

Invading Bologna

Prospects for Nordic Cooperation on Professional Military Education

Gary Schaub Jr. Henrik Ø. Breitenbauch Flemming Pradhan-Blach This report is a part of the Centre for Military Studies' (CMS) policy research service for the political parties to the Danish Defence Agreement 2009-2014. The purpose of this report is to indicate how the members of NORDEFCO may cooperate more fully and deeply in the area of professional military education (PME), in particular at the level of the command and staff course for mid-career officers.

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Contents

EXECUTIVE SUMMARY1
1. INTRODUCTION: TOWARD MULTINATIONAL PROFESSIONAL MILITARY EDUCATION4
2. PROFESSIONAL MILITARY EDUCATION: A NATIONAL AFFAIR
3. A MEGATREND IN INTERNATIONAL HIGHER EDUCATION: THE BOLOGNA PROCESS 20
4. PME, BOLOGNA, AND COPENHAGEN29
5. ENHANCING NORDIC PME COOPERATION37
6. CONCLUSION45
BIBLIOGRAPHY50
NOTES

Executive Summary

NORDEFCO states cooperate in many ways and desire to cooperate more fully and deeply in professional military education (PME). The purpose of this report is to indicate how they can do so in a limited yet comprehensive manner. They ought to raise their level of ambition from small training courses for specialists to their *command and staff courses*. Despite substantive overlap, these are executed as national courses for national purposes to a select group of officers-in-residence and in their national language. These constitute substantial barriers to cooperation and enhanced operational effectiveness. This PME situation mirrors that of civilian higher and vocational-technical education in Europe some two decades ago. Lessons can therefore be learned from civilian experiences in cross-national education reform.

The Bologna and Copenhagen Processes have developed means to harmonize the civilian education sector. Some states have attempted to harmonize their professional military education systems with the civilian sector to increase their quality and efficiency. PME is a hybrid of higher and vocational-technical education, however, and civilian standards have not yet been developed sufficiently to capture both aspects of competency development.

Moreover, it is essential that the military profession maintain control over the educational and training development of its own members. Still, eight principles that have encouraged substantial convergence in civilian education can be adapted to enable more meaningful and extensive cooperation in PME.

8 Principles

Common courses for common purposes

Common language

Common scheduling

Common competency metrics

Quality assurance

Student mobility

Exchange scheme

Mutual recognition

We recommend that these eight principles be explored and operationalized by an expanded NORDEFCO working group on human resources and education. PME reforms embodying these principles can be expressed in many ways. We developed a continuum of five PME

arrangement types building on the concept of common courses for common purposes in a common language to develop common competencies. They vary with regard to the degree that the NORDEFCO states retain the ability to teach national courses for national purposes in their national language in the command and staff course curriculum. They also vary with regard to whether their student base consists of an entire year-group cohort or individual officers, whether students are educated in-residence or not, and whether the command and staff school faculty retain a monopoly over course provision or whether other institutions are allowed to offer common courses for common purposes in a common language. The governance structure to monitor, evaluate, and assure the quality of the education provided and assess the competencies developed and the form of exchange scheme to ensure equity in sending and receiving relations also vary with regard to the student base and course providers considered in each alternative.

The continuum of institutional alternatives is bounded by two radical end points—a consolidated Nordic Defence College and an open market of supply and demand for command and staff course modules. Each is a substantial departure from the current PME arrangements. In between are different degrees of standardization of the curriculum and variations in the mix of officers deemed qualified to partake in PME at any given time. These institutional possibilities are summarized below.

Table 1: Possible Institutional Expressions of Nordic PME Cooperation								
	NORDEFCOL	Standardization	Bounded Demand	Open Demand	Open Supply & Demand			
Common Courses	Entirely	Entirely	Partially	Partially	Partially			
English	Entirely	Entirely	Common courses only	Common courses only	Common courses only			
Common Schedule	Entirely	Entirely	Entirely	Entirely	None			
Competency	Beyond ECTS-	Beyond ECTS-	Beyond ECTS-	Beyond ECTS-	Beyond ECTS-			
Assessment	ECVETS	ECVETS	ECVETS	ECVETS	ECVETS			
Governance	NORDEFCO	NORDEFCO + national	NORDEFCO + national	NORDEFCO + national	NORDEFCO + national			
Mobility	All	In-residence individuals or cohorts	In-residence individuals or cohorts	In-residence cohorts and non-resident individuals	In-residence and non- resident individuals			
Exchange Scheme	In assignment	In assignment	Agreed caps	Agreed caps	Agreed caps			
Mutual Recognition	By definition	By definition	By agreement	By agreement	By agreement			

These institutional possibilities indicate how cooperation can occur within the eight principles. Individual Nordic countries will determine how much commonality they will adopt. They could adopt any model entirely or in part, select some officers to receive the common courses for common purposes curriculum while selecting others to receive an entirely national course for national purposes, supplied by their command and staff college faculty or from any supplier of courses that they deem appropriate, select a large number for exchanges, or select none at all. It is up to them.

The NORDEFCO working group on human resources and education should form seven subcommittees manned by a mix of appropriate stakeholders to undertake the hard work required to implement the eight principles. Each of the institutional expressions of these principles sketched here has its own set of merits and liabilities that must be further explored, developed, and considered. We leave it to their governments to determine where they should aim their efforts.

1. Introduction: Toward Multinational Professional Military Education

This report considers how Denmark, Norway, Sweden, and Finland can increase their cooperative efforts to educate their military officers within the NORDEFCO context. It focuses on the education deemed appropriate for mid-career, field-grade officers, such as majors in the Army and Air Force, or lieutenant commanders in the Navy. It offers mention of other levels of professional military education and other venues of cooperation between these countries, such as those pursued bilaterally and in operational areas; however, these are not the focus of this report.

The Situation

In the spring of 2013, the Danish Air Force helped ferry French soldiers and equipment to Mali while American refueling aircraft enabled French fighter-bombers to conduct airstrikes against Islamist insurgents. In 2011, Danish F-16s joined aircraft from the United States, France, Great Britain, Norway, Sweden, the Netherlands, and eight other nations in Operation Unified Protector, the NATO operation that ousted Libyan leader Muammar Gaddafi. And Danish forces have been operating together with American, British, and other forces in Afghanistan since 2001. As these examples demonstrate, military operations supporting Western security interests are multinational in nature. This cooperation is driven by both preference and necessity: it is rare that any single nation can unilaterally undertake expeditionary operations and achieve its objectives.

Multinational cooperation in such operations must overcome numerous substantial challenges, including variations in how national forces are manned, trained, and equipped; their level of capability; language; national and organizational cultures; understanding of the situation; and objectives. Recent operations have benefitted significantly from—indeed, been made possible by—the efforts undertaken by NATO as an Alliance to overcome these challenges within the North Atlantic community. Even operations that have taken place outside of the NATO framework, such as Operation Desert Storm and Operation Iraqi Freedom, have benefitted significantly from the Alliance's decades-long efforts to promote understanding and congruence in equipment standards; command, control, and communications protocols and processes; planning and decision-making procedures; capability metrics; and more. Experience demonstrates that with each conflict, the partners have learned to cooperate in deeper and more meaningful ways. Many difficulties

encountered in Operation Allied Force, for instance, did not bedevil Operation Unified Protector.²

The Problem

Regrettably, difficulties remain. As U.S. Ambassador to NATO Ivo Daalder and SACEUR Admiral James Stavridis have argued,

"serious gaps remain... Within the command structure, for example, the alliance has failed to devote the necessary resources to developing key skills, including the capacity to find and engage the types of mobile targets common in contemporary operations, plan joint operations in parallel with fast-paced political decision-making, support the targeting process with legal advice, and provide timely and reliable information on operational developments to the public... U.S. commanders in Europe had to quickly dispatch over 100 military personnel to the NATO targeting center at the outset of the intervention when it became clear that other member states lacked the knowledge and expertise to provide their aircraft with the correct targeting information."

Those shortfalls halved the ability of NATO aircraft to carry out strike sorties—a real impact on operational effectiveness. ⁴ U.S. Secretary of Defense Robert Gates presented these problems to European audiences with an air of exasperation while the campaign was being prosecuted warned that they would undermine American confidence in NATO. ⁵

NATO countries have declared that they will address such problems. NATO leaders adopted a declaration of Alliance capabilities—NATO Forces 2020—at the Chicago Summit in 2012. It aims to strengthen the levels of interoperability obtained through international Allied operations such as ISAF in the *Connected Forces Initiative* (CFI). CFI is "meant to connect forces under a common command, understanding, control, arrangements, standards, language and doctrine." It is to do so through expanded education and training, increased use of exercises, and better use of technology. The initiative should "capitalise collectively on the individual training efforts of Allies, and identify areas for collaboration and potential synergies." CFI's objective, simply stated, is to educate and train the military personnel of NATO member states so that they can operate effectively in a multinational environment—and to do so through increased cooperation.

The Diagnosis

The CFI's focus on education and training is the correct one: it recognizes that wars are not fought by equipment or munitions, but by people who possess high skill levels and esoteric knowledge that must be acquired and maintained through professional development.

Professional military education (PME) is where the knowledge and skills of officers are developed so that they will possess the expertise necessary to utilize military force in an effective and efficient manner. Although militaries are the instruments of individual states, the military profession is characterized by a general consistency across borders, with the body of skills and knowledge to be mastered reflecting the tasks that these professionals undertake at different levels of responsibility. As such, PME is ripe for cooperative endeavors—at least among allies and partners, and especially among those that conduct operations together. And clearly much needs to be done to improve and harmonize the knowledge, skills, and expertise of the officers from NATO and partner countries.

But how to best go about improving the knowledge base extant in the officer corps of NATO nations?⁸ As with all multinational cooperation, difficulties increase with the number of parties involved. NATO has moved toward a model of *strategic proximity* to overcome the difficulty of coordinating the myriad policies of 28 member states. As characterized by NATO's Supreme Allied Commander Transformation, General Stéphane Abrial, strategic proximity presents

"a way for nations to work in smaller groupings. They must choose themselves with whom they are most comfortable working along lines which I call 'strategic proximity.' It may be geography, immediate neighbors; it may be culture, language, a history of successful cooperation, or a common strategic vision; there are many possible criteria."

The Nordic countries have cooperated closely in the field and in policy coordination. For instance, Danish, Swedish, and Norwegian armored units trained and coordinated with one another prior to deployment to the Balkans in 1993, which aided their engagement in a series of battles with Serb forces in Tuzla in 1995. They have signed memoranda of understanding to coordinate military peace support operations, known as NORDCAPS, and have led eight other nations in the Standby High-Readiness Brigade (SHIRBRIG) from January 1, 2000 until June 30, 2009. Thus, the Nordic states have adopted a policy of strategic proximity and chosen to organize themselves into a cooperative process under the auspices of

NORDEFCO for some purposes and the Northern Group for others. These provide a natural subset of states for Denmark to cooperate with. NORDEFCO consists of the five Nordic countries, while the Northern Group includes the NORDEFCO countries plus the Baltic states, the United Kingdom, Poland, and Germany. These groupings can provide the basis for even broader cooperation within the auspices of the EU or NATO.¹³

For the purposes of our analysis, NORDEFCO provides a well-placed group of strategically proximate countries that can pursue cooperative initiatives in the realm of PME. NORDEFCO Ministers of Defense have specifically acknowledged the need to address many of the shortfalls in officer development indicated by Alliance leaders. As Roger Ingebrigtsen, the Norwegian State Secretary for the Ministry of Defense, explains, "The ambition is to arrive at more cost-effective solutions, and enable the countries to provide appropriate units and capabilities to NATO-, EU- or UN-led activities." Norwegian Foreign Minister Thorvald Stoltenberg argued that:

"At present, the individual Nordic countries have their own programmes for educating officers, NCOs and experts at many levels in a number of highly specialised areas. The number of persons being educated is often small, and the education programmes are both expensive and demanding in terms of the expertise required... Higher quality is the main argument for setting up joint education programmes. In several areas, there are only a small number of national experts, and it can be difficult to develop and maintain the necessary teaching expertise in all areas. Joint courses and education programmes would lead to greater capacity and more resources in each individual area, and would also help to ensure continuity, research and development."

In response, NORDEFCO has established a framework for cooperation in the area of human resources and education and has already undertaken some initiatives. These have focused on developing "common courses for common purposes," including language courses, technical courses in aircraft maintenance, and combat medical courses for special forces personnel. ¹⁶ The NORDEFCO working group has even indicated that "common competent bod[ies] for recognition [and] certifying staff" should be developed to make these initiatives meaningful to their national personnel systems. ¹⁷ Such language indicates that the NORDEFCO countries can do more and, importantly, desire to do more to cooperate in this area. Therefore, we use

this framework as our starting point and elaborate on how PME cooperation could be developed within NORDEFCO and beyond.

