Formula SAE 2024 Survey results for each WG and measures for 2025

2024/12/25



~ Survey results and countermeasures ~

Thank you for participating in the Student Formula Japan 2024.

This was the first time in 18 years that the event was held at a different venue, and there were still some challenges to overcome.

We would like to share with you the measures that the executive team is considering based on the survey results we have collected from you all.

This document has now been made public.

We look forward to your continued success in the future.

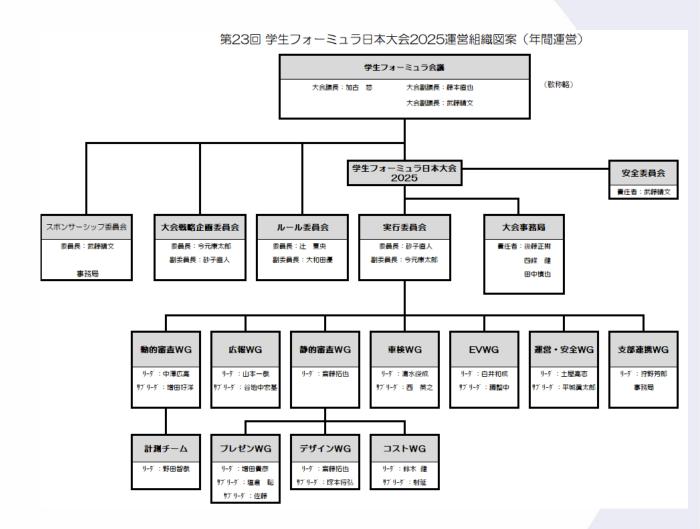
We look forward to your continued support so that we can create an even better event.

Formula SAE 2025 Executive Committee Chair Naoto Sunako



#### Survey results for

- 1 Technical Inspection Working Group
- ② Dynamic Event Working Group
- Static Event Working Group
- 4 Static Event Design Working Group
- **5**Static Event Presentation Working Group
- **6** Static Event Cost Working Group
- 7 EV Working Group
- **®**Operation and Safety Working Group



1 Technical Inspection Working Group

#### 2025 response to 2024 review (1) Vehicle Inspection Working Group )

Classification		Number of responses	Contents excerpt	Direction for 2025
○ Support	Operational aspects	16		Continuing with previous year's items
	Judging Criteria	3		Continuing with previous year's items
XSuggestions / requests	Operational aspects	10	day for the technical inspection.  Not being on time for the inspection (over the inspection time)  Shortage of quick vehicle inspectors  Please refrain from replacing the vehicle seat just before the vehicle inspection.	<ul> <li>In 2024, the EV/ICV inspection orders were combined, so it was unavoidable that the EV team had to wait. In 2025, the EV/ICV inspection orders will be separate, so this is expected to improve.</li> <li>Ensuring that vehicle inspectors adhere to inspection times</li> <li>Mobile vehicle inspections can be conducted with flexible allocation of vehicle inspection staff</li> </ul>
	Examination Contents	15	<ul> <li>Even if the same vehicle inspector is present, the points raised may differ each time.</li> <li>Lack of understanding of the rules by vehicle inspectors</li> <li>Pointing out items not on the vehicle inspection sheet</li> </ul>	•Expanding training courses to improve vehicle inspector inspection skills, Promoting the improvement of the skills of vehicle inspectors and the equalization of judgment standards •The purpose of the vehicle inspection and the reasons for the points raised will be clearly stated in the vehicle inspection seminar materials. This will help drivers understand that points are raised based on inspection standards that comply with the rules, even if they are not on the vehicle inspection sheet.
	Understanding	4	•Technical vehicle inspectors have a low understanding of EVs	•Redefine and clarify the inspection procedures for EV exit tests from an EV perspective

<sup>•</sup>When waiting for tilt/escape was crowded, it became difficult to move vehicles in the surrounding area.

