



FIA Executive Summary Report

To: FIA World Motor Sport Council

Date: 19 March 2022

Re: Executive summary of the analysis and clarification exercise conducted by the FIA following the 2021 Abu Dhabi Grand Prix

Introduction:

This report has been drawn up to present to the WMSC members the conclusions arising from the analysis of the events that took place during the last five laps of the Abu Dhabi Grand Prix counting towards the 2021 FIA Formula One World Championship. The sole purpose of this report is to draw any lessons from this situation and clarity to be provided to the participants, media, and fans about the current regulations to preserve the competitive nature of our sport while ensuring the safety of the drivers and officials.

I. THE FACTS

A) On-track events

1. On **12 December 2021**, on Lap 53/58 of the race of the Abu Dhabi Grand Prix held at the Yas Marina circuit in the United Arab Emirates (**the Abu Dhabi Grand Prix**), the last Competition counting towards the 2021 FIA Formula One World Championship, Nicholas Latifi (Williams Racing) crashed into the barrier at the exit of Turn 14 at **18:21:37** local time. Marshals were required to remove the car and debris from the track. At this point, the racing order was as follows: #1. Lewis Hamilton (**HAM**), Mercedes-AMG Petronas F1 Team (**Mercedes**); #2. Max Verstappen (**VER**), Red Bull Racing Honda (**Red Bull**) and #3. Sergio Perez, Red Bull. Marshals immediately displayed double-waved yellow flags in that sector.
2. At the time of the crash, both HAM and VER were driving on hard compound tyres, each having undertaken one previous tyre change. At **18:21:54** local time, the Safety Car was deployed by Race Control. VER pitted for new soft compound tyres. HAM remained out on track on hard compound tyres, behind the safety car. Once the field was under control behind the Safety Car, the recovery of N. Latifi's car began. The speed of the recovery was, however, slower than anticipated, due in part to the car's brakes having caught fire. On Lap 55/58, the recovery and clean-up of the incident continued.
3. At **18:27:55** local time, with the race on Lap 56/58 and the safety car still on the track as there was still significant debris being cleared by marshals on the track, the standard message "LAPPED CARS WILL NOT BE ALLOWED TO OVERTAKE" was published which led to confusion amongst the teams as they were preparing for the unlapping procedure. At this point, the racing order was as follows: #1. HAM; #2. VER and #3. Carlos Sainz, Scuderia Ferrari Mission Winnow (S. Perez having retired). Several radio exchanges took place between Red Bull and Race Control (see details on Page 4).
4. At **18:31:01** local time, with the race on Lap 57/58 and the safety car still on the track, the track was clear and the message "LAPPED CARS 4 (NOR) - 14 (ALO) - 31 (OCO) - 16 (LEC) - 5 (VET) TO OVERTAKE SAFETY CAR" (i.e., only the five lapped cars between HAM and VER) was published on Timing Page 3 and official message system. Three further lapped cars remained behind VER (Car



3 (Riccardo), Car 18 (Stroll) and Car 47 (Schumacher)). Those three lapped cars were not directed to, and did not, overtake VER or others. Mercedes made a remark to Race Control by radio (see details on Page 4).

5. Race Control subsequently notified the teams (on Lap 57/58) as follows: "SAFETY CAR IN THIS LAP".
6. At **18:32** local time, with the race entering Lap 58 (the final lap), the messages "TRACK CLEAR" and "CLEAR IN TRACK SECTOR 18" were published. This allowed for green flag racing conditions on the final lap.
7. On Lap 58/58, VER overtook HAM at Turn 5 and took the lead in the race. At Turn 9, HAM almost touched VER while trying to overtake him, but VER stayed ahead and crossed the finish Line first. HAM crossed the finish Line second.
8. At **18:33** local time, the message "CHEQUERED FLAG" was published.

