# KSCO-2009 Program

<u>Tuesday, 31 March 2009</u>

8:00    Registration (Business Centre Reception)

9:00    Welcome and Introduction – Jitu Patel, James Lawton

9:10    **KSCO Overview** – Austin Tate

9:30    **Invited Keynote Talk 1 – Major Mark Nooney**
        **Title**: *Experiences of Combat Operations in Afghanistan*

10:30   Break

10:45   **Paper Session 1: Collaboration Technology**

- Niranjan Suri, Andrzej Uszok, Jeffrey Bradshaw, Maggie Breedy, Marco Carvalho, James Hanna, Robert Hillman, Tim Hutcheson, Massimiliano Marcon, and Asher Sinclair.
  *Supporting Federated Information Spaces with the Joint Battlespace Infosphere (JBI) Platform*

- Austin Tate, Jeff Dalton and Stephen Potter.
  *I-Room: a Virtual Space for Emergency Response for the Multinational Planning Augmentation Team*

- Abdeslem Boukhtouta.
  *A Framework For Resource Visibility*

12:15   Lunch (Manor House Restaurant)

13:30   **Paper Session 2 – Planning 1**

- Gerhard Wickler, Antonin Komenda, Michal Pechoucek, Austin Tate and Jiri Vokrinek.
  *Multi-Agent Planning with Decommitment*

- Kyle Usbeck, William C. Regli, Gerhard Wickler and Austin Tate.
  *Finding Dominant Plans Using Plan Evaluation Criteria*

- Antonín Komenda, Jirí Vokrínek, Michal Pechoucek, Gerhard Wickler, Jeff Dalton and Austin Tate.
  *I-Globe: Distributed Planning and Coordination of Team-oriented Activities*

15:00   Break

15:30   **Panel Session 1**
        Topic: **Just in Time Training for Coalition Operations**

17:30   Wrap-up

18:00   Pre-Dinner Drinks (Main Hall & Lounge Bar)

19:00   Conference Dinner

8:00      Registration (Business Centre Reception)

9:00      **Invited Keynote Talk 2 – Dr. Jeff Bradshaw**
            **Title**: *Policy-Governed Information Exchange*
                    *in an Army Operational Scenario*

10:00      Break

10:30      **Paper Session 3 – Understanding and Trust**

- Paul Smart, David Mott, Katia Sycara, Dave Braines, Michael Strub and Dave Sloggett.
  *Shared Understanding within Military Coalitions: A Definition and Review of Research Challenges*

- Paul Smart, Shao Fen Liang, Chris Booth, Alistair Russell, Neil Briscombe, Andrew Rankin and Nigel Shadbolt.
  *Using Semantic Technologies to Improve Information Exploitation in Military and Civilian Application Contexts*

- Trung Dong Huynh.
  *Automating Trust Evaluation*

12:00      Lunch (Hilaire Belloc Room) / Demos

13:30      **Paper Session 4 – Planning 2**

- Michael Dorneich, David Mott, Jitu Patel & Ed Gentle.
  *Using a Structured Plan Representation to Support Multilevel Planning*

- Jeremy Bryans, John S. Fitzgerald and David Greathead.
  *A Proposal for a Verifiable Dynamic Coalition*

- Gennady Staskevich and Joseph Carozzoni.
  *Semantic Adaptation AGEnts (SAAGE)*

15:00      Break

15:30      **Panel Session 2**
            Topic: **The Network as an Enabler for Coalition Operations**

17:30      Wrap-up

# KSCO Keynote Presentations

**Experiences of Combat Operations in Afghanistan**
**Major Mark Nooney, Dstl**

Major Mark Nooney has recently returned from a short tour in Helmand Province, Afghanistan. His role was to mentor the Afghan National Army at operational and tactical levels. The deployment also involved extensive contact with US and other coalition partners. For a short period Mark was directly responsible for coordination between US, Canadian, British and Afghan units deployed on a complex clearance operation. The presentation will describe some of his experiences of coalition working in combat operations in Afghanistan.

**Policy-Governed Information Exchange in an Army Operational Scenario**
**Dr. Jeff Bradshaw, Institute for Human and Machine Cognition (IHMC)**

Researchers at IHMC are investigating how emerging policy and semantic web technologies can be used to help provide the best set of available tactical information to the soldier in the field. In this initial effort, we have developed a system that demonstrates the potential of these technologies in a small-scale U.S. Army mockup scenario. The system represents and reasons about domain-specific policies to help recognize what documents the end solder is allowed to receive given the current mission context. The system also relies on policies to help recognize when appropriate human approval can be obtained or a specific transformation of the information can be performed to allow the information to be sent. Semantic web technologies are further used to describe the properties and features of each document and relate these features to mission contexts in which the information is likely to be appropriate. The result is a compelling demonstration of the role that policies and semantic web technologies can play in promoting the Army's need to share information while remaining vigilant of the requirements to protect methods and sources.

# KSCO Panel Session 1
## Just in Time Training for Coalition Operations

<u>Participants</u>:

Chair: Paul Losiewicz – ONRG

Alenka Brown – OSD-AT&L

Eric Hamiltion – Pepperdine Univ

Leah Wong – SPAWAR Pacific

Hannu Kangassalo – University of Tampere, Finland

<u>Description</u>: A panel discussion of how to go beyond conventional e-Learning by use of new mobile computing technologies, cognitive models, language tools, and Social and Cultural modelling for the purpose of setting up, training, and operating ad hoc coalitions, e.g. NATO and UN operations, Disaster Response Teams, and Operations Other than War.

# KSCO Panel Session 2
## The Network as an Enabler for Coalition Operations

<u>Participants</u>:

Chair: Michael Strub – ARL @ dstl

Katia Sycara – CMU

Steve Poltrock – Boeing

Ray McGowan – US Army CRDEC

Alex Rogers – University of Southampton

Graham Bent – IBM

<u>Description</u>: The DoD and MoD are investing heavily in network science research with the conviction that more rapid, accurate, and complete communication of the right information to the right people at the right time will be a force multiplier and enhance force protection. With most instances of future combat viewed as coalition operations, the panel members will describe their current research in terms of opportunities for influencing coalition planning and execution.