



This work package applies to type 1 vehicle (for local suborbital flights) and type 3 vehicle (servicing Low Earth Orbit).

You will address one of the following topics:

1. For type 1 vehicle, define applications, other than carrying passengers, that could be proposed, using a suborbital vehicle, by addressing one of the following topics:

- Define the engineering aspects of small scientific and/or technological payloads for this platform: consider the constraints such as mass, power and thermal budgets. Define the interfaces, the safety aspects, the human factor considerations,
- **Or** Define experiments which could benefit from longer very low g-level period during one single parabola (circa 4 minutes), being inspired by applications performed on-board Airbus Zero G, sounding rockets and the ISS,
- **Or** Define any other applications, not necessarily scientific or technological (for example art and cultural, business applications etc).

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- For type 3 vehicle, define feasible applications on board a manned vehicle serving low-Earth orbit with atmospheric re-entry, in addition to the basic mission of transporting passengers to and from space stations, by addressing one of the following topics:
 - Definition of ancillary missions such as cargo transport, medical evacuations and other activities that can be carried out as a passenger on the basic mission,
 - **Or** Definition of additional missions requiring the flight to be extended by a few weeks in autonomous mode (e.g. laboratory experiments, weightless manufacturing, inspection of in-orbit infrastructure, repairs) and definition of functions that would enable the flight to be extended by a few weeks in autonomous mode without the need to dock with a space station.



General characteristics for the reference vehicles:



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