



## Global Air Navigation Industry Symposium (GANIS)

*Preparation for the Twelfth Air Navigation Conference*

**Workshop, Tuesday, 20 September 2011**

09:00	<b>Pre- Symposium Workshop Opening</b> Assembly Hall
<b>Workshop Session 1: Overview of ICAO Initiatives</b>	
09:00 – 09:30	<p>Opening Remarks by the Master of Ceremonies:</p> <p><b>Vincent Galotti</b>, Deputy Director, Safety Standardization &amp; Infrastructure, ICAO</p> <p><b>ICAO Global ATM Concept &amp; Global Air Navigation Plan</b></p> <p>Moderator: <b>Tai Feng</b>, Member of the Air Navigation Commission, ICAO</p> <ul style="list-style-type: none"> <li>• Outline of ICAO's current process and procedures</li> <li>• Speaker: <b>Saulo Da Silva</b>, Technical Officer, ATM, ICAO</li> </ul>
<b>Workshop Session 2: ATM Improvement Programmes</b>	
09:30 – 10:00	<p><b>Brazil</b></p> <p>Moderator: <b>Tai Feng</b>, Member of the Air Navigation Commission, ICAO</p> <ul style="list-style-type: none"> <li>• A brief introduction of the current ATM improvement programme in Brazil</li> <li>• Speaker: <b>Luiz Cláudio Ribeiro da Silva</b>, Head of Operational Department, DECEA</li> </ul>
10:00 – 10:30	<b>Coffee Break</b>

Workshop Session 2: ATM Improvement Programmes (Cont'd)	
10:30 – 11:00	<p><b>China</b></p> <p>Moderator: <b>Moussa Halidou</b>, Member of the Air Navigation Commission, ICAO</p> <ul style="list-style-type: none"> <li>• A brief introduction of China's ATM system development vision and current improvement programme</li> <li>• Speaker: <b>Li Xin</b>, Director of Science &amp; Technology Committee Office Air Traffic Management Bureau, CAAC</li> </ul>
11:00 – 11:30	<p><b>India</b></p> <p>Moderator: <b>Moussa Halidou</b>, Member of the Air Navigation Commission, ICAO</p> <ul style="list-style-type: none"> <li>• A brief introduction of the current ATM improvement programme in India</li> <li>• Speaker: <b>Anil Kumar Dutta</b>, General Manager - Air Traffic Management, Airports Authority of India</li> </ul>
11:30 – 12:00	<p><b>The Russian Federation</b></p> <p>Moderator: <b>Moussa Halidou</b>, Member of the Air Navigation Commission, ICAO</p> <ul style="list-style-type: none"> <li>• A brief introduction of the current ATM improvement programme in the Russian Federation</li> <li>• Speaker: <b>Eduard Falkov</b>, Head of Department – Chief Designer State Research Institute of Aviation Systems (GosNIAS)</li> </ul>
12:00	<b>Opening of the Exhibition</b>
12:00 – 14:00	<b>Lunch Break</b>

**Workshop Session 2: ATM Improvement Programmes (Cont'd)**

<p>14:00 – 14:30</p>	<p><b>Canada</b></p> <p>Moderator: <b>Alexander Korsakov</b>, Member of the Air Navigation Commission, ICAO</p> <ul style="list-style-type: none"> <li>• A brief introduction of the current ATM improvement programme in Canada</li> <li>• Speaker: <b>Rudy Kellar</b>, Vice President, Operations, NAV CANADA</li> </ul>
<p>14:30 – 15:00</p>	<p><b>Australia</b></p> <p>Moderator: <b>Alexander Korsakov</b>, Member of the Air Navigation Commission, ICAO</p> <ul style="list-style-type: none"> <li>• A brief introduction of the current ATM improvement programme in Australia</li> <li>• Speaker: <b>Greg Dunstone</b>, Senior Engineering Specialist, Airservices Australia</li> </ul>
<p>15:00 – 15:30</p>	<p><b>Collaborative Actions for Renovation of Air Traffic Systems (CARATS)</b></p> <p>Moderator: <b>Alexander Korsakov</b>, Member of the Air Navigation Commission, ICAO</p> <ul style="list-style-type: none"> <li>• A look at the long-term vision for the future air traffic system in Japan</li> <li>• Speaker: <b>Takeshi Imagome</b>, Director, Office of Air Traffic International Affairs, Japan Civil Aviation Bureau (JCAB)</li> </ul>
<p>15:30 – 16:00</p>	<p><b>Coffee Break</b></p>