B) Protests, hearings and Stewards' decisions

9. At **19:01** local time, Mercedes filed two notices of protest pursuant to Article 17 of the 2021 Formula One Sporting Regulations (F1 Sporting Regulations) and Articles 13.1 to 13.5 of the 2021 International Sporting Code (Code). The first protest alleged a breach of Article 48.8 of the F1 Sporting Regulations on the basis that VER overtook HAM during the safety car period. The second protest alleged that there had been a breach of Article 48.12 of the F1 Sporting Regulations during the Race, and sought an amendment to the Race Classification as a result (the Protest).
10. At **19:45** local time, the Team representatives of Mercedes and Red Bull were summoned by the Stewards for the following reason: *"Protest by Mercedes-AMG PETRONAS Formula One Team against Car 33, alleged breach of Article 48.8 of the 2021 FIA Formula One Sporting Regulations"* (i.e. Car 33 (VER) would have overtaken Car 44 (HAM) during the Safety Car period at 18:32).
11. At **20:45** local time, the Team representatives of Mercedes and Red Bull were summoned by the Stewards for the following reason: *"Protest by Mercedes-AMG Petronas F1 Team against the classification established at the end of the Competition, alleged breach of Article 48.12 of the 2021 FIA Formula One Sporting Regulations"*.
12. At **22:14** local time, after having heard the representatives of both F1 Teams concerned, the Stewards issued Document 57 whereby they determined that *"although Car 33 did at one stage, for a very short period of time, move slightly in front of Car 44, at a time when both cars were accelerating and braking, it moved back behind Car 44 and it was not in front when the Safety Car period ended (i.e. at the line). Accordingly, the Protest is dismissed."*
13. At **23:03** local time, after having heard the representatives of Mercedes and those of Red Bull (as an "interested party") and the Race Director, the Stewards issued Document 58 (the Decision) whereby they determined that *"Article 15.3 allows the Race Director to control the use of the safety car, which in our determination includes its deployment and withdrawal. That although Article 48.12 may not have been applied fully, in relation to the safety car returning to the pits at the end of the following lap, Article 48.13 overrides that and once the message "Safety Car in this lap" has been displayed, it is mandatory to withdraw the safety car at the end of that lap. That*



notwithstanding Mercedes' request that the Stewards remediate the matter by amending the classification to reflect the positions at the end of the penultimate lap, this is a step that the Stewards believe is effectively shortening the race retrospectively, and hence not appropriate. Accordingly, the Protest is dismissed."

14. At **23:22** local time, within one hour of the publication of the Decision (see Article 15 of the International Sporting Code and Article 10.1.1 of the FIA Judicial and Disciplinary Rules), Mercedes notified the Stewards in writing of its intention to appeal in respect of the Stewards' decision regarding the Article 48.12 Protest. The deadline for lodging this appeal before the FIA International Court of Appeal (ICA) was 16 December 2021, 8.22 p.m. CET.
15. Mercedes did not submit a notification of appeal by the deadline (or at any time thereafter), but rather confirmed publicly on 16 December 2021 that it was withdrawing its appeal.

II. KEY ISSUES AND FINDINGS

As confirmed by the WMSC in its statement of 15 December 2021, the purpose of the detailed analysis and clarification exercise was to identify any lessons that could be learned from the events that took place at the 2021 Abu Dhabi GP and consider how best to provide clarity to F1 participants, fans, and media regarding the Formula 1 rules and regulations going forward.

1. Multiple roles and responsibilities of the Race Director

16. The role of the Race Director is by nature demanding and high-pressured. However, a recurrent theme in the detailed analysis and clarification exercise was a concern that the number of roles and responsibilities of the Race Director that have accumulated over the years might be adding additional pressure to the role.
17. From 1997 to 2019, the role of Race Director was held by Charlie Whiting. In addition to the position of Race Director, Mr Whiting simultaneously held the positions of FIA Safety Delegate, Permanent Starter, and Single Seater Sporting Director. Following Mr Whiting's death in March 2019, Michael Masi was appointed as the new Race Director. Mr Masi had previously held the role of Deputy Race Director for F1, F2 and F3 from 2018. Mr Masi also took over Mr Whiting's roles of Safety Delegate and (from 2021) Single Seater Sporting Director.
18. Suggestions made by the F1 Commission, and those interviewed included that some of the Race Director's responsibilities should be divided and assigned to other persons to reduce the workload of the Race Director and allow them to focus on their key functions, including managing and controlling the race.

2. Radio communications between F1 teams and the Race Director

19. Radio communications between F1 teams and the Race Director were identified as another key issue during the analysis.
20. Direct radio communications between the F1 Teams and Race Control were made public from early on the 2021 Season as part of a broader media strategy. It should be noted that only part of the exchanges was made public.



