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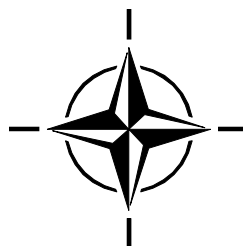
RTO MEETING PROCEEDINGS

MP-SAS-073

Analysis and Modelling for Human Resource Management in Defence

(Analyse et modélisation de la gestion des ressources
humaines en matière de défense)

Papers presented at the RTO System Analysis and Studies Panel (SAS)
Specialists' Meeting held in Brussels, Belgium on 19-20 March 2009.



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The Research and Technology Organisation (RTO) of NATO

RTO is the single focus in NATO for Defence Research and Technology activities. Its mission is to conduct and promote co-operative research and information exchange. The objective is to support the development and effective use of national defence research and technology and to meet the military needs of the Alliance, to maintain a technological lead, and to provide advice to NATO and national decision makers. The RTO performs its mission with the support of an extensive network of national experts. It also ensures effective co-ordination with other NATO bodies involved in R&T activities.

RTO reports both to the Military Committee of NATO and to the Conference of National Armament Directors. It comprises a Research and Technology Board (RTB) as the highest level of national representation and the Research and Technology Agency (RTA), a dedicated staff with its headquarters in Neuilly, near Paris, France. In order to facilitate contacts with the military users and other NATO activities, a small part of the RTA staff is located in NATO Headquarters in Brussels. The Brussels staff also co-ordinates RTO's co-operation with nations in Middle and Eastern Europe, to which RTO attaches particular importance especially as working together in the field of research is one of the more promising areas of co-operation.

The total spectrum of R&T activities is covered by the following 7 bodies:

- AVT Applied Vehicle Technology Panel
- HFM Human Factors and Medicine Panel
- IST Information Systems Technology Panel
- NMSG NATO Modelling and Simulation Group
- SAS System Analysis and Studies Panel
- SCI Systems Concepts and Integration Panel
- SET Sensors and Electronics Technology Panel

These bodies are made up of national representatives as well as generally recognised 'world class' scientists. They also provide a communication link to military users and other NATO bodies. RTO's scientific and technological work is carried out by Technical Teams, created for specific activities and with a specific duration. Such Technical Teams can organise workshops, symposia, field trials, lecture series and training courses. An important function of these Technical Teams is to ensure the continuity of the expert networks.

RTO builds upon earlier co-operation in defence research and technology as set-up under the Advisory Group for Aerospace Research and Development (AGARD) and the Defence Research Group (DRG). AGARD and the DRG share common roots in that they were both established at the initiative of Dr Theodore von Kármán, a leading aerospace scientist, who early on recognised the importance of scientific support for the Allied Armed Forces. RTO is capitalising on these common roots in order to provide the Alliance and the NATO nations with a strong scientific and technological basis that will guarantee a solid base for the future.

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Analysis and Modelling for Human Resource Management in Defence

(RTO-MP-SAS-073)

Executive Summary

Motivated personnel, in sufficient numbers and with the right mix of skills, training and experience are the bedrock of military capability. This has always been the case, but the requirements of defence transformation have led to increased levels of interest in this area as many nations embark on major changes in manpower structures in order to meet the new needs of expeditionary operations rather than territorial defence. Even for nations who have largely completed this change, demographic and economic pressures will continue to pose major challenges to national Ministries of Defence in formulating and implementing personnel policies. Many of the problems that currently exist in this area make it difficult for Nations and NATO Human Resource Management (HRM) bodies to function efficiently and effectively. Operational analysis and other model-based approaches are capable of providing valuable support to defence decision-makers addressing personnel issues. However, this application domain has tended to have a lower profile than work relating to topics such as concepts of operation, equipment acquisition and logistics. The Research Specialist Meeting SAS-073 on Analysis and Modelling for Human Resource Management in Defence therefore provided an opportunity to redress this balance. The purpose of the Research Specialist Meeting SAS-073 on Analysis and Modelling for Human Resource Management in Defence was to provide a forum for participants to exchange experiences and perceptions on the way in which operational analysis or other forms of modelling and simulation can provide support to decisions relating to human resource management within national armed forces and to discuss further possible collaborative research programs.

