

Speech of Mr Tim Rowntree, OCCAR Director,
UK Defence Forum on 5 February 2014

My Lords, Ladies and Gentlemen!

It is a great privilege for me to speak to you tonight, and I would particularly like to thank Madeleine Moon MP and Robin Ashby for inviting me here. I hope that I can provide some useful information and thoughts to stimulate a lively discussion on European Defence co-operation this evening.

From my OCCAR team, I also have Eric Huybrechts, the OCCAR Deputy Director, Nicolas Hue, A400M Programme Manager, Falko Fanslau, Business Development Manager and James Dowson, the A400M Technical Section Leader.

I realise that what I am about to say tonight, as the head of the principal European Cooperative armament programme management organisation, will sound very pro-European, and I do appreciate that this is not a universal view in the UK right now, so perhaps I could start with a personal perspective.

As a young and very keen student engineer in the 1970s, entering the military aviation business, the civil aviation world looked, frankly, hopeless for the UK. And that made me very sad as a UK engineer and citizen.

Our UK mass market passenger aircraft, the VC10, Trident and BAC 1-11, like other European products such as the French Caravelle, were simply not competitive with the US airliners, and Boeing, McDonnell Douglas and Lockheed looked set to dominate the foreseeable world market on the foundation of their already huge home market.

So when brave little Airbus formed, effectively from the Concorde relationship, it felt to me rather like my best friend stepping into the ring with Tyson. My heart and soul were supporting the endeavour, but the prospects seemed bleak. Well, it turned out that European companies and Governments, with confidence and determination, could do amazing things together. And today, with Airbus right up there and level with Boeing as the civil world leaders, the rest is history.

With that inspirational thought in mind, then, I would like to cover 4 topics:

- The origins and current status of OCCAR and its programmes,
- The urgency of the need to seize new opportunities to cooperate,
- The need for us to better control the number of national variants when we do cooperate and finally
- A few thoughts on the big question of whether international cooperation really works.

So, about OCCAR (which stands for the **O**rganisation **C**onjointe de **C**oopération en matière d'**AR**mement):

OCCAR was initially formed by France, Germany, the UK and Italy in the 1990s and achieved legal status in 2001. By 2005 Belgium and Spain had joined also, making up the current 6 Member States.

In creating OCCAR, its founding nations were determined to solve the major problems that had damaged previous cooperative programmes. I believe that they achieved that, and today's successful OCCAR programmes owe a great deal to the courage and vision of the people who founded the organisation back in the 1990s.

The key OCCAR founding principles include:

The renunciation of the highly corrosive work-share equals cost share, or Juste Retour approach, in favour of genuine competition to stimulate the strengthening and rationalisation of the European industrial base, and of course to make sure we get the very best capability for our money.

Thus, we use a principle called Global Balance to apply competition wherever possible and we only collect data on national work-share in hindsight across all programmes over many years.

Incidentally, the principle of competition also applies to the selection of OCCAR staff, and the resulting staff capability is remarkable. We are thus able to manage our €3.5 Bn annual turnover with a whole OCCAR team of just 230 people, giving us an operating cost overhead of just over 1%.

The OCCAR principles also created a cooperative structure that allows non-OCCAR states to participate in our programmes on equal terms. Turkey's participation in A400M is a good example of this.

And finally, as a multi-programme agency, we have a significantly empowered programme manager for each programme, supported by a Central Office centre of expertise and knowledge. This supports programmes going into new phases and ensures that the lessons of other programmes are applied.

We currently manage 8 international programmes:

- The A400M airlifter for FR, UK, DE, BE, SP, TR and LU,
- The IT, FR FREMM multi-role Frigate,
- The FR, DE, ES Tiger Attack Helicopter,
- The DE, NL Boxer Multi-Role Armoured Vehicle,
- The IT, FR, UK FSAF-PAAMS Surface to Air Missile Air Defence System,
- The ESSOR Software Defined Radio, for FI, PL, SE, FR, IT, ES,
- The DE, FR, TR Cobra counter-battery radar and
- The IT, FR MUSIS space based imagery sharing system.

Adding up to a total programme value of €50Bn.

And in the formative stages we have a number of further programmes including a UK/FR Maritime Mine Counter-Measures programme, as announced at last week's Brize Norton Summit, and potentially a Multi-Role Tanker Transport aircraft.

