

The 22nd ATRS World Conference Seoul, Korea

Program Book

Date 2nd(Mon)~5th(Thu) July 2018

Venue Grand InterContinental Seoul Parnas Hotel & COEX

Hosted by



Supported by



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Organized by



Welcome Addresses

Welcome on behalf of the Local Organizing Committee



On behalf of the Korea Airports Corporation, Incheon International Airport Corporation, and Korea Aerospace University, I would like to sincerely welcome and thank all of you who visited Korea for this event.

The Air Transport Research Society World Conference, which marks its 22nd edition this year, plays a leading role in the development of the aviation industry as one of the most pivotal occasions where aviation academicians get together. It is a great honor for the Korea Transport Institute to host this conference in Korea.

The ATRS World Conference allows experts in the industry and the academia, as well as in research not only to present research papers on topics including air transport policy, airport development and operation, the competitiveness of the aviation industry, aviation safety and technology, and the environment but also to discuss significant issues in the sector.

During this conference, I hope that aviation experts around the world would share their various experiences and knowledge, as well as carry out comprehensive analyses and discussions on the present and future of the air transport sector.

Once again, I express my gratitude to all the joint hosts, organizers, and sponsors who have made this event possible. I also extend my sincere appreciation to all the aviation experts who are here with us.

I hope you experience a memorable and delightful time during this conference and your stay in Korea.

A handwritten signature in black ink that reads "Jaehak Oh".

Jaehak Oh
President of the Korea Transport Institute

Welcome to Seoul from the Air Transport Research Society



It is with great pleasure that I welcome you to the 22nd Annual ATRS World Conference in the exciting city of Seoul. As you may be aware, this is the second ATRS World Conference to be held in Korea. In 2002, we were hosted in Jeju Island. The Jeju conference was a great success, so we are very pleased to return to Korea, this time at the invitation of KOTI, the Korea Transport Institute. Given that KOTI is one of the world's leading transport research institutions, the ATRS is very honored to partner with KOTI in undertaking this conference.

I would like to thank KOTI President Jaehak Oh, the chair of this conference, Vice President Yeonmyung Kim, the Chair of the Organizing Committee, Chief Research Director Jinseo Park, the Chair of the Program Committee, and Chief Director Kihan Song and Professor Yeongheok Lee, the co-chairs of the Scientific Committee, for all of their support. We are truly fortunate to have such excellent local committees hosting our conference. In addition, I would like to thank the supporting and sponsoring organizations, including the Ministry of Land, Infrastructure and Transport, the Seoul Metropolitan Government, the Korea Airports Corporation and the Incheon International Airport Corporation.

We have a full slate of keynote sessions, panel sessions and paper sessions over the next couple of days, along with lots of time for networking and experiencing the city. I wish you a productive and enjoyable conference.

A handwritten signature in black ink that reads "Martin Dresner".

Martin Dresner
President, Air Transport Research Society

■ Conference Chairman



Jaehak Oh
President
The Korea Transport Institute

Dr. Oh obtained his PhD degree for transport studies at University College London in 1990. Since 1992, he has been working for The Korea Transport Institute (KOTI), taking a one-year leave of absence during 1995 as Lecturer at the Tokyo Institute of Technology.

Dr. Oh was Vice President and Director of National Transport Strategy Planning at KOTI during 2011 to 2017. During the last 25 years, he has project managed more than 70 of KOTI's transport projects. During 2006 to 2011, He was the project manager of the national R&D, "Transport Connectivity and Transfer technology Development." He has played a key role in innovating transport systems for green growth and formulating infrastructure policies for the Korean government. Since 2009, Dr. Oh has been the research project manager of High-Speed Rail(KTX) economic development which aims to promote regional and urban development through KTX station area development.

Dr. Oh served as the Secretary General for the 2001 WCTR Seoul Conference. At present, he is a SC Member of WCTR-Society and an Editorial Board Member for the WCTR Journal of Transport Policy. Also, Dr. Oh is Chairperson of International Scientific Committee of EASTS(East-Asian Society of Transportation Studies).

■ Organizing Committee



Yeonmyung Kim
Vice President
The Korea Transport Institute

Dr. Yeonmyung Kim is a Vice President of the Korea Transport Institute (KOTI). He worked as a Policy Analyst of the ITF(International Transportation Forum) at the OECD organization in Paris, for two years since September 2013. He received his PhD in Transportation Program of Civil Engineering at University of Maryland at College Park, USA in 1997 after receiving the Master of Science degree from the graduate school of Seoul National University. After the completion of his academic careers in U.S., he joined as research fellow in KOTI in 1997.

In KOTI, he conducted more than 150 national projects and overseas projects in conjunction with various foreign governments. Most memorable projects were Incheon International Airport Master Plan for Year 2030, Joint project of Korea-European Union Air Transport Liberalization policy and Mid and Long term National Airport System Planning project in Korea as well as Smart Airport Master Plan project. The most of case, the result of his research works reflected to national and international policies in technology and law perspectives.

Executive Vice President Myungwoon Kim of Korea Airports Corporation (KAC) that manages, operates and constructs 14 airports in Korea. Mr. Kim has recently joined KAC in March this year and has been with the government of the Republic of Korea for the past 25 years serving in the Ministry of Land, Infrastructure and Transport (MOLIT) across various areas of profession including the aviation and land policy, urban planning and regional construction. His retirement position at MOLIT was the administrator of Daejeon Regional Construction and Management Administration. He has graduated from Yonsei University with B.A. in Political Science and Diplomacy (1988) and Seoul National University in Graduate School of Public Administration (1992). He also holds M.A. in Urban Affairs & Public Policy of the University of Delaware (1999).



Myungwoon KIM
Vice President
Korea Airports Corporation

Executive Vice President Kwangsoo Lee of Incheon International Airport Corporation (IIAC) is performing a crucial role in managing and operating Incheon International Airport. Mr. Lee has been in the aviation industry for more than 30 years. Mr. Lee has gained experience in various departments, such as Terminal Operation, Airline Marketing, Commercial Facilities Operation Group, Planning & Coordination Group, Smart Airport, Marketing Division as well as Passenger Services Division in IIAC.

Mr. Lee has also contributed to the growth of Incheon International Airport. One of his contributions is opening Terminal 2 in January, 2018. By opening the passenger terminal 2, Incheon International Airport now has the capacity to process 72 million, up from 54 million.



Kwangsoo Lee
Executive Vice President
Incheon Airport Corporation

■ Program Committee



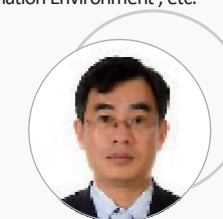
Jinseo Park
Chief Research Director
The Korea Transport Institute

Dr. Jinseo Park is a Research Fellow in the Department of Air Transport Policy and Technology in the Korea Transport Institute (KOTI). He graduated from Southern Illinois University with MPA (Masters of Public Administration) in Aviation Administration and B.S in Aviation Technology, and received a Ph. D. in Air Transportation at Korea Aerospace University. He graduated *Summa cum laude* in the College of Applied Science. He carried out many positions such as the Director of Aviation Information Analysis Center, the Director of Aviation Policy and Workforce Management.

His main research areas are various Aviation Policy and Airport Planning. He carried out more than 100 projects such as 'Aviation Policy Development', 'Air Demand Forecasting', 'Airline Management Strategy', 'Aviation Consumer Policy Development' and 'Aviation Environment', etc.

General Manager Jeongin Ha of Corporate External Affairs Team at Korea Airports Corporation is an expert in airport operations and law. His career comprises of approximately 16 years in the airport operations department as well as 7 years of working in the corporate planning department. He has joined Corporate External Affairs Team in 2016 to manage and enhance international relations of KAC.

He is the first KAC employee to have been selected for the secondment program to work at the sister airport in Japan, Haneda International Airport for a year. His extensive acquaintance with overseas airports personnel as well as the International organizations such as the International Civil Aviation Organization (ICAO) and Airports Council International (ACI) add to his capacity in working to forge solid relationships in the aviation industry.



Jeongin Ha
General Manager
Corporate External Affairs Team, KAC



Yongkyu Kang
Director
Airport Research Institute, IIAC

Mr. Yongkyu Kang is the Director in charge of overseeing technology & business research as the head of Airport Research Institute at Incheon International Airport Corporation.

Mr. Kang has taken part in constructing and operating Incheon Airport for the last 20 years. He participated in building the security system of Incheon International Airport Terminal 1 and in operating & maintaining the network system, car parking system, baggage handling system and many other fields in Airport operation. In particular, he contributed to the successful opening of Terminal 2 of Incheon International Airport. As the Director of ORAT team, he made every effort for stabilizing Terminal 2 until the grand opening.

■ Scientific Committee



Kihan Song
Chief Director
The Korea Transport Institute

Dr. Song joined the Korea Transport Institute in 2009 and he is a Chief Director of the department of Aviation. He graduated from Seoul National University in 2000, granted a degree of PhD, School of Civil, Urban and Geosystem Engineering in 2007 and he worked as a post-doc researcher in UC Berkeley from 2008 to 2009. He achieved the Engineer Information Processing License in 1999 and the Professional Engineer Transportation License in 2008.

Currently, he is conducting various researches related to air transport policies such as international and domestic airport's master plan, airport noise policy, aviation safety IT system as well as any aviation policies from Open Skies to technical issues.

Professor, School of Air Transport and Logistics in Korea Aerospace University (KAU) since 1995

Member, Advisory Committee of National Air Transport Policies in MLTM (former)

Chairman, Board of Directors in IIAC (former)



Yeongheok Lee
Professor
Korea Aerospace University

Keynote Speakers



Young Tae Kim
Secretary-General of
the International Transport Forum
at the OECD

Special Guest Speech

Young Tae Kim is the Secretary-General of the International Transport Forum (ITF). He was elected by the transport ministers of ITF member countries at their annual summit on 1 June 2017 and took office in August 2017.

Prior to his election as ITF Secretary-General, Dr. Kim distinguished himself in the civil service of his native Korea, most recently serving as Director-General in the Ministry of Land, Infrastructure and Transport (MOLIT). As Deputy Director-General from 2015, he was responsible for coordinating various transport policies including on autonomous vehicle, greenhouse gas reduction, urban transportation, Intelligent Transport Systems and road safety, among others.

After joining the MOLIT in 1994 as Deputy Director for Urban Transport, Dr. Kim also held several Deputy Director and Director positions with responsibility for housing welfare, integrated city development and overseas infrastructure construction. He was seconded to the Prime Minister's Commission on Administrative Reform in 1996 and the Presidential Committee on Social Inclusion in 2005-2007. From 2010 to 2014, Dr. Kim worked in Washington, D.C., as Counsellor for Construction, Transport and Maritime Affairs at the Korean Embassy.

Dr. Kim earned his Master's degrees in Public Policy from Seoul National University, Korea, and in Urban Studies from Paris University de Vincennes-Saint-Denis, France. He also received his Doctorate degree in Political Sociology and Public Policy from the Institut d'Etudes Politiques (Sciences-Po), Paris, France.

Dr. Kim speaks fluent English, French and some Spanish, in addition to his native Korean.

Academic Keynote Speech

Jan K. Brueckner is Chancellor's Professor of Economics at the University of California, Irvine. He received an A.B. from UC Berkeley in 1972 and a Ph.D. from Stanford University in 1976, and was a long-time faculty member at the University of Illinois at Urbana-Champaign before coming to UCI in 2005. He has published over 140 scholarly articles dealing with a variety of topics in applied microeconomics. His early work on the airline industry provided some of the first economic analysis of hub-and-spoke networks, demonstrating the efficiency gains from operation of such networks. He has also written on the economics of airline alliances, showing both theoretically and empirically that alliances lead to lower fares for interline passengers. Other recent work deals with the economics of airport congestion, as well as airport noise and aviation emissions. Brueckner is also an expert in the fields of urban economics and public finance, and he served as editor of the Journal of Urban Economics, the leading scholarly journal in the field, from 1991 to 2007.

Brueckner is an academic affiliate at Compass-Lexecon, working on a variety of airline matters. He also has consulted independently for American Airlines, United Airlines, Northwest Airlines, and the Star Alliance, as well as the US Department of Transportation and the World Bank.



Jan Brueckner
Professor of UC-Irvine

Industry Keynote Speech

Benyamin Ismail joined AirAsia Malaysia in March 2010 and was officially appointed as the Chief Executive Officer for AirAsia X Berhad on 1 September 2015.

Prior to that, he was the Group Head of Corporate Development, Implementation and Investor Relations, leading the group in corporate development and finding strategic opportunities to complement AirAsia's airline and non-airline businesses through mergers and acquisitions, investments and special projects.

Before his tenure at AirAsia, Benyamin had an illustrious eight-year career in the Investment Banking industry with big players such as CIMB Investment Bank, Maybank Investment Bank and Affin Investment Bank, giving him a wide understanding of the overall financial industry.

Benyamin played a pivotal role in enhancing AirAsia's growth to become one of the most attractive companies on the Bursa Stock Exchange in Malaysia in terms of transparency, investor returns and Corporate Governance. Under his leadership, AirAsia became one of the most covered stocks by domestic and international brokerage houses and was awarded the Best Investor Relation Company four years in a row by Corporate Governance Asia.

Benyamin received the award of Best IR Professional in 2011 and 2012 by Bursa's Malaysian Investor Relation Association. As well as the 'Best Investor Relation Professional' award four consecutive times. Benyamin holds a degree in Bachelor of Commerce (Banking & Finance) from Curtin University of Technology, Australia and a Masters in Electronic Commerce from Edith Cowan University, Australia.



