



FIA European Bureau
Call for Tenders

Expert study: 'Safety and environmental aspects of the use of Personal Mobility Devices'

Brussels, 1 December 2021

1. Introduction

The Fédération Internationale de l'Automobile (FIA) is the governing body for world motor sport and the federation of the world's leading motoring organisations. It is a non-profit making association and brings together 237 national motoring and sporting organisations from 142 countries on five continents.

FIA European Bureau¹ brings together 105 Mobility Clubs and their 36 million members from across Europe, the Middle East and Africa. Our members provide roadside assistance, legal advice, insurance, and many other services to their members.

The FIA European Bureau aims:

- 1) to provide strong representation of European Member Clubs' interests towards the European Union institutions - for example on road safety, consumer protection, environmental protection, and the promotion of sustainable motoring.
- 2) to build up links and support the exchange of best practices between our Member Clubs across Europe, Africa, and the Middle East.
- 3) to engage in new campaign activities together with Automobile Clubs throughout the region, such as the FIA Action for Road Safety campaign.

FIA European Bureau is now calling for expressions of interest for an expert study on '**Safety and environmental aspects on the use of Personal Mobility Devices**'.

2. Context of the study

The advent of readily available electric powertrains, accompanied by changes to the ownership models and the ability to provide instant online registration and payment, has led to the reimagining of some classical vehicle forms, such as scooters or bicycles.

The term "Personal Mobility Device" (PMD) is associated with a rapidly evolving range of light vehicles that are increasingly deployed in urban areas across Europe. PMDs are powered by driver-peddalling and/or electric motors, docked or dockless, and can be privately-owned or shared.

PMDs are frequently used for short distances, either from point to point, or as part of a longer inter-modal journey (e.g., providing the last-mile solution for journeys where the needs of commuters are not met by other means of transport). They enable multimodality and close the gap between transport systems.

Despite their advantages in terms of user convenience, as well as their potential to improve congestion and air quality, PMDs raise road safety and environmental concerns. Moreover, the rapid uptake of

¹ <http://www.fiaregion1.com>



these vehicles has outpaced developments in the frameworks for both the technical and road-circulation regulations. This has led to a lack of harmonisation in the approaches taken by Member States, and a large and rapidly growing fleet of vehicles that are in use on the road but are effectively outside of the current EU regulations or, in some cases, illegal.

The rules applied to PMDs vary greatly across Europe, in some cases even among regions within the same country. There are no EU harmonised rules specifically intended for PMDs that are not derived from pedal cycles. Electrically assisted pedal cycles with assistance speeds of more than 25km/h, or with motor powers greater than 250W, fall within the scope of Regulation (EU) No 168/2013 and are subject to type-approval. All vehicles not within the scope of type-approval automatically fall in the scope of the Machinery Directive 2006/42/EC and need to fulfil horizontal requirements (e.g., EMC Directive 2014/30/EC).

However, the Machinery Directive is a very generic instrument and frequently not specific enough to address the most elementary safety requirements, such as the need for braking, steering, and lighting system requirements, as well as appropriate performance criteria.

To address these gaps, the European Commission's Sustainable and Smart Mobility Strategy announced the publication of Guidelines to support the safe use of micromobility devices. In preparation for the Guidelines, in 2021, the European Commission commissioned research² on market development and related road safety risks for L-category vehicles and new personal mobility devices. On top of that, the Commission is considering a legislative proposal on safety measures for electric personal mobility devices, possibly in 2022.

The European Parliament also acted, by adopting last October a report on EU Road Safety Policy Framework 2021-2030³. The report notes that new personal mobility devices raise serious concerns related not only to the safety of the devices themselves, but also to their safe use in traffic.

3. Objectives of the study

This piece of research aims at obtaining a deep understanding of the road and functional safety implications of a set of PMDs, from a technical and a legal perspective. The following PMDs shall be included in the scope of the research:

- Electric bicycles
- Electric Scooters
- Self-balancing machines
- Cargo bicycles

In particular, the study shall examine the existing driver requirements (e.g., training, insurance, traffic rules), user behaviour & awareness, as well as technical and environmental aspects applicable to the selected PMDs.