That completes my overview of OCCAR, so I'll now move on to my second topic, the urgency for us to seek new opportunities to cooperate:

Today, we still have a highly capable European Defence industry, not just in the main prime contractors and major sub-systems providers, but also in the many hundreds of highly skilled Small and Medium Enterprises that support them, spanning all the nations across our continent. On the A400M programme for example, the first tier suppliers alone, delivering directly to Airbus, number about 175 different companies.

Experience shows time and again, that if we challenge and stimulate our industries through significant programme opportunities, using competition as far as possible to drive efficiency and rationalisation, they can and will deliver world class capabilities.

But no nation alone can any longer afford to provide the up-front investment for the key technology areas; A400M is a prime example of a world class European capability that was only made possible through successful cooperation.

And this goes beyond the actual equipment; it involves all systems throughout the whole equipment life-cycle. By engaging the best commercial practice in the fields of supply chain management, maintenance, upgrade, and repair and overhaul, working hand in hand with front-line operators at an international Global level, our industries can really help us improve capability and reduce the cost of ownership.

The benefits of engaging the best commercial practice also extend to the often expensive test and Certification, and A400M has clearly demonstrated how the use of a civil Certification baseline can greatly reduce and simplify the military certification process. In fact, the A400M joint certification framework is effectively an early pioneer for the European Military Airworthiness Requirements, or EMAR, being championed by the EDA.

But the urgency to provide substantial new challenge to our industry is real. The throughput of my organisation is probably fairly indicative of European investment in major co-operative programmes today. Today's €3.5Bn OCCAR throughput, dwindles to just €200M by 2023 in the absence of new major investment.

Our industries desperately need new challenges to retain those skills for the next decade and beyond, and coherent investment in systems such as RPAS, or UAS, will be key if we are to retain these capabilities in Europe. The UAS sector is in fact a particular concern, where in my view the current disparate collection of programmes across Europe will not create the critical mass needed. That said, last week's UK/FR UCAV announcement is of course a step in the right direction.

For the future, I contend that our choice is not so much cooperative or national, but cooperative or not at all in Europe.

I would now like to move to my third point, which concerns a major threat to effective cooperation, and one we **must** tackle. This is equipment commonality in cooperative programmes – or avoiding national variants.

Clearly, there will be times when a nation, through foreign policy or national geography, for example, has a genuine need for unique national requirements. In these cases we should do all we can to embody these needs into the common configuration. But the vast number of national variants of cooperative systems today goes well beyond these genuine needs, and this really undermines the value of cooperation.

I hear lots of people expressing frustration about all the national variants of particular helicopters and other equipment.

But I never hear anybody say, in hindsight, that they wished they had had their own national variant!

Everybody celebrates commonality when they get it – just look at the C-17 for example.

Which isn't surprising, because it brings:

- Significantly lower acquisition cost.
- Interoperability, both at a technical and an operational level.
- Reduced cost and risk of obsolescence.
- The opportunity to develop Global support solutions.
- Lower cost of through-life development and upgrade.
- Lower training and infrastructure costs.
- Reduced industry costs, and higher export potential.

Also, in my experience in the UK MoD, something like 90% of Urgent Operational Requirements fall into one of two categories:

- The need to provide interoperability for coalition operations, or
- The need to embody a capability we always knew we needed but couldn't fit into the national budget.

Both of these problems can be solved by efficient Defence Cooperation with common configuration management.

So why do we allow the spawning of so many national variants?

Understandably, nations employ their own policy, concepts and doctrine staffs, to develop their own views on the national threats and how the next war will be fought. And of course these views feed through as direction to the representatives trying to agree on common cooperative programmes. In the end though, whoever's right, the

threats are more or less the same for all of us in Europe. We will be in broadly the same crisis or war together. So common, interoperable equipment is a must.

There is also, of course, the very human factor, that our people like to specify their new equipment to fit with their familiar ways of operating.

Thus, the essential missing ingredient is in my view, a top-down strategic view and associated leadership, informed by a real knowledge of the huge cost and capability implications, to really challenge evolving plans for national variants at an early stage.

So, I come finally to the big question:

Does all this cooperation really work?

I know very well, that there are very differing views about the effectiveness of international co-operation.

Many of us, myself included during my earlier years in the Eurofighter programme, have been disappointed and frustrated by the long delays and the cost increases that have dogged many of our earlier European programmes.

