



Rules 2024

FSG Academy – Main Workshop for FSG 2024
on 21st of October 2023 at Schaeffler in Herzogenaurach

Throwback: Player change



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Agenda

- Rules Objective
- Rules for FSG 2024
- Feedback
 - RFC: A 2.2.2
- Major Changes for 2024

- Focus Topics:
 - A 4.2.8
 - Deadlines
 - No-DV and DCPI

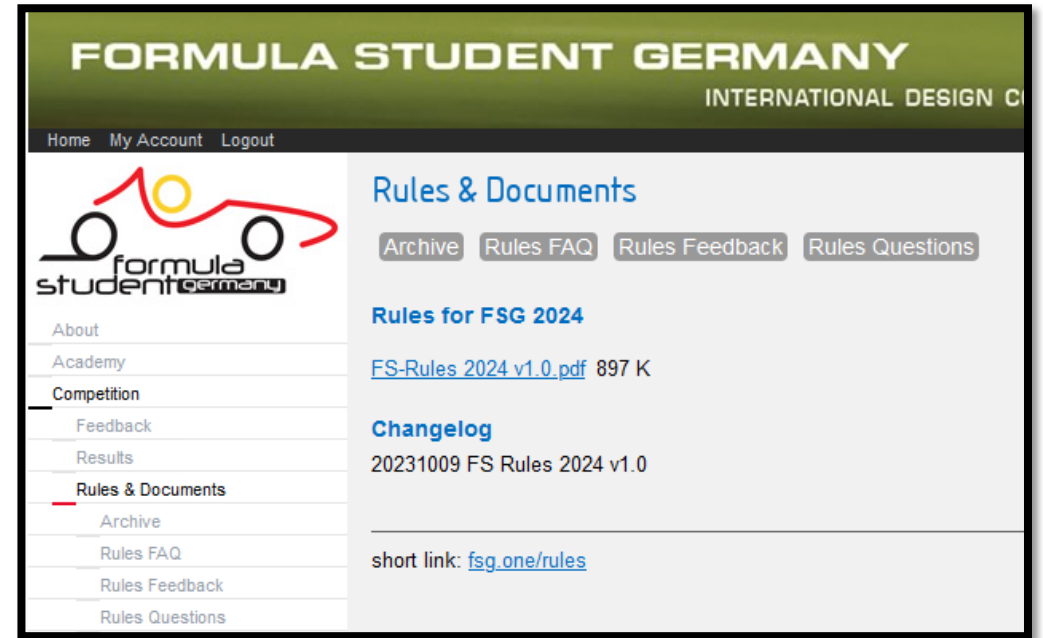
- Slido Survey Results
- Questions

Rules Objectives

- Safety
- Fairness
 - Rules are the same for everyone
- Used all over Europe
 - **FS Rules**
generally define the competition
 - **FSxx Competition Handbook**
defines competitions specific rules, procedures and deadlines

Rules for FSG 2024

- FS-Rules 2024 v1.0
 - Released on 2023-10-09
- FSG Competition Handbook
 - Not yet released
- Other Important Documents
 - Includes today's academy!
 - Considered part of the rules (A 3.1.4)!
- Rules Questions Tool (<https://fsg.one/RQ>)
 - Ask for clarification of a rule
- Rules FAQ (https://fsg.one/rules_faq)
 - Commonly asked questions, also included by A 3.1.4



<https://fsg.one/rules>

Rules Questions - Guidelines

- **Goal:**

Clarify the wording, intent or interpretation of any specific rule.

