

HADG Infrastructure for HAS Phase 2 - Document Content Guidelines

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1 Introduction

This document provides guidelines for structure and contents of all documents listed in the Statement of Work (SoW, ref. EUSPA-GAL-GSC-SOW-A26386) and corresponding Deliverable Requirements List (DRL, ref. EUSPA-GAL-GSC-DRL-A26388) for the procurement of the HADG Infrastructure for HAS Phase 2 (EUSPA/OP/17/23).

The Contractor is invited to complement the documentation listed and its content as needed and if deemed necessary, the contractor may propose to merge documentation where their content is similar or where it makes sense to do so.

The classification level of the documents shall be defined in accordance with their content and the applicable security classification guide [HADGp2-AD-SA04]. The contractor may split a deliverable document into a lower-classification main body with higher-classified annexes when a significant portion of the document is compatible with this lower-level of classification.

In case SoW or other applicable documents as per CISL require additional content not explicitly covered by these guidelines or in case of conflict, the SoW and CISL shall prevail over these content guidelines.

2 Acronyms and Abbreviations

Refer to “List of acronyms” document, ref. EUSPA-GAL-GSC-LI-A26393.

3 Applicable and Reference Documents

Applicable Documents are listed in CISL, ref. EUSPA-GAL-GSC-CISL-A26387.

Reference Documents are listed in “List of Reference Documents”, ref. EUSPA-GAL-GSC-LI-A26392.

4 Content Guidelines

4.1 Project Management Documentation

Management			
<i>ID</i>	<i>Title</i>	<i>Purpose</i>	<i>Content</i>
HADGp2-DD-PM01	Project Management Plan (PMP)	A description of how the project organisation, including Subcontractors, operates in conjunction with their company organisations, to accomplish the contract objectives.	Project Management Plan, covering at least: <ul style="list-style-type: none"> i. Industrial Organisation ii. Prime and core teams project organisation and interface with the Contracting Authority iii. Overall Management iv. Technical Management v. Lower tier contractor management vi. Procurement Management vii. Deployment Management viii. AIV Management ix. Obsolescence and maintenance Management x. CU (Contracting Authority Undertakings) and deliverables management xi. Product Assurance management, xii. Project Control, xiii. Risk Management, xiv. Schedule Management, xv. Financial and Cost Management, xvi. Contract Change Management,

Management			
<i>ID</i>	<i>Title</i>	<i>Purpose</i>	<i>Content</i>
HADGp2-DD-PM02	Work Breakdown Structures (WBS)	<p>To define a systematic division of work and tasks related to products.</p> <p>The objective of the work breakdown structure (WBS) is to provide, in a single document, a framework for project in cost and schedule management activities and for managing technical content</p>	<p>The WBS should contain a graphical and written description.</p> <p>Each item shall have an identity code. The WBS/WPD coding will be generated according to a consistent principle to be described by the Contractor.</p> <p>The WBS shall provide a logical and exhaustive breakdown of the product tree elements, that includes the Contracting Authority's defined support functions (e.g. project management, engineering, product assurance support).</p>
HADGp2-DD-PM03	Work Breakdown Description (WBD)	<p>The objective of the work package description (WPD) is to describe the detailed content of each element of the WBS</p>	<p>The WP description shall contain the following elements:</p> <ol style="list-style-type: none"> i. project name and project phase; ii. WP title; iii. unique identification of each WP and issue number iv. supplier or entity in charge of the WP performance; v. WP manager's name and organisation; vi. supplier's country; vii. product to which the tasks of the WP are allocated (link to the product tree); viii. description of the objectives of the WP; ix. description of the tasks; x. list of the inputs necessary to achieve the tasks; xi. interfaces or links with other tasks or WPs; xii. list of constraints, requirements, standards, and regulations; xiii. list of the expected outputs; xiv. list of deliverables;

Management			
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HADGp2-DD-PM04	Project Directory	To facilitate communications among the Agency, the Contractor and sub- contractors, and other on-going or planned HADG activities	<p>The Contractor shall generate and maintain a Project Directory containing at least:</p> <ol style="list-style-type: none"> i. Company name ii. Company code iii. Company location iv. Company postal address v. Company and project specific telephone, including business mobile and fax numbers vi. E-mail address vii. Key personnel with their: <ul style="list-style-type: none"> - responsibility name department - telephone extension - E-mail address - Role in the project (WP) - Résumés or CVs (longer) - % of involvement
HADGp2-DD-PM05	Baseline Schedule	The Baseline Schedule is the detailed schedule in line with the contractual milestones	<p>The Baseline Schedule Document shall include the following:</p> <ol style="list-style-type: none"> i. The detailed schedule bar chart reflecting the baseline schedule ii. The scheduling calendars information assumed for the baseline schedule including shift patterns if relevant iii. The reference to lower tier contractors schedules on which the Contractor baseline schedule is based iv. The critical path analysis v. The list of milestones subject to trend analysis in the Working Schedule Document with their baseline date. <p>Also refer to related SoW requirements.</p>
HADGp2-DD-PM06	Working Schedule Report	The Working Schedule document the detailed schedule current status	Refer to applicable SoW requirements, e.g. HADGp2-SoW-1010.

