# EIWAC2015

# Global Harmonization for Future Sky

November 17th Registration starts on 9:30

KFC Hall

Pres. ID	Paper ID	Time Title	Presenter / Chair	
		9:55 Safety tips and announcement	Mr. Shigeru Ozeki	ENRI
H1-1		10:00 Plenary 1: Opening /Policy for harmonized implementation	Mr. Ikuo Takagi	ENRI
		10:00 Opening address	Dr. Kazuo Yamamoto	ENRI
H1-1-1	EN-S-106	10:10 Toward the realization of Seamless SKY in the Asia Pacific Region	Mr. Hitoshi Ishizaki	JCAB
H1-1-2	EN-S-105	10:40 ICAO's Global Air Navigation Plan and the Importance of being Earnest about the ASBUs	Mr. Richard Macfarlane	ICAO
H1-1-3	EN-S-102	11:10 SESAR - the European approach to support Global Harmonization and Interoperability	Mr. Michael Standar	SESAR JU
H1-1-4	EN-S-110	11:40 CNS in ATM : the challenges ahead	Mr. Philippe Merlo	EURO CONTROL
		12:10 Lunch break		
H1-2		13:40 Plenary 2: Toward future aircraft operation	Dr. Kazuo Yamamoto	ENRI
H1-2-1	EN-S-109	13:40 How do they all come togetherSesar, NextGen and ASBU	Mr. Chris Metts Mr. Neil Planzer	Harris Corp. Boeing
H1-2-2	EN-S-108	14:10 The Operators' Perspective on ATM Modernization	Mr. Blair Cowles	IATA
H1-2-3	EN-S-104	14:40 Standards to ensure global harmonization and worldwide interoperability	Mr. Christian Schleifer	EUROCAE
		15:10 Break		
H1-3		15:40 Plenary 3: R&D and implementation for harmonization	Mr. Naoki Fujii	ENRI
H1-3-1	EN-S-101	15:40 The NextGen Role in Global Research & Development Coordination	Mr. Edward Bolton	FAA
H1-3-2	EN-S-112	16:10 Collaborative R&D for NextGen and Global Harmonization to inform ASBUs Blocks 2 and 3	Mr. Akbar Sultan	NASA
H1-3-3	EN-S-107	16:40 ENRI's R&D activities for Globally Harmonized ATM Environment	Dr. Kazuo Yamamoto	ENRI
H1-4		17:10 Closing Remarks	Mr. Ikuo Takagi	ENRI

#### KFC Hall Annex

CR3	12:10 Exhibition	
	12:10 Open for Exhibition	
	16:00 Closed for Settings	
	17:45 Open for Reception	
CR2&3	18:00 Reception Mr. Shigeru Ozeki	ENRI

Special sessions are scheduled for tomorrow.

