

Scrutineering Document Review and Feedback **April 2020**

Overview

Following our decision to cancel the FS2020 live event, scheduled to take place in July at Silverstone, we have been working on options for delivering those elements of the traditional FS event format which could be continued with or offered as virtual or simulation events to provide the fullest possible educational benefit to competing teams whilst complying with the social distancing regulations in force around the world due to COVID-19.

This document provides an overview of our plans for the review and provision of feedback for Scrutineering Documents which are:

	FS Teams	Concept Class Teams	FS-AI ADS Teams	FS-AI DDT Teams
SES	✓		✓	
FMEA (ETC only)	✓			
IAD	✓		✓	
<i>EV only</i>				
FMEA	✓		✓	
ESF	✓		✓	
<i>AI only</i>				
ASF			✓	✓

Purpose

- To respect social distancing regulations from the World Health Organisation and governments around the world in the fight against COVID-19 by removing the requirement for students and judges to physically meet in order to participate in the Formula Student competition
- To allow teams to demonstrate the engineering work they have completed to date as well as how they have worked as a team to overcome the organisational challenges resulting from current lockdown restrictions.
- To retain the educational benefits associated with the opportunity to present work for peer review, receive feedback and the transfer of knowledge between industry and academia

Rules and Regulations

Rules for the UK competition will be 'frozen' for 2021, meaning vehicles designs that would have been fully rules compliant this year will be eligible for the 2021 competition. That said, there may be minor tweaks to document templates for 2021, meaning not all can be reused. Affected documents are FMEA (EV) and ESF and more detail can be found below.

Scrutineering Documents

[SES](#)

[FMEA \(ETC only\)](#)

[FMEA](#)

[ESF](#)

[ASF](#)

Structural Equivalency Spreadsheet (SES):

Change to deadline?

The deadline was back in February 2020 so there is no change required.

If I have submitted my document, will my team receive feedback?

Yes, all teams will receive feedback for submitted SES'. This has been delayed due to very limited spare time of the Chief Technical Scrutineer. We aim to provide feedback for all teams by end of May 2020.

Will there be an option for resubmissions in response to judge/scrutineer feedback?

Yes, resubmissions are still open and will remain until start of submission window for 2021 (usually after Learn To Win). Your SES scrutineer (who will email you requesting resubmission if required) will need to be contacted via email to pick-up and review. No email = no feedback.

Can I reuse my submitted document for Formula Student 2021? If my document is approved this year, does that approval carryover to 2021?

Yes, you can reuse your 2020 SES for 2021, assuming there are no changes. If it is not approved in 2020 you will need to resubmit in 2021 and correct issues identified in feedback.

If your SES is approved in 2020 then the approval will need to be added to the SES and submitted in 2021 (guidance to follow in 2021). This will be checked and approval confirmed for 2021. Please note that any changes to the final chassis that deviate from the approved SES will result in your vehicle failing to pass scrutineering, this will be checked at competition.

Impact Attenuator Datasheet (IAD):**Change to deadline? Will FS still accept a submission?**

The deadline was 4 April 2020 but we have reopened submissions and will accept IAD reports until September 2020 for feedback this year. After that, submissions will fall into the 2021 Key Dates.

If I have/will submitted my document, will my team receive feedback?

Yes, all teams will receive feedback for submitted IAD. This may be delayed due to increased day-job workloads of the marking team. We will aim to provide feedback within 30 days of submission.

Will there be an option for resubmissions in response to judge/scrutineer feedback?

Yes, if your judge requests more information or a revised report, this will be accepted. However, any penalties applied to the original report (e.g. for lack of information) will stand. You can, of course, address the issues which gave cause to the penalties and resubmit for 2021. See below.

Can I reuse my submitted document for Formula Student 2021? If my document is approved this year, does that approval carryover to 2021?

If it is not approved in 2020 you will need to resubmit in 2021 and correct issues identified in feedback.