The output of the research shall be policy recommendations aiming at improving road safety multimodality, and user convenience, while not adding unreasonable burden and costs on consumers.

² <https://op.europa.eu/en/publication-detail/-/publication/b042f558-a319-11eb-9585-01aa75ed71a1/language-en>

³ https://www.europarl.europa.eu/doceo/document/A-9-2021-0211_EN.html



3.1 Areas of focus

The research shall focus on the following aspects:

I – Consolidation and analysis of relevant literature

A. Desktop research:

- Identify the relevant EU regulatory framework applicable to the selected PMDs (categorization, technical and performance requirements, driver restrictions, road traffic rules, training, insurance cover...). This task shall be complemented by a comparative analysis on how the use of PMDs as well as its technical requirements are regulated in three Member States.
- Collect and interpret publicly available data and information on accidents involving PMDs.
- Outline, analyse and draw conclusions on available literature on the environmental impacts and recyclability aspects of the selected PMDs. More concretely on:
 - Modal shift effects: Do PMD's save energy consumption (shift from car to PMD) or increase it (shift from to PMDs of users of public transport and people on foot)?
 - Battery use (privately and platforms). Is it recycling possible/usual trend after PMDs battery lifecycle is finalized?
 - Effect of PMDs on public spaces (e.g., parking spaces and use or maintenance).

B. Analysis of the collected information

- Identify the risks and opportunities of the current EU regulatory framework applicable to PMDs. For instance, the lack of harmonization allows for scenarios where the same PMD can be driven in a Member State, yet banned in another.
- Study whether certain PMDs are inherently unsafe from a technical perspective (e.g., the lack of mandatory blinkers, speedometer to comply with speed limits, handlebar, EU performance requirements...).

II – Consumer awareness

The study should seek to get an understanding on consumer views on PMDs. The contractor shall conduct a consumer survey covering the following:

- Perception, potential, and use of PMDs. Do they act as a last-minute solution or as an alternative to the traditional transport modes (public transport, private car...)?
- Awareness and knowledge of the main traffic rules and restrictions applicable to PMDs
- Main challenges of the use/interaction with PMDs (e.g., infrastructure, training, devices lighting...).

The survey shall be launched in three EU countries (*suggested by the contractor*) and aim at reaching around 1 000 respondents per country. If possible, the inclusion of statistic questions (age) is preferred. The contractor will be the sole responsible for obtaining the above mentioned figures.

II. Way forward



Make policy recommendations with a view to improving road safety, multimodality, and user convenience. Special attention shall be given to the ways to address driver education and training. In other words, recommendations should address the right conditions for the safe use of PMDs.

Study report

The analysis and the underlying methodological approach of this expert study need to be thoroughly explained and duly justified. The outputs will include a written report, accompanied by policy recommendations, which may be used by the FIA when interacting with policy makers.

Regular updates of the detailed project timing and work progress shall be provided to FIA European Bureau over the duration of the project. All study results shall be summarised in a comprehensive report and in a presentable (electronic) format for publication. In addition, the contractor(s) shall include an executive summary in the report. The final report shall be delivered as an electronic copy (Microsoft Word and pdf).

The final report shall be drafted in English. The contractor(s) shall make itself available for short presentations of the intermediate and final reports to FIA European Bureau and its members, and for the delivery of one presentation at a public event. Associated travel costs shall be accounted for in the tender. Considering the uncertainty around possible future travel restrictions due to the COVID-19 pandemic, the presentation to FIA members and at a public event, may be held online.

4. Tender procedure

Interested parties are invited to make an offer for carrying out this study, considering the following timeframe (subject to changes, which, in any case, will be notified by the FIA European Bureau to all candidates):

- **Application phase** – deadline to submit a formal expression of interest, including a proposed methodology, a timeline for the research work, and the feedback loops between the selected party/parties and FIA European Bureau, as well as an itemised price quotation: **7 January 2022.**
- **Date of notification to the selected candidate(s): 31 January 2022.**

This Call for Tenders is governed by French law and will be dealt with by a Selection Committee, which will consist of representatives from FIA European Bureau.

