

Increasing Military Energy Efficiency became paramount on such a far battlefield. Lessons learned are rich and promising and lead to an "operational energy" concept that could find a place in the Smart Defence mind-set.

Broad Vision

Smart Defence is a concept that encourages Allies to cooperate in developing, acquiring and maintaining military capabilities to meet security challenges in accordance with the new NATO Strategic Concept. In his closing remarks of the 2012 SACT Seminar in Washington D.C. in February, the NATO Secretary General stated that "Smart Defence is more than just a way to cope with financial austerity – it is the glue that binds the Alliance together and the way to fulfil paragraph 37 of the Strategic Concept." Smart Defence is about member states building greater security – not with more resources, but with greater collaboration and coherence of effort. Military Energy Efficiency is an issue that should be considered as a key enabler of Smart Defence.



Afghan Energetic Battlefield

NATO's ISAF mission in Afghanistan is the biggest expeditionary operation of the Alliance's history. Afghanistan's geographic location, environment and lack of locally available resources

Energy Security: Tough Lessons of Afghanistan - ACT

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present unique challenges in sustaining the forces, in particular providing fuel to often isolated bases in the heartland. Consider the following figures: NATO Forces in Afghanistan consumed an average of 1.8 million gallons of fuel per day in November of 2011; 99% of the fuel was delivered by trucks. When Pakistan closed its border crossings, more than 4,000 supply trucks were delayed in Pakistan; and there was at least one attack per day against supply convoys on 23 days of the month. In order to overcome these challenges innovative approaches were adopted by national contingents. Nations have used better technologies, established performance standards and diversified fuels using wind and solar systems. However, exchange of information, best practices and collaboration on how to best overcome these challenges amongst Allies was lacking.

Although military capabilities have significantly improved over the past decade, modern military forces still require high-quality energy-demanding systems and large amounts of fuel to operate. Following the reality of high-energy demands of future operations, militaries have shifted focus to reduce energy dependency without decreasing operational efficiency. In order to address this challenge, there needs to be a shift of focus from national to multinational solutions within the Smart Defence context. NATO should adapt to these new conditions and introduce the concept of "operational energy" into the decision making process of our leaders and planners.



Operational Energy

A change of culture within our leadership to establish multinational responses to military energy efficiency requires a clear understanding of the impact of cultural and behavioural change of using energy in operations. Through awareness and education and training, ACT can help in the development of an energy efficient culture.

Nations have developed energy efficiency best practices based on their experiences in Afghanistan. As we reduce our footprint, these lessons should not be forgotten. They have to be translated into action in the context of "operational energy."

Opportunities For Improvements

It is important to share these best practices and practical solutions to increase overall awareness and to overcome the challenges presented by the operational environment. ACT can provide a platform for sharing this information and best practices by including Energy Security and Military Energy Efficiency in the agenda of upcoming "Diamond Events" such as the Strategic Military Partner Conference (SMPC) and Industry Day. ACT should also keep the Chiefs of Transformation Conference (COTC) updated in order to inform a wider audience on developments in these areas. Additionally, in close coordination with NATO Emerging Security Challenges Division (ESCD), ACT will continue to host and facilitate workshops on military energy efficiency.

These activities are the beginning of a conversation to further include international organisations, Academia and Industry.

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