



NORTH ATLANTIC TREATY ORGANIZATION

**SUPREME ALLIED COMMANDER
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SACT's REMARKS to

NATO DEFENSE PLANNING SYMPOSIUM 2016

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"Preparing the future"

Général d'armée aérienne Denis MERCIER



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INTRODUCTION

Ambassadors, Generals, Admirals, Ladies and Gentlemen,
Heinrich, thank you for your kind introductory words.

I would like to thank the NATO School for its outstanding welcome and for hosting the Defence Planning Symposium in such perfect surroundings.

For almost 40 years now, this annual forum has exerted a direct influence on the future capabilities and structures of NATO forces.

I believe this place is very inspiring, as suggested by the NATO School's motto - *knowledge enables capability*. Today, more than ever, the Alliance needs to better understand our complex and rapidly evolving security environment in order to adapt our capabilities accordingly.

Our continuous political and military adaptation has enabled the Alliance to maintain the most appropriate and credible deterrent and defence posture over the last 67 years.

Ahead of the Warsaw Summit, the Secretary General has set out his expectations in terms of NATO political, military and institutional adaptations.



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In his guidance, he expresses his vision for an Alliance able to respond to current security challenges through short-term adaptation, but one that is more oriented towards its long-term future.

I firmly believe that the Warsaw Summit will offer the perfect opportunity for our Heads of State and Government to endorse this approach if we want our Alliance to be fully prepared for the future.

- There is a compelling need to look beyond the many current and pressing contingencies, on which I will expand first on this morning.
- I will then explore how we could drive a new momentum through innovation.
- My third and last point will be on Defence Planning which could sustain innovation as long as Nations agree to further develop its long-term aspects.

[FIRST PART]

To begin, let me go back over the last decade to identify how we prepared the Alliance for our current challenges.



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I believe we can rightly say that we had anticipated many of our current security challenges in the 2010 Strategic Concept.

With hindsight, we could however argue that we may have focused too much on the immediate requirements of expeditionary operations on the near horizon.

We did so at the expense of a more global and comprehensive preparation to cope with other future challenges on the more distant horizon, and perhaps missed the opportunity to generate the capability required to offset the threat they pose.

Let me illustrate this with three explicit examples.

- *First one, Hybrid Strategies.*

We had already identified a few years ago [2008] the potential to exploit any weaknesses and gaps in our national and international security and defence mechanisms. We even published some analysis.

Yet at the time, we may have been too cautious to engage in an enhanced cooperation with Nations and other International Organizations to ensure a strong, shared resilience and the coordination of our responses across the whole Diplomatic,



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Information, Military, Economic, Financial, Intelligence and Legal [DIFEMIL] spectrum.

- *Second example: A2AD – anti-access, area denial.*

A2AD, like hybrid, is not new. It is fair to say that the we had anticipated the potential threat posed by these systems which could be used to contest our freedom of manoeuvre and ability to deploy and fight when and where needed.

We maintained in our inventories key capabilities to remain able to militarily defeat, bypass or breach such integrated systems. However, we did so through a traditional conceptual approach, requiring large scale, high-intensity operations with potentially significant contributions of forces.

It is only recently that we have started thinking about organizing our forces with a more integrated approach, and looking beyond the current limited coordination of interoperable platforms and units. Rear Admiral Gumataotao will expand on this issue tomorrow.

- *Third example: the dynamic and networked groups of non-state actors.*



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During the last decade, we came to acknowledge the versatility and opportunism of these adversaries.

They seized any opportunity to increase the lethality of their actions and make the most of affordable and easily accessible dual use of military and civilian technologies.

They tried to contest the sustainability of our operations by using low-cost weapons against high-end capabilities and counter-measures. And they effectively forced us to reflect on a better balance between time, cost and effectiveness in the development of our capabilities.

The issue is that despite some successes such as the counter-IED battle, these non-state actors remain highly innovative and capable of rapidly spreading their best practice and improving their techniques.

- These are only three examples, but all of them highlight the need for the Alliance to adapt in a more proactive manner based on a clear long-term focus.