Benyamin Ismail
AirAsia X Malaysia CEO



Program Overview

ATRS World Conference

Program Overview

July 2 Monday

Venue / Grand InterContinental Seoul Parnas Hotel

9:00-11:00	ATRS Executive Committee Meeting
Room: Iris (2F)	(by invitation only)
11:00-12:30	ATRS Networking Committee Meeting
Room: Iris (2F)	(by invitation only)
12:30-13:30	Lunch
Room: Iris (2F)	(by invitation only)
13:00-19:30	Conference Registration
13:30-15:00	Airport Benchmarking Task Force Meeting
Room: Iris (2F)	(by invitation only)
13:30-17:00	Technical tour to Gimpo Airport
	(registration required)
14:00-18:30	Ph.D. Student and Junior Faculty Workshop
Room: Chrysanthemum (2F)	(registration required)
18:30-20:30	Welcome Reception
Room: Orchid (2F)	

Venue / Grand InterContinental Seoul Parnas Hotel

8:30-14:00	Conference Registration
9:00-9:15	Welcome Addresses
Room: Grand Ballroom (5F)	Martin Dresner President of ATRS Jaehak Oh President of KOTI Jeongryeol Kim Vice Minister for Transport, MOLIT
9:15-10:30	Keynote Speeches
Room: Grand Ballroom (5F)	Special Guest Speech: Young Tae Kim Secretary-General of the International Transport Forum at the OECD Academic Keynote Speech: Jan Brueckner Professor of UC-Irvine Industry Keynote Speech: Benyamin Ismail CEO of Airasia X
10:30-10:50	Coffee Break
Grand Ballroom Lobby (5F)	
10:50-11:50	Plenary Panel Session
Room: Grand Ballroom (5F)	Moderator: Martin Dresner President of ATRS Panelists: Jungjune Ahn Vice president of Administration & Innovation Division, IAC Jan Brueckner Professor of UC-Irvine Benyamin Ismail CEO of AirAsia X Sangdo Kim Director General for Aviation Safety Policy, MOLIT Miae Lee Vice President of Safety & Security Division, KAC Tae Hoon Oum Invited Professor at NSCIIC-MIT-Global China Program, and University of British Columbia, Canada Aisling Reynolds-Feighan Professor of University College Dublin

note: panelists in alphabetical order by last names

11:50-12:50	ATRS Global Airport Benchmarking Task Force Report and Excellence Award Presentation
Room: Grand Ballroom (5F)	Chair: Jinseo Park Chief Research Director, KOTI Presenter: ChunyanYu Coordinator, ATRS Global Airport Performance Benchmarking Task Force, and Embry Riddle Aeronautical University, USA

12:50-14:00	Lunch
Grand Ballroom (5F)	

Venue / COEX

13:00-18:00	Conference Registration
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14:00-15:10	Concurrent Keynote Panel Session
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	(1) Regulatory Air Policy
	Moderator: Yeonmyung Kim Vice-President of KOTI
	Panelists: Anderson Correia Rector, ITA-Brazil Ian Douglas Chair International Air Services Commission (Australia) Seongwoo Koh Deputy Director of International Air Transport Division, MOLIT Yeongheok Lee Professor of Korea Aerospace University Xie Li Professor of CAMIC, China Katsuhiko Yamaguchi Visiting Researcher, University of Tokyo
Room: COEX 307	

	(2) Air Transport Strategy in Modern Economy
	Moderator: Tae Hoon Oum Chairman of the ATRS and Professor, University of British Columbia, Canada
	Panelists: Balram Bheodari Deputy General Manager of Hartfield-Jackson Atlanta International Airport, USA Guillaume Burghouwt Strategist of Corporate Development, Royal Schiphol Group Seokhoon Kang Managing Director of Commercial Division, Jeju Air Sunyoung Kim Director of Global Business Team, KAC Peter Krogsgaard Chief Commercial Officer of Copenhagen International Airport, Denmark Chi-kee Ng Executive Director of Airport Operations of Airport Authority Hong Kong Won Park Director of International Relations Team, IAC
Room: COEX 308	

note: panelists in alphabetical order by last names

15:10-15:40	Coffee Break
COEX Lobby (3F)	

15:40-16:55	Concurrent Session I
Room: COEX 307A, 307B, 307C, 308A, 308B, 308C, 301A, 301B	

16:55-17:15	Break
COEX Lobby (3F)	

17:15-18:30	Concurrent Session II
Room: COEX 307A, 307B, 307C, 308A, 308B, 308C, 301A, 301B	

Program Overview

July 4

Wednesday

		Venue / COEX
8:30-18:00	Conference Registration	
9:00-10:15	Concurrent Session III	
Room: COEX 307A, 307B, 307C, 308A, 308B, 308C		
10:15-10:45	Coffee Break	
COEX Lobby (3F)		
10:45-12:00	Concurrent Session IV	
Room: COEX 307A, 307B, 307C, 308A, 308B, 308C, 301B		
12:00-14:00	Lunch	
Starfield Mall, COEX (B1)		
14:00-15:15	Concurrent Session V	
Room: COEX 307A, 307B, 307C, 308A, 308B, 308C, 301B		
15:15-15:30	Break	
COEX Lobby (3F)		
15:30-16:45	Concurrent Session VI	
Room: COEX 307A, 307B, 307C, 308A, 308B, 308C, 301B		
16:45-17:15	Coffee Break	
COEX Lobby (3F)		
17:15-18:30	Concurrent Session VII	
Room: COEX 307A, 307B, 307C, 308A, 308B, 308C, 301B		
19:00-21:00	Gala dinner	
Grand InterContinental Seoul Parnas Hotel Grand Ballroom (5F)		

Venue / COEX

July 5

Thursday

		Venue / COEX
8:30-11:00	Conference Registration	
9:00-10:15	Concurrent Session VIII	
Room: COEX 307A, 307B, 307C, 308A, 308B, 308C		
10:15-10:30	Coffee Break	
COEX Lobby (3F)		
10:30-11:45	Concurrent Session IX	
Room: COEX 307A, 307B, 307C, 308A, 308B, 308C		
11:45-11:50	Break	
11:50-12:50	ATRS General Assembly	
Room: COEX 300		
Optional excursions:		
12:50-19:00	DMZ Tour	
14:00-17:00	Seoul City Tour	

Concurrent Sessions Overview

Venue / COEX

Tuesday, July 3			
15:40-16:55 Concurrent Session I			
Session 1-A	Room: COEX 307A	Airline Strategy, Management & Operations 1	see p.15
Session 1-B	Room: COEX 307B	Airport Strategy, Management & Operations 1	see p.16
Session 1-C	Room: COEX 307C	Air Traffic Control 1	see p.16
Session 1-D	Room: COEX 308A	Air Transport Policy & Regulation 1	see p.17
Session 1-E	Room: COEX 308B	Aviation & Tourism 1	see p.17
Session 1-F	Room: COEX 308C	Aviation Safety & Security 1	see p.17
Session 1-G	Room: COEX 301A	Human Resources Management in Air Transport 1	see p.18
Session 1-H	Room: COEX 301B	Revenue Management	see p.18
17:15-18:30 Concurrent Session II			
Session 2-A	Room: COEX 307A	Airline Strategy, Management & Operations 2	see p.18
Session 2-B	Room: COEX 307B	Airport Strategy, Management & Operations 2	see p.19
Session 2-C	Room: COEX 307C	Air Traffic Control 2	see p.19
Session 2-D	Room: COEX 308A	Air Transport Policy & Regulation 2	see p.20
Session 2-E	Room: COEX 308B	Aviation & Tourism 2	see p.20
Session 2-F	Room: COEX 308C	Aviation Safety & Security 2	see p.20
Session 2-G	Room: COEX 301A	Human Resources Management in Air Transport 2	see p.21
Session 2-H	Room: COEX 301B	Airline Network Development 1	see p.21

Wednesday, July 4

9:00-10:15 Concurrent Session III			
Session 3-A	Room: COEX 307A	Airline Strategy, Management & Operations 3	see p.21
Session 3-B	Room: COEX 307B	Aviation Finance	see p.22
Session 3-C	Room: COEX 307C	Air Traffic Control 3	see p.22
Session 3-D	Room: COEX 308A	Market Outlook and Future Development of Air Transport	see p.22
Session 3-G	Room: COEX 308B	Air Transport Demand 1	see p.23
Session 3-H	Room: COEX 308C	ATRS Interest Group Session: African Air Transport - "Advancing Sub-Saharan African Air Transport Management Knowledge and Research"	see p.23
10:45-12:00 Concurrent Session IV			
Session 4-A	Room: COEX 307A	Airline Strategy, Management & Operations 4	see p.24
Session 4-C	Room: COEX 307B	Mergers and Alliances in Air Transport	see p.24
Session 4-D	Room: COEX 307C	Air Transport Policy & Regulation 3	see p.25
Session 4-E	Room: COEX 308A	Low-Cost Carriers 1	see p.25
Session 4-F	Room: COEX 308B	Intermodal and Air Travel Alternatives 1	see p.25
Session 4-G	Room: COEX 308C	Air Transport Demand 2	see p.26
Session 4-H	Room: COEX 301B	ATRS Interest Group Meeting: African Air Transport (ATRS IG-Africa)	see p.26
14:00-15:15 Concurrent Session V			
Session 5-A	Room: COEX 307A	Airline Strategy, Management & Operations 5	see p.26
Session 5-B	Room: COEX 307B	Airport Strategy, Management & Operations 3	see p.26
Session 5-C	Room: COEX 307C	Airport and Airline Performance 1	see p.27
Session 5-D	Room: COEX 308A	Low-Cost Carriers 2	see p.27



Concurrent Sessions Overview

Session 5-E	Room: COEX 308B	Intermodal and Air Travel Alternatives 2	see p.27
Session 5-F	Room: COEX 308C	Air Transport Demand 3	see p.28
Session 5-G	Room: COEX 301B	ATRS Interest Group Session: Strategic Management (ATRS IG-Strategy) - "Hot topics in Strategic Aviation Management: Multiple Perspectives from Science, Airports and Airlines"	see p.28
15:30-16:45 Concurrent Session VI			
Session 6-A	Room: COEX 307A	Airline Strategy, Management & Operations 6	see p.29
Session 6-B	Room: COEX 307B	Airport Strategy, Management & Operations 4	see p.29
Session 6-C	Room: COEX 307C	Airport Economics 1	see p.30
Session 6-D	Room: COEX 308A	Airport and Airline Performance 2	see p.30
Session 6-E	Room: COEX 308B	Airport Case Studies 1	see p.30
Session 6-F	Room: COEX 308C	Aviation Industry in APEC Economies	see p.31
Session 6-G	Room: COEX 301B	ATRS Interest Group Meeting: Strategic Management	see p.31
17:15-18:30 Concurrent Session VII			
Session 7-A	Room: COEX 307A	Airline Economics	see p.31
Session 7-B	Room: COEX 307B	Airport Strategy, Management & Operations 5	see p.32
Session 7-C	Room: COEX 307C	Airport Economics 2	see p.32
Session 7-D	Room: COEX 308A	Airport and Airline Performance 3	see p.32
Session 7-E	Room: COEX 308B	Marketing in Air Transport 1	see p.33
Session 7-F	Room: COEX 308C	Airport Case Studies 2	see p.33
Session 7-G	Room: COEX 301B	Aviation Case Studies	see p.33

Thursday, July 5

9:00-10:15 Concurrent Session VIII			
Session 8-A	Room: COEX 307A	Aviation & Economic Development 1	see p.34
Session 8-B	Room: COEX 307B	Environmental Issues in Air Transport 1	see p.34
Session 8-D	Room: COEX 307C	Marketing in Air Transport 2	see p.35
Session 8-E	Room: COEX 308A	Operations Research in Air Transport	see p.35
Session 8-F	Room: COEX 308B	Airline Network Development 2	see p.35
Session 8-G	Room: COEX 308C	Air Cargo 1	see p.36
10:30-11:45 Concurrent Session IX			
Session 9-A	Room: COEX 307A	Aviation & Economic Development 2	see p.36
Session 9-B	Room: COEX 307B	Airport Strategy, Management & Operations 6	see p.36
Session 9-C	Room: COEX 307C	Environmental Issues in Air Transport 2	see p.37
Session 9-E	Room: COEX 308A	Marketing in Air Transport 3	see p.37
Session 9-F	Room: COEX 308B	Airline Network Development 3	see p.37
Session 9-G	Room: COEX 308C	Air Cargo 2	see p.38



Conference Program

ATRS World Conference

Conference Program

Monday, July 2

Venue / Grand InterContinental Seoul Parnas Hotel

9:00-11:00 Room: Iris (2F)	ATRS Executive Committee Meeting (by invitation only)
11:00-12:30 Room: Iris (2F)	ATRS Networking Committee Meeting (by invitation only)
12:30-13:30 Room: Iris (2F)	Lunch (by invitation only)
13:00-19:30	Conference Registration
13:30-15:00 Room: Iris (2F)	Airport Benchmarking Task Force Meeting (by invitation only)
13:30-17:00	Technical tour to Gimpo Airport (registration required)
14:00-18:30 Room: Chrysanthemum(2F)	Ph.D. Student and Junior Faculty Workshop (registration required)
18:30-20:30 Room: Orchid (2F)	Welcome Reception

Tuesday, July 3

Venue / Grand InterContinental Seoul Parnas Hotel & COEX

8:30-18:00	Conference Registration
9:00-9:15 Room: Grand Ballroom (5F)	Welcome Addresses Martin Dresner President of ATRS Jaehak Oh President of KOTI Jeongryeol Kim Vice Minister for Transport, MOLIT
9:15-10:30 Room: Grand Ballroom (5F)	Keynote Speeches <i>Special Guest Speech:</i> Young Tae Kim Secretary-General of the International Transport Forum at the OECD <i>Academic Keynote Speech:</i> Jan Brueckner Professor of UC-Irvine <i>Industry Keynote Speech:</i> Benyamin Ismail CEO of Airasia X
10:30-10:50 Room: Grand Ballroom Lobby (5F)	Coffee Break
10:50-11:50 Room: Grand Ballroom (5F)	Plenary Panel Session <i>Moderator:</i> Martin Dresner President of ATRS <i>Panelists:</i> Jungjune Ahn Vice president of Administration & Innovation Division, IAC Jan Brueckner Professor of UC-Irvine Benyamin Ismail CEO of AirAsia Sangdo Kim Director General for Aviation Safety Policy, MOLIT Miae Lee Vice President of Safety & Security Division, KAC Tae Hoon Oum Invited Professor at NSCIC-MIT-Global China Program, and University of British Columbia, Canada Aisling Reynolds-Feighan Professor of University College Dublin <i>note : panelists in alphabetical order by last names</i>

11:50-12:50

ATRS Global Airport Benchmarking Task Force Report and Excellence Award Presentation

Chair: **Jinseo Park** | Chief Research Director, KOTI

Presenter:

Chunyan Yu | Coordinator, ATRS Global Airport Performance Benchmarking Task Force, and Embry Riddle Aeronautical University, USA

12:50-14:00

Room: Grand Ballroom (5F)

Lunch

14:00-15:10

Room: COEX 307

Concurrent Keynote Panel Session

(1) Regulatory Air Policy

Moderator: **Yeonmyung Kim**, Vice-President of KOTI

Panelists:

Anderson Correia | Rector, ITA-Brazil

Ian Douglas | Chair, International Air Services Commission (Australia)

Seongwoo Koh | Deputy Director of International Air Transport Division, MOLIT

Yeongheok Lee | Professor of Korea Aerospace University

Xie Li | Professor of CAMIC, China

Katsuhiko Yamaguchi | Visiting Researcher, University of Tokyo

Room: COEX 308

(2) Air Transport Strategy in Modern Economy

Moderator: **Tae Hoon Oum** | Chairman of the ATRS and Professor, University of British Columbia, Canada

Panelists:

Balram Bheodari | Deputy General Manager of Hartfield-Jackson Atlanta International Airport, USA