Management			
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HADGp2-DD-PM07	Action Item List	Report of project Action Items with their actual status information related to a review, meeting etc., to ensure that agreed items are properly recorded, monitored, performed and closed-out at the required time	<p>The Action Items system shall have the form of an electronic data base. It shall track the agreed project action items defined in reviews, meetings or other project events to which the Agency have right of attendance. It shall contain, as a minimum, the following information:</p> <ol style="list-style-type: none"> i. Meeting Identifier ii. Action Number iii. Action Item Title iv. Issue Date v. Action Due Date vi. Originating Organisation vii. Originator viii. Related Subsystem/Task ix. Actionee Organisation x. Actionee xi. Status (Open, Closed, Withdrawn, Pending) xii. Closing Date xiii. Related close out material xiv. Closing Reference xv. Critical Item Flag (Y/N)
HADGp2-DD-PM08	Progress Reports	To report information at management level reflecting the progress of the project during the reporting period for analysis and discussion.	<p>The progress report shall include information on the following topics:</p> <ul style="list-style-type: none"> - Status of contractual tasks; - List of actions and status; - Risk register; - Resources; - Subcontractors' management; - Financial management; - Working schedule, including updated milestone and task dates and progress (or link to Working Schedule document); - Any topic to be highlighted to the Contracting Authority; - Verification control document (from qualification phase); - Audit plan; - Critical items list; - List of problem reports (ORs, ARs, NCRs...) and trend; - Return of experience report; - Waivers and deviations status list; - Document status list; - PA reporting as per applicable documents.

Management			
ID	Title	Purpose	Content
HADGp2-DD-PM09	Risk Management Plan (RMP)	The objective of the risk management plan is to provide in a single document all the elements necessary to ensure that the implementation of risk management commensurate with the project, organisation, and management, while meeting the Contracting Authority requirements.	<ol style="list-style-type: none"> i. Organisation ii. The risk management plan shall describe the risk management organisation of the project and shall list the responsibilities of each of the risk management participants. iii. Risk management policy iv. The risk management plan shall contain a link to the applicable risk management policy document. v. Risk management documentation and follow-up vi. The risk management plan shall describe the structure, the rules and the procedures used to document the results of the risk management and the follow-up process. vii. Description of risk management implementation viii. The risk management plan shall describe how the risk management process is implemented. Risk identification and assessment <ul style="list-style-type: none"> • The risk management plan shall describe the identification and assessment process and procedures for examining the critical risk items and domains, and processes to identify and document the associated risks. It shall also summarise the analysis process for each of the risk domain leading to the determination of an overall risk assessment. • The risk management plan should include the identification of specific metrics for risk assessment. • The risk management plan may include: <ul style="list-style-type: none"> ○ Overview and scope of the identification and assessment process; ○ Sources of information; ○ Information to be reported and formats; ○ Description of how risk information is documented; ○ Assessment techniques and tools. ix. Decide and act x. The risk management plan shall describe the risk treatment, which uses the risk assessment report as input.

Management			
<i>ID</i>	<i>Title</i>	<i>Purpose</i>	<i>Content</i>
HADGp2-DD-PM10	Risk Register	This document should identify and maintain the list of risks that can affect contract objectives.	<p>The Contractor shall maintain a "Risk Register" covering the detailed and up-to-date description of the risks of all activities subject of this contract (including the subcontracted activities) and containing:</p> <ul style="list-style-type: none"> i. Risk identification matrix (occurrence probability and impact severity on a 5 grades scale for each) ii. Risk mitigation plan with costs and schedule iii. Risk mitigation actions tracking <p>The risk register shall be a table / spread sheet including for each identified risk:</p> <ul style="list-style-type: none"> i. The risk designation and explanatory description ii. The related Control Work Package Code iii. Reasons for its criticality <p>Magnitudes of consequences (functional, performance, schedule and/or cost impacts)</p>
HADGp2-DD-PM11	Review Organisation Notes	The purpose of this document is to provide with the objective, scope and organisation of a specific review.	Refer to template HADGp2-AD-PA03
HADGp2-DD-PM12	Statement Of Compliance (SOC) to each applicable document	SOC to each applicable document in CISL.	<p>As per applicable SoW requirements.</p> <p>Different columns, sections or documents may be used to distinguish as-contracted, as-designed, and as-built SoCs. References to RFDs and RFWs shall be included.</p>
HADGp2-DD-PM13	Technical Assistance Description	Support WP activity description before implementation	Description of the support activity, its duration (start date, end date), the documents to be delivered, CFIs (if any), the type of activity, the estimated effort and the TAD manager
HADGp2-DD-PM14	Technical Assistance Report	Support WP activity report after implementation	Summary of the support tasks performed, results, and the actual effort spent (in comparison with the estimate in the TAD).

4.2 Engineering documents

Engineering			
ID	Title	Purpose	Content
HADGp2-DD-EN01	Design, Development, and Verification Plan (DDVP)	The document shall outline the plan for the Design, Development, and Verification.	<ul style="list-style-type: none"> • Design: <ul style="list-style-type: none"> ○ Strategy and methodology; ○ Contribution from lower-level elements/components; ○ Assumptions; ○ Approach to security; • Development: <ul style="list-style-type: none"> ○ Assumptions and constraints; ○ Development methodology and lifecycles; ○ Procurement plan (HW and SW); ○ Security aspects of development; • Deployment: <ul style="list-style-type: none"> ○ Installation plan; ○ Usage of the different chains (HW and SW); ○ Overall migration plan; • Verification plan: <ul style="list-style-type: none"> ○ Refer to HADGp2-RD-EC02 annex A for general information; ○ Detailed account of activities to be performed per platform; ○ Acceptance test plan; • Interface management plan; • Relation with Operational preparation and validation; • Transversal to all the above: <ul style="list-style-type: none"> ○ Schedule overview, including relations and dependencies between lower and higher lever milestones and tasks; ○ Critical path analysis; ○ Actors involved in each process and their responsibilities; ○ Engineering tools; ○ Configuration control;
HADGp2-DD-EN02	Requirements Traceability Matrix	Contractor's flow-down of requirements baseline	Refer to HADGp2-RD-EC01 annex N. In particular, it shall include full traceability from contractual baseline to the lower levels (elements, components)

