**Shared Satellite Payload Introduction Document**

# Client Information

|  |  |
| --- | --- |
| *Organization Name\*:* |  |
| *Tax registration number/Company number\*:* |  |
| *Address registered office\*:* |  |
| *City/State/Zip\*:* |  |
| *Represented by1 \*:* |  |
| *Company website\*:* |  |
| *Link to and official public register (if any), e.g. Commercial Register; Trade Chamber; Non-Profit Legal Entities Register* |  |

1 List all the registered legal representatives

# Mechanical Information

|  |  |
| --- | --- |
| *Payload Size (envelope dimensions or units [U])\*:* |  |
| *Payload mass\*:* |  |
| *Attach a sketch of the payload shape (if known):* |  |

# Hardware Aspects

|  |  |
| --- | --- |
| *Average Power Consumption in [W]\*:* |  |
| *Payload power bus voltage(s) (list all compatible voltage ranges if more than one)\*:* |  |
| *PC104 stack compliance [yes/no]\*:* |  |
| *Peak power consumption in [W] (if known):* |  |

# Software Aspects

|  |  |
| --- | --- |
| *Available control and data interfaces (list all compatible data interfaces if more than one)\*:* |  |
| *Preferred control and data interface(s):* |  |
| *What is the operating system running on the payload’s processor?* |  |
| *Do you use some well-known scheduling mechanism?* |  |
| *Does the design of your payload maintain different states and certain lifecycle monitoring systems?* |  |
| *Do you plan to use encryption of the data sent from the payload which you plan to decrypt on the ground?* |  |
| *What is the size of the biggest data package that you plan to send to the ground?* |  |
| *Do you already have your own communication protocol implemented on the device?* |  |
| *What is the expected frequency of the data that you plan to send to other modules?* |  |
| *If possible, provide some diagrams showing:*   1. *Expected Input and output data for your device (together with the accompanying interfaces)* 2. *Major sequence diagrams for the important use cases* 3. *Some configuration file or a document describing the commands and the telemetry maintained by the payload* |  |
| *Does your device have sufficient non-volatile memory storage for the mission purpose or will you rely on some of the platform devices for storing telemetry data (including error logs, events, etc.)* |  |
| *Does the payload support firmware update as a feature? Do you plan to use EnduroSat firmware update protocol (as part of EnduroSat Space Protocol) ?* |  |

# Hazardous Materials and Environmental Considerations

|  |  |
| --- | --- |
| *Does the payload contain any pressurized vessels, batteries, radioactive, easily combustible or explosive materials [yes/no]?\*:*  *If “yes”, please provide a list of all known hazardous materials:* |  |
| *Has the payload undergone a flight qualification campaign [yes/no]?\*:*  *If “yes”, please elaborate on the tests performed and their levels/durations:* |  |
| *To the best of your knowledge, does the payload fall under any export restriction or regulation such as EAR/ITAR [yes/no]?\*:*  *If “yes”, please provide the details of the classification number:* |  |

# Operational Aspects

|  |  |
| --- | --- |
| *Average operations time needed on a daily basis [hours]\*:* |  |
| *Do you require any attitude control [yes/no]?\*:*  *If “yes”, please elaborate on the pointing/spinning modes needed and the frequency of use.* |  |
| *Pointing accuracy needed (if active attitude pointing is required):* |  |
| *Do you require onboard processing [yes/no]?\*:*  *If “yes”, please elaborate on the estimated complexity/tasks:* |  |
| *Average data generated by payload on a daily basis [kB/MB/GB]\*:* |  |
| *Primary data type to be downlinked (telemetry only, imaging data, etc., if known):* |  |
| *Fraction of peak to average power consumption during nominal operations (if known):* |  |

# Payload Summary

*Please provide a few sentences regarding the payload, it’s primary function and your mission objectives? Please include any important aspects which should be considered during the Shared Satellite’s integration and operations:*