- **Wrong:** Does this design fulfill the rules? / Does XYZ pass scrutineering?
- **Correct:** Does 2020 count as part of the 5 years in A 4.2.8

- Please check the FAQ
- Please check **all** the documents on the Rules & Important Documents page (<https://fsg.one/rules>)
- Please check the slides from the Academy
 - Your question may already have been answered!
- Full guidelines at <https://fsg.one/rt-guidelines>

Feedback

- Rules changes based on feedback from teams and officials
 - Current version of the rules:
 - 123 Tickets accepted and implemented (260 Feedback Tickets created)
- Rules Feedback Tool (<https://fsg.one/RF>)
 - Currently collecting feedback for FS-Rules 2024 v1.0
 - Open until 2023-10-27 13:00 CEST
- v1.1 addressing some **severe issues** is going to be released in the next weeks
 - Otherwise, feedback is implemented in 2025

Feedback – Guidelines

- Please check the feedback tickets that are already there
- Please put the correct rule number and chapter
- Please include
 - What would you like to change
 - Why you think this change is necessary
 - (If possible, a new wording for the rule)

Difference between Question and Feedback

Rules Question

- Question on how existing rule is to be interpreted
- Not aimed at changing the rules

Rules Feedback

- Not a question
- Not related to your specific vehicle
- Proposal of change to the rules

Request for Comments – A 2.2.2

A 2.2.2 To be classified as new, a vehicle must have at minimum, a newly manufactured chassis with significant changes in the primary structure to its predecessor.

- Rules team is currently debating a change for 2025
 - Keep “significant changes” but allow them also in other systems?
- Things to consider
 - How/when would this be checked?
 - How do we minimize the effort for this check?
 - How do we ensure fairness across all teams and reviewers?
- Ideas? Please write a feedback (<https://fsg.one/RF>)

Major Changes for 2024

- FSG 2024 is going to be EV-only

2006-2009	2010-2016	2017-2021	2022-2023	2024- ?
				
				
				
				

But CV is still in the Rules !?!

- FS-Rules Objective #3: Used all over Europe
- But: Not all competitions offer all classes/disciplines
 - Defined in Competition Handbook
- CV chapter maintained by FS Austria
 - Same tools for Rules Questions and Feedback (see previous slides)
- Workshop on CV (Hybrid) by FS Austria on 2023-11-11
 - <https://fsaustria.at/fs4a-register-now/>

Major Changes for 2024

- Defined penalty handling for DC
- Added rule about shape of bodywork
- Increased requirements on EBS performance
- Pouch cell mounting
- Holes in TSAC
- Refined hand cart rules

→ More Details in the talks on Statics / Tech Inspection

Focus Topics

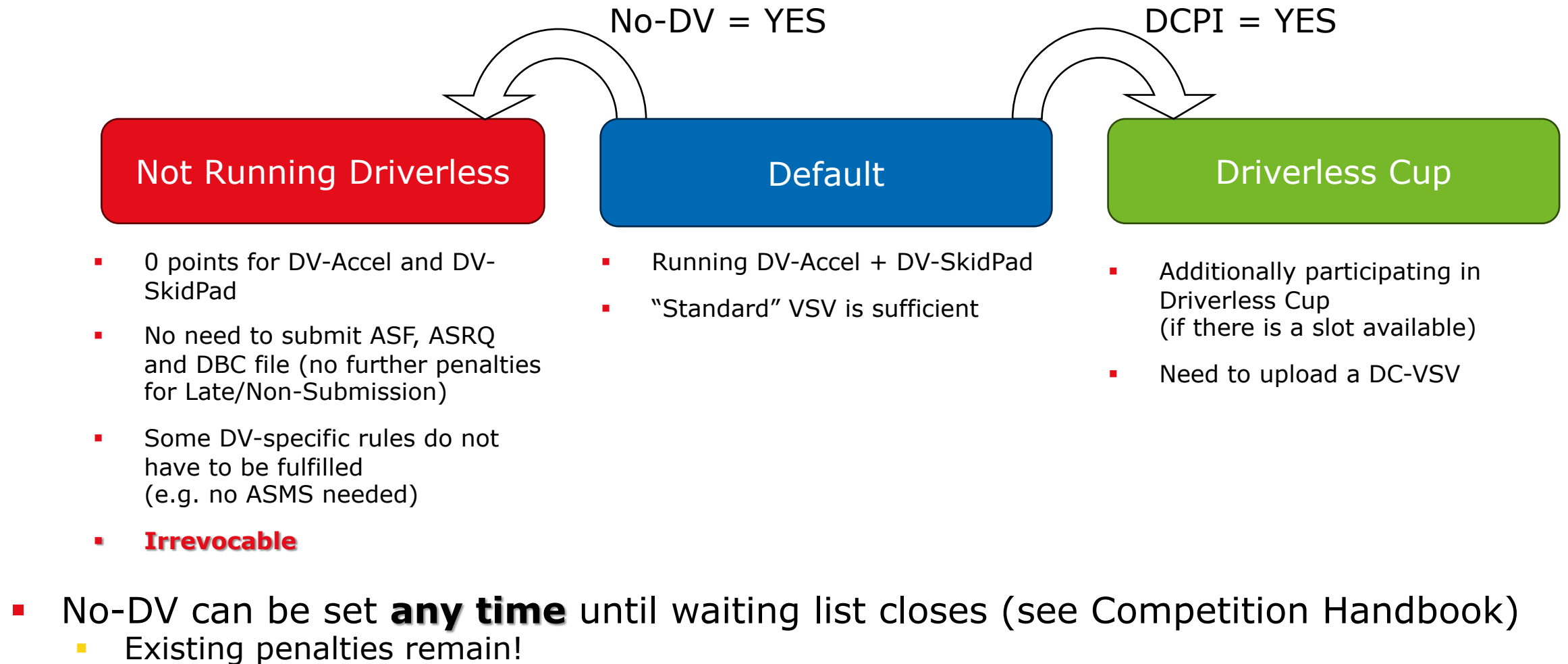
A 4.2.8 (“Five-Year-Rule”)