The Solution Set

To do so, we consider what would be required for NORDEFCO states to develop their cooperation on vocational-technical courses that serve small numbers of personnel into cooperation on their heterogeneous higher education programs that develop much larger numbers of officers. The problem is that the higher education PME systems among the NORDEFCO countries, in particular their command and staff courses, are incompatible in purpose and form, if not in general content. These programs are national courses for national purposes. As such, they are offered exclusively in-residence to a select number of officers in each state's native language, differ in length and intensity, are accredited by different national and international authorities, and serve different purposes within their personnel and promotion systems. Consequently, officers from other states constitute only 1–10 percent of the student body, reflecting the difficulty of cooperation at this level.

The reforms required to overcome these barriers to increased cooperation are straightforward. First, the initiative to develop common courses for common purposes should be expanded. Curricula in command and staff courses should overlap significantly, as officers at this point in their career are being prepared for similar levels of responsibility. Commonalities, particularly with regard to education and training that addresses multinational cooperation, should be determined and further harmonized. Second, the most substantial barrier to foreign officer participation in higher education is language—even among the Nordic countries. Common courses for common purposes ought to be taught in a common language: English. English is most likely the language used in multinational military operations; thus, preparation to perform well in such circumstances requires mastery of the material in that language. Third, common courses for common purposes should be offered at common times. Absent a radical change in PME delivery, synchronization of the academic calendar is necessary to facilitate the myriad forms of cooperation possible. Fourth, a common currency of course credits based upon competency development must be established. Fifth, a common governance structure to facilitate the monitoring of competency development and assure the quality of the education provided must be established. Sixth, space must be increased for participation by foreign officers in these common courses. Officers must not only be allowed but also encouraged to seek their command and staff course credits abroad and space must be made available to accommodate them. Seventh, an exchange scheme should therefore be

developed to ensure equity in sending and receiving relations. Eighth, officers' home service must recognize and acknowledge the equivalence of the common course taken abroad for the purposes of the officer's career development.

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These eight reforms could be implemented in many ways. We consider five, indicated in Table 1: a Nordic Defense College, standardization of existing command and staff courses, a bounded demand market for common command and staff courses, open demand for common courses, and open supply and demand for common courses. Each option is based on common courses for common purposes in a common language. They are enabled by cooperation on content, quality assurance procedures, mutual recognition of educational credit, and facilitation of cross-national mobility for student officers. Thus, each requires increased cooperation amongst NORDEFCO members and that different types and levels of challenges be addressed within the context of an expanded human resources and education working group.

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Luckily, models exist to facilitate adopting these reforms. The Bologna and Copenhagen Processes have addressed these prerequisites for deeper cooperation in the realms of civilian higher education and vocational-technical training throughout Europe. These processes offer a road map for creating a common currency of course credits that can then facilitate the mutual recognition of course offerings—and perhaps entire curricula. Cross-border recognition would facilitate competition between course suppliers—particularly if enabled through increased mobility, be it in-residence or virtually through distance learning—and, hopefully, increase the quality of professional military education and the officers who pursue

it. In all, international pressures for cooperation and comparability are driving the further professionalization of the profession of arms and increasing its quality.

How We Produced the Report

The report's primary contributor served as a faculty member in two American PME schools for eight years and is currently working on an academic volume on the American system of professional military education. Two of the authors penned two short articles addressing the internationalization of European staff officers in 2012. Moreover, two of the authors participated in NATO's First Functional Clearing House on Defence Education in Brussels in September 2012. Finally, one of the contributing authors has experienced the Danish PME system first-hand as a student at the Air Force Academy and the Royal Danish Defence College.

In terms of method, this report was developed as a combination of a desk study, an email survey to the relevant PME organizations in NORDEFCO and Northern Group countries, and interviews with key decision-makers in Denmark. Prior to publication, the report was subjected to internal and external quality control at the Centre for Military Studies that included a session with relevant stakeholders in Denmark and external peer review. As with all reports published by the Centre for Military Studies, the result is the responsibility of the authors alone. The report should not be perceived as an official statement of the Danish Ministry of Defence, Defence Command Denmark, the Royal Danish Defence College, or any other institution.

Structure of the Report

The aim of this report is to provide an overview of the barriers to improved cooperation in professional military education between NORDEFCO members and indicate how these barriers can be overcome. Therefore, this report has four main sections beyond this introduction. The next chapter discusses the purpose of professional military education in general, the measures that have been undertaken thus far by NORDECO to increase ad hoc cooperation in training, and the substantial barriers that exist to expanding cooperation on a systematic basis to the level of higher education in PME—that is, the command and staff course. The next chapter introduces the Bologna and Copenhagen Processes in civilian higher and vocational-technical education, the context and intentions behind their origins, and their main components so as to lay the conceptual and policy basis for comprehensive PME cooperation. Third, we consider the manner that European militaries have adopted the

Bologna and Copenhagen standards, examine in greater detail the barriers existing to their further adoption, and suggest the areas where adaption is possible and desirable. Fourth, we consider the five alternative paths that increased cooperation in PME at the level of the command and staff course could take: a Nordic Defence College, standardized national command and staff courses, bounded demand for common courses for common purposes, open demand for such courses, and an open market for common courses for common purposes. The report concludes with a summary of the argument and concrete steps that NORDEFCO states can take to consider and implement the reforms discussed herein.

2. Professional Military Education: A National Affair

Professional Military Education

The military is a profession that utilizes specialized knowledge regarding the use of force to achieve the purposes of the state. Military officers are the possessors of this specialized and esoteric knowledge. At the highest levels, it is their job to advise political leaders as to the wisdom of using military force in particular ways of achieving particular objectives. At the middle levels, it is their job to manage, lead, and command military personnel in the use of violence as well as ancillary functions. Finally, at lower levels, it is their job to utilize violence with skill and discrimination to achieve tactical objectives on the battlefield. Professional military education is an integral part of the development of military officers. It develops their knowledge and ability to exercise judgment so as to carry out these tasks competently.

Professional military education is a mix of higher education and vocational-technical training. Over the course of their careers, officers undergo training to develop the skills necessary to perform practical tasks at the tactical level. They also pursue education to develop the knowledge and intellectual acumen to command, lead, and manage their subordinates as well as to advise their superiors in the chain of command as to the most appropriate course of action. This developmental process is usually quite explicit, with particular training and educational objectives tied to career progression and promotion. PME can be supplied entirely by the officer corps itself, but such exclusive provision has generally waned in the West.²⁰ Officers and civilians, within and outside of the defense establishment, provide developmental opportunities that are accepted by their services.²¹ Despite this heterogeneity of suppliers, there is a general consistency across borders with regard to the body of skills and knowledge to be mastered reflecting the tasks that these professionals undertake at different levels of responsibility. As such, PME is ripe for cooperative endeavors—at least among allies and partners.

PME Cooperation in NORDEFCO

PME is a natural area for military cooperation, and Nordic countries have cooperated with one another for many years.²² For instance,

"The Nordics set up a joint UN training program for officers and non-commissioned officers in the 1965–1973 period. The 1973 programme consisted of UN observer courses hosted by Sweden and Finland, a UN staff course hosted by Sweden, a course for movement control personnel hosted by Norway, a military police course hosted by Denmark and a logistic officers course hosted by Norway. Later, a Nordic UN seminar dealing with questions related to UN peacekeeping operations for persons at command level with the ministries of foreign affairs and defence and the defence staffs was added."²³

These courses grew to 25 in 2003, were attended by 850 students that year, and contributed to the drafting of the NORDCAPS Peace Support Operations Tactical Manual Volumes I and II that replaced the Nordic Standby Forces Manual as a standard for UN peace support operations. ²⁴ The command and staff colleges exchange a handful of students and faculty each year and meet in an annual Commandant's Conference and other forums to exchange information, plans, and discuss possibilities for cooperation. ²⁵ Beyond NORDEFCO, there are Swedish, Norwegian, and Finnish officers serving in the Baltic Defence College's command structure, and "the College is currently looking at developing a one-year war college-type course, to be conducted in partnership with the Danish National Defence Academy." ²⁶ A pilot project for the senior-level course is planned for 2014 and implementation is scheduled for 2015. ²⁷ It is hoped that this will be an elite PME institution to educate the best and brightest Nordic colonels in strategic thought.

With the formation of NORDEFCO in 2009, the Nordic countries began institutionalizing a well-placed group of strategically proximate states that can pursue cooperative initiatives in this realm. NORDEFCO has already established a framework for cooperation in the area of human resources and education. This working group, chaired by Denmark, has undertaken some initiatives that have focused on developing "common courses for common purposes." In 2013, the members of NORDEFCO have established twenty week-long training courses for personnel deploying to multinational assignments in partner capacity building or low intensity stabilization and training missions under the auspices of NATO's Partnership for Peace program or the United Nations.²⁸ The working group has further identified language courses (English, Pashto, and Farsi), technical courses in aircraft maintenance, combat medical courses for special forces personnel, mine counter-measures, and logistics as areas with "good potential for further cooperation" in training and education.²⁹ NORDEFCO's working group has even indicated that "common competent bod[ies] for recognition [and]

certifying staff" should be pursued to make these initiatives meaningful to their national personnel systems. ³⁰ Such language indicates that the NORDEFCO countries can do more and, importantly, desire to do more to cooperate in this area. We therefore begin with this framework and elaborate on how PME cooperation could be developed within NORDEFCO and beyond.

Cooperation between Nordic states on specialized training courses is a good place for cooperation to begin. Requirements for such courses are not continuous, involve limited numbers of personnel, and require minimal institutional adaptation to implement. Indeed, the marginal nature of this cooperation enables it, minimizes the risk of failure, and therefore prepares the ground for further, deeper, and more meaningful cooperation. In the interim, however, it also yields marginal benefits, appears superficial, and can be dealt with by the institutions involved as one-off activities that need not be repeated. Plans should therefore be made to establish and achieve a higher level of ambition.

Increasing the Level of Ambition

Where should this level of ambition be set? PME takes place at three levels: the undergraduate level, where cadets are prepared to be commissioned as officers; the intermediate level, where officers transition from being technically proficient in their specialty to being proficient at command and staff processes; and the senior level, where officers transition to being strategic thinkers. Each level addresses different needs of the profession. Pre-commissioning PME introduces a large number of students to the military profession, educates them in national issues and processes, socializes them into military culture, and molds them into loyal agents that are licensed to command others to use violence on behalf of the state. Intermediate PME develops a smaller number of officers, those that have remained in the service, have been promoted to field-grade ranks and that have been selected for further development. These officers form the middle management of the military. Senior PME at the war college level develops an even smaller cadre of officers to become senior leaders of their services and the military that will interact with civilian policy makers at the highest levels.

The highest possible level of ambition would be to harmonize the entire PME systems of the Nordic countries, with common levels of education and training associated with each rank and specialty across the entirety of their forces. Such a level of ambition might possibly be

attainable in the future, but we consider the possibilities for harmonizing parts of the PME continuum of education.

There are sufficient reasons to keep pre-commissioning education at the undergraduate level (i.e., for cadets) national. The undergraduate academy is the state's primary opportunity to indoctrinate future officers to be loyal, to introduce them to the national system of government, military procedures, and other topics specially geared toward the home state. These needs cannot be met by institutions in other states. The senior level of PME—the war college—is a better candidate for cooperative efforts. Graduate-level PME at the command and staff and war college levels can (and should) be geared toward orienting officers toward multinational, coalition, and Alliance policies, procedures, and practices at the operational and strategic levels. Undertaking PME in an allied state's institution or in a multinational setting would serve to socialize officers into a multinational mindset. Education abroad would therefore constitute an added value, as the more international experience that an officer has, the better. Expanding cooperation at the senior level would be welcome but requires some NORDEFCO members to expand their national PME capabilities in a time of fiscal constraint to meet the needs of a small number of offices. Intermediate-level PME—the command and staff courses—involves both large numbers of officers that require education and a curriculum that can (and should) be pitched toward international content. Through this development experience, officers should transition from technical proficiency in their career field toward competence in the profession of arms. The staff courses serve many officers, are staffed by sizable faculties, and last a long time. They are therefore costly activities. Even small economies—whether of scale or from more efficient use of existing means—will therefore be of significance. This said, there are substantial barriers to cooperation in intermediate PME among the Nordic countries that must be recognized and addressed. These barriers include their purpose, length, language of instruction, and accreditation.

Everyone must recognize that PME is not an end in itself; rather, it is tied to the needs and rhythms of the personnel system of each state's military. Intermediate PME can serve different purposes in this context: it can impart specific knowledge to prepare officers for their next assignment, it can serve to socialize a cohort of officers and build their informal connections, and it can educate them broadly for the second half of their careers. The purpose of the command and staff course differs between the Nordic countries, as can be seen in the prerequisites and selection criteria for students and what completion means for the career of an officer.

National Courses for National Purposes

In 2009, Norwegian Foreign Minister Thorvald Stoltenberg pointed out that

"the individual Nordic countries have their own programmes for educating officers, NCOs and experts at many levels in a number of highly specialised areas. The number of persons being educated is often small, and the education programmes are both expensive and demanding in terms of the expertise required." ³¹

He was correct, and these national courses for national purposes present substantial barriers to the cooperation that he advocated.

