

ATM - 2000

Call for Papers for the 3rd USA/EUROPE ATM R&D Seminar

In an effort to foster the realisation of a harmonised global Air Traffic Management system, the EUROCONTROL Organisation and the United States Federal Aviation Administration will jointly sponsor the Third International Seminar on Air Traffic Management Research & Development, to be held in **Napoli**, Italy from **June 13 to June 16, 2000**.

The objectives of the seminar are:

- to create or reinforce working and personal relationships between leading experts and researchers in the Air Traffic Management Research & Development (ATM R&D) community, and,
- to share available results, reach consensus on major issues and present recommendations to decision makers on selected topics.

To meet these objectives only authors of papers selected by the seminar's Programme Committee and selected auditors will be invited for the first three days of the seminar. There will be ample opportunity for direct exchange between participants at and outside the event. In addition, key decision-makers will be invited to attend the final presentation of conclusions and recommendations on the fourth day.

The Programme Committee welcomes papers which present results of applied research and development in air traffic operations and address areas with potential high added value to air transport. These areas include:

- ATM performance assessment, modelling and analysis techniques, gate-to-gate capacity issues, demand forecasting.
- ATM safety assessment, modelling and analysis techniques with regard, in particular, to human factor aspects.
- Application and integration of human factor concepts in ATM system development.
- Overall system performance objectives (combining capacity, flexibility, predictability, safety, affordability and environmental objectives) and their impact on operational concepts and requirements on human and technology elements.
- Advances in ATM support tools and human-centred systems.
- Relation of airline operations with ATM, this includes network design (hub and spoke, direct-to, multi-hub, ...), flight planning, scheduling and real-time Airline Operating Centre operations.
- Flow management issues such as planning on different levels, from global to local, from strategic to tactical as well as collaboration among users and service providers.
- Development of criteria for airspace and air traffic management procedure design to assure operational benefits of new concepts and/or technologies. New procedures and transition issues due to implementation of airborne separation assurance systems are one example.
- Environment, including procedures designed to reduce noise, emission reduction on airport surface and terminal manoeuvring area, external safety monitoring.
- Modelling and analysis requirements for future concept development and validation.

Papers discussing

- fundamental research issues, i.e. innovative systems covering genuine new concepts for tools for controller working positions, human factors, computational techniques and new ATM paradigms,
- infra-structural issues (airports, surface movement, guidance and control systems),
- detection, measurement and forecasting of meteorological phenomena,

- advances in communication, navigation and surveillance, or, information technology in general, and,
- system architectural aspects,

will be considered if they pertain to air traffic operations.

All interested researchers are invited to submit an **extended abstract** or **draft paper** (referred to as draft hereafter) of the technical paper they want to present.

The selection of papers for the seminar will be based on this draft, which describes the work to be presented in approximately 2000 to 3000 words. Preference will be given to papers that document significant advances and results obtained in one of the areas listed above.

Each draft should begin with a summary, enabling (in 100 to 300 words) the reader to understand the main ideas of the work and its relevance for air traffic management issues according to the areas given above. An introduction should then assess the international state-of-the-art relevant to the work described and explain the paper's main contributions. The body of the draft should contain sufficient detail to allow thorough evaluation of the paper. The draft should close with a conclusion.

A short biographical notice (no more than 100 words) should provide the readers (and later the auditorium) with background information on the author.

The drafts (A4-two-columns, 10-/12-point characters/line spacing, WordPerfect 8, Word6.0 / Word97 or PDF format) are to be sent to the Programme Chair (see below) not later than **September 15, 1999**.

Authors will be notified of acceptance (or rejection) of the paper by December 15, 1999. Final papers are due April 15, 2000. All papers will be published on the <http://atm-seminar-2000.eurocontrol.fr> web-site; please note that the Programme Committee will select the best papers and propose them for publication in professional journals.

The drafts as well as general inquiries or suggestions concerning the programme or the form of the seminar should be directed – preferably via e-mail - to the Programme Chair :

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Information about the 1st and 2nd USA/EUROPE ATM R&D Seminar can be found in

<http://atm-seminar-97.eurocontrol.fr/> and <http://atm-seminar-98.eurocontrol.fr/>,

both sites are equally accessible via the home page of the Experimental Centre <http://www.eurocontrol.fr/>.