



# GBAS/SBAS Implementation Workshop

Seoul, Republic of Korea, 3-5 June 2019



Ministry of Land,  
Infrastructure and Transport

Day 1 (3 June 2019)	
Session 1 – Introduction to GBAS/SBAS	
08:30 – 09:00	Registrations
09:00 – 09:30	<b>Welcome Address</b> <i>(Mr. Yongseog Kim Director General, Office of Civil Aviation, MOLIT, Republic of Korea)</i>
	<b>Opening remarks</b> <i>(Mr. Raphael Guillet, Chief of APAC RSO) (House-keeping announcement)</i>
09:30 – 09:45	<b>CNS Policy of the ROK</b> <i>(Mr. Changseang Yang, Deputy Director, Air Navigation Facilities Division, KOCA, MOLIT Republic of Korea)</i>
09:45 – 10:15	<b>Concept and benefits of GBAS/SBAS</b> <i>(Mr. Raphael Guillet, Chief, ICAO APAC RSO)</i>
10:15 – 10:30	<b>Document review related to GBAS/SBAS</b> <i>(Mr. Huho Ha, Regional Officer, ICAO APAC RSO)</i>
10:30 – 11:00	<b>Group photo</b> (prepared by ROK) Coffee/Tea Break
11:00 – 11:30	<b>WAAS Development Changes since Commissioning</b> <i>(Mr. Timothy Schempp, WAAS/GAGAN Engineering Fellow, Raytheon)</i>
11:30 – 12:00	<b>EGNOS Status</b> <i>(Mr. Guillaume Comelli, SBAS/EGNOS/KASS Engineering Fellow, Thales Alenia Space)</i>
12:00 – 12:30	<b>Q&amp;A (of the morning session)</b>
12:30 – 13:30	Lunch Break
13:30 – 14:00	<b>MSAS System development</b> <i>(Dr. Susumu SAITO, Principal Researcher, Electronic Navigation Research Institute, Japan)</i>
14:00 – 14:30	<b>System development - GAGAN</b> <i>(Mr. L. S. R. Mohana Rao, General Manager, AAI, India)</i>
14:30 – 15:00	<b>System development - KASS</b> <i>(Dr. Eunsung Lee, Project Manager, Korea Aerospace Research Institute, Republic of Korea)</i>
15:00 – 15:30	Coffee/Tea Break
15:30 – 16:00	<b>GBAS System Development</b> <i>(Mr. Paul Nef, Director ATM Initiatives APAC Honeywell Air Transport &amp; Regional)</i>
16:00 – 16:30	<b>Airbus Fleet readiness for GBAS/SBAS</b> <i>(Mr. Mathieu HIALE GUILHAMOU, Navigation System Manager, Systems Sales &amp; Marketing, Airbus Commercial Aircraft)</i>
16:30 – 17:00	<b>Boeing GBAS and SBAS Overview</b> <i>(Mr. William Petersen, Manager, Airplane Product Development Product Strategy &amp; Future Airplane Studies Boeing Commercial Airplanes)</i>
17:00 –	<b>Q&amp;A of the Day</b> <i>(If any questions from the participants, All speakers)</i>