<sup>→</sup>Re-arrange examination booths and consider traffic flow to avoid congestion

2 Dynamic Event Working Group

## 2025 response to 2024 review (2) Dynamic Review Working Group)

#### 1) From the team survey ( management aspects )

Classification		Number of responses	Contents excerpt	Direction for 2025
○ Support	Operational aspects	10	The guidance was thorough and I was able to take the exam without any confusion.	continuation
XSuggestions / requests	schedule	18	, , , , , , , , , , , , , , , , , , ,	Guide to Consider ( AUT/END end time 17:30 )
	Flag Operation	7	is dangerous to swing just before a corner as the driver can easily	Review of flag presentation post position P1 flag was likely caused by carelessness on the part of the driver waving it from the exit of the slalom. Thorough confirmation of post positions during course walks
	Viewing area	6	It was difficult to see the vehicles moving around, especially small children.	Consider installing spectator seats (stands)
	Road surface interference	5	I felt that it would be good to have clearer standards for road interference of aero parts.	We will continue to consider ways to do this.
	Layout	1	I did feel it was a little risky that the refuelling area and noise test site were outside the dynamic area.  Regarding braking, warming up, and practice, please allow members without D passes to get a little closer.	Consider changing the layout of the dynamic areas (brake, warm-up, practice)

## 2025 response to 2024 review (2) Dynamic Event Working Group )

#### 1) From the team survey ( management aspects )

Classification		Number of responses	Contents excerpt	Direction for 2025
others	interpretation		any announcements to always be made available and announced clearly in English as well.	continuation
	How to enter	6		ACC/SKD/AUT: mixed run, END: Classification race schedule

## 2025 response to 2024 review (2) Dynamic Event Working Group )

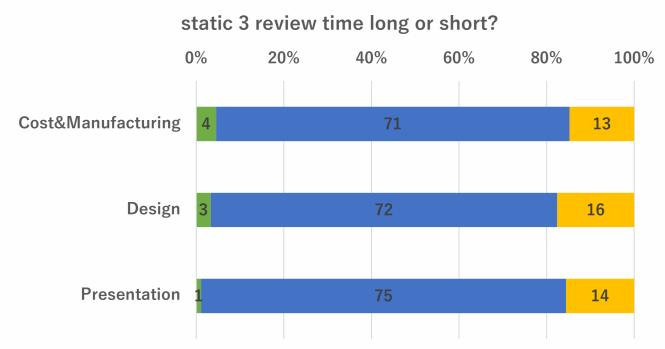
#### 1) From the team survey (course aspects)

Classification		Number of responses	Contents excerpt	Direction for 2025
	Change of course	8	Compared to last year, the course now requires greater overall vehicle maneuverability and durability.	continuation
	Change of course	13	The road surface was very uneven, causing many vehicles to experience road interference.	We will continue to consider ways to do this.
			If we keep the timetable as it is, I think it would be better to shorten the courses a little.	The course cannot be shortened due to Consider
	Flag position	4	It seems that the posts for displaying checkered flags etc. are difficult to see.	Review of flag post position P1 flag was waving from the exit of the slalom, so it seems likely that this was due to driver carelessness. Thorough confirmation of post positions during course walks
	schedule	2	I waited for more than two hours under the scorching sun to enter the 2nd driver race at AX, but I was unable to enter the race.	rGuide to Consider
	Viewing area	2	The view of the course from the viewing area didn't look very good.	Consider installing spectator seats (stands)
	EV vehicles	2	an EV , instructions were given to guide the vehicle forward without waiting for pre-charging, and it felt like the information provided about starting an EV was a little insufficient.	This has been written in the staff materials and made known to everyone, but Thoroughly implement during staff training Improving staff training content (extending training time)

3 Static Event Working Group

### 2025 response to 2024 review (3)Static Review Working Group )

## 1) From the team survey



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In the future, we would like to extend the review time.
However, regarding the 2025 tournament:
Prioritizing the realization of on-site inspections,
We will consider judging in a 60 minute/ team "cycle."