**Workshop Session 2: ATM Improvement Programmes (Cont'd)**

<p>16:00 – 16:30</p>	<p><b>Single European Sky ATM Research Programme (SESAR)</b></p> <p>Moderator: <b>Adel Alaufi</b>, Member of the Air Navigation Commission, ICAO</p> <ul style="list-style-type: none"> <li>• A brief introduction of the current ATM improvement programme in Europe.</li> <li>• Speaker: <b>Patrick Ky</b>, Executive Director, SESAR Joint Undertaking</li> </ul>
<p>16:30 – 17:00</p>	<p><b>Next Generation Air Transportation System (NextGen)</b></p> <p>Moderator: <b>Adel Alaufi</b>, Member of the Air Navigation Commission, ICAO</p> <ul style="list-style-type: none"> <li>• A brief introduction of the current ATM improvement programme in the United States.</li> <li>• Speaker: <b>Victoria Cox</b>, Senior Vice President for NextGen and Operations Planning, FAA</li> </ul>

**Symposium Day 1, Wednesday, 21 September 2011**

07:30 – 9:00	<p align="center"><b>Continental Breakfast</b></p> <p align="center"><i>Sponsored by AIRBUS</i></p>
09:00	<p><b>Opening of the Symposium</b></p> <p>Assembly Hall</p>
09:00 – 10:00	<p><b>Welcome and Opening</b></p> <p>Master of Ceremonies:</p> <p><b>Vincent Galotti</b>, Deputy Director, Safety Standardization &amp; Infrastructure, ICAO</p> <p><b>Keynote: Our Collective Challenge</b></p> <ul style="list-style-type: none"> <li>• The global accident rate is currently flat but the traffic is increasing.</li> <li>• Accidents will also begin to increase, unless we intervene.</li> <li>• The global aviation system needs to evolve.</li> <li>• The evolution towards a future system is unclear.</li> <li>• Over US\$ 120 billion will be spent on new technologies/systems over the next 10 ten years worldwide.</li> <li>• In this session, Industry leaders share their views on the challenges ahead, with a focus on creating aviation’s future system.</li> </ul> <p>Keynote Speakers:</p> <ul style="list-style-type: none"> <li>• <b>Raymond Benjamin</b>, Secretary General, ICAO</li> <li>• <b>Matthias Ruete</b>, Director General of Mobility &amp; Transport, European Commission</li> <li>• <b>Michael P. Huerta</b>, Deputy Administrator, FAA</li> </ul>

Session 1: Developing Tomorrow's Aviation System...Today	
10:00 – 10:30	<p><b>Creating Operational Improvements Through Aviation System Block Upgrades</b></p> <ul style="list-style-type: none"> <li>• The ICAO <i>Aviation System Block Upgrades</i> concept will help develop tomorrow's system.</li> <li>• “Block Upgrades” provide a series operational performance improvements, organized into flexible and scalable building blocks.</li> <li>• They can be implemented in a State or region depending on the need and level of readiness.</li> <li>• This session provides an overview of the “Block Upgrades” concept and outlines of the methodology behind it.</li> </ul> <p>Speaker:</p> <ul style="list-style-type: none"> <li>• <b>Nancy Graham</b>, Director, Air Navigation Bureau, ICAO</li> </ul>
10:30 – 11:00	<p><b>Coffee Break</b></p> <p><i>Sponsored by MITRE</i></p>

