



## **Baja SAE BRAZIL – Northeast Event 2019**

### **Informative 08 – Design Evaluations**

Salvador, Aug 15<sup>th</sup>, 2019

**Dear Participants,**

The Design Evaluations will be broken down in five different events divided in 2 phases as specified below:

- Phase 1:
  - **Design Validation** (100 points)
  - **Design Presentation** (150 points)
  - **Management and Budget Presentation** (80 points)
  - **Business Presentation** (40 points)
- Phase 2:
  - **Design Finals** (30 Points).

The best three teams considering all the points from Phase 1 + Dynamic Evaluation of Design will qualify to the Design Finals, specifics for where and when all the tests will take place will be informed through new communications.

All deliveries must be written in English (**TSS, DV**, presentation files and any other document), any document delivered partially or totally in any language other than English will have a 30% deduction from their score.

#### **Design Validation**

Refer to [\*\*Informative 02 – Deliverables\*\*](#)

#### **Design Presentation**

Design Presentation will follow the same format adopted in the past years, with an oral presentation regarding vehicle development. The team should be able to present concisely the engineering considerations and processes used during every system development, that description should include but is not limited to: Objectives, client requirements, considered solutions (ex: manual transmission x CVT; independent rear suspension x dependent rear suspension, etc.), improvements over past designs, calculations, analysis, test results, costs considerations, etc.



The presentation material must be delivered to the committee in advance and its size is limited to 150MB.

For each team will be given a maximum of twelve minutes for presenting its vehicle; an extra five minutes may be added for questionings from examining board. The presentation will be made by up to two team members and an optional third for operating the projector, the other team members can be requested during questioning phase, the extra time needed for him/her to be ready (get microphone / go up stage) may impact teams performance on Q&A section.

The presentation order will be defined randomly by the end of the opening briefing presentation, the teams that are not present at the time of the drawing will not be allowed to present, the full presentation order will be informed right after it is finished and before the evaluation begins.

The items to be evaluated are listed below and should be presented in the following order:

- Roll Cage / Ergonomics
- Steering
- Suspension
- Powertrain
- Brakes
- Electronics
- Project Management,

Teams will also be evaluated by the presenters' behavior and performance during Q&A phase.

Scores will be published as below:

- Sub-items – Scores between 0 and 10.
- Design Presentation – Scores between 0 and 150.
- The design presentation final score won't be given by a direct sum/mean of all sub-items scores.

Teams will be provided as minimum resources as a computer with MS PowerPoint 2016 and a projector, the presentation will be open to the public and the vehicle presence is not required during evaluation.



## Management and Budget Presentation

The teams are expected to present:

- Management practices, tuned to the reality of each team, focusing on policies for record-keeping, preservation and dissemination of knowledge; project management; and strategies to increase efficiency, minimize rework and eliminate activities that add little or no value to the project.
- People management aspects, with considerations on the processes to improve technical and behavioral skills of the team members while maintaining and raising the standards of the team, ensuring its continuity.
- Budget plan with considerations to money raising, comparison to planned and real spending, yearly financial reviews, cash flow, balance sheet and futurization when applicable.

The presentation material must be delivered to the committee in advance and its size is limited to 150MB.

For each team will be given a maximum of twelve minutes for presenting its vehicle; an extra five minutes may be added for questionings from examining board. The presentation will be made by up to two team members and an optional third for operating the projector, the other team members can be requested during questioning phase, the extra time needed for him/her to be ready (get microphone / go up stage) may impact teams performance on Q&A section.

The presentation order will be defined randomly by the end of the opening briefing presentation, the teams that are not present at the time of the drawing will not be allowed to present, the full presentation order will be informed right after it is finished and before the evaluation begins.

## Business Presentation

### Objective and Audience

The objective of the Business Presentation is for the team to pitch their startup company (their team) and its first prototype product (the Baja SAE car) to a group of “corporate executives” with various backgrounds who are looking to potentially invest in the further engineering development, manufacturing, sales, and distribution of the cars. Therefore, the “executives” interests include, but are limited to:

- What makes the specific vehicle unique?
- Vehicle design (specifically consumer facing features).
- Manufacturing plan.
- Sales & distribution plan.



- Marketing plan.
- Financials.

**Format**

The business presentation this year will be done in advance through a video sent by the team to the judging committee; up to two team members may be presenting on the video, which should be limited to a maximum of five (5) minutes. The oral presentation may be done in English or Portuguese while all the written information on the video must remain in English.

**Submission Procedure**

The Business Presentation must be submitted as a video file. The team must upload the presentation privately to YouTube and send the link to [bajasaene@gmail.com](mailto:bajasaene@gmail.com) by the submission deadline.

