

What is Transformation

An Introduction To Allied Command Transformation



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WHAT IS TRANSFORMATION? – AN INTRODUCTION TO
ALLIED COMMAND TRANSFORMATION

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Foreword (by Lieutenant General Phil Jones, Chief of Staff, Supreme Allied Commander Transformation)



When Allied Command Transformation (ACT) was established in 2003, much effort was expended in articulating the *raison d'être* for what was often a relatively narrowly understood organization and mission. Whilst overall awareness has increased steadily since its inception, reflecting ACT's growing reputation and maturation as a command, many nations have continued to express a desire for the development of a generic reference document which might serve to increase awareness about ACT and which, more widely, might complement the broader effort of achieving a shared and common understanding of the key objectives of transformation. This collective desire was both the genesis and catalyst for the development of this publication.

NATO finds itself at a time of strategic transition, requiring careful thinking to manage the balance between addressing the increasing threats to Allies' security and the constraints limiting the Alliance's military capabilities. Against this challenging backdrop, a dynamic transformational agenda is essential; an agenda which matches the pressing need to enhance the Alliance's readiness and responsiveness with the strategic requirement to focus ACT's efforts on safeguarding NATO's long-term military relevance and utility.

ACT sees transformation as a golden thread which bonds our past, present and future. We must assess, learn from, and capitalize on our past, and we must constantly adapt in order to ensure the success of current operations. We must also help to prepare for an uncertain future through a candid assessment of our strengths and shortfalls, a strong commitment to fulfil our agreed level of ambition, and the development of a shared sense of the future.

Our vision is "to remain the Alliance's lead for NATO military transformation, ensuring a foresight of the future security challenges; shaping connected forces through ambitious and realistic training and exercises; and enabling innovative interoperable capabilities through cooperation with NATO's global partners, including industry and the science and technology community". In this, our primary effort is to ensure that transformation is coherent, comprehensive and well-balanced to enable the availability of more robust, flexible and mobile forces for NATO Forces 2020, which is the landmark for the Alliance's capability development.

At the outset, I would wish to emphasize that the aim of this publication is not to provide readers with an exhaustive, complex and definitive tour of the transformation landscape. Rather, it is to provide a basic overview of the enduring and key fundamentals, principles and tools of NATO military transformation, together with some helpful supporting information concerning those agencies and entities in whom the facilitation and delivery of transformation is currently vested. As such, I commend it to you in the context of your daily activities. Furthermore, it is also intended to be a living document for which your feedback is both welcomed and appreciated.

Preface

“It is not the strongest of the species that survives, nor the most intelligent, but rather the one most adaptable to change” – Charles Darwin

At the NATO Summit in Prague in 2002, and as a result of changes and anticipated changes in the strategic operating environment, the then Secretary General Lord George Robertson and the US Secretary of Defence Donald Rumsfeld proposed that NATO should have an organization that was capable of helping nations transform their armed forces from being static and garrisoned to more flexible and deployable. This organization, a kind of military-strategic dynamo and catalyst for change, was ACT.

The early years, from 2003-2007, were a time when nations were principally focussed on the technological modernization of their forces. NATO encouraged nations to look for more robust command and control systems, with hardware improvements, to make allied forces more modern and net-enabled, more interoperable, more capable and, in the longer-term, more sustainable. The mantra, and assumption, was that the majority of our security challenges would be overcome if we allowed technology to be the main driving force, particularly information technology.

During the same period, the Supreme Allied Commander Transformation (SACT) was dual-hatted as the Commander of the US Joint Forces Command, whose focus was also on information technology and networking, high-end capabilities, and the delivery of effects. With the support of its growing number of stakeholders, ACT made important progress in these early years, contributing to a number of key areas such as a common mission network, counter-IED, precision weapons, and strategic lift; all capabilities that provided the foundation for NATO's operations in Afghanistan, in the Mediterranean through Active Endeavour, and across the Horn of Africa through Ocean Shield.

Over time, however, the nations and other stakeholders began to view things from a slightly different perspective. Some had become uneasy about an Alliance that was so heavily focused on technical solutions to increasingly complex challenges; challenges that many believed required more than just technology in isolation. So what had been the dominant culture began to change in favour of a more balanced approach including, in addition to the core work on capability development, a focus on doctrine, training and education and longer-term thinking. In particular, ACT began to examine how it should approach thinking in light of the 21st Century strategic environment that had, years earlier, changed from the relatively well understood stability of the Cold War to a much more fluid, interconnected and dynamic environment.

ACT and its stakeholders realised that, to be successful, NATO would require flexible and adaptable forces that could integrate and work effectively with a range of other actors, in order to deal with challenges and threats across the full spectrum of conflict. It also recognized that future challenges and threats would be blurred and hybrid in nature, and that some would emanate from adversaries who adapted western capabilities and concepts to serve their own ends. Further, it believed that, over time, the capability to maintain free access to what many now call the global commons would be pivotal in a globalized world and, by inference therefore, would be of immense importance to the security of nations.

And so as well as becoming more effective at providing support to operations, ACT began to place a greater emphasis on human capital and the importance of creative thinking. This paradigm shift was reflected quite clearly in the language of NATO's new Strategic Concept, launched at the 2010 Lisbon Summit, which reaffirmed ACT's relevance at a time of real stress both in operations and finances.

The onset of the global economic downturn heralded a significant challenge to the transformation process, and will continue to do so for the foreseeable future. Against this backdrop, the 2012 NATO Summit in Chicago called for an alliance of Nations which understood the importance of capabilities but which also remained true to itself in placing a premium in areas such as partnerships, Smart Defence (SD), the Connected Forces Initiative (CFI), and education, training and exercises. The key driver behind all of these areas was the search for greater interoperability and coherence, and an associated desire to maintain NATO's readiness.

Moving to the present, and the aftermath of the 2014 Wales Summit, the key pivot point in the short-term will be the transition from the NATO-led International Security Assistance Force (ISAF) mission to the Resolute Support Mission in Afghanistan; though recent destabilizing events on NATO's eastern and southern flanks have shown the potential for other challenges to emerge, generating NATO's Readiness Action Plan response. Although NATO will likely shift from a campaign to a contingency posture, ACT will be provided with a huge opportunity to drive the transformational process given the continuing requirement for ready, flexible, robust and interoperable forces. Much of this work will involve long-term analysis and programming (based upon a shared understanding of the current strategic context) while at all times maintaining the flexibility to respond to short-notice and unexpected political and military demands.

Somewhere in the debate, however, will be a renewed commitment to shared values, trust and a willingness to cooperate. Until that time, military leaders across the Alliance will help shape the strategic debate by outlining how we can do better by thinking more creatively, and promoting and building interoperable capabilities. The military discussion will likely focus on defining how best to cooperate, prioritize and, in some cases, specialize as nations develop capabilities that provide commanders with forces that are more agile, effective, better trained, educated and exercised. **Against this immensely challenging backdrop, ACT is naturally positioned to be in the vanguard of the main effort.**

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noun

Chapter 1: Transformation – Definition, Strategic Environment and Role of ACT

1.1. The aim of this Chapter is to situate the ensuing chapters by placing transformation into context. As such, it will consider some of the definitions and interpretations of transformation and will seek to provide an overview of the likely future strategic environment which, in the most part, underlines the necessity for transformation. With all this in mind, it will then describe the role of ACT, indicating why this is so fundamentally important.

Definition

1.2. There are many dictionary definitions of the word 'transformation', ranging from the simplistic to the more complex. While the simple definitions can occasionally be one-dimensional or misleading in that if you were to consider them from a military perspective they would fail to convey the broader sense of what is meant by the term, some of the more complex definitions also present challenges, using rather esoteric phrases that can sometimes be difficult to comprehend. Regardless, it is clear that the word does not always lend itself easily to interpretation and is not necessarily intuitive (particularly in the military sense), which is why it can be so difficult to communicate to others.

1.3. A glance at some of those definitions of 'transformation' reveals a generally uniform baseline interpretation. However, there are variations in emphasis and tone which tend to relate to the extent or rate of change, as illustrated by the following examples:

- a. “a thorough or dramatic change in form or appearance” (The Oxford Dictionaries).
- b. “a marked change, as in appearance or character, usually for the better” (The Free Dictionary).
- c. “a change or alteration, especially a radical one” (Collins English Dictionary).

1.4. So while there is consensus that transformation represents change, there is also a sense that it may signify more than just a slight alteration of the status quo, and may be characterized by something more pressing than a slow, evolutionary change. In military terms, this last point is significant.

1.5. Significant because in previous times when nations were better able to allocate resources to defence spending, the pace of change was relatively slow (in comparison with today's environment) and, furthermore, the security threats were easier to predict, understand and rehearse. Fast forward to the present, however, and to a known scenario where NATO defence spending has decreased and may continue to do so for the foreseeable future, yet the security environment is more unstable, dangerous and global than at any time in history; a situation which, arguably, demands more resources than ever before. Our ability to respond to this effectively can be limited by the structures of traditional institutions which, in a more stable, static and benign environment were able to function well but which, in a more dynamic, virtual, and uncertain world, often lack the agility to be truly effective. In this context, never has the need for more rapid, agile and innovative military 'change' been greater, which is why use of the word 'transformation', with its implied meaning of a more radical change, is so apt.

1.6. With all of the foregoing in mind, we are able to edge towards a sharper definition of the word transformation or, more specifically, military transformation. In essence, it represents a continuous and proactive process, without a defined end state, by which forces adapt to the rapidly changing security environment to ensure that they are fully capable of meeting upcoming challenges with the equipment and training that is needed, at a price that can be collectively afforded. Typically, although not exclusively, this might involve addressing five major areas: military structures; modernization; readiness; interoperability and sustainability. Put more simply, it is about gaining and then retaining a competitive advantage, a process which involves filling gaps and, in particular, those gaps which the changing environment threatens to create in the future.

1.7. The transformation effort is immensely challenging, requiring constant attention, a shared commitment to embrace change and a willingness to accept risk. It also requires a balanced approach to short, medium and long-term planning, which is not always easy to achieve when there are often more immediate and visible challenges, creating a natural inclination to commit resources to the present rather than the future.