21. Following the 2021 Abu Dhabi GP, there was a significant amount of media attention and public debate directed towards the communications between the Race Director and the Red Bull Racing Team Principal on the one hand, and the Race Director and the Mercedes Team Principal on the other hand, especially the conversations which took place during the final laps of the race
22. On Lap 56/58, after the message “LAPPED CARS WILL NOT BE ALLOWED TO OVERTAKE” was published, the conversation¹ between Red Bull’s Team Principal (Christian Horner) / Team Manager (Jonathan Wheatley) and Race Control (Michael Masi) was as follows:
 - Team Principal: Christian to Michael.
 - Race Director: Yes, go ahead Christian.
 - Team Principal: Why aren’t we getting these lapped cars out of the way?
 - Race Director: Just give me... because Christian... just give me a second... OK, my main, big one is to get this incident clear.
 - Team Principal: You only need one racing lap.
 - Race Director: Yeah.
 - Team Manager: Obviously, those lapped cars, you don’t need to let them go... right away round and catch up with the back of the pack.
 - Race Director: Understood.
 - Team Manager: You need to let them go....
 - Race Director: Understood. Just give us a second.
 - Team Manager: ... and then we’ve got a motor race on our hands.
 - Race Director: Understood.
23. On Lap 57/58, after the message “LAPPED CARS 4 (NOR) - 14 (ALO) - 31 (OCO) - 16 (LEC) - 5 (VET) TO OVERTAKE SAFETY CAR” was published, Mercedes’ Team Principal (Toto Wolff) radioed Race Control:
 - Team Principal: Michael... Michael, this isn’t right. Michael, that is so not right. That is so not right.
[later]
 - Team Principal incorrectly stated: He [VER] just overtook under safety car.
24. Thus, much of the debate centred around the purpose and appropriateness of those communications and whether in-race communications between the F1 teams and the Race Director should be broadcasted or even permitted at all.
25. The consensus of those involved in the detailed analysis and clarification exercise was that the respective communications to the Race Director by the Red Bull Racing and Mercedes Team Principals during the final laps of the 2021 Abu Dhabi GP had a negative impact on the smooth running of the final laps because they were distracting when the Race Director needed to focus on making difficult and time-pressured decisions.
26. Indeed, when the Safety Car is deployed, the Race Director must in particular monitor the cars on track, the order in which they are placed, the deployment of the appropriate flags, the progress of the marshals’ intervention and then, if the Clerk of the Course considers that conditions so permit, order the Safety Car to leave the track.

¹ <https://youtu.be/77RXPgDr-24>



27. The Race Director must therefore manage both the cars on the track, the intervention of the Safety Car and what happens at the scene of the incident, i.e. a considerable number of tasks to be accomplished in a minimum of time to allow the race to resume safely and as soon as possible, while at the same time responding to the demands of the Team Principals. This requires immense concentration.
28. Hence, it was found that these communications were neither necessary nor helpful to the smooth running of the race. Rather, the consensus was that they add pressure to the Race Director at a critical time (i.e. at a time when the Race Director must simultaneously monitor the cars on the track, the deployment of the appropriate flags, and the progress of the marshals in clearing the track, and also liaise with the Clerk of the Course in relation to the end of the safety car period) and might seek to influence (whether directly or indirectly, or intentionally or unintentionally) the decisions made by the Race Director.
29. With the foregoing in mind, the consensus of those involved in the detailed analysis and clarification exercise was that communications between (on one hand) F1 teams and (on the other hand) the Race Director during a race ought to be restricted so that the Race Director would be free to perform his/her crucial role without unnecessary disruption and distractions.

3. Safety car unlapping procedure

30. The safety car unlapping procedure was a central topic of discussion during the detailed analysis and clarification exercise, stemming from the misunderstanding regarding the application of this procedure at the 2021 Abu Dhabi GP, pursuant to Articles 48.12 and 48.13 of the F1 Sporting Regulations.
31. It was apparent from the analysis that there could be different interpretations of Article 48.12 and/or Article 48.13, and that this likely contributed to some of the confusion surrounding the safety car unlapping procedure. It was therefore considered that these provisions of the F1 Sporting Regulations would benefit from clarification.²
32. It was also considered that the decisions regarding the safety car at the end of the 2021 Abu Dhabi GP likely took into account previous discussions (including at meetings of the F1 SAC, the F1 Commission, and F1 Team Managers) that made clear the F1 teams' preference to end races under green flag racing conditions, rather than behind a safety car, when safe to do so. The F1 drivers' consultation confirmed that finishing a race under green flag racing conditions remains desirable, but that safety should always come first. If for safety reasons it is not possible to withdraw the safety car, the F1 teams confirmed that they would accept finishing the race under safety car conditions.
33. The process of identifying the lapped cars used to be a manual process. For 2022 season a software has been developed that will automate the communication of the list of cars that must unlap themselves.