Session 2: Making the Most of What We Have Today	
11:00 – 11:30	<p><b>Today’s Operational Environment and The Challenges</b></p> <ul style="list-style-type: none"> <li>• The renovation of ATM systems is necessary to safely and efficiently accommodate the increase in air traffic demand.</li> <li>• It is also crucial to respond to the needs of operators, environmental concerns and other issues.</li> <li>• Modernization will provide the greatest operational and performance benefits but many of those benefits could be attained today.</li> <li>• What is preventing us from achieving them?</li> <li>• In this session, Industry experts discuss the challenges associated to the current operational environment.</li> </ul> <p>Moderator:</p> <p><b>Guenter Matschnigg</b>, Senior Vice President, Safety, Operations &amp; Infrastructure, IATA</p> <p>Speakers:</p> <ul style="list-style-type: none"> <li>• <b>Steve Brown</b>, Senior Vice President of Operations, NBAA</li> <li>• <b>Craig J. Spence</b>, Vice President, Operations &amp; International Affairs, AOPA</li> <li>• <b>Alan Stealey</b>, Divisional Senior Vice President Flight Operations, Emirates Airline</li> </ul>
11:30 – 12:00	<p><b>Capabilities Within Our Grasp</b></p> <ul style="list-style-type: none"> <li>• How can we make the most of what is currently available?</li> <li>• Block “0” is the first of the Block Upgrades that can be introduced.</li> <li>• It optimizes current airborne technologies and provides a baseline for improvements.</li> <li>• This session explores the capabilities that can be implemented today, for short-term benefits.</li> </ul> <p>Moderator:</p> <p><b>Guenter Matschnigg</b>, Senior Vice President, Safety, Operations &amp; Infrastructure, IATA</p> <p>Speaker:</p> <ul style="list-style-type: none"> <li>• <b>Rick Heinrich</b>, NextGen Institute - Technical Team Member &amp; Director, Strategic Initiatives, Rockwell Collins</li> </ul>

12:00 – 14:00	<p style="text-align: center;"><b>Lunch Break</b></p> <p style="text-align: center;"><i>Sponsored by Boeing and Jeppesen</i></p>
<p style="text-align: center;"><b>Session 2: Making the Most of What We Have Today (Cont'd)</b></p>	
14:00 – 15:30	<p><b>Capabilities Within Our Grasp (Cont'd)</b></p> <ul style="list-style-type: none"> <li>• Key players from different segments of the Industry present ways to obtain benefits from capabilities that are currently available.</li> </ul> <p>Moderator:</p> <p><b>Jim Dow</b>, Member of the Air Navigation Commission, ICAO</p> <p>Speakers:</p> <ul style="list-style-type: none"> <li>• Air Transport Aircraft <ul style="list-style-type: none"> <li>○ <b>Didier Delibes</b>, Senior Manager, ATM Engineering, Airbus</li> <li>○ <b>Dave Nakamura</b>, Senior Technical Fellow – Boeing Airplane Systems, The Boeing Company</li> </ul> </li> <li>• Regional Aircraft <ul style="list-style-type: none"> <li>○ <b>André Gauthier</b>, Principal Engineering Specialist – Avionics, Bombardier Aerospace</li> </ul> </li> <li>• Business &amp; General Aviation Aircraft <ul style="list-style-type: none"> <li>○ <b>Greg Bowles</b>, Director of Engineering and Manufacturing, GAMA</li> </ul> </li> <li>• Ground Automation <ul style="list-style-type: none"> <li>○ <b>François DeLille</b>, Director of CNS/ATM Product and Business Strategy, Thales Group</li> <li>○ <b>Carol Huegel</b>, Vice President of Business Development, Advanced Research and Engineering, Metron Aviation</li> </ul> </li> <li>• Airport Systems <ul style="list-style-type: none"> <li>○ <b>Michael Underwood</b>, Director, Business Development, Honeywell International</li> </ul> </li> </ul>
15:30 – 16:00	<p style="text-align: center;"><b>Coffee Break</b></p> <p style="text-align: center;"><i>Sponsored by Bombardier</i></p>