We have seen the first signs of this approach through the implementation of the Readiness Action Plan... a plan which is progressing well and which will be one of the resounding successes of the next Summit.



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But, this is only a first step.

What really matters is what will follow the RAP, what will really enable the Alliance to respond to any new instability situation with the required level of responsiveness.

It is clear that we will face many new instability situations. We only have to analyse the political, human, economic, environmental and technological trends driving our societies to identify this.

Focusing on this last domain, I believe, we are actually on the brink of many technological breakthroughs.

- In terms of distance and persistence: Platforms and weapons will have extended ranges, time on task and perform their missions with increased autonomy.
- In terms of data processing: Artificial intelligence and the capabilities used to collect, analyse and identify trends and associations in huge amounts of unstructured data will continue to improve.
- In terms of responsiveness: hypervelocity weapons will continue to reduce the time we have to make decisions.

These few technological trends highlight very well how the way to plan and conduct warfare will be deeply affected in the future.

These evolutions can be opportunities or risks for the Alliance.



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This is why the Alliance needs to create a new momentum, to make sure the initiative remains with NATO, to make sure the Alliance is prepared for its future and keep the edge to offset any opponent.

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[SECOND PART]

This brings me to my second point.

To achieve such a momentum, Nations need to realize the requirement to foster innovation, an innovation which would result from initiatives in the political domain, in military concepts and in the technological area.

I must admit here, I have some concerns. I fear Innovation has become a buzzword, the meaning of which has certainly been distorted over time.

I would then like to share with you my view on Innovation and the way ahead for NATO.

I will do so by highlighting the essential connections between the political, military and technological domains, leading to a definition of Innovation and the ways to implement it. I will then illustrate these ideas with a tangible example.



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So, first question, why a coordinated approach to innovation in the political, military and technological domains?

It is only by addressing these three domains that we can overcome current small-step, often limited solutions, which mainly respond to changes initiated by others, especially potential opponents.

Innovation at the heart of the political, military and technological domain is, I believe, a main lesson learned from modern warfare.

This week we mark the 100th anniversary of the beginning of one of the largest and deadliest battles of World War 1: Verdun.

You will certainly have in mind the image of a stalemate, which is entirely appropriate...

But remember this was a stalemate between state powers which, in the space of just four years, transformed their Napoleonic model armies into modern battlefield forces...whose structures are not wildly different from those we see today.

Each Nation implemented many new military concepts at the tactical level. New technologies were fielded on the battlefield. such as the airplane...



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But it always lacked a fully coordinated approach at the political, military and technological level to provide a strategic advantage to one Nation.

Having said that Innovation is at the crossroads of the three domains, the second question is how we can define Innovation itself?

Innovation is about implementation – I insist on this word, Implementation- of new or significantly different creative ideas/projects to achieve substantial progress.

Innovation aims at building on the art of the possible and presenting different solutions, looking at creating disruption whenever possible.

Innovation is change more than enhancement and more about mind-set than established processes.

This is why strategic leadership has to exercise an overall responsibility to foster curiosity and nurture such new ideas right through to their full implementation.

It brings us to the fundamental point on innovation: how can these new ideas be implemented?



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The Alliance and Nations should consider three main stages: the identification of these ideas, their analysis and experimentation before the implementation of the most promising and robust ones.

- To identify new ideas, we must first challenge our current paradigms and NATO processes.

I know this is always easy to say but this is the characteristic of an adaptive organization, which we must not forget created a specific command for its Transformation.

In addition, we must recognize that today many think-tanks, academia, private companies are developing what we would perceive as unconventional approaches to our way of doing business.

And this trend will only keep growing as leadership in innovation has already shifted from the defence and security sector to the commercial sector.

We should take note that, in 2014, there were no defence companies remaining among the Top 20 industrial R&D spenders worldwide.

And today, the R&D of Google alone is 4 times more important than that of DARPA with 12 to 14 billion USD allocated.



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So, NATO has to be open minded and strengthen some current initiatives to identify new ideas.