The scope and topics covered were limited to: human resources management (HRM) and career concepts, the role of analysis and modelling for HRM in Defence, results of SAS-059, right personnel at the right time at the right place with the right qualification, personnel assessment and assignment, modelling and simulating the future personnel structure including Markov chain models, personnel succession planning, cultural models, education and training, European Foundation for Quality Management (EFQM) based transformational models.

The level of the presentations and of the discussions was very good and stimulating. However it should be reminded that important topics like recruitment, selection, reward, promotion policies, job satisfaction, operational deployment and roulement policies, HRM decision support systems and day-to-day management of personnel were not covered or needed a more in depth discussion. It is therefore recommendable to repeat this event in order to elaborate on these and other important issues concerning HRM in Defence.

Analyse et modélisation de la gestion des ressources humaines en matière de défense

(RTO-MP-SAS-073)

Synthèse

Un personnel motivé, en nombre suffisant, et possédant le mélange approprié de savoir-faire, d'entraînement et d'expérience est la base des capacités militaires. Ceci a toujours été le cas, mais les besoins de transformation en matière de défense ont accru l'intérêt pour ce domaine car beaucoup de nations s'orientent vers des changements importants dans la structure de leurs effectifs afin de satisfaire les nouveaux besoins en matière d'opérations extérieures plutôt que de défense territoriale. Même pour les nations qui ont déjà largement exécuté ce changement, les pressions démographiques et économiques continueront à poser des défis importants aux ministères nationaux de la Défense dans la formulation et la mise en place des politiques du personnel. Beaucoup des problèmes actuels dans ce domaine font qu'il est difficile pour les organismes chargés de la gestion des ressources humaines des Nations et de l'OTAN (HRM) de fonctionner efficacement et effectivement. L'analyse opérationnelle et d'autres approches modélisées sont capables de fournir un support précieux aux décideurs de la Défense traitant des questions de personnel. Cependant ce domaine d'application tend à être moins en vue que les travaux relatifs aux concepts d'opération, d'acquisition d'équipement et de logistique. La réunion des spécialistes du domaine de la recherche SAS-073 en analyse et en modélisation de la gestion des ressources humaines pour la Défense a fourni l'opportunité de redresser cet équilibre. L'objet de la réunion des spécialistes du domaine de la recherche SAS-073 était de fournir aux participants un forum dans lequel ils échangeraient leurs expériences et perceptions sur la façon selon laquelle l'analyse opérationnelle ou d'autres formes de modélisation et de simulation pouvaient fournir un support aux décisions relatives à la gestion des ressources humaines au sein des forces armées nationales et de discuter d'éventuels programmes ultérieurs de recherche.

La portée et les sujets couverts étaient limités à : gestion des ressources humaines (HRM) et concepts de carrière ; rôle de l'analyse et de la modélisation pour les ressources humaines au sein de la Défense ; résultats de SAS-059 ; affectation du personnel au bon endroit au bon moment avec la bonne qualification ; évaluation et assignation des tâches au personnel ; modélisation et simulation de la future structure des effectifs comprenant les modèles de chaîne de Markov ; planification de la relève des personnels ; modèles culturels ; formation et entraînement ; modèles transformationnels basés sur la Fondation européenne pour le management par la qualité (EFQM).

Le niveau des présentations et des discussions était excellent et stimulant. Toutefois il faut se rappeler que des sujets importants tels que le recrutement, la sélection, la récompense, les politiques de promotion, de satisfaction dans le travail, de déploiement opérationnel et les politiques de relève, les systèmes de support à la décision dans le domaine des ressources humaines et la gestion quotidienne du personnel n'étaient pas couverts ou auraient nécessité une discussion plus approfondie. Il est en conséquence souhaitable de répéter cet événement de manière à approfondir ces questions et d'autres questions importantes concernant la gestion des ressources humaines en matière de Défense.