Engineering			
<i>ID</i>	<i>Title</i>	<i>Purpose</i>	<i>Content</i>
HADGp2-DD-EN03	Design Definition File (DDF)	<p>The objective of the design definition file (DDF) is to establish the technical definition of a system or product that complies with its requirements.</p> <p>It shall include the architecture definition and description, functional analysis and functional allocation to elements and components.</p>	<p>Refer to [HADGp2-RD-EC01] annex G</p> <p>The document shall be split into one volume for segment-level, and one for each element (if more than one). In addition, the element-level volumes shall also contain traceability to SW DDFs as per applicable document.</p>
HADGp2-DD-EN04	Design Justification File (DJF)	<p>The objective of the design justification file (DJF) is to present the rationale for the selection of the design solution, and to demonstrate that the design meets the baseline requirements.</p> <p>The DJF is a collection of all documentation that traces the evolution of the design during the development and maintenance of the product.</p>	<p>Refer to [HADGp2-RD-EC01] annex K.</p> <p>The document shall be split into one volume for segment-level, and one for each element (if more than one). In addition, the element-level volumes shall also contain traceability to SW DJFs as per applicable document.</p>

Engineering			
<i>ID</i>	<i>Title</i>	<i>Purpose</i>	<i>Content</i>
HADGp2-DD-EN05	Commercial Off-The-Shelf (COTS) List	The purpose of this list is to provide the list of products (HW or SW) procured from third parties as COTS products, providing sufficient information to prove compliance to contractual conditions and justify their appropriateness for their intended use.	<p>List of COTS, including at least:</p> <ul style="list-style-type: none"> - traceability to design, - justification for selection, - proof of compliance to contractual conditions (IPRs, ITAR/EAR...), - information relevant for maintainer (spares policy, end of sale, cost, license management...). <p>The document shall be split into one volume for segment-level, and one for each element (if more than one). In addition, the element-level volumes shall also contain traceability to SW DJFs as per applicable document.</p>
HADGp2-DD-EN06	External Interface Control Document (EICD)	The External Interface Control Document defines the interfaces between the HADG and all external entities.	Refer to [HADGp2-RD-EC04] annex B and [HADGp2-RD-EC05] annex E. The scope of the document includes external interfaces. It is noted that there are external interfaces covered by existing ICDs applicable as per CISL (GSC, etc.) or deliverable as per DRL (SECMON, etc.), which can be referenced by the EICD for what concerns those interfaces.
HADGp2-DD-EN07	Internal ICD (IICD)	The Internal Interface Control Document defines the interface between two lower level subsystems of the HADG.	Refer to [HADGp2-RD-EC04] annex B and [HADGp2-RD-EC05] annex E. The scope of the document includes internal interfaces between elements and components.
HADGp2-DD-EN08	Obsolescence Plan	Monitoring	Refer to applicable SoW requirements.

Engineering			
ID	Title	Purpose	Content
HADGp2-DD-EN09	Installation Report	The report shall compile the description of the actual works performed on site during the installation of the element and provide the summary conclusions of the status of the element 'as deployed'.	<ul style="list-style-type: none"> i. Interactions with other elements/entities on site during installation period ii. Overall Site Description iii. Overall element description iv. Actors involved in the Site Installation v. Installation tools checklist vi. Packing Inspection vii. Equipment Inspection viii. Installation detailed description ix. Installation schedule x. Health and Safety procedures (General and Site specific) xi. Inputs to Site/Elements ICD xii. Local Rules and Regulations applicable to the installation activities on site xiii. Recommendations for future installations
HADGp2-DD-EN10	Verification Specification	As required by the Statement of Work, this document provides detailed step-by-step instructions for conducting verification activities (test, inspection, review of design...) in accordance with the relevant requirements.	Refer to [HADGp2-RD-EC03] annexes B and C. The document shall be split into one volume for segment-level, and one for each element (if more than one).
HADGp2-DD-EN11	Verification Report	Report on the execution, result and conclusions (as per pass/fail criteria) of verification procedure, which may be test, inspection or review of design.	Refer to [HADGp2-RD-EC02] annexes C, D, E, F. The document shall be split into one volume for segment-level, and one for each element (if more than one).
HADGp2-DD-EN12	Verification Control Document (VCD)	List of requirements with traceability to phase in which they are planned to be verified and status	Refer to [HADGp2-RD-EC02] annex B.
HADGp2-DD-EN13	HADG-SECMON ICD	Interface Control Document for SECMON	Refer to [HADGp2-RD-EC04] annex B and [HADGp2-RD-EC05] annex E. (Specific to SECMON interface)

Engineering			
ID	Title	Purpose	Content
HADGp2-DD-EN14	HADG Elements (sub-systems) Technical Specifications	Element or sub-system level technical specifications of the HADG Infrastructure	The applicable document " HADG V2 Technical Requirements ", HADGp2-AD-TR01, being the customer specification, shall be intended as the system level technical specification from where the required element (sub-system) technical specifications need to be derived from the supplier, covering the whole E-GSC SW and HW design. Refer to [HADGp2-RD-EC11] and to [HADGp2-AD-PA07] for SW specifications.

