The field of Air Traffic Management (ATM) has traditionally been a relatively closed environment characterised by siloed, local, tailor-made systems communicating via dedicated connections using legacy protocols. ATM has long been an environment founded on trust, with information exchanges being made “in the clear”, with its integrity, provenance, and authenticity being taken for granted.

Aviation and ATM are undergoing a transformation. New technologies and operational concepts are being readied to address the projected growth of air transportation and known bottlenecks to ATM System performance. With the launch of initiatives such as the FAA Next Generation ATM System (NextGen) and the European Single European Sky ATM Research (SESAR) program, the ATM community is investigating how to increase capacity, improve safety, reduce environmental impact, and cut costs.

In order to achieve these goals, these programs are in the process of evolving the ATM system into an interconnected wide-area information system. However, the increasing use of automation, interconnection and data sharing is likely to result in the elevation of security risks.

This workshop will focus on the security of next-generation Air Traffic Management systems and similar critical information infrastructures. In particular, the dual nature of security

1.) self-protection/resilience, and
2.) collaborative support

shall be explored.

The aim of the workshop is to explore the state-of-the-art and identify future security research threads in ATM and mission-critical infrastructures and to provide an opportunity for networking and sharing ideas. We received 17 submissions, of which 10 were accepted for presentation in the workshop. The range of selected papers will stimulate debate on self-protection and collaborative support. The topics covered by the papers illustrate the breadth and depth of the research area, with subject matter ranging from the highly technical to the more strategic visions of ATM System security and security management.

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