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# Supplementary Regulations 2020 State & National Finals

Version 1.2

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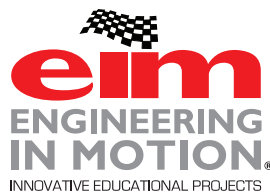
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## ARTICLE S1 - PREFACE

Re-Engineering Australia Ltd. have determined that due to the impact of COVID-19 including but not limited to social distancing measures, restriction of large group gatherings, the closure of many state borders and a ban on school excursions, our State Final events will still proceed but under very different arrangements [to normal](#). This document sets out new conditions relating to the submission of Project Elements - what and when - and how these will be judged.

These Supplementary Regulations apply only to the 2020 4x4 in Schools State Finals and overrides any corresponding regulations in the 2020/2021 Season Australian Competition Regulations.

If you feel there is any ambiguity surrounding the following instructions, please contact REA for clarification.

Changes between version 1.0 and version 1.1, appear as [dark green underlined text](#).

Changes between version 1.1 and this version 1.2 appear as [light green underlined text](#)

## ARTICLE S2 - Finals Events

### S2.1 State Finals

In 2020, there will be **NO** physical state final events conducted around Australia for 4x4 in Schools. Rather, [teams from all over Australia will electronically upload their project elements to an REA Google Drive by a nominated deadline, whereupon their project elements will all be judged simultaneously by one set of judges for each category. Overall and category awards will be determined and awarded individually for each state by this process.](#)

There will be **NO** face to face or on-line interviews between teams and judges.

### S2.2 National Final

[The extended duration of the State Final process will leave insufficient time for winning State teams to prepare for a 2020 National Final. As such, the 2020 National Finals for the 4x4 in Schools STEM Challenge will NOT be held. Instead, 2020 National Final overall and category awards for the 4x4 in Schools STEM Challenge will be separately determined from the same pool of State Final teams' project elements during the same judging process.](#)

[This means that all teams entering the 2020 4x4 in Schools STEM Challenge will be effectively entering both their respective 2020 State Final and also the 2020 National Final. Teams do not have to submit two sets of project elements. Each team will submit only one set of project elements that will be judged to determine both its 2020 State Final awards and winners and also the 2020 National Final awards and winners. Rest assured that all judging will be fair and equitable at all stages of the process for all teams from around Australia, as each category will be judged by the same set of judges.](#)

## ARTICLE S3 - Timeframes

### S3.1 Project Elements for Submission

#### S3.1.1 Electronic Files

**ALL** required electronic files as per S4.5 for **ALL** teams in every state **MUST** be uploaded via a link provided by REA no later than **11.59pm on Friday, 13 November 2020**.

#### S3.1.2 4x4 Vehicles

A decision is pending relating to the track assessment of all vehicles. A physical track event is preferred and if they go ahead this should take place between [16 November and 30 November](#). Physical track assessments will largely depend on our ability to travel interstate, social distancing measures, maximum group sizes and a school's policy on students being able to travel to an external location for this purpose.

### S3.2 Judging

#### S3.2.1 Electronic Project Elements

All team project elements submitted electronically, will be assessed by independent judges between [16 November and 4 December](#) 2020.

### S3.2.2 4x4 Vehicles

Specifications judging and all track assessments will be managed and conducted by REA staff or experienced local based judges over the course of day. Teachers from individual states will be advised of when and where that will take place. All teams will need to attend as scheduled and in accordance with COVID-19 restrictions in place at that time

### S3.3 Results

Results will be sent to teams, state by state, commencing 7 December 2020 and complete no later than 14 December 2020.

## ARTICLE S4 - Project Elements for Submission

Around two weeks prior to the submission deadline date, teams will be emailed a unique link to a google drive folder that they will be required to upload their electronic data to. Teams **WILL** require a Google account to facilitate this.

### S4.1 General

- Uploaded files **MUST** be a team's final versions they are submitting for judging.
- **ALL** files **MUST** be clearly labelled in accordance with the specified convention to be published.
- Team videos will take the place of interviews and presentations normally conducted at physical events.
- The content of the videos **SHOULD** be aligned with the relevant scorecard criteria.
- Teams are **NOT** to wear a team uniform in any of the recorded assessable content. See S5.4 for more information.