Guillaume Burghouwt | Strategist of Corporate Development, Royal Schiphol Group

Seokhoon Kang | Managing Director of Commercial Division, Jeju Air

Sunyoung Kim | Director of Global Business Team, KAC

Peter Krogsgaard | Chief Commercial Officer of Copenhagen International Airport, Denmark

Chikee Ng | Executive Director of Airport Operations of Airport Authority Hong Kong

Won Park | Director of International Relations Team, IAC

note : panelists in alphabetical order by last names

15:10-15:40

COEX Lobby (3F)

Coffee Break

Concurrent Session I (Tuesday, July 3, 15:40-16:55)

15:40-16:55

Room: COEX 307A

1-A

Airline Strategy, Management & Operations 1

Chair: **Tae Hoon Oum** | Chairman of the ATRS and Professor, University of British Columbia, Canada

85 Exploring Airline Customer Satisfaction through Social Media Platform (Bo Lin, ICL; Julia Zhu, Air New Zealand; Kan Wai Hong Tsui, Massey University)

100 How Do Passengers React to Airlines' Overbooking Strategies? Evidence from the US Airlines (Hideki Fukui, Ehime University; Koki Nagata, University of Maryland)

Conference Program

- 109 Willingness to Accept for Flight Delay Compensation (Chieh-Hua Wen, Feng Chia University)
- 8 Will Low-cost Carriers also Disrupt Long-haul Services? (Andreas Knorr, German University of Administrative Sciences Speyer; Alexander Eisenkopf, Zeppelin Universitat Friedrichshafen; Andreas Lueg-Arndt, Frankfurt University of Applied Sciences)

15:40-16:55
Room: COEX 307B

1-B

Airport Strategy, Management & Operations 1

Chair: **Balram Bheodari** | Atlanta International Airport

- 67 A New Business-oriented Way of Segmenting Airports (Vasco Reis, University of Lisbon; Marta Gomes, University of Lisbon; Diogo Santos, University of Lisbon)
- 126 Passenger Satisfaction, Efficiency, Airport Delays and Bond Ratings: An Application of Network DEA to Evaluate the Performance of US Airports (Young-Tae Chang, Inha University; Chunyan Yu, Embry-Riddle Aeronautical University; Kiljae Lee, Embry-Riddle Aeronautical University; Suhyung Lee, Inha University)
- 159 The Outcomes of Airport Corporatisation, Commercialization, and Privatization: A Systematic Review (Mohammed Chaouk, Cranfield University; Romano Pagliari, Cranfield University; Richard Moxon, Cranfield University)

15:40-16:55
Room: COEX 307C

1-C

Air Traffic Control 1

Chair: **Jun-hyuk Kim** | The Korea Transport Institute

- 44 The Effect of Air Traffic Controller's Response to Abnormal Situations on Job Absorption and Satisfaction (Jong Duk Jeon, Korea Aerospace University; Sang Soo Kim, Korea Office of Civil Aviation, Ministry of Land, Infrastructure and Transportation; Kee Woong Kim, Korea Aerospace University)
- 169 Airline Efficiency Benefits of Reduced Oceanic Separations (Vitaly Guzhva, Embry-Riddle Aeronautical University; Abbas Shaban, Embry-Riddle Aeronautical University; Kenny Martin, ISA Software)
- 184 A Sensitivity Analysis on the Probability of Airborne Conflict in a Free Flight Concept (Larissa Costa, University of Calgary; Alexandre de Barros, University of Calgary; Atime Ronda, École nationale de l'aviation civile (ENAC))
- 219 Investigating the Effect of Alternative Geofencing on the Availability of Low-altitude Urban Airspace (Jungwoo Cho, Korea Advanced Institute of Science and Technology; Yuyol Shin, Korea Advanced Institute of Science and Technology; Yoonjin Yoon, Korea Advanced Institute of Science and Technology)

15:40-16:55
Room: COEX 308A

1-D

Air Transport Policy & Regulation 1

Chair: **Yeonmyung Kim** | The Korea Transport Institute

- 13 Carriers' Entry Patterns in a Liberalizing Transatlantic Market under EU-US Open Skies Agreement (Shengrun Zhang, Nanjing University of Aeronautics and Astronautics; Ben Derudder, Ghent University; Kurt Fuellhart, Shippensburg University; Hailong Zheng, Nanjing University of Aeronautics and Astronautics; Frank Witlox, Ghent University & Nanjing University of Aeronautics and Astronautics)
- 99 A Pricing versus Slots Game: The Case of Substitute Air Services (Hao Lang, Hong Kong Polytechnic University; Achim I. Czenry, Hong Kong Polytechnic University)
- 229 Has Light Handed Regulation of Australian Airports Really Worked? A Performance Study (Hans-Martin Niemeier, City University of Applied Sciences Bremen; Peter Forsyth, Monash University & Southern Cross University; Kok Fong See, Universiti Sains Malaysia)
- 248 A Study on Analysis for Changes and Strategy Plan between Korea and China's Aviation Market (Sunwook Park, The Korea Transport Institute; Jinseo Park, The Korea Transport Institute; Jechul Kim, The Korea Transport Institute; Yeonmyung Kim, The Korea Transport Institute)

15:40-16:55
Room: COEX 308B

1-E

Aviation & Tourism 1

Chair: **Katsuya Hihara** | University of Tokyo

- 24 Impacts of Airport Efficiency on Airlines and Tourism: A Causality Analysis on New Zealand Airports (Thanh Ngo, Massey University; Kan Tsui, Massey University)
- 80 Does a Hub Bring More Tourists? - Evidence from Peru (Enzo Defilippi, Universidad del Pacifico)
- 143 Brisbane Airport International Passenger Travel Dispersal in Queensland (Tim Ryley, Griffith University; Gui Lohmann, Griffith University; Bojana Spasojevic Sijack, Griffith University; Beat Kistler)
- 203 Analysis of Airport- Airline Relationship with a Third-Party Tourism Promotion (Katsuya Hihara, University of Tokyo)

15:40-16:55
Room: COEX 308C

1-F

Aviation Safety & Security 1

Chair: **Frank Fichert** | University of Applied Sciences Worms

- 19 Hazard Identification of Runway Excursions in Taiwan (Hui-hua Yang, Chang Jung Christian University)
- 209 The UAVs Threat to Airport Security: Risk Analysis and Mitigation (John Pyrgies, SkyAngels)
- 287 Effect of Demand Shifting on Security Checkpoint Operation (Hyoshin Park, North Carolina A&T State University; Paul Schonfeld, University of Maryland; Ali Haghani, University of Maryland)

Conference Program

- 341 A Study on Requirements of the Accident Investigation Agency by Using Delphi and AHP (Sujin Jung, The Korea Transport Institute; Jaehyun Han, The Korea Transport Institute; Yeonmyung Kim, The Korea Transport Institute)

15:40-16:55

Room: COEX301A

1-G

Human Resources Management in Air Transport 1

Chair: **Stefan Baumeister** | University of Jyväskylä

- 7 Off-stage Heroes: The Antecedents and Consequences of Job Passion among Civil Aviation Maintenance Crew (Shun-Chuan Chen, Aletheia University)
- 41 Investigating the Effects of Career Management Competencies on Employability among Students of Department of Air Transportation Management (Ya-Ling Kao, National Cheng Kung University; Shu-Chuan Chen, Aletheia University)
- 58 A Study of Manpower Scheduling Optimization for Airport Station Operations (Pedro Jose Gudiel Pineda, National Taipei University of Technology)
- 252 Redesigning and Improving the Productivity of Airline Inflight Service Carts Assembly System (Banna Govardhana Rao, Republic Polytechnic; Teik-Cheng Lim, Singapore University of Social Sciences; Kotireddy Rama Bhupal Reddy, Republic Polytechnic)

15:40-16:55

Room: COEX301B

1-H

Revenue Management

Chair: **Benny Mantin** | University of Luxembourg

- 120 Agile Revenue Management training – A New Holistic Simulation Based Approach "DOLFIN" (Jens Hujer, Heilbronn University of Applied Sciences)
- 155 A Study on the Dynamic Refund Fee Model of Air Tickets Based on Win-to-Win Mechanism (Jun-yi Deng, Civil Aviation University of China; Gui-Hong Zhao, Civil Aviation University of China)
- 320 Dynamic Price Competition in Long Haul Air Markets (Miguel Urdanoz, Toulouse Business School; Chantal Roucolle, ENAC; Catherine Muller, Toulouse Business School)
- 50 How Does Price Volatility Influence Demand of Revenue Managed Goods? (Benny Mantin, University of Luxembourg; Chiara Marlotti, University of Pavia)

16:55-17:15

Break

Concurrent Session II (Tuesday, July 3, 17:15-18:30)

17:15-18:30

Room: COEX307A

2-A

Airline Strategy, Management & Operations 2

Chair: **Woohyun Cho** | University of New Orleans

- 42 Airline Competition in Germany before and after the Air Berlin Bankruptcy (Tobias Grosche, Worms University of Applied Sciences; Richard Klophaus, Worms University of Applied Sciences; Adam Serebinski, Amadeus Germany GmbH)

- 110 Mode Choice Behavior Analysis of Air Transport on the Introduction of Remotely Piloted Passenger Aircraft (Joon-Kyu Lee, The Korea Transport Institute; Sang Hyun Kim, The Korea Transport Institute; Ga Ram Sim, The Korea Transport Institute)

- 239 Flight to Privatization of State-Owned Airlines - A Global Analysis and Empirical Study of Failures and Successes (Wali Mughni, Aviation Institute of Management)

- 14 The Impact of Predicted Quality and Failure Cost on Quality Assurance Behavior for Airline Departure Service (Woohyun Cho, University of New Orleans; Martin Dresner, University of Maryland; Dong-Jun Min, University of New Orleans)

17:15-18:30

Room: COEX307B

2-B

Airport Strategy, Management & Operations 2

Chair: **Richard Moxon** | Cranfield University

- 20 Managerial Values and Preferences: Evidence from Airport Terminal Operators (Triant Flouris, Hellenic American University; Ayse Kucuk Yilmaz, Anadolu University; Hilal Tugce Bal, Anadolu University)

- 92 Feasibility Analyses of Electric Ground Transportation Buses at Sabiha Gokcen Airport (Bora Suavi Unsal, Embry-Riddle Aeronautical University)

- 135 The Development of Green Low-Cost Airport Terminal Design: Kuala Lumpur International Airport (KLIA 2), Malaysia Case Study (Rohafiz Sabar, Universiti Utara Malaysia; Nur Khairiel Anuar, Universiti Utara Malaysia)

- 336 A Study on Airport Operator's Operational Strategy to Enhance Competitiveness of Airport through Increasing Efficiency (Dong-Ho Cho, Korea Airports Corporation)

17:15-18:30

Room: COEX307C

2-C

Air Traffic Control 2

Chair: **Sanghyun Kim** | The Korea Transport Institute

- 48 Traffic Management for Drones Flying in the City (Busyairah Syd Ali, University of Malaya)

- 242 Economies of Scale in the European ANS Industry: A Multi-product Translog Cost Function Approach (Sven Buyle, University of Antwerp; Wouter Dewulf, University of Antwerp; Evy Onghena, University of Antwerp; Hilde Meersman, University of Antwerp; Eddy Van de Voorde, University of Antwerp)

- 263 Coordinated Capacity Ordering and Trajectory Pricing for Better-Performing ATM (COCTA) - A Large Scale Case Study for the European Airspace (Frank Fichert, Worms University of Applied Sciences; Radosav Jovanovic, University of Belgrade; Nikola Ivanov, University of Belgrade; Goran Pavlovic, University of Belgrade; Obrad Babic, University of Belgrade; Arne Strauss, University of Warwick; Stefano Starita, University of Warwick)

- 273 Urban Airspace Structure Considering Dynamic Traffic Demands (Michael Schultz, German Aerospace Center (DLR); Stefan Kern, German Aerospace Center (DLR))

Conference Program

17:15-18:30
Room: COEX308A

2-D

Air Transport Policy & Regulation 2

Chair: **Sungyeoul Oh** | The Korea Transport Institute

- 45 International Air Transportation Liberalization and Trade Creation in China (Xingwu Zheng, Civil Aviation University of China; Yi Zhang, Civil Aviation University of China)
- 208 Change in Korea Aviation Authority to High-Reliability Organization: Longitudinal Case Study (Ik Hyun Han, The Korea Transport Institute (KOTI))
- 302 Potential Benefits of Open Skies in South Asia (Darshi Piyathilake, Coventry University)
- 309 Impact of China-ASEAN ATA on Hong Kong Hub Competitiveness (Chi Lok Andrew Yuen, Chinese University of Hong Kong; Kan Tsui, Massey University)

17:15-18:30
Room: COEX308B

2-E

Aviation & Tourism 2

Chair: **Chrystal Zhang** | Swinburne University of Technology

- 149 Air Transport and Tourism Development in Thailand (Yahua Zhang, University of Southern Queensland)
- 151 Simultaneously Modelling the Tourism Participation and Expenditure Decisions for Air Travel Behavior (Chih-Wen Yang, National Taichung University of Science and Technology)
- 201 Measuring the Impact of Increased Air Arrivals on the Regional Dispersion of Tourism (Tay Koo, UNSW Sydney; Pong-Lung Lau, UNSW Sydney)
- 255 The Effect of Increase Passenger Service Charges (PSC) on Low Cost Travel (Wan Mazlina Wan Mohamed, Universiti Teknologi MARA)

17:15-18:30
Room: COEX308C

2-F

Aviation Safety & Security 2

Chair: **Anderson Ribeiro Correia** | Technological Institute of Aeronautics

- 9 Statistical Dependence Analyses of Operational Flight Data Used for Landing Reconstruction Enhancement (Lukas Hoehndorf, Technical University of Munich; Thomas Nagler, Technical University of Munich; Phillip Koppitz, Technical University of Munich; Claudia Czado, Technical University of Munich; Florian Holzapfel, Technical University of Munich)
- 205 Proposing Improvements to Increase the Professionalism of the Aviation Security Personnel (Kang Seok Lee, Hanseo University; Sung Ah Kim, Hanseo University)
- 104 Perception of Safety Culture in the Aviation Industry: Case of USA and Korea (Seock Jin Hong, University of North Texas)
- 39 Landing Accident Model for Medium and Large Sized Commercial Aircraft (Anderson Ribeiro Correia, Technological Institute of Aeronautics (ITA); Michelle Carvalho Galvão Bandeira, Technological Institute of Aeronautics (ITA); Marcelo Ramos Martins, University of São Paulo)