1.8. In this context, one might offer the following observation. Who, in 1987, would have envisaged a European security environment by 1992, with no Warsaw Pact or Soviet Union? Who could have predicted the events of 9/11 and the subsequent strategic fallout that has permeated the globalized world since? Or who could have foreseen the strategic surprise of the Arab Spring? In short, to those who might believe that 'you can't expect what you can't expect', a cursory glance at history will show that we should, at the very least, expect to be surprised when we least expect it. ACT can never predict the future with absolute certainty, but it can help to identify the possible drivers which could shape the future operating environment.



1.9. At a time when new, innovative and creative solutions are continually required to address hugely complex challenges, and when thinking and the ability to 'out-think' opponents is more important than ever, the rationale for transformation remains compelling.

In selecting a visionary and proactive identity, the Alliance created a new strategic command which, in name alone, sent a clear message concerning the importance of transforming and, indeed, the urgency of doing so.

Future Strategic Environment – Brief Overview

1.10. While the future strategic operating environment is neither completely predictable nor pre-determined, it is reasonable to believe that the transition which humanity is currently experiencing will become even more complex and uncertain, fuelled by an accelerating rate of change combined with the pervasive effects of globalization. At the political level, global power shifts will continue to have significant effects, and the human dimension will likely be characterized by changing demographics, urbanization, networks and fractured identities. Accelerating technological change will contribute to how the future is shaped and, in particular, new emerging threats with the potential to disrupt are increasingly likely to be available to both state and non-state actors. Globalization and increasing resource scarcity will directly influence international security, and environmental changes will also have an impact on many global issues.

1.11. Recent destabilizing events around the globe and within the Euro-Atlantic region have reinforced NATO's assessments of a future security environment that is volatile, complex and uncertain. The political relevance of the Alliance and the military effectiveness of its forces will continue to be challenged by a combination of this highly dynamic, interconnected and ambiguous operating environment, together with a period of lasting fiscal austerity and the consequences of an anticipated reduced operational tempo following the end of the ISAF mission. By the end of 2014, NATO will shift from a campaign to a contingency posture requiring ready, flexible, robust and interoperable forces which are fit to meet the challenges NATO will face. With the strong desire not to lose the experience gained through joint operations in Afghanistan, NATO and its global partners will need to find other ways of retaining that corporate knowledge, maintaining interoperability levels and sustaining the experience of working together. In this respect, it will be necessary to adopt a mindset where increased multinational cooperation is regarded as essential, not optional, and where individual nations resist the temptation to look inward; instead, seeking new ways of working together to optimize defence capabilities.

Role of ACT

1.12. The fundamental role of NATO is to provide security to the citizens of member nations. As already indicated, real security is not only provided by the capabilities that meet today's threats, but also by having the foresight and planning to deal with the likely threats to our collective security in the short, medium and long-term.

1.13. Within the Alliance security mission, Allied Command Operations (ACO) is responsible for the command and control of today's NATO operational missions, whereas ACT is responsible for preparing NATO to meet future challenges, by **leading the transformation and continuous improvement** of military structures and capabilities; in particular, enhancing the preparation, military effectiveness and interoperability of NATO forces. More specifically, the North Atlantic Council (NAC) has given SACT the following three principal tasks in his terms of reference: **provide support to operations; lead NATO's military transformation; and engage, interact and cooperate with partners and other organizations.**



1.14. With regard to operations, SACT is the supporting commander to the Supreme Allied Commander Europe (SACEUR). This means ACT working in close cooperation with ACO to support the front line commanders, their headquarters and units. While nations are responsible for training their own forces, ACT is responsible for training the multinational staff serving in the various NATO headquarters. These headquarters include the Joint Force Commands, operational headquarters, and those headquarters rotating through the NATO Response Force (NRF). For example, the command teams leading the Libya operation from their headquarters in Naples were all trained through ACT facilities and by ACT personnel. Supporting operations also includes leading the effort to overcome emerging operational challenges. An example of this problem-solving function was the creation of the Alliance's action plan to counter improvised explosive devices, which sought to share existing capabilities between NATO and non-NATO troop contributing nations.

1.15. In leading NATO's military transformation, identifying the capabilities necessary for successful future operations is a function derived largely from ACT's responsibilities under the NATO Defence Planning Process (NDPP). This aspect will be described in further detail in Chapter 2 but, in essence, ACT works with the nations, ACO, and staff members at the NATO Headquarters to determine NATO's future capability requirements and to prioritize shortfalls. ACT then works with nations individually, as well as with the International Staff (IS), to identify the capability contribution each will commit to deliver. The fundamental roles of education and training, as key enablers for transformation, should also be remembered in this principal task.

1.16. The final task mandates ACT to engage, interact and cooperate with others in order to enhance mutual understanding and encourage ongoing transformation efforts. Here, ACT's direct engagement with other organizations, institutions and non-NATO nations is fundamental to maintaining the ongoing process of mutual transformation. As a key actor in making the Comprehensive Approach (CA) operational, ACT seeks to build and develop its relationships with the broadest range of potential partners.

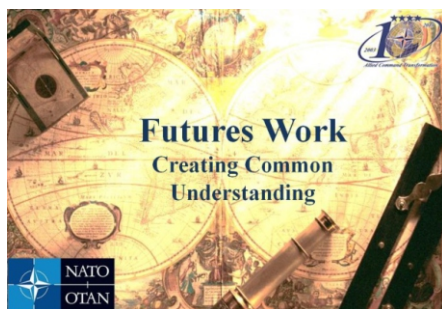
1.17. The threads which bind each of the above tasks together are **Strategic Thinking, Capability Development, Education and Training, and Partnerships**. These four areas of activity provide the sharp focus for ACT in terms of delivering genuine effects for NATO and its operations (from a functional perspective, further detail concerning the delivery of these activities is provided at Annex A, which describes ACT's Command Structure). Further general information concerning ACT can be found at its main website: <http://www.act.nato.int/>

Chapter 2: Transformation – Key Enablers & Tools

2.1. This Chapter describes those key enablers and tools that assist ACT in delivering its transformational mandate. These should not be viewed as ends in themselves, but more as mutually supporting ways that help Allies work better together as they move towards a vision of an Alliance that reflects the intent of the Strategic Concept, the outcomes of the Wales Summit, and which is fit for purpose in 2020 and beyond. The list is not intended to be exhaustive and does not include every available avenue of support; rather, it seeks to target those elements that resonate most with SACT's enduring priorities and focus areas.

Futures Work

2.2. Successful military transformation is dependent, in large part, on the collective ability to prepare the Alliance and its Partners to meet potential future challenges. The first, and most critical, part of this process is to develop an understanding of those challenges, threats and opportunities, and the broader impacts of global developments on NATO (and this has to be reviewed constantly). This absolutely vital strategic thinking is difficult and challenging, and while it does not deliver a tangible piece of equipment that can be seen, touched, or demonstrated, it does lay the foundation for building capabilities that are both fit for purpose and which provide lasting value. It is, therefore, at the very heart of ACT's work and, as indicated in Chapter 1, this thinking (and communicating this thinking to a wider audience) is at the very core of the transformation process.



2.3. ACT's Strategic Foresight Analysis (SFA) represented the initial phase of the persistent, long-term military transformation futures work being conducted at ACT. Its purpose was to develop a shared perspective of a future that will be different from today. Together with the follow-on Bi-SC Framework for Future Alliance Operations (FFAO) initiative, the SFA informs the NATO Defence Planning Process (NDPP) and improves the Alliance's long-term perspective of the security environment by identifying common themes, trends and security implications expected to be present in 2030 and beyond.

2.4. The FFAO provides the strategic context for NATO to begin preparing for the long-term future. It builds upon the SFA and is based on a number of national, think tank, and academic studies. It also informs and connects with the enhanced NDPP to further describe and answer what NATO should be prepared to do in the long-term future security environment. Based on NATO's core tasks, the FFAO will deliver a method for modelling the future security environment that sets the context for developing a set of strategic military perspectives (based on new ways of implementing the core tasks), together with the associated military implications that are inferred by an assessment of missions, roles and tasks. All of this work is conducted in support of the current Strategic Concept.

2.5. It is important to recognize that ACT's futures work is an ongoing commitment. Persistent futures work is essential to facilitate the alignment of national and Alliance capability development and it will enable earlier and more collaborative multinational procurement.

Connected Forces Initiative (CFI)

2.6. NATO's military effectiveness is a key enabler for the Alliance's credibility and political relevance in a constantly changing security environment. To maintain such effectiveness in support of political objectives, NATO requires high readiness forces optimized for agility, flexibility, and interoperability. These forces must be appropriately equipped, prepared, trained and ready to conduct a wide range of missions in any environment. At the Chicago summit, NATO Heads of State and Government committed to ensuring that Allies retain and improve the ability to work effectively together, and with partners. The financial situation of most nations, and the draw-down of troops from the operation in Afghanistan have only served to exacerbate the need for the Alliance to keep its forces connected and to build upon valuable gains in interoperability that have been achieved as a result of recent operations. In short, retaining the



best platforms means little without people who are trained and ready to operate them in an environment of cooperation with Allies and Partners.

2.7. The CFI allows Allies to act upon this commitment and represents one of the chief means by which NATO can maintain and develop the capabilities required to implement the Strategic Concept. As such, it is the Alliance's central framework for the future. CFI is a necessary part of an integrated set of programmes that also includes the enhanced NDPP, Smart Defence (SD), a new NATO Command Structure (NCS), and the other initiatives from the Lisbon and Chicago summits designed to improve the military efficiency and effectiveness of the Alliance, and leading to the achievement of the vision for NATO Forces 2020.

2.8. The CFI represents the primary way by which NATO will be able to field fully interoperable, high-readiness forces which are fit for the future. It consists of three pillars (education and training, exercises, and the effective use of technology) and proposes an Alliance-wide, multi-level, joint programme of exercises, executed under ACT's authority, over a three-year cycle. Synchronization of NATO exercises with those of nations, partners and other organizations is intended to maximise its efficiency and effect.



2.9. The CFI provides opportunities to preserve, capitalize on, and further develop the interoperability that has already been achieved, at considerable cost, over more than a decade of operations. Interoperability requires an ability to communicate using a common language and a common terminology. It requires interoperable equipment and effective doctrine and standards to allow nations to prepare forces to function in a multinational environment. Interoperability does not exist by chance or without cost; rather, it is built and maintained through continuous Alliance training and exercises which practise and test the integration of military capability.

