Management Plan

Overview

- Project organization

- ECSS Documentation Tree

- ITASAT Documentation Tree

Project Organization
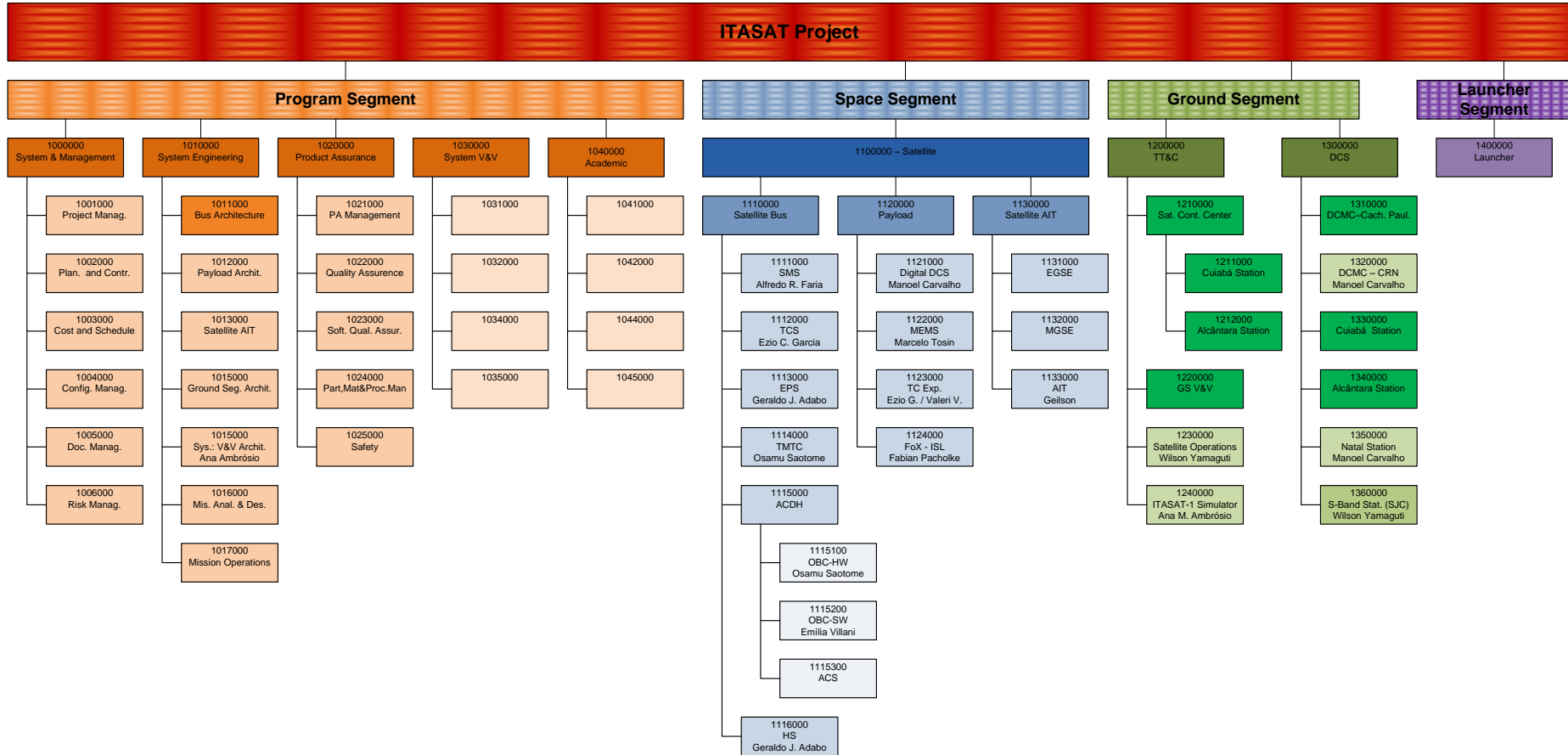
ECSS – System Doc

Table A-1: System engineering deliverable documents

Document title	ECSS document	DRD ref.	Phase 0 MDR	Phase A PRR	Phase B SRR	Phase B PDR	Phase C CDR	Phase D QR	Phase D AR	Phase D ORR	Phase E FRR	Phase E LRR	Phase E CRR	Phase E ELR	Phase F MCR
Mission description document	ECSS-E-ST-10	Annex B	+	+											
Specifications															
Preliminary technical requirements specification	ECSS-E-ST-10-06	Annex A	+	+											
Technical requirements specification	ECSS-E-ST-10-06	Annex A			+										
Interface requirements document	ECSS-E-ST-10	Annex M		+	+	+									
System engineering plan	ECSS-E-ST-10	Annex D	+	+	+	+	+	+	+						
Technology plan	ECSS-E-ST-10	Annex E		+	+	+									
Technology matrix	ECSS-E-ST-10	Annex F		+	+	+									
Verification plan	ECSS-E-ST-10-02	Annex B		+	+	+	+	+	+						
AIT QM/FM plan	ECSS-E-ST-10-03	Annex A			+	+	+	+	+						
Orbital debris mitigation plan	ISO 24113		+	+	+	+	+	+	+	+	+	+		+	+
Other related plans (as called in ECSS-E-ST-10 Annex D)				+	+	+	+	+	+						
Coordinate system document	ECSS-E-ST-10-09	Annex A		+	+	+	+	+							

ECSS – System Doc

Document title	ECSS document	DRD ref.	Phase 0 MDR	Phase A PRR	Phase B SRR	Phase B PDR	Phase C CDR	Phase D QR	Phase D AR	Phase D ORR	Phase E FRR	Phase E LRR	Phase E CRR	Phase E ELR	Phase F MCR
Design definition file	ECSS-E-ST-10	Annex G		+	+	+	+	+							
Function tree	ECSS-E-ST-10	Annex H		+	+	+									
Product tree	ECSS-M-ST-10	Annex B		+	+	+									
Specification tree	ECSS-E-ST-10	Annex J			+	+									
Technical budget	ECSS-E-ST-10	Annex I		+	+	+	+	+	+						