17:15-18:30
Room: COEX301A

2-G

Human Resources Management in Air Transport 2

Chair: **Sarah Wan** | Hong Kong Polytechnic University

- 2 Social Technologies and Crisis Communication in the Aviation Sector (Lucia de Fatima Piedade, Universidade Lusófona de Humanidades e Tecnologias; Manuel Jose Damasio, Universidade Lusófona de Humanidades e Tecnologias)
- 106 Effects of Enterprise Bargaining and Agreement Clauses on Operating Cost of Airline Ground Crew Scheduling (Cheng-Lung Wu, UNSWSydney; ShaoXuan Lim, UNSWSydney)
- 188 Task Performance Repair by Emotional Labor of Flight Attendants (Noriko Okabe, Yokohama National University)

17:15-18:30
Room: COEX301B

2-H

Airline Network Development 1

Chair: **Christian Hofer** | University of Arkansas

- 76 Skynet: An R package for Generating Air Passenger Networks for Urban Studies (Filipe Alberto Marques Teixeira, University of Ghent; Ben Derudder, University of Ghent)
- 101 Two Part Models Considering Connection and Frequency for Airport Route Development (Yu-Chen Wang, National Chiao Tung University; Jinn-Tsai Wong, National Chiao Tung University)
- 113 Towards a Maturity Model for Big Data Analytics in Airline Network Planning (Maximilian Schosser, HHL Leipzig Graduate School of Management; Iris Hausladen, HHL Leipzig Graduate School of Management)
- 312 Assessing Airline Performance in the China-Europe market (Nan Dai, Institute for Aviation Research; Zheng Lei, Swinburne University of Technology; Ruowei Chen, Shanghai Aircraft Design and Research Institute)

Wednesday, July 4

Venue / COEX

8:30-18:00 **Conference Registration**

9:00-10:15 **3-A Airline Strategy, Management & Operations 3**

Chair: **Terence Fan** | Singapore Management University

- 37 Turnaround Management of Full Service Carrier- The Case of TransAsia Airways (Hsueh-Yu Tseng, National Cheng Kung University; Yu-Hern Chang, National Cheng Kung University)
- 98 Impact of New Airport on Airlines' Strategies (Ozge Peksatici, Ozyegin University; Hatice Kucukonal, Ozyegin University)
- 222 Designing Commercially Optimal Fuel Hedging Strategies for Airlines through Simulation under Various Market Conditions (Hassan Swidan, University of Sydney; Rico Merkert, University of Sydney; Oh-Kang Kwon, University of Sydney)

Conference Program

- 89 Scheduled Flight Durations over the Years (Terence PC Fan, Singapore Management University)

9:00-10:15
Room: COEX 307B

3-B

Aviation Finance

Chair: **Sunder Raghavan** | Embry-Riddle Aeronautics University

- 102 Aircraft Value: Under Operating Cost Shocks (Bijan Vasigh, Embry-Riddle Aeronautical University; Stavros Ioannou, Embry-Riddle Aeronautical University)
- 298 Does Leasing Substitute or Complement Debt? Evidence from US Airlines (Hari Adhikari, Embry-Riddle Aeronautical University; Nilesh B. Sah, North Eastern Illinois University; Abbas M. Shaban, Embry-Riddle Aeronautical University)
- 16 Empirical Study of Different Approaches to Aircraft Valuation (Sunder Raghavan, Embry-Riddle Aeronautical University; Jayathi Raghavan, Embry-Riddle Aeronautical University)
- 128 From Full Freighters to Belly Cargo Aircraft: Stochastic Analysis of Alternatives for Freight in Schiphol Airport (Miguel Mujica Mota, Amsterdam University of Applied Sciences; Abdel Makhloufi, Amsterdam University of Applied Sciences; Rodrigo Romero-Silva, Amsterdam University of Applied Sciences)

9:00-10:15
Room: COEX 307C

3-C

Air Traffic Control 3

Chair: **Jorge Silva** | Universidade da Beira Interior

- 26 Input and Output Measurement in Air Navigation Service Provider Performance Benchmarking - Implementing Composite Indicators for Efficiency Analysis Using European Data (Thomas Standfuss, German Aerospace Center (DLR); Frank Fichert, University of Applied Science Worms; Michael Schultz, German Aerospace Center)
- 213 Conflict Resolution Policy for Small UAV Based on Satisficing Theory (Nam-woo Kim, Korea Advanced Institute of Science and Technology; Yoonjin Yoon, Korea Advanced Institute of Science and Technology)
- 340 Verification of Frangibility Design of Fixed FOD Detection System Using Structural Analysis (Nam-Hyun Cho, Incheon International Airport Corporation; Hyerin Lim, Incheon International Airport Corporation; Myoung Kyu Park, WAVE TECH; Min Soo Kim, WAVE TECH)
- 116 Unmanned Aircraft and Airspace Interfaces: Insights and Challenges (Jorge Silva, Universidade da Beira Interior (UBI); Omar Netto, Universidade da Beira Interior (UBI))

9:00-10:15
Room: COEX 308A

3-D

Market Outlook and Future Development of Air Transport

Chair: **Hongchang Li** | Beijing Jiaotong University

- 55 Current Experience of Corporate Air Passengers and Future Developments of Business Travel: An Explorative Study (Ulrike Kluge, Bauhaus Luftfahrt e.V.; Annika Paul, Bauhaus Luftfahrt e.V.; Viola Gissibl, Julius Maximilian University of Würzburg)

- 83 Simulation and Analysis of the Impacts of Commercial Space Transportation on Airlines (Chunyan Yu, Embry-Riddle Aeronautical University; Janet K. Tinoco, Embry-Riddle Aeronautical University; Rodrigo Firmo, Embry-Riddle Aeronautical University; Carlos Alberto Castro, Embry-Riddle Aeronautical University; Todd Hugh Waller, Embry-Riddle Aeronautical University; Mohammad Moallemi, Embry-Riddle Aeronautical University)

- 228 Demand Forecasting and Policy Suggestion for OPPAV (Optionally Piloted Personal Air Vehicle) Operation (Myeonghyeon Kim, The Korea Transport Institute; Ki-Han Song, The Korea Transport Institute)

- 176 The Impact of HSR on Civil Aviation Supply in China: a 2007-2014 Panel Data Analysis (Hongchang Li, Beijing Jiaotong University; Jack Strauss, University of Denver; Lulu Hao, Beijing Jiaotong University)

9:00-10:15
Room: COEX 308B

3-G

Air Transport Demand 1

Chair: **Kazuyuki Takada** | Tokyo Denki University

- 212 A Study on Transportation Mode Choice for User with Infants in Case of Long Distance Travel (Takahiro Minami, Kanazawa University; Makoto Fujiu, Kanazawa University; Junichi Takayama, Kanazawa University; Wataru Urata, Kanazawa University; Kazuhiro Nagaki, Kanazawa University)
- 214 A Fine-Grained Demand Model for Air Taxis Over Europe (Xiaoqian Sun, Beihang University; Sebastian Wandelt, Beihang University; Eike Stumpt, RWTH Aachen University)
- 237 Air Passenger Home-departure Time and Airport Access Mode Choices: Effect of Terminal Congestion Information (Yi-Shih Chung, National Chiao Tung University; Szu-Yu Tu, National Chiao Tung University)
- 305 Estimating the Number of Air Passengers Affected by Sudden Continual Flight Cancel by Utilizing Several Air Travel Survey Data (Kazuyuki Takada, Tokyo Denki University; Kota Miyauchi, Tokyo Denki University; Mai Kaneko, Tokyo Denki University)

9:00-10:15
Room: COEX 308C

3-H

ATRS Interest Group Session: African Air Transport - "Advancing Sub-Saharan African Air Transport Management Knowledge and Research"

Chair: **Eric Tchouamou Njoya** | University of Huddersfield

Introduction: African air transport paper presentations

- 62 Turbulences Towards Air Transport Liberalization: An Interdisciplinary Perspective on Sub-Saharan Africa and the ASEAN Region (Jonathan Steinbach, Zeppelin University Friedrichshafen)
- 82 Effects of Enhanced Air Connectivity on the Kenyan Tourism Industry and Their Likely Welfare Implications (Eric Tchouamou Njoya, University of Huddersfield; Artur Semeyutin, University of Huddersfield)

Conference Program

Panel discussion:

Moderator: **Eric Tchouamou Njoya**, University of Huddersfield

Panelists:

David Warnock-Smith | Buckinghamshire New University

Gianmaria Martini | University of Bergamo

Jonathan Steinbach | Zeppelin University Friedrichshafen

Artur Semeyutin | University of Huddersfield

10:15-10:45

COEX Lobby(3F)

Coffee break

Concurrent Session IV (Wednesday, July 4, 10:45-12:00)

10:45-12:00

Room: COEX307A

4-A

Airline Strategy, Management & Operations 4

Chair: **Ryan Leick** | Utah Valley University

288 Recurrent Neural Network based Aircraft Boarding Prediction (Stefan Reitmann, German Aerospace Center (DLR); Michael Schultz, German Aerospace Center (DLR))

290 Why Do Mega Full-Service Carriers Tend to Own Their Low-Cost Carriers? Comparison between Air Transport Industry and Mobile Industry (Kiyotaka Yuguchi, Sagami Women's University)

295 Developing Measures of Service Quality and Degree of Interconnectedness in Air Transport Networks (Branko Bubalo, University of Hamburg; Alberto A. Gaggero, University of Pavia)

307 Gamifying Airline Operations - One Metric to Rule Them All (Ryan Leick, Utah Valley University; Alec Robinson, G2 Secure; Chris Welty, AECOM)

10:45-12:00

Room: COEX307B

4-C

Mergers and Alliances in Air Transport

Chair: **Richard Klophaus** | University of Applied Sciences Worms

28 Consolidation and Firm Performance in the U.S. Airline Industry (Wilfred S. Manuela Jr., Asian Institute of Management; Dawna L. Rhoades, Embry-Riddle Aeronautical University; Tamilla Custis, Embry-Riddle Aeronautical University)

187 Demand and Consumer Welfare Analysis in the Chinese Airline Market (Wenliang Ma, University of International Business and Economics; Kun Wang, University of British Columbia; Qiang Wang, University of International Business and Economics; Hangjun Yang, University of International Business and Economics; Yahua Zhang, University of Southern Queensland)

196 Impact of Major Airlines' M&A on Profitability and Marketability (Su-Hyung Lee, Inha University; Young-Tae Chang, Inha University; June Young Bae, Inha University)

246 Airline Routes Performance and Alliance Effects on Flight Frequency Using Panel Data (Taejin Shin, Incheon International Airport Corporation; Taewoo Roh, Soonchunhyang University)

10:45-12:00

Room: COEX307C

4-D

Air Transport Policy & Regulation 3

Chair: **Katsuhiko Yamaguchi** | University of Tokyo

47 Floodgate Effect of Liberalizing International Air Transport Market: The Case of China and Australia Market (Chrystal Zhang, Swinburne University of Technology; Kareem Yarde; Yi Hsin Lin, Asia University)

146 Optimal Use-It-or-Lose-It Airport Slot Policies (Achim I. Czerny, Hong Kong Polytechnic University)

330 State Subsidies for Air Transport: The Case of Turkey (Ferhan Kuyucak Sengur, Anadolu University; Mustafa Uzgor, Anadolu University)

23 Consequence of JAL's Bankruptcy and Bailout: Has the Legacy Carriers in Japan Become More Productive? (Katsuhiko Yamaguchi, University of Tokyo)

10:45-12:00

Room: COEX308A

4-E

Low-Cost Carriers 1

Chair: **Ali Haghani** | University of Maryland

118 The Factors Affecting Passengers' Choices for Low Cost Carriers (Yi Hsin Lin, Asia University; Chris Ryan, University of Waikato; Chrystal Zhang, Swinburne University of Technology; Yu Hsun Lai, Asia University; Li-Wen Low, Asia University)

127 Low Cost Carrier Operations and Its Impact on Tourism Flows in China (Chuntao Wu, Sichuan University; Li Juan, Sichuan University; Qiuyue Jiang, Sichuan University; Tingting Yuan, Sichuan University)

264 Exploring the Rationale and Potential of LCCs' Self-interlining (Renato Redondi, University of Bergamo; Sebastian Birolini, University of Bergamo; Mattia Cattaneo, University of Bergamo; Stefano Paleari, University of Bergamo)

10:45-12:00

Room: COEX308B

4-F

Intermodal and Air Travel Alternatives 1

Chair: **Michael Williams** | Embry-Riddle Aeronautical University

69 Managing the Multiple Airport System with High Speed Rail Network and the Big Market of Inbound Travelers: Case of Tokyo Metropolitan Area (Mikio Takebayashi, Kobe University)

73 Impact of Network Configuration on High-Speed Rail Adoption and Development (Tiziana D'Alfonso, Sapienza University of Rome; Valentina Bracaglia, Autostrade per l'Italia S.P.A.; Alberto Nastasi, Sapienza University of Rome; D Sheng, Hong Kong Polytechnic University; Yulai Wan, Hong Kong Polytechnic University; Anming Zhang, University of British Columbia)

130 Air Cargo Market Structure, Intermodal Competition, and Prices: Evidence from Chinese Imports from Europe (Sara Maioli, Newcastle University; Volodymyr Bilotkach, Newcastle University; Bo Gao, Loughborough University; Wolfgang Grimme, German Aerospace Centre (DLR))

280 Using Airport Infrastructure as a Hub for Connecting Regional Population Centers to High-traffic Tourist Destinations (Michael Williams, Embry-Riddle Aeronautical University)

Conference Program

10:45-12:00
Room: COEX308C

4-G

Air Transport Demand 2

Chair: **Xiaowen Fu** | University of Sydney

- 177 Passenger Collection and Distribution Demand of Beijing New International Airport for Substitute Transportation Modes (Li Xie, Civil Aviation Administration Institute of China; Xujuan Kuang, Civil Aviation Administration Institute of China)
- 241 A Study on the Forecasting Method of Air Passenger Demand: Focusing on Quantitative Forecasting Method (Heung-gu Son, The Korea Transport Institute; Jin-seo Park, The Korea Transport Institute; Je-chul Kim, The Korea Transport Institute)
- 277 International Airline Code Sharing and Air Traveler Behavior: Misconceptions vs Risk Aversion (Gerben de Jong, Vrije Universiteit Amsterdam)

10:45-12:00
Room: COEX301B

4-H

ATRS Interest Group Meeting: African Air Transport (ATRS IG-Africa)

Chair: **Eric Tchouamou Njoya** | University of Huddersfield

12:00-14:00
Room: Starfield Mall, COEX (B1)

Lunch

Concurrent Session V (Wednesday, July 4, 14:00-15:15)