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Day 2 (4 June 2019) Session 2 – GBAS/SBAS Implementation Challenges	
09:00 – 09:30	<b>System Development, certification and implementation</b> <i>(Mr. Jorge Woods, Project Manager OneSKY, CNS/ATM Section, ANAA Branch CASA, Australia)</i>
09:30 – 10:00	<b>GBAS: FAA Program Status, System Approval Process, and Operational Experience</b> <i>(Ms. Shelly Beauchamp, Manager, NextGen Portfolio Management &amp; Technology Development Office, Engineering Development Services Division, Navigation Branch FAA, USA)</i>
10:00 – 10:30	<b>Operational experiences in SBAS</b> <i>(Dr. Benoit ROTURIER, GNSS &amp; PBN Program Manager, DSNA, France)</i>
10:30 – 11:00	Coffee/Tea Break
11:00 – 11:30	<b>EGNOS system certification and implementation</b> <i>(Mr. Thierry RACAUD, CEO European Satellite Service Provider)</i>
11:30 – 12:00	<b>System certification and implementation - Japan</b> <i>(Dr. Susumu SAITO, Principal Researcher, Electronic Navigation Research Institute, Japan)</i>
12:00 – 12:30	<b>Q&amp;A (of the morning session)</b>
12:30 – 13:30	Lunch Break
13:30 – 14:00	<b>Regulation for KASS System Certification</b> <i>(Ms. Yunjung Choi, Researcher, Korea Institute of Aviation Safety Technology, Republic of Korea)</i>
14:00 – 14:30	<b>Software certification status of KASS</b> <i>(Mr. Heemoon Chae, Senior Researcher, Telecommunication Technology Institute, Republic of Korea)</i>
14:30 – 15:00	<b>PBN safety studies - main principle</b> <i>(Dr. Benoit ROTURIER, GNSS &amp; PBN Program Manager, DSNA, France)</i>
15:00 – 15:30	Coffee/Tea Break
15:30 – 16:00	<b>GBAS Design Safety Assurance</b> <i>(Mr. Paul Nef, Director ATM Initiatives APAC Honeywell Air Transport &amp; Regional)</i>
16:00 – 16:30	<b>GLS/LPV procedure design and validation</b> <i>(Mr. V. K. Mishra, Jt. GM (ATM-FPD), Directorate of Air Space Management, AAI, India)</i> <b>GLS/LPV flight validation</b> <i>(Mr. Madan Lal, Jt. GM (Flight Inspection Unit, AAI, India)</i>
16:30 – 17:00	<b>SBAS LPV flight procedure design and implementation</b> <i>(Dr. Benoit ROTURIER, GNSS &amp; PBN Program Manager, DSNA, France)</i>
17:00 –	<b>Q&amp;A of the Day</b> <i>(If any questions from the participants, All speakers)</i>



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Day 3 (5 June 2019) Session 3 – GBAS/SBAS Implementation in APAC	
09:00 – 09:30	<b>ROK's perspective on GBAS/SBAS implementation</b> <i>(Mr. Kyungjoon Jang, Assistant Director, Air Navigation Facilities Division, KOCA, Republic of Korea)</i>
09:30 – 10:00	<b>GBAS/SBAS implementation perspective - Japan</b> <i>(Dr. Susumu SAITO, Principal Researcher, Electronic Navigation Research Institute, Japan)</i>
10:00 – 10:30	<b>Australia's perspective</b> <i>(Mr. Jorge Woods, Project Manager OneSKY, CNS/ATM Section, ANAA Branch CASA, Australia)</i>
10:30 – 11:00	Coffee/Tea Break
11:00 – 11:30	<b>India's perspective on GBAS/SBAS implementation</b> <i>(Mr. V. K. Mishra, Jt. GM (ATM-FPD), Directorate of Air Space Management, AAI, India)</i>
11:30 – 12:00	<b>GBAS/SBAS implementation in China</b> <i>(Mr. Xin Li, Deputy Director (Senior Engineer) Technology Center of ATMB, CAAC, China)</i>
12:00 – 12:30	<b>Q&amp;A (of the morning session)</b>
12:30 – 13:30	Lunch Break
13:30 – 14:00	<b>Fight test of GBAS in Tianjin Airport</b> <i>(Mr. Shuming Liu, Flight Inspection Center of CAAC, China)</i>
14:00 – 14:30	<b>GAGAN Regional Service Availability</b> <i>(Mr. Timothy Schempp, WAAS/GAGAN Engineering Fellow, Raytheon &amp; Mr. L. S. R. Mohana Rao, General Manager, AAI, India)</i>
14:30 – 15:00	<b>GBAS Trial at the Hong Kong International Airport</b> <i>(Mr. Takyuen George Wong, Senior Electronics Engineer &amp; Ms. Jenny Lee, Flight Procedure Designer Civil Aviation Department, Hong Kong, China)</i>
15:00 – 15:30	Coffee/Tea Break
15:30 – 16:00	<b>Proposal for GBAS/SBAS procedure design training in FPP</b> <i>(Mr. Lujiang Liu, Manager, ICAO APAC Flight Procedure Program)</i>
16:00 – 16:30	<b>Q&amp;A of the Day</b> <i>(If any questions from the participants, All speakers)</i>
Summary and outcome of the workshop	
16:30 – 17:00	<b>Summary of the workshop</b> <i>(Mr. Raphael Guillet, Chief, ICAO APAC RSO)</i>  <b>Close of the Workshop</b> <i>(Ms. Somyeong BAE, Director of Air Navigation Facilities Division, Office of Civil Aviation, MOLIT, Republic of Korea)</i>