Xavier Bonnin	20/12/2016
AD2	ROC-GEN-OTH-NTT-00036-LES/1/0	ROC Project Glossary of terms	Xavier Bonnin	13/09/2017
AD3				
AD4				
AD5				

### 1.3 Reference Documents

This document is based on the documents listed in the following table:

Mark	Reference/Iss/Rev	Title of the document	Authors	Date
RD1				
RD2				
RD3				
RD4				
RD5				
RD6				
RD7				
RD8				

### 1.4 About this document

#### 1.4.1 Access policy

The present document is accessible without any restriction.

*ROC-GEN-SYS-PLN-00040-LES\_Iss00\_Rev00(Software\_Validation\_Plan).Draft.docx*



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**Any modification of this document must be approved by the RPW Ground Segment Project Manager before publication.**

## **1.4.2 Terminology**

All terms used in this document, and which are not listed in the table below must follow the definition in [AD2].



## 2 SOFTWARE VALIDATION PROCESS PLANNING

### 2.1 General

*The SValP shall describe the approach to be utilized to implement the validation process, the required effort, and the level of required independence for the validation tasks.*

*The SValP shall also address, if it is applicable to the software validation campaign against the requirements baseline, to the software validation campaign against the technical specification, or, for both.*

*The SValP shall address separately the activities to be performed for manually and automatically generated code.*

*The SValP shall include the validation of the quality requirements.*

### 2.2 Organization

*The SValP shall describe the organization of the validation activities.*

### 2.3 Schedule

*A reference to the master schedule given in the software development plan shall be included.*

### 2.4 Resource summary

### 2.5 Responsibilities

### 2.6 Tools, techniques and methods

### 2.7 Personnel requirements

### 2.8 Risks

## 3 SOFTWARE VALIDATION TASKS IDENTIFICATION

## 4 SOFTWARE VALIDATION APPROACH

## 5 SOFTWARE VALIDATION TESTING FACILITIES

## 6 CONTROL PROCEDURES FOR SOFTWARE VALIDATION PROCESS

## 7 COMPLEMENT OF VALIDATION AT SYSTEM LEVEL





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## 9 DISTRIBUTION LIST

<p style="text-align: center;"><b>LISTS</b></p> <p>See Contents lists in “Baghera Web”: Project’s informations / Project’s actors / RPW_actors.xls and tab with the name of the list or NAMES below</p>	Tech_LESIA
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