14:00-15:15
Room: COEX307A

5-A

Airline Strategy, Management & Operations 5

Chair: **Myongjin Kim** | University of Oklahoma

- 59 Understanding the Operating Landscape of the Global Airline Industry: A DEA Integrated Alternating Conditional Expectation Approach (Joyce M.W. Low, Singapore Management University; Kum Khiong Yang, Singapore Management University)
- 115 Evaluating Disaggregate Input Efficiency of Airline Companies in the United States (Chia-Ning Chiu, National Ilan University)
- 162 Network Carriers Without Legacy - European LCCs at the Crossroads? (Richard Klopheus, Worms University of Applied Sciences)
- 318 The Value of Relational Adaptation in Outsourcing (Myongjin Kim, University of Oklahoma)

14:00-15:15
Room: COEX307B

5-B

Airport Strategy, Management & Operations 3

Chair: **Gianmaria Martini** | University of Bergamo

- 49 Development of Airport Information Systems, Analysis of Smart and Automated Airports (Eniko Nagy, Budapest University of Technology and Economics)

- 218 Performance of Passenger Flow within Crowded Airports: A Systematic Literature Review and Meta-analysis (Alhussin Abudiyah, Cranfield University; Rich Moxon, Cranfield University; Romano Pagliari, Cranfield University)

- 232 Recognizing Departing Passengers' Patterns at a Busy Airport (Deokbae An, Korea Aerospace University; Huiyang Kim, Korea Aerospace University; Hojong Baik, Korea Aerospace University)

- 129 Airport Cost Function, Output and Input Elasticities and Temporary and Persistent Efficiency: A Comparison between Italy and UK (Gianmaria Martini, University of Bergamo; Davide Scotti, University of Bergamo)

14:00-15:15
Room: COEX307C

5-C

Airport and Airline Performance 1

Chair: **Thomas Budd** | Cranfield University

- 160 Operational Performance Forecasting and Evaluation: A Case of 20 Busiest Chinese Airports (Zhanwei Wang, Korea Aerospace University; Woon-Kyung Song, Korea Aerospace University; Hee-Young Hurr, Korea Aerospace University; Gene Choi, Korea Aerospace University)

- 207 An Analysis of the Financial Efficiency of the World's Major Hub Airports: A two-stage Bootstrapped DEA Approach (Jongchul Kim, Inha University; Tae Seung Kim, Inha University)

- 243 Performance Measurement of Airports Using DEA: Review of Methods and Findings (Soumya Jain, Indian Institute of Technology (IIT) Delhi; K Chandrashekhar Iyer, Indian Institute of Technology (IIT) Delhi)

- 319 Airlines Performance Scorecard: A Long-term Fundamental Evaluation Framework (Hang Zou, Embry-Riddle Aeronautical University)

14:00-15:15
Room: COEX308A

5-D

Low-Cost Carriers 2

Chair: **Tobias Grosche** | University of Applied Sciences Worms

- 17 Low-cost Carriers and International Tourism Flows: Evidence from Italy (Alberto A. Gaggero, University of Pavia; Marco Alderighi, University of Aosta Valley & Bocconi University)

- 21 In-flight Merchandise Sale: An Operational Experience of a Thai Low-Cost Carrier (Narudh Cheramakara, Bangkok University)

- 175 Effects of Advertising Endorser Credibility and Brand Fit on Brand Attitude and Purchase Intention for Low Cost Carriers (Yueh-Ling Hsu, Kainan University)

- 194 Effect of LCC Entries on FSC's Airfare - An Empirical Analysis of the Domestic Market in Japan (Jun Mizutani, Kobe University; Masato Muraguchi, Kobe University)

14:00-15:15
Room: COEX308B

5-E

Intermodal and Air Travel Alternatives 2

Chair: **Augusto Voltes-Dorta** | University of Edinburgh

Conference Program

- 78 The Impact of High-speed Rail (HSR) Development on Airport: A Comparative Study of China and Japan (Shuli Liu, Hong Kong Polytechnic University; Yulai Wan, Hong Kong Polytechnic University; Anming Zhang, University of British Columbia; Yuichiro Yoshida, Hiroshima University; Hun-Koo Ha, Inha University)
- 114 A Routing and Consolidation Decision Model for Air-Land Intermodal Transportation (Kuan Cheng Huang, National Chiao Tung University; Yu-Ting Lee, National Chiao Tung University; Haoran Xu, National Chiao Tung University)
- 173 The Model of Passenger Behavior Choice Under Flight Delay Based on Dynamic Reference Point (Hong Jiang, Civil Aviation University of China; Xinhui Ren, Civil Aviation University of China)
- 211 The Impact of High-speed Rail Connectivity to Airport Recovery: A Case Study of Barcelona Airport (Augusto Voltes-Dorta, University of Edinburgh; Hector Rodriguez-Deniz, Linköping University; Pere Suau-Sanchez, Cranfield University)

14:00-15:15
Room: COEX308C

5-F Air Transport Demand 3

Chair: **Xingwu Zheng** | Civil Aviation University of China

- 91 Advance Purchase Behavior of Air Tickets: A Survival Model Analysis (Jin-Long Lu, National Kaohsiung Marine University; Yi-Ju Wu, National Kaohsiung Marine University)
- 200 The Impact of Third-Country Exchange Rate Risk on Air-Passenger Flows: The Case of Korean Outbound Tourism Demand (Junwook Chi, University of Hawaii at Manoa)
- 270 Convenience or Discount? The Analysis of Travelers' Willingness-to-Pay for Bundling Airline Services (Chieh-Yu Hsiao, National Chiao Tung University; Yu-Ting Liu, National Chiao Tung University)
- 304 Empirical Analysis of Demand for Hub-Airport at Transit (Munekatsu Usami, Osaka University; Nobuo Akai, Osaka University)

14:00-15:15
Room: COEX301B

5-G ATRS Interest Group Session: Strategic Management (ATRS IG-Strategy) - "Hot topics in Strategic Aviation Management: Multiple Perspectives from Science, Airports and Airlines"

Chair: **Erik Linden** | University of St.Gallen

Session Introduction: **Erik Linden**

Perspectives from Science on Airline Business Models

Andreas Wittmer and **Julian Rossy**, University of St.Gallen

Perspectives from Science on Airports

Ulrike Kluge | Bauhaus Luftfahrt

Gerben de Jong | Vrije Universiteit Amsterdam

Erik Linden | University of St.Gallen

Panel discussion:

Moderator: **Erik Linden** | University of St.Gallen

Panelists:

Andreas Wittmer | University of St.Gallen

Ulrike Kluge | Bauhaus Luftfahrt

Gerben de Jong | Vrije Universiteit Amsterdam

Julian Rossy | University of St.Gallen

15:15-15:30

Break

Concurrent Session VI (Wednesday, July 4, 15:30-16:45)

15:30-16:45

6-A

Airline Strategy, Management & Operations 6

Chair: **Wouter Dewulf** | University of Antwerp

- 93 A Study of Airline Passenger Complaints: An Assessment of the US Market (Thomas Budd, Cranfield University; Robert Mayer, Cranfield University)
- 221 Estimation of Discretionary Fuel for Airline Operations (Hyoseok Chang, Korea Aerospace University; Kwang Eui Yoo, Korea Aerospace University; Hojong Baik, Korea Aerospace University)
- 253 AHP Method Applied for Evaluating Passengers Preference: Presence of Turboprop in Commercial Aviation (Lucas Morotti dos Santos, Aeronautics Institute of Technology; Giovanna Miceli Ronzani, Aeronautics Institute of Technology; Rogeria de Arantes Gomes, Aeronautical Institute of Technology (ITA))
- 269 The Significance of Air Cargo Revenues for the Selection Process of New Destinations for Passenger Transport - A Nice-to-Have or a Crucial Contribution? (Wouter Dewulf, University of Antwerp; Eddy Van de Voorde, University of Antwerp; Hilde Meersman, University of Antwerp)

15:30-16:45

6-B

Airport Strategy, Management & Operations 4

Chair: **Anne Graham** | University of Westminster

- 35 The Impact of Airport Terminal Wayfinding Design on Low-Cost Passengers at Kuala Lumpur International Airport 2 (KLIA2) Terminal, Malaysia (Nur Khairiel Anuar, Universiti Utara Malaysia; Rohafiz Sabar, Universiti Utara Malaysia)
- 84 Innovation in Airport Passenger Taxi Management: A Case Study of Stockholm Arlanda Airport (Richard Moxon, Cranfield University)
- 216 Willingness to Pay for Airport Parking in Adelaide Airport (Wen-Chun Tseng, University of South Australia)
- 10 The Impact of Ownership Change on Competition and Pricing Behaviour at Edinburgh and Glasgow Airports (Anne Graham, University of Westminster; Romano Pagliari, Cranfield University)

Conference Program

15:30-16:45

6-C

Airport Economics 1

Chair: **Sam Yap Yin Choo** | British Columbia Institute of Technology

- 96 Comparative Analysis on the Production Structure of Asia-Pacific Airports (Young Hak Kim, Inha University; Tae Seung Kim, Inha University)
- 111 Airport Charge Regulation for Non-aviation Sector: The Case of Japan (Katsumi Tanabe, Keio University)
- 133 Granting Airports Concessions for Local Development: Evidence from Peru (Pedro Mateu, Universidad del Pacifico; Julio Aguirre, Universidad del Pacifico; Chrissie Pantoja, Universidad del Pacifico)
- 202 Airport Efficiencies and Air Traffic Using DEA and Multilateral Resistance Terms Gravity Models (Ahhyun Jo, Inha University; Young-Tae Chang, Inha University; June Young Bae, Inha University)

15:30-16:45

6-D

Airport and Airline Performance 2

Chair: **Ian Douglas** | University of New South Wales

- 18 Airline Schedule Padding and Consumer Choice Behavior (Javad Gorjidoz, Embry-Riddle Aeronautical University-Prescott; Jules Yimga, Embry-Riddle Aeronautical University-Prescott)
- 33 Calibration of Airline Cost Factors Depending on the Airline Business Model (Peter Biesslich, German Aerospace Center (DLR); Janine Kamniski, Hamburg University of Technology; Sascha Koppmann, Hamburg University of Technology; Klaus Luetjens, German Aerospace Center (DLR))
- 63 Comparative Analysis of DEA and Financial Performance in Major Airlines (Kyeonghee Sung, Inha University; Tae Seung Kim, Inha University)
- 193 The Impact of Airline Strategic Planning on Profit Performance (Ian Douglas, University of New South Wales)

15:30-16:45

6-E

Airport Case Studies 1

Chair: **Sven Maertens** | German Aerospace Center

- 30 A Supply Side Categorization of Airports across Global Multiple Airport Cities and Regions (Kurt Fuellhart, Shippensburg University; Kevin O'Connor, University of Melbourne)
- 68 Investigating the Effect of Experience in an Airport on Pleasure, Satisfaction and Airport Image: A Case Study on Incheon International Airport (Young Kyung Ryu, Korea Aerospace University; Jin-Woo Park, Korea Aerospace University)
- 97 Measuring and Managing Aircraft Turnaround Delay to Enhance Airfield Operation Efficiency for Taiwan Taoyuan International Airport (Suiling Li, National Penghu University of Science and Technology)

- 145 Bird Strike Risk Model and Verification at Taoyuan International Airport (Yu-Ning Wang, National Cheng Kung University)

15:30-16:45

6-F

Aviation Industry in APEC Economies

Chair: **Andrew Yuen** | Chinese University of Hong Kong

- 15 The ASEAN Approach to Subsidies for Airlines (Jae Woon Lee, Chinese University of Hong Kong)
- 31 International Liberalization and Domestic Market Competition - Analysing the Spatial Entry Pattern of Low-cost Carriers in New Zealand (Wai Hong Kan Tsui, Massey University; Kun Wang, University of British Columbia; Lan-Bing Li, Nankai University; Zheng Lei, Swinburne University of Technology; Xiaowen Fu, University of Sydney)
- 51 Measuring Multi-modal Connections and Connectivity Radiations of Transport Infrastructure: The Methodology and an Application to China (Anming Zhang, University of British Columbia)
- 79 Single Sourcing vs. Multiple Sourcing: Empirical Evidence from the US Airline Industry (Yulai Wan, Hong Kong Polytechnic University; Changmin Jiang, University of Manitoba; Kun Wang, University of British Columbia)

15:30-16:45

Room: COEX 301B

6-G

ATRS Interest Group Meeting: Strategic Management

Chair: **Erik Linden** | University of St.Gallen

16:45-17:15

COEX Lobby (3F)

Coffee break

Concurrent Session VII (Wednesday, July 4, 17:15-18:30)

17:15-18:30

Room: COEX307A

7-A

Airline Economics

Chair: **Aisling Reynolds-Feighan** | University College Dublin

- 134 Airline Price Competition in Australia (Hangjun Yang, University of International Business and Economics; Wenliang Ma, University of International Business and Economics; Qiang Wang, University of International Business and Economics; Yahua Zhang, University of Southern Queensland)
- 136 Does the Southwest Effect Still Matter? How Low-Cost Carriers Still Impact the US Aviation Market (Hyo-Soo Park, University of Maryland; Martin Dresner, University of Maryland; Robert Windle, University of Maryland)
- 284 A Model of Network Formation for Airlines (Christian Bontemps, ENAC & Toulouse School of Economics; Kevin Remmy, Toulouse School of Economics)
- 181 Seasonality in US Air Traffic Distributions: Impacts and Implications for Airlines and Communities (Aisling Reynolds-Feighan, University College Dublin)

Conference Program

17:15-18:30
Room: COEX 307B

7-B

Airport Strategy, Management & Operations 5

Chair: **Cheong Kim** | Korea Airports Corporation

- 306 What's with These Deice Pads (Aaron Organ, American Association of Airport Executives; Jordan Stacy, Utah Valley University; Ryan Leick, Utah Valley University)
- 328 Factors Affecting the Adoption of Airport E-Gate Service in Taiwan: An Empirical Analysis (Fang-Yuan Chen, Feng Chia University)
- 335 A Comparative Study of the Pavement Performance Using HMA overlays on the ASR Concrete Pavement (Pyung-Jin Kwak, Korea Airports Corporation; Jeil Lee, Korea Airports Corporation)
- 338 Enhance Passenger Experience through Smart Airport Operation: Biometrics Identification Procedure of Korea Airports Corporation (Seunghyun Kim, Korea Airports Corporation; Sungmi Lee, Korea Airports Corporation; Sangchul Yoon, Korea Airports Corporation)

17:15-18:30
Room: COEX 307C

7-C

Airport Economics 2

Chair: **Chikage Miyoshi** | Ningbo Supply Chain Innovation Institute China & MIT SCALE Network