2.10. The CFI Implementation Plan begins with a NATO Training Concept 2015-2020, which suggests how NATO can use education and training to build and sustain interoperability and readiness. It includes a series of building block exercises up to 2015 that are designed to prepare the NCS and NATO Force Structure (NFS) headquarters to conduct NATO-led operations. It also provides recommendations for a continuing series of exercises from 2016-2020, and details an action plan for the NATO high visibility exercise in 2015 that ACT and ACO, with NAC approval, have already begun to implement.

2.11. The NATO Response Force (NRF) will be a leading element for post-ISAF NATO and will, therefore, be a centrepiece of CFI. Thus, the CFI Implementation Plan proposes a continuum of actions to optimize the deployability, interoperability, operational effectiveness, readiness and transformational effect of the NRF. In addition, it addresses efforts to enable and enhance Special Operations Forces (SOF) interoperability through SOF-specific training and education, enhanced integration in exercises, and the use of human and technological networking.



2.12. The combination of NCS and NFS headquarters and units, and their exercising under demanding conditions, will provide a framework for the deployment and incorporation of modern, targeted technology to support operations and training. Similarly, linking national education, training and exercises to equivalent NATO activities to the greatest extent possible will emphasize interoperability and common standards. CFI seeks to connect Allied forces practically and intellectually in order to enhance and sustain interoperability, to connect NATO with others to facilitate interagency actions on operations in the modern environment within a comprehensive approach, and to connect with Partners to enable cooperative security in accordance with the Alliance's Strategic Concept.

2.13. The entire CFI effort, the importance of which was reiterated at the Wales Summit, is underpinned by the requirement for technological interoperability. The CFI Implementation Plan outlines how NATO can leverage technology to improve interoperability, education, training, exercises, the development of Federated Mission Networking and the optimization of capability demonstration and validation. Taken as a whole, the implementation plan provides a good framework to achieve the goals and objectives of CFI, incrementally over time. However, the success of the entire initiative will depend on a substantial commitment by the Allies themselves, particularly in terms of resources.

2.14. In the NATO context, CFI is everybody's business and for everybody's benefit. By making CFI a reality, ACT will help to reinforce the Alliance's commitment to sustained readiness and interoperability as a vital part of an integrated approach, and will help to maintain NATO's role as a source of stability, ready to safeguard the freedom, common values, and civilization of its peoples.

The NATO Defence Planning Process (NDPP)

2.15. The NDPP, which is a 4-year cycle, is the Alliance's framework for harmonizing national and Alliance defence planning activities to meet agreed capability targets in the most effective ways. It places ACT at the forefront of the rationalization and optimization of the design and development of current and future capabilities.

2.16. Although it might appear quite complex, particularly the derivation of the minimum capability requirements, the NDPP is very similar to other strategic planning processes. From a capability perspective, it establishes where we are and where we want to be as an Alliance in order to meet NATO's level of ambition. It identifies gaps and apportions requirements to Allies, based on the principle of fair burden sharing. NATO then facilitates its implementation, reviews progress and identifies risk areas. Successful implementation is dependent on Allies' defence spending to meet requirements and to cover the gaps. This is, of course, increasingly challenging given the current economic environment. A pictorial representation of the NDPP model is provided below:



2.17. ACT contributes throughout the five steps of the NDPP, and this effort can be summarized as follows:

- a. In Step 1 (Establish Political Guidance), ACT provides expertise and analytical support, through the Defence Planning Staff Team (DPST), to assess those military factors which could impact on the development of the required capabilities. It also supports the Defence Policy and Planning Committee and the Military Committee (MC) in formulating their advice to the North Atlantic Council (NAC) for the development of the political guidance. It is important that the MC continuously brings its expertise to this reflection so that the political guidance is translated into tangible and immediate courses of action, whatever the timeframe being considered. This military expertise is the key to supporting long-term actions and decisions as the capability development process moves forward, from the NDPP top-down, analytic approach to the SD projects supported by nations. The more coherent the Nations' initial shared intent is within the political guidance, the higher the chances are of delivering the relevant capability and saving money.
- b. In Step 2 (Determine Requirements), ACT takes into account any guidance deemed necessary from the MC, to lead the Bi-SC's effort aimed at identifying the complete set of capabilities necessary to meet the quantitative and qualitative ambitions set out in the political guidance for defence planning. This work is done through a transparent, traceable and analytical process where Nations are invited to observe the key milestones and decision points, within the framework of the NDPP. The output of this analysis is a single set of requirements across the DOTMLPFI (Doctrine, Organization, Training, Material, Leadership, Personnel, Facilities, Interoperability) lines of development, and associated shortfalls, from which ACT (with ACO in support) derives a set of priority shortfall areas.
- c. In Step 3 (Apportionment of Requirements and Setting of Targets), ACT initially leads the DPST to develop targets for existing and planned capabilities against the minimum capability requirements. ACT also leads the subsequent phase of initial apportionment of targets to nations, or to multinational or common funded initiatives. After initial discussion of the individual draft target packages with Allies, and with the NATO bodies responsible for addressing and considering the draft collective target packages, ACT hands over the leadership of DPST to the International Staff (IS), which further refines the packages. ACT, supported by ACO, contributes to the assessment of the potential risks associated with apportioned targets not being met, and the possible impact on the delivery of the Alliance's Level of Ambition. Step 3 is a good point at which to promote multinational approaches that offer cost-effective and efficient solutions to capability gaps, the implementation of which can be facilitated in Step 4.
- d. In Step 4 (Facilitate Implementation), ACT may be designated to take the lead of specific task forces, or have its staff assume the function of Capability Monitors, who keep themselves abreast of progress in the implementation of identified actions and report any divergences which would require remedial action (as directed by the Capability Development Executive Board). ACT also provides staff and expertise, as required, to any task force. Step 4, which is an ongoing process, is led by the nations with NATO being on hand to provide any additional help that may be required. SD projects that the nations have agreed to pursue are also implemented in this phase.
- e. In Step 5 (Review Results), ACT contributes to two NATO Capability Reviews through participation in the DPST. It also supports ACO in developing the Bi-SC Suitability and Risk assessment, on which the MC's Suitability and Risk assessment is based. The Reviews are important because they measure progress and assist the IS when they update the political guidance with Nations. They also assist all the different stakeholders during the ongoing implementation work detailed in Step 4.

2.18. The current NDPP was introduced in 2009 and has progressed through its first cycle. Recognizing opportunities for improvements to the process, and the results that it delivers, Allied Heads of State and Government decided to enhance the NDPP process, the aims being to improve responsiveness (whilst preserving the focus and validity of the military requirement) and high-level visibility (providing a strategic understanding of the risks associated with unfilled capability targets). This work is continuing, with improvements being implemented for the second planning cycle which commenced in 2014. Implicit in this enhancement is a deeper connection between the NDPP and all capability building initiatives, such as SD, CFI and the Framework Nations Concept (FNC), the desired outcome being an increased emphasis on multinational solutions to capability requirements.

2.19. Regarding NDPP enhancement, ACT continues to propose innovative options for capability development along three lines of effort. The first strand of work pertains to refining the process, focusing on improving the visibility and clarity of the outputs for the nations, particularly at the political level. The second strand of work aims to improve the relevance of products to best support the Alliance and nations in their decision-making. The final strand relates to a deliberate effort to extend the planning horizon, with a view to enabling the Alliance to be better prepared in the long-term (ACT's SFA and FFAO work are good examples of how contributions can be made here).

2.20. The development of any lengthy process is challenging in a large organization such as NATO. For the NDPP, balancing intellectual rigour and ease of high-level understanding in the requirements derivation process is always a challenge. The issue of burden sharing, while broader than the NDPP, is another. But perhaps the biggest challenge is the collective ability to match the NDPP to short-notice and unexpected political and military demands, whilst simultaneously preparing the delivery of future capabilities.

2.21. In sum, however, today's NDPP provides the nations with a robust planning mechanism within a very complex strategic environment. The majority of nations are very supportive of this process and some have even adopted it as their principal national defence planning tool. Furthermore, many nations are increasingly aligning their medium and long-term development plans with the NDPP.

Smart Defence (SD)

2.22. Launched in the wake of the Lisbon Summit, and championed again at the Wales Summit, NATO SD promotes and supports Allies working together to maintain and build required capabilities that increase NATO's effectiveness. It is an example of how NATO is addressing fiscal realities in a way that is critical to the transatlantic relationship. SD is backed by a vision, action and leadership to implement a multinational cooperation mindset. From the outset, SD was built with, and for, Allies with commitment at the highest political levels. In solidifying a SD mindset across the Alliance, it is important to remember that SD is guided by a bottom-up approach with a 'from the nations, for the nations' spirit. This nation-led approach is balanced with the Alliance-led NDPP by alignment with NDPP targets, when appropriate.

2.23. The SD vision is to help Allies identify and pursue multinational capability development opportunities to address both Allies' and NATO's priorities through a phased continuous approach, examining what can be achieved in the short, medium and long-term.

- a. Short-term projects focus on practical and achievable outcomes (training-concept-doctrine-best practices-maintenance-logistics).
- b. Medium-term projects propose a coherent approach to take a second look at shortfalls and risk areas and identify options for Allies.
- c. Long-term projects address major procurement programmes of large scope and scale that will benefit from short and medium-term efforts to build trust and confidence working together. Early synchronization of intent, especially requirements, programmes, and the provisional budget is essential to enable cooperation for projects of this dimension.

2.24. Heads of State and Government established NATO Forces 2020 as the Alliance's capability focal point. The NDPP is the primary means to achieve NATO Forces 2020, and SD reinforces the importance of Allies working together to achieve this goal. SD brings increased political visibility and impetus to important capability areas. The SD portfolio was developed in conjunction with the NDPP, but also allows Allies to develop proposals based upon their own national goals. Alignment of relevant SD projects with NATO's capability requirements ensures that multinational solutions support Alliance goals.

