

Staff Branches Can Build Capabilities - ACT

Written by Brigadier General Giovanni Fungo, Italian Army, ACT Capability Engineering Division and Dr. Han De Nijs, ACT Capability Engineering Division

Capability Engineering and Innovation within Allied Command Transformation takes on the challenge of managing capability improvements, new initiatives and innovation.



A New Division

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Allied Command Transformation (ACT)'s commitment to improve its efficiency while managing [human resources constraints](#)

, has led to the creation of the more integrated and result-focussed Capability Engineering and Innovation (CEI) Division. This new division is actually the existing Capability Engineering Division enhanced with two

[branches](#)

: Transformation Network Branch (TNB) and the Innovation, Doctrine Coherence and Lessons Learned (IDLL) branch, and by merging the Lessons Learned Implementation (LLI) branch and Policy and Plans branch.

A New Mission

This restructuring stays in line with the division mission and function, but the aim of the new division, to focus on "innovation", will alter the current work programme: business will not be as usual.

The CEI Division will initiate, undertake, facilitate and support the development of emerging capabilities and future innovative approaches to solve identified and anticipated capability shortfalls. It will use a coherent approach to solutions development and, will integrate NATO and national efforts.

Requirements and Solutions

The CEI Division will match requirements with solutions and conduct projects which fulfil them. Requirements for capabilities are generated in a number of ways in NATO: most of them being called Urgent Operational Requirements and Lessons Learned, others formed by the emerging needs and transformational ideas of the Alliance. Moreover, the NATO Defence Planning Process (NDPP) produces Capability Shortfalls or Gaps.

Engineering and Innovation

Solutions to requirements can often be found by engineering existing or known solutions. Innovation has increasingly been sought in NATO capability development as a means to maintain effectiveness and improve efficiency. The premise is that through innovation and better exploration of existing capabilities, NATO nations may be able to offset decreasing defence funds while still maintaining or enhancing the Alliance's capabilities. Furthermore, new ideas can result from strategic thinking, study and consideration about the Future Security and Operating Environment and from Nations need to change their current defence capabilities. Transformational solutions and disruptive change can be found when innovative capability development is applied to these new ideas.

Innovation, as a mindset, broadly discussed throughout this magazine is at the heart of the initial process. Once emerging innovative applications are better understood, further refinement and adjustment to a new function can become an engineering activity.

Collaboration and Engagement

The development of solutions through engineering and innovation is improved by engagement and collaboration with other actors. Seeking external perspectives is a crucial part. Through engagement, the CEI Division seeks to improve capability development projects across nations and NATO entities with collaboration. Engagement and collaboration by the CEI Division will be governed by an understanding of supply and demand. The demand is to have external actors understand current solutions, the operational environment and the need for new solutions. The supply is the available applications that may find use in the defence domain. This will develop a constant pull and push of possible ideas and solutions.

Transformational Events

The CEI Division will organize transformational events that allow a strategic understanding of what is involved in the demand and supply or what transpires in defence requirements and solutions. For example,

- the *Chiefs of Transformation Conference (COTC)* an engagement with nations about transformation and innovation,
- Industry Day a meeting with the captains of Industry,
- CD&E Conference gathering relevant practitioners from NATO and the nations.

Programme of Work

These events serve as an engine for the divisional programme of work, collaboration and engagement. The division manages the programmes that involve the contracting of the Centre for Maritime Research and Experimentation (CMRE), the NATO Communications and Information Agency (NCIA) or national analysis, modelling and simulation entities and academic institutions. [The Innovation Hub](#) is the ultimate extension.

Implementation

The CEI Division will implement its new mission in 2013, with the challenge to be seen as the focal point of innovation within the Command.

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