### S4.2 File Formats & Size

- Videos **MUST** be submitted as separate **AVI** or **MP4** files. Penalties apply.
- Documentation **MUST** be submitted as separate **PDF** files no larger than 100mb. Penalties apply.
- CAD files **MUST** be submitted as **STEP** files. Penalties apply.
- Renders **MUST** be submitted as high quality (maximum 10mb each) PICTURE FILES. Penalties apply.

### S4.3 Video Detailed Information

#### S4.3.2.1 Engineering Videos

- Each topic (CAD, Manufacturing & Testing) **MUST** be submitted as separate videos
- 'Testing' video is optional
- The combined total time for all three videos is a maximum 12 minutes. E.g. 3 x 4 minute videos
- The maximum resolution for each video is not to exceed 1080P

#### S4.3.2.2 Trade Display Video

- No physical display is to form part of a team's assessable video content. See S5.3 for more information.
- The maximum total time of the submitted video content is 10 minutes
- The maximum resolution for each video is not to exceed 1080P

#### S4.3.2.3 Verbal Presentation Video

- The maximum total time of the submitted video content is 10 minutes
- The maximum resolution for each video is not to exceed 1080P
- One take no editing. Fixed camera, simulating judges position. See S5.8.2 for more information.

## S4.4 Penalties

### S4.4.1 Late Submission

If Project Elements are not received by Re-Engineering Australia Foundation on or before the required deadline, or in the required format, **those elements will NOT be eligible for assessment. No exceptions.**

### S4.4.2 Video Timing, Resolution & Format

A penalty of **20 points SHALL** be applied for each infringement for each judging category video that:

- Exceeds the maximum time as per S4.3.
- Exceeds the maximum resolution as per S4.3.
- Does not comply with the required file format as per S4.2

### S4.4.3 File Size & Document Formats

A penalty of 20 points will be applied to ANY submitted documents for each judging category that:

- Exceed the maximum files size as per S4.2.
- Are not submitted in the correct file format.

### S4.4.4 Wearing of Team Uniform

A penalty of **20 points** will be applied for each judging category video where any team member wears a uniform in violation of S4.1

## ARTICLE S5 - General Advice

### S5.1 Team Registration Deadline

Team Registrations closed on 31 August 2020. However, membership changes can continue to be made by teachers only up to 16 October 2020 by clicking on the following link: <https://rea.org.au/4x4-in-schools/team-registration-form/>

### S5.2 4x4 Vehicle Sticker Decals

Once the Team Registration deadline has expired, REA will post to schools the required 4x4 vehicle sticker decals for each registered team.

### S5.3 Trade Displays

Teams are **NOT** to build a physical Trade Display or manufacture any of its contents as part of their evidence submitted for assessment. Rather, teams are required to produce a 3D model of their final trade display which simulates exactly what would be presented to judges in a physical form. Teams should carefully read the updated 2020 Trade Display scorecard.

Note: Packaging Restriction criteria will **NOT** be assessed for 2020 State Finals and Development Class restrictions apply

### S5.4 Team Uniforms

Teams are **NOT** to manufacture Team Uniforms for the 2020 State Finals. Rather, teams are to 'propose' a Team Uniform within their Enterprise Portfolio. Judges will be advised to **ONLY** assess a 'proposed' team uniform from within the Enterprise Portfolio. Team members appearing in person in their videos, and when attending track assessment activities, are advised to wear their School Uniform. Penalties apply as per S4.4.4. A school sports uniform, or plain shirts without printing and embroidery will be acceptable.

### S5.5 Scrutineering

If physical track assessments are conducted, experienced REA staff and/or independent scrutineers will gather at the venue hosting the track assessment to undertake this process immediately prior to the commencement of, and on the same day as, the track activities.

### S5.6 Rectification

If physical track assessments are conducted, the process of Rectification post Specifications judging will be offered to teams as per the conditions outlined within the Australian Competition Regulations.

### S5.7 4x4 Vehicle Repairs

If physical track assessments are conducted, teams will be afforded the opportunity to repair 4x4 vehicles during these activities as per the conditions outlined in the Australian Competition Regulations

## S5.8 Video Content

As with any assessable content, **teams SHOULD** ensure they structure video content around the descriptor information that exists in the **advanced range** for each criteria in the relevant scorecards.

Teams should ensure they do not exceed the maximum time length and maintain a constant volume throughout.