2.25. The NATO Secretary General leads SD through his two Special Envoys (the Deputy Secretary General and SACT), who are the driving forces behind the SD initiative. They work with Allies to garner support for new ideas and, at the same time, seek to maintain momentum for existing SD projects that are linked to unfilled NDPP targets. Experience has shown that even the most basic ideas can take two or three years to socialise before a project can be formally initiated. This is why political ambition, high-level leadership and facilitation are of paramount importance to SD project success. NATO's role in the SD process is to help Allies identify practical areas for cooperation and to facilitate progress. In steady state, this function could be overseen in planning domains by NATO committees who are well placed to harmonize multinational solutions with NATO requirements, act as a clearing house to discuss proposals, set priorities, develop new ideas, and share lessons learned.

2.26. The association of SD with the NDPP (during Step 3 Target Setting and Apportionment) has proven to be extremely effective. By institutionalizing SD principles as an organic part of the NDPP Step 3, ACT provides Allies with an opportunity to discuss SD and multinational solutions that focus on unfilled or partially filled targets and Alliance or national priority shortfalls. SD also facilitates the creation of Planning Domain "marketplaces", where Allies can begin to discuss multinational solutions to future requirements and better enable multinational apportionment. Such marketplaces promise to help to sustain SD in future cycles of the NDPP.

2.27. There are several factors that will likely influence the future success of SD, not least NATO's ability to recognize Allies' future planning goals, budget limitations and project expectations. The assured availability of multinational capabilities is also a concern of many Allies, although this is mitigated because availability risk is always considered when determining specific areas. The crucial role of the Special Envoys in promoting SD and providing it with long-term sustainment should not be underestimated; this work includes the development of ideas to promote cooperation amongst regional groupings and other communities of interest. Finally, and what might be the most critical to SD's lasting impact and success will be the degree of synergy that it can achieve with the EU's Pooling and Sharing initiative, a view often expressed by political and military leaders.

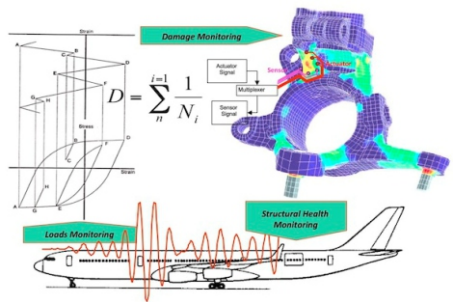
Science & Technology

2.28. The NATO Science and Technology Organization (STO) was established in July 2012, the fundamental premise being that science and technology (S&T) knowledge, expertise and advice are crucial inputs for transformation, not just for the capability development effort but also across the whole DOTMLPFI¹ spectrum. With this premise in mind, ACT seeks to influence S&T activities, contribute to their development and exploit the results in the most cost-effective manner.

2.29. The Alliance requires S&T in order to maintain its military advantage. For example, the massive use of UAVs in recent conflicts is currently challenging doctrines and military organizations. As computer capabilities, artificial intelligence and robotics develop, many other challenges will have to be addressed. Furthermore, modeling and simulation seem set to revolutionize training. Given this background, S&T is vitally important to ACT, in terms of both stimulating and driving transformation.

2.30. At the SC level, SACT has the lead (in conjunction with other stakeholders such as ACO and the Office of the Chief Scientist of the STO) for the development of requirements during Stage 2 of the NDPP, and is responsible for articulating these to the STO. As a major customer of the NATO Communications and Information Agency and the Centre for Maritime Research and Experimentation, ACT is obliged to define the requirements for requested work and the expected outputs from both of these customer-funded organizations.

2.31. Within the framework of the IMS S&T Consolidated Action Plan, ACT's role is to support the IMS in advocating NATO S&T requirements. This is achieved through the NDPP process, which identifies areas where the S&T community should explore unknown capabilities and capability elements. Once the NATO S&T priorities are determined, STO's role is then to encourage the national initiatives, addressing those priority requirements, and to coordinate related multinational initiatives. In this way, the same activity



can support national capability development and inform decision-making in the NATO collective capability development process. In other words, the STO seeks to deliver more for the same investment. Further information on the STO can be found at: <http://www.sto.nato.int/>

The NATO Lessons Learned Process

2.32. Continuous improvement, a form of transformation, occurs when individuals and organizations apply their experiences and practical knowledge to avoid repeating mistakes or help others avoid those same mistakes. Improvement also occurs when best practices are shared throughout an organization or with other organizations. Learning from operations, training, exercises and other events enables continuous

¹ Doctrine, Organization, Material, Leadership, Personnel, Facilities, Interoperability.

improvement across NATO, and the mechanism for sharing experiences and knowledge is known as the LL (Lessons Learned) capability. LL is a major driver for transformation although, in itself, it should not be considered as the final step of a process; the real value of lessons lies in their exploitation as inputs for better performance in current and future activities.

2.33. As indicated in Chapter 2, ACT has the lead for the overall NATO LL process and for building and sustaining the LL capability within NATO. In HQ SACT, the Innovation, Doctrine and LL Branch is responsible for coordinating LL with subordinate and higher HQ entities; it also coordinates all LL-related issues at the strategic level with SHAPE, and prepares the Joint Analysis and Lessons Learned Centre (JALLC) Programme of Work every six months in close cooperation with SHAPE and the JALLC. The JWC and JFTC support the LL capability through recording, implementing and disseminating best practices and LL products from training and experimentation, exercises and doctrine development.

2.34. In order to develop and maintain a NATO LL Community of Interest and provide an opportunity for NATO bodies and organizations to consult and coordinate on multilateral LL-related efforts, there is a NATO LL working group comprising LL Staff Officers from the Headquarters of the NATO Command Structure. Beyond this working group, the LL Community of Interest is also open to non-NATO nations and organizations who wish to work with NATO and to benefit from the information available on the NATO LL Portal. Examples include Centres of Excellence, the European Union and the United Nations.

2.35. The key sharing tool for NATO LL information is the NATO LL Portal, managed by the JALLC, which resides on both the NATO classified network and in an unclassified version on the internet. The information and knowledge sharing area of this portal serves as a sharing platform for many documents that can be used for improving NATO capabilities and procedures, such as operational reports, final exercise reports and directives. The portal also hosts various communities of interest and allows for exchange of opinion and discussion.

Accession & Integration

2.36. The addition of a new member nation to NATO is clearly a transformational event. ACT, supported by SHAPE and the Joint and Single Service Commands, leads the practical aspects of accession and integration into the NCS and NFS for new member nations (in the military realm) from the time they attain invited nation status until the completion of the requirements for integration.



2.37. The process of introducing a new member nation has four phases:

- a. Membership Action Plan (MAP). The MAP is a NATO programme of advice, assistance and practical support tailored to the individual needs of countries aspiring to join the Alliance. Whilst the IS has overall responsibility, ACT and ACO collaborate in the process, providing and coordinating military activities in the Planning and Review Process framework.

b. Accession. The practical accession activity, which occurs post formal invitation, provides new member nations with the tools required for interoperability within the Alliance. This includes the provision of appropriate publications, equipment and the training required to use them.

c. Integration. Integration is initiated by the formal invitation to sign the Washington Treaty, and new member nations are provided with training, seminars and conferences geared towards enabling them to fully function within the Alliance. Specifically, assistance is provided to help nations achieve capability targets and declared forces affirmation status.

d. Transformation. The transformation process often commences before the MAP programme, and continues through, and beyond, completion of the nominal three-year accession and integration process. New member nations are assisted in understanding and participating in the NDPP, under the guidance of ACT, and in cooperation with the IS and SHAPE.

2.38. A key part of accession and integration activities is the review, and revision, of national documentation because, although a national preserve, joining NATO will have fundamental effects on a nation's defence institutions. In this respect, ACT leads NATO's efforts in guiding new member nations to develop their own integration plans, and providing support in reviewing their strategic document sets.

Chapter 3: Transformation – Cooperation, Interaction & Engagement

3.1. Cooperation, interaction and engagement are closely related to efforts that enhance NATO's ability to contribute to a comprehensive approach, and have a key role in influencing the future transformational environment. ACT has a history of interaction with other NATO entities, partners and organizations and, through building these relationships, it is able to work more efficiently and effectively to synchronize those efforts, avoid duplication and ensure that activities are complementary. This Chapter seeks to highlight those main entities with which ACT has its key relationships, with which it shares common interests and which, through cooperation, interaction and engagement, help ACT to fulfil its transformational mission.



Nations

3.2. ACT's chief customers are, of course, the Alliance Nations themselves, with whom it engages through the NATO Command Structure (NCS) and NATO agency structures, and through a complex, interconnected network of committees, groups, projects and work strands. However, one particularly good example of practical and pragmatic interaction with the Nations is ACT's formal collaboration programme with national Chiefs of Transformation (COT).

3.3. ACT has been using the COT network for many years to align NATO's transformational vision with that of the nations. Such collaboration has substantially multiplied opportunities for interaction with transformational counterparts within the nations and with other entities across the globe. The main goals of the network are to discuss and explore transformational ideas, initiatives and priorities, exchange best practices, share lessons learned and identify potential areas of cooperation. Some of the more important HQ SACT projects and focus areas were initiated from COT discussions, based upon early identification of critical priorities. For example, post-ISAF challenges (now called CFI), Innovative Capability Development (now called SD), and Futures and Foresight (now called SFA & FFAO) were all initiatives identified and moved forward by the COT programme of work. Furthermore, the Nations Engagement Team concept also stemmed from a proposal from this group.

Partner Nations

3.4. In a changing, globalized world, NATO is more than ever affected by events that happen far from its constituent borders. The 9/11 attacks and the subsequent attacks in Istanbul, Madrid, London and Paris highlighted this, and showed that distance was no protection. Similarly, global prosperity depends more and more on the free and safe circulation of goods, people and information, but this surge in international trade has also created new vulnerabilities. Many of these materialize in environments that are beyond the reach of any single nation, such as the high seas, international airspace, outer space and cyberspace. As a consequence, NATO can no longer live as if it were a self-sufficient organization which, to a degree, it may have been during the Cold War.

3.5. These are some of the reasons why, from a transformational perspective, ACT (and NATO) must engage with Partner nations. The Strategic Concept not only recognised this, but dedicated unprecedented attention to strengthening NATO's partnership frameworks. This was further reiterated at the Wales Summit with the launching of the Defence Capacity Building initiative, which will help to reinforce NATO's commitment to Partner nations and will also contribute to projecting stability without projecting large combat forces. The initiative focuses on providing advice, assistance, support, training, education and mentoring activities in the defence and related security sector. Finally, military partnerships are part of Cooperative Security, which constitutes one of the three core tasks of NATO.