November 18th

Registration starts on 9:15

Conference Room 1 - KFC Hall 2nd

Pres. ID	Paper ID	Time Title	Presenter / Chair	
CR1-1		9:30 Opening Session: Invited Talks on R&D for Global Harmonization	Mr. Shigeru Ozeki Dr. Yasuto Sumiya	ENRI ENRI
CR1-1-1	EN-S-111	9:30 Moving from SESAR R&D activities to implementation : An ANSP perspective	Mr. Patrick Souchu	DSNA
CR1-1-2	EN-S-117	10:00 ATM Research and Development for Asia Pacific	Mr. Mohamed Faisal Bin Mohamed Salleh	ATMRI
CR1-1-3	EN-S-113	10:30 DREAMS project, its results and implementation status	Dr. Yasuhiro Koshioka	JAXA
		11:00 Break		
CR1-2		11:20 Policy for Future ATM and Enablers	Mr. Tokuaki Nakajima Mr. Jean-Marc Loscos	ENRI DSNA
CR1-2-1	EN-I-002	11:20 Harmonization of Future Technologies to Serve the ATM Community	Ms. Midori Tanino	FAA
CR1-2-2	EN-I-054	11:40 The Swiss Wide Implementation of Performance Based Navigation	Mr. Heinz Wipf	Skyguide
CR1-2-3	EN-A-004	12:00 A Growth Model for the Adoption of Advanced Aircraft Avionics	Mr. Heinz Wipf	Skyguide
		12:20 Lunch Break		
CR1-3		14:00 Special Session: Asian R&D Interchange	Prof. Vu Duong Mr. Yutaka Fukuda	VNU ENRI
CR1-3-1	EN-S-114	14:00 Gate Hold Manager in Thailand	Mrs. Wachiraphorn Chaiwattanakulkit	AeroTHAI
CR1-3-2	EN-S-116	14:20 Future of Generic Multi-ATC Surveillance Sensor Data Fusion	Mr. Paveen Juntama	AeroTHAI
CR1-3-3	EN-S-115	14:40 Status of ATM Research In Korea Aerospace University	Prof. Keumjin Lee	KAU
CR1-3-4	EN-S-118	15:00 Aviation Growth in China: Opportunities and Challenges	Dr. Yanjun Wang	NUAA
CR1-3-5	EN-S-119	15:20 NTT DATA's R&D Strategy on ATM and Electronic Terrain & Obstacle Data (eTOD) from very high-resolution satellite image	Mr. Munetaka Kimura	NTT-data Corp.
		15:40 Break		
CR1-4		16:00 Datalink	Ms. Midori Tanino Dr. Xiaodong Lu	FAA ENRI
CR1-4-1	EN-I-003	16:00 The Future Terrestrial Data Link LDACS - Current Status and Way Ahead	Dr. Michael Schnell	DLR
CR1-4-2	EN-I-056	16:20 AeroMACS for Next Generation Airport Surface Communication Solution	Mr. Shoichi Hanatani	Hitachi Ltd.
CR1-4-3	EN-I-069	16:40 Service Considerations for an AeroMACS Network Reference Model	Mr. Brian Crowe	WiMAX Forum
		17:00 Adjourn		

## November 18th

#### Conference Room 2 - KFC Hall Annex

Pres. ID	Paper ID	Time Title	Presenter / Chair	
CR2-1		10:30 OPEN		
		11:00 Break		
222				
CR2-2		11:20 Optimisation of Airport and Approach Operations	Dr. Eri Itoh Dr. Navinda Kithmal Wickramasinghe	ENRI ENRI
CR2-2-1	EN-A-031	11:20 Do chaotic conditions for landside airport processes translate into chaotic airside disruptions?	Mr. Florian Piekert	DLR
CR2-2-2	EN-A-018	11:40 Methodology for Assessing and Optimizing Operation Performance in Airport systems	Dr. Miguel Mujica Mota	Amsterdam U. of Appl. Sci.
CR2-2-3	EN-A-035	12:00 Aircraft route optimization for RNP AR approach procedure design	Dr. Yoshinori Matsuno	U. Tokyo
		12:20 Lunch Break		
CR2-3		14:00 Trajectory Based Operation - I	Dr. Mark Brown Mr. William C. Johnson	ENRI NASA
CR2-3-1	EN-A-017	14:00 Four-Dimensional Multi-Objective Air Traffic Flow Management Optimization	Ms. Zena Assaad	RMIT University
CR2-3-2	EN-A-036	14:20 Three-Dimensional Trajectory Optimization Considering Arrival Time at the Merging Point	Ms. Arisa Okubo	NDA Japan
CR2-3-3	EN-A-053	14:40 Optimization-Based Performance Assessment on 4D- Trajectory Based Operations with Track Data	Dr. Navinda Kithmal Wickramasinghe	ENRI
CR2-3-4	EN-A-052	15:00 Numerical investigation on flight trajectory optimization methods	Mr. Akinori Harada	Kyushu U.
CR2-3-5	EN-A-064	15:20 Aircraft Trajectory Planning with Dynamical Obstacles by Artificial Evolution and Convex Hull Generations	Prof. Daniel Delahaye	ENAC
		15:40 Break		
CR2-4		16:00 Trajectory Based Operation - II	Mr. William C. Johnson	NASA
			Prof. Vu Duong	VNU
CR2-4-1	EN-A-045	16:00 Allocation, Sequencing and Trajectory Generation for Aircraft using Superimposed Navigation Functions and Optimal Control	Mr. Benedikt Gruter	U. Munich
CR2-4-2	EN-A-025	16:20 Large Scale Pre-Tactical 4D Trajectory Planning	Mr. Arianit Islami	ENAC
CR2-4-3	EN-A-032	16:40 Homotopy Route Generation Model for Robust Trajectory Planning	Dr. Andrija Vidosavljevic	ENAC
CR2-4-4	EN-A-043	17:00 Optimal Conflict Free Approach Trajectories for Multiple Aircraft	Mr. Matthias Bittner	U. Munich
CR2-4-5	EN-A-063	17:20 Quantitative Analysis of Conflict between Aircraft by Using Radar Track Data	Mr. Tomoyuki Kozuka	Kyushu U.
		17:40 Adjourn		