4.3 Operations and maintenance documents

Operations and maintenance			
ID	Title	Purpose	Content
HADGp2-DD-OP01	Concept of Operations	This document describes the new operations concept for each release.	<p>Refer to [HADGp2-RD-EC10] annex C. The Operations Concept shall include in particular information on:</p> <ul style="list-style-type: none"> • Utilizing the provided infrastructure to provide the services in the most efficient manner, whilst safeguarding the safety and security of the Galileo System; • operational processes, procedure preparation, validation and training activities, team composition, etc., whilst guaranteeing the continuity of operational services. • interactions with the external interfaces • Specifying the benefits expected to accrue (efficiency, performance improvements, etc.); • Analysing of the impact on the: <ul style="list-style-type: none"> ○ End-user services; ○ Safety of the segment; ○ Compliance with requirements (including security); ○ Ability to upgrade the OPE chains with new releases of the infrastructure without service interruption. • Describing the resource impacts for introducing the change (e.g. for modifying and validating the operational products, team training, routine operations team sizing, etc.); • Planning for the schedule for introducing the change. • Justifying of any deviation(s) to the present CONOPS.

Operations and maintenance			
ID	Title	Purpose	Content
HADGp2-DD-OP02	Maintenance Plan	<p>The maintenance Plan shall be developed to guarantee the supportability of the HADG, with the best cost effective policy and with respect of the availability</p> <p>Purpose of this document is to describe and plan the activities necessary to assure the development of the HADG maintenance planning and procedures.</p>	<p>The Maintenance Plan shall have at least as contents:</p> <ol style="list-style-type: none"> i. General presentation of the product (context) ii. Maintenance management and organisational approach iii. Maintenance basic concept and assumptions iv. H/W maintenance concept v. S/W maintenance concept vi. Maintenance activities definition vii. Maintenance WP and logic viii. Maintenance plans and specifications ix. Maintenance procedures definition and verification. x. Maintenance tools / equipment and their maintenance requirements xi. Maintenance development logic xii. Obsolescence xiii. Management and obsolescence handling logic xiv. Product under consideration xv. Activities definition xvi. Report description
HADGp2-DD-OP03	Integrated Logistics Support Concept	<p>The purpose of the ILS Concept is to define the general Integrated Logistic Support (ILS) Concept and forms the baseline and reference document for the implementation of the ILS tasks applicable to the Contractor.</p>	<p>The "ILS Concept" shall document, as a minimum, the conduct of:</p> <ul style="list-style-type: none"> • Overall ILS approach; • Maintenance concept; • Provision of spare and consumable; • Provision of test equipment and tools/applications; • Provision of technical documentation; • Asset Management of overall Galileo EU Assets; • PHS&T, including ITAR/Security constraints & Import/Export regulations.

Operations and maintenance			
<i>ID</i>	<i>Title</i>	<i>Purpose</i>	<i>Content</i>
HADGp2-DD-OP04	Integrated Logistics Support Plan	The ILS Plan documents the system maintenance concept, its maintenance resource requirements, and supporting maintainability analyses.	<p>The ILS Plan and its processes and outputs shall be based on the latest ECSS standard [HADGp2-RD-EC09] and shall be in accordance with the System ILS Concept and applicable documents.</p> <p>The ILS Plan shall have, at least, as contents:</p> <ul style="list-style-type: none"> • General assumptions and constraints; • ILS program product tree & WBS; • ILS schedules and milestones; • ILS program description: <ul style="list-style-type: none"> ○ ILS activities; ○ ILS management; ○ Logistic Support Analysis, including process and interfaces; ○ Maintenance plan and procedures; ○ Asset Management, including processes and interfaces; ○ Supply support plan; ○ Packaging, Handling, Storage & Transportation (PHS&T); ○ Training and certification. • ILS team structure and roles; • ILS tools and support equipment; • Facilities used to host and support the ILS activities; • ILS security aspect consideration; • ILS interfaces & responsibilities; • ILS KPIs and reporting mechanisms.

Operations and maintenance			
<i>ID</i>	<i>Title</i>	<i>Purpose</i>	<i>Content</i>
HADGp2-DD-OP05	Spare parts analysis	The scope of the “Spare Parts Analysis” is to identify all the spares required to support the routine operations and maintenance of the HADG, provide an estimation of its consumption rate, and identify their placement and numbers required to ensure that the pool of spareparts available to replace failed components is sufficient to maintain the overall services performance and to guarantee that the restoration times for fulfilment of the HADG performances.	This document shall provide an analysis for each element at each facility and, taking into account the overall requirements, provide a detailed estimation of the spares required to support its operations, and the acceptable latency of its availability.

<p>HADGp2-DD-OP06</p>	<p>Training Plan</p>	<p>The purpose of this document shall provide a detailed overview of the training plan put in place to ensure the required skills to operate the HADG are available and maintained.</p> <p>The primary purpose of this document is to generate the training concept, identify training needs, give an overview of the training program, including the concept for training from Element or equipment Providers and to identify the course content and auxiliary features of the training program.</p> <p>This document gives an overview on the training in terms of training concept, instructor role, training types and courseware summary. This document addresses also the key aspects to be taught during lessons for each element. Those aspects are addressed during training to Operations and Maintenance personnel within</p>	<p>The Training Plan shall have at least as contents:</p> <ul style="list-style-type: none"> i. Training management and organisational approach; ii. Work Breakdown Structure (WBS); iii. Training planning; iv. Training concept: <ul style="list-style-type: none"> o Context; o Process; o Technical objectives; o Competence/Certification; o Schedule; o Personnel; o Training modules; o Training development schedule; o Training courseware; o Course structure; o Training means/tools/manual/facilities/simulators; o Instructional method and evaluation. v. Training program: <ul style="list-style-type: none"> o Training types; o Program overview; o Training requirements for AIV/deployment, and special/routine operations; o Detailed schedule of courses; o Training course definitions. vi. Training records; vii. Training summary;
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Operations and maintenance			
<i>ID</i>	<i>Title</i>	<i>Purpose</i>	<i>Content</i>
		<p>the overall training concept.</p> <p>It also serves as a general document to coordinate the different trainings. The purpose is to provide a general overview of who needs what training and when.</p>	