**Further Considerations**

Please bear in mind that the same behavioral criteria used to be evaluated during on-site presentations still are going to be evaluated through video. In this sense, the presentation should flow smoothly and post-production processes such as video cuts should be kept to a minimum, since they may jeopardize the entire understanding of the presentation.

Even though organization of the presentation and effectiveness of visual aids will be evaluated, as long as it is possible to clearly read and hear the presentation content, video quality will not play any role when it comes to scoring.

Scores will be published as below:

- Business Presentation – Scores between 0 and 40.

**Design Finals**

To choose the top 3 teams of the Design Finals, we will add the Dynamic Evaluation of Design and Design Evaluation phase 1 scores. These teams will be given the opportunity to have a deep dive evaluation, where all teams will be lined with the vehicles and the design judges may ask about any subject related to the project, deliverables, design presentation, management and budget presentation and any project related items even if they have not been presented before.

In the event of a tie, all tied team will pass on to design finals.



On **Design Finals** the teams will not present again their projects but should have members ready to answer any questions from the judges on any subject (can be supported with any materials: written documents, banners and/or notebooks brought by the team). These extra materials may be in any Portuguese or English as required.

**Members should be ready to answer questions in English.**

The total evaluation duration will be 1 hour and 30 minutes.

The vehicle presence is mandatory.

- Design Finals – Scores between 0 and 30.

## **Dates and times for files delivery**

The design evaluations files should be delivered following the dates below:

**Design Validation (Delays will NOT be accepted): (*Informative 02 – Deliverables*)**

- Deliverable 1 – Jun 13<sup>th</sup>, 2019 up to 13h59min (Brasilia time);
- Deliverable 2 – Jul 25<sup>th</sup>, 2019 up to 13h59min (Brasilia time);
- Deliverable 3 – Sep 12<sup>th</sup>, 2019 up to 13h59min (Brasilia time);
- Deliverable 4 – Oct 3<sup>rd</sup>, 2019 up to 13h59min (Brasilia time);

### **Business Presentation:**

- 20/09/2019 up to 13h59min (Brasilia time) – Penalty: 0 points lost;
- 21/09/2019 up to 13h59min (Brasilia time) – Penalty: 30% deduction on final score;
- 22/09/2019 up to 13h59min (Brasilia time) – Penalty: 50% deduction on final score;

Files sent after 13h59min (Brasilia time) on 22/09/2019 will not be evaluated.

### **Presentation Files (Design Presentation, Management and Budget Presentation):**

- 17/10/2019 up to 13h59min (Brasilia time) – Penalty: 0 points lost;
- 18/10/2019 up to 13h59min (Brasilia time) – Penalty: 30% deduction on final score;
- 19/10/2019 up to 13h59min (Brasilia time) – Penalty: 50% deduction on final score;

Files sent after 13h59min (Brasilia time) on 19/10/2019 will not be evaluated.



In case of delay to upload any document, the appropriate penalty (described above) will be applied.

The SAE Brazil and the Technical Committee will not take any responsibility for delays that might occur during the uploading due to issues on the internet connection. We strongly recommend teams to not leave the files' submission to the end of the deadline, there will be no tolerance.

The upload of the requested documents is imperative for the evaluation. The deliver time will be considered in the exact time when the last document version was uploaded.

### **Submission procedure**

Due to documents sizing, there will be two different submission procedures.

#### **Design Validation:**

Deliverables submission will be made through email ([bajasaene@gmail.com](mailto:bajasaene@gmail.com)). The deliverables should be submitted by the teams as a single document in DOCX and PDF format (except for **Deliverable 4** in which the team will also submit the TSS, and **Deliverable 1** where the schedule can be sent in PDF format), following the standard title below:

**BNE19 – Deliverable X – Car ## – Team YYYYYY**

The teams are allowed to update the files by making a new upload until the deadline, only the latest submission will be considered as official and the appropriate penalties will be applied.

If the file is too large the team may use the same presentation file submission procedure below.

#### **Business Presentation:**

The team must upload the presentation privately to YouTube and send the link to [bajasaene@gmail.com](mailto:bajasaene@gmail.com) by the submission deadline following the standard title below:

**BNE19 – Business Presentation – Car ## – Team YYYYYY**

#### **Presentation File**

The presentation file must be uploaded to Google Drive (no other way will be accepted) and the generated links should be sent to the



committee through the email: [bajasaene@gmail.com](mailto:bajasaene@gmail.com) meeting the deadlines already given. The email should have the following standard title:

**BNE19– Presentation Files – Car ## – Team YYYYYY**

It is recommended that the team take the files on the presentation day as CD and/or USB flash drive.

***Baja SAE Brazil – Northeast Phase Committee***