- 108 Impacts of Airline Market Structure on Airport Efficiency (Yap Yin Choo, British Columbia Institute of Technology)
- 195 Potential Self-Connectivity Markets for Ten Major Asian Airports (Yu-Chun Chang, National Taiwan Ocean University; Wei-Hao Lee, National Taiwan Ocean University; Chia-Jui Hsu, Taiwan Taoyuan International Airport)
- 323 Japan Airport Privatisation: An Econometric Assessment of the Airport Charging Scheme (Chikage Miyoshi, Ningbo Supply Chain Innovation Institute China & MIT SCALE Network)
- 339 Build of Test-Bed for Localization of Baggage Handling System (Nam-Hyun Cho, Incheon International Airport Corporation; Hyerin Lim, Incheon International Airport Corporation; Hacksoon Song, Mirai Envitech.Co., Ltd; Byung Geun Kang, G-philos Co., Ltd)

17:15-18:30
Room: COEX 308A

7-D

Airport and Airline Performance 3

Chair: **Dieter Wilken** | German Aerospace Center

- 180 Effect of Individual Service Components on Overall Airport Experience (Nigel Halpern, Kristiania University College; Deodat Mwesiumo, Molde University College)
- 217 A System-of-Systems Model for Collaborative Decision Making in Interdependent Airport Networks (Alexander Gillissen, German Aerospace Center (DLR); Michael Schultz, German Aerospace Center (DLR))
- 260 Airport Performance and Efficiency: Label Development (Maria Baltazar, University of Beira Interior; Jorge Silva, Universidade da Beira Interior & Universidade de Lisboa)

17:15-18:30
Room: COEX 308B

7-E

Marketing in Air Transport 1

Chair: **Andreas Wittmer** | University of St. Gallen

- 5 Booking Recommendations of Search Engines' Danger for the Airline Industry? (Andreas Wittmer, University of St. Gallen; Sabrina Nachbaur, Hochschule für Technik und Wirtschaft HTW Chur)
- 32 ~~The Implications of Social Media Influencers on the Airline Industry (Junhao Kuang, Swinburne University of Technology; Peter Bruce, Swinburne University of Technology; Yi Gao, Swinburne University of Technology)~~
- 226 A Reliable Customer-based Brand Equity Measure for Airlines (Eren Sezgen, Cranfield University; Keith Mason, Cranfield University; Robert Mayer, Cranfield University)
- 4 Usability of Airline Websites at the Flight Ticket Purchase Process (Andreas Wittmer, University of St. Gallen; Tamara Bruscek, University of St. Gallen; Erik Linden, University of St. Gallen)

17:15-18:30
Room: COEX 308C

7-F

Airport Case Studies 2

Chair: **Koki Nagata** | University of Maryland

- 141 Service Quality at Passenger Terminal in the Aspect of Service Providers and Customers: A Case of Incheon International Airport in Korea (Dongho Choi, Korea Aerospace University; Seock-Jin Hong, University of North Texas)
- 192 Does Privatisation as a Correct Path Way for Bringing Japanese Airports toward Sustainability? (Kok Fong See, Universiti Sains Malaysia)
- 235 Spill Effects of Chinese Hub Airports on Connection Traffic (Hailong Zheng, Nanjing University of Aeronautics and Astronautics; Shengrun Zhang, Nanjing University of Aeronautics and Astronautics; Frank Witlox, Ghent University/ Nanjing University of Aeronautics and Astronautics)
- 329 Flight Delays Prediction Modeling in Chinese Hub Airport: A Case Study of Shanghai Pudong International Airport (Sisi Ma, Nanjing University of Aeronautics and Astronautics; Xiaowei Tang, Nanjing University of Aeronautics and Astronautics; Meihua Lu, Nanjing University of Aeronautics and Astronautics; Yutong Wang, Nanjing University of Aeronautics and Astronautics)

17:15-18:30
Room: COEX 301B

7-G

Aviation Case Studies

Chair: **Eric Pels** | Vrije Universiteit Amsterdam

Conference Program

- 125 Identifying Ideal Aircraft Cabin Design for Short-Haul and Medium-Haul Flights in Japan (Berkcan Uyan, Cranfield University; Chikage Miyoshi, Ningbo Supply Chain Innovation Institute; Thomas Budd, Cranfield University; Romano Pagliari, Cranfield University)
- 337 A Study on Introducing Aircraft Noise Management Accreditation for Sustainable Development of Airports (Jina Yoo, Korea Airports Corporation)
- 121 Air Transport and Regional Development: Evidence from Turkey (Eric Pels, VU University; Zeynep Elburz, Dokuz Eylul University)

- 77 How to Regulate Aviation's Full Climate Impact as Intended by the EU Council from 2020 Onwards? (Janina Scheelhaase, German Aerospace Center (DLR))

19:00-21:00

Gala dinner

Room: Grand InterContinental Seoul Parnas Hotel Grand Ballroom (5F)

Thursday, July 5

Venue / COEX

8:30-11:00

Conference Registration

Concurrent Session VIII (Thursday, July 5, 9:00-10:15)

9:00-10:15

Room: COEX307A

8-A

Aviation & Economic Development 1

Chair: **Shinya Hanaoka** | Tokyo Institute of Technology

- 147 Scenario-Based Strategic Planning for Future Civil Vertical Take-off and Landing (VTOL) Transport (Woo Jin Choi, Embry-Riddle Aeronautical University; Steven Hampton, Embry-Riddle Aeronautical University)
- 170 The Evolution of Regional Air Transport Connectivity in Europe: A Comparison between Remote and Central Areas (Flavio Porta, University of Bergamo; Gianmaria Martini, University of Bergamo; Davide Scotti, University of Bergamo; Antonio Antunes, University of Coimbra)
- 301 One Belt One Road' and Aviation: The Past, Present and Future Growth (Li Zou, Embry-Riddle Aeronautical University; Chunyan Yu, Embry-Riddle Aeronautical University)
- 206 Bundling of Airports in a Region with Trip-Chain Formation (Fangzhou Xu, Tokyo Institute of Technology; Shinya Hanaoka, Tokyo Institute of Technology; Masamitsu Onishi, Kyoto University)

9:00-10:15

Room: COEX307B

8-B

Environmental Issues in Air Transport 1

Chair: **Janina Scheelhaase** | German Aerospace Center

- 107 Estimating and Forecasting for the Social Impact of Aircraft Emission at the Airport (Cheol Hyun Lim, Inha University; Yong Hwa Park, Inha University)
- 189 Developing Society's Attitudes toward the Use of Biofuel in Aviation (Teguh Iman Maulana, Universitas Indonesia; Vitria Indriani, Universitas Indonesia; M. Dhafa S. Nurmanto, Universitas Indonesia)

9:00-10:15

Room: COEX307C

8-D

Marketing in Air Transport 2

Chair: **Mikio Takebayashi** | Kobe University

- 132 Airline Choice in a Market with Two Major Players (Isaac Levi Henderson, Massey University; Wai Hong Kan Tsui, Massey University; Thanh Ngo, Massey University; Andrew Gilbey, Massey University; Mark Avis, Massey University)
- 174 Segmenting Online Booking Air Passengers Based on K-means Clustering Methods (Guihong Zhao, Civil Aviation University of China; Runqing Wang, Civil Aviation University of China)
- 220 The Competition between Aviation and New Extension of High Speed Rail in Japan (Gen Hayamizu, Kanazawa University; Makoto Fujiu, Kanazawa University; Junichi Takayama, Kanazawa University)
- 282 Sports, Sponsorship and Spending - Airline Engagement and Activation (Scott Ambrose, Embry-Riddle Aeronautical University; Blaise Waguespack, Embry-Riddle Aeronautical University)

9:00-10:15

Room: COEX308A

8-E

Operations Research in Air Transport

Chair: **Christian Bontemps** | ENAC & Toulouse School of Economics

- 154 Aircraft Acquisition under Demand and Cost Uncertainties: A Stochastic Integer Programming Approach (Wei-Ting Chen, University of New South Wales; Cheng-Lung Wu, University of New South Wales; David Tan, University of New South Wales)
- 164 Binary Particle Swarm Optimization for Solving the Aircraft Routing Problem (Marius Radde, German Aerospace Center (DLR); Eva Lang, zeroG a Lufthansa Systems Company)
- 178 Airline Fleet Size Optimization by Modifying the Sequential Airline Scheduling Process (Michael Husemann, RWTH Aachen University; Raphael Schuetz, RWTH Aachen University; Eike Stumpf, RWTH Aachen University)
- 300 Using QAR Data to Quantify Cruise Fuel Planning Uncertainties due to Prediction Deviation (Agnes Tang, University of New South Wales; Cheng-Lung Wu, UNSW Sydney; David Tan, UNSW Sydney)

9:00-10:15

Room: COEX308B

8-F

Airline Network Development 2

Chair: **Nicola Volta** | Cranfield University

- 119 The Development of Transfer Passengers at Key International Airports (Sven Maertens, German Aerospace Center (DLR); Wolfgang Grimme, German Aerospace Center (DLR))
- 308 The Development of Air Transportation Network Models on Pioneer Routes in Papua, Indonesia (Sakti Adji Adisasmita, Hasanuddin University; Yoniman Ronting, Hasanuddin University; Resti Octavia Palayukan, Hasanuddin University)

Conference Program

262 European Regions and Air Routes' Dismissal Risk (Nicola Volta, Cranfield University; Davide Scotti, University of Bergamo; Alessandro Manello, CNR-IRCrES)

9:00-10:15
Room: COEX308C

8-G

Air Cargo 1

Chair: **Jungkyu Choi** | Dongseo University

- 186 The Key Influential Factors of Air Cargo Terminal to being the E-Commerce Air Hub (Chao-Hung Chiang, China University of Science and Technology)
- 204 Choice Preference of Low Cost Carrier in Air Freight Market: Shippers' and Forwarders' Perspective (Jung Kyu Choi, Dongseo University; Jaeseong Lee, Dongseo University; Seongmin Choo, Dongseo University, Mikyoung Kim, Incheon International Airport Corporation)
- 256 Assessing Airport Strategy for Cargo in Europe (Thomas Van Asch, University of Antwerp; Eddy Van de Voorde, University of Antwerp; Dewulf Wouter, University of Antwerp; Franziska Kupfer, University of Antwerp; Evy Onghena, University of Antwerp)

10:15-10:30
COEX Lobby (3F)

Coffee break

Concurrent Session IX (Thursday, July 5, 10:30-11:45)

10:30-11:45

9-A

Aviation & Economic Development 2

Chair: **Hans Martin Niemeier** | University of Applied Sciences Bremen

- 61 Scope of Airport-oriented Development (AOD) for Indian airports: A Distribution Assessment Using Spatial Econometrics Models (Sunny Bansal, Indian Institute of Technology (IIT) Kharagpur; Joy Sen, Indian Institute of Technology (IIT) Kharagpur)
- 75 Regional Development and New Airport Construction in China: Does a New Airport Really Stimulate Regional Growth? (Kong Wing Clement Chow, Lingnan University; Ka Yiu Michael Fung, Chinese University of Hong Kong; Chi Lok Andrew Yuen, Chinese University of Hong Kong)
- 153 Agglomeration Economies in Aircraft Parts Industry: A Case Study in Japan (Hidenobu Matsumoto, Kobe University; Koji Domae, Kansai Gaidai University)

10:30-11:45
Room: COEX307B

9-B

Airport Strategy, Management & Operations 6

Chair: **Gunyoung Lee** | Korea National University of Transportation

- 22 Introducing Competition in Terminal Navigation Services in Australia and New Zealand (Margaret Arblaster, Monash University)
- 224 Decision Making Methodology on Airport Irregular Operations (IROPS) (Myeonghyeon Kim, The Korea Transport Institute; Yuri Choi, The Korea Transport Institute; Ki Han Song, The Korea Transport Institute)

315 Airport Development and Capacity Deficiencies in Thailand: National Policy Implications (Navatasn Kongsamutr, Kasetsart University)

10:30-11:45
Room: COEX307C

9-C

Environmental Issues in Air Transport 2

Chair: **Wolfgang Grimme** | German Aerospace Center

- 90 Altruism among Air Passengers - Is There a Willingness to Pay for Increased Fuel-Efficiency? (Stefan C. Baumeister, University of Jyväskylä)
- 167 Fuel Efficiency Model through Multiple Regression Analysis & Airline's Method to Enhance Fuel Efficiency and to Reduce CO2 (Sungwoo Jang, Korea Aerospace University; Kwang Eui Yoo, Korea Aerospace University)
- 36 Towards More Sustainability? - The Development of Aviation Emissions from Germany between 1995 and 2016 (Wolfgang Grimme, German Aerospace Center (DLR); Martin Jung, German Aerospace Center (DLR))

10:30-11:45
Room: COEX308A

9-E

Marketing in Air Transport 3

Chair: **Seockjin Hong** | University of North Texas

- 46 Airline E-commerce User Experience Experiment: An Investigation of Thai LCCs passengers' Purchasing Behaviour among Different Online Platforms (Sarakard Pasupa, Silpakorn University; Narudh Cheramakara, Bangkok University)
- 65 Optimal Pricing Rule for One-way Airline Tickets: Empirical Evidences (Elena Irina Ungureanu, University of Aosta Valley; Marco Alderighi, University of Aosta Valley; Christophe Feder, University of Aosta Valley)
- 103 Determining Factors of Air Passengers' Choice of Transfer Airports: The Southeast Asia - North America Market (Jong Hae Choi, University of British Columbia & Incheon International Airport Corporation; Kun Wang, University of British Columbia; Wenyi Xia, University of British Columbia; Anming Zhang, University of British Columbia)
- 291 Organisational Trust: An Application to the Air Transport Sector (David Warnock-Smith, Buckinghamshire New University; Derek Cameron, Huddersfield University; John Frankie O'Connell, University of Surrey)

10:30-11:45
Room: COEX 308B

9-F

Airline Network Development 3

Chair: **Martin Dresner** | University of Maryland

- 66 Expansion of International Airline Networks: An Application to US Carriers (Tatiana Seregina, ENAC-TBS; Chantal Roucolle, ENAC; Miguel Urdanoz, TBS)
- 183 Analysis of Flight Delay Propagation and Delay Cause in Japanese Domestic Air Transport Network (Terumitsu Hirata, Ibaraki University)
- 259 Airlines' Entry Decisions under Schedule Operational Constraints (Sebastian Birolini, University of Bergamo & University of Pavia; Chiara Morlotti, University of Bergamo; Mattia Cattaneo, University of Bergamo; Paolo Malighetti, University of Bergamo; Renato Redondi, University of Bergamo)

