PANEL III – Duality of civil and military space: The European way

Preliminary elements – Patrick MOULIN – 18 Sept. 2008

Understanding the stakes for SMEs requires taking into account the relationship between civil and military markets. Indeed there are many interactions between both markets and several technologies are shared or common, to a certain extend. The challenges for technology, industry or policy issues are also very similar.

Both markets are not only small in Europe as well as very fragmented, which hampers the competitiveness of many companies and particularly the SMEs. One might indeed keep in mind few figures:

- In the US, the federal government invests each year in space 17 billion $ for civil applications (NASA, NOAA…) and 25 billion $ for the Pentagon.
- In Europe, we invest only 5 billion € in civil programmes and 1 billion € for defence, that is, respectively, 4 and 25 times less.
- While the US has a unique market, Europe is divided over 27 countries, with national programmes tending to lead to redundant capacities and competing projects.

Even though a Europe-wide approach is more than ever necessary, one solution to strengthen our European space industrial base is to promote a stronger integration between the civil and defence markets. His raises questions and opportunities for SMEs, especially if a larger market gives them possibilities to enter new markets.

A stronger SME base is crucial for the sustainability of the European access to space in both fields; and it is in the interest of large companies to find a competitive supply chain. Today one might keep in mind that that we rely up to 60 percent on imported components in the production of space systems. Such dependence constitutes a true burden, with:

- delays in sourcing from non-European partners, especially due to export controls
- uncertainties of supply, when non-European suppliers must serve their national customers or non-space ones first
- lack of guaranties on technical performances
- reliability specificities for a space usage may require additional testing, screening etc …and consequently additional R&D efforts
- limited access to certain technologies (leading to design constraints on European solutions, sometimes with second-best only approaches)
- as well as lost business opportunities on export market (when our proposals cannot comply)
- and monopoly prices

Strengthening our industrial base then requires pushing for a more integrated industrial base between civil and military markets and a stronger SME supply chain, which is a key component in terms of capabilities and innovation. Last week, these questions were at the heart of the first seminar organised jointly by ESA, EDA and the European Commission on the "critical space technology for the European strategic non-dependence." The key points that one could have noted during this day were:

- Europe must increase its investment in selected technologies to maintain or develop its space non-dependence.
- The R&D space policy must be completed by a sourcing policy that supports the strengthening of the European space industrial base, helping it compete with non-European suppliers.

Both dimensions raise questions on the civil-defence integration, especially in terms of financial efforts and coordination of policies, and on the place of SMEs in the space industrial and technological base.

If the independence seems difficult to reach in every field of space technologies, a relative independence represents a realistic and reachable objective, that is, non-dependence. Europe must therefore target its industrial policy on selected critical technologies to reach the optimal balance with its partners.

Few times ago Eurospace published a R&T Position Paper asked for a European investment in the critical fields where the European space industrial base is lagging behind the US to leverage its competitiveness (affordability) and reduce the restricted access to technologies when there is a monopoly of supply (availability).

Both approaches underline the criticality of a strong European space industrial base. Let one thousand companies blossom, one could say: as in many field, a healthy SME base is the key of the competitiveness and the creativity of the space industry and of an improved use of satellites for the benefit of European citizen. It is then necessary to lessen the compartmentalization of activities, between countries and between markets.

An increased investment is necessary but in selected fields and with a coordination of national efforts to avoid duplications. During this seminar, it became clear that all stakeholders of space business must work together for developing synergies between civil and defence markets.

Finally if investing in R&D is a prerequisite, the sustainability of the industrial base – and in particular the SMEs – requires that sourcing rules supports the companies in the infancy, helping them become competitive against non-European suppliers.

Here are the questions that our panel is going to deal with. The challenges go beyond the specific needs of defence or SMEs: what is at stake is the dynamism of the whole space industry in Europe.