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**Abstract**

The use of Space has drastically evolved these last ten years. Tomorrow will see easier and cheaper access to Space, satellite servicing, in-orbit manufacturing, human private spaceflights to ever increasing number of Orbital Stations, road to the Moon, Asteroids, Mars. . .

It seems fundamental to make sure we can rely on robust, reliable, frequent and affordable access to and from LEO with both automatic systems and human missions; such systems are the bricks with which all the future operations in Space will be built.

Independent human access to space from Europe for our astronauts is a key to any future in Space. It has been studied in depth since the 80's with Hermes Spaceplane, then through numerous studies, pre-development activities, and demonstrations such as ARD, X38-CRV or IXV which now allow Europe to reconsider such an endeavor with a much higher confidence.

We have worked during one year on every aspect of a European Human spaceflight system aimed at being launched from Guiana Space Center. It would be a logical addition to new orbital infrastructures in LEO which will follow the ISS, are already under deployment by governments and commercial entities in the US, Russia, China, India. We found out that Europe could play a very specific role, deploying a "universal" vehicle capable to visit any future LEO architecture; following its historical tradition, Europe would be in a position to cooperate potentially with everyone in LEO!

We traded the various types of potential vehicles dealing with the recovery techniques for both nominal and abort cases. The launch with Ariane 6 has been looked at in detail and a particular effort has been devoted to the adaptation of the Guiana Space Centre.

A cautious examination of the required technologies shows that European industry is fully ready, and that most of these technologies are available. In particular, we have shown the readiness of Human-Rating systems, based on the ATV, Orion ESM and ISS pressurized modules.

It would be easy to kill such an idea, but can Europe be left aside in the future? Such a program would release a very strong positive sign for the young generations cradled with the feats of our astronauts; it would give motivating STEM objectives to the next generation of students.

As a major space power it is clearly strategic for Europe to develop independent human access to LEO in the current multipolar world.