

ARTES ScyLight Full Proposal

Requirements for the Content of the Technical Proposal

Part 3A *Product Specification*

Statement of Applicability and Proposal Submission Requirements

Applicable Segment(s)	
Space	Ground
yes ^{1,2}	yes

Applicable Development Phase(s)			
Definition	Technology	ScyLight Demonstration	Product
yes	yes ¹	yes ^{1,2}	yes ¹

1. Requirements specific to Space Segment elements of the Technology, ScyLight Demonstration and Product Phases are stated in section 4.
2. Requirements specific to Space Segment elements of the ScyLight Demonstration Phase are stated in section 5.

Proposal Submission Requirements
A single Part 3A of the Technical Proposal shall be included covering all Development Phases for which support is being requested under the ARTES ScyLight Call for Proposals.

Notes on the Content of this Document

- i* This style is used for explanatory notes and guidance to help you to develop the Full Proposal content.
- 1** This numbered style in bold font identifies the main sections to be completed in this Part of the Proposal.
- 1.2 This numbered style identifies requirements for the Full Proposal content for each of the main sections of this Part of the Proposal.

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Requirements for the Content of the Technical Proposal: Part 3A - Product Specification	
1	Technical Requirements
1.1	<p>The Product Specification shall define the technical requirements at a level of detail commensurate with the development status of the product. The technical requirements shall cover the following:</p> <ul style="list-style-type: none"> - functional requirements; - performance requirements; - interface requirements; - environmental requirements; - design requirements; - implementation requirements; - operational scenarios requirements, user needs and use cases (if applicable); - verification requirements, in particular those established for the product by any third party. <p><i>¿ For example, third-party verification requirements could be requirements received from the customer(s), or from a certification authority such as the FCC.</i></p> <p><i>¿ Requirements needing further elaboration should be highlighted (e.g. TBC/TBD).</i></p> <p><i>¿ For the Definition Phase, approximate or preliminary requirements shall be provided in the Full Proposal.</i></p>
1.2	The Tenderer shall provide a copy of the technical requirements for any major subsystem of the product at a level of detail commensurate with the development status of the product.
1.3	The Product Specification shall be appended to Part 3A of the Full Proposal.
1.4	The requirements shall be specified using unique identifiers.
1.5	<p>If the technical requirements have been provided by an external entity to the Tenderer, then the Tenderer shall provide a statement of compliance (SOC) to the technical requirements.</p> <p><i>¿ For example, if a spacecraft manufacturer has provided a set of technical requirements to the Tenderer for use in their development.</i></p>
2	Quality Requirements
<i>¿</i>	<i>If the product is targeting a specific customer, then the quality requirements should reflect those used by the target customer.</i>
<i>¿</i>	<i>The product quality requirements may be a stand-alone document.</i>
2.1	<p>The Tenderer shall identify any specific quality requirements for the product in its intended market and operating environment at the level of detail appropriate for the proposed Development Phase.</p> <p><i>¿ For example, the end product will be qualified to ECSS-xxxx; or: the space product will be subject to qualification testing consistent with its use on the xxxx satellite platform; or: the item shall be tested to meet CE/FCC marking requirements.</i></p>
3	Requirements Traceability
3.1	The Tenderer shall provide a copy of the Requirements Traceability Matrix, where the product complexity is such that multi-level specifications are used and the development maturity of the product enables the traceability to be defined.

Requirements for the Content of the Technical Proposal: Part 3A - Product Specification	
4	<p>Specific Requirements for Space Segment elements of the Technology, ScyLight Demonstration and Product Phases</p> <p><i>¿ For Space Segment activities during the Product Phase, verification includes qualification.</i></p> <p><i>¿ The verification approach for Space Segment activities may be presented in the form of a verification control document (VCD). ECSS-E-ST-10-02C, Annex B, provides a description of the contents of a VCD for Space Segment products.</i></p>
4.1	<p>The Product Specification shall define the requirements for quality control, including as applicable:</p> <ul style="list-style-type: none"> i) quality assurance ii) dependability iii) safety iv) electrical, electronic, electromechanical (EEE) components v) materials, mechanical parts and processes vi) software product assurance <p><i>¿ For Space Segment activities Product Specification includes a description or a list of the quality standards or documents that the Tenderer will apply during the development process.</i></p>
4.2	<p>The Tenderer shall state whether or not the proposed development specifically targets one or more ESA space missions.</p>
4.3	<p>If the development targets specific ESA space missions, the Tenderer shall:</p> <ul style="list-style-type: none"> - state that the proposed product assurance approach is compliant with the product quality requirements for those missions, or - provide a statement of compliance to quality requirements of each of the targeted ESA space missions.
5	<p>Specific Requirements for Space Segment elements of the ScyLight Demonstration Phase</p>
5.1	<p>The Tenderer shall encompass the requirements of the targeted flight mission by the generic product specification.</p>
5.2	<p>The Tenderer shall identify the intended differences between the proposed flight item(s) and the generic product, as applicable. This includes:</p> <ul style="list-style-type: none"> - technical requirements - interface requirements - qualification requirements - build standard - verification requirements
5.3	<p>The Tenderer shall include in the Full Proposal a statement of compliance encompassing the generic product requirements and the requirements of the targeted flight mission.</p>