

## Cost and Manufacturing Update - March 2023

Hi Teams,

Hopefully your builds are well progressed now and you are testing and beginning to think about preparation for the static events. With regards to that I have an update on the expectations for 2023 for the Cost and Manufacturing Event. The good news is the requirements are very similar to last year so we are looking for you to build and improve through evolution.

### 1. Documents Required

Again this year we need FS Class (Class 1) and Concept Class (Class 2) to both upload the CRD (Cost Report Documents) to the portal by the deadline.

This includes:

FS Class

- |  |                               |
|--|-------------------------------|
| 1. CBOM – <u>Frame and Body &amp; Powertrain</u> | DBOM – <u>All other areas</u> |
| 2. Cost Explanation File                         |                               |
| 3. Cost Supporting Documents                     |                               |

PDF format only, A4 portrait.

(Please bring hard copies to the event too)

Concept Class

- |                                      |                            |
|--------------------------------------|----------------------------|
| 1. CBOM – <u>Frame and Body only</u> | DBOM – <u>Not required</u> |
| 2. Cost Explanation File             |                            |
| 3. Cost Supporting Documents         |                            |
| 4. Presentation of the Special Task  |                            |

PDF format only, A4 portrait.

(Please bring hard copies to the event too)

## 2. Deadline – VERY IMPORTANT

DOCUMENT/EVENT:	SUBMISSION DEADLINE	PENALTIES INCURRED FOR MISSING SUBMISSION DEADLINE	FINAL DATE FOR LATE SUBMISSION	PENALTIES INCURRED FOR MISSING FINAL DATE	SUBMIT VIA:	FURTHER INFORMATION
Cost Report Document	<b>23/06/2023 17:00 UTC</b>	<b>-20 per day (or part thereof); up to a maximum of -100.</b> All documents required (EBOM, CBOM and Support Documentation). If one or more documents missing, -20 point penalty per day.	28/06/2023 17:00 UTC	-30 points for each missing element of Cost Report on top of any lateness with a maximum of -100 points for non-submission or 5 days late	Manage Submissions' section of Team Account plus hard copy print out to be brought to Cost judging at live event	Upload as zip file containing PDF export from online BOM tool, PDF Cost Explanation File and PDF Supporting Material File

There will be zero mitigation for late submissions. Actually zero. For any reason...

If your system fails or our website isn't available... zero, nothing.

1 second over is late. Teams last year failed on this point and were seconds late and incurred penalties as a result. We are going to follow the same principle this year. Also please note: the penalty as also doubled this year so there is even more reason to submit early.

You should assume that the portal will crash on the submission day and submit early. If this happens it will be your fault for not taking notice of this warning not ours.

I will help you and guarantee your completed submission if you flag issues to me via the FSQD up to the 16<sup>th</sup> June 2023. After that you will have to take your chances. Please, please don't leave it to the last minute.

If you do miss the deadline penalties will apply, there will be no appeal, but I will be happy to explain why we take this strict stance on the day at the event to anybody who wants to know.

## 3. Using the Cost Tool

In one of our videos, we indicated that we were trying to change up the Cost Tool to make it more EV friendly.

This is still an objective (even 1 year later) but development time and capacity is very limited (please feel free to volunteer if you would like to help us with this next year).

In the meantime, in the Powertrain section, we have added an "other" field to the drop down to try and assist EV teams to be able to locate their correct components in the correct location. Any issues please raise a question via the FSQD.

#### **4. Concept Class – Special Task**

The Concept Class Cost Final we introduced last year will continue for '23, as will the ask of teams to undertake a presentation on the topic below. Delivery of the presentation is down to you.

No equipment will be provided so you will have to be innovative in your delivery. You will be left to present the solution to the task and questions will come at the end of the presentation.

The duration should be no longer than 10-15 minutes and that time frame should allow for Q&A too.

Your Special task for 2023 is:

*Your Formula Student Team have been approached by a new single seat racing league that is setting up a global competition in multiple countries, they have seen your prospective frame and body design and really interested in taking on your proposed design for use in their global series.*

*They would like you to present how you would scale up your current manufacturing setup from the current single one off product to a production run of 12,000 units over the next 5 years.*

*Things you may wish to consider (there maybe others)*

- *Materials used*
- *Cycle time impacts*
- *Labour impacts*
- *Make vs buy*
- *Manufacturing processes & feasibility*
- *Assembly processes*
- *Tooling*
- *Capital investment (leasing vs buying)*
- *Risks and opportunities*

Hopefully this gives you all the information you need at this stage. I wish you the best of luck for Formula Student this year and can't wait to meet you all properly at Silverstone. Keep pushing... The results will be worth it.

Best Regards,

John Dangerfield  
Head Cost and Manufacturing Judge  
Formula Student