Operations and maintenance			
ID	Title	Purpose	Content
HADGp2-DD-OP07	Training Material	The Contractor shall provide, in accordance to their qualified processes and procedures related to training and the training material (documents, presentations, technical exercises, supporting material...)	<p>The training manuals shall cover management, supervision, maintenance and engineering of the HADG and shall be organised in sections, each one covering a specific domain. Each section/volume shall cover the training objectives, schematics and course file.</p> <p>Volume I: Overall Training (mission, functions, design, ...) Volume II: Installation and Maintenance training shall include at minimum:</p> <ul style="list-style-type: none"> • Installation activities for the HADG • The whole set of procedures to start and re-start the HADG • Environment controls and check-lists prior to installation • In process and after installation controls • Recovery procedures in case of control failure <p>Volume III: Operations training shall include at minimum:</p> <ul style="list-style-type: none"> • Operational description of the HADG, including working positions • Operational support set-up • Operational constraints • Operational configuration management • HADG monitoring • Performances monitoring • Reporting • Routine operations • Contingency operations, procedures following an alert, procedures following an alarm <p>Volume IV: Maintenance training shall include at minimum:</p> <ul style="list-style-type: none"> • Technical description including functional schematics • Hardware configuration management • Software configuration management • Detection of anomalies • Maintenance procedures • Test and acceptance procedures for spare/repair parts <ul style="list-style-type: none"> ○ Other procedures ○ Maintenance reporting ○ Performances analyses ○ PHST procedures
HADGp2-DD-OP08	Training Report	To provide records of the trainings that have been held	<p>The records shall include:</p> <ol style="list-style-type: none"> i. Name of the course ii. Name of participants iii. Date of course iv. Pass/fail status

Operations and maintenance			
ID	Title	Purpose	Content
HADGp2-DD-OP09	Installation, Operations, and Maintenance Manual	The manual for all elements, equipment, tools and functionalities are to be provided, including installation, operation and maintenance topics.	<p>The document shall be split into volumes segregating segment-level, and each of the elements (if applicable), which in turn may be further split into Installation, Operation and Maintenance volumes. Procedures may be included as annexes to improve readability.</p> <p>The Installation volume shall include at minimum:</p> <ol style="list-style-type: none"> i. The whole set of installation procedures ii. The whole set of start and re-start procedures iii. Environment controls and check-lists prior to installation iv. In process and after installation controls v. Recovery procedures in case of control failure <p>The Operations volume shall include at minimum:</p> <ol style="list-style-type: none"> i. Operational support set-up ii. Operational constraints iii. Operational configuration management iv. Element monitoring v. Performances monitoring vi. Reporting vii. Routine operations viii. Contingency operations, procedures following an alert, procedures following an alarm ix. General information x. Procedures to upgrade the system in a scalable way <p>The Maintenance volume shall include at minimum:</p> <ol style="list-style-type: none"> i. Technical description including functional schematics ii. Hardware configuration management iii. Software configuration management iv. Detection and resolution of anomalies v. Maintenance procedures : installation/removal/tests/trouble shooting/repairs vi. Test and acceptance procedures for spare/repair parts vii. Other procedures viii. Maintenance reporting ix. Performances analyses (hardware reliabilities,...) x. Links to PHST procedures
HADGp2-DD-OP10	Packaging, Handling, Storage, and Transportation (PHST) Manual	Manual detailing the handling and packing control for the items under the contract	Manuals, procedures and information in compliance with applicable documents

Operations and maintenance			
<i>ID</i>	<i>Title</i>	<i>Purpose</i>	<i>Content</i>
HADGp2-DD-OP11	Maintenance Procedures	The maintenance procedures should include step-by-step, fool-proof instructions to maintain each part of the system (routinely and non-routinely).	Procedures including classification into maintenance levels, environment, required tools, starting and ending conditions, steps, possible problems and contingencies. Refer to [HADGp2-RD-EC10] annex I.
HADGp2-DD-OP12	Migration Plan	Plan for the migration to OPE of a new release	Detailed list of activities step-by-step to allow the migration to a new HADG release in OPE chain, preserving the operational data and configuration from the previous list, identifying the corresponding CCRs, inputs and risks
HADGp2-DD-OP13	KPI Monitoring and Management Plan	Plan for the KPI regime management	The “KPI Monitoring and Management Plan” shall define the Contractor’s approach to at least the following aspects: <ul style="list-style-type: none"> • The measurement, configuration, and maintenance of service perform the activities under KPI regime; • Reporting techniques for each of the KPIs • Mechanisms for automated data collection and reporting; • Tools used to measure and analyse the KPI data
HADGp2-DD-OP14	KPI report	Report on the measured KPIs and metrics computed as per applicable requirements.	List of applicable KPIs and metrics, measured results and evidence