Preliminary technical requirements specifications for next lower level	ECSS-E-ST-10-06			+	+										
Technical requirements specifications for next lower level	ECSS-E-ST-10-06				+	+									
Design definition file for next lower level						+	+	+	+						
Interface control document	ECSS-E-ST-10-24	Annex A			+	+	+	+	+	+	+	+			
Product User manual / User Manual	ECSS-E-ST-10	Annex P				+	+	+	+	+	+	+	+	+	+
Design justification file	ECSS-E-ST-10	Annex K		+	+	+	+	+							
Requirements traceability matrix w.r.t. next lower level	ECSS-E-ST-10	Annex N		+	+	+									
Requirement justification file	ECSS-E-ST-10	Annex O	+	+	+	+									
System concept report	ECSS-E-ST-10	Annex C	+	+											
Trade off reports	ECSS-E-ST-10	Annex L	+	+	+	+	+								

ECSS – System Doc

Document title	ECSS document	DRD ref.	Phase 0	Phase A	Phase B		Phase C	Phase D			Phase E				Phase F
			MDR	PRR	SRR	PDR	CDR	QR	AR	ORR	FRR	LRR	CRR	ELR	MCR
Verification control document	ECSS-E-ST-10-02	Annex C		+(1)	+(1)	+(1)	+	+	+	+	+	+	+	+	+
Test specification	ECSS-E-ST-10-03	Annex D					+	+	+	+	+	+	+	+	+
Analysis report	ECSS-E-ST-10	Annex Q		+	+	+	+	+	+	+	+	+	+	+	+
Mathematical model description					+	+	+	+							
Correlation report							+	+							
Test procedure	ECSS-E-ST-10-03	Annex C					+	+	+	+	+				
Test report	ECSS-E-ST-10-02	Annex D					+	+	+	+	+	+	+	+	+
Verification report	ECSS-E-ST-10-02	Annex H					+	+	+	+	+	+	+	+	+
Design justification file for next lower level							+	+	+						
Review of design report	ECSS-E-ST-10-02	Annex F					+	+							
Inspection report	ECSS-E-ST-10-02	Annex G					+	+	+						
GSE specifications						+	+	+	+						
GSE Data packages							+	+	+						
Other documents															