## 4 Static Event Design WG

## 2025 response to 2024 review (4) Static Event Design Working Group )

1) From the team survey

Classifica tion		Number of response s	Contents excerpt	Direction for 2025
O Support	Design Free Talk	12	during the local competition.	Free talks will also be held at the 2025 on-site screening. Applications are required from teams who wish to participate, and the time will be set at 1 hour per team during the dynamic screening . ( The same method as before 2019 )
XSugges tions / requests	Design Final	7	the back, it was hard to understand what was being said.	ASE needs to be reviewed.  Stage, speaker type and position, sound from surrounding booths, audience seating, etc.  However, we would like to consider prioritizing the operation and schedule, such as holding a closed event in 2025 only, where there will be separate classes for ICV/EV, and streaming it on YouTube at a later date.
	Online screening	6	We believe that it is essential that the judges, especially in design judging, are able to see the actual car on-site and speak directly with students while judging.	The judges are of the same opinion. From the 2025 Games onwards, we will make it a top priority to conduct on-site and in-person reviews.
	Examination Contents	2	It will be better if there is a clear explanation on how the design review will be carried out.	The points below will be written in the FSAEJ2025 Local Rule.  • Discussion scopes for each judge  • Procedures of Design Final
	interpretation	1		Some FSAEJ2024 judges said, "I would like to discuss in English", "I will study English". Current judges to improve English skills and also, we would like to increase English speaking judges.
others		8	sessions were sometimes not possible.	In the design review, we do not accept "only the person in charge knows".  As a team, make sure that you share your past experiences, your machine, and your engineering knowledge.  This is not only a preparation for the design review, but also a process that will help you as an engineer.

#### 2 ) Review by the judges

- ·I want to improve my English by competing against overseas teams!
- •It was great to be able to see the vehicles indoors and talk to the students.

Static Event Presentation WG

## 2025 response to 2024 review (⑤Static review presentation)

Classification	·	Number of responses	Contents excerpt	Direction for 2025
○ Support	feedback	9	I received feedback and was able to clearly understand the grading criteria.	Continuing with previous year's items
	On-site inspection	8	Since we were face to face with the judges, we were able to see their faces and it was easy to understand their reactions.	Continuing with previous year's items
XSuggestions / requests	Presentation equipment	twenty one	I wish there was an opportunity to know in advance about the lack of equipment and the room environment.	The SAE rules state that " you must provide your own equipment necessary for your presentation , " and this rule was followed. (=Equipment not provided)  However, information about the venue infrastructure will be disclosed in a handbook.
	Examination Contents	3	the deadline for the cost review to be earlier than	This order will not change, and the vehicle development process will be followed.
	Review Schedule	2	I wish there was more time for feedback. I had a lot of questions and I wasn't able to ask them all.	Consider FB time
others		3	SPD profit calculation field is too large to fit within the specified	Revise the SPD format

6 Static Event Cost Working Group

## 2025 response to 2024 review (6)Static review Cost and manufacturing review

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Clas	sification	Number of responses	Contents excerpt	Direction for 2025
○ Support	Examination Contents		I thought it was efficient and useful that the sections were divided into several parts and feedback could be given simultaneously.	Since the audit will be conducted on-site, we are currently considering how to provide feedback.
XSuggestions / requests			One person may be responsible for multiple tasks, so breakout sessions are not possible.	
XSuggestions / requests	Overall review content	5	The review criteria for cost reports are unclear.	Penalties are imposed in accordance with the rules, so please make sure you understand the rules well.  Additional points are awarded based on the quality of the parts and process diagrams.
XSuggestions / requests	Review Schedule	5	The 30- minute cost review was short as the feedback and real case scenario presentations were not completed.	Considering that the audit will be conducted on-site, the audit time will be extended slightly.  All teams should aim to finish their real case presentations in five minutes.
others		7	It's best to have the judges see the actual car on-site.	In 2024, only teams subject to a Cost Audit were audited on-site, but in 2025, all teams will be audited on-site, so we will return to audits in which all teams see their actual cars.

## 7 EV Working Group

## 2025 response to 2024 review (⑦ EVWG)

Classification		Number of responses	Contents excerpt	Direction for 2025
○ Support	ESF	1	It was a good idea to distribute EM to the teams that passed the ESF before the vehicle inspection .	Continue
	Electrical Inspection	3	The number of vehicle inspection slots has increased, and vehicle inspections can be completed smoothly.  The available slots were easy to see at a glance.	Continue
XSuggestions / requests	Electrical Inspection	1	Since the number of slots has increased, wouldn't it be possible to convert them into mechanical inspection slots from the second day onwards?	Consult with the Mechanical Vehicle Inspection
others	Overall Electrical Inspection		Good , Excellent!  They were very kind to me and all the members were very encouraging.  Since people other than those participating in the vehicle inspection were allowed to observe many members were able to watch the event and check the points raised as a study for the next year.  The friendly and polite service provided has given me motivation for next year.  During the inspection process, inspectors were willing to communicate with students.	the 25th year of the tournament, we will communicate well with the students, liven up the tournament together with them, and enjoy it.

