Crowdsourcing

What is crowdsourcing?
Crowdsourcing is a new and powerful way of using social media for problem solving. One definition is: "Crowdsourcing refers to harnessing the skills and enthusiasm of those who are prepared to volunteer their time contributing content and solving problems."\(^1\)

It would perhaps be better to recognise that two or more people working together will always achieve more than one on their own. If you follow that analogy by opening up the discussion to as many people as possible, using Information Technology (IT) to gather their views, it is possible to understand that this can be a very powerful method for solving problems. However, this methodology has no NATO-agreed definition, and is only accepted in a few nations.

Why (now) this article?
As John Verdon was mentioning in his paper *The Wealth of People*\(^2\), we are in an era when "technology is enabling more than just expanded connectivity and networks." Now, technology offers greater and greater reach to "large pools of knowledge" and, the authors would humbly add: large and larger pools of more and more diverse judgement. The authors would name this large, diverse pool: "the crowd's opinion". Today, crowdsourcing is more and more broadly applied by various organisations seeking to please their customers (in the case of commercial ones) or the public (in the case of governmental ones). In this article, the authors will extrapolate from the general concept of crowdsourcing to outline the reason why NATO should consider crowdsourcing.

A look outside the military box
How does civilian society use crowdsourcing? "Crowdsourcing is leveraging the power of the many to achieve what was once relegated to a few specialists."\(^3\)

It has been recognised that "the crowd has way more than just wisdom. It has talent, creativity, and it is amazingly productive. (...) They build online communities of passionate social customers and tap them for service, knowledge and ideas."\(^3\) The crowd has a "strong desire to collaborate; the crowd contributes quickly; the crowd jumps at opportunities to cultivate talent and loves passing knowledge on to others. (...) Using the power of the crowd, smart organisations deepen their knowledge bases and rapidly accelerate innovation by looking at thousands of ideas instead of several."\(^3\)
Crowdsourcing is a methodology that is closely aligned with some of the most important NATO initiatives. It is an ideal force enabler, providing areas identified in the Connected Forces Initiative such as "harmonise efforts", "identify areas for collaboration and potential synergies" and "better use of technology". Furthermore, the "shift from operational engagement to operational preparedness" will require an increased capacity to look far into the future in order to anticipate future potential crisis and imagine the type of response NATO should then provide, rather than planning to react to an already existing crisis. Crowdsourcing not only addresses concerns in the CFI, but also Smart Defence and enhances the Comprehensive Approach. It should be noted that Allied Command Transformation has not only created courses for Social Media through Crowdsourcing (February 2014), but has already taken the first steps to exploit this methodology.

A look in the mirror

In the context of seeking to increase its forces' connectivity (the CFI — Connected Forces Initiative) and Members' resource sharing, or the Smart Defence concept, outsourcing and optimising the use of common (re)sources seems to be critical to modern NATO. Therefore, today, maybe more than ever, it is the time to review how much attention is given to how the entire corporate knowledge resource is exploited across NATO. Meeting the functional requirements with the proper expertise combined with national funding issues seems to become just an idealistic desirable rather than an achievable objective to NATO Human Resources (HR) departments. What if NATO would start to look at how other organisations have successfully applied crowdsourcing both internally and externally? This article argues that crowdsourcing requires little effort and proposes a low-cost method not only for resource optimisation, but also as a method, which contributes to maintain NATO's relevance as a security provider worldwide. It should be needless to mention that NATO is nowadays requested to provide security in a much more complex dynamic and socially very aware environment.

The authors do recognise that NATO has lately made a couple of attempts to reach to the outer world. The Civilian Fusion Centre (CFC) was for example one such attempt. Unfortunately, the CFC was recently shut down. At a very short glance one may say that, although laudable, the excessively (in the authors' opinion) filtered interaction with the external actors or individuals, obstructed this initiative to become "the gateway" to the outer world. Another laudable initiative is the Innovation Hub established by Allied Command Transformation (ACT) in an attempt to connect people within and from outside NATO willing to contribute to the preparation of the organisation for future challenges. But still, the membership is filtered and again the authors consider the chances of this initiative to help NATO reach the crowd's opinion to be low if not concerted with other similar initiatives.

