

This work package applies to type 2 vehicle (for high-speed long-range transportation) and type 3 (servicing low Earth orbit).

You will address one of the following topics:

1. From the few characteristics given for type 2 vehicle capable of high-speed long-range transportation , you will define a set of high-level requirements that impact both vehicle design and trajectory. You will add some other constraints linked to the fact that use of the vehicle is close to airliner or business jet ones, while offering a concept allowing two hour door-to-door trips

Or

2. From the few characteristics given for type 3 vehicle servicing low Earth orbit, you will

define a set of high-level requirements that affect both vehicle design and trajectory. In particular, you will need to take into account the fact that the vehicle may carry non-professional passengers, fragile equipment for various lengths of time depending on the mission (a week in free flight and up to six months when docked to a station), may or may not be launched under a fairing, and may have to undergo a restrictive atmospheric re-entry requiring the vehicle to be re-configured for a new flight.

Whatever vehicle you choose, your final file will at least contain:

- logic used for functional analysis,
- identified requirements and constrinsts,
- trajectory profile,
- a pre-project type architecture of vehicle, with the design, geometric and mass

characteristics able to cover elements coming from functional analysis.



General characteristics of reference vehicles: Upload <u>PDF</u> Previous WP