- Multiple questions on this in 2023, wording was changed for 2024
- Intent: Limit participation in FS (teams) to 5 years
- “Participation” is when your team captain registers you at/after the TMD deadline
 - Whether or not you (or your team) are physically on site is irrelevant
 - If you are selected for a paid team member slot, we assume you were an active team member in that season
- **You** (and your team captain) are responsible to check this

Deadlines

- Deadlines are **enforced automatically** by the server
 - 13:00 means 13:00:00.000...
 - Please **don't wait until the last second** to allow for unexpected issues (internet is down, file too big, slight difference in time/clock etc.)
 - Additionally, A 5.4.2 gives a 24h grace period with penalties
- Exceptions may be granted in rare cases (e.g. due to problems on the competition side). Messaging the helpdesk **before** the deadline expires is essential.
- Contacting helpdesk@formulastudent.de is sufficient, no need to message half of the operative team directly

Competition Settings: No-DV / DCPI



Slido Survey Results

Thank you for your attention

Any questions?

Statics



Sebastian Hoppe
ZF Friedrichshafen AG



Robert Weingart
Rivian Automotive LLC

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Engineering Design Event

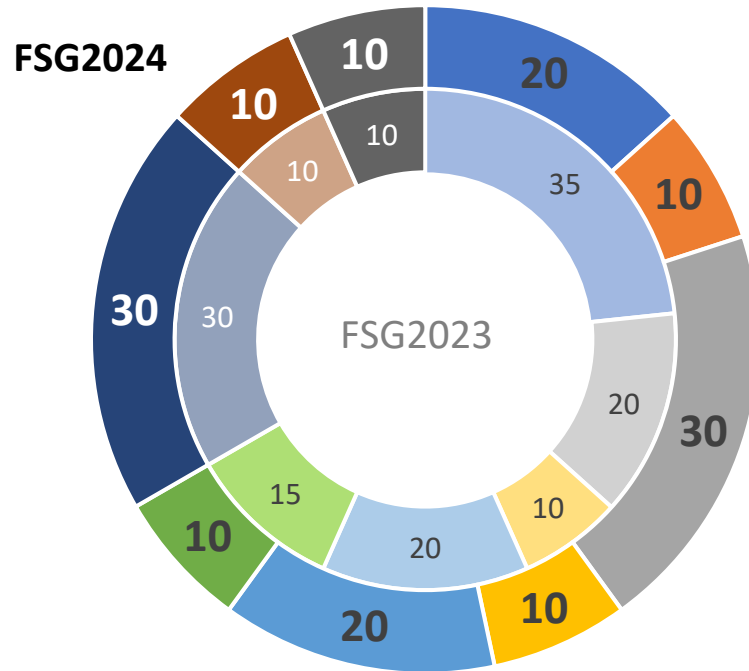


What's new and important remarks!