I have few examples in mind:

- Tide Sprint events which occur twice a year. They are an ACT think tank initiative for achieving and maintaining Information, Decision and Execution Superiority.

TIDE Sprints mainly use a combination of show-and-tell brainstorming, collaboration, education, demonstration, coding and testing in a non-constraint and non-hierarchical environment to explore new ideas as well as exploit and evolve existing and emerging technologies.

- I can also mention the recent I3X initiative during our last major strategic exercise Trident Juncture 15. It was a first trial to bring 39 industries from across Europe to observe and identify by themselves some of our challenges. There is an expectation it will help develop creative solutions for the future.

These are two promising initiatives but they are only indicative, as there are so many more areas in which NATO should innovate.



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- After identification, we must then analyse, test and select the most promising solutions from the earliest moment possible.

Here, we have to build a more dynamic culture of exercise and experimentation.

It calls for a less risk adverse approach to assess new technologies and concepts. By accepting to fail early, we could make the best use of our limited resources and thus save money for the most likely successful solutions.

This is something already considered in NATO as we organize the CWIX exercise forum to experiment with new interoperability solutions for our Communication and Information Systems.

But let's just imagine what we could achieve if Nations would leverage the bulk of exercises present in NATO's programme to add experimentation objectives.

Of course, we have to take care of not jeopardizing the initial objectives of these exercises.

But definitely, it is already conceivable and achievable to increase experimentation by exploiting the potential of our Connected Forces Initiative fully.

It is really for Nations to seize this opportunity.



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- From such experimentation, we could then implement the most promising solutions.

I would highlight two aspects of this implementation:

- We must remain flexible in order to bring together capabilities which already exists and new ones.
- We must also foster openness by defining architectures that will leverage any capability a Nation can provide, and exploit their niche expertise.

To close on these three stages -identification, experimentation, implementation- I believe this will be the best way to invest our money wisely, to make the best use of Nations' pledge to reinvest in their defence with high pay-off at the end.

Let me turn from the theoretical to the practical by illustrating them with a tangible example: Command and Control.

Let's get back 8 years ago.

In Afghanistan, the intensity of operations required an ad-hoc solution to improve the sharing of information between many national networks. Many efforts were done to create a unique Afghan Mission Network.



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This successful adaptation of the Alliance called for a better solution to avoid inventing a new network while the operation and missions are already ongoing.

An idea was then promoted which initiated a broader project.

We should ensure an upstream work to define the architecture and the standards to be ready to build when and where needed, as of the first day, a coalition network connecting Allies' and Partners' assets.

This idea became the Federated Mission Networking –FMN- initiative. Supporting this initiative, some events such as Tide Sprint provided additional ideas to design open architectures.

These ideas were experimented on several occasions during main exercises such as CWIX, Bold Quest, Trident Juncture and Steadfast Cobalt to assess the relevance of this initiative.

Today, the first spiral of FMN is combat ready and will be implemented during Steadfast Cobalt 16.

The next spirals are already in preparation to ensure a common operational picture between the forces and the possibility to have a unique network supporting various levels of classification.



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There are also efforts for a mission thread approach to define the requirements of all FMN applications. For instance, for a MEDEVAC mission, all the connections and data exchanges necessary for a successful mission will be analysed.

FMN will nevertheless remain only a tool of our overall Command and Control structure.

There is a common understanding of the necessity of higher levels of flexibility, responsiveness and resilience for NATO C2 to establish the appropriate strategic awareness and make timely decisions.

We will then have to identify and experiment new ideas such as an agile C2 framework which would enable a real time reorganization of the chain of command to adapt to dynamic opportunities during a mission. This is a requirement already known in the world of Special Forces.

From this example, I hope you start to grasp the far reaching implications of innovation, with its political, military but also technical aspects.

- If we really want to embrace innovation in the Alliance, we now need to connect bottom-up initiatives with top-down leadership.



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- We must create the fertile ground to nurture innovation.
- We will build on existing tools, such as our ability to develop and experiment concepts.
- We will connect with the multiple events we already organise.

