



SAS 044 'Decision Support to CJTF and Component Commanders' and other SAS Initiatives of Relevance

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Background to SAS 044

- Topic Proposed by US Panel Member
- UK chair Exploratory Team
- Initial meeting (March 01) seen as sharing experiences, looking for a basis for collaboration, TORs, topic areas
- Second meeting (July 01) agreed Programme of Work, TORs
- Liaison meeting (Aug 01) with NMSG 016, ET L, to discuss programme overlaps etc
- Briefed NATO OA Workshop, RHQ AFNORTH (Sept 01)
- SAS Panel approved set up of Technical Team (Nov 01)

Participants in SAS 044

- UK, US, GE, NO, FR, NL, TU, SW
- NC3A, SHAPE, RHQ AFNORTH, RHQ AFSOUTH, HQ ARRC, HQ EASTLANT, EUCOM, USURER, WPC
- Decision at Sept NATO 'OA Commands Workshop' is that outputs of Technical Team to be distributed to all major NATO HQs (through RHQ AFNORTH)
- New NATO Centre for Lessons Learned invited to join

SAS 044 : Work Schedule

- Task 1: User Requirements Definition Study will be initiated at the start of the programme and initial results will be presented at a Workshop (W1) in late 2002 followed by a report by mid 2003.
- Task 2: Census of Decision Support Tools and Techniques will be initiated at the start of the programme. Initial findings will be presented to the Workshop (W1) in late 2002 and final results at a Workshop (W2) in late 2003.
- Task 3: Catalogue of recent Experiences and Lessons will be initiated at the start of the programme and results will be presented at the Workshop in late 2002 (W1).
- Task 4: Code of Best Practice will be initiated at the start of the programme, with an initial draft outline and structure presented at the Workshop in late 2002 (W1) and refined before presentation at a Workshop in late 2003(W2)

Programme of Work for SAS 044

‘Decision Support for Joint Task Forces and Component Commanders’

Task 1: User Requirement Definition Study.

- To develop a clear understanding of the decision making processes in the appropriate organisations (HQs).
- Example HQs, RHQ AFSOUTH, RHQ AFNORTH and HQ ARRC
- Possible to include operational HQs such as SFOR and KFOR
- This task fits well with a Workshop which identifies recent practical experiences.

- Deliverable: Report and (informal) Workshop proceedings.

Programme of Work for SAS 044

'Decision Support for Joint Task Forces and Component Commanders'

Task 2: Carry out a census on current Decision Support Tools and Techniques

- The census will concentrate mainly on current capabilities
- It is recognised that techniques that are emerging from the research community could be included.
- One proposal is for NATO's premier OA Agency (NC3A) to become the 'owner' of this product. A workshop will be held to demonstrate the utility of current tools.
- This task has generated interest by other initiatives- in particular ET L and NMSG 016. A joint approach is seen as most cost effective.
- Deliverable: Report/'database', Workshop

Programme of Work for SAS 044

‘Decision Support for Joint Task Forces and Component Commanders’

Task 3: Catalogue Recent Decision Support Experiences and Lessons Learned from Nations and NATO HQs

- This task seeks to capture their experiences and further demonstrate to the customer community the range of techniques that are available
- In particular, recent Balkans operations have generated considerable interest and the respective deployed operational headquarters will be invited to share their experiences
- This task will start to build up the fundamental lessons that have been learned and will be a precursor to collation of these lessons into a ‘Code of Best Practice’
- This task will be achieved through a workshop comprising Formal presentations and informal ‘round table’ discussions on particular topics
- Deliverable: Workshop Proceedings

Programme of Work for SAS 044

‘Decision Support for Joint Task Forces and Component Commanders’

Task 4: Develop a Guide to ‘Best Practice’ for successful decision support to commanders.

- A major output from this Technical Team and will greatly benefit the nations analytical communities.
- Directly linked to the lessons learned from recent experiences of operational support
- It will consider the training requirements for analysts and the characteristics which best suit analysts to this type of direct support to military commanders.
- The Guide is anticipated being in two parts
 - a set of principles that have been seen to be of longstanding and proven utility.
 - practical examples of analysis support and will be continually updated as the experience base grows.
- Deliverable: Guide/report and Workshop Proceedings.

Item 7: POW Item Leaders and Team Composition

- Item 1: AFSOUTH lead with EUCOM/AFNORTH/HQARRC
- Item 2: NO lead
- Item 3: NC3A/UK lead
- Item 4: UK lead



Liaison with Other NATO Groups

Parallel SAS/NMSG Activities

- SAS 027: Analysis of Small Scale Contingencies
- ET L : Computer Decision Tools for the Support in Military Operational Headquarters
- NMSG 004: Modelling and Simulation Support to Non Article 5 Activities
- NMSG 016: Course of Action Analysis Toolsets to Assist Operational Decision Making for Campaign Planning/Mission Rehearsal
- SAS ET W: Mission Planning Tools for Deployment of Aviation Assets

ET L : Computer Decision Tools for the Support in Military Operational Headquarters

- ET L commenced as a SAS Exploratory Team in May 2000 as result of the DRG LTSS048 Study on Computer Generated Forces
- ET L is looking across the breadth of the current problem to see what technologies and techniques could assist in the future. ET L feeds from the capability gaps identified by ETs X (SAS044) and MSG 16 (MSG 024) in the generation of recommendations for future R&D
- Little support from nations, ET discontinued