² NB: On Lap 58/58, HAM radioed to Mercedes "This has been manipulated". It is worth noting that neither the International Olympic Committee (IOC) nor Sportradar have reported any integrity concerns regarding the official betting activity on the 2021 Abu Dhabi Grand Prix.



34. In a recent E-Vote, the WMSC has confirmed a rule change that clarifies that in case of unlapping « all » cars rather than « any » cars have to unlap. Further investigation into the F1 timing system shall clarify whether a « virtual unlapping » procedure could bring advantages and simplification.
35. The results of the 2021 Abu Dhabi Grand Prix and the FIA Formula One World Championship are valid, final and cannot now be changed. In accordance with the rules, Mercedes made a protest to the stewards after the race, seeking to change the race classification. The stewards dismissed the protest and Mercedes then had an opportunity to appeal that decision to the FIA International Court of Appeal, but did not do so. There are no other available mechanisms in the rules for amending the race classification.

4. FIA race management team structure

36. The support available to the race management team was identified as a key issue by participants in the analysis, in the context of ensuring that the Race Director is able to perform his/her role to the best of his/her ability.
37. Responsibility for supporting the race management team lies primarily with the FIA Single Seater department. When consulted in relation to the support that they provide, department staff reported that the team was positive and worked well together. They noted the demanding nature of the Race Director role, particularly in light of the Race Director's multiple roles and responsibilities. They also identified the need for additional support and resource in order to improve the functioning of the department and thereby provide better support to the race management team.
38. Additionally, the staff identified the need to improve communications between the FIA office in Geneva and track staff, and between the F1 Sport and F1 Technical departments. They also noted the complexity of the F1 Regulations (in particular the F1 Technical Regulations, the Technical Directives that supplement them, and the F1 Financial Regulations) and the reduction of the duration of consultancy agreements from 3 years to 1 year, often resulting in higher staff turnover and so reduced familiarity with the rules.

IV. THE RECOMMENDATIONS

39. Recommendations are set out below to address the findings and conclusions in this report. These recommendations have been presented by the FIA President to both the F1 Commission and the WMSC, and were publicly announced in a statement of the FIA President released on 17 February 2022³.

Recommendation 1: to assist the Race Director in the decision-making process, a **Virtual Race Control Room** should be created. Like the Video Assistance Referee (VAR) in football, it will be positioned in one of the FIA Offices as a backup outside the circuit. In real-time connection with the FIA F1 race director, it will help to apply the Sporting Regulations using the most modern technological tools.

³ See www.fia.com/news/fia-president-mohammed-ben-sulayem-opens-way-new-step-forward-formula-1-refereeing.



Recommendation 2: direct radio communications during the race, currently broadcast live by all TVs, **should be removed** in order to protect the Race Director from any pressure and allow him to take decisions peacefully. It will still be possible to ask questions to the Race Director, according to a well-defined and non-intrusive process.

Recommendation 3: unlapping procedures behind safety car should be **reassessed** by the F1 Sporting Advisory Committee and presented to the next F1 Commission prior to the start of the season.

Recommendation 4: a new race management team has been put in place starting in Barcelona for the test session. Niels Wittich (former DTM Race Director) and Eduardo Freitas (former WEC Race Director) will act alternatively as Race Director, assisted by Herbie Blash (former right-hand man of Charlie Whiting) as permanent senior advisor.

40. Many improvements, such as recruitments and the division of the Race Director's many roles and tasks, have already been made. Furthermore, the role of Executive Director of the FIA Single Seater department was created within the FIA in December 2021, which Peter Bayer holds in addition to his role as Secretary General for Sport.
41. However, in order to finalise the new structure:
 - A new F1 Sporting Director will be recruited (process finalized),
 - An additional senior regulatory legal counsel will be recruited to strengthen the legal support (i) during the F1 competitions (regardless of the time difference) and especially during the weekend and (ii) on F1 sporting matters.
42. It is suggested that all the recommendations that have not already been implemented are actioned as a matter of priority so that the benefit of the lessons learned from the detailed analysis and clarification exercise can be maximised for the for the 2022 season. The WMSC members will be kept regularly informed of the progress made.