4.4 Security and accreditation documents

Security accreditation			
ID	Title	Purpose	Content
HADGp2-DD-SA01	Security Management Plan (SMP)	This document specifies how the Contractor and subcontractors shall implement a "Security Management Plan" in line with the procedures of the Galileo Program Security Instruction and the COMSEC (whenever applicable) and the applicable Cyber Security requirements	<p>The "Security Management Plan (SMP)" shall include, but is not limited to, the conduct of:</p> <ul style="list-style-type: none"> i. Organisation presentation: <ul style="list-style-type: none"> ○ Role, responsibilities and contact details of the security officer; ○ Roles responsibilities and contact details of the project manager. ii. Personnel and facilities clearances; iii. Organisation of classified meetings; iv. Management of classified information: <ul style="list-style-type: none"> ○ Information distribution; ○ Markings of classified documentation; ○ Protection of restricted classified information; ○ Protection of confidential/secret information; ○ Documentation repositories; ○ Decommissioning; ○ Incident handling and reporting. v. Transmission of classified information: <ul style="list-style-type: none"> ○ Formal and informal transmission; ○ Electronic transmission; ○ Transmission of restricted information; ○ Transmission of confidential/secret information; ○ Crypto and key material transmission. vi. Communication: <ul style="list-style-type: none"> ○ Video conferencing; ○ Telephone conferencing. vii. Secured facilities description: <ul style="list-style-type: none"> ○ Alarm follow up procedures; ○ Key policy; ○ Access procedures. viii. Visits to classified facilities: <ul style="list-style-type: none"> ○ Request for Visits (RFV); ○ Procedures for international visits; ○ Standard procedures for recurring visits. ix. Identification of specific security needs; x. Risk assessment based on the security needs; xi. Cyber strategy and approach according to applicable Cyber requirements

Security accreditation			
ID	Title	Purpose	Content
HADGp2-DD-SA02	Threat Scenario Coverage	Refer to [HADGp2-AD-SA21].	Refer to [HADGp2-AD-SA21].
HADGp2-DD-SA03	Identification and Classification of Assets	The purpose is to ensure that assets are identified and properly classified, to be adequately protected throughout their lifecycles	It shall cover, but is not limited to, the following aspects: <ul style="list-style-type: none"> • Identification of assets • Dataflow description between assets • Security impact assessment • Determination of classification as per security classification guide • Specific security protection
HADGp2-DD-SA04	Certification and Evaluation Status Report	Since the protection of EUCI is provided by cryptographic products, preference shall be given to products which have been approved by the Council or by the Secretary-General of the Council in its function as crypto approval authority of the Council. In addition, also the Common Criteria evaluation for other equipment fulfilling security functions.	The contractor shall: <ul style="list-style-type: none"> • demonstrate that the procurement of approved cryptographic products has been performed • demonstrate that only that approved cryptographic products will be used for the transmission, processing and storage of EUCI by electronic means • Provide relevant certificates for all cryptographic product installed in the E-GSC
HADGp2-DD-SA05	Inputs to Local Security Plan	The Local Security Plan shall provide a local security risk assessment for a specific site	This document will show which security measures, if any, are required by the infrastructure to be implemented by the site to meet the corresponding security requirements, and which residual risks remain.
HADGp2-DD-SA06	Local Security Operations (SECOPS)	The SECOPS shall describe the procedural security to be adopted at system level.	It shall cover, but is not limited to, the following aspects: <ul style="list-style-type: none"> • Administration and Organisational Security • Asset Classification and Control • Physical Security • Personnel Security • Document Security • Hardware and Software Security • Emergency and Contingency Plans • Communications Security • Configuration Management

Security accreditation			
ID	Title	Purpose	Content
HADGp2-DD-SA07	Business Continuity Plan	The BCP (incl. Business Impact Assessment (BIA)) presents the result a security incident analysis on business functions and the effect that a business interruption may have upon them.	<p>The BCP shall provide all measures required to prevent and overcome system and operational failures within the specified availability and reliability thresholds defined. It is the ability of the HADG to withstand changes in its environment and still function. The BCP covers all measures related to HADG resilience, identifying and quantifying of loss ratios must also include the estimated investment required in loss prevention that can prevent disaster-related economic loss to the HADG services and systems, both tangible and intangible.</p> <p>Each function/activity typically relies on a combination of constituent components of the plan in order to operate, these include:</p> <ul style="list-style-type: none"> • Inventory of Assets <ul style="list-style-type: none"> • Registration of all hardware, systems, software, versions, licenses, • Ownership and control associated with each configuration item, • Configuration item management database. • Supply of Equipment <ul style="list-style-type: none"> • Supplies and suppliers, • Locations, including other offices and backup/work area recovery sites, • Documents and documentation, including which have off-site backup copies, • Business documents, • Procedure documentation. • Business impact analysis (BIA) <ul style="list-style-type: none"> • impact analysis, • threat analysis. • Business Impact Scenarios (BIS) on: <ul style="list-style-type: none"> • Human resources (full-time staff, part-time staff, or contractors), • IT systems, • Physical assets (mobile phones, laptops/workstations, etc.), • Documents (electronic or physical).
HADGp2-DD-SA08	Key Management Plan	Plan for the management of encryption keys used in the system.	Refer to template HADGp2-AD-SA37.

4.5 Cyber-security documents

Please refer to the applicable cybersecurity requirements, CISL and DLR list.

Cyber-security			
ID	Title	Purpose	Content
HADGp2-DD-CS01	Cyber audit plan	Refer to Cybersecurity requirements for Management [HADGp2-AD-SA12]	
HADGp2-DD-CS02	Cyber audit report	Refer to Cybersecurity requirements for Management [HADGp2-AD-SA12]	
HADGp2-DD-CS03	Cyber critical findings notification	Refer to Cybersecurity requirements for Management [HADGp2-AD-SA12]	
HADGp2-DD-CS04	Security incident report	Refer to Cybersecurity requirements for Management [HADGp2-AD-SA12]	
HADGp2-DD-CS05	Security awareness programme	Refer to Cybersecurity requirements for Management [HADGp2-AD-SA12]	
HADGp2-DD-CS06	Security awareness report	Refer to Cybersecurity requirements for Management [HADGp2-AD-SA12]	
HADGp2-DD-CS07	Cyber acceptance audit plan	Refer to Cybersecurity requirements for service infrastructure [HADGp2-AD-SA13]	
HADGp2-DD-CS08	Cyber acceptance report	Refer to Cybersecurity requirements for service infrastructure [HADGp2-AD-SA13]	
HADGp2-DD-CS09	Network map	Refer to Cybersecurity requirements for service infrastructure [HADGp2-AD-SA13] and Network Map Template and Annex E [HADGp2-AD-SA15]	
HADGp2-DD-CS10	Vulnerability report	Refer to Cybersecurity requirements for service infrastructure [HADGp2-AD-SA13] and Cyber Security Report Template [HADGp2-AD-SA18]	
HADGp2-DD-CS11	Vulnerability correction plan	Refer to Cybersecurity requirements for service infrastructure [HADGp2-AD-SA13]	
HADGp2-DD-CS12	Patch report	Refer to Cybersecurity requirements for service infrastructure [HADGp2-AD-SA13]	
HADGp2-DD-CS13	Lockdown report	Refer to Cybersecurity requirements for service infrastructure [HADGp2-AD-SA13]	