NATO as a large politico-military (read: global) organisation

The idea of writing this article was sparked among other reasons by the inspirational speech delivered by Jamie Drummond: "Let's crowdsourcethe world's goals" in a TED speeches session, in 2012. Due to its involvement in crises such as Middle East (Iraq NTM), Central Asia (Afghanistan — ISAF) and Horn of Africa (Ocean Shield), NATO has overpassed the limits implied by its own title (North Atlantic Organisation). The recent endeavours require more and more that NATO interacts with environments far beyond the geographical and
cultural boundaries envisaged by the original treaty signatories. NATO political leadership has acknowledged this very fact in order to address the new challenges, which reach far outside the military comfort zone, and into politics, economy and social areas. This new age has also demanded far more attention to information (particularly at the strategic level), and much more awareness of infrastructure needs. NATO, in order to address these needs, has developed the Comprehensive Approach (CA).

The "WHAT needs to be done" has been outlined in the concept paper, the "HOW must be done" has been somewhat addressed (see the Knowledge Development concept implementation status), but while struggling to implement the CA, many started to realise that the predominant military nature of NATO's human resource represents a de facto immovable roadblock. To declare operational success, NATO's Commanders now have to do something completely different from what they are trained and educated to do. They have to "contribute to the stabilisation of the society". Attempting to address this issue and, being inspired by other governmental/non-governmental or commercial institutions' efforts in this direction, the authors suggest that crowdsourcing might be something that NATO should consider.

Scoping the issue
This part of the article is about the scope of the crowdsourcing applicability. While writing the first draft, we realised that either half of the entire issue of scope is excluded or, better, we needed to change the title in order to address it holistically. This is the reason why now the article refers to both dimensions: internal crowdsourcing\(^7\) and external crowdsourcing. You could ask: how can you treat such different dimensions with the same approach? Let's describe the two dimensions and, in all probability, the reader will easily get this question answered. But before proceeding any further, it is important to highlight one of the conditions for success when thinking to apply crowdsourcing, as James Surowiecki\(^8\) stated in his book of reference The Wisdom of Crowds: "the conditions that are necessary for the crowd to be wise are diversity, independence, and a particular kind of decentralisation."

**Internal dimension**
Think about NATO as a distinct world. There are personnel belonging to 28 Nations (diversity) and working in numerous geographical locations across the globe (independence), all connected to the same secure virtual environment and, more importantly, all following the same goals defined by a unique politico-military leadership, the North Atlantic Council (NAC), but each with their particular task (relative decentralisation).

Thus, NATO meets the conditions of a diverse, independent and relatively decentralised pool of opinions. Maybe this is one of NATO's greatest benefits. NATO represents an amazing venue for staff of different nationalities, different services and different specialties to exchange safely, sensitive opinions. However, it is the authors' opinion that very little of this potential is used. Or, better said, the organisation currently fails systematically to exploit this resource to its maximum extent. Many of the 'bright brains' are prevented from contributing to solving common issues due to lack of an appropriate formal framework (read: agreed methodology). Thus, many "bright ideas" occur in informal ad hoc venues, but they are not corroborated, distilled and delivered to the ones in need i.e. the decision-makers. In short, extremely valuable knowledge resource is wasted nonchalantly.

Successful broad collaborative platforms/models are in place and continuously evolving both within and outside NATO's world. Maybe it is time for NATO to start rethinking the methodology on which the corporate knowledge resource is harnessed and exploited across the Alliance. Staff officers with sound diverse experience are everywhere in NATO, in all HQs, and at all levels. Imagine NATO as an organisation allowing each of its Members to quickly understand the priority of challenges that the decision-makers are confronted with. This would allow good, willing and available knowledge resources (regardless of their assignment or deployment) to immediately contribute, and, thus, support the process. How accurate and valuable would the result of such common effort be to the decision maker? Well, paraphrasing James Surowiecki, the authors argue that many are smarter than the few, no matter how bright those few are...

NATO has already taken the first tentative steps towards use of this powerful methodology. For example ACT Innovation Hub of 2013, where interested individuals from both within and outside of ACT were invited to brainstorm how NATO can use social media more efficiently. It was quickly recognised that this "crowdsourcing" activity highlighted a lack of training in social media within NATO. To close this gap, a NATO Social Media Course\(^9\) has been established and the first course started in mid-February 2014.

**External dimension**
The Comprehensive Approach and the Knowledge Development (KD) concepts address the issue of ensuring more correspondence between the military and civilian institutions' goals, by means of conducting "comprehensive planning". So-called "White Cells" have been embedded into military
planning groups; positions such as Political Advisor (POLAD), Legal Advisor (LEGAD), Culture Advisor (CULAD), Gender Advisor (GENAD), and Civil/Military Analysts have been created at operational and strategic command levels, but it seems that achieving comprehensive, holistic understanding of the diverse spectrum of issues is far from easy. The operational planners face great difficulties while designing the Operation Plan (OPLAN) and, maybe more importantly, NATO forces face even more difficulties while trying to parallel the OPLAN to the complex reality on the ground. No wonder; it is unrealistic to assume that a handful of people will accurately intuit the issues of millions. In the outer world, experts have understood that attempting to meet the expectations of the customers, especially when the service/product is addressed to heterogeneous groups, requires close attention paid to the specific needs of each and every individual. Nowadays, more and more commercial companies closely interact with their customers and crowdsource solutions using the wisdom of the crowds to shape their strategies for future actions. Why should not NATO do the same when attempting to intuit the complex needs of a society in a troubled environment?