3.6. ACT engages with many countries as Partners through a series of initiatives, or networks. These include: the Euro-Atlantic Partnership Council and the Partnership for Peace (PfP); the Mediterranean Dialogue (MD); the Istanbul Cooperation Initiative (ICI); and the Partners across the Globe (PatG). All these frameworks provide NATO with forums for international dialogue and political support and a great potential for achieving economies of scale that can lead to savings on research and development costs, efficiencies in maintenance and improved logistics. Partners, through training and operational cooperation, and continued dialogue, enable NATO to achieve its strategic objectives. These include enhancement of the Transatlantic Bond and the promotion of international peace, security and stability, through regional security and cooperation, and the support for NATO-led operations and missions.

3.7. The Military Partnership Directorate (MPD) has developed a military cooperation methodology that ensures a 'requirement to delivery' integrated approach to Partners, and which consolidates military partnership planning. This has been integrated into a series of tools and mechanisms, which include Country Specific Plans, clearly identifying and prioritizing the Partners' agreed military goals, and their respective roadmaps. All partnership programmes, tools and activities are, by default, open to all Partners who have an established partnership framework with NATO. Each Partner nation's agreed objectives with NATO are approved by the NAC through the Individual Partnership Cooperation Programme.

3.8. **Partnership for Peace (PfP).** When the PfP was launched in 1994, it represented a significant advancement in NATO's partnership programmes. Twenty-two countries are currently members of the programme (Armenia, Azerbaijan, Belarus, Georgia, Kazakhstan, Kyrgyzstan, Moldova, Russia, Tajikistan, Turkmenistan, Ukraine,

Uzbekistan, Bosnia-Herzegovina, the Former Yugoslav Republic of Macedonia², Montenegro, Serbia, Austria, Finland, Ireland, Malta, Sweden and Switzerland). A Special Relationships (SR) framework has been established within the PfP framework for NATO-Ukraine, NATO-Russia and NATO-Georgia relations. NATO has determined that these three Partner nations warrant more targeted attention as a result of their strategic importance to the Alliance. SR countries receive this additional attention in the form of meetings in special formats such as MC + SR Partner, and by managing their cooperation in special, more labour-intensive instruments such as their NATO work plans, which extend beyond the PfP menu of activities.

3.9. **Mediterranean Dialogue (MD).** The MD was established in 1994 and, during the Istanbul Summit (2004) it was decided to elevate it to a partnership with a more ambitious and expanded framework, achieving interoperability, supporting defence reforms and contributing to the fight against terrorism. The overall aim is to contribute to regional security and stability, and achieve better mutual understanding through enhanced practical cooperation. Seven countries are currently members of the MD programme (Algeria, Egypt, Israel, Jordan, Mauritania, Morocco and Tunisia).

3.10. **Istanbul Cooperation Initiative (ICI).** The ICI, launched at the NATO Summit in June 2004, aims to contribute to long-term global and regional security by offering countries of the broader Middle East region practical bilateral security cooperation with NATO. ICI focuses on practical cooperation in areas where NATO can add value, notably in the security field. Six countries of the Gulf Cooperation Council were initially invited to participate and, to date, four of these - Bahrain, Qatar, Kuwait and the United Arab Emirates - have joined. Saudi Arabia and Oman have also shown an interest in the initiative. Based on the principle of inclusiveness, the initiative is open to all interested countries of the broader Middle East region who subscribe to its aims and content, including the fight against terrorism and the proliferation of weapons of mass destruction.

3.11. **Partners across the Globe (PatG).** As security has become increasingly a global issue, NATO has strengthened its efforts to establish a global network of partnerships alongside its traditional frameworks. One of these is the PatG, which currently has a membership of eight nations with an established partnership programme with NATO (Afghanistan, Australia, Iraq, Japan, Mongolia, New Zealand, Pakistan and Republic of Korea). Most of the PatG members were involved in ISAF, either as an Operational Partner or with a non-operational contribution (eg trust fund).

3.12. **Partner Training and Education Centres (PTECs).** APTEC is a nationally or multi-nationally sponsored facility, recognized by NATO, which conducts education and training activities relating to NATO partnership programmes and policies. These activities are open to Allies and Partners. Recognition of a national training and education facility as a PTEC is subject to a decision by the NAC. Since 1999, PTECs have played an essential role in supporting NATO/PfP objectives. The concept was extended to the MD and ICI nations in 2008 and, to date, 23 institutions have joined the network (including 3 MD centres).

3.13. ACT assists NATO HQ in the PTEC accreditation process by providing subject matter expertise support, building on the experience of the NATO School and the existing Centres. ACT also provides support and guidance to the Centres to ensure that their education and training activities reflect NATO standards.

²Turkey recognizes the Republic of Macedonia with its constitutional name.

International Organizations/Non-Governmental Organizations (IOs/NGOs)



3.14. The definition of together must, by necessity, be as inclusive as possible and incorporate the vast number of non-military and often non-governmental partners with whom NATO forces must learn to work. It is inconceivable to imagine any security crisis being solved through a wholly military solution. Conversely, it is difficult to conceive of any severe crisis that would not require military intervention. The key message is the imperative to make the Comprehensive Approach (CA) an integral

part of the way NATO thinks and, through close collaboration with IOs and NGOs (specifically the European Union [EU], United Nations [UN] and the International Committee of the Red Cross [ICRC]), ACT is particularly well-placed to help NATO achieve this.

3.15. **European Union (EU).** The most obvious start point for leveraging ACT's relationship with IOs is with what the Strategic Concept describes as NATO's 'unique and essential partner', the EU, which is the only international organization with a full spectrum of military, financial, civilian and political capabilities. Sharing strategic interests, NATO and the EU cooperate on issues of common concern and work side-by-side in crisis prevention, crisis management, capability development and political consultations. The two organizations share a majority of members, all of whom share common values. The Allies underlined their determination to improve the NATO-EU strategic partnership at the Lisbon Summit in 2010, and this intent was reiterated at the Chicago Summit in 2012, particularly in the context of the current environment of austerity where nations cannot afford to waste limited resources through a lack of coordination between both organizations.



3.16. The EU is itself engaged in its own initiative to promote the pooling and sharing of capabilities, and this has the continuing potential to be mutually reinforcing with SD. With 22 nations being members of both the EU and NATO, transforming in one organization will inevitably have benefit in the other. For example, ACT's engagement with the EU Military Staff has been extremely helpful in reducing overlap and enhancing coherence where it makes sense in capability and concept development. ACT has also developed informal contacts with the European Defence Agency (EDA). Close cooperation between ACT and the EU is also an important element in the development of an international CA to crisis management and operations, which requires the effective application of both military and civilian means.

3.17. **United Nations (UN).** As with the EU, NATO and the UN share a commitment to maintaining international peace and security. The two organizations have been cooperating in this area since the early 1990s. At the Chicago Summit in 2012, NATO Heads of State and Government reiterated commitments to continue enhancing cooperation with the UN through political dialogue and practical cooperation. The UN is at the core of the framework of international organizations within which the Alliance operates, a principle that is enshrined in NATO's founding treaty.



3.18. UN Security Council resolutions have provided the mandate for NATO's operations in the Western Balkans and in Afghanistan, and the framework for NATO's training mission in Iraq. More recently, NATO's operation to protect civilians and civilian-populated areas under threat of attack in Libya was carried out in support of UN Security Council Resolution 1973. NATO has also provided support to UN-sponsored operations, including logistical assistance to the African Union's UN-endorsed peacekeeping operations in Darfur, Sudan and Somalia, support for UN disaster-relief operations in Pakistan, and escorting merchant ships carrying humanitarian supplies off the coast of Somalia. Over the years, however, NATO-UN cooperation has extended beyond operations to include consultations between NATO and UN specialized bodies on issues such as crisis assessment and management, civil-military cooperation, training and education, logistics, combating human trafficking, de-mining, civilian capabilities, women and peace and security, arms control and non-proliferation, and the fight against terrorism.

3.19. While NATO Headquarters is responsible for the policy aspects of these relationships, both ACT and ACO implement these policies at the practitioner level, particularly in relation to education, training and exercises, sharing best practices, collaboration on developing capabilities of common interest, and mechanisms for cooperation in operations. ACT's work has also been valuable in the areas of logistics, medical, LL, Children and Armed Conflict and gender, particularly in the development of core training courses. This cooperation has helped to facilitate the sharing of perspectives and promote mutual trust.

3.20. **International Committee of the Red Cross (ICRC).** In 2005 the ICRC, ACT and ACO signed a Memorandum of Understanding to consolidate interaction in terms of training, education, exercises, operational dialogue and commonly identified LL. Fully respecting the ICRC's status as an impartial, neutral and independent organization, the MOU allows ACT and ACO to exchange information with respect to its policies, concepts, doctrine, activities and lessons learned. It also allows ACT to invite ICRC representatives to participate as speakers and students at NATO's education and training institutions, and to provide specialist assistance during the planning and conduct of NATO exercises. This is a very valuable relationship which assists NATO because it explores different perspectives and seeks to gain an understanding of other organizations' mandates, roles and objectives.

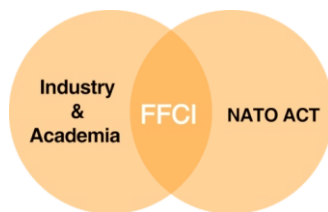


Industry

3.21. ACT has developed a transformational tool, the Framework for Collaboration with Industry (FFCI), which provides a legally approved mechanism to foster collaboration with both Industry and Academia. FFCI aims to support capability development and associated efforts in a non-procurement manner, leveraging the expertise of all parties to develop better, faster and more affordable capabilities. This kind of collaboration is not a permanent partnership with a particular company, but is a time-limited and result-oriented activity.

