



FEDERATION INTERNATIONALE DE L'AUTOMOBILE

FIA Hillclimb RPM logger

Call for expression of interest

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1 Introduction

1.1 Overview

The new FIA Hillclimb regulation based on the Performance Factor (PF) requires Competitors to declare the maximum engine speed used during a competition. This value is an input that will allow calculating the PF value of the car and of the engine to classify the Competitors in different groups with homogeneous performances. The PF will also be used to calculate the minimum car weight.

This regulation has been in force since 2020 for Category 1 cars for both the National and FIA Championships and will be applied starting from 2024 for Category 2 cars.

Furthermore, in 2023 the maximum engine speed of Category 2 cars will be regulated to limit maximum engine performances.

Where FIA regulations apply – because it is an FIA Championship or because a National Sporting Authority (ASN) applies the FIA regulations in its National or Local Hillclimb Championship – a data logger must be installed in the car in order to check that the Competitors respect the maximum engine speed during the Event.

In this context, the objective of the FIA is to establish a Technical List of homologated RPM (Rotation Per Minute) logger systems that must be used where FIA regulations apply. This will in particular contribute to the regulatory needs of the FIA, support the ASNs in choosing an RPM logger system which is compliant with the needs of the Hillclimb discipline and improve the compatibility of different systems, so that a Competitor can participate to different National Championship with the same logger and without modifying the car.

In general, the Hillclimb RPM logger system must include a free of charge application that allows Event Officials to check that engine rev time history is below the maximum declared value and Competitors to check and correctly configure the system.

1.2 Assumptions & Dependencies

- It is assumed that every Hillclimb Competitor will install in its car a wiring loom and the specified connector in strict compliance with the relevant regulation.
- It is assumed that Event Officials will have a laptop to download and analyse the data logged on the system, without significant training other than the documentation/tutorials provided by the provider.

2 Evaluation Process

After a provider has registered their interest with the FIA to be evaluated as a Hillclimb RPM logger system provider, the FIA will conduct an evaluation of their solution, assessing the proposed system on the basis of the evaluation criteria listed in this document. Extra features or capabilities will also be taken into account.

All costs for the evaluation process will be covered by a fee of 500 € which the FIA will request from the provider in order to include the device in the technical list.

If requested by the FIA, the provider will have to provide (at its own cost) the proposed device and all needed materials to the FIA in order to carry out the assessment.

The FIA will publish a Technical List with the references of the selected RPM loggers available for ASNs and Competitors.

As part of this process, interested providers are also invited to fill in the “Questionnaire Compliance – Due Diligence” attached to this document.

3 Evaluation Criteria

3.1 Competitors

Competitors should be able to configure the device easily

Competitors should be able to easily configure the logger after downloading the appropriate software and instructions.

3.2 Event Officials

The Event Officials should be able to check the device configuration easily

Event Officials should be able to easily check the logger configuration, without significant training other than the documentation/tutorials provided by the provider.

The Event Officials should be able to download and analyse the data recorded in the logger easily

Event Officials should be able to easily download the data stored in the logger and graphically analyse the engine rpm time-history easily, without significant training other than the documentation/tutorials provided by the provider.

3.3 Technical requirements

Wiring

The device must be operating with a power supply voltage range from 8 to 16 VDC.

The connector on the logger side must be a DTM04-4P (car side DTM06-4S) with the following pinout:

| | |
|---|-----------------------|
| 1 | GND (-) |
| 2 | V-batt (+12V) |
| 3 | RPM signal (4-50V) |
| 4 | RPM signal (150-450V) |

The engine speed must be measured and recorded by one of the following signals:

- petrol engines: the low voltage signal to the ignition coils;
- diesel engines: the command signal to the electronic fuel injectors.

Logging performances

The logger shall start recording engine speed as soon as the engine is started without any external action.

The logger must be able to store all engine RPM time history even if the power is suddenly cut off.

The RPM value must be related to a specific date and time.

The minimum logging capability should be not less than 60 minutes with a sampling frequency not lower than 10 Hz.

The maximum RPM value should be at least 20.000 rpm.

The minimum measurement accuracy should be +/-50 rpm at any engine speed.

3.4 Usability

Adequate help/tutorial available on the provider website

The application should contain adequate help and/or tutorials to allow users to understand how to use it in a short amount of time.

3.5 Other

Pricing

The pricing model should be consistent and publicly accessible. The target price of the device should be less than 300 EUR. However, if the provider is unable to meet this target, he can still submit his solution to the FIA. The analysis and configuration software must be downloadable free of charge from the provider's website.

Support

The amount and level of support offered to ASNs, event Organisers and Competitors is up to the provider to determine. It should be noted, however, that Hillclimb events take place mostly on weekends, and when issues arise, they need to be resolved quickly, or the safety of the event can be impacted.

