# Group/project:

*Group 3 /* Project Healios

**PM/SE peer review provided by: Group 5**

This document contains the peer review grading sheet for the Systems Engineering and Project Management items addressed in the Design Synthesis Exercise as listed in the title.

Instructions for peer review

Please provide peer review towards the PM/SE aspects of the DSE reports of your peers, as allocated to you. Per deliverable / criterion, provide at least 1 tip (improvement suggestion) and 1 top (accomplishment).

**Consider the following guidelines (but addressing points beyond these guidelines is expected, especially for the deliverables not covered in these explicit guidelines):**

* Functional Flow Diagram (FFD)
  + Does the FFD adhere to standard formatting and syntax?
  + Does the FFD include functions in a logical sequence?
  + Does the FFD include functions to a sufficient level of detail for understanding the project from a functional point of view?
* Functional Breakdown Structure (FBS)
  + Does the FBS adhere to standard formatting and syntax (e.g. proper grouping of functions)?
  + Is the FBS sufficiently detailed (at least up to 3 levels)?
  + Does the FBS translate generic functions to DSE-specific functions (i.e., is the connection with the specific DSE mission statement made, including flow down to detailed functions)?
  + Are the common functions of different mission phases grouped together?
* Requirements Discovery Tree (RTD) & requirements tree
  + Does the RDT adhere to standard formatting?
  + Is there a complete specification of mission and system requirements (either in the RDT or in a dedicated list of requirements)?
  + Do the requirements adhere to the ‘requirements on requirements’?
  + Are the customer-provided (user-)requirements properly analysed, and, if need be, extended with requirements from the functional, market, risk and sustainability analysis?
  + Are sub-system requirements given, provided they affect the top-level system choices?
* Design Option structuring (tree) - DOT
  + Is / are the DOT(s) logically arranged?
  + Is / are the DOT(s) used to think broadly about design generation, i.e., does it include feasible as well as ‘blue-sky’ concepts?
  + Is the initial screening (= trade off) provided, and are the concepts that will enter the mid-term phase provided?
* Market analysis
  + Does the market analysis include stakeholder identification, market segmentation and initial size estimation?
  + Does the market analysis include competitor analysis (including SWOT and/or competitive positioning of the own product)?

**5 – Functional Flow Diagram(s)**

Tip:

Top:

**6 – Functional Breakdown Structure**

Tip:

Top:

**7 – Requirements Discovery Tree & Requirement Structuring**

Tip:

* Some of your requirement statements contain multiple requirements, these should be split up.
* Some of your requirements also implicitly give a solution to a problem, which should not be done at this stage of the design (For example: FU-SYS-12, -14, -15 and -16).
* A lot of your requirements are directly based on JARUS CS-UAS. Having one requirement stating that the system shall adhere to these guidelines might be better for the non-key or non-driving ones to have a better view on your specific requirements.

Top:

* There is a very good explanation for the regulatory context of your requirements.
* You also provide a clear link between the discovery tree and the tables by the way you structured them.
* This is a very complete list of requirements.

**8 – Technical Resource Budgets**

Tip:

Top:

**9 – Technical Risk Assessment**

Tip:

Top:

**10 – Design Option Tree(s)**

Tip:

* You should do some pruning of your DOT to determine the clear loser design options, to make your overall concepts easier to create.
* Some aspects of your tree seem even further split up into subtrees, although there is no clear distinction between when the splitting in aspects and the actual design options start.
* You do not provide overall concepts for consideration in the midterm and trade-off phase.

Top:

* All the expected aspects for a drone seem well covered. There is a broad exploration of these aspects as well. All aspects are also explored deeply enough for this stage of the project.

**11 – Contingency Management**

Tip:

Top:

**12 – Market Analysis**

Tip:

Top:

**25 – Sustainable Development Strategy**

Tip:

Top: