

# Formula Student Netherlands 2024 Mechanical Scrutineering Handbook

## Purpose

The purpose of this document is to provide information about the way procedures and policies will be followed regarding the Mechanical Inspection during Formula Student Netherlands 2024. It is formulated to accommodate a clear understanding and promote a smooth and safer operation during the event.

## Mechanical Inspection

### Pre Inspection

The Pre Inspection (MECH 0) will be done separately from the inspection of the car (MECH 1 - MECH 4).

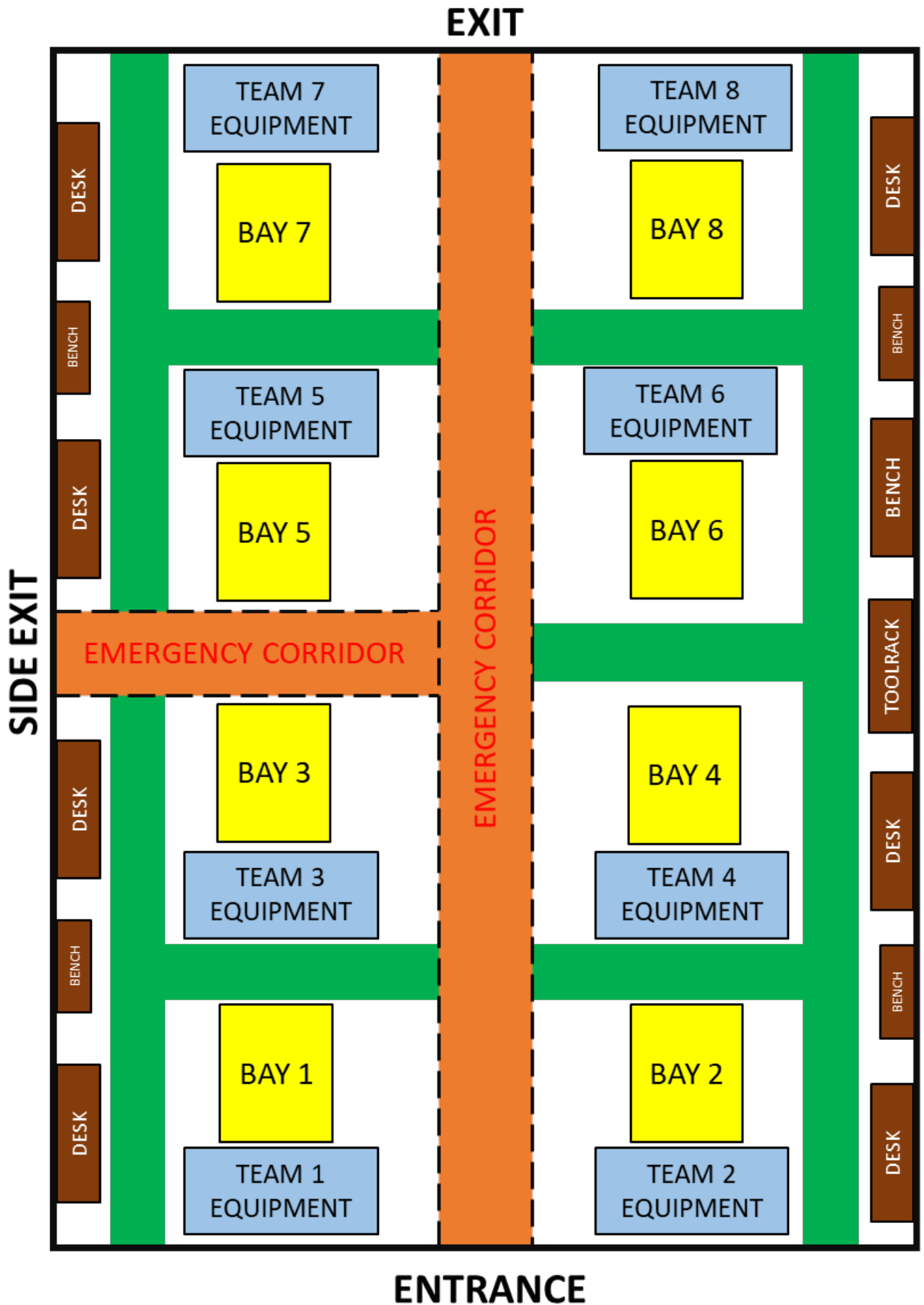
The teams must prepare and present the necessary equipment to be inspected (see CHECKLIST MECH0) in front of their pit garages. Teams that will be inspected before entering their pit garages (Sunday 14.07.2024, 19.00 CET) shall present their equipment in the Mechanical Inspection area. The Pre Inspection will be carried out until Monday 15.07.2024 at 12:00 CET.

Items that are deemed unsuitable or unsafe during the Inspection will be confiscated for the duration of the event. At the end of the event, it is the team's responsibility to contact the Mechanical Scrutineers to retrieve their items after the Endurance event.

## Mechanical Inspection Main Tent - MECH 1 - MECH 4

### Main Mechanical Tent Layout

The following depiction describes the layout and operation of the main mechanical inspection tent.



The tent is divided into eight bays. Each team will be positioned in one bay and will remain there until the end of the time slot. To save time, the Scrutineers will be moving between the bays to carry out each part of the inspection.

The team members entering the tent must be wearing their dynamic vest. Each team is allowed to have **four members including the driver** at all times during the scrutineering process. A team member can switch vests with another member during the process, outside the dynamic area.

### **SAFETY GUIDELINES**

For safety and operating reasons, the teams must position the car and their equipment within the dedicated space. The equipment of each team shall be positioned according to the layout above.

The main corridors as well as the side exits (orange) shall not be obstructed at any time by either equipment or individuals. The green secondary corridors shall not be obstructed at any time by any type of equipment or object that may prevent the safe exit of individuals in case of an emergency.

A general professional and composed conduct is expected at all times and locations.

**CV teams must make sure that the fuel tank of the car is empty before entering the tent.**

**EV teams must not enter the tent with the Accumulator Container present, unless it has been inspected and approved in the Accumulator Inspection. If the Accumulator has been inspected and the team has the Accumulator inspection sticker, the team can enter the Mechanical tent with the Accumulator disconnected.**

In the event of an injury of any type, immediately contact the scrutineering personnel for aid.

### Time Slot System

In 2024 an assigned time slot system will be implemented. Each team will be assigned a dedicated time slot of **2 hours** for their first attempt, based on the VSV submission order. After all teams have had their first attempts, then a second attempt round with slots of **1 hour** will follow based on the same queuing principle.

For the first attempt, the time intervals for each part are **30 minutes**. For the following attempts the time slot will be utilized depending on each team's needs and the availability of the scrutineers.

After the second attempt round is over and all teams have had both attempts, the teams must contact the Mechanical Scrutineers to arrange their slot (**30 minutes**) for the following attempts.

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If a team does not show up for their assigned first attempt time slot, they can retry during their second attempt assigned time slot (with the reduced time) after all the teams have finished their first attempts.

The dedicated time slot includes any delays from the team as well as time needed to enter and exit the tent. Team should show up at the entrance of the main mechanical tent 30 minutes before their dedicated slot.

EV teams will proceed to their attempts without the Accumulator Container to inspect the rest of the car. Only when the team has finished Accumulator Inspection will they present the car with the Accumulator disconnected, to finish the mechanical inspection.

EV teams that have completed the entirety of the checklist except for the Accumulator Container points on their first attempt, will continue with the Accumulator points, in their second attempt slot, provided that they have passed the Accumulator Inspection.

### Transponders

The transponders shall be mounted securely on the car. Attachment via velcro or double sided tape is not allowed.

It is the team's responsibility to attach the transponders properly. In the event of a detached-lost transponder, the team is disqualified from the corresponding attempt and bears responsibility for it.

### Jewelry and Communication Devices

Jewelry is not allowed inside the track under racing conditions.

Communication devices powered by batteries on the wrong side of the firewall are not allowed. This includes cell phones.

The safe egress of the drivers must also not be obscured by any part of the communication devices. The corresponding checks will be made during the Mechanical Inspection as well as during the Pre Inspections.

Wired earphones used for telecommunication must be attached to the communication device in a way that does not prevent the driver from exiting the vehicle. Earphone jacks must be easily removable with a single pull motion.

### Inspection of obscured or hard to reach areas

Any part of the car must be able to be inspected during the event. The ability to do so is included in the team's responsibilities.

## M4 Mechanical Inspection

Teams must provide during the Mechanical Inspection:

- a 2D cross section of the steering assembly
- a 2D cross section of the wheel assembly
- (EV) a 2D cross section of the electric motor mounts (inside wheel assembly)