**Session 2: Making the Most of What We Have Today (Cont'd)**

<p>16:00 – 17:00</p>	<p><b>Capabilities Within Our Grasp (Cont'd)</b></p> <ul style="list-style-type: none"> <li>• Panellists from key aviation segments discuss how Block 0 should be organized to prepare deployment.</li> </ul> <p>Moderator:</p> <p><b>Margaret Jenny</b>, President RTCA, Inc.</p> <p>Panellists:</p> <ul style="list-style-type: none"> <li>• <b>Carole Couchman</b>, Technical Officer, IFALPA</li> <li>• <b>Brigadier Luiz Cláudio Ribeiro da Silva</b>, Head of Operational Department, DECEA Brazil</li> <li>• <b>Rob Eagles</b>, Director, Infrastructure Strategy, IATA</li> <li>• <b>Steve Fulton</b>, Technical Fellow, GE Aviation</li> <li>• <b>Matthew Riley</b>, Head of Operational Policy and Evolution, National Air Traffic Services Ltd (NATS)</li> <li>• <b>Ruth Stilwell</b>, IFATCA Representative to ICAO, IFATCA</li> <li>• <b>Robert Sturgell</b>, Senior Vice President, Washington Operations, Rockwell Collins</li> </ul>
<p>17:00 – 19:00</p>	<p style="text-align: center;"><b>Welcome Reception</b></p> <p style="text-align: center;"><i>Sponsored by GE Aviation</i></p>

**Symposium Day 2, Thursday, 22 September 2011**

07:30 – 9:00	<p align="center"><b>Continental Breakfast</b></p> <p align="center"><i>Sponsored by NavCanada</i></p>
<p align="center"><b>Session 3: How Will We Create Aviation's Future System?</b></p>	
09:00 – 09:30	<p><b>Which New Technologies for Which Benefits?</b></p> <ul style="list-style-type: none"> <li>• In this session, speakers will discuss emerging technologies and the benefits associated to their implementation.</li> </ul> <p>Moderator:</p> <p><b>Christian Schleifer</b>, Member of the Air Navigation Commission, ICAO</p> <p>Speakers:</p> <ul style="list-style-type: none"> <li>• <b>Dave Nakamura</b>, Senior Technical Fellow – Boeing Airplane Systems, The Boeing Company</li> <li>• <b>Pierre Bachelier</b>, Head of ATM Programme, Airbus</li> </ul>
09:30 – 10:00	<p><b>The Next Step – A Detailed Look at Block 1</b></p> <ul style="list-style-type: none"> <li>• Each Block Upgrade contributes to four performance improvement areas:             <ul style="list-style-type: none"> <li>○ Greener airports</li> <li>○ Globally interoperable systems and data</li> <li>○ Optimum capacity and flexible flights</li> <li>○ Efficient flight path</li> </ul> </li> <li>• This session presents the modules that are introduced in Block 1 and explains how they relate to each of the areas.</li> </ul> <p>Speaker:</p> <p><b>Steve Bradford</b>, Chief Scientific and Technical Advisor for Architecture and NextGen Development, FAA , and ICAO Technical Team Member</p>