Note (1) : Document limited to the verification matrix

Documentation Tree

Doc Code	Title	0/A	B	C	D
	SYSTEM & MANAGEMENT				
	ITASAT Mission Requirements (Mission Requirement Document and User Requirement Document)				
	System Definition (Mission Description Document, which includes the mission analysis)	issue	update		
	Management Plan (incl. WBS, Prod. Tree, Work Packages, Document Tree in Phase A)	draft	issue	update	update
	ITASAT Verification and Validation Plan	draft	issue	maint.	maint.
	Satellite to TT&C Ground Interface Definition		draft	issue	
	Satellite to DCS Ground Interface Definition		draft	issue	
	Satellite to Launch Vehicle Interface Definition		draft	issue	
	Risk Analysis Plan		draft	issue	

Documentation Tree

Doc Code	Title	0/A	B	C	D
	PRODUCT ASSURANCE				
	Product Assurance Plan	draft	issue	maint.	
	Configuration Management Plan		draft	issue	maint.
	Documentation Management Plan		draft	issue	maint.
	Critical Items List		draft	update	update
	Test, Parts/Material/Processes, Waiver Boards Minutes of Meeting			occur.	occur.

Documentation Tree

Doc Code	Title	0/A	B	C	D
	SATELLITE				
	Design and Construction Specification		draft	issue	
	Environmental Specification		draft	issue	
	EMC/EMI Requirements Specification		draft	issue	
	ITASAT Satellite Specification		draft	issue	
	ITASAT EGSE Specification		draft	issue	
	ITASAT EGSE Development Plan		draft	issue	
	ITASAT MGSE Specification		draft	issue	
	ITASAT EGSE Development Plan		draft	issue	
	ITASAT Satellite Definition and Justification File		draft	issue	
	ITASAT Satellite User Manual			draft	issue
	ITASAT Risk Analysis Report		draft	issue	maint.
	ITASAT¨Thermal Analysis Report		draft	issue	

Documentation Tree

Doc Code	Title	0/A	B	C	D
	SATELLITE (cont)				
	ITASAT Structural Analysis Report		draft	issue	
	ITASAT Power Analysis Report		draft	issue	
	ITASAT Power Budget		draft	issue	
	ITASAT Mass Budget		draft	issue	
	ITASAT Link Budget		draft	issue	
	ITASAT TM/TC Budget (including TM List and TC List		draft	issue	

Documentation Tree

Doc Code	Title	0/A	B	C	D
	AIT				
	Satellite Assembly, Integration and Test (AIT) Plan		draft	issue	
	Satellite level AIT Procedures/Reports			draft	issue

Doc Code	Title	0/A	B	C	D
	SATELLITE SUBSYSTEMS & EQUIPMENT				
	Subsystem Technical Specification		draft	issue	
	Subsystem Interface Control Document		draft	issue	
	Subsystem Interface Requirements Document, **as needed**		draft	issue	
	Subsystem Definition and Justification File		draft	issue	
	Subsystem Development and Verification Plan		draft	issue	
	Risk Analysis and associated reports, **as needed**		draft	issue	maint.
	GSE Requirements			draft	issue
	Verification Matrix			draft	issue
	Test procedures and Reports (Electrical, Environmental, EMC)			draft	issue
	EIDP (See below)				issue

Documentation Tree

Doc Code	Title	0/A	B	C	D
	TT&C GROUND SEGMENT				
	TT&C Ground segment requirements specifications		draft	issue	maint.
	Flight operation plan			draft	final
	Ground Segment Definition and Justification File			draft	issue

Documentation Tree

Doc Code	Title	0/A	B	C	D
	DATA COLLECTION GROUND SEGMENT				
	Data collection ground segment requirement specification		draft	issue	
	Data collection ground segment Definition and Justification File			draft	issue

THANKS FOR YOUR ATTENTION.