NATO Modelling and Simulation Group Activities

- **NMSG 004: Modelling and Simulation Support to Non Article 5 Activities**
- **NMSG 016: Course of Action Analysis Toolsets to Assist Operational Decision Making for Campaign Planning/Mission Rehearsal**
- **Amalgamated into:**

MSG-024 “Non Article 5 Operations / Course of Action Analysis Tools”

MSG-024 Programme of Work (Tentative)

- Definition of a simulation based training and operational support environment. Principal functions of simulation based planning-, analysis-, rehearsal-, decision support-tools.
- Requirements for M&S support to “NATO Non-Article 5” –operations. The requirements will be derived in cooperation with the MORS and under consideration of the results of the study of NIAG SG67 and- if applicable- the work of SAS-044.
- Experiences from peace support operations accomplished. These experiences will be used to assess the importance of specific Non-Article 5- tasks to be represented in simulations.
- The state of the art in the area of modelling and simulation of Non-Article 5 missions in NATO and in the nations.
- Possible contributions by NATO and nations to set up a NATO Non-Article 5 M&S capability for NATO commands in the future.

MSG-024 Programme of Work (Tentative)

- **Conformity with the PATHFINDER vision (integration with other simulations, C3I-systems, other “real”-systems, support-tools).**
- **Standardization needs (architecture, data models/FOM's,)**
- **Special data needs (CIMIC, cultural, ethnic,) Special technical aspects and challenges (human behaviour representation, multi-level –representation,**)

MSG 024: Planned Activities

- Membership - GE offers lead; B, CA, CZ, FR, GE, UK, US, to be confirmed, participation still open to further nations
- First Meeting - Koblenz, GE
- 21-22 November 2002

SAS 045: Computer Based Support Tool for Helicopter Mission Planning in Disaster Relief and Military Operations

- The main goal of the research is to provide the basis for developing a generic and flexible decision support tool for effective management of helicopter missions by conducting the problem analysis, investigating the concept of solutions and determining relevant technical requirements.
- TU lead- FR, GE, BE,GR,NL,PO participating
- CA,US may participate
- First meeting May 2002, final deliverable- late 2005

SAS 045: Computer Based Support Tool for Helicopter Mission Planning in Disaster Relief and Military Operations

- **Item 1** Determine the operational context, environment, desired capability and scope.
- **Item 2** Carry out technology surveys.
- **Item 3** Develop the technology mapping and capability matrix.
- **Item 4** Define the constraints, the inputs and the outputs of the desired decision support tool.
- **Item 5** Develop the required models and propose solution procedures.
- **Item 6** Determine information management and database interfacing
- **Item 7/8** Prepare study report. Organize symposium.

Other SAS Activities (1)

MODELLING & SIMULATION GROUP CONFERENCE

NATO-PfP/INDUSTRY/NATIONAL

MODELLING AND SIMULATION PARTNERSHIPS

21-25 October, Paris, France

The increasing importance that Modelling and Simulation (M&S) now affords in NATO, the PfP and National activities, is now well recognised. The successful and cost-effective implementation of M&S activities requires the formulation of partnerships and understandings between NATO, the PfP, Industry and National organisations. This Conference will address the interrelationships between these organisations, the current or future partnerships that are in existence or should be developed in the areas of:

- M&S Infrastructures
- Intellectual Property Rights
- Interoperability Standards
- Private Finance Initiatives.

In addition the Conference will also address the themes of research, development and the cost-effective application of M&S in the defence environment.



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Other SAS Activities (2)

- **‘SIMULATION OF AND FOR MILITARY DECISION MAKING’** Lecture Series 222 organised by the **STUDIES, ANALYSIS & SIMULATION PANEL** to be held in NC3A, The Hague, NL 10-11 December 2002

This Lecture Series will start with an overview on the NATO Research and Technology Organisation (RTO) given by an RTO representative and an overview on M&S Orientation Course) given by a representative from the NATO Modelling and Simulation Coordination Office (MSCO). The lectures will cover different aspects of "Simulation of and for Military Decision Making" starting with military needs, underlying architectures, interfaces to Command and Control Information Systems (CCIS), continuing with Computer Generated Forces (CGF) and Human Behaviour Representation (HBR) itself. Practical examples and future needs are also part of the presentations.

Other SAS Activities (3)

- NATO Industrial Advisory Group (NIAG) SG 067 'Pre-feasibility Study in Modelling and Simulation to Peace Support Organisations'
- No Information to date!!

The Cornwallis Group

- Since 1996 the Cornwallis Group has met to discuss the application of rigorous analytic tools and techniques to Peace Operations, Operations Other Than War, Small Scale Contingencies and other civil/military international engagements
- 7 Workshops all with published Proceedings
- THE substantive body of PSO analysis work
- Chairman: Dave Davis, George Mason University
 - **Cornwallis VIII: Analysis for Governance and Stability**
 - **Lester B. Pearson Canadian International Peacekeeping Training Centre Cornwallis Park, Nova Scotia, Canada - 14-17 April 2003**

QUESTIONS?



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