

Technology Request

Manufacturer for a lightweight, three-wheel, electric vehicle designed for a sustainable mobility sharing system

Summary

A Swiss spin-off has developed an electric vehicle specifically designed for a mobility sharing system: three-wheel, with a roof, made of sustainable material. In its function, comfort, and investment costs it is positioned between the car and the (e-) bike. The company is looking for a manufacturing agreement with a partner able to produce the vehicle according to the L2E street admission regulation and quality standards in the field of light vehicles with experience in high volume production.

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Details

Description

A Swiss spin-off from a University of Applied Sciences has developed an electric vehicle specifically designed for a mobility sharing system. Conventional sharing systems offering bikes or scooters are known to reach only about 30% of their user potential, due to bad weather conditions and the fact that these two-wheel vehicles attract mostly younger, athletic and more likely male users. The offered mobility solution consists of a free-floating fleet of three-wheel electric vehicles, which can be localized, booked, locked/unlocked, operated and paid by a mobile app.

The vehicle

The vehicle has an electric drive, is made from sustainable materials and has a hard-top weather protection. It is the first vehicle in the world specifically designed for sharing use in urban areas and is catering to the needs of all age and social groups (sharing economy). Its use requires no personal fitness or motorbike experience, as it is extremely easy and fun, yet safe to drive in all weather conditions and also on slippery floors. The vehicle has a maximum speed of 45 km/h. It has the smallest footprint (1.2m²) and is the lightest (80 kg) three-wheel vehicle on the market. Beside that it features a newly developed tilting mechanism and has swappable batteries.

The Swiss company is looking for a partner who is able to produce the final serial product according to the given design and drawings. The partner should be able to support already the final serial development with its knowledge and be able to support the street approval process. A production of 50 vehicles in 2019 are planned and more than 30'000 pieces per year in the long term.

Technical Specification or Expertise Sought

The sought industry partner, a manufacturer of lightweight motor and electric vehicle as OEM (Original Equipment Manufacturer), should be able to produce, manufacture and assembly this vehicle (category L2E – three wheel moped, see 1. below) to low costs and exclusively for the Swiss company. All IP will belong to the Swiss company.

The complete design, cad drawings and requirements are defined by the Swiss company.

Key elements of the vehicle:

- Electric driven, 45 km/h
- Aluminum frame
- Hardtop with a windshield
- Three wheel

The drivetrain will be delivered by a third partner.

1. https://en.wikipedia.org/wiki/Vehicle_category

Keywords

Technology

02003004	Supply chain
02003006	Prototypes, trials and pilot schemes
02009001	Design of Vehicles
02009002	Hybrid and Electric Vehicles
02009012	Automotive engineering

Market

09001005	Motor vehicles, transportation equipment and parts
09004008	Other manufacturing (not elsewhere classified)

Open for EOI : **Yes**

Dissemination

Send to Sector Group

Environment

Client

Type and Size of Organisation Behind the Profile

Industry SME <= 10

Year Established

2016

Already Engaged in Trans-National Cooperation

No.

Languages Spoken

English
German

Client Country

Switzerland

Partner Sought

Type and Role of Partner Sought

Manufacturer of lightweight motor and electric vehicle as OEM (Original Equipment Manufacturer).

The tasks to be performed by the partner sought:
Production of an electric lightweight vehicle.

Type and Size of Partner Sought

>500 MNE, 251-500, SME 51-250, >500

Type of Partnership Considered

Manufacturing agreement

Attachments

Vehicle_manufacturer.jpg