10:00 – 10:30	<p style="text-align: center;"><b>Coffee Break</b></p> <p style="text-align: center;"><i>Sponsored by SAE International</i></p>
<b>Session 4: Exploring the Near-Term Solutions – Discussions on Block 1</b>	
10:30 – 12:00	<p><b>Industry Discussion: Is this the Right Direction?</b></p> <ul style="list-style-type: none"> <li>• Key players share their views on near-term solutions for the evolution of the aviation system, Block 1 of the Block Upgrades, and opportunities or issues associated with developing the needed capabilities.</li> </ul> <p>Moderator:</p> <p><b>David Behrens</b>, Member of the Air Navigation Commission, ICAO</p> <p>Speakers:</p> <ul style="list-style-type: none"> <li>• Air Transport Aircraft <ul style="list-style-type: none"> <li>○ <b>Andrew Belotserkovsky</b>, Expert of the Joint Stock Company “Consortium for Avionics Manufacturing”, Russian Federation</li> <li>○ <b>Didier Delibes</b>, Senior Manager, Airbus ATM Engineering, Airbus</li> <li>○ <b>Chip Meserole</b>, Director, Air Traffic Management Boeing Research &amp; Technology, The Boeing Company</li> </ul> </li> <li>• Regional Aircraft <ul style="list-style-type: none"> <li>○ <b>Fernando Guimaraes</b>, Product Development Manager, Embraer</li> </ul> </li> <li>• Business &amp; General Aviation Aircraft <ul style="list-style-type: none"> <li>○ <b>Mike Mena</b>, Director, Advanced Cockpit Programs, Gulfstream Aerospace</li> </ul> </li> <li>• Ground Automation <ul style="list-style-type: none"> <li>○ <b>Brad Culbertson</b>, Principal Systems Engineer, Lockheed-Martin</li> <li>○ <b>Bill Lang</b>, Vice President Air Traffic Management, Adacel Inc.</li> </ul> </li> <li>• Air Navigation Service Provider <ul style="list-style-type: none"> <li>○ <b>Gunnar Frisk</b>, Team Manager ANS R&amp;D Products and Services, LFV</li> </ul> </li> </ul>
12:00 – 14:00	<p style="text-align: center;"><b>Lunch Break</b></p> <p style="text-align: center;"><i>Sponsored by IDS Ingegneria Dei Sistemi SPA</i></p>

**Session 4: Exploring the Near-Term Solutions – Discussions on Block 1 (Cont'd)**

14:00 – 15:00	<p><b>Panel Discussion on Block 1</b></p> <ul style="list-style-type: none"> <li>• Panellists from key aviation segments discuss how Block 1 should be organized to prepare deployment.</li> </ul> <p>Moderator:</p> <p><b>Andrew Tiede</b>, Member of the Air Navigation Commission, ICAO</p> <p>Panellists:</p> <ul style="list-style-type: none"> <li>• <b>Mark Bradley</b>, Chief Technical Pilot, Delta Air Lines</li> <li>• <b>Steve Brown</b>, Senior Vice President of Operations, NBAA</li> <li>• <b>Carole Couchman</b>, Technical Officer, IFALPA</li> <li>• <b>Jean-François Grout</b>, Director, Future Systems Architecture, Thales</li> <li>• <b>Takafumi Nakada</b>, Director, CNS Planning Office, Air Traffic Services Department, JCAB</li> <li>• <b>Neil R. Planzer</b>, Vice President – Strategy, Boeing Advanced Air Traffic Management, The Boeing Company</li> <li>• <b>Eric Stefanello</b>, CEO, Airbus ProSky</li> </ul>
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**Session 5: Exploring The Longer-Term Solutions - Blocks 2 & 3**