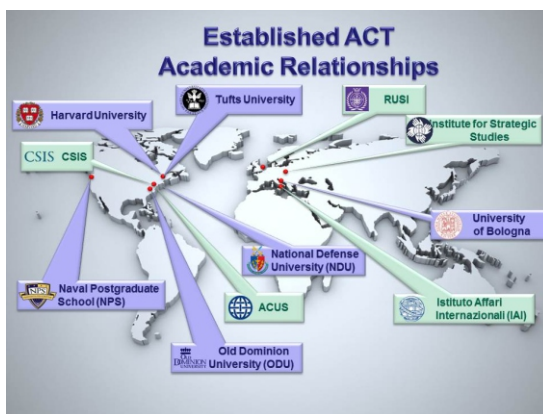
3.22. The FFCI promotes a culture that respects the principles of transparency, positive partnering, fairness, and openness. The initiative was based on the fact that a significant part of innovation comes from research accomplished in companies and universities. The funding of activities is based on the principle that costs lie where they fall and, thus far, ACT has engaged with over 50 companies such as Astrium, Dell, Thales, IBM, Lockheed Martin, Boeing and Finmeccanica.

3.23. An Office for Collaboration with Academia and Industry (OCAI) has been established in ACT to oversee the implementation of FFCI, guarantee compliance with its principles and ensure overall coherence of engagements across ACT. Collaborative projects have been implemented in the domains of Cloud Computing, Medical Information Services and Medical Support, Countering Hybrid Threats, Modelling and Simulation, and Logistics and Geographical Information Services. ACT has also initiated a number of information exchange activities on the topics of Cyber Defence, Missile Defence and Joint Intelligence, Surveillance and Reconnaissance. FFCI engagements are clearly demonstrating their benefits in terms of informing industry's and ACT's thinking and capability development processes.



Academia and Think Tanks

3.24. As a further means of both informing and supporting the transformational effort, ACT has developed strong ties with the US and European Academic and Think Tank community. The University of Bologna, the Institute of International Affairs in Rome, the Royal United Services Institute in London, and the plethora of Think Tanks in Washington all provide an invaluable source of intellectual capital and objectivity for the Alliance, especially in areas such as strategic concept development, experimentation, and exercises and training.



3.25. ACT's Academic Outreach programme enables it to engage with academia to gain an understanding of issues and regions, particularly those beyond NATO's traditional areas of expertise. Through this programme, ACT has built an academic network that provides a trusted pool of subject matter experts and which serves as a valuable asset to the Alliance.

NATO Education and Training Facilities (NETFs)

3.26. **NATO Defense College (NDC).** At the strategic level, the NDC in Rome, Italy, is NATO's premier academic institution. It contributes to Alliance objectives through its role as a major centre of education, study and research on transatlantic security issues. Although it is an agency of the MC, it has a formalized relationship with ACT through a Memorandum of Agreement, whose overriding goal is to enable both parties to develop and maintain a close liaison, so that curriculum planning and development benefit from, and are consistent with, ACT's transformation mission and the NDC's strategic mission.

3.27. The NDC's main tasks are to help prepare both civilian and military leaders for senior appointments within NATO, conduct outreach activities directed at partner nations, and provide fresh perspectives to NATO's decision-makers. Its key courses are: the Senior Course, a five-month course designed to prepare staff officers for key NATO appointments; the Integrated Partner Orientation Course; the NATO Regional Cooperation Course, which links issues of importance to the broader Middle East region with the wider international community; and the Generals, Flag Officers and Ambassadors Course, which provides senior officials with an opportunity to discuss the Alliance's key issues.

3.28. The NDC also has a Research Division, which provides a vital link to other defence institutions, and which publishes a wide variety of research papers. ACT is able to leverage the expertise from this Division by requesting inputs to its programme of work. Further information on the NDC can be found at: <http://www.ndc.nato.int/>

3.29. **NATO School in Oberammergau (NSO).** The NSO, in Germany, is a bilateral cost-sharing venture between the United States and Germany, with no direct command relationship with ACT. It is NATO's key operational-level training facility, providing short-term, multidisciplinary training tailored to military and civilian personnel from NATO, PfP, MD, ICI and other global partners. In addition, it serves as a facilitator for the harmonization of the programmes within the PTECs.

3.30. The mission of the NSO is to conduct education and training in support of current and developing NATO strategy, policy, doctrine and procedures. It also has an important role supporting individual education as a precursor to NRF battle staff and combined training, in coordination with the NATO Joint Warfare Centre. NSO offers over 100 different courses, ranging from comprehensive operations planning to leadership training, network security and predeployment training.

3.31. NSO's guiding principles are to: support operations by educating and training individuals; assist NATO's transformation efforts by helping to create a flexible, deployable, networked and sustainable military force to meet Alliance tasks; support NATO's Partnership and Cooperation Programmes by making courses available to NATO Partners; and support NATO's Political-Military initiatives by improving relationships and interaction with nations and regional and international organizations. Further information on the NSO can be found at: <https://www.natoschool.nato.int/>

3.32. **NATO Maritime Interdiction Operational Training Centre (NMIOTC).** Based in Souda Bay, Greece, the NMIOTC is a multi-nationally manned facility, whose mission is to conduct the combined training necessary for NATO forces to better execute surface, sub-surface, aerial surveillance, and special operations activities in support of

Maritime Interdiction Operations (MIO). Its goal is to establish its position as the unique NATO expert in MIO and to further enhance maritime security through MIO training, simulation and experimentation.

3.33. Its training activities include but are not limited to: tailored theoretical and practical training to naval units; tailored practical training to specialized MIO, maritime law enforcement and special forces teams; course development, including advanced distributed learning courses; participation in NATO exercise planning and execution; provision of mobile training teams; and defence experimentation. The Centre also provides specialized operational and predeployment training for naval units and personnel participating in NATO's maritime operations. Further information on the NMIOTC can be found at: http://www.nmiotc.gr/#home_en.htm

3.34. **NATO Communications and Information Systems School (NCISS).** Currently located in Latina, Italy (but moving to Oeiras, Portugal, in 2016/17), the NCISS provides advanced training for civilian and military personnel from both NATO and non-NATO nations in the operation and maintenance of the Alliance's communications and information systems. The School trains approximately 4,000 students per annum and conducts courses in nearly 100 differing CIS specialities, including some that are distance-learning based. The future vision for the NCISS is one that reflects the convergence of communications and information systems and a potential to become a Command, Control, Communications and Computer, Intelligence, Surveillance and Reconnaissance (C4ISR) COE. Further information on the NCISS can be found at: <http://www.nciss.nato.int/>

Centres of Excellence (COEs)

3.35. A NATO COE is a nationally or multi-nationally sponsored entity (funded at no cost to NATO), which offers recognized expertise and experience to the benefit of the Alliance, especially in support of transformation and in those areas that are underdeveloped in the NCS, thereby helping to fill capability gaps. In 2005, the first COE was accredited and, to date, 20 Centres have been accredited (others are in the various stages of accreditation). A COE is not part of the NATO Command Structure, but forms part of the wider framework supporting NATO command arrangements. ACT forms its relationships with COEs through specific MOU arrangements developed between the Sponsoring Nations and with NATO.

3.36. There are many reasons why a nation might decide to offer a COE to NATO. One of the most common ones is to contribute to NATO while, at the same time, being able to directly benefit one or more nations. COEs provide opportunities to enhance education and training, improve interoperability and capabilities, assist in doctrine development, test and validate concepts through experimentation, and contribute to the Analysis and Lessons Learned process. Additionally, they often facilitate access to academia and industry without some of the limitations imposed elsewhere. ACT's Transformation Network Branch (TNB) is responsible for overall COE coordination and employment within NATO, in coordination with ACO.

3.37. TNB's management duties include the establishment, accreditation and periodic assessment of the Centres, as well as the day-to-day coordination. The branch also represents NATO positions and provides advice to COE Sponsoring Nations. Requests for support and NATO inputs to COE Programmes of Work are the primary tool

for the coordination of COE activities, and a prioritized list is developed and submitted annually to each COE. ACT has also assigned its Flag and General Officers as functional counterparts to the COE Directors in order to better leverage COE capabilities and provide the Directors with a defined strategic point of contact.

3.38. NATO COEs are well placed to sustain and increase their value to the future NCS, especially in light of decreasing resources within that structure. COEs remain at the forefront of NATO's collective efforts and are representative of the principles and advantages of Smart Defence. As nations consider how to face future threats, and to balance the challenges of continued interoperability under fiscal constraints, they are increasingly viewing COEs as proven models for multinational solutions. Further information on NATO COEs can be found at: <https://portal.transnet.act.nato.int> (register or login and then select Centres of Excellence under My Community Links).

Multinational Collaboration/Regional Groupings

3.39. Regional and functional frameworks can complement formal structures of partnership with limited arrangements based on common goals and interests. They enable the Alliance to take advantage of regional skills, capabilities and knowledge that are resident within institutions and can increase the financial and operational efficacy of participants. Indeed, a project launched under the auspices of NATO can very well include non-NATO nations. An example of this is Nordic Defence Cooperation, which associates two non-NATO EU Scandinavian nations with two NATO ones, only one of which is itself a member of the EU.

3.40. Further examples of established multinational frameworks include the BENELUX³, Visegrad 4⁴, and US-Adriatic Charter⁵ groups of nations. Again, such frameworks offer the potential for ACT to leverage regional expertise and initiatives for a broader, NATO-wide benefit.



³ Belgium, Netherlands, Luxembourg.

⁴ Czech Republic, Hungary, Poland, Slovakia.

⁵ Albania, Bosnia-Herzegovina, Croatia, the former Yugoslav Republic of Macedonia, Montenegro, USA (Turkey recognises the Republic of Macedonia with its constitutional name.)

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Chapter 4: Transformation – The Transatlantic Bond

“The transatlantic bond between North America and Europe is the bedrock of security in Europe and in North America.”

- Anders Fogh Rasmussen, NATO Secretary General, 26 March 2014

4.1. NATO is by definition a transatlantic relationship. The maintenance of that relationship remains essential to sustaining Alliance security and stability, and for addressing new challenges and opportunities around the world. It has been the driving force for peace and security in the past, and will likely remain the key to Alliance security in the future. As NATO's only strategic command on US soil, ACT has a special role to play as the voice of the Alliance, maintaining close ties with US and Canadian military entities to ensure that they remain aware of NATO's interests (including the Pentagon, where ACT has its dedicated liaison officer), and promoting consistent interaction and information exchange.



