Plenary Discussion Notes – Session 3

Issues that arose from plenary discussion after session on COP Present and Future:

- NATO used manually edited PowerPoint for COP

- Database size

- Data-bandwidth

- Framework for COP

- Uncertainty

- Standards

- Show something (60-70% solution is better than nothing)

- The biggest threats to good systems are procurement and security peoples

- Cultural differences

- Difference between spatial and non-spatial background (ties into HAT-report: located ver labeled data)

- Different levels and kinds of commonality

- Leadership in establishing COP

The plenary discussion is divided into questions and answers. The name of the person questioning or answering is in italics. Some of the answers are additional comments.

Question: What sort of difficulties in database size have you run into, and what kind of time delays do you find?

Answers: *Karin Silvervarg*: Tracks are sent in 10 seconds to eliminate the problem of storage delays.
Denis Gouin: Faced with only so much bandwidth – need to receive info from environments – people may limit what they send. The solution is that people can decide whether they want to receive something or not, or files that are too big do not get access, because they clog the bandwidth. People who share bandwidth are prevented from downloading huge files.
Jean-Pierre Faye: The most complex problem is the management of documents.
Female: One has to retire data over time when it is no longer useful to free up space.
Denis Gouin: There is a need to have rules to regulate what takes up the bandwidth and pre-fit information for higher levels minimizing what gets through the bandwidth.

Question: *Martin Taylor*: Should we consider a set of "Common Operational Environments" hierarchically more suitable to different cultures and users?

Answers: *Martin Taylor*: Cultures change slowly, and missions and our need for pictures change faster, so if there are cultural differences, they can be predetermined.

Question: *Tom Johansen*: Who is going to take care of NATO's framework for a common operating picture?

Answers: *Tom Johansen*: A lot of nations are going to be in the same situation. We need to determine: "Do we have a common Operating Framework". The nations can not create their own COP.

You need to tell nations that if they are going to be somewhere specific, they need this and this… If they do not have it they are in the dark. We need standards. We need to spend some time discussing this.

Jan-Terje Bjørke: There are several aspects. How do we communicate uncertainties to commanders? There are several visual conflicts. Should it be standardized rather than nation-specific?

William Cunningham: Rationalisation is a better word than standardisation. People always object to submitting their own stuff to someone else's standard.

Question: Can you foresee that other countries would not trust a country for not being up to data in the NATO plan?

Answers: *Tom Johansen*: Yes. They had to kick countries out. They were in the dark and unprepared. It is political. The goal is to have 60% of everyone up to par. This will go on for years, so get the framework going.

???: We need to document that this type of visualisation is better than this kind after research is done.

???: Everyone is different. Groups could come up with one way to do the framework, and then take it to NATO, and make a standard model, or NATO could make a standard.

Denis Gouin: Every country can have its own database, extend the model, and individual countries can change their own model, when a good idea arises, without all of the NATO countries having to change their plans.

???: Everything needs to be based on scientific research and then documented.

???: If people have to train to use something, they would not bother. Give them something that is easy to adapt to. Have it available to them, if they want to use it. We need to spend more time on the Human Factors side of it.

Stephen Boyne: Be careful about how we present a NATO wide standard. There are lots of cultural differences. What could be good for country, could be really bad for another country.

Tom Johansen: We need a COP where everyone is in and participating, but there will always be differences between commanders, and countries where people say "I want this" instead of the standard. Leave some room to be flexible for the group.

Question: How do we know what to let be flexible?

Answers: There are lots of experienced people here. There should be lots of expertise to come to a command and control system.