Much can be inferred concerning the purpose of the command and staff course from who attends and what they are being prepared for. In Denmark, approximately 25 percent of captains/lieutenant commanders are selected based upon their rank and approval by the Danish Defence Personnel Organization, resulting in a class size of 38–54 officers each year. The course is primarily national in nature: the language of instruction is Danish, and only 5 percent of the slots in the class are available for officers from other states. These foreign officers must be certified Danish speakers. The typical assignment for graduating officers is as a "staff officer in Defense Command Denmark, higher operational commands and equivalent commands and teachers at Danish Defense College and the three services defense colleges." Graduates of this course are not awarded a masters degree, although reforms are afoot to change this. Finally, graduation from the course "is the condition for senior ranks" but does not guarantee promotion.³⁴

In Norway, an indeterminate percentage of officers ranging in rank from captain/naval lieutenant to lieutenant colonel/commander with baccalaureate degrees are selected on the basis of "good recommendations" from their superior officers to attend the course, the maximum class size being 55.³⁵ The course is primarily national: the language of instruction is Norwegian, and foreign officers occupy only 7–8 percent of the slots. Assignments for graduating officers include "various staff positions in the defence sector, both in Norway and abroad." An extended curriculum is available that results in a masters degree. Graduation from the command and staff course "qualifies the student for the level of advanced officer training, which is a requirement for higher officer positions and rank."

In Sweden, 5 percent of the cohort of majors, lieutenant commanders, and squadron leaders "are carefully selected" to attend the 2-year long command and staff course every second year, resulting in a class size of 70.³⁹ The course is national in nature: the language of instruction is Swedish, but 10 percent of the positions are open for foreign officers—the largest percentage among the Nordic countries. Graduation "can lead to a degree." Graduates are prepared for "independent posts at the OF-4 level," as defined by the Swedish Defence Command. Graduation is required for promotion to the next rank but is no guarantee.

Finally, Finland requires the most prerequisites for attending its 2-year command and staff course: one third of the graduates from the masters of military sciences program offered by the Finnish National Defence University are accepted, all must fall within an established age range, be in general physical health, pass a physical conditioning exam, and speak and write English. All 100 students in each cohort are captains or naval lieutenants (senior grade), and Finnish is the language of instruction. Only 1–3 percent of student positions are available for foreign officers. Graduation confers a masters degree, and follow-on assignments are "at the level of battalion commander or comparable" positions. Selection to the program indicates pre-selection for promotion that occurs upon graduation.

Substantial Barriers

Thus, it is possible to conclude that the primary purpose of the command and staff course in Finland is to directly develop and screen officers for promotion to the senior ranks; whereas in Denmark it is required professional development for potential selection to higher ranks; and in Norway and Sweden, intermediate PME is further removed from promotion: it is a prerequisite for further professional development that is required for the possibility of promotion. These differences constitute **substantial** barriers to some forms of cooperation in command and staff courses among the Nordic countries.

Two further barriers stem from differing purposes: course length and accrediting body. The command and staff courses range in length from 11 months in Denmark, 1 year in Norway (with an optional second year to earn a masters degree), to two years for Sweden and Finland. Accreditation also differs substantially between the Nordic countries. In Denmark,

"certification of the quality of the course is governed by national directives (FKO-DIR 180-9 and FAK-DIR 180-2) and evaluated through key performance indicators reported to national authorities [e.g., Defence Command]. The

equivalency of the course to other courses amongst NATO and/or European PME institutions is not certified."⁴⁴

In Norway, the Ministry of Education accredits the National Defence University, its command and staff course is recognized as meeting the Bologna standard of student workload for a year of study, and "parts [of the course] are accredited by NATO."⁴⁵ In Sweden, the Swedish Ministry of Education accredits the command and staff course. ⁴⁶ Finally, in Finland, the content of the command and staff course is "determined by the Defence Staff," accredited by the Finnish Ministry of Education and Culture, and recognized as requiring a Bologna student workload of 140 ECTs. ⁴⁷

Conclusion: Substantial Barriers to Overcome

Unsurprisingly, professional military education in the Nordic countries is a national affair. The development of professional military officers is a key contributor to state sovereignty and each PME system developed independently to meet this need. The type of education, its content, and its purpose are determined by the ideal mid-and-senior ranking officers that each military has determined are required. The system developed to deliver this education, determine its content, and validate its effectiveness has been and remains entirely national.

Thus, we see that the accrediting body for these courses ranges from the minimal level of the Defence Command in Denmark to the National Ministry of Education in the other Nordic countries, of which Sweden and Finland have also standardized their course-loads to meet the Bologna standards of the ECTS system. Differences in accreditation are clearly linked to the length of the command and staff course, with the shorter programs certified only by national authorities and the longer programs meeting the Bologna standards and hence passing muster with its quality assurance standards. When considered with the substantial differences that attendance and graduation from command and staff college play in the development and promotion of officers, substantial barriers to cooperation among even the strategically proximate Nordic countries clearly exist.

Given these barriers, how can the germ of cooperation on small, occasional training courses be nurtured into full-fledged cooperation in the higher education and vocational-technical training that occur in each state's command and staff college? This is the problem we begin addressing in the next chapter by discussing how similar barriers have been reduced in the civilian sector of higher and vocational-technical education.

3. A Megatrend in International Higher Education: The Bologna Process

Overview

The scope, purpose, and national nature of higher education programs used to develop military professionals in the Nordic countries differ substantially. This makes deep and meaningful cooperation difficult. How can the Nordic states overcome these substantial barriers? Luckily, much of the conceptual work necessary to harmonize higher education has already been accomplished and applied to the civilian sector. It can provide the basis for overcoming the barriers to cooperation in Nordic PME.

Two ongoing processes have been established by the states of Europe to facilitate cooperation in higher education and vocational-technical training: the Bologna Process and the Copenhagen Process. Each provides an intergovernmental framework for cooperation that encourages, as opposed to requires, convergence in the form that higher education takes, the requirements for educational progression, and the means of evaluating the quality of programs and competency of graduates. Through such convergence, each Process seeks to establish the basis for the mutual recognition of educational and vocational credentials so as to facilitate student exchange during the educational process and labor mobility afterwards. As such, the Bologna and Copenhagen Processes have much to offer as NORDEFCO and other countries contemplate international cooperation in professional military education.

In this chapter, we introduce the Bologna Declaration, the ensuing Process, and discuss its evolution and achievements. We then introduce the Copenhagen Declaration and the processes that have been initiated under its guidance. The chapter ends with an identification of generic Bologna and Copenhagen Process elements and themes that we then utilize to discuss initiatives for further military cooperation in PME in the subsequent chapters.

The Bologna Process

Fifteen years ago, civilian political leaders in Europe were facing many of the same challenges as their counterparts leading our armed forces today. Globalization and increasing levels of education in developing countries put a premium on a well-educated workforce. At a continental European level, however, they were faced with a fragmented and uneven university-level education system with very few opportunities for exchange of degrees, experience, or work. They were facing increased competition from China and India, which

were producing ever better candidates that allowed their companies to move up the ladder of productivity at an unprecedented rate, while American, Japanese, and Australian graduates also progressed to very high standards in large, integrated systems of higher education. These political leaders also saw how the heterogeneity of European education systems blocked innovation by reducing the possibilities for cooperation, exchange, and improvement in the quality of output.

The Bologna Declaration of 1999, signed by 29 European Ministers of Education, and the subsequent Process was intended to answer these challenges. ⁴⁸ The Sorbonne Declaration—signed by the Education Ministers of Germany, France, the United Kingdom, and Italy only—preceded the Bologna Declaration itself the year before. It also built on international cooperation initiatives in Europe dating back to the 1980s. ⁴⁹ As is characteristic of the higher education policy domain, institutions of higher education played a significant role in its development. ⁵⁰ The basic—but ambitious—aim of the Bologna Declaration is the creation of a European Higher Education Area (EHEA). The declaration clearly states that the overall objective is fewer borders and divisions between national systems of higher education inside Europe and a more globally competitive European system. What EHEA means exactly and how it is to be achieved has been the subject of the ongoing Process and will be described below. First, however, the status of the Process and resulting geographical variance require brief discussion.

Status and Variance in Adoption

With an intergovernmental status, the Bologna Process is not legally binding in how supranational initiatives are, for instance, within the EU framework. This means that participating nations are not compelled to implement the Bologna objectives. The degree and speed of adaptation to the overall initiative as well as with regard to the specific elements or lines of operation inside the initiative therefore differ among the participating countries. At the national level, systems of higher education are organized in many different ways. These differences themselves are partially what motivate the Process. But reorganizing entire systems of higher education is arduous, costly, and difficult due to the organic relationship between education systems and their surrounding societies.

Still, a three-tiered structure in the area of quality control—with quality assurance mechanisms and institutions distributed in each of the participating institutions, in national agencies, and finally at the international level in agencies (who watch the watchers)—means

that participating institutions and countries are in fact compelled to follow shared standards to an increasing degree. EU policies related to higher education mirror the intentions and goals of the Bologna Process, reinforcing the incentives for their adoption.

Contents of the Declaration

The four-page Bologna Declaration places ideas about international cooperation in higher education within a larger strategic framework for the European nations and economies. Three kinds of rationales are found in the document, concerning, respectively, the nature and context of international cooperation in higher education, the overall goals identified to be pursued, and, finally, the concrete objectives launched as lines of operation.

As regards the nature and context of international cooperation in higher education, the declaration itself is part of a larger historical shift in European perceptions of the role of higher education. Over the decades leading up to the beginning of the process and after, the perceptions have shifted from education for cultural and idealistic reasons to more economic and strategic reasons. This is not least because the EU Single Market's principles regarding the free flow of goods and people have spilled over into the domain of higher education.⁵¹ The Declaration itself is an amalgamation of previous forms of cooperation in European higher education. In 2000, one year after Bologna, the EU launched its Lisbon Agenda. It aims at preparing Europe for future global competition by becoming the "most competitive and dynamic knowledge-based economy in the world, capable of sustainable economic growth with more and better jobs and greater social cohesion."⁵² In this manner, the Bologna Process can be seen as a functional partner to the Lisbon Agenda.⁵³ Thus, even if Lisbon has not met its goals, it has strongly influenced European research and development policies as well as the domain of higher education in the intervening period (and continues to do so with its successor, the Europe 2020 program).⁵⁴

In the second paragraph of the Declaration, the grand strategic rationale of the declaration clearly becomes visible, even if the more cultural and community-creating effects are also signaled:

"A Europe of Knowledge is now widely recognized as an irreplaceable factor for social and human growth and as an indispensable component to consolidate and enrich the European citizenship, capable of giving its citizens the necessary competences to face the challenges of the new millennium."

55

What we see here is a sign that, at the European level, the context for higher education was increasingly to perceive education as a source of economic and strategic benefits of a citizenry with a high level of human capital, as a source for economic growth, relative wealth, and security. Consequently, earlier concerns about sovereignty related to culture and identity were superseded by concerns about the global competitiveness of Europe. Ultimately, the result was a widespread acceptance of the necessity to explore how conventional forms of cooperation could be furthered or even "tilted to another plane," namely those of harmonization and integration. ⁵⁶

A second level of rationales in the declaration concerns the overall goals to be pursued to bring about the strengthened Europe of knowledge. The major idea here is the promotion of *convergence* in the structure of higher education systems. The code words for the objectives with the EHEA are therefore *mobility* and *employability*. Of course, reticence may arise at the national level given the level of ambition of such external shaping of national systems of education. Yet as noted by the Confederation of EU Rectors' Conferences and the Association of European Universities, the Process aims at convergence and is therefore "not a path towards the 'standardisation' or 'uniformisation' of European higher education. The fundamental principles of autonomy and diversity are respected." The aim of convergence is thus not to be understood as uniformity, but rather compatibility. The intention is to reduce the barriers not only to cooperation, but also exchanges of students and the resulting labor force, hence the objectives of mobility and employability.

At the third and most concrete level, the Process (taking into subsequent revisions and additions) has created concrete objectives or lines of operation in order to reach the overall goals. Today, these include 1) a three-cycle degree structure, 2) the introduction of national qualification frameworks, 3) quality assurance, 4) recognition of qualifications and credits and of prior learning, and 5) student and staff mobility. The following sections briefly discuss these lines of operation.

The three-cycle degree structure consists of the adoption of a continuum of degrees consisting of a baccalaureate, masters, and PhD, where each is a requirement for access to the next level. Furthermore, the cycle structure is expressed in terms of credits that enable further comparability. Under the ECTS workload system, 1 credit reflects 25–30 hours worth of student work, and one academic year consists of 60 ECTS credits, or 1500–1800 hours of student work. This means the 3–4 year baccalaureate is worth 180–240 ECTS, and the 1–2

year masters is worth 60–120 ECTS. The most prominent model is 180 ECTS for the baccalaureate and 120 ECTS for the masters. The adoption of such a uniform system has the merit of enabling mobility inside national education systems and across borders as well as to enhance international employability as employers will more easily recognize the relative value of degrees.