Conference Program

279 Competitive Profiling to Evaluate Airline Hub Connectivity (Zeliha Akca, Turkish Airlines)

10:30-11:45
Room: COEX 308C

9-G Air Cargo 2

Chair: **Li Zou** | Embry-Riddle Aeronautical University

- 54 Applying TOE Model to Examine the Adopting Intention of Cloud Information System for the Air Freight Forwarder (Ching-Cheng Chao, National Kaohsiung Marine University; Chien-Yu Chen, National Kaohsiung Marine University; Meng-Xiu Wu, National Kaohsiung Marine University)
- 139 Discrete Choice Model of Drone Delivery Service (Sang Hyun Kim, The Korea Transport Institute; Ga Ram Sim, The Korea Transport Institute; Joon-Kyu Lee, The Korea Transport Institute)
- 171 Unmanned Cargo Operations at Airports: Influencing Factors, Potential Use Cases and First Possibilities for Implementation (Stefanie Helm, German Aerospace Center (DLR); Annette Temme, German Aerospace Center (DLR); Ingrid Gerdes, German Aerospace Center (DLR))

11:45-11:50 Break

11:50-12:50 ATRS General Assembly
Room: COEX 300

Optional excursions:

12:50-19:00 DMZ Tour

14:00-17:00 Seoul City Tour

Air Transport Research Society
ATRS 2018 Seoul
WORLD CONFERENCE

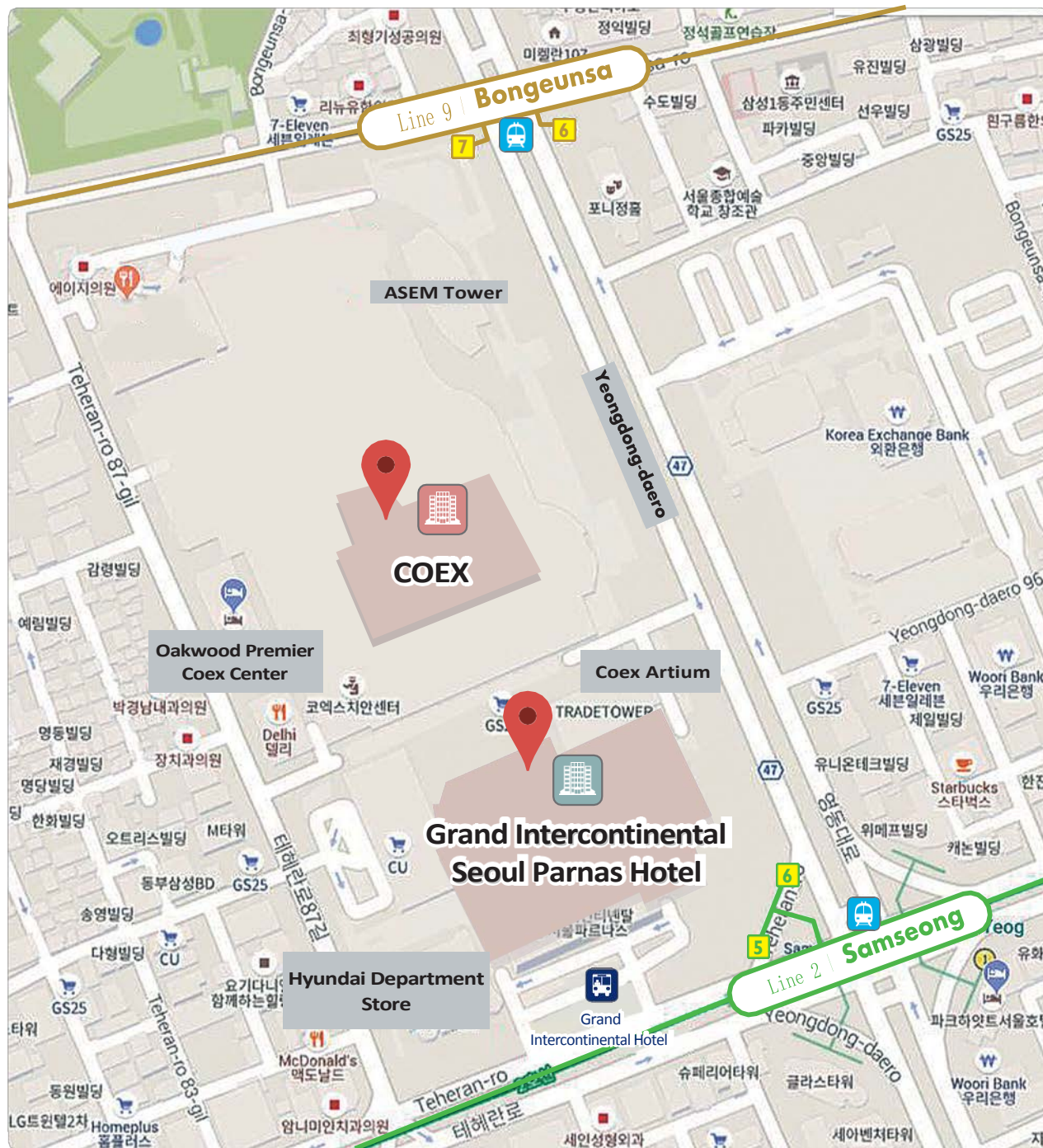


Venue & Tour Programs

A T R S W o r l d C o n f e r e n c e

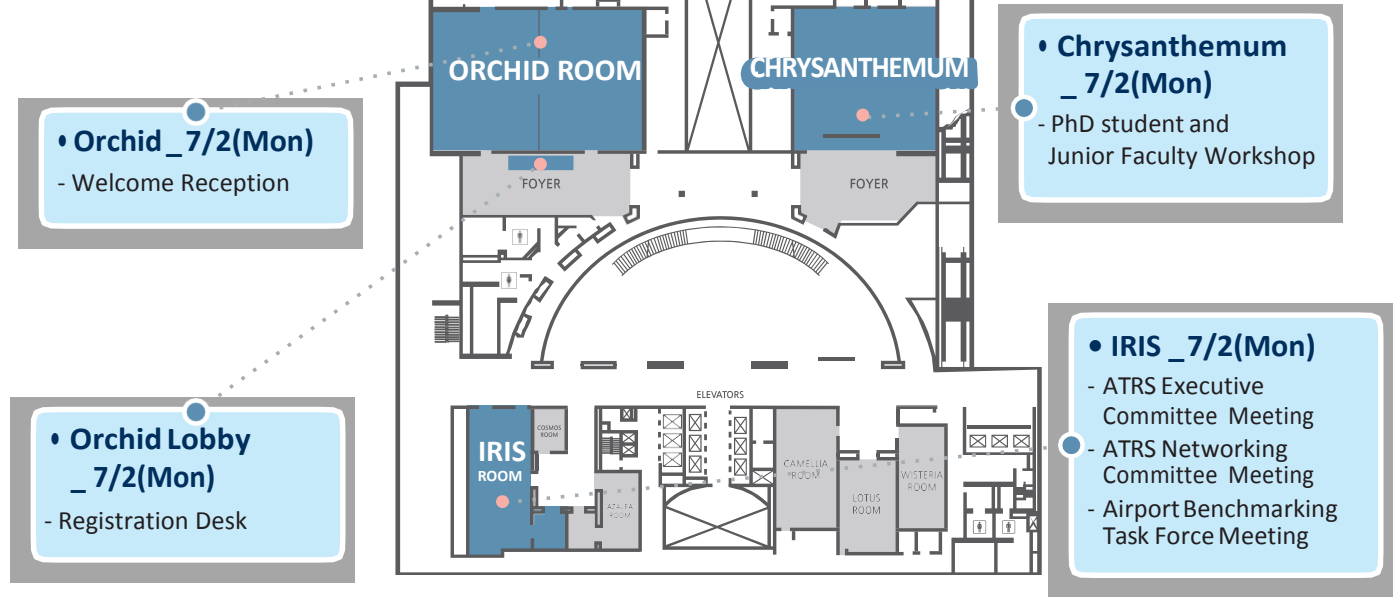


GRAND INTERCONTINENTAL SEOUL PARNAS HOTEL COEX BUS SUBWAY

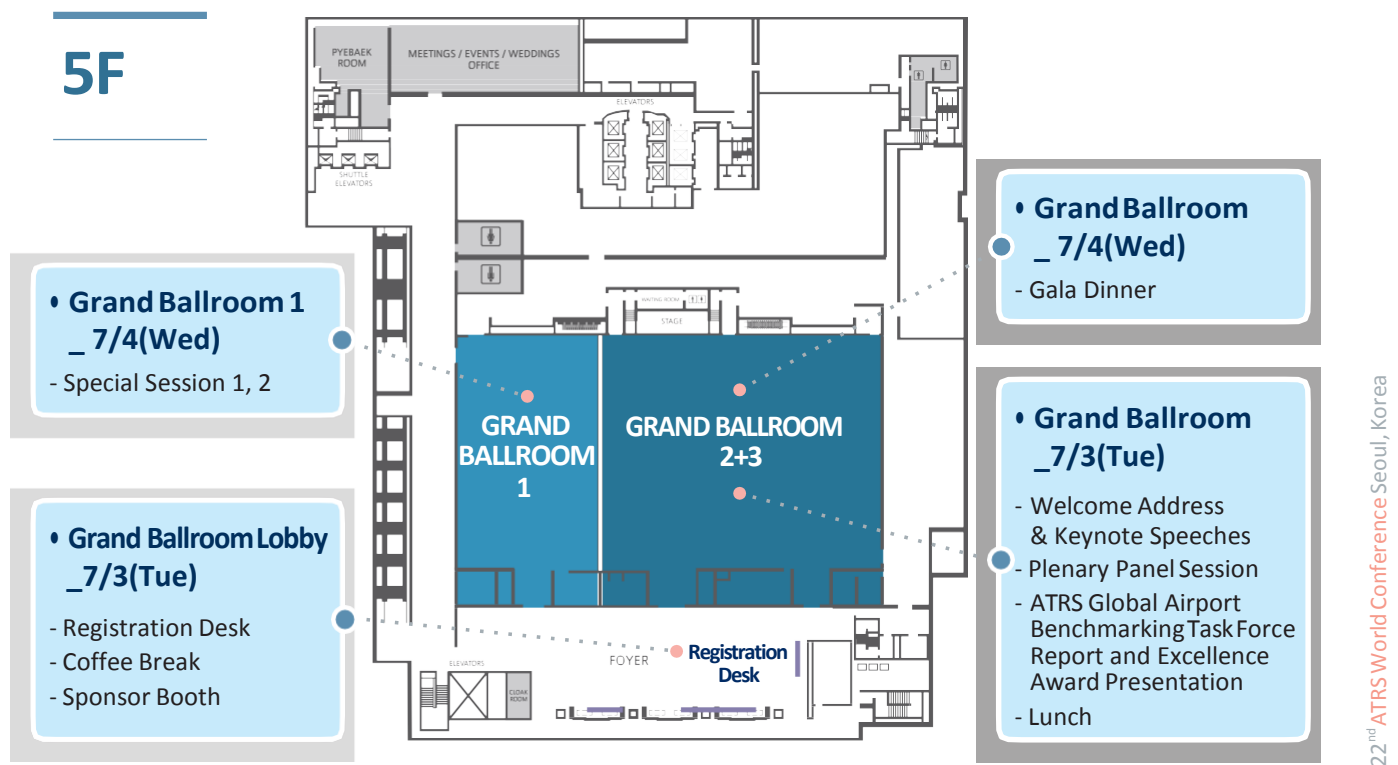


Grand InterContinental Seoul Parnas Hotel

2F



5F



COEX 3F



Gimpo International Airport

Technical Tour is open to all the registered participants.
The tour itineraries are subject to changes.



- | **Date:** July 2nd 2018 (Mon.)
- | **Pick up:** 13:30 PM (Grand InterContinental Seoul Parnas Hotel Orchid Room Lobby 2F)
- | **Return to:** 17:00 PM (Grand InterContinental Seoul Parnas Hotel Lobby)
- | **Tour Timing:** 14:30 PM – 16:00 PM
- | **Mode of Transportation:** Bus
- | **Remarks:** Please submit a copy of your passport.

1. Aviation Training Center

Korea Airports Corporation Aviation Training Center was established in 2017 to further develop aviation industry and train pilots to cope with the future demand. KAC is provocatively pursuing to implement Jet Transition Course that has yet to be facilitated in Korea on the back of governmental policy support and collaboration with CAE, a global training institution. This facility is equipped with state of the art training equipments such as FFSs(Full Flight Simulator) : CAE 7000XR, Aircraft: CESSNA CITATION M2.

2. Seoul-Gimpo Business Aviation Center (SGBAC)

Seoul-Gimpo Business Aviation Center made its debut in 2016 as the nation's first dedicated business aviation services facilities. The facilities are comprised of an executive terminal and 12,490m² of hangar that can accommodate up to eight G550 or Global 6000 simultaneously. SGBAC is committed to providing our customers with safe services of high quality for international corporate jets to get to and from Korea.

* The tour also includes visit to Gimpo Airport domestic terminal and vicinity development such as Gimpo Skycity Project.

Seoul City Tour

- | **Date:** July 5th (Thur.)
- | **Pick up:** 14:00 PM (Room: COEX 308A)
- | **Return to:** 17:00 PM (Grand InterContinental Seoul Parnas Hotel Lobby)



1. Kyeongbokgung Palace

Kyeongbokgung Palace is one of the oldest of the five palaces in Seoul. It is such a great and magnificent building as a representative of Joseon Dynasty. It shows off the beauty of its construction. Through this, it can be a representative tourism spot for foreigners to understand the tradition and history of Korea. This tour course takes around one and a half hours; you will see remarkable pavilions like Kyunghoju and Hyangwonjeong, and beautiful/classy wooden and stone structures as Kyungcheonsaji 10-story tower, you also will see Kyotaejeon and Kangnyungjun places where you can experience the life of noble people with a guide. The choicest tour place for foreign tourists. Gyeongbok-gung Palace is the starting point of 500 years of history in Joseon Dynasty. You will defiantly enjoy the stroll around the place feeling the quiet and peaceful mood. It can be a representative tourism spot for foreigners to understand the tradition and history of Korea. If you want to know the history of Korea properly, you should visit this place.



2 N Seoul Tower

N Seoul Tower, which is on top of the Namsan Mountain is 479.7 meter high. It is the 2nd tallest tower of the world. When you go up to the observatory of this place, you will see the fabulous panorama of Seoul. Also, N Seoul tower has a beautiful night view, you will see the beautiful scenery at the observatory as well as the outside of the tower in this representative landmark of Seoul. In the N Seoul tower; concert, love festival, love locker event, and other various events take place throughout 365 days a year, you will not be bored regardless of when you visit here.

DMZ

- | **Date:** July 5th (Thur.)
- | **Pick up:** 12:50 PM
(Room: COEX 307A)
** The tour at DMZ start from 15:00 until 17:00(2h)
- | **Return to:** 19:00 PM
(Grand InterContinental Seoul Parnas Hotel Lobby)
** Passport biographic page submission must needed



1. Dora Observatory



2. DMZ Theater and Exhibition Hall



3. The 3rd Infiltration Tunnel



4. Dorasan Station

1. Dora Observatory

Dora Observatory, or OP Dora is the closest observation post to North Korea. From the observation platform, North Korean scenery is visible, and so are the outskirts of Gaeseong City, the 3rd largest city of North Korea. Especially, you can view the Gaeseong Industrial Complex operated by both Koreas. If you use the binocular, a statue of Kim Il-sung can be found near the Gaeseong City.