4.2. Because of its location and mission, ACT is well positioned to deliver NATO's transformational message to North American politicians, military leaders and public audiences, and to convey reciprocal US perspectives across the Atlantic to Europe and NATO HQ. Furthermore, it is able to facilitate engagement between academia, industry and national organizations on both sides of the Atlantic.

4.3. ACT's Transatlantic Bond Engagement Plan is coordinated and conducted for SACT by DCOS SPP. It is part of the Outreach and Engagement programme and it seeks to achieve the following:

- a. Establish and maintain effective staff-to-staff relationships with key US and Canadian entities that work on NATO issues.
- b. Establish and maintain consistent and continuous information exchange and provide factual and responsive information to US and Canadian entities on current and planned ACT and NATO initiatives and projects.
- c. Facilitate and support SACT and ACT senior leader engagement with US leadership and institutions.
- d. Provide regular feedback to NATO Headquarters and leadership and integrate feedback into ACT work as applicable.
- e. Through action, continuously and effectively affirm the role and mission of NATO to US and Canadian entities.

4.4. For ACT, the concept of sharing responsibility among Allies transforms what was a transatlantic link into a transatlantic bond. By harmonizing the political and military instruments of power of all the Nations to support overall Alliance security, as well as the security of its individual Nations, the Alliance creates a bond that is stronger and more enduring than a mere link. ACT supports this effort by improving target setting through the enhanced NDPP, fostering a responsibility mindset across the Alliance, and delivering military advice on cooperative initiatives.

Conclusion

In over six decades of providing security to the Euro-Atlantic area, NATO has consistently transformed in response to evolving strategic conditions and, in recent years, it has engaged in some of its most demanding operations. The increasing need for its forces to be multinational and joint by design, deployable wherever and whenever needed, and coherently interoperable in thought and action drives this process ever forward. Now involved in a new wave of reform and transformation, with a necessary focus on cost-effective solutions to mitigate the growing pressure on defence budgets, the looming challenge for NATO will be to develop and maintain the necessary capabilities, readiness and interoperability with which to anticipate and respond to strategic surprise and the emerging challenges of the 21st Century. In this respect, and as this narrative has illustrated, ACT will continue to have an extremely important role to play.

It should always be remembered that transformation occurs within the nations. Over time, however, and with the indispensable support of the 'family' of NATO entities, agencies and myriad of other stakeholders, ACT has established a proven and effective network connecting national transformation efforts, especially in the areas of futures work, capability development, and education and training. This combined effort has enabled ACT to position itself squarely as NATO's hub and honest broker for the coordination of all transformational activity, helping to create a more resilient Alliance. It has also served to deepen the Alliance's collaboration with a wide range of security partners, sharing lessons learned, best practices and processes, and aligning and synchronising efforts with organizations such as the EU and UN.

This Publication is not intended to capture each and every activity within ACT's broad portfolio. However, it has been designed to provide the reader with a clearer sense and understanding of the transformation message, and of ACT's role in the broader military transformation arena. Just as important, it is also intended to be a source of valuable information for the growing audience of transformational actors and entities, and a springboard from which they might explore further avenues to assist transformational efforts.

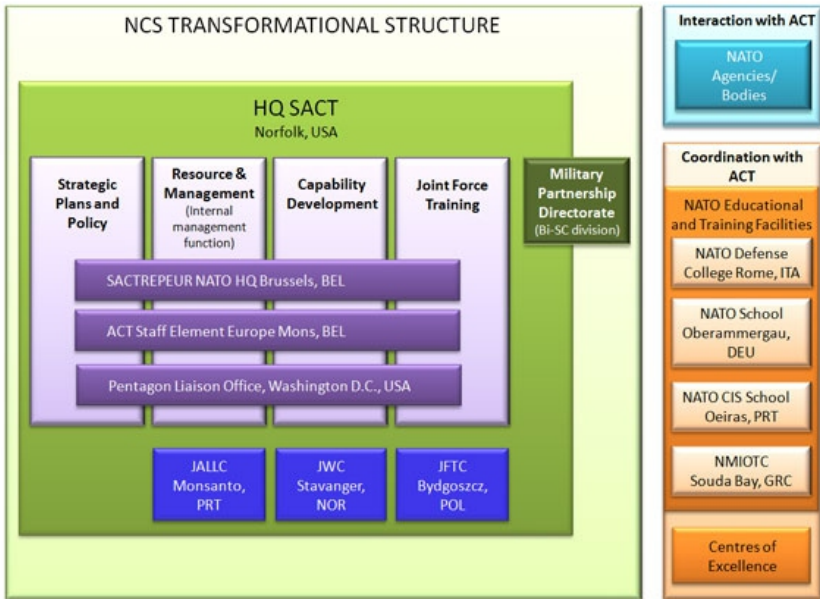


Annex A – The ACT Command Structure

A.1. This Annex seeks to provide further context in terms of highlighting those functional elements, within the ACT Command Structure, in which the delivery of ACT's transformational mandate is vested.

A.2. ACT was created as part of the reorganization of the NATO Command Structure (NCS) in 2002. This was the first time a separate strategic command was dedicated to transformation, demonstrating the importance placed by Allies on the role of transformation as a continuous and essential driver for change that would ensure the relevance of the Alliance in a rapidly evolving global security environment.

A.3. ACT is organized around three principal functions: strategic planning; the development of capabilities; and education and training. These three pillars permeate the overall architecture of ACT, which is composed of the Norfolk Headquarters (Headquarters Supreme Allied Commander Transformation [HQ SACT]) and three entities subordinated to SACT: one in Norway (Joint Warfare Centre [JWC]), one in Poland (Joint Force Training Centre [JFTC]) and one in Portugal (Joint Analysis & Lessons Learned Centre [JALLC]). ACT also includes a SACT representative at NATO Headquarters in Brussels, ACT Staff Elements at Supreme Headquarters Allied Powers Europe (SHAPE), a shared Military Partnership Directorate (MPD) with ACO, and a liaison office within the Pentagon in Washington DC. This transformational structure is depicted on the following diagram:



A.4. Additionally, NATO's Education and Training Facilities (NETFs) and nationally-run entities (which are not part of the NCS) have a coordination function with ACT. These include: the NATO Defense College (NDC) in Italy; the NATO School in Oberammergau (NSO), Germany; the NATO Communications and Information Systems School (NCISS), Portugal (relocating from Italy); the NATO Maritime Interdiction Operational Training Centre (NMIOTC), Greece; and the NATO-accredited (nationally run) Centres of Excellence (COEs).

A.5. **HQ SACT.** Taking each of these elements in turn, HQ SACT is configured in a four directorate structure, with an additional directorate shared with ACO (Military Partnership Directorate). These comprise three output-oriented directorates: Strategic Plans and Policy, Capability Development, and Joint Force Trainer; and one management directorate, Resources and Management. This configuration is designed to support an enhanced capability development process and allow a more integrated approach to individual training and education in order to respond more effectively to new operational and transformational requirements.

A.6. **Strategic Plans and Policy (SPP).** The SPP Directorate comprises three strategic branches: Strategic Analysis, Strategic Plans & Policy, and Strategic Issues & Engagement. SPP serves as ACT's lead agent to develop and promote issues of strategic importance to transformation, articulate policies to direct Alliance transformation efforts and support the development of emerging, and the revision of current, NATO strategic-level documents which highlight how transformation can be achieved.

A.7. Developing a collective vision of what the future operating environment will look like in 2030 and beyond is at the core of SPP's (and ACT's) mission. In seeking to prepare NATO for this uncertain future, and in close cooperation with NATO HQ, SPP identifies strategic issues that the Nations can use to inform and influence future NATO roles and missions (eg through the NATO Defence Planning Process [NDPP]), through the analysis of NATO strategy, guidance, concepts and global trends. This work is conducted in co-operation with SHAPE, international and non-Governmental Organizations (IOs/NGOs), research and defence institutes, think tanks and universities.

A.8. **Capability Development (CD).** The CD Directorate is a broad area which covers the entire capability development process, from the moment a need is identified to the production phase when a new capability is actually developed for the Alliance. The directorate aims to identify, plan and develop the crucial capability requirements for NATO for current and future operations, to ensure that it can remain potent, coherent and credible. Improving these capabilities to face emerging security challenges represents one of the most important elements of transformation and, although the vast majority of ACT staffs support this function directly through the capability development process, the CD Directorate has the overall lead.

A.9. The CD Directorate develops and coordinates a major contribution to the NDPP, and initiates and supports capability development activities by focusing on concepts, experimentation, analysis and the development of solutions, especially in science and technology-related work. It also develops doctrine, standardisation and the training required to exploit these capabilities fully. A myriad of other capabilities are also covered by the directorate, including cyber defence, missile defence, federated mission networking, logistics and medical issues.

A.10. **Joint Force Trainer (JFT).** The JFT directs and coordinates those ACT activities to train and educate individuals and to manage collective training and exercises, at all levels of command, to provide the Alliance with improved capabilities to undertake the full spectrum of Alliance missions. It comprises three branches: Training and Exercises; Education and Individual Training; and Education, Training, Exercises and Evaluation Plans and Policy. JFT also has the overall ACT responsibility for the management of the Connected Forces Initiative.

A.11. JFT maintains the Training Management System, which consists of two elements. First, the Military Training and Exercise Programme, which contains more than one hundred exercises; and second, the Electronic Individual Training and Education Programme, with the Electronic Training Opportunities Catalogue embedded. This Catalogue advertises over four hundred individual education and training courses from more than thirty training providers. NATO's training plans are primarily based upon SACEUR's priorities, which are mainly articulated through SACEUR's Annual Guidance for Education, Training, Exercises and Evaluation (SAGE).

A.12. In addition to its coordinating role with the JWC, JFTC and JALLC, JFT also maintains close relations with NETFs (NDC, NSO, NCISS and NMIOTC), the COEs and the Partner Training and Education Centres (PTECs).