National qualification frameworks (NQF) are tools based on learning outcomes rather than on the duration of studies. This means that the NQF is an instrument:

"...for the development, classification and recognition of skills, knowledge and competencies along a continuum of agreed levels. It is a way of structuring existing and new qualifications, which are defined by learning outcomes, i.e. clear statements of what the learner must know or be able to do whether learned in a classroom, on-the-job, or less formally. The Qualifications Framework indicates the comparability of different qualifications and how one can progress from one level to another, within and across occupations or industrial sectors (and even across vocational and academic fields if the NQF is designed to include both vocational and academic qualifications in a single framework)." 58

This means that NQFs entail the production of formalized descriptions of qualifications—in terms of skills, competences, and knowledge—acquired through a specific education. This is part of the process of encouraging comparability pushed under the Bologna Process wherein systems are to move from assigning credit based on contact hours between students and faculty and toward assessing student workload and, eventually, learning outcomes. With the introduction of QF at the national level, comparability across educations is enabled. For the same reasons, another layer, namely the European Qualification Frameworks (EQF), was also introduced in order to enable the Bologna goals of mobility and employability.

Qualification frameworks are then also tools that pave the way for a more systematic practice of quality assurance (QA). One decade into the Bologna Process, most countries have national QA systems. Following the introduction of European Standards and Guidelines (ESG) for QA, the goal of introducing comparable criteria and methodologies is, according to the leading expert, "largely achieved." The ESG consists of three layers of quality assurance: processes inside the institutions themselves, external quality assurance typical at the national level, and then, finally, external quality assurance of the quality assurance

agencies typically in an international and European context. Even so, progress at institutional levels varies substantially.

Given that some progress has been made in aligning other elements, it should come as no surprise that the recognition of diplomas has also played a large role. Introduced in 1997, the Lisbon Recognition Convention forms the basis for the principle that the burden of proof lies on a country that should wish to not recognize a foreign academic qualification that is similar to the corresponding qualification in that country. Recognition is the rule, in other words. Tools to achieve recognition include the adoption of ECTS, a diploma supplement detailing the courses taken and credits earned, as well as the QA frameworks mentioned above.

Finally, mobility as a line of operation and a goal plays an important part in the effort to promote and further the EHEA—as it indeed has since the introduction of, for example, the Erasmus exchange program in the EU context. Here, outcomes are mixed, as in how it is difficult to establish a significant 'Bologna effect' on mobility, beyond the attractiveness of North-Western Europe, which incidentally is also where the major suppliers of courses taught in English are located. But a large majority (four-fifths) of Bologna countries have institutionalized some kind of support for mobile students, even if they do not bridge the largest identified barriers to student mobility, namely financial issues and lack of recognition. 62

Diffusion of the Agreed Agenda

Because of the intergovernmental character of the Bologna Process, changes at the national and institutional levels affected by the international level (the process itself) have largely occurred through persuasion rather than authoritatively. Bologna's effects at national levels can be understood as a case of diffusion from the international to the domestic levels, but also as a negotiated outcome at the national level between the various actors involved, engaged in how to interpret the developing agenda. In fact, it is very fruitful to integrate the more general concept of diffusion with the more regionally specific concept of Europeanization, of which the Process is one particular kind of example. Nonetheless, in order to map the actual outcomes at national levels, it matters to conceive of the process with a model depicting the Process as an overarching "European institutional context" for the specific domestic policy formulation processes related to reforms of higher education. As different policy domains have different "interaction modes," the specific form of negotiation between engaged actors

related to higher education often occurs in the "shadow of hierarchy," which compels actors to reach compromises and consensus before an eventual ministerial intervention.⁶⁴

This also means that the ongoing shaping of the developing agenda is very much a result of the state's active participation, that is, "decisions written in communiqués and declarations are born from discussions, negotiations, etc.," even if the "policy actors have no European decision-making powers or authority." Tracing the use of the concept of "quality" in higher education through the first half decade of the Process therefore makes it possible to show how a concept of quality akin to that in the wider discussions concerning the quality of higher education during this period was slowly focused towards an increasingly specific meaning referring to quality assurance (QA), including a relatively formalized set of procedures. Of special importance here was the mimicking of the intergovernmental character of the Process itself in that the QA system developed through these early and later stages followed a distributed rather than unitary logic; i.e. that instead of a joint or integrated European QA system, another model was followed in which layers of QA were developed as described above.

The Copenhagen Process

Clearly, adopting homogenous degree structures matters for improving the mobility of both students and candidates in the civilian market. Yet the special case of non-university tertiary/higher education institutions shows that superficial reforms will not yield large-scale convergence in the overall field of higher education—between universities and said institutions.

An analysis of how the Process changed the relationship between these two types of institutions in the Netherlands, Germany, and France, show that progress was indeed made over the first five years, especially in the case of the two first countries. ⁶⁷ These countries were also the ones where a binary structure in the overall market—a division of labor between more academic universities and slightly more vocational technical "high schools" (*Hogescholen*, *Hochschulen*)—was most clearly extant. In all three cases, a "convergence in institutional types" was supported by reforms of "curricular governance" as all of the institutions came under the same (national) accreditation regimes in the Netherlands and Germany, while the French enabled some integration of its *grandes écoles* under a single national system of quality assurance. As reforms were introduced and Process-inspired degree structures were adopted, the "gap between the different types of higher education

systems" became smaller.⁶⁸ But even if the Process has clearly helped shape wider and more integrated national fields of higher education, the adoption of single sets of elements from the Process has not been sufficient for more complete integration:

"The extent to which the adaptation of national degree structures could result in coherent policy regarding the relationship between institutional types [university and non-university institutions in tertiary education] was limited in all countries, largely because other defining features, such as funding, personnel requirements, and academic pay, were not adopted along with the changes in degree structures."

In other words, in the absence of a comprehensive reform of the non-university higher education institutions—including the defining features mentioned above—there is a low probability of strong integration between university and non-university institutions. Or, in more positive terms, comprehensive reform including funding, personnel requirements, and academic pay is necessary at those institutions that at least resembles the universities if the walls between the two types of institutions are to be permeable.

As the Process initially focused largely on universities and academic education, technical and vocational training leading to procedural rather than conceptual knowledge were relative latecomers in the process. Via the Copenhagen Process on Vocational Education and Training (VET), launched in 2002, this aspect has since been receiving more traction in parallel with the Bologna Process proper. Much like the Bologna Process, its Copenhagen cousin aims at reinforcing the European dimension in VET, including improved information and transparency regarding VET. It also proposes the development of tools for the "mutual recognition and validation of competences and qualifications" as well as for the advance issue of QA inside VET (due in 2015). The introduction of a specific set of credits for VET, akin to ECTS but known as ECVET and fully compatible with ECTS, is likely to be a strong driver of mobility and exchange in this domain.

Conclusion: Take-aways from Bologna and Copenhagen

Fifteen years ago, heterogeneous higher and vocational-technical education systems across Europe presented substantial barriers to capitalizing on the free movement of highly educated and skilled labor within the EU and beyond. Incompatible degree requirements, course credit systems, accreditation, and quality assurance procedures precluded the recognition of educational credentials for students and graduates, stymied competition for each, discouraged

international innovation, and hence limited European productivity and competitiveness in an increasingly global marketplace. Policy makers realized that these barriers to cooperation had to be addressed at a foundational level if they were to be overcome.

The Bologna and Copenhagen Processes in civilian higher and vocational-technical education were designed to facilitate a gradual convergence of national higher education systems across Europe. They have encouraged the harmonization of education credit systems and recognition of these credits across institutions and borders so as to facilitate mutual recognition and student mobility. Beyond this, the Bologna Process has encouraged the standardization of degrees and their requirements across the three levels of higher education—baccalaureate, masters, and doctoral—so as to facilitate the recognition of degrees between institutions and borders. These reforms have had a substantial impact on higher education in European states and promise to have a similar effect on vocational-technical education. They therefore provide a source of ideas and inspiration that can be drawn upon as the militaries of the Nordic states seek ways to enhance and deepen cooperation on professional military education. We discuss how the concepts underlying Bologna and Copenhagen could apply to PME—and where they may not—in the next chapter.

4. PME, Bologna, and Copenhagen

Inspiration and Adaptation

As described in the previous chapter, the Bologna Process in civilian higher education was designed to facilitate the gradual convergence of national higher education systems across Europe. To do so, the process encouraged the harmonization of education credit systems and recognition of these credits across institutions and borders so as to facilitate mutual recognition and student mobility. A similar system has been established to deal with vocational and technical education, although it is less developed. Beyond this, the Bologna Process has encouraged the standardization of degrees and their requirements across the three levels of higher education—baccalaureate, masters, and doctoral—so as to facilitate recognition of degrees across institutions and borders. Together, these reforms are intended to increase cooperation and competition amongst European institutions of higher learning, enhancing their efficiency and effectiveness and improving the quality of the workforce thereby produced.

How might this or a similar system be applied to professional military education in Europe? Professional military education shares many similarities with civilian higher education, but there are also many differences. Similarities will suggest areas where the adoption of the Bologna criteria should pose few difficulties, whereas differences would suggest areas where adaptations or alterations may be required. Comparisons can be made in terms of the levels of education inherent in each system, program length, nature of the course of study, potential for standardizing credits, potential for mutual recognition, potential methods of quality assurance, and the ultimate measures of effectiveness.

The Continuum of Education

To begin, PME consists of at least two levels of education: undergraduate education at military academies and two tiers of graduate-level education at command and staff colleges and war colleges. This three-step educational process does not correspond directly to the three levels of higher education delineated in Bologna. Undergraduate education at the academies typically corresponds to a three-year education at a civilian university and would therefore be amenable to harmonization within the Bologna Process. Indeed, Paile reports that at least 21 army academies, 13 naval academies, and 16 air force academies across Europe have begun implementing the Bologna Process. Programs at the command and staff or war college level, however, are typically 11 months long and, at best, could qualify for 60

ECTS—that is, a short masters degree program but not a doctorate.⁷³ They would therefore require substantial alternation, extended in time, and expanded in content to accommodate the Bologna terms or time and student workload, as has occurred as an option in Norway and as required in Finland and Sweden.

A Hybrid of Higher and Vocational-Technical Education

Secondly, professional military education at each level has traditionally been a combination of education and vocational training. At the undergraduate level, professional military education adopts the Oxbridge model of a holistic approach wherein the institution undertakes to develop students in both social and academic dimensions. Classroom instruction is combined with training in the military arts, embodied in the drill and more advanced forms, as well as ritualized social activities. The objective of such an educational environment is to mold loyal officers possessing the esoteric knowledge and skills of the military profession as well as the appropriate character traits, including loyalty, courage, and honor. This objective is often facilitated by an in-residence model requiring group living arrangements, isolated from the influence of the broader community.

At the command and staff and war college levels, further education in military science is combined with training in staff processes and leadership skills for officers in the middle or at the apogee of their careers. The organization of the curriculum into seminars (or syndicates) captures this mixture of higher and vocational-technical education. The seminar environment replicates small unit dynamics and larger exercises emphasizing group coordination, management, and leadership. The form as is as an important component of the educational experience as the content. PME at this level embraces a less comprehensive Oxbridge model than at the cadet level, as student-officers at the mid-career point have been considerably socialized into their profession and developed more mature lifestyles—i.e., they likely have a spouse and children. They are therefore given greater opportunity to pursue individual living arrangements, albeit often-times constrained to on-base housing, so as to not break the development of social ties to the community of service that is their national profession.

Standardization: Higher is Better

This leads to the third issue: the potential for standardizing credits across military educational institutions, borders, or with civilian university systems. The combination of education and vocational training may prove problematic to adopting Bologna standards, objectives, and processes wholesale. The Bologna Process is geared toward education, and a clear distinction

was drawn with vocational training. Although a parallel system of accounting for credits is being developed for vocational occupations, Bologna's ECTS standard is far ahead of Copenhagen's ECVETS (European Credit in Vocational Education and Training) standard. Thus far, the tendency of PME institutions that have emulated or joined the Bologna Process has been to "increase[e] the proportion of intellectual training and bring[] initial military education ever closer to the civilian higher education model." But such tendencies cannot continue if professional military education is to retain its hybrid nature and achieve its objective of developing military professionals, either prior to their commissioning or later in their careers. Standards that account for contact hours, student workload, and/or the development of competencies must be established if Bologna–Copenhagen standards are to be adopted in PME—and this is well beyond the state of the art in civilian higher education.

Potential for Mutual Recognition in PME

The potential for the recognition of course credits and degrees in PME has two aspects: whether credits and degrees are recognized by other military education institutions and their national militaries and whether recognized by civilian institutions. Within the military sphere, acceptance will likely depend on the level of education being addressed. At the undergraduate level, the course of study is geared toward national purposes that would hamper the recognition of credits and especially degrees obtained abroad or outside of the military academy setting. The undergraduate academy is the state's primary opportunity to indoctrinate the future officer to be loyal, to introduce them to the national system of government, military procedures, and other topics specially geared toward the home state. The data bear this out. Paile found that "only 56% of the countries responding [to the stocktaking survey of European military academies] recognized the training provided in an other [sic] EU Member State as a rule. 65% said that they recognized it on a case-by-case basis," and 45 percent require cadets to have participated in an exchange program to fulfill all national education and training requirements despite their enrichment abroad. ⁷⁶ The acceptance and recognition of credits and degrees obtained from civilian institutions or abroad would require a wholesale reconceptualization of the nature and purpose of undergraduate PME, perhaps resulting in a system such as the Reserve Officer Training Corps or Officer Training Schools utilized by the United States as commissioning pipelines for its officer corps. ⁷⁷ Clearly, the wisdom of such a wholesale change to the process of manning the officer corps is beyond the ambit of this report.

This constraint is less onerous at the command and staff level, and even less so at the war college level, where officers have progressed to the mid-point of their careers or further and can therefore be expected to have been effectively socialized and familiar with their national military. Indeed, at the graduate level, much of the education can (and should) be geared toward orienting officers toward multinational, coalition, and Alliance policies, procedures, and practices at the operational and strategic levels. Undertaking PME in an allied state's institution or in a multinational setting would serve to socialize officers into a multinational mindset. Credits and degrees obtained from abroad would therefore constitute an added value as the more international experience that an officer has, the better.

Potential for Mutual Civilian Recognition

However, gaining recognition of PME credit in the civilian educational system poses a separate challenge. This stems from two considerations: the vocational nature of PME and the attitudes of civil society toward the military.

On the first, PME institutions are unlikely to find compatible partners given the hybrid nature of their education. Somehow, each part would have to be captured. The Bologna ECTS system may be in place for higher education, but the ECVET system of frameworks for qualifications across occupations and professions at the national level, including defining units of credit that could serve as the basis for transparency, comparability across institutions and borders, mutual recognition, and mobility, have yet to be fully developed and implemented. Because ECVETS is not mature, a system of equivalency between it and ECTS has not been established. It is therefore unlikely that civilian institutions will be equipped to make judgments about the equivalency of the vocational-technical education offered in other institutions or other national systems for some time. PME institutions could simply accept their educational product being worth less than that offered by civilian higher education systems, despite equivalency of workload and/or time spent in studies. But undervaluing PME, its quality, and its purpose should not be a desirable end state and will contribute to the second challenge in gaining mutual recognition with civilian institutions: the low esteem in which the military profession is held in Europe.

The second challenge is the image of the military in European societies. Although the military is often referred to as "the profession of arms," the manner that many European states have chosen to acquire and develop their personnel—conscription of young men who are developed within a closed system—has denied them association with the other

professions and their institutions—in particular, university education. ⁸¹ Paile argues that prior to their participation in the Bologna Process, military academies had not been "identified as full actors in European higher education" and "officers [had not been] recognized as intellectual elites and legitimate holders of defence-related knowledge." ⁸² Indeed, Paile continues,

"[o]fficers who had been educated in the armed forces encountered significant difficulties in retraining for the civilian labour market because of this loss of standing and the unsuitability of their qualifications in the eyes of civilian society."83

Polls of public esteem of the professions in European states do not include military officers.⁸⁴ Indeed, the officers of many European states have also held themselves in low regard.⁸⁵ The image of the military as an occupation that is not associated with expertise that is obtained through advanced educational experiences is a significant barrier to overcome to facilitate recognition of PME in the European civilian higher education systems and full participation in the Bologna Process.

On this score, however, the military profession ought to go on the offensive. The Bologna and Copenhagen Processes have moved from using contact hours with students to student workload as the basis for assigning educational credit. They are beginning to move beyond these input measures to measures of outcomes—student competency in their chosen fields. The civilian side faces a crucial challenge in this respect, since the ultimate measures of the effectiveness of higher education are the degree that graduates are employable, their productivity, and the economic benefits accrued from enhancing human capital.

Macroeconomic statistics possibly capture such market measures, although it is unlikely that such statistics will capture data adequately enough to differentiate between employees that have directly benefitted from the Bologna Process—even those who have participated in the Erasmus program—and those who have not.

Here, the military has a significant advantage, as it has systematically evaluated officer competencies for decades. In the military realm, the ultimate measures of effectiveness are the degree that officers are capable of performing the functions assigned to them in the context of their rank and occupational specialty. This includes understanding the political-military environment in which they operate at the tactical, operational, and strategic levels

and in the context of their service, the military as a whole (the "joint force"), the nation, and the international system. As a U.S. Congressional Subcommittee put it,

"PME's principal purpose is to educate and prepare military leaders, throughout their careers, for the rigorous intellectual demands of employing military force or other instruments of national power in a complex and uncertain security environment... The officer corps must possess the needed competencies specific to the services' primary warfare domains (i.e., the air, land, sea, and space aspects of warfare). The department and the services must also produce sufficient numbers of officers who can contribute to joint, international, intergovernmental, and multinational operations."

Measures of effectiveness can be more easily captured in this context, since the national militaries are closed systems that serve as the supplier and demander of officer PME. Indeed, officers receive performance evaluations on a regular basis, are compared explicitly for promotion, and attendance (if not necessarily performance) in PME is a key discriminator in these evaluations. The will therefore be much easier to evaluate the effectiveness of any reforms in the PME realm—and much sooner than in the civilian realm. PME systems can use this advantage to take the initiative in the national qualification frameworks being constructed to merge the Bologna and Copenhagen Processes. Indeed, national ministries of education could benefit from including the hard work that military schools have undertaken to delineate and evaluate the qualifications of their officers.

Quality Assurance

The fifth issue is the potential methods of quality assurance. The Bologna Process calls for internal quality assurance measures that include transparency of programs, explicit grading criteria, monitoring, periodic program review, collection of student feedback, and collection of other relevant program data by the institutions. In many ways, such requirements would not be alien to these institutions. Perhaps the most challenging would be explicit grading criteria. The Oxbridge model of education that served as a foundation for many PME institutions combined with their partial vocational orientation to form a culture wherein explicit grading criteria is de-emphasized. ⁸⁸ But the grading of coursework, courses, and exercises is an activity of quality assurance that has been embraced by many PME institutions, especially in the United States. ⁸⁹

Bologna also calls for national and international external reviews of program quality. Paile argues that military educational institutions "might feel uncomfortable with the idea of international surveys, peer reviews, or, due to hierarchical organization of the armed forces, student involvement in the quality assurance program." This may be the case, but cooperation amongst allied states within strategic proximity ought to relieve some of the anxieties of international peer review. Peer review by civilian institutions may induce more anxiety, although the Norwegian, Swiss, and Finnish programs are accredited by their national Ministries of Education—with Denmark working toward this goal—and Norway and Finland participate in the Bologna Process. This suggests that both internal and external means of quality assurance are possible within PME.

Conclusion: Adapting PME to Bologna and Copenhagen

The military profession is one that trains and educates its members in the esoteric skills and knowledge required to utilize and manage organized violence to achieve state objectives in an effective and efficient manner. Professional military education is an integral part of this development process. Like most areas of education, it has until recently remained the province of individual states and separate from civilian higher education and vocational-technical education. But European states have begun synchronizing their higher and vocational-technical education systems under the Bologna and Copenhagen Processes. This has created systemic incentives to encourage the harmonization of education credit systems and degree requirements, and recognition of these systems and requirements across institutions and borders so as to facilitate student mobility and worker mobility. It is hoped that this convergence will increase competition and the quality of higher and vocational-technical education across Europe, ultimately increasing the quality of the workforce and Europe's competitiveness in the global economy.

Europe's militaries face similar incentives to improve the quality of their officers through their professional military education systems. The Bologna and Copenhagen Processes offer some ideas and incentives, but outright integration of PME into them is neither possible at this time nor desirable. The continuum of education in PME does not match that of Bologna's levels of baccalaureate, masters, and doctoral degrees. The hybrid nature of PME, its requisite mix of higher education and vocational-technical education, presents a second barrier. The national purposes of PME and the greater proportion of vocational-technical education at the lower levels suggest that convergence and mutual recognition will be easier at the mid-career command and staff level and higher. Recognition by civilian institutions,

however, must await the development of equivalencies in the Bologna ECTS and Copenhagen ECVETS credit systems. The push toward measuring competence in each as a means of achieving equivalence is a development that the PME system can leverage since the military profession has a mature system for linking education and training to the evaluation of competence. Finally, the requirements of internal and external quality assurance present no real obstacles.

How can the Nordic states increase PME cooperation? Do these barriers and obstacles to outright adoption of Bologna and Copenhagen preclude cooperation on that basis? What parts can be adopted and what parts can be adapted, if any, to facilitate cooperation? These are the considerations addressed in the next chapter.

5. Enhancing Nordic PME Cooperation

The NORDEFCO states have established their desire to increase their level and depth of cooperation in PME. They have already established a framework for cooperation in the area of human resources and education and have already taken small-scale initiatives focusing on specialist training and education courses. We have argued that the Nordic states should raise their level of ambition and address cooperative initiatives at the command and staff college level. Addressing this level of PME has many reasons to commend it. It stands at the point of an officer's career when they can and should begin focusing on concerns beyond those of their home service and military, when cooperation with allies and partners comes to the fore. The command and staff course is also substantial, serving a large number of officers. Cooperation therefore offers opportunities to reap a number of economies of scale; it is where reforms can yield the greatest return on investment.

But cooperation with respect to providing the command and staff course involves substantial obstacles. These are national courses that are offered only in-residence to a select group of officers in each state's native language. They differ in length and intensity, are accredited by different national authorities, and serve different purposes within their personnel and promotion systems. These differences render cooperation difficult, as indicated by the small percentage of officers going abroad for this developmental opportunity. How can these difficulties be overcome?

The reform of the civilian sector in higher and vocational-technical education under the Bologna and Copenhagen Processes suggests key reforms that can enable increased cooperation: standardization of degrees and requirements in terms of contact hours, student workload, and/or competencies; mutual recognition of course credits and degrees obtained elsewhere; common governance structures to monitor, police, and encourage quality; and student mobility to generate competition so as to increase the quality of the educational products being offered by course providers.

The reforms required to overcome these barriers to increased cooperation are straightforward. First, common courses for common purposes should be developed. Curricula in command and staff courses should overlap significantly, as officers are being prepared for similar levels of responsibility at this point in their respective careers. Commonalities, particularly with regard to education and training that addresses multinational cooperation, should be determined and further harmonized. Second, the most substantial barrier to foreign officer

participation in higher education is language—even among the Nordic countries. Common courses for common purposes ought to be taught in a common language: English. Regardless of Nordic Council sensitivities with regard to shared languages, the international language of military affairs and international missions is English. English is most likely the language that will be used in multinational military operations, and preparation to perform well in those circumstances therefore requires mastery of the material in that language. Third, common courses for common purposes should be offered at common times. Synchronization of the academic calendar is necessary to facilitate the myriad forms of cooperation possible. Fourth, indicators of competency should be utilized as the basis for quality assurance judgments, because this is what truly matters and military institutions have the criteria and evaluative machinery in place—far ahead of what is extant in the civilian sector. Fifth, a common governance structure to facilitate the monitoring of competency development and assure the quality of the education provided must be established. Sixth, space must be increased for the participation of foreign officers in these common courses. Officers must not only be allowed but also encouraged to seek their command and staff course credits abroad, and space must be made available to accommodate them. Seventh, an exchange scheme should therefore be developed to ensure equity in sending and receiving relations. Finally, officers' respective home services must recognize and acknowledge the equivalence of the common course taken abroad for the purposes of their career development.

8 Principles

Common courses for common purposes

Common language

Common scheduling

Common competency metrics

Quality assurance

Student mobility

Exchange scheme

Mutual recognition

These eight principles could be implemented in many ways. We consider five: a Nordic Defence College, standardization of existing command and staff courses, bounded demand for common courses for common purposes, open demand for common courses, and open demand and supply of such courses. Each option is based on common courses for common

purposes in a common language. They require cooperation on content, quality assurance procedures, mutual recognition of educational credit, and facilitating cross-national mobility for student officers. Thus, each requires increased cooperation amongst NORDEFCO members and presents different challenges to be overcome.

The first option is a Nordic Defence College to supplement or supplant the existing PME structure in the Nordic states. A NORDEFCOL would have common courses for common purposes, would use English as the language of instruction, would of course implement a common schedule for all officers in attendance, would necessarily have a large number of slots available to "foreign" officers, the selection of officers to attend would be explicitly managed through an exchange scheme to ensure equity, and all participating states would agree before the institution was inaugurated that the education received therein would be recognized. Such a NORDEFCOL would necessarily be governed by a committee of participating states that would provide guidance with regard to curriculum content, accredit the course of study, and assure its continued quality through monitoring and evaluation. The result would be something akin to the Baltic Defence College, albeit on a grander scale.

The second option is the standardization of existing command and staff courses across the Nordic region in content, time, and length. By adopting a standard curriculum taught in English and scheduled synchronously across the participating countries, foreign officer participation would be enabled, increasing potential demand that should be met with an exchange scheme to increase the slots available to partake of the opportunity. Mutual recognition of the quality of the education and its credit for the officer student would be determined by a committee of participating states that would provide guidance with regard to curriculum content, accredit the course of study in each country's schoolhouse, and assure its continued quality through monitoring and evaluation. The result would be something like the American system of Joint Professional Military Education across the four services.

The third option is enabling bounded demand for staff course requirements. In this option, common courses for common purposes taught in English would be developed and offered across the command and staff colleges. Other courses—national courses for national purposes—could remain as such. The common courses, however, would have to be offered at common times to accommodate officers who are assigned as students to PME for that year. The exchange of students could take place within a coordinated exchange scheme that could allocate slots across the involved nations according to a common formula, imposing a cap for

maximum participation in the name of equity. Recognition of the credit for the common courses would be governed by a committee of participating states, as would the accreditation, monitoring, and evaluation of those courses. The remainder of the courses would be governed and accredited according to each state's domestic preferences, the result being something like the Combined Joint Exercise (CJEX) filtered through the entirety of the command and staff curriculum.⁹¹

The fourth option is enabling unbounded demand for staff course requirements. As in the bounded market, common courses for common purposes taught in English would be developed and offered across the command and staff colleges. Other courses—national courses for national purposes—could remain as such. The common courses should still be offered at common times to accommodate officers who are assigned as PME students for that year. Each state's military could additionally designate officers to be assigned as PME students as well as others who are cleared to partake in educational opportunities in a modular manner. This would enable a more open professional development scheme, diffusing the delivery of PME requirements over time for some officers. Officers designated as nonresident students would have to adjust their regular duty schedules to attend courses and ought to have leave to do so. The exchange of students would take place according to the demand for the common courses and would therefore have to be governed by an exchange scheme imposing a cap for maximum participation to ensure equity. Recognition of the credit and for the common courses would be governed by a committee of participating states, as would the accreditation, monitoring, and evaluation of those courses. The remainder of the courses would be governed and accredited according to each state's domestic preferences. The result would be a bifurcated population of officers cleared to participate in PME, akin to the mix of resident and non-resident cohorts of officers in the American PME system.

The fifth option is enabling unbounded demand and supply for staff course requirements. As in the unbounded demand market, common courses for common purposes taught in English would be developed and offered across the command and staff colleges. Other courses—national courses for national purposes—could remain as such. The common courses could be offered at different times in different locations to accommodate officers taking PME as resident or non-resident students. The scheduling of courses would be determined by the ability of different faculties to supply them at any particular time. All officers would participate in educational opportunities in a modular manner. This would enable an entirely open professional development scheme, diffusing the delivery of PME requirements over

time for all Nordic officers. The exchange of students would take place according to the demand for the common courses and would therefore have to be governed by an exchange scheme that imposed a cap on maximum participation for each state to ensure equity. Recognition of the credit and for the common courses would be governed by a committee of participating states, as would the accreditation, monitoring, and evaluation of those courses. This would hold for any course supplier, military or civilian. The remainder of the courses would be governed and accredited according to each state's domestic preferences. The result would be an à la carte PME system with the primary constraint imposed by the prerequisites required by individual militaries for officer qualification and promotion.

The manner that these five alternatives address the eight guiding principles is summarized in the following table.

Table 1: Possible Institutional Expressions of Nordic PME Cooperation					
	NORDEFCOL	Standardization	Bounded Demand	Open Demand	Open Supply & Demand
Common Courses	Entirely	Entirely	Partially	Partially	Partially
English	Entirely	Entirely	Common courses only	Common courses only	Common courses only
Common Schedule	Entirely	Entirely	Entirely	Entirely	None
Competency Assessment	Beyond ECTS- ECVETS	Beyond ECTS- ECVETS	Beyond ECTS- ECVETS	Beyond ECTS- ECVETS	Beyond ECTS- ECVETS
Governance	NORDEFCO	NORDEFCO + national	NORDEFCO + national	NORDEFCO + national	NORDEFCO + national
Mobility	All	In-residence individuals or cohorts	In-residence individuals or cohorts	In-residence cohorts and non-resident individuals	In-residence and non- residence individuals
Exchange Scheme	In assignment	In assignment	Agreed caps	Agreed caps	Agreed caps
Mutual Recognition	By definition	By definition	By agreement	By agreement	By agreement

Each of these five alternative ways of institutionalizing PME cooperation in the Nordic countries has different degrees of potential to enable further reform and cooperation, but each option also has its own liabilities. A NORDEFCOL would require significant investments during a period of austerity, although it might prove to be more efficient over time. It would

focus any efforts to further reform PME in one organization and would certainly provide a Nordic profile to any subsequent cooperation in multinational military operations.

Standardizing courses of study across the Nordic schoolhouses would require the significant adjustment of the curriculum and reduce its national content. Yet it, too, would provide opportunities for economies of scale in curriculum production, validation, and accreditation, provide an institutional focus for further PME reform, and again establish a Nordic profile in multinational military operations.

Bounded demand requires the least adjustment in the purpose and structure of intermediate PME across the Nordic states, provides for a common Nordic profile in multinational operations, promotes competition between course providers, and lays the basis for further cooperative reforms.

Open demand for command and staff courses requires adjusting the manner that personnel systems assign officers to PME, keeps track of their progress and qualifications, and balances the duties of officers who are assigned to duties other than those of a student, including determining when duties must be performed by a temporary replacement. On the plus side, it enables competition between course providers as well as officers demanding slots in the common courses, would provide for a Nordic profile in multinational military operations, and would encourage further reform, including distance learning and perhaps the use of civilian educational providers for the officers who are not assigned to in-residence PME.

Finally, an entirely open market for command and staff requirements would require significant change in the structure of PME in all Nordic states. Coherent, sequential curricula would have to be modularized and courses offered in response to demand. The modularization of courses would enable new course suppliers, such as civilian university departments, to enter the market. New modes of educational delivery, such as distributed learning, could also be enabled by opening supply common courses for common purposes. 92 Market forces of competition would have to be constrained by rigorous content requirements and a strong oversight and enforcement mechanism in the form of a governing and accreditation board if a race toward minimal requirements is prevented. 93 Cohorts of inresidence students would be reduced to those that shared individual course modules, resulting in different levels and types of small group cohesion. The human resource departments of each state's military would have to develop means to track the progress and qualifications of officers enrolled in this system and set time limits for the completion of all requirements.

How the mix of benefits and liabilities inherent in these different institutional arrangements that enable PME cooperation are to be evaluated is something for the NORDEFCO nations to consider and discuss.⁹⁴

It is important to bear in mind that these institutional possibilities indicate how cooperation within the eight principles can occur. Individual Nordic countries will determine how much commonality they will adopt. They could adopt any model entirely or in part, select some officers to receive the common courses for common purposes curriculum and select others to receive an entirely national course for national purposes, supplied by their command and staff college faculty or from any supplier of courses that they deem appropriate, select a large number for exchanges, or select none at all. It is up to them.

Conclusion: Pathways Toward Increased PME Cooperation in NORDEFCO

The NORDEFCO states have begun cooperating in the realm of human resources and professional military education. They have done so through the mechanism of common courses for common purposes. This principle has been applied thus far on an ad hoc basis to small training courses. NORDEFCO members ought to raise their level of ambition. The command and staff courses offered by each provide an excellent opportunity for increasing cooperation; such cooperation is difficult, however, because they have been developed as national courses for national purposes despite the commonality of required competencies for officers reaching this stage in their careers.

We have argued that the harmonization of the civilian sector in higher and vocational-technical education that is taking place as part of the Bologna and Copenhagen Processes offers mechanisms that can be adapted to PME cooperation. Eight principles for reform provide a Bologna–Copenhagen-inspired way to increase cooperation. Developing common courses for common purposes that are taught in a common language, the synchronization of the academic calendar, the establishment of a governance body for quality assurance, enabling and encouraging student mobility within an exchange structure that ensures equity, and the mutual recognition of educational competencies developed in a foreign institution can significantly enable increased cooperation. This cooperation can express itself in many ways and we discussed five: a Nordic Defence College, standardization of the command and staff courses across the Nordic region, bounded demand for common courses, open demand for common courses, and open supply and demand for common courses. Each presents its own unique mix of benefits and liabilities, as well as potential for further reform. All five options,

and perhaps others, provide a way of greatly enhancing Nordic cooperation with respect to PME. NORDEFCO nations should further examine these principles and institutional proposals as they consider how to deepen their PME cooperation.

6. Conclusion

International cooperation is difficult. It requires accepting common solutions to common problems, and such solutions will not be optimal for each individual. The benefit of cooperation, however, is the increase in efficiency that accrues to each. In the context of multinational military operations, cooperation also increases effectiveness: militaries that train and educate together are far more likely to operate well together than those meeting for the first time in the theater.

Austerity and international operations have increased the political demand for further international cooperation in defence matters. The NORDEFCO states have recognized this, as have the international organizations that its members are also part of: NATO and the EU. Thus, the desire and opportunity for cooperation at a fundamental level exists. Professional military education represents one area that may be perceived as less sensitive than cooperation on operational capabilities, such as through NATO's Smart Defence and the EU's Pooling and Sharing concepts. 95 As we have shown, however, PME is also a very complex area: the education of military officers is at the heart of every state, because it produces the essential operators in the state's ability to prepare for and ultimately wage war and protect itself.

PME is thus a very national affair. The PME programs of even strategically proximate states, such as the NORDEFCO states, serve different purposes in the career development and promotion system of their officer corps. These differences are expressed in terms of language, curriculum content, duration, workload, and accreditation. At the level of the command and staff course for field-grade officers, cooperation as expressed in officer exchanges has been extremely modest. The current plan for enhancing NORDEFCO cooperation in this area focuses on ad hoc cooperation on a few common courses for common purposes that train a small number of personnel in very discrete competencies. This sets the bar too low. There are ways for NORDEFCO partners to address a higher level of ambition and cooperate more deeply and meaningfully in professional military higher education.

Indeed, the reform of the civilian sector in higher and vocational-technical education under the Bologna and Copenhagen Processes suggests key principles that can overcome national differences and enable increased cooperation. These principles include the standardization of degrees and requirements in terms of contact hours, student workload, and/or competencies; mutual recognition of course credits and degrees obtained elsewhere; common governance

structures to monitor, police, and encourage quality; and student mobility to generate competition so as to increase the quality of the educational products being offered by course providers.

When applied to the hybrid realm of PME, these principles suggest several principles. First, the current push to develop common courses for common purposes should be expanded to include curricula in command and staff courses addressing the common areas of knowledge that field-grade officers must master to be true military professionals. Second, these common courses for common purposes ought to be taught in the international language of military affairs and international missions: English. Third, common courses for common purposes should be offered at common times given the requirements of the personnel assignment systems of the Nordic countries as they exist today. Synchronizing the academic calendar is necessary to facilitate the myriad forms of cooperation that are possible. Fourth, a common governance structure to facilitate the monitoring of competency development and assure the quality of the education provided must be established. Fifth, part and parcel of this must be the development of standards to evaluate the competencies enhanced through the common courses for common purposes. Sixth, officers must not only be allowed but also encouraged to seek their command and staff course credits abroad, and space must be made available to accommodate them. Seventh, an exchange scheme should be developed to ensure equity in sending and receiving relations. Eighth, and perhaps most importantly, the equivalence of common courses taken abroad must be recognized with respect to the officer's career development. These eight principles ought to guide any paths to greater cooperation at the level of command and staff courses.

The NORDEFCO working group on human resources and education should expand and form seven subcommittees to explore ways of implementing each of these principles. One subcommittee should deal with common courses for common purposes. This group should be primarily composed of faculty from the command and staff colleges, with representation from the defense commands and MoDs. This working group should determine the competencies that officers at this level ought to have upon graduation from a command and staff course and examine the curricula of the respective command and staff courses to determine which courses overlap significantly in content and the competencies that they are intended to produce. The areas of strategic theory, military history, leadership, and staff processes—particularly those associated with coalition operations—should offer fruitful areas to begin. A reference curriculum for command and staff courses for NATO members

developed by a multinational team of PME faculty organized by the Canadian Defence Academy could provide a basis for such standardization.⁹⁶

A second subcommittee should be established to assess the competency of officers in NORDEFCO member states to effectively learn complex material in English.

A third, consisting of the deans of the command and staff colleges or their designates, should consider modalities to align the academic calendar to permit common courses to be taught at common times.

A fourth subcommittee should establish the basis for a governance structure that will monitor and assess the quality of the education provided in the common courses. This group will establish reporting and assessment mechanisms for the common courses, determine the means to encourage and assure quality, and prevent a race to the bottom.

A fifth group must develop the means to assess the competencies to be developed in the courses. Such assessment standards should capture both educational and vocational-technical competencies. This is beyond the state of the art in the Bologna and Copenhagen Processes and provide a means to take the initiative in the standardization of educational credits away from civilian institutions. Success here would allow the military to "invade" Bologna with standards that harmonize the ECTS and ECVETS systems within the national qualification frameworks and control their own destiny where they are particularly vulnerable: the shape and content of their profession. Otherwise, the initiative will rest with national Ministries of Education and Ministries of Finance and the services and MoDs will suffer correspondingly. Accordingly, this subcommittee should include PME faculty, deans, commandants, Defence Command and MoD personnelists, and representatives from the Ministries of Education as active observers.

A sixth subcommittee, composed of representatives from the services' personnel centers, should consider means to encourage and enable officer mobility during their time in a student assignment. This would include considering the prerequisites for promotion to higher rank and the range of appropriate duty assignments upon graduation. Here, the U.S. experience with establishing requirements for joint education and joint duty assignments linked to promotion to senior ranks could be instructive. ⁹⁷

The seventh subcommittee would work to develop an equitable officer exchange system so that many of the problems encountered in the civilian sector—with imbalances between sending and receiving states⁹⁸ that have resulted in fines to Danish universities⁹⁹—can be avoided.

The final task need not be delegated to a subcommittee. The mutual recognition of the education received and the competencies developed in the common courses for common purposes should flow naturally from the work of these groups as a whole. Indeed, the entire purpose of these groups is to develop a framework for cooperation that will enable the administrative decision to recognize the command and staff education obtained from institutions abroad.

As these subcommittees of the human resources and education working group proceed, some thought ought to be given to how these eight principles can be institutionally expressed. We presented five possibilities: a Nordic Defence College, standardized national command and staff courses, bounded demand for common courses, open demand for common courses, and open supply and demand for common courses. Each has its own virtues, from a long-term promise of efficiencies (a Nordic Defence College) to considerable flexibility and harnessing the power of the marketplace (an open supply and demand for common courses). Each have liabilities as well, from requiring a large initial investment of capital (a Nordic Defence College) to dismantling the command and staff course model as a coherent and cumulative sequence of courses that an entire cohort of officers experience together over a finite period of time (open supply and demand).

Each of these alternatives can and should be explored further by the NORDEFCO human resources and education working group. To address this larger issue, the working group ought to be expanded to include members of the personnel office within each state's military, Ministry of Defence, command and staff college, members of defense-related research institutes, and perhaps representatives of the Ministry of Education. These stakeholders will be able to more fully detail the advantages of each alternative and, undoubtedly, their shortcomings. Moreover, they will be able to more fully relate the changes in PME to officer development, changes in force structure, infrastructure and facilities, civilian education systems, labor markets, and other aspects that could not be given due consideration in this short report.

Much hard work lies ahead for these officers, civil servants, scholars, practitioners, and policy makers. But it will be worth it. By raising the level of ambition to cooperation in staff courses, NORDEFCO would serve a strategically useful purpose for its own member states and also very likely shape conditions for further PME cooperation beyond the context of a Northern Group, NATO, or EU CDSP. As is the basis for the Nordic Council, the shared values and common history of the Nordic countries make for a comparatively strong starting point for Euro-regional cooperation in such matters. On top of this, we may add a geopolitical landscape that—if it does not appear completely identical across all of the NORDEFCO capitals—nevertheless is calling for military officers trained and educated at the highest Western level with an operations-ready ability to participate in large and complex international missions in both staff and operational capacities. Increasingly, this demand for an internationalization of the staff officer will shape PME, and this can be strategically advanced by states leveraging their strategic proximity to become first movers. The profession itself is being further professionalized through international impulses, and NORDEFCO states have the opportunity to lead and shape this ongoing process.

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Notes

¹ See Stephan De Spiegeleire, "Taking the Battle Upstream: Towards a Benchmarking Role for NATO", (Washington: Center for Technology and National Security Policy, National Defense University, August 2012).

² Ivo H. Daalder and James G. Stavridis, "NATO's Success in Libya," *The New York Times* (October 30, 2011).

³ Ivo H. Daalder and James G. Stavridis, "NATO's Victory in Libya: The Right Way to Run an Intervention," *Foreign Affairs* 91, 2 (March/April 2012), page 6; Eric Schmitt, "NATO Sees Flaws in Air Campaign Against Qadaffi," *The New York Times* (April 14, 2012). "Several Nations reported that personnel assigned to fill staff positions in support of OUP often lacked pre-requisite training and/or experience resulting in a mismatch of people and skills required, and that there was a reduced effectiveness of OUP Headquarters due to the frequent rotation of some assigned personnel," "Operation Unified Protector: Lessons from National Military Perspectives," *Project Factsheet*, (Brussels: NATO Joint Analysis and Lessons Learned Centre, February 27, 2012).

⁴ Amy McCullugh, "The Libya Mission," *Air Force Magazine* (August 2011), page 30. In fact, the air operations center under the American-commanded Operation Odyssey Dawn had 770 staff officers; when command was transferred to NATO's Operation Unified Protector, the number dropped to 170 (Daniel F. Baltrusaitis and Mark E. Duckenfeld, "Operation Unified Protector: Triumph or Warning Sign?" *Baltic Security and Defence Review* 14, 2 (2012), page 37.

⁵ Secretary of Defense Robert M. Gates "The Security and Defense Agenda (Future of NATO)," Brussels, Belgium, Friday, June 10, 2011, [http://www.defense.gov/speeches/speech.aspx?speechid=1581].

⁶ Aaron Willschick, "The Connected Forces Initiative: NATO's (Im)practical Road to Interoperability," The Atlantic Council of Canada (March 13, 2013). Available at http://atlantic-council.ca/portfolio/the-connected-forces-initiative-natos-impractical-road-to-interoperability/.

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One solution would be to greatly expand the curriculum and capacity at the NATO School at Oberammergau. The faculty there offer over 100 1-week specialty courses covering a host of operationally relevant topics, including those areas where European staff officers fell short in 2011. NATO members could and do send their officers there to supplement their professional development on a routine basis. But the NATO School currently lacks the capacity to handle increased student throughput. A second solution would be to plan for "just in time" training and education that can be obtained by relevant staff officers when the need arises. This solution mimics pre-deployment training but ignores the lead-time and investments in physical, personnel, and intellectual infrastructure necessary to prepare and deliver such training—and who would make such investments. It also assumes that officers have mastered the general competencies of a staff officer assigned to a NATO billet before undertaking more specific training. Finally, it assumes that there would be time for an officer to deploy to a training program for 1–6 weeks before heading to their real position. As Ambassador Daalder stated on April 13, 2012, NATO allies must be "ready on Day 1," (Ivo Daalder, "Smart Enough? NATO's Response to the Fiscal Crisis," Remarks delivered to GLOBESEC 2012, Bratislava, Slovakia, (April 13, 2012).

⁹ "General Abrial's Answers: Part 2 – NATO Transformation," Atlantic-Community.org (December 13, 2011), available at: http://archive.atlantic-community.org/index/view/General Abrial's Answers: Part 2 – NATO Transformation.

¹⁰ Peter Viggo Jakobsen, *Nordic Approaches to Peace Operations: A New Model in the Making?* (London: Routledge, 2006), page 101.

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¹² Joachim Koops and Johannes Varwick, "Ten Years of SHIRBRIG: Lessons Learned, Development Prospects and Strategic Opportunities for Germany", *GPPi Research Paper Series No. 11*, (Berlin: Global Public Policy Institute, 2008).

¹³ Denmark, Finland, Sweden, Estonia, Latvia, and Lithuania are members of the EU, although Denmark has an opt-out regarding military cooperation in the CFSP. Denmark, Norway, Iceland, Estonia, Latvia, Lithuania, the UK, Poland, and Germany are members of NATO.

¹⁴ Roger Ingebretsen, "Nordic Defence Cooperation – A Mini-NATO to the North?" (Oslo: Norwegian Ministry of Defence, June 24, 2011), available at: <a href="http://www.regjeringen.no/en/dep/fd/whats-new/Speeches-and-articles/Speeches-and-articles-by-other-apolitica/speeches-and-articles-by-state-secretary-2/speeches-and-articles/nordic-defence-cooperation--a-mini-nato-.html?id=648561, accessed May 8, 2013.

¹⁵ Thorvald Stoltenberg, "Nordic Cooperation on Foreign and Security Policy," proposals presented to the Extraordinary Meeting of Nordic Foreign Ministers in Oslo on February 9, 2009.

¹⁶ "Annual Report for COPA HR & EDU – 2012," Memorandum to the Nordic Military Coordination Committee, (December 21, 2012).

¹⁷ "Annual Report for COPA HR & EDU – 2012," page G-4.

¹⁸ Gary Schaub, Jr., editor, *Reforming Professional Military Education: A Clash of Professional Ethics,* (forthcoming).

¹⁹ Henrik Ø. Breitenbach and Gary Schaub, Jr., "Connected Forces Military Education: A NATO Market for Staff Courses," *Euro-Atlantic Quarterly* 2 (Summer 2012) and Henrik Ø. Breitenbauch and Gary Schaub, Jr., "Smart Defence in Military Education: A NATO Market for Staff Courses," *Europe's World* (May 22, 2012).

²⁰ The United States in particular utilizes a mix of educational institutions to develop its officers at the precommissioning level and allows a very select minority of promotable officers to substitute some of their PME requirements in heavily regulated exchange programs with civilian institutions. See Cynthia A. Watson, *Military Education: A Reference Handbook*, (Westport, CT: Praeger Security International, 2007).

²¹ Professions control the certification and development of their members, usually in the context of a professional school. See Eliot Friedson, *Professionalism: The Third Logic,* (Chicago: University of Chicago Press, 2001).

²² For instance, the Danish and Norwegian army academies have engineered meetings between their cadets for sporting and scholarly purposes since the 1950s and have developed a 6–8 week bilateral cadet exchange program.

²³ Jakobsen, *Nordic Approaches to Peace Operations*, page 32.

²⁴ Jakobsen, *Nordic Approaches to Peace Operations*, page 211.

²⁵ See the summary of the 2012 meeting at http://www.bdcol.ee/?id=500.

²⁶ James Corum, "Some Key Principles of Multinational Military Education," *Connections: The Quarterly Journal* 11, 4 (Fall 2012), pages 23, 16.

²⁷ Personal communication with Ole Kværnø, Director of the Institute for Strategy, Royal Danish Defence College, May 31, 2013.

²⁸ NORDEFCO, "Courses 2013," available at http://www.nordefco.org/files/nordefco-courses-a4.pdf.

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³⁰ "Annual Report for COPA HR & EDU – 2012." page G-4.

³¹ Thorvald Stoltenberg, "Nordic Cooperation on Foreign and Security Policy," proposals presented to the Extraordinary Meeting of Nordic Foreign Ministers in Oslo on February 9, 2009.

³² Personal communication with Major Søren Bach, Head of Education, Royal Danish Defence College (April 11, 2013).

³³ Personal communication with Rear Admiral Nils Wang, Commandant, Royal Danish Defence College (May 27, 2013).

³⁴ Personal communication with Søren Bach (April 11, 2013).

³⁵ Personal communication with Morten Flagestad, Senior Executive Officer, Norwegian Defence Command and Staff College (February 18, 2013) and LTC Marianne Døhl, "Norwegian Defence Educational System," PowerPoint briefing (2009).

³⁶ Personal communication with Morten Flagestad (February 18, 2013).

³⁷ LTC Marianne Døhl, "Norwegian Defence Educational System," PowerPoint briefing (Oslo: Norwegian Defence Staff, 2009), slide 13.

³⁸ Personal communication with Morten Flagestad (February 18, 2013).

³⁹ Personal communication with Nina Gemvik, Directorate for Officers' Academic Education, Co-ordination Division, Swedish National Defence College, Stockholm, Sweden (February 11, 2013).

⁴⁰ Translated from Swedish. "Högre stabsofficersutbildning: Innehåll," Swedish National Defence College website, available at: http://www.fhs.se/sv/utbildning/uppdragsutbildningar/militara-uppdragsutbildningar/hogre-stabsofficersutbildning/innehall/#content, accessed May 28, 2013.

⁴¹ Personal communication with Nina Gemvik (February 11, 2013).

⁴² Personal Communication with Captain Mika Penttinen, Deputy Commander of Department of Academic Affairs, National Defence University, Helsinki, Finland (February 5, 2013).

⁴³ Personal Communication with Mika Penttinen (February 5, 2013).

⁴⁴ Personal communication with Søren Bach (April 11, 2013). Rear Admiral Nils Wang, Commandant of the Royal Danish Defence College says that his institution "is already moving towards describing and certifying all Danish PME under the umbrella of the New Danish Qualification Framework. All Danish curricula are broadly within the scope and rage of NATO's Reference Curriculum," (personal communication with Nils Wang, (May 27, 2013)).

⁴⁵ Personal communication with Morten Flagestad (February 18, 2013).

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⁴⁷ Personal Communication with Captain Mika Penttinen, (February 5, 2013).

⁴⁸ "The Bologna Declaration of 19 June 1999," [http://www.eua.be/eua/jsp/en/upload/OFFDOC_BP_bologna_declaration.1068714825768.pdf].

⁴⁹ Guy Neave, "Anything Goes: Or, How the Accommodation of Europe's Universities to European Integration Integrates an Inspiring Number of Contradictions," *Tertiary Education and Management* 8, 3 (2002); Jeroen Huisman, Clifford Adelman, Chuo-Chun Hsieh, Farshid Shams, and Stephen Wilkins, "Europe's Bologna Process and Its Impact on Global Higher Education," in Darla K. Deardorff, Hans de Wit, John D. Heyl, and Tony Adams, editors, *The SAGE Handbook of International Higher Education*, (Thousand Oaks, CA: 2012), page 83.

⁵⁰ Such as the *Magna Charta Universitatum* of 1988, signed by European university rectors and mentioned in the Declaration. "Magna Charta Universitatum, Bologna, Italy, September 18, 1988," [http://www.fer.unizg.hr/ download/repository/880918 Magna Charta Universitatum.pdf].

⁵¹ Kurt De Wit and Jeroen Verhoeven, "The Higher Education Policy of the European Union: With or Against the Member States?" in Jeroen Huisman, Peter Maassen, and Guy Neave, editors, *Higher Education and the Nation State: The International Dimension of Higher Education*, (Oxford: Elsevier-Pergamon for IAU, 2001), page 204.

⁵² "Presidency Conclusions," Lisbon European Council, (March 2000), pages 23–24 [http://www.consilium.europa.eu/uedocs/cms_data/docs/pressdata/en/ec/00100-r1.en0.htm].

⁵³ Ruth Keeling, "The Bologna Process and the Lisbon Research Agenda: The European Commission's Expanding Role in Higher Education Discourse," *European Journal of Education* 41, 2 (June 2006).

⁵⁴ European Commission, "Europe 2020: Europe's Growth Strategy," (January 2013), [http://ec.europa.eu/europe2020/index en.htm]

⁵⁵ "The Bologna Declaration of 19 June 1999," page 1.

⁵⁶ Jeroen Huisman and Don F. Westerheiden, "Bologna and Quality Assurance: Progress Made or Pulling the Wrong Cart?" *Quality in Higher Education* 16, 1 (April 2010), page 83.

⁵⁷ Confederation of EU Rectors' Conferences and the Association of European Universities (CRE) "The Bologna Declaration on the European Space for Higher Education: An Explanation", n.d. [http://ec.europa.eu/education/policies/educ/bologna/bologna.pdf].

⁵⁸ Ron Tuck, *An Introductory Guide to National Qualifications Frameworks: Conceptual and Practical Issues for Policy Makers*, (France, International Labor Organization, 2007), page 5, available at: http://www.ilo.org/wcmsp5/groups/public/@ed_emp/@ifp_skills/documents/instructionalmaterial/wcms_10_3623.pdf.

⁵⁹ Huisman, Adelman, Hsieh, Shams, and Wilkins, "Europe's Bologna Process and Its Impact on Global Higher Education," page 86.

⁶⁰ Convention on the Recognition of Qualifications Concerning Higher Education in the European Region, (Lisbon, 11.IV.1997), Article VI.1. In terms of academic qualification: among EU members professional qualifications are regulated by EU directives.

⁶¹ The European Higher Education Area in 2012: Bologna Process Implementation Report, (Brussels: European Commission, April 2012), pages 151–170.

⁶² Huisman, Adelman, Hsieh, Shams, and Wilkins, "Europe's Bologna Process and Its Impact on Global Higher Education," page 88.

⁶³ Tanja A. Börzel and Thomas Risse, "When Europeanisation Meets Diffusion: Exploring New Territory," West European Politics 35, 1 (2012).

⁶⁴ Johanna Witte, M. V. Wende, and Jeroen Huisman, "Blurring Boundaries: How the Bologna Process Changes the Relationship Between University and Non-university Higher Education in Germany, the Netherlands and France," *Studies in Higher Education* 33, 3 (June 2008), page 219.

⁶⁵ Taine Saarinen, "'Quality' in the Bologna Process: From 'Competitive Edge' to Quality Assurance Techniques," *European Journal of Higher Education* 40, 2 (2005), page 189.

⁶⁶ Saarinen, "'Quality' in the Bologna Process."

⁶⁷ Witte, Wende, and Huisman, "Blurring Boundaries," page 223.

⁶⁸ Witte, Wende, and Huisman, "Blurring Boundaries," page 223.

⁶⁹ Witte, Wende, and Huisman, "Blurring Boundaries," page 223.

⁷⁰ Declaration of the European Ministers of Vocational Education and Training, and the European Commission, convened in Copenhagen on 29 and 30 November 2002, on enhanced European cooperation in vocational education and training, *Copenhagen Declaration*, 30 November 2002, [http://ec.europa.eu/education/pdf/doc125_en.pdf]; Europa: Summaries of EU legislation" The Copenhagen process: enhanced European cooperation in vocational education and training", last updated 08.04.2011, [http://europa.eu/legislation_summaries/education_training_youth/vocational_training/ef0018_en.htm]; for 2015 see the *Bruges communiqué*: The Bruges Communiqué on enhanced European Cooperation in Vocational Education and Training for the period 2011–2020, December 7, 2010, [http://ec.europa.eu/education/lifelong-learning-policy/doc/vocational/bruges_en.pdf].

⁷¹ See e.g. *The European Credit System for Vocational Education and Training ECVET. Get to know ECVET better. Questions and Answers*, Revised February 2011, [http://ec.europa.eu/education/lifelong-learning-policy/doc/ecvet/faq en.pdf].

⁷² Sylvain Paile, *The European Military Higher Education Stocktaking Report*, (Brussels: European Council, May 2010), page 80. Among them are the service academies of Denmark, where the baccalaureates awarded by the Air Force and Army Academies are 48 months long and equal to 240 ECTS, while those awarded by the Naval Academy are 60–66 months long and correspond to 300–330 ECTS.

⁷³ The ECTS Users' Guide, (Brussels: European Union Education and Culture DG, February 6, 2009), page 16. This is the level of ambition of the Royal Danish Defence College (personal communication with Nils Wang (May 27, 2013)).

⁷⁴ Corelli Barnett, "The Education of Military Elites," *Journal of Contemporary History* 2, 3 (July 1967); Stephen Deakin, "Education in an Ethos at the Royal Military Academy Sandhurst," in Paul Robinson, Nigel de Lee, and Don Carrick, editors, *Ethics Education in the Military*, (Hampshire: Ashgate, 2008).

⁷⁵ Sylvain Paile, *The European Military Higher Education Stocktaking Report*, (Brussels: European Council, May 2010), page 15.

⁷⁶ Paile, *The European Military Higher Education Stocktaking Report*, page 27.

⁷⁷ Stuart H. Altman and Alan E. Fechter, "Military Manpower Procurement: The Supply of Military Personnel in the Absence of a Draft," *American Economic Review* 57, 2 (May 1967); Charles A. Henning, "Army Officer Shortages: Background and Issues for Congress," *CRS Report for Congress*, (Washington: Congressional Research Service, July 5, 2006).

⁷⁸ CEDEFOP, *Necessary Conditions for ECVET Implementation*, (Luxembourg: Publications off of the European Union, 2012), available at http://www.eric.ed.gov/PDFS/ED532257.pdf.

⁷⁹ Although the European Parliament and European Council have "set as a requirement that the ECVET and the ECTS be compatible in order to contribute to 'permeability between level of education and training'," (Paile, The European Military Higher Education Stocktaking Report, page 63, emphasis in original).

⁸⁰ The command and staff colleges of each of the Nordic states have, or are in the process of, certifying their courses under Bologna's ECTS system, (personal communication with Mika Penttinen (February 5, 2013); personal communication with Nina Gemvik (February 11, 2013); personal communication with Morten Flagestad (February 18, 2013); and personal communication with Rear Admiral Nils Wang, Commandant, Royal Danish Defence College (May 27, 2013)).

⁸¹ Daniel Nelson, "Civil Armies, Civil Societies, and NATO Enlargement," *Armed Forces & Society* 25, 1 (Fall 1998), pages 151–152.

⁸² Paile, *The European Military Higher Education Stocktaking Report*, page 60.

⁸³ Paile, The European Military Higher Education Stocktaking Report, page 13.

lpsos MORI, "Trust in the Professions," (October 5, 2009), available at: http://www.ipsos-mori.com/researchpublications/researcharchive/poll.aspx?oltemld=15&view=wide. They are included in surveys of institutions that the public trusts, however. See GfK Verein, GfK Global Trust Report 2011, available at: http://www.gfk.pl/public relations/pressreleases/press articles/009189/index.en.html. Still, as noted by Reka Szmerkeny, "a high level of public confidence in the military does not mean equally high prestige," (Central European Military Reform at Risk, Adelphi Paper #306, (London: International Institute for Strategic Studies, 1996), pages 54–63).

⁸⁵ Giuseppe Caforio and Marina Nuciari, "The Officer Profession: Ideal Type," *Current Sociology* 42 (1994), pages 43–45.

⁸⁶ U.S. House of Representatives, Committee on Armed Services, Subcommittee on Oversight & Investigations, Another Crossroads? Professional Military Education Two Decades After the Goldwater-Nichols Act and the Skelton Panel, (Washington: U.S. House of Representatives, April 2010), page 16.

⁸⁷ David McCormick, *The Downsized Warrior: America's Army in Transition*, (New York: New York University Press, 1998), page 142; David M. Bresser, "Sustainability of Universal ILE," (Fort Leavenworth: School of Advanced Military Studies, March 2007); United States Army Combined Arms Center, "Command and General Staff School," (January 17, 2013), available at http://usacac.army.mil/cac2/CGSC/CGSS/, accessed January 28, 2013.

⁸⁸ See Joan Johnson-Freese, *Educating America's Military*, (London: Routledge, 2012), pages 38–39, 50–52, and 117; U.S. House of Representatives, Committee on Armed Services, Subcommittee on Oversight and Investigations, <u>Another Crossroads? Professional Military Education Two Decades After the Goldwater-Nichols Act and the Skelton Panel</u>, (Washington: U.S. House of Representatives, April 2010), pages 68–70.

⁸⁹ For instance, the guidance for joint education in the United States (the OPMEP—the Officer Professional Military Education Policy) specifies that "[e]ducational goals and objectives should be clearly stated and that students' performance should be measured against defined standards. Accordingly, all of the PME institutions have published grading standards that are reviewed by the PAJE process," (U.S. House of Representatives, *Another Crossroads?* page 69). "PAJE" stands for the Process for Accreditation of Joint Military Education, the quality assurance process used by the U.S. military services.

⁹⁰ Paile, The European Military Higher Education Stocktaking Report, page 58.

⁹¹ On CJEX, see Defence Academy of the United Kingdom, *Advanced Command and Staff Course: Joint Services Command and Staff College*, (November 2012), page 26–27), available at: http://www.da.mod.uk/prospectus/jscsc/acsc/at download/courseFlyer.

⁹² Civilian supply and distance learning are the basis for reforms to PME being implemented by the Danish armed forces.

⁹³ The American experience in this regard is not encouraging. When distributed learning was made available to all officers, regardless of selection to in-residence PME, "what ensued was a race to the bottom in terms of which service could develop the non-resident JPME [Joint Professional Military Education] program that students could complete most quickly and with the least amount of effort... The Air Force handily won the 'quickest-easiest course' distance education race. Students—from all services—were signing up as quickly as the Air Force could process them," (Johnson-Freese, *Educating America's Military*, page 111).

⁹⁴ The Nordic Defence University College has hosted a NORDEFCO conference addressing issues in advanced distributed learning in 2012 and 2013. See the NORDEFCO Advanced Distributed Learning website, at: http://www.nordefco.org/ADL.

⁹⁵ Henrik Ø. Breitenbach, Gary Schaub, Jr., Flemming Pradhan-Blach, and Kristian Søby Kristiansen, *Get it Together: Smart Defence Solutions to NATO's Compound Challenge of Multinational Procurement,* (Copenhagen: Centre for Military Studies, University of Copenhagen, February 2013); Baltrusaitis and Duckenfeld, "Operation Unified Protector." Emelifeonwu, David C., Generic Officer Professional Military Education Reference Curriculum, (Kingston: Canadian Defence Academy, September 21, 2011).

⁹⁶ Generic Officer Professional Military Education Reference Curriculum, (Kingston: Canadian Defence Academy, September 21, 2011).

⁹⁷ Michael C. Veneri, "The U.S. Military's Implementation of the Joint Duty Promotion Requirement," *Armed Forces and Society* 34, 3 (April 2008).

⁹⁸ The European Higher Education Area in 2012: Bologna Process Implementation Report, (Brussels: The Education, Audiovisual and Culture Executive Agency, 2012), pages 154–164.

⁹⁹ Christian Wenande, "Too Many Foreign Students Lead to Fines," *The Copenhagen Post* (April 6–11, 2013), page 5.