Cyber-security			
<i>ID</i>	<i>Title</i>	<i>Purpose</i>	<i>Content</i>
HADGp2-DD-CS14	Security credentials	Refer to Cybersecurity requirements for service infrastructure [HADGp2-AD-SA13]	
HADGp2-DD-CS15	Patch impact analysis	Refer to Cybersecurity requirements for service infrastructure [HADGp2-AD-SA13]	
HADGp2-DD-CS16	Element Security Profiles for Provider (UNCLA and/or CLA)	Refer to the CISL template reference [HADGp2-AD-SA17]	

4.6 PA, QA and RAMS documents

PA, QA and RAMS			
<i>ID</i>	<i>Title</i>	<i>Purpose</i>	<i>Content</i>
HADGp2-DD-PA01	Product Assurance Plan	The plan shall describe the planning, implementation and control of the PA/QA/RAM & Safety Programme established by the Contractor to meet the Requirements	Refer to [HADGp2-AD-PA04]
HADGp2-DD-PA02	PA & Safety Requirements for Subcontractors and Suppliers	To tailor the Contracting Authority PA requirements, to PA Requirements to Subcontractors and Suppliers.	Refer to [HADGp2-AD-PA04], GAL-PA-345
HADGp2-DD-PA03	PA/QA Report		Refer to [HADGp2-AD-PA04] GAL-PA-706

PA, QA and RAMS			
ID	Title	Purpose	Content
HADGp2-DD-PA04	Audit Preparation and Implementation Plan	This plan shall provide information about planned audits of HADG activities, Subcontractors and Suppliers.	<p>The Contractor shall provide the list of the audits planned. The list shall identify:</p> <ol style="list-style-type: none"> i. Scope ii. Objectives iii. Activities, subcontractors and suppliers to be audited iv. Audit baseline v. Current status vi. Schedule of the follow-up Audit vii. Schedule for implementation of recovery actions (when applicable) <p>Also refer to [HADGp2-AD-PA04] section 4.5</p>
HADGp2-DD-PA05	Audit Report	This report shall provide the findings of audits conducted at the Prime Contractor at the subcontractors and lower level subcontractors. This report shall be provided after each Audit conducted. Internal Audits in relation to the Quality Management System (ISO 9001 or equivalent) do not need to be provided.	<p>This document shall include:</p> <ol style="list-style-type: none"> i. Purpose and rationale of the audit ii. Auditor(s) iii. Auditee(s) iv. Scope of the audit v. Approach/procedure, including audit baseline vi. Outcome of Audit and recommendations <ul style="list-style-type: none"> ○ Findings, including non-conformances ○ Actions placed on the auditee
HADGp2-DD-PA06	Critical Item List (CIL)	To identify and to track all the items that are critical to dependability, safety, performance, procurement, manufacturing, and verification. The Contractor shall include any Long lead Items (LLI) here, in case there is any.	Refer to [HADGp2-RD-EC07] annex A.

PA, QA and RAMS			
ID	Title	Purpose	Content
HADGp2-DD-PA07	Problem Reports (ORs, AR, NCRs)	To report the detection and correction of non-conformances, their disposition and tracking up to close-out	Content can be extracted from description in the PA/QA requirements as identified in CISL. The Reports shall have at least as contents: <ol style="list-style-type: none"> i. Company ii. Project name iii. Report-no. iv. Revision v. Critical item vi. Attachments vii. Anomaly/NC observation viii. Description ix. Initiator x. References. to Minutes of Meetings xi. Classification xii. Cause of Anomaly/NC xiii. Corrective or preventive actions xiv. PA signature xv. Engineering signature xvi. Chairman signature xvii. AR/NCR close-out.
HADGp2-DD-PA08	List and trend of Problem Reports	To provide the list of Anomaly Reports and Non-Conformance Reports, when required	Content can be extracted from description in the PA/QA requirements document as identified in CISL. The List of reports shall have at least as contents: <ol style="list-style-type: none"> i. Anomaly/NC ID ii. Date Raised iii. Item issue raised against iv. Person raising issue v. Description of issue vi. Date of last board where issue was discussed vii. Current status of issue resolution viii. Link to lower level issue if existing ix. Summary status – to allow filtering of anomalies
HADGp2-DD-PA09	Dependability, RAMS analysis and Reports	To identify all failure modes of the equipment and rank them in accordance with the severity of the effects of their occurrence	Content can be extracted from description in the PA/QA requirements document as identified in CISL.

