



DRONE ENABLE
ICAO's Unmanned Aircraft Systems (UAS) Industry Symposium

ICAO Headquarters, Montréal, Canada

22 – 23 September 2017

DAY 1 – Friday, 22 September 2017

Plenary Session – Assembly Hall

<p>09:00 – 09:10</p>	<p>Welcome Remarks <i>Dr. Fang Liu Secretary General, ICAO</i></p>
<p>09:10 – 10:10</p>	<p>Keynote Speeches <i>Stephen Creamer Director, ICAO Air Navigation Bureau</i> <i>Gilberto Lopez Meyer Senior Vice President, Safety & Flight Operations, IATA</i> <i>Timothy Reuter Head of Civil Drones Project, World Economic Forum</i></p>
<p>10:10 – 10:30</p>	<p>ICAO's strategy for addressing unmanned aviation – RPAS and UAS Two approaches / two streams of work This session will provide an overview of the work underway at ICAO on a full regulatory framework for RPAS and the new approach to support global harmonization of UAS provisions in a domestic environment. <i>Leslie Cary RPAS Programme Manager, ICAO Air Navigation Bureau</i></p>
<p>10:30 – 11:00</p>	<p><i>Coffee Break – Sponsored by:</i> Exhibitions and Flight Demonstrations</p>
<p>11:00 – 12:45</p>	<p>UTM – A common framework with core boundaries for global harmonization This session will provide an opportunity to showcase several submissions from experts that describe a common framework for UTM that could be implemented by all States. The objective is to create a structure that will focus research and development activities going forward. Moderators: Mr. Aaron McCrorie, Director General, Aviation Safety Regulatory Framework, Transport Canada. Mr. Parimal Kopardekar, NASA Ames Research Center <u>Presentations</u> GeoNetwork ATMRI - Air Traffic Management Research Institute ENAC - Ente Nazionale per l'Aviazione Civile Amazon <u>Discussion</u></p>



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12:45 - 13:00	Lunch Sponsor
13:00 - 14:30	<i>Lunch – Sponsored by:</i> <i>Exhibitions and Flight Demonstrations</i>
DAY 1 – Friday, 22 September 2017	
Plenary Session - Assembly Hall	
14:30 – 16:30	<p>UTM – A common framework with core boundaries for global harmonization - Continued This session will provide an opportunity to showcase several submissions from experts that describe a common framework for UTM that could be implemented by all States. The objective is to create a structure that will focus research and development activities going forward.</p> <p>Moderators: Mr. Aaron McCrorie, Director General, Aviation Safety Regulatory Framework, Transport Canada, Mr. Parimal Kopardekar, NASA Ames Research Center</p> <p><u>Presentations</u> The Boeing Company uAvionix IDS - Ingegneria Dei Sistemi</p> <p><u>Discussion</u></p>
16:30 – 17:00	<i>Coffee Break – Sponsored by:</i> <i>Exhibitions and Flight Demonstrations</i>
Plenary Session - Assembly Hall	
17:00 – 17:45	<p><u>Background Presentations</u> Mr. Parimal Kopardekar, Principle Technologist, NASA Ames Research Center, United States Mr. Nikolai Vassiliev, Chief, Terrestrial Services Department, International Telecommunication Union (ITU)</p>
17:45 – 19:00	<i>Welcome Reception – Hosted by</i>
End of Day 1	



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DAY 2 – Saturday, 23 September 2017

	Stream A (Assembly Hall, 1)	Stream B (Assembly Hall, 2)	Stream C (Conference room 3, 1st floor)
09:00 – 10:30	<p>UTM – Registration, identification and tracking</p> <p>UTM relies on data about the aircraft operating within its system. The data is obtained through a registration system and permits real-time identification and tracking of aircraft. This session will showcase potential registration systems that may have global applicability.</p> <p>Moderator: Dr. Hiroko Nakamura, Deputy Director General at JAPAN Unmanned System Traffic & Radio Management Consortium (JUTM)</p> <p><u>Presentations</u></p> <p>DJI AirMap AIROS Rockwell Collins</p> <p><u>Discussion</u></p>	<p>UTM – Communications systems</p> <p>UTM requires communications systems for the exchange of data, including for control purposes and broadcasting of position. This session will showcase potential solutions for communications system(s) that may have global applicability.</p> <p>Moderator: Captain Denis Guindon, Director General, Aviation Oversight and Transformation, Transport Canada</p> <p><u>Presentations</u></p> <p>Google X Embention Gryphon Sensors Queensland University of Technology</p> <p><u>Discussion</u></p>	<p>UTM – Geofencing-like systems</p> <p>Geofencing is one potential solution for keeping UA from entering danger, restricted or sensitive airspace. This session will showcase potential geofencing-like systems that may have global applicability.</p> <p>Moderator:</p> <p><u>Presentations</u></p> <p>Pierce Aerospace Thales Avionics NASA Langley Research Center France</p> <p><u>Discussion</u></p>
10:30 – 11:00	<p><i>Coffee Break – Sponsored by:</i></p> <p><i>Exhibitions and Flight Demonstrations</i></p>		



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12:30 – 12:45	Lunch Sponsor		
12:45 – 14:00	<i>Lunch – Sponsored by:</i> <i>Exhibitions and Flight Demonstrations</i>		
Plenary Session – Assembly Hall			
14:00 – 14:30	<p>ICAO Registration System The ICAO registration system which is under development will be explained, its purpose, intended functionality and interaction with national registration systems.</p> <p>Ms. Sam Brand <i>Chief Revenue and Production, ICAO</i></p>		



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14:30 – 15:30	<p>Wrap up and next steps</p> <p>Looking back at the many presentations and related discussions, what are the key points that garnered support? Can we begin to define the general framework for UTM? How do we take the information we have received and translate it into the first steps of a global implementation plan?</p> <p>Moderator: Stephen P. Creamer</p> <p>Panel discussion</p> <p>(moderator) (moderator) (moderator)</p> <p>AUVSI (TBC)</p> <p>Mr. Yves Morier, Chairman, Joint Authorities on Rule-making for Unmanned Systems (JARUS) Mr. Doug Davis <i>Chairman of UAS-AG</i></p>
<p style="text-align: center;">End of Symposium</p>	

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