

Workshop Proposal

1. Workshop Title

Service Assurance in System Wide Information Management

2. Abstract

With the advancement of business globalization and technology standardization, the requirement for constructing a “collaborative environment” which allows different stakeholders and heterogeneous systems to cope with the full complexity of real-time operational information exchanges has been increasing. To achieve interoperable and harmonized operation, the System Wide Information Management (SWIM) concept has been proposed and has been applying in the current Global Air Traffic Management (ATM) System. Service Assurance in the SWIM is defined as capability of guaranteeing the quality of data, information and service provision and utilization during the entire life cycle of a mission critical operation system under heterogeneous and changing requirements.

The objective of the Workshop is to provide the premier interdisciplinary forum for academic and industry professionals to discuss recent progress in the area of system and network architecture, software implementation, test-bed developments, experiments, evaluation and analysis of SWIM concept based global ATM integration and related applications.

3. General Chairs and contact person of the workshop

General Chairs:

Remzi Seker, Embry-Riddle Aeronautical University, USA

Tadashi Koga, Electronic Navigation Research Institute, Japan

Program Committee Co-Chairs:

Radu F. Babiceanu, Embry-Riddle Aeronautical University, USA

Xiaodong Lu, Electronic Navigation Research Institute, Japan

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4. Topics and keywords

- SOA and Cloud technologies for service assurance
- Communication and network technologies for service assurance
- Modeling, simulation, evaluation, validation and analysis of SWIM-based applications
- Data, information and service management
- Safe and secure air transportation system
- Security issues for information management
- Aircraft/airline operation for service assurance
- Air/ground integration
- Trajectory based operations
- Surveillance and situational awareness
- Improved environmental performance
- Aviation related data, information and service delivery
- System governance and standardization
- Integration of ATM and UTM (Unmanned aircraft system Traffic Management)
- SWIM-based applications for Advanced Air Mobility (AAM)

5. Submission deadlines

Paper submission due: October 31, 2022

Author notification: November 30, 2022

Final manuscript due: December 31, 2022