**®**Operation and Safety Working Group

### 2025 response to 2024 review

( ® Operational Safety Working Group: guided tours, loading and unloading, contact methods, first aid)

Classification		Number of responses	Contents excerpt	Direction for 2025
○ Support	Slack	12	I think the official announcement on	2025 tournament will be easier to understand by dividing the events into categories (mentions) according to their importance.
	How to load and unload	9	As for the loading and unloading of vehicles, we were given careful guidance under the scorching sun, which allowed us to proceed smoothly and without getting lost.	We plan to increase the number of external security guards to ensure safer and more secure student loading and unloading procedures.
XSuggestions / requests	Slack	9	Please make use of mentions and use separate channels for important and non-important things.	2025 tournament will be easier to understand by dividing the events into categories (mentions) according to their importance.
	COVID-19 Response	4	I felt that by using Slack , there was no need to gather information in an emergency meeting, such as the COVID-19 response on the third day, when information could easily be shared.	Regarding COVID-19 response, we will use Slack and make efforts to reduce face-to-face interactions as much as possible.
others		9	I would like the files to be released according to the initial deadlines.	We will release the files as soon as possible for FY2013 .
			Many workers were seen working without wearing pit passes when loading and unloading.	During loading and unloading work, we will have many staff members in the pit area to ensure that everyone can pay close attention.

## 2025 response to 2024 review (® Operational Safety Working Group: Layout)

1) From the team survey

Classification		Number of responses	Contents excerpt	Direction for 2025
○ Support	Pit Layout	twenty five	The pit was spacious and very comfortable.	2013 , the pit area will be slightly reduced due to the static judging venue and an increase in the number of teams accommodated.
XSuggestions / requests	Layout within D area		The traffic flow between the warm-up area and the practice area was extremely narrow, making it difficult to pass through.  The path up to the dynamic area was also quite narrow when divided according to events.  I wish the practice area was a little larger.	For the 2013 tournament, the area of Area D will be expanded and the aisles will be wider.  The size of the practice area remains an item to be considered.
	Traffic flow within the hall		The entrance to the technical inspection was crowded. The road	The entrance and exit areas for the vehicle inspection area will be relocated to accommodate congestion.
	Viewing area	4	I believe that spectators should also be able to watch the vehicle inspection areas ( warm-up, noise tests, brake tests ) .	The relationship between the viewing area and the dynamic area is a contradictory condition, so it will remain an item for consideration.
others	Lighting		The lighting in the venue was dim.	We have wired each team so please work as a team.
			We hope that the shipping instructions for overseas teams can be clearer next time.	We will make this as clear as possible. (Handling containers that exceed the weight limit, etc.)

#### 2 ) Review by the judges

The pits were generally well received, but some areas of the inspection work were dark, so these will be addressed in

Because the location of the general reception desk was difficult to find, the location will be changed for the 2025 tournament

Consider installing a desk and vice in the work tent

## 2025 response to 2024 review (® Operational Safety Working Group : Heat stroke prevention measures)

Classification		Number of responses	Contents excerpt	Direction for 2025
○ Support	Indoor Pit	28	I think the indoor pit reduces the risk of heatstroke.	This will continue into fiscal year
	Drinks provided to drivers	8	P0 ( stage area ) , staff were proactive in handing out drinks and encouraging members, which was great as it helped keep the members in good health.	2012 , we distributed drinks at
XSuggestions / requests	Air conditioning temperature control & temperature difference with outside	9	Sometimes the air conditioning would stop working temporarily and it was very hot.  The driver seemed to find the temperature difference between indoors and outdoors difficult.	Temperature control will be implemented more precisely at the 2013 tournament We believe that the basic principle of managing the health of team members is a team matter. (Getting used to the outside temperature quickly)
others		6	I was grateful that there was a pool in area D.	It was originally used as a fire pool, but since it appears to be in use, we will prepare it for the 2025 tournament as well .

### 2025 response to 2024 review (9. Public Relations Working Group)

1) From visitor survey

	Classification	Summary	Direction for 2025
Reason for visiting			Advance notices will be distributed mainly through social media , and we will ask for cooperation in using the official social media accounts of sponsoring companies.

#### 2 ) Sponsorship response ( from survey results )

	Classification	Summary	Direction for 2025
Online exchange meeting	The event was held before the summer internship application period and Implementation timing and content will follow was generally well received.  The operation method needs to be considered.		

# < Policy for 2025 > The basics will follow those of the 2024 event, but improvements will be reviewed.