## Conference Room 3 - KFC Hall Annex

CR3-1	12:20 Exhibition
	12:20 Open for Exhibition
	17:00 Closed (CR2 is accessible)

## November 19th

Registration starts on 9:15

Novem	iber 19th	Registration starts on 5.13		
Pres. ID	Paper ID	Conference Room 1 - KFC Hall 2nd Time Title	Presenter / Chair	
	Paper ID			17 1 11
CR1-5		9:30 ATM Modeling and Weather	Prof. Yoshikazu Miyazawa Ms. Sachiko Fukushima	Kyushu U. ENRI
CR1-5-1	EN-I-013	9:30 Integration technology to assess airport capacity from weather forecasts	Mr. Zheng Zhao	NUAA
CR1-5-2	EN-A-007	9:50 Weather-Aware, Superfast-Time Simulation Model for a National Airspace System: Requirements and Applications	Dr. Alexander Klein	AvMet Applications
CR1-5-3	EN-A-008	10:10 Analysis on burstiness and propagation delay in air traffic	Mr. Hidetaka Ito	U. Tokyo
CR1-5-4	EN-A-041	10:30 Generation of dynamic ATM models with automatically generated derivatives for optimization	Mr. Matthias Rieck	U. Munich
CR1-5-5	EN-A-023	10:50 Research on the Controller Behavioral Modeling Based on BDI Agent	Mr. Yuepeng Liu	NUAA
CR1-5-6		11:10 Introduction of poster session & exhibition	Chair or co-chair	ENRI
	Posters	11:40 (Poster session at CR3)		
		12:10 Lunch break		
CR1-6		13:30 Arrival Management	Dr. Sakae Nagaoka Ms. Hiroko Hirabayashi	ENRI ENRI
CR1-6-1	EN-A-039	13:30 Future Arrival Management Collaborating with Trajectory Based Operations	Dr. Eri Itoh	ENRI
CR1-6-2	EN-A-049	13:50 An Efficient Landing Route Structure to Enhance Airport capacity	Prof. Daniel Delahaye	ENAC
CR1-6-3	EN-A-019	14:10 Arrival time assignment by Dynamic programming optimization	Mr. Haruki Matsuda	Kyushu U.
		14:30 Break		
CR1-7		14:50 Airspace Design	Mr. Kota Kageyama Ms. Hiroko Hirabayashi	ENRI ENRI
CR1-7-1	EN-A-055	14:50 Dynamic Sectorization based on a Column Generation Approach	Mr. Tambet Treimuth	ENAC
CR1-7-2	EN-A-062	15:10 Complexity Analysis of the Concepts of Urban Airspace Design for METROPOLIS Project	Dr. Andrija D. Vidosavljevic	ENAC
CR1-7-3	EN-A-010	15:30 Merging Optimization Method with Multiple Entry Points for Extended Terminal Maneuvering Area	Mr. Daichi Toratani	Yokohama N. U.
CR1-7-4	EN-A-012	15:50 Optimizing the design of a route in Terminal Maneuvering Area using Branch and Bound	Ms. Jun Zhou	ENAC
CR1-7-5	EN-A-034	16:10 French support to young developing countries in the field of ANS training - Example through a study on the Implementation of the PMS solution in the small complex airspace of Kosovo	Mr. Franck Giraud Mr. Mohamed Luta	DGAC CAAK
		16:30 Break		
CR1-8		16:50 Human Performance	Dr. Satoru Inoue Mr. Shigeru Ozeki	ENRI ENRI
CR1-8-1	EN-I-061	16:50 Attempts of air traffic flow analysis considering human performance aspects using process visualization tool of ATC tasks	Dr. Daisuke Karikawa	ENRI
CR1-8-2	EN-A-044	17:10 Pilot Malicious Action Prevention System: Can We Find a Way to Prevent Malicious Flight Control?	Dr. Kai Shi	NEU China
CR1-8-3	EN-A-020	17:30 Correlations between air traffic activities and air traffic controller's eye movements	Dr. Yanjun Wang	NUAA
				ENDI
CR1-9		17:50 Closing Remarks	Dr. Kazuo Yamamoto	ENRI