5. Budget

For the performance of the study described above, a total amount of up to **45,000 EUR**, including VAT (if applicable), is available to be allocated to the selected party/parties as follows:

- Forty per cent (40%) of the total amount will be transferred to the selected candidate once it has been officially appointed and within 30 days after the signature of the Services Agreement between FIA European Bureau and the selected candidate.
- Sixty per cent (60%) of the total amount will be paid once the final report has been submitted and approved by the FIA European Bureau.



The project must be invoiced at the latest by 31 December 2022.

6. Timing

The study shall start upon notification of the selected party and be completed by **June 2022** with the delivery of the final report. An interim report will be provided to FIA European Bureau at a date to be agreed.

The project duration may be extended following the parties' agreement. FIA European Bureau shall be notified immediately in case of any roadblock or reason that might risk the project falling behind schedule or the planned budget being exceeded.

7. Terms

The following points are the 'core terms' of the Services Agreement (hereinafter the "Agreement") to be concluded between FIA European Bureau and the selected candidate (hereinafter "Selected Party"):

1. Any intellectual property rights attached to the works created by the Selected Party in accordance with the project specifications of FIA European Bureau and/or in relation to the services rendered by the Selected Party including but not limited to copyright works, data and databases, computer programmes and software, patents, designs, plans, drawings, trademarks, logos, business name, domain names, specifications, know-how, or devices, of whatever nature, whether or not patentable or capable of registration and whether or not recorded in any medium, invented, developed, devised, created or acquired by the Selected Party (whether alone or jointly with any other person) will be the property of the FIA, and the Selected Party hereby unconditionally assigns all existing and future rights, title and interest in and to any such intellectual property to the FIA.
2. The study results will be the sole property of the FIA. It should be quoted as an "FIA European Bureau study" or as an "FIA European Bureau study performed by [Selected party name]". The study results may only be used, published and/or reproduced by the FIA and any FIA member Club wishing to use them on a date to be set by the FIA.
3. During the term of the Agreement, and after its termination for whatever reason without limitation in time, the Selected Party agrees to treat as secret and confidential and will not disclose or permit to be disclosed to any person or otherwise make use of or permit the use by any third party of any information relating to the FIA's business, affairs or finances or any such information relating to any member, clubs or affiliate of the FIA where knowledge or details of the information was obtained or received during performance of the Services (hereinafter the "Confidential Information"). In particular, the Selected Party agrees that all confidential information remains the property of the FIA and shall not, during the term of this Agreement and thereafter without limitation in time, be (either directly or indirectly) used, disclosed, or made available to any third party except with the FIA European Bureau prior consent in writing.



8. Declaration

The declaration in Annex I needs to be returned dated and signed with the letter of candidacy.

9. Contact

For any question regarding this call for tenders, please contact Mr Diogo Pinto (dpinto@fia.com – phone: +32 2 282 08 12)



ANNEX I: Declaration

(To be returned dated and signed with the letter of candidacy)

- A. The candidate undertakes to respect the consultation procedures according to the present document and its appendices.
- B. The candidate declares not to be in a situation of cessation of payments, nor be subject to safeguarding, receivership or liquidation proceedings, or any comparable proceedings under applicable law.
- C. The candidate declares to be entirely independent.
- D. The candidate declares to be up to date in its social security contributions and tax payments.
- E. The candidate declares to be in full compliance with all legal and regulatory standards, and standards of any other nature in the accomplishment of the services that he provides or may provide in the future and with those regarding child labour, prison labour, minimum wages, non-discrimination, respect for the environment, etc.
- F. The candidate further declares to ensure that these standards are respected by all its employees and/or sub-contractors.

Done in:

Date:

Name of the legal representative of the candidate:

Title of the legal representative of the candidate:

Signature of the legal representative of the candidate: