

NATO RSI PLANNING SYSTEMS

BY

JOHN S. W. FARGHER, JR
Deputy, Light Armored Vehicle Directorate
USMC Development Center, Quantico, VA

and

DR. MURRAY GEISLER
Senior Logistician
Logistics Management Institute, Washington, DC

INTRODUCTION. The purpose of this article is to explain and clarify further the ongoing efforts within NATO to effect improved armaments cooperation between the member nations by fostering an early and continuing exchange of developmental information. In a previous article¹ we discussed the triad approach being used in NATO to facilitate the growth of Rationalization, Standardization and Interoperability (RSI): the establishment of general and reciprocal Memoranda of Understanding (MOUs) with member NATO nations; the negotiation of dual production of developed or nearly developed systems; and the creation of families of weapons (system packages) for systems not yet developed. Planning systems of the type described in this article are essential prerequisites to identifying national and NATO weapon needs that can then be represented in programs governed by the triad of approaches. Thus, the subjects of these two articles form an interlocking process in the efforts directed at achieving greater RSI.

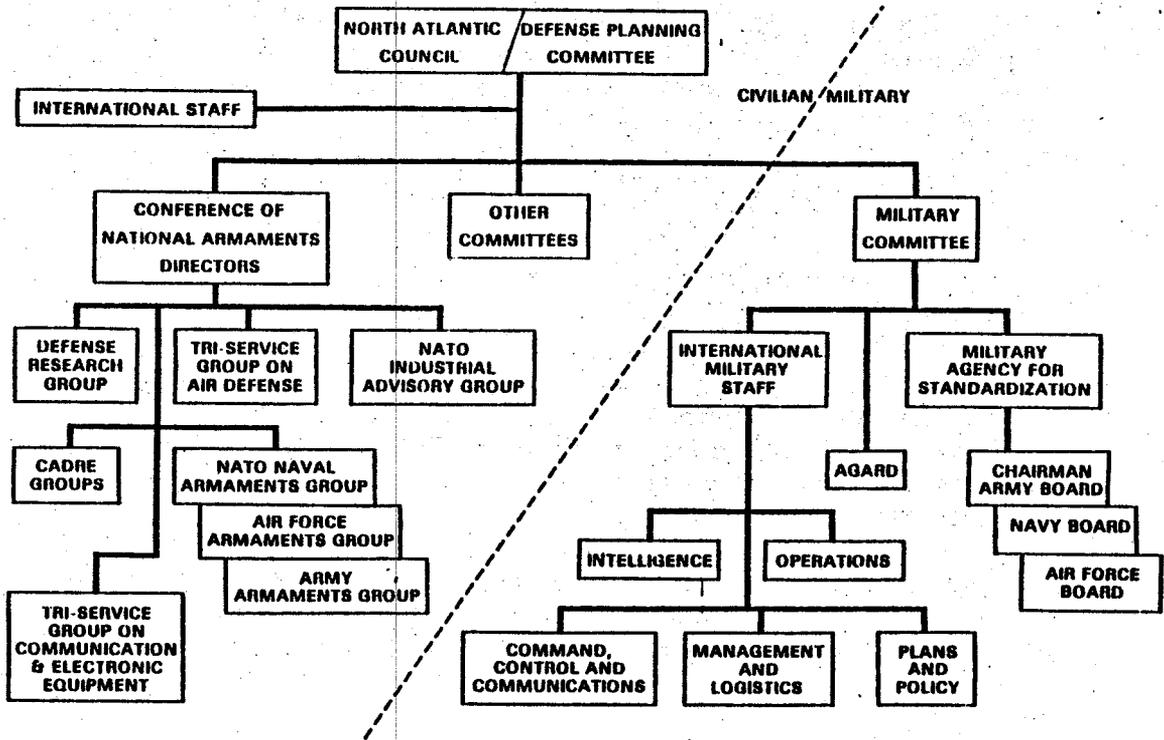
NATO EFFORTS ON PLANNING. Since the mid 1960s, the real burden of achieving weapon standardization and interoperability has shifted to the civil authorities and institutions within NATO. This shift recognized that achieving cooperation in development, common selection, and procurement is fundamentally a political and economic problem more than a military problem. A fresh start was begun in May 1966 when the North Atlantic Council (NAC) approved the report of an exploratory group set up to study the problem of standardization and to propose new solutions. The principal institutional device to emerge from the ensuing reorganization was the Conference of National Armaments Directors (CNAD), which consolidated and replaced three earlier groups; the Defense Production Committee, the Armaments Committee, and the Committee of Defense Research Directors. Besides focusing standardization efforts in the civil structure of NATO and consolidating its committees, this shift also recognized that the implied mandatory approach of the NATO Basic Military Requirements (NBMRs) system² could not work, and that what was required was a flexible, clearly voluntary system of exchanging information on national R&D and procurement programs and encouraging cooperation among any two or more NATO members in meeting

their national requirements. A unique organization of non-official civilians--the NATO Industrial Advisory Group (NIAG)--was also created in 1968 to facilitate information exchange and voluntary cooperation on a broader basis encompassing defense industries in the member countries. Besides providing a forum for the exchange of information and the encouragement of industrial cooperation, the NIAG has been used to perform pre-feasibility studies in various critical areas of armaments.

In 1971, the work of the Conference of National Armaments Directors (CNAD) and its subgroups was given sharper focus and redirected to concentrate on the most pressing needs for the Alliance as a whole. Budgetary and economic problems in all NATO countries gave a new urgency to achieving more efficient uses of resources through standardization in the high priority, high cost areas of new weapons requirements. Moreover, the CNAD began to work much more closely with the military authorities in identifying the most critical areas of interoperability. In addition, by the beginning of 1976, NATO had created nine special agencies (three of which no longer exist because they have completed their work) to manage integrated programs in weapons and logistics standardization. There were Twenty Steering Committees created to oversee approved NATO coproduction projects.

After the U.S. initiatives in mid-1975 for NATO to develop new and stronger commitments, policies, and procedures for achieving standardization, the North Atlantic Council (NAC) in Ministerial session in December 1975 created an Ad Hoc Committee on Equipment Interoperability to seek to develop practical steps in this priority area and implicitly tabled immediate new action on standardization pending further development of intra-European and U.S. interests and trends.

Figure 1 depicts the principal NATO standing groups and agencies dealing with RSI in general and standardization in particular. NATO Standardization Agreements (STANAGs) are developed from the work of these groups and agencies, and are promulgated by the Military Agency for Standardization (MAS). As valuable as these agreements have been, they have been concerned mainly with components and procedures. In recent years, however, the emphasis has been placed on projects for the standardization of entire items of equipment. These are not normally covered by STANAGs, but are cooperative projects of NATO member nations. These projects have been achieved among groups of states within NATO through exchanges of planning and requirements information that are generated in these NATO groups and agencies and, informally, through contacts made by participation within them. Such groups and agencies also help to coordinate priorities Alliance-wide and to issue various forms of guidance to participants for greater cooperation in research, development, and the acquisition of materiel.



Much of the current emphasis in NATO equipment planning has resulted from action by the NATO Military Committee (MC) in 1975. Military Committee Memorandum (MCM) 79-75 recommended that a defense equipment cycle be considered for the Alliance; that recommendation was reinforced in discussions held by the National Armament Directors' Representatives (NADREPs) in 1976 and their subsequent recommendations to the Conference of National Armaments Directors (CNAD). In the fall of 1976, the CNAD established an Ad Hoc Study Group to examine a possible Periodic Armaments Planning System (PAPS) for use by NATO.

The basic concern of all these groups was that national equipment programs were not sufficiently responsive to the needs of NATO forces, especially in the areas of standardization and weapons interoperability.

The concerns expressed in MCM 79-75 are worth reviewing. First, the NATO Military Committee (MC) felt there was a definite need to increase the NATO Military Authorities' contributions to the planning process. Second, a cyclical method of work was seen as being desirable. Third, MCM 79-75 stated that special attention was necessary to define the interface between equipment planning and force planning. Fourth, time scales of planning were felt to be too short. Fifth, full Alliance participation was desired. These concerns became the genesis of the program of work for the Ad Hoc Study Group whose efforts have resulted in two programs -- the NATO

Armaments Planning Review (NAPR) and the Periodic Armaments Planning System (PAPS). The next two sections discuss these two programs, and also consider briefly their relationship, particularly that of PAPS, to the U.S. counterpart acquisition management process. The final section discusses the mechanisms and requirements for consideration of RSI in the Defense Systems Acquisition Review Council (DSARC).

THE NATO ARMAMENTS PLANNING REVIEW (NAPR).

The NAPR has been designed to provide NATO's National Armaments Directors (NADs), and ultimately the North Atlantic Council, with a systematic, cyclical review process through which attention can be focused on the most important and promising opportunities to achieve standardization and interoperability of NATO's future defense equipment. These opportunities are revealed by detailed analyses of the member nations' annual plans for equipment acquisition, comparing them against the priorities for achieving standardization/interoperability of such equipment as determined by the Military Committee in its biannual review of these plans. The four basic stages in the cyclical review of armaments planning are as follows:

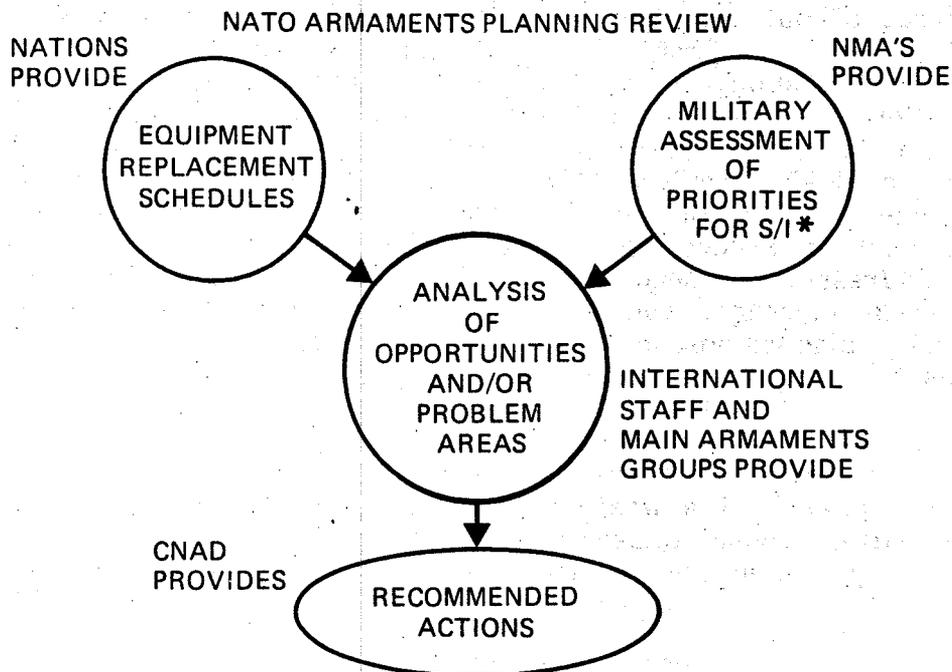
- (a) Inputs
 - (i) National
 - (ii) NATO Military
- (b) Equipment Item Selection
- (c) Equipment Item Analysis
- (d) Outputs
 - (i) Reports to CNAD
 - (ii) Reports to Council
 - (iii) Instructions from CNAD and Council

The stages (a)(i) and (b) are completed each year; (a)(ii) is completed once for each equipment item and updated as required, with a review for currency of information not later than every two years for each item of equipment; stage (c) is completed as soon as possible, but not later than two years following stage (b); stage (d) is dependent upon action under stage (c), and is completed within six months following completion of stage (c). The CNAD continuously monitors progress of the work.

In essence, the NAPR consists of an annual input from member nations of their plans to replace currently deployed equipment. A second input is an assessment by the National Military Advisors (NMAs) of their priorities for standardization/interoperability in key categories of equipment (mission areas). The European input for plans to replace equipment is provided through the Independent European Programme Group (IEPG), with U.S. and Canadian inputs provided separately. The replacement schedules and NMA inputs are provided to the International Staff and the CNAD main armament

groups to be reviewed for opportunities for cooperation not previously exploited. This review can also identify areas where nations are diverging from standardization or interoperability as a result of independent national decisions. The conclusions and recommendations drawn from this review are then presented to the CNAD for action. A simplified diagram of this process is given in Figure 2.

PERIODIC ARMAMENT PLANNING REVIEW



* STANDARDIZATION/INTEROPERABILITY

At the fall 1977 meeting, the CNAD directed that a trial be conducted using a few equipment categories to determine the utility of these new procedures. The trial was successful, and the CNAD directed implementation of the system in October, 1979. With these procedures, NATO planners can gain better insight into national equipment replacement plans--a process which has been random in the past, at best. Furthermore, as a result NATO decisions will be more representative of national perspectives.

Two other benefits should accrue: first, the NMA's judgements on priorities will be available for consideration earlier in the CNAD decision process, thus having a more effective impact on equipment decisions. In many cases in the past, collaborative projects have suffered because the NMA's military judgement has not been available until late in the decision process. A second benefit is that NAPR elevates progress, or lack of progress, toward standardization/interoperability to high-level national authorities who can take appropriate action, both nationally and within NATO.

At the present, it would be difficult for a program manager to gain access to the NAPR schedule. However, copies of NAPR are in the hands of the service staffs at the Pentagon. The program manager could ask these service offices for the appropriate sections of the NAPR to be distributed. Whenever NAPR and other relevant information are put into a central information system, it will be much easier to provide the program manager with just those sections he wants.

THE PERIODIC ARMAMENTS PLANNING SYSTEM (PAPS).

One limitation of NAPR is that the data presented represents a rather mature stage of national planning. When national equipment replacement schedules are firm, it is difficult to accommodate program changes brought about via attempts to collaborate. In seeking earlier communications on national programs and plans, two problems were encountered: a lack of early consideration in national military requirements and of NATO review before a national commitment was made; and incomplete information on national plans and a lack of discipline in the reporting process for collaborative programs. Since NAPR partially addressed the second problem area, the Ad Hoc Study Group focused on developing a solution to the first problem, that of encouraging early discussions of military requirements. The proposed solution is the Periodic Armaments Planning System (PAPS).

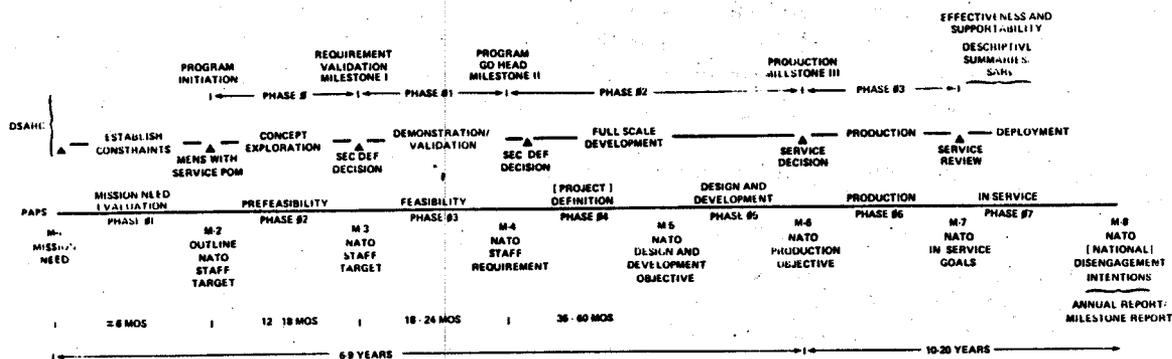
In arriving at an approach to PAPS, the first task was to reach agreement on what is meant by "early." This was achieved by defining the phases of a weapon system's life cycle and the activities embodied within those phases. The PAPS is divided into seven phases and eight milestones. These are shown in Figure 3.

FIGURE 3
PAPS MILESTONES AND PHASES

Milestone 1	Mission Need Document (MND) ⁴
Phase 1	Mission Need Evaluation
Milestone 2	Outline NATO Staff Target (ONST)
Phase 2	Pre-feasibility
Milestone 3	NATO Staff Target (NST)
Phase 3	Feasibility
Milestone 4	NATO Staff Requirement (NSR)
Phase 4	[Project] Definition ⁵
Milestone 5	NATO Design and Development Objective (NADDO) ⁵
Phase 5	Design and Development
Milestone 6	NATO Production Objective (NAPO)
Phase 6	Production
Milestone 7	NATO In-Service Goals (NISEG)
Phase 7	In-Service
Milestone 8	NATO [National] Disengagement Intention (NADI) ⁵

These PAPS phases and milestones are shown in figure 4 with reference to the Defense System Acquisition Review Council (DSARC) process. We should mention that the DSARC process is undergoing review within DoD, and changes can be expected in the structure of the DSAR milestones. Such changes will soon be reflected in revised DoD directives 5000.1 and 5000.2. Pending publication of these revised documents, we have retained the current DSARC structure in this article.

FIGURE 4
PAPS/DSARC STRUCTURES AND THEIR RELATIONSHIP



There is a great deal of similarity between PAPS and the DSARC process, but two differences are worth noting. First, PAPS defines the start of the weapon system life cycle as the point when military authorities forward the mission need. This is somewhat earlier than DoD which defines the start as the point when approval of the need is obtained from the Secretary of Defense. PAPS also recommends attention be given to the in-service and disengagement phases at the mature stages of the weapons system life cycle, whereas DSARC visibility terminates at the production decision.

PAPS is based upon two general principles:

- Recognition of the sovereignty of the nations in equipment decisions.
- Utilization of the basic NATO structure without radical change, while providing clear roles, relationships, and tasks in the formal process.

The challenge to PAPS therefore becomes that of guiding the early consideration of the allies toward cooperation and development of a feedback loop throughout the life cycle. The following is a description of the steps involved in the different PAPS phases. It should be noted that this description of the PAPS phases follows the course of the normal project. The process is flexible enough to permit skipping steps whenever it makes sense to do so. However, the formalization of the process ensures that such skipping will be a conscious, well-thought-out move, and not random or accidental.

Preceding the PAPS phases, we have the normal long term planning process, mission analysis, etc., which we identify as Long-Range Forecasting. It is a continuously performed function, broader than individual weapon systems. Long-Range Forecasting represents an assessment of the "state of the world," including technological, economic, social, and political factors. The East-West military balance is established which affects various aspects of planning. Mission analysis of the current and future military balance is continuously assessed by the NMAs. This includes threat projections and analysis, development of Warsaw Pact tactical doctrine and concepts, assessment of equipment capabilities vis-a-vis the threat, and scenario development. These trends are studied for important implications and are continuously incorporated into the ability of the Alliance to detect the threat through NATO doctrine, tactics, force levels, logistics, weapons acquisition, and the identification of other possible force deficiencies. Harmonization of the NATO perceived threat, doctrine, and concepts is especially important in the development of mission analysis, because this provides the basis for the mission need and for successful cooperative research and development programs. Long-Range Forecasting leads to the Mission Need Evaluation which initiates the PAPS process.

PAPS Phase Descriptions.

Phase 01, Mission Need Evaluation, starts with the input from the continuous process of mission analysis. Specific operational deficiencies in capabilities are defined, usually in relation to a mission area or tactical sub-concepts. These deficiencies are documented in operational terms as a "mission need" for the basis of this input to phase 01. This mission need document (MND) is prepared by either the national military staffs or the NMAs. The MND is forwarded for action to the Office of the Assistant Secretary General for Defense Support (ASG/DS), who coordinates the document with the NADs, all

NMAs, and other NATO staff agencies. This coordination invites participation of all interested parties in seeking a NATO solution to the mission need. Although MNDs are forwarded to the NADs, national responses may be provided via Main Armament Group (MAG) representatives in the appropriate MAG forum, especially for those MNDs without significant impact.

The MND is ultimately transformed by an ad hoc subgroup or panel of the appropriate MAG into a set of functional system requirements. The functional system requirements, called an Outline NATO Staff Target (ONST), are built on the mission need, and include general financial, technical, and schedule gross estimates so nations can better assess the necessity and desirability of entering into a cooperative development program. The subgroup/panel is established with representation from the interested nations, NMAs, and NATO agencies. The subgroup/panel provides the forum for discussion of a NATO response to the mission need, and is charged with integrating the technical, financial, and operational matters into the collaborative requirement.

Although all nations may not participate in this or the development phases, they are encouraged to join in the drafting of the Outline Staff Target. This is done in order to harmonize requirements so as to achieve greater acceptance in, and eventually, procurement by these nations. To avoid narrowing the range of alternatives at this stage, the Outline Staff Target must not over-specify characteristics of the required system. Phase 01 ends with submission of the Outline NATO Staff Target to the nations for approval. The ONST is comparable to the Mission Element Needs Statement (MENS) of the U.S. acquisition process.

Phase 02, Pre-feasibility, is an analysis of the alternatives for meeting the Outline NATO Staff Target through use of pre-feasibility studies of competitive concepts provided by member nations, industry, or as requested and funded by the subgroup. Where funding is needed, Terms of Reference (TOR) and an MOU are also required. A NATO Staff Target (NST) is developed, based upon the evaluation of the pre-feasibility studies detailing the capability being sought, and a summary of the most promising candidates. The subgroup, normally composed of members from nations planning to participate, also drafts appropriate follow-on documentation, such as an MOU and Statement of Work (SOW) for Phase 03. Other than minor commitments of resources, participation in the subgroup has been dependent solely on interest. The signing of this MOU, however, begins a commitment of ever-increasing amounts of resources, as well as work-sharing arrangements through the production and in-service phases. The group may wish to develop the initial project plan, a plan that could be used as the primary program management instrument integrating the essential technical, political, military, financial, and managerial factors during the subsequent phases of the weapon system life cycle. It is comparable to the Program Management Plan/Acquisition Strategy at DSARC Milestone I.

Phase 03, Feasibility, begins with approval by participating nations of the NST and the signing of the MOU/TOR and approval of the SOW. NATO's role diminishes as the subgroup of Phases 01 and 02 becomes a project group established to direct the follow-on activity, and to maintain liaison with nonparticipating countries, the NMAs, and NATO agencies. With the relationships denoted in the MOU, the participating nations are now responsible for all centralized management of the technical business and logistics aspects of the joint project. NATO, however, must maintain close liaison with the project group. The project group is now responsible for developing a system specification and logistics plan, and evaluating candidate concepts to provide necessary performance capabilities described in the NATO Staff Target. The system specification, logistics plan, and the project group's estimates of unit production and fly-away costs, life-cycle costs, manpower and training requirements, development and production schedules, and other relevant data become the NATO Staff Requirement. The Staff Requirement represents a major decision document, since the participating countries will now commit to major development resources, and must assess the benefits of acquiring the system and budgeting for it. Coproduction and licensing agreements must be worked out. The NATO International Staff publishes progress reports and monitors the project group. Phase 03 is concluded with approval of the NATO Staff Requirement and signature of the associated MOU by the participating countries. This point in PAPS corresponds to Milestone II of DSARC in the U.S. process.

Phase 04, [Project] Definition, consists of the development of design details and subsystem specifications which comprise the system. The project group transitions into a NATO Project Steering Committee to provide periodic reports to the CNAD and through the office of the Assistant Secretary General for Defense Support (ASG/DS) to the non-participating countries, the NMAs, and other NATO agencies. These reports should provide sufficient information for force structure, doctrine, and tactical/operational concepts, training, and logistics. A joint common configuration management system should be set up early in the project definition stage, to remain under the technical authority of the developing nations until at least completion of the acquisition phase.

Phase 05, Design and Development, consists of design and production engineering, and perhaps, prototype evaluation. Completion of Phase 05 in PAPS corresponds to Milestone III in DSARC.

Phase 06, Production, is the production and deployment phase. The organization and reporting remain the same. Operational data from using units are collected to assess the adequacy and highlight problems in performance, safety, reliability and maintainability, logistics, training, etc.

Phase 07, In-Service, continues the data collection and coordination of Phase 06. At some point, nations will express their intentions to retire the system, identifying the specific point in the life cycle when a nation programs replacement of the existing system with a new capability, feeding back to phase 01.

Current Status.

The testing of PAPS has been completed, with the overall objectives of developing a complete PAPS procedure, integrating PAPS with NAPR, establishing the appropriate relationships between NATO and national planning systems, and providing a complete design procedure to the CNAD in 1981. The CNAD has approved the implementation of milestones 1 through 4, and is expected to endorse the rest of the process in late 1981.

Integration of PAPS and NAPR.

Sufficient information is now available on the success of NAPR and the acceptability of PAPS procedures that the CNAD has directed an examination of ways to integrate the two. NAPR will provide the so-called "feedback" on replacement plans and augment other existing reporting procedures within NATO, thus providing the CNAD with sufficient information on major programs, regardless of their state of maturity. In a sense, NAPR is an accounting system reporting on the success of PAPS and the overall arms cooperation effort.

The process of involving the NADs and obtaining their decisions at early milestones has been adopted, and procedures for later milestones are being developed. When completed, NATO will have a method not only for participating in joint cooperative development, but also a method whereby nations who have not participated in the research and development phase of a major program will be able to obtain information to make decisions on whether to enter into coproduction or dual production agreements or simply to procure the weapon. This process occurs today, but only on an ad hoc basis, and opportunities for coproduction or common procurement are often missed because information is not available or is too late to be of value.

If an integration is completed along these lines, the PAPS process will include three elements:

- (1) The receipt and processing of Mission Need Documents from NATO or National Military Authorities with NAD involvement in the initial decision by nations to participate;

- (2) A method whereby National Armaments Directors provide the CNAD with national positions on the degree of participation in cooperative activities such as pre feasibility (concept formulation), feasibility (validation), and full-scale development; and

(3) A periodic review of national equipment acquisition plans and assessment of progress made toward enhanced cooperation. This includes the identification of areas where divergence is beginning to occur so that proper action can be taken.

The DSARC/PAPS Interface.

Because of similar definitions and procedures, PAPS and the DoD Acquisition process should complement one another. Under DoDD 5000.1 a Service identifies needs and develops a draft MENS for each of those which may become major programs. The MENS is first coordinated with the Service staffs, resulting in a document which represents the Service's position with regard to the mission need. The MENS is then forwarded to the Office of the Secretary of Defense (OSD) for comment and finally to the Secretary of Defense for approval.

If a particular need has potential NATO application and may represent a target for cooperation with the Alliance, the USDRE in OSD, acting as the U.S. NAD, could forward the draft MENS to NATO as a Mission Need Document (MND) under PAPS. Specifically, the draft MENS (now an MND) would be transmitted to other nations for review and decision on their degree of initial participation. The DoD review of the MENS would proceed as usual, and in parallel a Main Group subgroup would meet to take action on the MND.

The results of a U.S. and a NATO review can then be reflected in the final approved MENS providing a sound basis for collaborative R&D from the start. (The MENS would have a NATO equivalent in an Outline NATO Staff Target). If this process is conducted in parallel, time will not be lost; in fact, it may preclude delays in new starts due to concerns raised regarding NATO standardization goals in the MENS and specific plans for Concept Exploration (DSARC Phase O).

As mentioned earlier in the chapter, the DSARC structure is being revised but in terms of the current DSARC system, the DSARC process of approval of the Decision Coordinating Paper (DCP) for Milestones I, II and III, parallels NAD reviews under PAPS. Activation of the PAPS process could form a part of the normal DCP coordination process prior to a DSARC, thus providing DSARC/PAPS compatibility from the draft MENS to the completion of full-scale development.

PAPS/European Interface.

The PAPS structure being developed is compatible with a number of European systems and a concept recently developed within the IEPG. Therefore, the similarities noted between PAPS and DSARC will likely hold for most other nations, and the procedures could be widely adopted without major structural changes to national systems.

Concluding Remarks on PAPS and NAPR.

Clearly, there is no procurement authority or agency within NATO to insure standardization and interoperability of materiel procured by the NATO countries. RSI is more likely to be accomplished, due to political and economic factors in weapon acquisitions, by cooperation among Allies when there are uniquely converging interests, needs, and capabilities to collaborate on development and production. The NATO Long-Term Defense Program, which has lent considerable impetus to the formulation and acceptance of NAPR and PAPS, should make collaboration more readily viable.

U.S. SYSTEM ACQUISITION PLANNING TO PROMOTE RSI.

There are a number of planning requirements or recommendations largely contained in the Defense System Acquisition Review Council (DSARC) process, that the Services and Program Managers should observe. This section contains extracts from the relevant documents to assist in that effort.

The DSARC Review Process.

Under the provisions of DoD Directive 5000.2, Major System Acquisition Process, the Services are required to address RSI at each milestone beginning with Milestone I. OSD policy is clearly stated, as well, in DoD Directive 2010.6, Standardization and Interoperability of Weapons Systems and Equipment within NATO. As stated in DoDD 2010.6 and reiterated in DoDD 5000.1 (19 March 1980), Major Systems Acquisition., "equipment procured for the use of personnel of the Armed Forces of the United States stationed in Europe under the terms of the North Atlantic Treaty should be standardized or at least interoperable with equipment of other members of NATO. Accordingly, NATO rationalization, standardization, and interoperability (RSI) shall be basic considerations in acquisition of systems having a partial or total application to Europe."

DoDD 5000.2 (19 March 1980) is very specific in its guidance on international programs and NATO RSI. That paragraph specified:

12. International Programs: NATO Rationalization, Standardization and Interoperability (RSI). DoD Components shall take action on the following areas and report progress at all milestone reviews.

a. Consider NATO country participation throughout the acquisition process. This includes standardization and interoperability with other NATO weapons and systems.

b. Consider NATO doctrine and NATO member threat assessments. In development of MENS, mission needs of NATO members shall be considered. In general, data that cannot be disseminated to foreign nations shall not be included in MENS.

c. Solicit NATO member contractors for bids and proposals on U.S. systems and components when such an opportunity is not precluded by statute or by the National Disclosure Policy.

d. During the evaluation of alternative system concepts, the DoD Component shall:

(1) Consider all existing and developmental NATO member systems that might address the mission need. Identify any performance, cost, schedule, or support constraints that preclude adoption of a NATO system.

(2) Determine testing requirements for NATO member candidate systems recommended for further development or acquisition.

(3) Determine whether a waiver of "Buy American" restrictions is appropriate, when a Secretary of Defense determination has not been made.

(4) Develop plans for further international cooperation in subsequent phases of the acquisition cycle, such as cooperative development, coproduction, sub-contacting, and cooperative testing or exchange of test results.

(5) Recommend U.S. position on third-country sales, recoupment of research and development costs or sharing research and development costs, and release of technology.

e. In subsequent phases of the acquisition cycle, DoD components shall:

(1) Continue to expand and refine plans for international cooperation.

(2) Recommend U.S. position on third-country sales, recoupment of R&D costs or sharing foreign R&D costs, and release of technology.

(3) Develop plans for host nation initial or joint logistics support, if applicable.

DoDD 5000.2 also provides fairly specific guidance on RSI matters to be addressed at the various milestones. For convenience, salient points are synopsized.

Decision Coordinating Paper (DCP) and Integrated Program Summary, (IPS).

Both a DCP and IPS will be prepared for each milestone review. The IPS will address international programs, summarizing action taken

in those areas specified in Paragraph E.14 of the basic DoDD 5000.2 (see above). Approved, pending, and potential foreign military sales will be identified. The DSARC and Service Systems Acquisition Review Councils will address RSI at Milestones I, II, III.

RSI Plans.

Within DoD, there is no formal requirement for the submission of an RSI plan for OSD approval. On occasion, OSD has requested RSI plans be submitted for approval on selected systems. Service acquisition regulations and development command directives vary, however, in that regard. The U.S. Army Materiel Development and Readiness Command (DARCOM), for example, requires program managers to prepare and submit an RSI plan for major systems, a requirement not mandated by the governing Army Regulations. The Navy instruction is SECNAV Instruction 5711.10A; and for the Air Force, it is AFR 73-3, both stressing attention to RSI considerations.

With the stringent length restrictions mandated for the DCP and IPS, the preparation of an RSI plan, attached as a tab to the DCP/IPS, can provide a useful mechanism for providing the alternatives and rationales considered. This can provide clarification and amplification for the synopses presented in the DCP/IPS. As well, the preparation of a separate plan helps ensure thorough consideration of available alternatives.

NOTES

¹ See article by John S. W. Fargher, Jr., "Major RSI Approaches," DSMC Newsletter Program Manager, May-June 1981, pp. 26-32.

² The NATO Basic Military Requirements (NBMR) was a system used early in NATO history by which the NATO Military Authorities attempted to specify common or standard requirements for all NATO forces. This system proved cumbersome, rigid, and ineffective, and was abandoned in the mid 1960s.

³ The main armaments groups include NATO Army Armaments Group (NAAG); NATO Naval Armaments Group (NNAG); NATO Air Force Armaments Group (NAFAG); Tri-Service Group on Communications and Electronic Equipment (TSGCEE); and the Tri-Service Group on Air Defense.

⁴ Mission Need Documents resulting from long range planning/mission analysis (Phase 0) are prepared by nations and Mission Need Committees. Procedures for the development and processing of MNDs by the NATO Military Authorities are set out in MC 289 (Final), dated February 3, 1981.

⁵ Square brackets are used at Phase 4 and Milestone 8 to reflect preferences of several nations to have these words appended to clarify meaning.

⁶ See previous article by John S. W. Fargher, Jr., entitled "Tailoring an RSI System Acquisition Plan for NATO," DSMC Newsletter Program Manager, Vol. VIII, No.6, Nov-Dec 1976, pp 17-20.