If it is approved then you can reuse your 2020 IAD for 2021, assuming there are no changes to your IA assembly. If there are no changes to your IA but you incurred penalties for the 2020 datasheet, you may choose to address these issues and submit a new IAD for 2021.

If your SES is approved in 2020 then please submit your feedback sheet (which will state that the IAD has been approved) together with a statement that the design has not been changed, in place of an IAD report in 2021. **Please note that any changes to the final impact attenuator assembly that deviate from the approved IAD will result in your vehicle failing to pass scrutineering, this will be checked at competition.**

Electrical Systems Form (ESF):

Change to deadline? Will FS still accept a submission?

There is no change to the deadline which was 30 March 2020. Only documents submitted prior to the deadline will be reviewed.

If I submitted my document, will my team receive feedback?

All teams will receive feedback for submitted ESFs by end of May 2020, which will be useful to your planning for the 2021 competition, **but note that there will be no approval of 2020 ESFs.**

Will there be an option for resubmissions in response to judge/scrutineer feedback?

There will be no resubmission requests this year, however we will answer any questions you may have on receipt of your feedback.

Can I reuse my submitted document for Formula Student 2021?

The ESF will have a different template for 2021, so a 2020 ESF will no longer be valid. Whilst the majority of the content will remain the same, the new template will include some of the key points from the FMEA. **This will be explained fully at Learn To Win in October and made available shortly after.** We also realise that you are likely to continue to develop the electrical systems in your car, so it is unlikely that even if we were to approve your 2020 ESF it would still be valid in 2021.

FMEA – EVs:

Change to deadline? Will FS still accept a submission?

There is no change to the deadline which was 15 February 2020. Only documents submitted prior to the deadline will be reviewed.

If I submitted my document, will my team receive feedback?

The FMEA will not be used for FS2021 (instead it will be incorporated into the ESF) so there would be little value in providing detailed feedback.

FMEA – ETCs:

Change to deadline? Will FS still accept a submission?

There is no change to the deadline which was 17 February 2020. Only documents submitted prior to the deadline will be reviewed.

If I submitted my document, will my team receive feedback?

Yes, all teams will receive feedback for submitted FMEAs by end of May 2020, but there will be no approval of 2020 FMEAs.

Will there be an option for resubmissions in response to judge/scrutineer feedback?

There will be no resubmission requests this year, however we will answer any questions you may have on receipt of your feedback.

Can I reuse my submitted document for Formula Student 2021?

The ETC FMEA will be replaced by a new document for 2021 which will incorporate some, but not all, of the content of the FMEA. This will be explained fully at Learn To Win in October and made available shortly after. Re-submission of the 2020 version of the FMEA would therefore be of little value.

Autonomous Systems Form (ASF):

Change to deadline? Will FS still accept a submission?

There is no change to the deadline which was 30 March 2020. Only documents submitted prior to the deadline will be reviewed.

If I have/will submitted my document, will my team receive feedback?

Yes, teams will receive some feedback for submitted ASFs. This will be limited to specific areas of concern or questionable design decisions. This has been delayed due to very limited spare time of the AI Lead Scrutineer and Technical Project Lead. It is our aim to return any comments by end of May 2020.

Will there be an option for resubmissions in response to judge/scrutineer feedback?

Yes, resubmission are still open and will remain until start of submission window for 2021 (usually after Learn To Win). Your ASF scrutineer will need to be contacted via email to pick-up and review.

Can I reuse my submitted document for Formula Student 2021? If my document is approved this year, does that approval carry over to 2021?

It's assumed that the design and application will advance between now and 2021, but you can reuse the relevant parts from 2020.

If the ASF is not approved in 2020 you will need to resubmit in 2021 and address any issues identified in feedback.

If your ASF is approved in 2020 then the approval will need to be added to the ASF and submitted again in 2021 (guidance to follow in 2021), this will be checked and approval confirmed for 2021. **Please note that any changes to the final application and design that deviate from the approved ASF will result in your vehicle failing to pass scrutineering, this will be checked at competition.**