Service Level Agreement

A service level agreement guarantees customers a certain percentage of uptime for the service they are purchasing. No system is perfect, and services can rarely run for extended periods of time without disruption. There is no requirement for a service level agreement, however if the provider wishes to offer one, details will be collected for comparison purposes.

Internationalisation

There is no requirement on any particular language support, however, in order to reach the largest possible audience, multiple language support is important. Details about language support and other internationalisation efforts will be collected for comparison purposes, however, no judgement will be made.

Regulation Compliance

Both the Event Officials application and the Competitors Application must be compliant with any and all applicable personal data protection laws and regulations.

3.6 Other Features

Whilst no other features will be evaluated, nothing prevents developers from creating innovative new features on top of the basic RPM logging features described above. Details about other features will be collected for comparison purposes, however, no judgement will be made.

4 Legal Notice

By participating in this Hillclimb RPM logger process, interested providers: (i) accept to do so at their own risk and cost, (ii) accept that their Hillclimb RPM logger Systems will be evaluated by the FIA acting at its sole discretion, (iii) accept not to contest such evaluation by the FIA as well as the potential decision by the FIA not to include their Hillclimb RPM logger Systems in the Technical List, and (iv) acknowledge and agree that they won't be entitled to seek any kind of damages, indemnification or compensation from the FIA in connection with this document, the evaluation of the Hillclimb RPM logger Systems by the FIA, the decision to include (or not to include) their Hillclimb RPM logger



Systems in the Technical List, and the selection/use (or absence of selection/use) of their Hillclimb RPM logger Systems by the ASNs and Competitors.

Interested providers further acknowledge that nothing in this document or any communication made by the FIA or its employees, affiliates, subcontractors and/or any other third party it may engage in relation to this document shall: (i) constitute an offer or a contract between the FIA and any interested provider, or (ii) be construed as placing an obligation on the FIA to grant rights to any interested provider, or (iii) constitute any appointment of an interested provider by the FIA, or (iv) not act as a representation that any interested provider will be granted any right(s) or appointed by the FIA in any capacity.

Expressions of interest – including full presentation of the Hillclimb RPM logger System and evidence of compliance with the above-mentioned evaluation criteria – must be submitted to the FIA Technical Department by e-mail to the following address: pf@fia.com

The FIA reserves the right at any time, without giving reasons therefore and at its sole discretion, to amend, modify or terminate this call for expression of interest (including the evaluation process and evaluation criteria) and/or to issue a new call for expression of interest.



QUESTIONNAIRE

| Questions | Answers |
|---|---------|
| 1. GENERAL INFORMATION | |
| 1.1. Type of partnership | |
| 1.2. Name and country of the potential partner or stakeholder | |
| 1.3. Name and country of the ultimate beneficial owners | |
| 1.4. Name and country of the officers and directors | |
| 1.5. Name and country of the bank | |
| 2. INTERNATIONAL RELATIONSHIPS | |
| 2.1. Will the relationship involve at any stage a High-Risk Country as per the list below? | Yes No |
| 2.2. If yes to Q2.1, will there be any transactions denominated in USD between the FIA and the potential partner? | Yes No |
| 2.3. If yes to Q2.1, are there any US citizens involved in the relationship? | Yes No |
| 2.4. If yes to any of the questions above, please provide more details | |
| 3. PUBLIC AUTHORITIES | |
| 3.1. Will the potential partner or stakeholder represent the FIA before any public authority? | Yes No |
| 3.2. Will the potential partner or stakeholder be authorized to make payments to any public authority on behalf of the FIA? | Yes No |
| 3.3. If yes to any of the two questions above, please provide more details | |
| 4. PAYMENTS | |
| 4.1. Will there be any payments through an Offshore Financial Center as per the list below? | Yes No |
| 4.2. If yes, please provide more details | |



Compliance – Due Diligence Policy

| 5. CONNECTIONS | |
|--|--------|
| 5.1. Do you have any personal or business connections with any FIA Party (FIA members, FIA body members, consultants, officials, employees)? | Yes No |
| 5.2. If yes, which? | |
| | |
| Stamp and signature | |



High Risk Countries

- Syria
- Cuba
- Sudan
- Iran
- North Korea

Offshore Financial Centers

The International Monetary Fund has identified the following jurisdictions as Offshore Financial Centers. Any connections with those countries triggers money-laundering flags:

- Andorra
- Anguilla
- Antigua
- Aruba
- Bermuda
- British Virgin Islands
- Cayman Islands
- Gibraltar
- Guernsey
- Isle of Man
- Jersey
- Nauru
- Vanuatu