



**NORTH ATLANTIC TREATY ORGANIZATION**

**SUPREME ALLIED COMMANDER  
TRANSFORMATION**

**SACT opening address at**

**Chiefs Of Transformation Conference 2017**

**“Prepare for Tomorrow, Share the Future”**

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**Général d’armée aérienne Denis MERCIER**



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Admirals, Generals, Chiefs of Transformation,

Ladies and Gentlemen, Distinguished Guests,

It is a great honour and a privilege for me to open the Chiefs of Transformation Conference 2017.

The next two days are the only annual venue that gathers the Chiefs of Transformation of our 29 Allied nations, together with our Partners, and is thereby the event where we can form and share a common perspective of future challenges and opportunities for innovation and transformation.

It is indeed, as the NATO Deputy Secretary General, Mrs Rose Gottemoeller just said, the “opportunity to connect, confer and collaborate”.

NATO is in the midst of a cycle of political, military and institutional adaptation, primarily driven by the fast moving security environment that affects us beyond the borders of the North Atlantic area.

While executing the mainly short term measures, decided in Warsaw, and mentioned by the Deputy Secretary General, we also need to focus on the longer term.

This urges for our transformation efforts to share future or long-term tendencies, and to expand them to our partners, including the European



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Union. Because, it is no longer a choice, but a necessity to base today's decisions on shared future perspectives.

The Strategic Foresight Analysis is the first step to do this, in the broader context of what we call the Long-Term Military transformation.

The recently published 2017 SFA describes 20 political, social, technological, economic and environmental trends, and then identifies 59 deriving defence and security implications for the Alliance.

The Framework for Future Alliance Operations – that we will deliver next year – forms the next step. The 2018 FFAO will analyse these trends, and identify a number of instability situations and their military implications.

Your nations and organizations have been involved in this work, and it is essential to continue to work together on these implications.

Both the SFA and FFAO inform the NATO Defence Planning Process to identify the gaps to meet NATO's level of ambition and define the national targets necessary to fill these gaps based on the principles of reasonable challenge and fair burden sharing.

But if many targets can be delivered in the short and medium term, others will require 10 to 15 years to be developed and fielded. A common understanding of the future plans and innovation initiatives from nations is



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essential as the desired effects in the longer term could be met through different capabilities than those that exist today.

Let me illustrate this with the following example.

Based on the contributions of the NATO Centre for Maritime Research and Experimentation, the Norwegian development of autonomous underwater vehicles in the context of covert underwater operations, demonstrates how future promising technologies could deliver the required effects differently. The ability to deploy autonomous underwater vehicles at greater distances using these emerging technologies, could introduce new potential applications for surveillance and reconnaissance, mine countermeasure, anti-submarine warfare and anti-surface warfare, with significant operational benefits and reduced risk to personnel.

Many other nations work on similar innovative future solutions, and sharing them could offer opportunities to identify potential new multinational initiatives.

It is the theme of this year's COTC: "As we prepare for tomorrow, we must share the future".

Each nation develops its own future capabilities and innovation initiatives, but it is essential to identify those domains where we must be able to combine all efforts to support a coherent military capacity for the Alliance.

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Command and Control, Logistics and Sustainability, Training and Exercises, Partnerships, Capability Development and Human Capital are 6 areas of focus essential to support this military capacity.

With the exception of Partnerships – that will of course be the focus for the Partnership 360 Symposium next month in Berlin – the 5 Syndicate discussions, each of them led by a national Chief of Transformation, will address issues related to these focus areas. And of course I would like to acknowledge the value of the participation of numerous partners in our conference.

And, as we are talking about transformation, we need to also innovate in our conference.

Notwithstanding the successful results of previous COTC's, this year's conference will exclusively be built around Syndicate discussions – and not around the classic panel discussions – aiming to identify actionable outcomes to share future initiatives and breakthroughs that must enable the Alliance to keep the advantage over future potential adversaries.

With a new outline that changes the teams in each of the sessions, we may force you to go out of your comfort zone – and that is precisely what we need to do: this is transformation.

Furthermore, the discussions will allow us to deep-dive into the subjects, and analyse them to properly define the problem first, rather than jumping too



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quickly into, what I would call, prescriptive solutions. In the complexity of our environment, the first obvious solution will most likely not deliver the right answer to our problems.