PA, QA and RAMS			
<i>ID</i>	<i>Title</i>	<i>Purpose</i>	<i>Content</i>
HADGp2-DD-PA10	Return of Experience report	The purpose of the document is to provide the Return of Experience (REX) Report.	Refer to [HADGp2-AD-PA04] section 9.
HADGp2-DD-PA11	System/Element Release Note	System or Element hardware and software configuration	Refer to [HADGp2-AD-PA04], in particular GAL-PA-352. Segment-level releases shall contain traceability to element (and lower level) release notes.
HADGp2-DD-PA12	Certificate of Conformance	Certificate of conformance for each delivered end-item	Refer to [HADGp2-RD-EC08] annex D.
HADGp2-DD-PA13	Request for Deviation	Request for authorisation to deviate from a specified contractual requirement during design and development phases	Template [HADGp2-AD-PA06]. For what concerns RFDs to cyber requirements, please refer to applicable Cyber requirements
HADGp2-DD-PA14	Request for Waiver	Request for authorisation to deviate from a specified contractual requirement during or after qualification phase	Template [HADGp2-AD-PA06]. For what concerns RFDs to cyber requirements, please refer to applicable Cyber requirements
HADGp2-DD-PA15	Non-conformance Status List	List the Non-Conformances	List of Non-Conformances with their explanation and proposed workarounds and permanent fixes (if possible), in line with [HADGp2-RD-EC12]
HADGp2-DD-PA16	Inspection Plan	The plan shall describe the planning, purpose and organization of the inspections to be performed in the course of the project	Schedule, responsibilities, scope & objectives, reference to the procedures that will be used, organizational details
HADGp2-DD-PA17	Inspection Procedure	A document that describes how the inspection will be performed.	Step by step procedure to be followed for the execution of the inspection Methods and tools used to perform the inspection and gather all the evidences

PA, QA and RAMS			
ID	Title	Purpose	Content
HADGp2-DD-PA18	Inspection Report	A document that reports the result of the inspections performed	Result of the inspection (expected result, actual result) Evidences Actions raised

4.7 Configuration and documentation management documents

Configuration and documentation management			
ID	Title	Purpose	Content
HADGp2-DD-CD01	Configuration and Documentation Management Plan (CADM Plan)	The “CADM Plan” details the process employed to maintain all hardware, software, operational procedures and other operational documentation under configuration control.	Refer to [HADGp2-RD-EC06] annex A. <ul style="list-style-type: none"> i. Milestone chart which depicts the Configuration Management (CM) and Data Management (DM) activities and their relationship to the major overall project milestones; ii. Description of the CM and DM organisation; iii. Identify the CM and DM interrelationships, among the contractor's software and hardware; iv. Description of the organisation, authority and responsibility of the Configuration Control Board (CCB); v. Describe the methods for documents, physical items and software identification; vi. Identify requirements for the standardisation, preparation, submission and subsequent release of configuration documents and controlled documents; vii. Describe procedures for identifying both formal and internal (contractor) configuration baselines; viii. Plan the selection of configuration items; ix. Define procedures for processing of changes and waivers; x. Outline the recording, storing, handling, verifying, validating and presenting of configuration status information;

Configuration and documentation management			
<i>ID</i>	<i>Title</i>	<i>Purpose</i>	<i>Content</i>
HADGp2-DD-CD02	Deliverable Items List	To establish the list of all deliverable items, hardware and software including Contracting Authority Undertakings per version	The document identifies the complete list of deliverable items (HW, SW...) under the contract, in compliance with the Deliverable Requirements List, including the information on scheduled contractual deliveries and redeliveries of each document.
HADGp2-DD-CD03	Document Delivery List	To establish the list of all deliverable documents and delivery plan	The document identifies the complete list of deliverable documentation under the contract, in compliance with the Document Requirement List, including the information on scheduled contractual deliveries and redeliveries of each document.
HADGp2-DD-CD04	Document Status List	To provide status of project documentation baseline	List of deliverables documents and their current status. References to the corresponding delivery notes shall also be included.
HADGp2-DD-CD05	Configuration Status Accounting Report (CSAR)	The Contractor shall maintain and regularly report to the respective Contracting Authority the configuration status accounting up to date.	Detailed content can be extracted from the PA/QA documentation in CISL. The CSAR shall however include at least the following elements: <ul style="list-style-type: none"> i. Contractual Baseline up to date with respect to the original contract, in terms of Contract Change Notice list and status ii. Contracting Authority Change Requests and status reports on change implementation and verification iii. Document status list
HADGp2-DD-CD06	Configuration Items Data List (CIDL)	Document generated from the central database giving the current design status of a configuration item (CI), at any point of time in sufficient detail, providing its complete definition	Refer to [HADGp2-RD-EC06] annex C.
HADGp2-DD-CD07	As-Built Configuration List	to provide a reporting instrument defining the as-built status per each serial number of configuration item subject to formal acceptance	Refer to [HADGp2-RD-EC06] annex D.

Configuration and documentation management			
<i>ID</i>	<i>Title</i>	<i>Purpose</i>	<i>Content</i>
HADGp2-DD-CD08	Document Change Proposal	Request to the book-captain of a document for a specified modification in the document	Template defined in the CISL
HADGp2-DD-CD09	Document Change Notice (DCN)	Modification of a document by the corresponding book-captain	Template defined in the CISL
HADGp2-DD-CD10	Waivers/Deviations Status List	The purpose of the document is to provide the status list of deviations and waivers.	List of Waivers and Deviations and their status as per applicable processes. It shall include traceability to the corresponding applicable requirements, NCRs, and to affected elements/subsystems (if relevant).
HADGp2-DD-CD11	Hardware and software inventory	List of hardware and software items available under the contract, with their associated details	Refer to [HADGp2-AD-PA09].

4.8 SW documents

Content as per GSWs [HADGp2-AD-PA07].

End of Document