This paper is part of the following report:

TITLE: Multimedia Visualization of Massive Military Datasets [Atelier
OTAN sur la visualisation multimedia d'ensembles massifs de donnees
militaires]

To order the complete compilation report, use: ADA408812

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Joint Operations Picture

Liz Bilsby & Rose Hines

Command and Information Applications, KIS Division, DERA Malvern

tel: +44 (0)1684 894779, fax: +44 (0)1684 896660

The Problem

- The ability to give the commander at the Strategic / Operational level the appropriate amount of situational awareness in order to facilitate understanding to aid the command process.
- The total set of information, in whatever form, which is a managed and validated view of the history, current situation and future plans for all components of an operation.
- Right information, right form, right time!

What is it?

- Not just the geo-spatial situational awareness picture
- Information centric and includes facilities for information retrieval, linking and management as well as database interaction
- Dynamic by phase of operation, level in command and role/function
- The JOP is not just technology it requires an information culture, standards, procedures, a diversity of information sources and an infrastructure.

Key Purposes

- Enable individual and collective awareness of operational situation
- Enable individuals/groups to share/compare/contrast their views
- More effective means of communicating operation information
- Enable individuals/groups to model/represent the operation with combined knowledge and perception

Functional Requirements

- HCI
- Searching capability
- Information assurance
- Aggregation
- Data replication/synchronization
- Ownership
- Lifecycle
- Time stamp
- Archiving, Backup and recovery

Profiling

- **Profile**
  - security
- **Use of Digital sigs/PKI**
- **Managed Access-control & Capabilities Environment (MACE)**
  - function
  - command level
  - personnel preferences - language e.t.c.
- **Information Broker**
  - ability to change user profile
  - suggest more information

Future Issues

- **Summarisation**
  - between command levels
  - between cells
  - over various sources of information
  - truth maintenance
- **Certainty**
  - representing uncertainty - sliding scale?
  - aggregation of weightings
  - degradation of data - fading?
- **Alerting**
  - track changes
  - communication problems
  - alerting mechanisms

Discussion – Paper 10

Can you overlay images on the graph?
- Yes, but it is a controllable option.

Is there an overview to show an inventory of available information?
- Not at present, but it could be done.

How well does it interface with other systems?
- It is designed to look for information from other sources.

Collaborative aspects at different levels of command: Is there a common update so all levels get the most recent data?
- For group work there can be shared information in the individual wants to publish it, at a given security level.