

Call for Papers
IEEE GLOBECOM 2012 - Symposium on Selected Areas in Communications
Tactical Communications and Operations Track

Track Chair:

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Track Scope:

Tactical communications and operations management increasingly rely on robust and secure wireless networks that can operate in the face of unpredictable user mobility and impaired transmission channels. This track brings together papers that cover the most recent advances in communications, networking and situation management technologies applicable to the area of network-centric military communications. Papers are solicited that present research, development, experimentation, test and measurement, and practical deployment activities.

Track Topics

Tactical Communications

- Network science for military communications
- Cognitive radio and cognitive networking
- Peer-to-peer networking
- Cross-layer design and optimization
- Network management and control in tactical networks
- Commercial communications technology in tactical networks
- Network characterization and modeling
- Protocol efficiency on bandwidth constrained links
- Mobility management
- Signaling and Quality of Service provisioning
- Mobile routing
- Network security and information assurance
- Cooperative diversity
- Free-space optical communications
- Network coding
- Dynamic spectrum allocation and management
- Airborne networks
- Space-based networks
- Situation monitoring and awareness
- Semantic web technologies, situation modeling and ontologies
- High-level information and knowledge fusion
- Multi-agent systems and distributed situation management
- Situation management in tactical, ad hoc, sensor and mobile networks

Tactical Combat Situation Awareness

- Situation modeling, recognition and verification
- Situation awareness in incomplete, inexact and probabilistic environments
- Predictive situation modeling
- Cognitive modeling and hard/soft information fusion
- Situation knowledge acquisition
- Learning and situation discovery

Command Decision Support

- Tactical mission support
- Cognitive modeling and decision support
- Team decision making
- Adaptive and self-organizing processes
- Agents, Grids and Distributed Situation Management
- Combat operations visualization tools and environments