Let me illustrate this by an example that you have already heard about.

The Alliance Future Surveillance and Control (AFSC), is aimed to replace the AWACs capability in the +2035 timeframe. The solution will not be another airplane with a new radar. We have refused to go directly to what could have appeared as the obvious solution. We have first studied the problem and examined thoroughly the effects: what the future functions of surveillance and control will look like in 2035?

As in many future capabilities, data is key.

In ACT's view, supporting future functions of surveillance and control, requires the design of digital architectures that will allow to collect, to concentrate, to fuse and to re-distribute data to future users.

Data and human capital are the main strategic resources for the AFSC, and we need to define the right "human versus machine balance", and identify the level of autonomy that would be necessary and acceptable.

Building on this issue, automation becoming increasingly intelligent in all operational domains, it is likely to open innovative perspectives that will question the human role in the process. ACT has launched an Autonomy

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Programme aiming to identify guiding military principles and set the conditions for the Alliance - through support to policies, concepts and terminology developments – for the integration of autonomous functions and capabilities, in a coherent, standardised and interoperable manner.

Let me remind you of the importance of the definition of a common standard for interoperability, which is the purpose of the Federated Mission Networking, and I encourage all your organizations to participate in this essential programme for the Alliance.

Back to the AFSC, ongoing studies are likely to give not one, but a different set of solutions that will be interconnected in our future networks. War gaming these architectures, would help select the most appropriate and effective architecture, refine the conditions to ensure the interoperability of the future systems, and define the level of Cyber protection.

You will see here good connections with some of the syndicate work we will conduct in the conference.

But, there is still a long way to go to implement the AFSC through the innovative approach I have just described.

Because it requires a change of mind set: instead of saying “don’t give me the problem, but give me solutions”, we will say: don’t give me solutions right away, but first raise correctly the problem!” This is what I expect from the syndicate sessions.

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This is the spirit of innovation we are developing in ACT.

And there is a sense of urgency to bring this innovation in our work. Why?

Among the future threats, the exponentially growing rate of technologies is undoubtedly the fastest growing and evolving one. We must develop technological awareness and be ready to analyse how the use of these technologies by our future adversaries can question NATO's superiority, or how these technologies offer opportunities to operate differently and increase our agility and responsiveness.

Let me stress again that there is also an urgency to consider technological interoperability from the onset in all new capability development initiatives. Adding interoperability to our capabilities after they have been designed is too late and would result in unaffordable cost.

And interoperability is not only technical. It also requires political decisions to implement appropriate policies and legal frameworks to facilitate the adoption of new technologies. Keep this in mind for the syndicate discussions.

To conclude.

We are a powerful organization of 29 nations cooperating with a wide range of partners. We will be able to keep the advantage on any adversary if we work closely together on new solutions. We must share innovation and



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exchange the new developments that will be integrated in our respective national plans to identify challenges, opportunities and create the conditions to remain interoperable, today and in the foreseeable future.

We will use the outcomes of the COTC, and align them as much as we can with upcoming events, such as the Tide Sprint, CWIX, Unified Vision, Bold Quest, NATO Industry Forum, or within existing national or NATO exercises. If you are not familiar with these events, ask us and we will be pleased to provide you with all the information for your participation.

In the NATO Command Structure adaptation, while ACO is refocussing on Warfighting, ACT will concentrate on Warfare Development. What does this mean? It is about adapting NATO's military capacity to the constantly changing environment.

This is a work we cannot do without you the national Chiefs of Transformation. And we must expand this cooperation to our partners, academia, industry, and other international organizations, and create the ecosystem that will enable us together to permanently adapt at the speed of relevance.

Steve Jobs once said: *"Innovation has nothing to do with how many research and development dollars you have. It's about the people you have, how you're led, and how much you get it"*.

We have all three elements: our human capital as our most valuable resource, us as the leadership in transformation, and the COTC to reunite

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the conditions to discuss and form a common understanding on the transformation efforts we need to implement.

I'm looking forward to getting actionable outcomes from the syndicates, and wish you all fruitful discussions in a spirit of openness, connectedness and close collaboration.

Thank you for your attention.