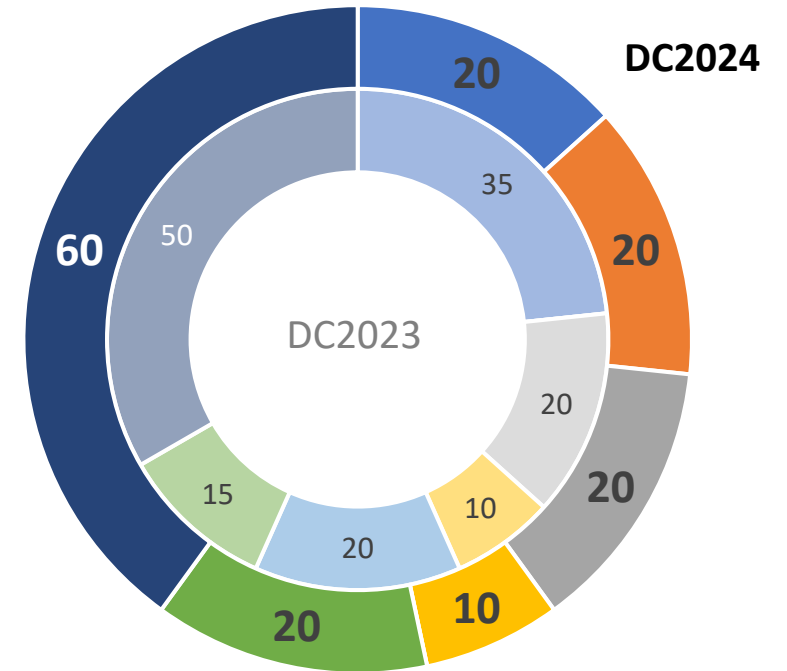
New Scoring for FSG 2024

Changes will reflect increased demand for software-driven development processes.

FSG - Engineering Design Event



DC Cup - Engineering Design Event



+ DC Cup Design Finals

Engineering Design Competition 101

How to improve your scoring and why the process has already started!

- During the season:
 - **Documentation** of design goals, processes, decisions, measurements, material tests, test drives...
 - Boost **cross-functional knowledge** among team members/ sub-teams
 - **Challenge** your concept and designs
- Preparation before competition:
 - EDR: 10 pages in total
 - Prepare your materials (folder, tablet, ...)
 - Practice your presentation skills
 - Review articles:
 - [Best practices to excel in Engineering Design Event](#)
 - [Do's and Don'ts of Engineering Design Report](#)





Business Plan Presentation (BPP)

Business Plan Presentation

Overview

Plan your presentation:

Presentation schedule	~ 45 min
Installation/ preparation	~ 10 min
Presentation	10 min
Q&A session	5 min
Judge scoring	5 min
Feedback	5 min
De-installation	5 min

What to bring:

- Your laptop with the presentation slides (*beamer or screen will be available*)
- Optional (*if you need it*):
 - Speakers
 - devices for back-up material

Back-up material:

- Prepare yourself for the Q&A session with more details and information.
- **„please consider the environment before printing“** – avoid tons of paper, prefer digital back-up or bring just one copy for all judges which you can re-use at the next competition.

The judges:

- You will be judged by 3-4 judges.
Pitch Video and presentation are scored by the same judges.
- The judging group is different for every team – judges are changing rooms after every slot.

Finals:

- The teams with the best scorings in the presentations will present in the finals on the same day.
- Finalists are judged by the whole judging group.
- The order of the finalists' presentations is by car no.
- Just the 10 minutes presentation, no Q&A!