Our intent is to develop a new framework for innovation consistent with the enhancement of NATO's military capacity.

- Let me just raise a last concern related to this framework. To be efficient, the Alliance must take into account the different momentum given to innovation by each Ally. So, there will be a need for synchronization at the Alliance level for efficiency, and interoperability matters.

Indeed, if we want to remain "One NATO", connections must be established with those Nations that have already triggered their own Defence Innovation Initiative, such as the United States.

NATO should also be connected with its Partners and especially the European Union, which now seems to be taking the path to make additional efforts in Defence Research and Technologies.

This effort may be integrated into the Global Strategy that the EU High Representative expects to publish mid-2016.



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NATO has a high stake in synchronizing and sustaining innovation with Allies and Partners.

I believe NATO can be an innovative hub for a strong transatlantic bond as well as an enhanced cooperation with the European Union.

This will help develop innovative solutions, while avoiding duplications, keeping the highest level of interoperability of future systems and preserving strategic defence and industries on both sides of the Atlantic.

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[THIRD PART]

Moving on to my third point.

I would argue that Defence Planning is perfectly placed to play an increasingly central and synchronizing role in NATO's long-term Transformation.

- However, it calls for a change of mind-set about the NDPP to make it more focused over the long-term.

Nations could agree to adapt the NDPP to consider a better balance between what is best for today and what would be best in the long-term.



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Indeed...

Today, we make many decisions in the NDPP trying to judge the requirement for forces based on what we have today, limiting the impact on expenditure, judging the ability of multirole to fill single roles and vice versa.

But we rarely if ever make the connection to the long-term requirement.

Remember what we already said about countering A2AD.

- That said, I believe there is a much potential for a possible adaptation of the NDPP.

The refinement of the long-term aspects in the Minimum Capability Requirements have been one of the many improvements of the current cycle...improvements that LTG Lofgren will present to you on Wednesday.

The correlation between these long-term aspects and ACT's future works done in the Framework for Future Alliance Operations provided the NDPP process a coherent view of the future security challenges.



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These long-term aspects have four purposes. They highlight:

- Threat capability evolution resulting in a loss of Alliance own abilities or advantage
- Current and mid-term capability gaps with no foreseen mid-term solution
- Developments in the strategic environment requiring new capabilities
- And the opportunity for significantly enhanced efficiency in achieving desired strategic military effects.

They remain broad, but are a good baseline.

The idea is to already start exploring our next steps to make of NDPP what Nations agreed in its outline model.

I quote: “the process needs to be integrated to the maximum degree possible and focus on medium and longer-term capability development, while at the same time remaining responsive to unanticipated requirements arising from current operations”.

Integrated to the maximum degree...Focus on medium and longer-term...

What has been done so far was to get everyone to a common view of the future challenges and their military implications



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through the Strategic Foresight Analysis and the Framework for Future Alliance Operations.

This will continue as these documents will be updated on a regular basis and translate Allies' view of the future security environment.

For instance, ACT aims at including more technological aspects in FFAO and through this document, better describe the future security environment before the establishment of the new Political Guidance.

We have now to be more specific on the adjustments we should make to the NDPP.

We need to expand the dialogue with Nations to get inputs from them on the future security environment but also on Nations' long-term plans.

This can be done in close coordination with the International Staff and ACO.

We realize that the current survey and engagement may not be the same people in nations that do long term planning so this will require meeting with those planners.



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We can leverage the Chiefs of Transformation in each of the Nations to help focus this engagement.

As a hub for future works and long-term defence planning, ACT could gather and analyse national plans to form a common direction of travel for the Alliance.

We will continue to reflect on this and introduce as one of the proposals that ACT will make to the IS for the upcoming Outline Model revision.

We will define with IS and ACO teams the ideal choreography for these different interactions with Nations.

But, this approach of course needs Nations' buy in and participation which this forum provide a good venue to share our views.

To be relevant, long-term perspectives cannot be ACT's thoughts only but must also integrate an analysis of Nations' plans. These perspectives should enable a common understanding between Nations' plans and the Alliance's direction of travel.

