

## **Space Strategy - The Vision and Us**

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**S**ince the Bush government presented the new space exploration vision other nations will have to decide which position to take. The Shakespearian question of “to be or not to be” simply translates into participate or not. Is it really so simple? - one might wonder!

First of all one might even ask whether the option to say “no” really exist. Space exploration is a formidable task and in my view one of the fundamental challenges to mankind!

Any technical, financial or human dimension of it could be projected and influence the size of the undertaking up to the wildest dreams. However to make it meaningful to everybody, we have to find ways to cooperate with each other and in particular learn how to do it with an overwhelming and often disappointing partner as the United States.

Within the then Space Transportation Program, Spacelab was a program where Europe engaged into with much hope but it ended in large frustration. As one ESA delegate put it once: The program was “the most expensive gift from Europe to the United States since the Liberty Statue...”<sup>1</sup>

It was clearly an uneven balance of power with the odds stacked heavily in favour of the USA. Frederic d’Allest, former DG of the French Space Agency and founder of Arianespace, the pioneer of commercial space transportation put it in words saying “the bitter experience of cooperation in the spacelab programme and finally the declared policy of limiting transfers of technology and technical information to the minimum needed to ensure compatibility of peripheral European elements, demonstrates unambiguously the limits of cooperation with the USA in a strategic sector”.<sup>2</sup>

Europe started as early as 1973 a cooperation on a large scale with the United States in a frame known as “post-Apollo” and developed this laboratory as part of the U.S. Space Transportation System. Unfortunately though, after a few experimental flights the hardware ended up in the hands of NASA. Interest of experimenting in orbit declined, the shuttle became overly expensive and in addition operationally clumsy. The program ended on the shelf! Too bad for Europe! Billions of dollars wasted and the prestige of our space industry blotted!

So, never again? Well, if we were a learning system, we might not, but apparently, we remain permanently victims of confusing cooperation strategies. Europe despite the rather negative experience with Spacelab engaged on an even larger scale into the International Space Station! Since then, frustrations have risen to an extreme level. So far even, it is no more taboo to think that the space station elements be given up entirely. Once it was to become the

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<sup>1</sup> A history of the European Space Agency, SP 1235, April 2000, p 75

<sup>2</sup> Interavia, Dec 1985, cited after “A history of the European Space agency”, Vol II, The story of ESA, SP 1235, April 2000

first large outpost in space of the “free” world, to represent the largest international cooperative venture in space ever! Now this important and overly costly program becomes engulfed to vanish into oblivion. With the Space Shuttle coming to its end of service soon, perhaps sooner than we would ever think and the station’s early end, politically determined as part of President’s Bush vision, its scope is anyway now dramatically reduced!

The way the US deals with partners now looks not very different from the attitudes experienced during the former Spacelab programme. Is this on purpose?

It should at least alert us and lead to question whether something is fundamentally flawed in our relationships. Or do the reasons for this originate in our own political impotence? Once Reimar Lüst, former DG of ESA requested “Whenever necessary, European autonomous capabilities in space should be expanded – not for its own sake, but rather to avoid dependence on critical elements outside Europe and thereby become a competent partner in international co-operation”.<sup>3</sup> Europe, unfortunately, did not comply with. She did not man-rate Ariane 5 nor develop Columbus in such a way that it could become an independent element of the Space Station, a mini-station by itself. Europe ran out of leadership!

What should we do now? We can no more afford to engage as “other” nations into a cooperation with the United States without a major change of our own space policies! Otherwise, it would be another act of foolishness and this time perhaps the last one! So, what then is needed? What lessons to learn from our preceding mistakes?

The lessons to learn and to apply concern our own positioning towards space activities as a national activity. We need to recognize and consequently to create public awareness that space activities are an immensely valuable national asset capable of both, operating in and controlling near earth as well as exploring beyond the boundaries of earth. We need to derive from this strategic view all future attitudes towards international cooperation.

Still international cooperation must be seen as a path towards peace and understanding and for overcoming discrimination between nations. It must be open to everybody, I mean to all nations, as long as we can agree on certain rules. We must meet as equals and cooperate as such. This could lead to an international space agency or at least a program office with international status, where NASA might be *primus*, but *inter pares*. Experience has shown that the two large cooperative programs embedded within NASA have suffered too much from dependence and obvious arrogance of it.

In terms of future exploration of space, the participants must have independent means of access and be able to pursue missions in different and changing partnerships. No single access solution should be allowed, not even limited to two independent sources. The United States as pivotal element of all need to be replaced by a more democratic and on a global scale more federal structure.

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<sup>3</sup> Reimar Lüst, “Where is Europe’s place in space?” *Space Policy*, November 1991, p.296, cited after ...p.674)