15:00 – 15:30	<p><b>Future Aviation System Performance</b></p> <ul style="list-style-type: none"> <li>• Each Block Upgrade contributes to four performance improvement areas:             <ul style="list-style-type: none"> <li>○ Greener airports</li> <li>○ Globally interoperable systems and data</li> <li>○ Optimum capacity and flexible flights</li> <li>○ Efficient flight path</li> </ul> </li> <li>• This session presents the modules in Blocks 2 &amp; 3 and explains how they relate to each of the areas.</li> </ul> <p>Moderator:</p> <p><b>Farid Zizi</b>, Member of the Air Navigation Commission, ICAO</p> <p>Speaker:</p> <p><b>Bernard Miaillier</b>, Head of Division - ATM Content Review, EUROCONTROL, and ICAO Technical Team Member</p>
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15:30 – 16:00	<p style="text-align: center;"><b>Coffee Break</b></p> <p style="text-align: center;"><i>Sponsored by Thales Air Systems</i></p>
<b>Session 5: Exploring The Longer-Term Solutions - Blocks 2 &amp; 3 (Cont'd)</b>	
16:00 – 17:00	<p><b>Panel Discussion on the Longer-Term</b></p> <ul style="list-style-type: none"> <li>• Panellists from key aviation segments discuss how Blocks 2 and 3 should be organized to prepare deployment.</li> </ul> <p>Moderator:</p> <p><b>Graham Lake</b>, Director General, CANSO</p> <p>Panellists:</p> <ul style="list-style-type: none"> <li>• <b>Alexis Brathwaite</b>, President &amp; Chief Executive Officer, IFATCA</li> <li>• <b>Carey Fagan</b>, Executive Director for International Affairs, FAA</li> <li>• <b>Mark Hamy</b>, Vice President of SESAR and NextGen Deployment, Airbus ProSky</li> <li>• <b>Rudy Kellar</b>, Vice President, Operations, NAV CANADA</li> <li>• <b>Michael Standar</b>, Chief ATM, SESAR Joint Undertaking</li> <li>• <b>Geoff Shearer</b>, Business Development Lead, Boeing Advanced Air Traffic Management, The Boeing Company</li> </ul>
17:00 – 19:00	<p style="text-align: center;"><b>Cocktail Reception</b></p> <p style="text-align: center;"><i>Sponsored by</i></p> <p style="text-align: center;"><i>Environmental Systems Research Institute, Inc. (Esri)</i></p>

Symposium Day 3, Friday, 23 September 2011

Session 6: Tomorrow's System: Justifying Spending & Financing Possibilities	
09:00 – 10:30	<p><b>Building a Business Case &amp; Exploring Financing</b></p> <ul style="list-style-type: none"> <li>• How do we build a global business case to justify investments in future aviation systems?</li> <li>• It must bring identifiable benefits forward for a level of equipage and infrastructure costs.</li> <li>• This session explores possible financing methodologies to support Block Upgrades:               <ul style="list-style-type: none"> <li>○ ICAO's current financing policies</li> <li>○ Public/private partnerships</li> <li>○ Other financing methods employed by States</li> <li>○ Financing via development banks</li> </ul> </li> </ul> <p>Moderator:</p> <p><b>Angela Gittens</b>, Director General, ACI</p> <p>Speakers:</p> <ul style="list-style-type: none"> <li>• <b>Russell G. Chew</b>, Managing Partner, NEXA Capital</li> <li>• <b>Cyriel Kronenberg</b>, Assistant Director, Airport &amp; ATC Charges, IATA</li> <li>• <b>Narjess Teyssier</b>, Chief, Economic Analysis &amp; Policy Section, ICAO</li> <li>• <b>Nicolas Warinsko</b>, Senior Policy Advisor, European Commission</li> <li>• <b>Michael Standar</b>, Chief ATM, SESAR Joint Undertaking</li> </ul>
10:30 – 11:00	<p><b>Coffee Break</b></p> <p><i>Sponsored by ACI</i></p>

**Session 7: Where Do We Go From Here?**

11:00 – 12:00

**Focusing on the Next Steps**

- Agreement on the first series of Block Upgrades is required to bring a level of certainty for all stakeholders in the aviation system and encourage efficient implementation.

Moderator:

**Mervyn Fernando**, President of the Air Navigation Commission, ICAO

Speakers:

- **Nancy Graham**, Director, Air Navigation Bureau, ICAO

**Symposium Adjourned**