There is no doubt that cooperation can go badly wrong, and it is certainly true that it does require a particular level of camaraderie, strategic vision, flexibility, communication and discipline, that goes beyond what is needed in a national programme.

But ultimately, programmes go wrong when they are badly managed, and go well when they are properly managed. And in my experience, that's exactly the same, whether they are national or cooperative. The key is to establish a programme properly, with clarity over the intent, a clear delivery plan, a sound understanding of the risks and uncertainties, and contingency plans and resources to match.

I believe that the OCCAR model embodies those needs, and also the solutions to avoid many of the problems that beset earlier cooperative Defence programmes. It provides a highly evolved and effective system with the flexibility, as I said earlier, to include non-OCCAR Member states as participants on equal terms.

To illustrate this with a practical example, let's consider A400M against the main concerns often expressed about international co-operation:

More Decision Makers, more interfaces, less control:

Yes, but more nations also bring more intellectual power and more ideas. During the problems of 2010, the 6 nations actually provided a very powerful multi-national pool of talent to drive us through. By sharing out the lead roles in the technical, operational, commercial and support areas, we stayed right on top of the task - enabling strong negotiation of a taut contract amendment in just 12 months. And just in case you ask, UK provided the commercial lead. In practice, the often expressed

fear that decisions become exponentially harder with more partners, does not seem to apply in practice.

I should also say something under this heading about bi-laterals. It is often stated that simple bi-lateral agreements are the way to go; eye to eye with the other nation, no complication, no bureaucracy, just getting on with it. But the evidence doesn't back that up. I see nothing wrong with bi-laterals, but they do need discipline and structure to avoid later frustrations and delays as a result of mis-aligned expectations, strategies and plans.

They Take Longer, Higher Overall Cost:

The high cost overheads of many of the older cooperative programmes are well documented. Fixed workshare for non-competitive suppliers with no real incentive to perform, dogged by standing army costs during frequent stoppages between phases, and of course duplication of effort through diverging national variants.

A400M used the commercial approach, which meant industry was obliged to deliver the full 180 aircraft capability against a fixed price. It was exactly the sort of contract the UK would have placed nationally, and no delays or costs arose directly from the collaborative aspect. Indeed, when Professor Trevor Taylor conducted his independent review, he concluded that the only cause of significant collaborative delay was in the time it took to agree on a common set of requirements across the 6 nations. But when we looked at the product, the world's first truly tactical and strategic multirole airlifter, we concluded that that time was probably well spent as it created a potentially world-beating capability with considerable export potential.

As I said earlier, OCCAR adds 1% onto the common programme value, which is of course offset by the programme management effort saved in nations by doing it centrally. Then we simply share out the costs, so each nation only pays its share of a value for money total cost. For this reason, my predecessor used to joke that as long as nations have national programmes in mainstream defence equipment, they still have too much money in their national budgets.

Compromising National Needs:

Perhaps, to some extent; but we get a better, interoperable, globally supportable, product.

Inflexible once established:

Yes, so we need to be sure we really want the capability when we sign up. In practice, cooperation can bring its own flexibilities, for example we are currently looking to swap some early A400M production slots between UK and France.

So, my key point, for your challenge and discussion this evening, is that the historical indicators of cooperative programme time and cost overhead are **not** relevant to the modern OCCAR model.

And, of course, the combined EDA/OCCAR interface model, where OCCAR acts as the programme delivery engine for programmes developed by the EDA through alignment and coordination of future national requirements, represents a final evolution of this. Thus, working closely together, EDA and OCCAR can offer a capability that spans right from requirements capture, analysis and harmonisation, right through to programme delivery.

Today, European cooperation through OCCAR is no longer a dream for the future, it is a reality:

- A400M is in service with France, and deployed to Mali over the New Year,
- FR, ES and DE Tiger Helicopters have proved highly effective in Afghanistan and Mali,
- Both the IT and French FREMM Frigates are delivered into service,
- The Boxer Armoured vehicle is deployed to Afghanistan and
- The Cobra radar is deployed on the Syrian border.

So, that completes my 4 topics, I hope it didn't come across as **too much** of a sales pitch, and I would like to stress that my goal tonight was **not** just to convince you about how good OCCAR is, but to illustrate what European nations can achieve when we work together.

My message for tonight is actually quite simple:

That if we can control the number of national variants, there is today a mature and efficient means of European Defence cooperation, that can provide the world class capabilities our forces need into the 21st Century.

But we need to act now with confidence and vision.

Thank you.