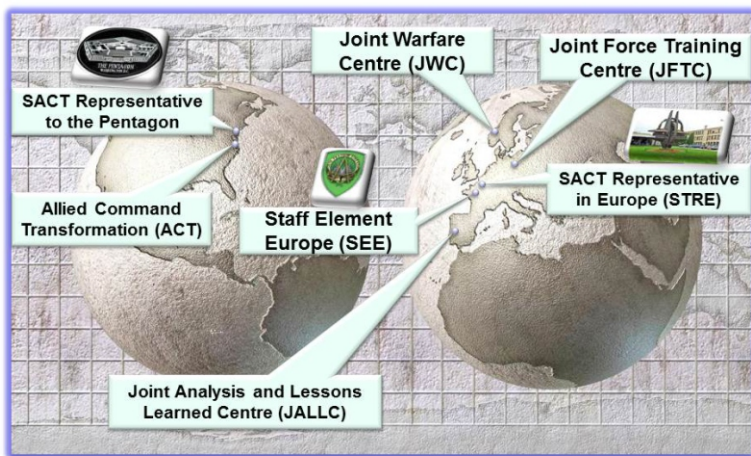
A.13. **Resources and Management (R&M).** The R&M Directorate has an internal management function through which it directs the harmonization of all requirements and common-funded resources, including manpower, during the phases of planning (including prioritization), execution and evaluation (reporting) at all ACT's organizations. It also provides guidance for the development of integrated resource policies for ACT.

A.14. R&M is responsible for ACT's medium-term resource planning in all three resource pillars (NATO Security Investment Programme, NATO Command Structure and Entities Programme, and Manpower), through which it directs the development of the ACT input to the Consolidated Resource Proposal and contributes to the NATO Military Authorities' (NMA) strategic resource priorities through the annual prioritized Consolidated NMA Impact Statement. RM also represents ACT in the appropriate NATO HQs' resource bodies and committees, through which it supports the development of overall resource-related guidance, and addresses resource policy issues relating to ACT.

A.15. **SACT Representative in Europe (SACTREPEUR).** SACTREPEUR is located at NATO Headquarters in Brussels, Belgium. As the name implies, the SACTREPEUR represents SACT at NATO HQ, acting as SACT's representative to the Military Committee and attending all relevant meetings, at all levels. SACTREPEUR has the coordinating authority for all ACT elements involved in engagements with NATO HQ and maintains strong links with SACEUR through his counterpart, the SACEUR Representative, also based at NATO HQ.

A.16. **ACT Staff Element Europe (SEE)** is co-located with ACO in Mons, Belgium. It deals primarily with defence planning issues and, in so doing, interacts with different NATO entities such as the International Military Staff (IMS) and International Staff (IS) at NATO HQ, ACO, and a range of other NATO bodies and agencies. Deputy Assistant Chief of Staff Defence Planning also acts as SACT's representative to SHAPE.

ACT Components & Linkages



ACT Components and Linkages

A.17. **Military Partnership Directorate (MPD).** At the strategic command level, the MPD provides direction, control, coordination and support of military cooperation activities across the Alliance. It directs and oversees all non-NATO country involvement in military partnership programmes, events and activities, and coordinates and implements NATO plans and programmes in the area of partnerships. The MPD is a Bi-Strategic Command directorate, which means that ACT shares responsibility with ACO. It is located in Mons, Belgium, with a dedicated staff element at HQ SACT.

A.18. **ACT Liaison Officer to the Pentagon (PENLO).** The disestablishment of US Joint Forces Command presented a challenge to the maintenance of links between ACT and those US entities responsible for US transformation. At the same time, senior US leaders had been lobbying for an ACT presence in Washington in order to educate key stakeholders on the value and relevance of ACT's contribution to NATO. To overcome these challenges, SACT established a representative in the Pentagon. The PENLO's role is to promote effective links between ACT and the US Joint Staff on matters relevant to SACT's mission, in order to enhance NATO transformation.



A.19. **JWC.** The JWC was established as a subordinate NATO body to SACT in 2003, in Stavanger, Norway. It is responsible to ACT, but also works closely with ACO, and is a major bridging asset between the two Strategic Commands. It provides NATO's focal point for the full spectrum of joint operational level warfare by planning, preparing and executing static and distributed joint operational level training in accordance with SACEUR's requirements. It also assists ACO in the evaluation of joint force

training. Its principal mission is the training of the NATO Response Force (NRF) Headquarters elements and NRF Component Headquarters elements.

A.20. The JWC supports NATO's concept development, experimentation and lessons learned processes, and the maintenance of joint operational doctrine and standards, by integrating these elements into all aspects of its training programme. It also has formal links with various NATO agencies and with many national and multinational training centres. In this way, it plays a valuable role in strengthening relationships and in helping to integrate national training and command organizations, as well as regional security organizations and partners. Further information on the JWC can be found at: <http://www.jwc.nato.int/>

A.21. **JFTC.** The JFTC was established to provide joint and combined tactical level training to the Alliance, with a focus on the NRF Component Commands. In recent years, its priority has been to provide predeployment training in support of current operations. The JFTC also supports the Alliance by conducting courses, organising conferences and events such as SACT's Coalition Warrior Interoperability Exercise (CWIX). Further, the JFTC has actively pursued a distributed training concept and has assumed the leading role in NATO Live Virtual Constructive simulations.



A.22. Rather like the JWC, the JFTC also cooperates with many national training centres, including PTECs and COEs, to ensure consistency in the application of NATO doctrine and standards in joint and combined fields. The JFTC has gained significant experience and expertise in tactical level training and is in the process of changing its training focus from current operations to conducting exercises in support of the NCS and NATO Force Structure. Further information on the JFTC can be found at: <http://www.jftc.nato.int/>

A.23. **JALLC.** ACT has the lead for the overall NATO Lessons Learned (LL) process and for building and sustaining the LL capability in NATO. The JALLC is the ACT subordinate command which is dedicated to this process. It supports NATO's LL capability by providing analysis expertise to operations, training, exercises and experimentation. It also provides LL training, manages the NATO LL Portal and engages, through its JALLC Advisory and Training Team, with NATO commands and nations, partners and other entities to support their LL capability development.



A.24. HQ SACT tasks, coordinates and provides inputs to the JALLC Programme of Work, in close cooperation with SHAPE. From this programme, the JALLC can produce up to fifteen analysis reports every year, which are pitched at the strategic and operational levels. The key sharing tool for NATO LL information is the NATO LL Portal, to which every NATO and Partner nation, NATO entity, COE, and many IOs and NGOs have access. Further information on the JALLC can be found at: <http://www.jallc.nato.int/>

Annex B – Glossary of Abbreviations

ACT	Allied Command Transformation
C2 COE	Command and Control Centre of Excellence
CA	Comprehensive Approach
CASPOA	Analysis and Simulation Centre for Air Operations
CCD COE	Cooperative Cyber Defence Centre of Excellence
CCE	Civil Military Cooperation Centre of Excellence
CD	Capability Development
CFI	Connected Forces Initiative
CIED COE	Counter-Improvised Explosive Devices Centre of Excellence
CJOS COE	Combined Joint Operations from the Sea Centre of Excellence
CMDR COE	Crisis Management and Disaster Response Centre of Excellence
COE	Centre of Excellence
CSW COE	Operations for Confined and Shallow Waters Centre of Excellence
CWIX	Coalition Warrior Interoperability Exercise
CWO COE	Cold Weather Operations Centre of Excellence
DAT COE	Defence Against Terrorism Centre of Excellence
DOTMLPFI	Doctrine, Organization, Material, Leadership, Personnel, Facilities, Interoperability
DPST	Defence Planning Staff Team
e-NDPP	Enhanced NATO Defence Planning Process
EDA	European Defence Agency
ENSEC COE	Energy Security Centre of Excellence
EOD COE	Explosive Ordnance Disposal Centre of Excellence
EU	European Union
EUMS	European Union Military Staff
FFAO	Framework for Future Alliance Operations
FFCI	Framework for Collaboration with Industry
HQ SACT	Headquarters Supreme Allied Commander Transformation
HUMINT COE	Human Intelligence Centre of Excellence
ICI	Istanbul Cooperation Initiative
ICRC	International Committee of the Red Cross
IMS	International Military Staff
IO	International Organization
IS	International Staff
ISAF	International Security Assistance Force
JALLC	Joint Analysis and Lessons Learned Centre
JAPCC	Joint Air Power Competence Centre
JCBRN COE	Joint Chemical Biological Radiation and Nuclear Defence Centre of Excellence
JFT	Joint Force Trainer
JFTC	Joint Force Training Centre
JWC	Joint Warfare Centre
LL	Lessons Learned
MAP	Membership Action Plan
MC	Military Committee
MD	Mediterranean Dialogue
MILENG COE	Military Engineering Centre of Excellence

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MILMED	Military Medicine Centre of Excellence
M&S COE	Modelling and Simulation Centre of Excellence
MP COE	Military Police Centre of Excellence
MPD	Military Partnership Directorate
MW COE	Mountain Warfare Centre of Excellence
NAC	North Atlantic Council
NCISS	NATO Communications and Information Systems School
NCS	NATO Command Structure
NDC	NATO Defense College
NDPP	NATO Defence Planning Process
NETF	NATO Education and Training Facilities
NFS	NATO Force Structure
NGO	Non-Government Organization
NMA	NATO Military Authorities
NMIOTC	NATO Maritime Interdiction Operational Training Centre
NMW COE	Naval Mine Warfare Centre of Excellence
NRF	NATO Response Force
NSO	NATO School Oberammergau
OCAI	Office for Collaboration with Academia and Industry
PatG	Partners across the Globe
PENLO	Pentagon Liaison Officer
PfP	Partnership for Peace
PTEC	Partner Training and Education Centre
R & D	Research and Development
R & M	Resources and Management
SACEUR	Supreme Allied Commander Europe
SACT	Supreme Allied Commander Transformation
SACTREPEUR	SACT's Representative in Europe
SD	Smart Defence
SEE	Staff Element Europe
SFA	Strategic Foresight Analysis
SHAPE	Supreme Headquarters Allied Powers Europe
SOF	Special Operations Forces
SP COE	Stability Policing Centre of Excellence
SP	Strategic Plans and Policy
STO	Science and Technology Organization
STRATCOM COE	Strategic Communications Centre of Excellence
TNB	Transformation Network Branch
UN	United Nations

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Allied Command Transformation
Transformation Network Branch
Phone: +1.757.747.4330/3706

North Atlantic Treaty Organization
Headquarters, Supreme Allied Command Transformation
7857 Blandy Road
Norfolk, Virginia USA 23551-2490
Quarterdeck: +1.757.747.3400

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