And it is really important to understand the effect such an effort can have.



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- If the Nations support a closer relationship to the long-term analysis, then this could strengthen their acceptance of targets and aim points for national long-term development.

Indeed, it would focus specifically on what they need to invest in and is coherent with their long-term plans.

- NATO would also have a better knowledge of what capabilities it can leverage in the future.
- It would not be grading or constraining Nation's plans but instead providing insights on coherence which may open up opportunities for collaboration between Nations on capability development.
- Allies could then utilize multinational solutions, such as Smart Defence or the Framework Nations Initiatives as tools for implementing long term aspects. It would enable partnering in capability development to share costs and risks.
- It would also synchronize Nation's collective efforts and provide a modicum of stability and coherency to defence planners in Nations.

Above all, fostering Innovation in the long-term aspects would strengthen and ensure the Alliance has a high level of strategic



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awareness, resilience, operational agility, expanded security networking and efficient strategic communications.

Boiled down, such an effort could make NDPP the backbone of a tangible Transformation, shared by all Allies and Partners, through a parallel approach in the Partnership Planning and Review Process.

Its outputs shall give the operational commanders the military capacity to successfully achieve their mission today and in the future.

For that purpose, I have already reoriented ACT's inputs to better feed Defence Planners with the knowledge from experiments and concepts developed to address the future security environment.

ACT is now looking at future NATO military capacity, which remains the foundation of a credible deterrence and defence posture.

We focus on 6 main lines of efforts: Command and Control; Collective Training and Exercises; Logistics and Sustainability; Human Capital; Partnerships and Capabilities.

I tasked my staff to find possible solutions to many questions in these fields.



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An array of these questions...

How must our Command and Control be designed to ensure in the future a permanent, resilient ability to plan and conduct operations? How will C2 manage the sheer quantity of important data and information that will need to be packaged and shared from the political level down to the tactical?

In terms of logistics, how will our forces be supported and sustained in a more contested environment? How can they leverage possible innovations in the production processes as well as hub and spoke concepts already used in the civilian world.

In terms of Collective Training and Exercises, how can we exploit the full potential in the Connected Forces Initiative and use it as a dynamic agent of change? How could exercises be adapted to reach the right level of complexity able to challenge NATO's military capacity and to enable military leaders to test new concepts and capabilities?

In terms of Partnerships, how could we improve interoperability, so that, their forces can operate together with Allies at day 0? How could we innovate to provide more coherency in our Partnership activities?



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In terms of Human capital, how could we ensure our future leaders and operators have the skills to take advantage of an enhanced NATO capacity in an ever-changing environment?

In terms of capabilities, how must the NDPP be enhanced to make sure we have the right capabilities for our operational commanders...today and in the future taking innovation into account?

This is the bigger picture to which the NDPP process could contribute.

Would Nations agree on this role and share their long-term views, ACT has already planned to leverage all its strategic events such as the Chiefs of Transformation conference and the NATO industry forum to support NDPP long-term aspects.

Finally, the 2017 NATO Transformation Seminar could advantageously offer a good forum to look specifically on this better sharing and understanding of our long-term plans.

This would help propose future objectives for agreement by Nations to build NATO's capacity in the long-term (15 years and out). And I must say this would offer another important area of cooperation with the EU.



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CONCLUSION

In conclusion, I would like to congratulate you once again for what has been done in terms of the enhancement of our NATO Defence Planning Process.

Now we must look ahead, as that is where the most important changes and challenges lie.

We have to already design the NDPP of the next 25 years which will build our full-spectrum military capacity, a capacity which preserves our political, military and technological edge.

It suggests important decisions ahead of us.

And I would leave you with the words of American author Harriet Beecher Stowe: *“The past, the present and the future are really one. They are today.”*

You are key enablers to take the right decisions today and foster innovation in implementing the vision of future NATO’s capacity.

So, let this conference be a first building block.

Thank you for your attention.

I’m ready to answer your questions. Please...