The (Wisdom) crowdsourcing could bring the NATO OPLAN in resonance with local populace needs, implicitly improving the public understanding and support. Subsequently, the chances for the newly created institutions to last longer will increase. Will this be beneficial to the political ultimate aim of instilling long-lasting stability in troubled areas? Most likely, yes.

However, the discerning amongst you will already be wanting to cry “what about security?” The very success of crowdsourcing depends on opening it up to the maximum number of people with different experience and knowledge than merely the average military officer. Obviously, there are elements that will need to be retained inside the military bubble, but in non-warfighting roles where the military spectrum is less important as a stand-alone element, and it is more important to make use of all available skills and good will in the Comprehensive Approach arsenal, the needs of the information will often override the security concerns. NATO has already seen that involvement of civilian IO and NGO organisations is an essential part of the planning environment, and the security bubble has hampered this coordination — in some cases beyond their willingness to continue to act as partners in solving the problem.

While it could be argued that security concerns will never allow NATO to properly progress crowdsourcing, the authors would argue that unless resolved, security concerns will continue to hamper the Comprehensive Approach and even put at risk the success of the mission. Addressing the means of allowing military forces to properly interact with all the players in the PMESII domain, may also enable NATO to develop an effective crowdsourcing methodology, thus, enabling itself to find out what is “the crowd’s opinion” in an attempt to align its actions with the expectations of the people affected by its decisions. Perhaps the CFI Information Exchange Gateway will provide some of these necessary tools to enable NATO to benefit from this methodology.

Recommendations

It is out of the scope of this article even to outline an implementing strategy for (Wisdom) crowdsourcing in NATO; nevertheless, the authors thought that recommending several principles to follow can be done at this stage:

- **Get agile and attractive:** Replace the rigid (non-interactive database-wise) “lessons learned” with a continuous process of initiating open debates across headquarters. People learn (better) when feeling involved, engaged and will, in this way, be more committed to the solving process. The so-called “lessons learned” are often regarded as issues of others (read: “not mine”), happened in the past, with little relevance to present happenings or to the present persons. Remember that staff officers usually spend only three years in the organisation so, very rarely, are they interested to know/learn what happened before their presence in NATO (or after). Engagement is a luxury, don’t waste it.

- **Discourage unhealthy competition:** Discourage the mysterious ownership of an issue. This risks creating unhealthy problem-solving by allowing the owner to use the process as a personal success (if problem solved, obviously). Instead, start promoting the “shared issue solving”. Educate staff how to share their problems and seek to reach to most appropriate contributors, beyond their HQs boundaries. Needless to say that a meticulous appraisal of the knowledge resource is critical; once done this knowledge resource has to be reachable and usable by all, NATO wide.

- **Curate instead of accumulate:** Establish the “content curator institution”, which will be in charge of “collecting” and curating content as well as “connecting” and committing contributors, rather than only synthetically managing non-interactive sterile content. The curator has to exude charisma, commitment, vision and passion, and be able to transcend cultural boundaries to create more effective knowledge-sharing venues by linking and committing people.

There are probably many other useful principles/ideas on how (Wisdom) crowdsourcing could should be applied by NATO, but this remains to be addressed, with the courtesy of the publishers, in a future article.

END NOTES:

(1) USAF – The Air Force Guide to Effective Social Media Use.
(3) From Crowdsourcing to Knowledge Management – Lithium Technologies 2012.
(4) www.wikistrat.com
(5) Why is this company crowdsourcing, gamifying the world’s most difficult problems? – Neal Ungerleider.
(6) Jamie Drummond co-founded the advocacy organisation DATA (Debt, AIDS, Trade, Africa) with Bono, Bobby Shriver, and others in 2002 and ONE in 2004.
(7) Some will say that wisdom crowdsourcing is by definition conducted outside the organisation, but, as the reader will notice, NATO internal is considered in the conceptual boundaries of this article, as a distinct world.
(8) James Michael Surowiecki is an American journalist.
(9) http://innovationhub-act.org
(10) Political, military, economic, social, infrastructure, information.
(11) Jamie Drummond: Let’s Crowdsourse the World’s Goals.