Teams are strongly encouraged to watch their video to iron out any issues before submitting for assessment.

### S5.8.1 Engineering & Trade Display Videos

Teams have a unique opportunity to record a shared desktop to include a walk through of their CAD design/s and other document content whilst providing an explanation or commentary via a voice overlay and/or superimposing a team member into the footage presenting the information. Video editing is permitted.

### S5.8.2 Verbal Presentation Videos

A team's Verbal Presentation video MUST be representative of a standard delivery at a physical competition event. For example, ALL team members standing together as if they were presenting to judges in the same room.

The following conditions apply:

- The video MUST be recorded as one continuous take with no editing permitted using a fixed camera simulating the judge's position.
- ALL team members, from head to feet, are to be present in every frame of the video.
- Media presentations if used SHOULD be projected from a screen or large TV monitor with team members arranged to either side so the the content clearly viewable by judges. Content that is not clearly visible when the video is viewed for judging purposes will obviously result in reduced marks.
- An optional handout document may be provided for judging and uploaded to the REA Google Drive link.

## S5.9 Plagiarism

From 2020, plagiarism detection software 'Turnitin' will be used to check the authenticity of content in all teams' state and national final portfolios.

Content in team portfolios found to have been plagiarised, will not be assessed as part of the judging process resulting in zero marks for the relevant criteria.

State Final teams **ONLY** will be given free access to this software to upload their portfolios and make required changes based on a report of results provided by Turnitin. Multiple uploads can be made to check the authenticity of team portfolios.

Judges **WILL** be provided with a report generated by Turnitin based on the content of the FINAL portfolios teams upload by the submission deadline.

Teams need to be aware of the following conditions for uploading portfolios to Turnitin.

- File format MUST be PDF as required by REA.
- File size must NOT exceed 100mb
- PDF files MUST be editable and not a 'scanned' PDF.

### Notes

1. PDF documents must contain text to be submitted. PDF files containing only images of text will be rejected during the upload attempt. To determine if a document contains actual text, copy and paste a section or all of the text into a plain-text editor such as Microsoft Notepad or Apple TextEdit. If no text is copied over, the selection is not actual text.
2. Teams are required to include the new Turnitin logo within their project as per the conditions for Level 2 Corporate Partner Logos outlined in the Australian Competition Regulations. This logo is available for download from the REA website at <https://rea.org.au/f1-in-schools/resources/>

## **S5.10 New Portfolio Arrangements**

### **S5.10.1 Increased Page Limits**

Due to the new requirement for state and national team portfolios to be self-checked through Turnitin's authenticity software, it is anticipated teams will need to better address the requirement for referencing content to avoid penalties.

Commencing from the 2020 State Final competition for **ALL** states, teams using the 'ENDNOTE' method of referencing **ONLY** will be provided with one extra page in their Engineering and Enterprise Portfolios to facilitate this arrangement. The only content on this extra page is to be the reference list.

**S5.10.1.1 Development Class (using Endnote method): 8 pages**

**S5.10.1.2 Professional Class (using Endnote method): 12 pages**

### **S5.10.2 Submission of Portfolios for Judging**

Commencing from the 2020 State Final competition for ALL states, teams will be required to upload their FINAL Engineering and Enterprise Portfolios direct to Turnitin by the same published deadline as per S3.1.1.

It is expected that teams will be uploading draft portfolios well before the deadline to check the document authenticity before uploading their final version.

To facilitate access to Turnitin, REA will contact teams to request a team email. One **ONLY** valid email **MUST** be provided for each team.

FINAL portfolios submitted by the deadline will be downloaded by REA and used by judges for assessment purposes.

Note: Submitted portfolios are time-stamped by Turnitin. Any team found to have uploaded a portfolio after the published deadline will incur a penalty as per S4.4.1.



### S5.11 Project Elements Submission Checklist

The following team Project Elements **MUST** be received on or before [the published time and](#) date as per S3.1.

