

## CHIEFS OF TRANSFORMATION CONFERENCE: SYNDICATE SESSION 1

“Expanding the Alliance Open Innovation Network”

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### Premise:

- During the Warsaw Summit in July 2016, Article 136 specifically mentioned innovation as particularly important for NATO to keep its technological edge by identifying “*advanced and emerging technologies, evaluate their applicability in the military domain, and implement them through innovative solutions*”. Simultaneously, NATO encouraged nations to develop capabilities through an innovation lens and to ensure “*such [efforts] will lead to innovation initiatives which will lead to increased cooperation within the Alliance and among Allies*”.
- As part of the NATO HQ functional review, the Secretary General stressed the need to establish an innovation focal point at the political level “*to better integrate the existing work on innovation*” within the Alliance. Whilst an innovation board will help identify priorities to pursue initiatives when it comes to fostering innovation, ACT “*would continue to play the leading role for innovation at NATO*”.
- To accomplish this mandate, ACT is seeking to expand and consolidate the NATO Innovation Network. Managed by the ACT Innovation Hub, the goal is to federate the NATO and Allies open innovation entities. In order to achieve this, we need to identify a successful strategy to foster innovation where technology is already available. Understanding how to build, fuel, and drive innovation is the first step to bring all nations on board at the same speed. The NATO Innovation Network offers nations the opportunity to share ideas, best practices, and combine efforts to tackle the future challenges together.

**Aim:** To share the vision, chart progress, and recognise best practices, in order to identify possible common/shared efforts and to establish a robust network for cooperation in the area of innovation.

### Why we should be concerned about innovation:

- Recent decades have seen an unprecedented acceleration of technological development, thanks in a large part to commercial sector investments (especially in the digital domain). As a result, proliferation and availability of knowledge and technologies have provided a number of non-state adversary and non-NATO nations with growing abilities and opportunities to challenge the Alliance and its member nations politically, militarily, and technologically.
- Moreover, most of these technologies emanate from an ecosystem fundamentally different from the traditional defence industrial and technological model, and are characterized by an extremely short time to market.
- The NATO military and technological edges against peer competitors and non-state actors/adversaries is steadily being eroded. To remain relevant, the Alliance needs to urgently reverse this dynamic and re-gain its strategic and military advantage. To do so, it is imperative that NATO and nations embrace innovation to adapt, remain relevant and successfully accomplish its core tasks
- For innovation to occur, there is a need for updating our processes, adapting our organizations and mobilizing the right skills. It is also about having the willingness to change mindsets and creating an enhanced collaboration environment among nations, NATO, and non-NATO stakeholders.

**How this Syndicate Session approached these challenges:** The benefits of the NATO Innovation Network emphasized the establishment a federation of entities or 'nodes' (from NATO and Nations) able to leverage open innovation, provide mutual support, share best practices, provide subject matter expertise, and solicit audiences and solution proposals. This network is a force multiplier for all its nodes, allowing problems and solutions to be considered within a global ecosystem. During discussion we:

- Encouraged nations to join the NATO Innovation Network will strengthen the collaboration by sharing their work on emerging technologies as well as helping to identify policy issues and solutions.
- Supported nations to consolidate and expand an appropriate culture and develop concepts in order to establish an innovation strategy.
- Helped nations embrace innovation and set-up their own open innovation structure as the engine to adapt, remain relevant, and successfully accomplish its core tasks.

**Syndicate Session Questions:**

(The breakout session explored the following questions in order to present tangible outcomes in the innovation domain)

- How can nations unlock their innovation capacity? (BUILD)
- How to create an ecosystem?
- What entities should be involved in the project?
- Who should I connect with?
- How can an innovation entity be sustainable? (FUEL)
- How do we finance innovation?
- How do we embody the team?
- How do we cultivate a robust innovation organization - (Innovation: Management, Policy & Practice)
- How can nations join and benefit from NATO Innovation Network? (DRIVE)
- What should the NATO innovation network provide in support of its members?
- How should information (issues to solve and potential solutions) be shared and support mutually provided within the network members?
- How to develop and implement innovative ideas? (DRIVE)
- What are the best practices to identify innovative ideas and turn them into efficient solutions for the operational users?
- How should Agile Development be implemented in defence organizations?

### **Syndicate Discussion Main Points:**

- National representatives showed interests and willingness to increase their level of involvement in the process of open innovation lead by ACT. We can identify 3 tiers of nations namely:
  - Those who are already on board and applying open innovation within their organizations.
  - Those who are very interested and willing to embark in open innovation but need a little help.
  - Those who really discover this opportunity and need significant support to get going.
- In order for nations to be successful in innovation they need to:
  - Capture and share user stories/needs/problems (this is a hard step to perform as it is difficult to admit weakness/failure).
  - Look out for solutions from unusual suppliers of solutions such as industry (especially small and medium businesses), academia and potentially through crowdsourcing.
- Cultural change can help in aligning the military and civilian worlds so that they can understand better each other.
- Innovation is not only about technology, but also a change in mind set.
- Challenges to innovation we face:
  - Risk aversion/ and fear of failure mentality within NATO is one of the largest hurdles to innovation.
  - Nations are struggling to identify issues to solve and to involve end-users in the process of identification.
  - Nations unwillingness to share their problem is also a challenge to open-innovation.
- To capture innovation, we need to look both inside and outside and also enable the end-users to convey their ideas.
- Nations should leverage ACT/Innovation hub as a vehicle to launch innovation as well as avoid the duplication of national efforts and become aware of other national efforts.
- By engaging academic institutions like universities we expand participation, and the inclusion of totally different ideas can be potential game changers. More participants in the process can equal more innovation.

### **Syndicate Actionable Items:**

- ACT should create an innovation ecosystem. ACT can facilitate the development of national open innovation capabilities by inviting interested parties to observe, then participate and eventually capture the best practices that ACT and some nations have already implemented.
- ACT can help in various ways: some nations propose to ACT to coordinate, collect and publish user needs on a single platform in order for nations to have a better visibility and collaboration opportunities.
- NATO must find better ways to cooperate with partners – this includes sharing data and accepting failures.

## Syndicate Closing Plenary Slides



### *“Innovation” - Outcomes*



- Need for a cultural change
- Need to navigate within/around the rules to get to a « yes »
- Need to combine top level directive with bottom up initiatives to unfreeze the middle level
- Ideas without funding will never materialize
- Need to mimic national approaches such as SBIR etc. Within NATO
- Need a « digital store front » to share problems/opportunities

12 Dec 2019



### *“Innovation” – Way forward*



- Nations to identify their MoD chief innovation officer
- ACT will share its innovation agenda with them
- ACT will facilitate/help in the development of national open innovation capabilities by inviting interested parties to observe/learn/participate
- ACT will
  - share the lessons identified and best practices from the network
  - together with interested nations explore successful national models for innovation
- Welcome to the ACT/NATO Innovation Network!

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