## November 19th

## Conference Room 2 - KFC Hall Annex

D ID	DID	Time - Title	D	
Pres. ID	Paper ID	Time Title	Presenter / Chair	
CR2-5		9:30 Surveillance and D&A for UAS	Mr. Jean-Marc Loscos	DSNA
			Mr. Shigeru Ozeki	ENRI
CR2-5-1	EN-I-038	9:30 Detect and Avoid System Development of Remotely Piloted Aircraft for Non-Segregated Airspace Integration	Dr. Tatsuya Kotegawa	GAAS Inc.
CR2-5-2	EN-I-075	9:50 Active Secondary Surveillance Performance onboard Remotely Piloted Aircraft for Detect and Avoid Systems	Dr. Tatsuya Kotegawa	GAAS Inc.
CR2-5-3	EN-I-026	10:10 Implementation Study of ADS-B System to UAV	Dr. Changsun Yoo	KARI
CR2-5-4	EN-A-040	10:30 Mobile MLAT for PBN and ADS-B Performance Assessments	Dr. Maurizio Fabio Scaramuzza	Skyguide
CR2-5-5	EN-A-066	10:50 High-assurance Tracking System for Air Traffic Surveillance	Dr. Xiaodong Lu	ENRI
CR2-5-6	EN-I-011	11:10 Wave propagation over a spherical earth for TACAN system	Dr. Jinyoung Hong	Korea Airports Corp.
CR2-5-7		11:30 Introduction of poster session & exhibition	Chair or co-chair	ENRI
	Posters	11:40 (Poster session at CR3)		
		12:10 Lunch break		
CR2-6		13:30 MIC Projects: New Technology to Expand	Dr. Shun-ichi	ENRI
		Radio Wave Resources	Futatsumori Dr. Kazuyuki Morioka	ENRI
CR2-6-1	EN-I-058	13:30 High-speed mobile backhaul links using fiber-wireless technologies	Prof. Tetsuya Kawanishi	NICT
CR2-6-2	EN-A-068	13:50 Expansion of millimeter wave communication area utilizing effective reflection paths	Dr. Feng Lu	KDDI R&D Lab.
CR2-6-3	EN-A-057	14:10 Experimental study of Photonic based Radar for FOD detection systems using 90GHz-band	Mr. Nobuhiko Shibagaki	Hitachi Ltd.
CR2-6-4	EN-A-074	14:30 Photonic frequency conversion technique for millimeter wave radio-over-fiber access network	Dr. Kensuke Ikeda	CRIEPI
CR2-6-5	EN-A-072	14:50 Antenna-Coupled-Electrode Electro-Optic Modulators for Millimeter-Wave Frequency Ranges	Prof. Hiroshi Murata	Osaka U.
		15:10 Break		
CR2-7		15:30 Space Weather and GNSS	Dr. Susumu Saito Dr. Michi Nishioka	ENRI NICT
CR2-7-1	EN-A-016	15:30 Space weather effects on air navigation and utilization of space weather information	Dr. Susumu Saito	ENRI
CR2-7-2	EN-A-022	15:50 NICT operational space weather nowcast/forecast	Dr. Michi Nishioka	NICT
CR2-7-3	EN-A-037	16:10 Simple plasma bubble model with scintillation feature for ground-based augmentation system (GBAS)	Mr. Sarawoot Rungraengwajiake	KMITL
CR2-7-4	EN-A-021	16:30 Simulation Study of Plasma Bubble Detection by VHF Radar for GBAS	Dr. Susumu Saito	ENRI
CR2-7-5	EN-A-073	16:50 Optimal Scheduling of Arrivals at Low-Latitude Airports Under Severe Ionospheric Spatial Gradients and Scintillation	Dr. Sam Pullen	Stanford U.
CR2-7-6	EN-I-077	17:10 Introduction of the feature of the composition items of NEC GBAS established by prototype development	Mr. Ryuichiro Iwasaki	NEC Corp.
		17:30 Break		
CR2-8		17:50 Open		
	Closing	17:50 (Closing Remarks at CR1)		
	-	18:00 Adjourn		