	Project Element	Submission Details	Judging Criteria	
<input type="checkbox"/>	1 x Engineering Portfolio	Electronic: PDF format <a href="#">Maximum 100mb file size</a> <a href="#">Submitted to Turnitin</a>	<ul style="list-style-type: none"> <li>Engineering: Manufacturing</li> <li>Engineering: Design Process</li> <li>Portfolio: Design</li> </ul>	
<input type="checkbox"/>	1 x Engineering Compliance Booklet	Electronic: PDF format <a href="#">Maximum 100mb file size</a> <a href="#">Submitted to REA</a>	<ul style="list-style-type: none"> <li>Engineering: Specifications</li> <li>Engineering: CAD</li> </ul>	
<input type="checkbox"/>	1 x Enterprise Portfolio	Electronic: PDF format <a href="#">Maximum 100mb file size</a> <a href="#">Submitted to Turnitin</a>	<ul style="list-style-type: none"> <li>Portfolio: Project Management</li> <li>Portfolio: Design</li> <li>Marketing: Branding</li> </ul>	
<input type="checkbox"/>	Optional Testing Document	Electronic: PDF format <a href="#">Submitted to REA</a>	<ul style="list-style-type: none"> <li>Engineering CAD</li> </ul>	
<input type="checkbox"/>	Design Development Brief	Electronic: PDF <a href="#">Submitted to REA</a>	<ul style="list-style-type: none"> <li>Marketing: Trade Display</li> </ul>	
	Optional Verbal Presentation Handout	Electronic: PDF <a href="#">Submitted to REA</a>	<ul style="list-style-type: none"> <li>Verbal Presentation</li> </ul>	
<input type="checkbox"/>	Watercraft Finishing Form	Electronic: PDF <a href="#">Submitted to REA</a>	<ul style="list-style-type: none"> <li>For use by REA</li> </ul>	
<input type="checkbox"/>	Media Consent Form	Electronic: PDF <a href="#">Submitted to REA</a>	<ul style="list-style-type: none"> <li>For use by REA</li> </ul>	
<input type="checkbox"/>	Student Code of Conduct Form	Electronic: PDF <a href="#">Submitted to REA</a>	<ul style="list-style-type: none"> <li>For use by REA</li> </ul>	
<input type="checkbox"/>	High Quality Renders	Electronic: Picture Files <a href="#">Submitted to REA</a>	<ul style="list-style-type: none"> <li>For use by REA</li> </ul>	
<input type="checkbox"/>	ALL Engineering CAD Files	Electronic: STEP Files <a href="#">Submitted to REA</a>	<ul style="list-style-type: none"> <li>Engineering CAD</li> <li>For use by REA</li> </ul>	
<input type="checkbox"/>	ALL Trade Display CAD Files	Electronic: STEP Files <a href="#">Submitted to REA</a>	<ul style="list-style-type: none"> <li>For use by REA</li> </ul>	
<input type="checkbox"/>	Engineering CAD Video	Electronic: AVI or MP4 <a href="#">Maximum resolution 1080P</a> <a href="#">Submitted to REA</a>	Combined total of Max 12 Min <ul style="list-style-type: none"> <li>Engineering CAD</li> </ul>	
<input type="checkbox"/>	Engineering Manufacturing Video	Electronic: AVI or MP4 <a href="#">Maximum resolution 1080P</a> <a href="#">Submitted to REA</a>		<ul style="list-style-type: none"> <li>Engineering: Manufacturing</li> </ul>
<input type="checkbox"/>	<a href="#">Optional</a> Engineering Testing Video	Electronic: AVI or MP4 <a href="#">Maximum resolution 1080P</a> <a href="#">Submitted to REA</a>		<ul style="list-style-type: none"> <li>Engineering CAD</li> <li>Engineering Design Process</li> </ul>
<input type="checkbox"/>	Trade Display Video	Electronic: AVI or MP4 <a href="#">Maximum resolution 1080P</a> <a href="#">Submitted to REA</a>	Max 10 Min	<ul style="list-style-type: none"> <li>Marketing: Branding &amp; Trade Display</li> </ul>
<input type="checkbox"/>	Verbal Presentation Video	Electronic: AVI or MP4 <a href="#">Maximum resolution 1080P</a> <a href="#">Submitted to REA</a>	Max 10 Min	<ul style="list-style-type: none"> <li>Verbal Presentation: Technique &amp; Content</li> </ul>
<input type="checkbox"/>	1 x Track Assessment ready 4x4 vehicle complete with sticker decals & controller	Delivered to Track Assessment Venue <a href="#">Submitted to REA</a>		<ul style="list-style-type: none"> <li>Track Assessment</li> </ul>



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