Business Plan Presentation (BPP)

Reminder of categories

Category	Points
Pitch Video	10 pts
Content	20 pts
Finances	10 pts
Deep Dive Topic	10 pts
Demonstration and Structure	15 pts
Delivery	10 pts
Questions	10 pts
General Impression	15 pts
Total	100 pts

Context for your preparation

- ✓ Make sure to cover all perspectives of a **typical business plan** within your presentation, that is the core of the points
- ✓ Next to content a lot of the points can be well prepared with **practicing your presentation**
- ✓ The category *Novelty* was removed in last year's rule adaption

Business Plan Presentation (BPP)

What's new?

Refinement of the rules

1. Clarification of the Business Plan Presentation Objective (S 1.1.1)
 - "... the business model must **relate to the team's specific** prototype **vehicle or a specific component** of it ..."
 - "In doing so, the business must offer the vehicle or component as a product, or sell a service **based on it** ..."
2. Reduction of penalty points (S 1.4.2)
 - "If the business model presented does not relate to one of the areas listed within S 1.1.1, **15 penalty points** will be deducted from the team's BPP scoring"

Context for the rule S 1.1.1

- ✓ Your business plan needs to be based on **your specific vehicle**
- ✓ Consider what **parts or the entire vehicle** can create a rewarding business opportunity
- Please use the Rules Questions Tool at <https://fsg.one/RQ> in case of specific questions



Cost and Manufacturing Event

Cost and Manufacturing Event

Changes for 2024

- S2.4.5 Self-manufactured „fastener“ is considered as a „part“

Evaluation Points

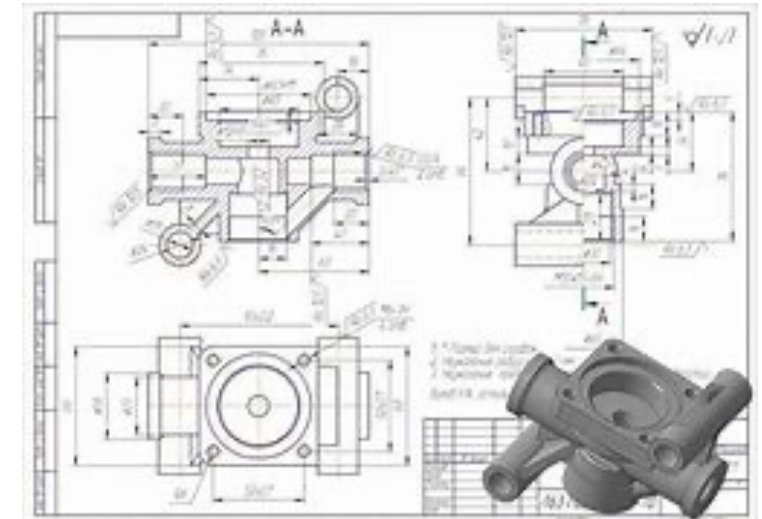
Category	Point
Format and Accuracy of Documents	5
Knowledge of Documents and Vehicle	5
Part 1 “BOM and BOM discussion”	35
Part 2 “Cost Understanding”	35
Part 3 “Real Case”	20
SUM	100



Cost and Manufacturing Event

Important FAQ

- Supporting Material File
 - Technical Drawings, Exploded views and/or pictures
 - Should help to get to know your vehicle and how it is/can be manufactured
 - We don't want to make more rules for more giving more regulations
 - **Not for the Real case**
- Splitting Electrical System => Not considered yet



Cost and Manufacturing Event

Hints and Tips for the Event

- Start with a general introduction at the event
- Prepare examples for each topic in the rules regarding Cost Understanding (e.g. Posters, calculations, Presentations)
- Know your documents (if you need more time for searching your documents the judges will deduct points) – it should be a plus when you are fast (not negative due to the fact that they have more chances to find mistakes)
- Have min. 2 versions available (electronic, printed, its up to you)
- Involve your design engineers in the manufacturing process
- It is a team event!



Cost and Manufacturing Event

Outlook and Future

- Overall: We do not want to bring in more work!
- We want to bring more focus on sustainability!



Thank you for your attention

Any questions?