#### ENRI InternationI Workshop on ATM/CNS

## November 19th

## Conference Room 3 - KFC Hall Annex

Pres. ID	Paper ID	Time Title	Presenter / Chair	
CR3-2		9:30 Exhibition		
		9:30 Open for Exhibition		
CR3-3		11:40 Poster Session		
CR3-3-1	EN-A-033	11:40 Delays Predicting System from Weather Report Based on Data Mining	Ms. Shimin Wang	NUAA
CR3-3-2	EN-A-046	11:40 Dynamic Arrival Sequencing and Scheduling - A Shanghai Pudong International Airport Case	Prof. Junfeng Zhang	NUAA
CR3-3-3	EN-A-030	11:40 Identification of Conflict Scenarios Based on Multi-Agent Simulation	Mr. Lin Yingda	NUAA
CR3-3-4	EN-I-027	11:40 A novel approach to automated merge 4D arrival trajectories for multi-parallel runways	Ms. Man Liang	ENAC
CR3-3-5	EN-A-048	11:40 A Multicommodity Flow Optimization Formulation for Estimating Air Traffic Capacity of Airport Network	Mr. Murad Hossain	UNSW
CR3-3-6	EN-I-067	11:40 Future ATM: centralized and decentralized approach	Mr. Alexander N. Zaytsev	Monitor Soft Ltd.
CR3-3-7	EN-A-050	11:40 Effects of Pre-reversal Enhancement of E x B drift on the Latitudinal Extension of Plasma Bubble in Southeast Asia	Mr. Prayitno Abadi	Nagoya U.
CR3-3-8	EN-A-042	11:40 Mobile Vehicle Surveillance System Based on D-GPS on Airport Surface	Ms. Shuli Gong	NUAA
CR3-3-9	EN-A-051	11:40 Robust Transceiver Design for Up-Link Multi-User Multiple-Input Multiple-Output System with Amplify-and-Forward Relay	Dr. Xiaomin chen	NUAA
CR3-4		12:10 Exhibition		
		12:10 Open for Exhibition		
		15:00 Closed for Withdrawal (CR2 is accessible)		