2 DMZ Theater and Exhibition Hall

It's a unique museum within the civilian control line. The museum, on which the nation and provinces had spent 44.5 billion Korean won, officially opened on 08, 14, 2009. DMZ Showroom displays leaflets used during the 6.25 Korean Civil War, military letters, bayonets, empty cartridges, pottery found in DMZ, taxidermied birds and etc.

3 The 3rd Infiltration Tunnel

Since 1974, South Army has discovered four tunnels crossing the MDL. The tunnels are believed to have been planned as a military invasion or infiltration route. Each tunnel is large enough to enable the passage of thirty thousand soldiers in one hour. The 3rd tunnel discovered in 1978 penetrates into South Korea by 435 meters beyond the ceasefire line.

4 Dorasan Station

A sign in the station reads, "Not the last station from the South, But the first station toward the North." For now, it is the northernmost station of South Korea which is only 700m, or a half mile away from the southern boundary of DMZ. The milestones of Dorasan Station (205km to Pyongyang, 56km to Seoul) imply the reality of the division between two Koreas and the hope of a future.

ATRS Executive Committee and Corporate Members

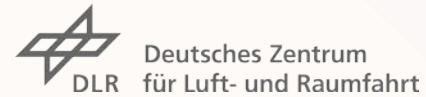
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Transport Policies Designed to Improve People's Quality of Life

For the past 30 years, KOTI has played a leading role in the timely construction and efficient operation of Korea's transport infrastructure. KOTI has also contributed to national economic development and people's higher quality of life through innovation of the nation's transport and policies.

Transport is now required to play an even more vital role in enhancing quality of life and boosting economic growth. Safer, faster and more affordable transport has become a public service for which the government needs to take responsibility. Furthermore, the "4th industrial revolution," based on super-connected and super-intelligent digital technology, comes with new challenges and opportunities for transport, logistics and aviation systems. KOTI will be a leader in shaping and coordinating human-centric and safe transport systems, fast and comfortable commuting, innovating the transport industry through field-oriented and data-driven policy researches. KOTI also aims to become a world-renowned excellent research center in the areas of big data technology, autonomous vehicles, unmanned aerial vehicles, logistics 4.0, and smart mobility.

We will make combined efforts to address current issues in transport and to contribute to the development of new and efficient transport systems. Thank you.



THE KOREA TRANSPORT INSTITUTE | www.koti.re.kr



Korea Airports Corporation(KAC) is a representative public corporation in the Republic of Korea that contributes to the national economic development by providing seamless air transportation services with high efficiencies in construction, management and operation of 14 airports nationwide. We make ceaseless efforts to fulfill both corporate social responsibility and stakeholder's satisfaction by establishing people-centered strategic goals.

The individual and corporate efforts made by KAC employees and executives are focused on enhancing the safety & convenience and efficiency of our airports. As a result, Daegu and Cheongju airport saw the first surplus, reaching a total passenger traffic of 81.25 million, for the first time, which is a 3.5% increase year on year. Moreover, KAC has been awarded the Airport Service Quality(ASQ) Award for six consecutive years as the best airport in the world and was recognized for the efficient airport operation.

Korea is welcoming a large number of tourists from all over the world and the number of Koreans traveling overseas has increased by 17.9% year on year, reaching approximately 53 million. To meet increasing demand for air transportation, KAC's new airport construction is underway at Gimhae, Jeju, Ulsan and Heuksan. Through this, KAC is creating quality jobs and increasing public access to air transportation as to contribute to the balanced national development.

Our global competitiveness in aviation industry is secured by the 4th Industrial Revolution technologies, commitment to aviation research, and fostering experts in comprehensive airport operation including pilot training.

As a public enterprise, our commitment to corporate social responsibility in creating social value is translated into action in social welfare, education, culture and the environment at home and abroad. We have aligned our overseas business with the government's Official Development Assistance(ODA) program to support developing countries, which is also in line with the "No Country Left Behind" campaign led by International Civil Aviation Organization(ICA) to build and expand aviation infrastructure and capacity of emerging economies.

KAC's vision "Connecting the World, Inspiring the Future" is aimed to seek both corporate interest and public value, while enhancing passenger experience at our 14 airports.



www.airport.co.kr



Incheon Airport



About Incheon International Airport Cooperation

“A New Leap Forward, Towards the Global Leading Airport”

Incheon International Airport, which connects the Republic of Korea with the world, has finished the long journey of phase 3 construction and now it makes a new leap forward into the future with the grand opening of Terminal 2, boasting more convenient facilities and service.

With the goal of being the hub airport of Northeast Asia, Incheon International Airport has shown steady growth and became a No. 7 airport in the world in terms of international passengers and No. 3 in international cargo. Amid the rapid growth, more than 50,000 airport family members put safety and comfort of passengers before anything else, and we achieve the honor of being the best service airport in the world for 12 consecutive years.

Instead of dwelling in our past glory, Incheon Airport takes on a new challenge for the future. With eye-catching services and facilities, we will draw more passengers, expand our facilities in preparation for more than 100 million passenger demand, and become the state-of-the-art smart airport with futuristic technologies. With the focus on high-value adding logistics, we will be reinforce the role of logistics hub and rise to the center of aviation, logistics, tourism and culture of Northeast Asia by completing the Air City project.

We will take a step further to enter the global market with Incheon Airport’s world-class service and pioneer the new export market of airport operating system.

We ask for your continued support and encouragement till Incheon International Airport becomes a true hub of the world beyond Northeast Asia.



About Korea Aerospace University

Korea Aerospace University (KAU) was established in 1952 as a national university.

Over sixty-five years, it has fostered highly skilled experts for the aerospace industry and has played a leading role in conducting research.

KAU is the one and only university in Korea that specializes in aerospace education and research. It is a nationally and internationally recognized university offering aerospace programs, such as flight operations, air traffic control, aircraft maintenance, airport management, air transport and logistics, and space law. Advanced engineering programs are also prominent, providing cutting-edge knowledge in design and manufacturing of aircraft and even outer-space structures.

KAU professors publish their research results in leading international journals, particularly in the specialized fields of unmanned aerial vehicles, space launch vehicles, avionics, air traffic control, and aircraft authentication. The university plans to enhance its status as a leader in aerospace technology by cooperating with the aviation industry.

To continue to develop global leaders in aviation and aerospace, Korea Aerospace University will proudly reach out from Korea to the rest of the world, from the present generation to the next, and beyond.

KOREA CITY AIRPORT



About Seoul Coex City Airport

COEX City Airport(CALT), since its opening in 1985 at Samseong-dong in Gangnam-gu, the center of trade and culture in South Korea, provides one-stop departure services from check-in by airlines, immigrations, and exclusive gates for passengers of the city airport, as well as non-stop limousine services to the Incheon Airport.

COEX City Airport is an affiliate of the Korea International Trade Association (KITA), a public business with more than 70,000 member companies, and has accumulated a wide range of experience, capabilities, and know-how in running city airports. If you have an interest in partnership in city airport business in cities around the world, please contact us.

CALT is also a logistics company that supports promotion of national trade in South Korea. It has six large logistics centers at major free trade zones in the Incheon Airport, the Pusan New Port and Pyeongtaek Port. As an integrated logistics company, CALT provides comprehensive logistics processes including consolidation, dismantling, sorting, storage, stock control, warehouse management and so etc.

Recently CALT launched its container rental business and is also planning to expand its business sectors to those that need special requirements and infrastructures, such as dangerous goods, perishable stuffs and reverse logistics by using domestic and global partner networks.

www.calt.co.kr



The member of society which cannot protect citizen's life could not be happy, so the society with happiness for all citizen starts from the value; 'Human first'.

Korea Transportation Safety Authority is a professional organization managing and researching for the safety of traffic on the roads, rails, and aviation. We concentrate all our capability for our citizen to make their lives be safe and comfy, and to protect their lives from traffic accident. We also try our best to keep our traffic safety level with top 10 ranked economic scale in the world.

We are trying to reduce accident by car with preventive activity such as development and supply for high tech equipment, and managing for digital record of run. We do our best to manage safety for next generation vehicle such as electric and hydrogen powered can be safe for citizen through safety evaluation, defect investigation in manufacturing, and inspection of safety.

Also we are preparing future traffic safety that gives innovation to citizen's lives such as technology securement for self-driving cars with K-city which is the experimental city in fourth industrial revolution, drone safety management backed up vitalization on drone industry, and traffic big data analysis.

We, Korea Transportation Safety Authority try our best to realize our value 'Human First' in traffic safety. We will always be a strong protector for our citizen next to them.

www.kotsa.or.kr



“We support the dreams of young people to help them pioneer a new era with their creative talent and passion.”

Since Dongseo University opened in 1992, it has been growing rapidly based on the three strategies of specialization, informatization and internationalization. Now, Dongseo University is preparing for the era of the Fourth Industrial Revolution with a new vision of an innovative Future University.

Dongseo University is recognized as a leader in internationalization. Through its various global programs, as many as 1,000 students a year can obtain overseas experiences. Moreover, the university is expanding its global programs in areas such as joint degree programs with distinguished universities in foreign countries. These programs create opportunities both for students from overseas and for those at Dongseo University, who may visit one another's country as though they are part of a single campus.

Through innovative future-oriented education, enhancement of global capabilities, and “education without dropouts,” which values the potential of each student, Dongseo University will help all of its students create a Bright Future.

www.dongseo.ac.kr



Since the establishment in 2005, JEJU AIR has made remarkable growth as Korea's largest, most successful and profitable LCC. We offer scheduled regular flights, operating 7 domestic and 44 international routes in Asia Pacific region. To achieve economies of scale, we introduce 6-8 aircrafts annually and operate a fleet of about 50 aircrafts by 2020. Especially, The Boeing 737 MAX will be deployed on long-haul sectors with serving more destinations next year.

Through these efforts of expanding its stations based on aggressive fleet plan, we could reach annual cumulative of 10 million passengers and recorded 101 billion won operating profit on the back of 996 billion won revenue in 2017.

JEJU AIR also has been improving range and performance of products by joining 'Value Alliance' which has a broad network of low cost carriers in Asia Pacific Region. Opportunity to boost revenue via alliance increases exponentially with our expanded network growth.

Furthermore, JEJU AIR ensure that focusing on technology and infrastructure investment will contribute to enhance IT competitiveness as well as customer service for future growth. With this IT initiative, JEJU AIR aims to become a safer, more convenient and affordable airline.

www.jejuair.net



AIR BUSAN(BX/ABL) was established in August, 2007 as a regional airline based in the southern area of Korea. In ten years, since our first launched flight departing Busan, we have expanded our regional sky. One in three passengers using Gimhae International Airport(PUS) is currently using AIR BUSAN. Thus, we have become a trusted carrier which the majority of passengers are travelling with.

AIR BUSAN has made efforts to return the best value to our customers by consistently implementing our core value, that is to say safety, convenience and affordability. As a result, we became the only airline that received 'the level A (Most excellent)' in both domestic and international flights of 'Airline Service Assessment' announced by the Ministry of Land, Infrastructure and Transport 3years in a row from 2013 to 2015. In addition, AIR BUSAN has won the first place for Low Cost Carrier Section at Korean Customer Satisfaction Index (KCSI) 5 years in a row from 2013 to 2017 and Korean Standard – Service Quality Index (KS-SQI) in 2013, 2016 and 2017. By doing so, we could firmly prove that AIR BUSAN is the best airline among domestic LCCs in cases of safety and service which are our core values.

AIR BUSAN has been growing into a well-established airliner, setting up a significant milestone along the way in Korean civil aviation industry. Having been evaluated as a successful model of Korean LCC at our international destinations such as Japan, China, Southeast Asia, and so on, we have been enhancing our reputation as one of reliable Koran airliners and have set our position as a true international airliner covering beyond regional areas.

www.airbusan.com



Eastar Jet pleasant flight for you
 Eastar Jet aims to allow everyone to enjoy flight.
 The airline that touches the heart of customers with reasonable price and the best safety and service, that's 'Eastar Jet'.

Eastar Jet currently operates five domestic routes and 27 international routes to countries such as China and Japan as well as Southeast Asia and, based on its cooperative network with China, has flown to China the most among Korean low-cost carriers.

Eastar Jet has an unparalleled experience especially in charter flights to Pyongyang, North Korea. In 2015, it operated a special charter for Lee Hee-ho, wife of the former president Kim Dae-jung, to Pyongyang and recently, it successfully ran a special charter to the North Korean capital for the South Korean performance team visiting the city before the summit meeting between the North and South.

Greeting its 11th year anniversary this year, Eastar Jet is planning to have an IPO by 2019 based on its continued growth and aims to make a new leap to become the best LCC in Northeast Asia with the introduction of the next generation model B737-MAX, vigorous sales marketing, development of new routes, and vitalization of regional airports.

www.eastarjet.com



ASEA Aviation College was established in 1993 for the purpose of producing the country's top-tier technicians in the aviation industry. Since then, it has produced a large number of highly qualified technicians who have played a central role in the development of the country's aviation industry.

In line with the founder's vision, ASEA does its best to cultivate top-notch aviation technicians boasting of both abundant competence and upright moral character.

As part of such efforts, ASEA opened a foreign language institute on campus for the first time among local technical colleges and established the ASEA Future Talent Development Center devoted to moral and character education. As always, ASEA will continue to lead aviation-related vocational education in Korea by introducing the most advanced technology training facilities and curricula.

The aviation industry has kept growing at a fast pace in Korea amid the increasingly higher youth unemployment rate coupled with the lackluster performance of the country's key driving forces for growth. The industry is estimated to record even faster growth down the road given the impressive overall economic growth in Northeast Asia.

Against such backdrop, ASEA has focused on aviation occupational education and produced over 19,000 graduates for the local aviation industry for more than 20 years. ASEA spares no efforts to help each and every one of its students realize their dreams through hard work and integrity.

Today, professional skills count more than one's academic background. Take on challenges and realize your dreams.

www.asea.or.kr

Aerospace & Defense

The Only Aerospace Specialized Journal in Korea

<Aerospace & Defense>, which has published its first issue 29 years ago, is the only Korean journal specializing in aerospace field.

With in-depth articles and up to date aerospace news, it is the most favored aerospace journal by the Ministry of National Defense, the Air force-Army-Navy, the Defense Acquisition Program Administration(DAPA), Ministry of Land, Infrastructure and Transport, the aerospace industry, and the public who have an interest in aerospace.

<Aerospace & Defense> also has been publishing <Aerospace>, the Korea Aerospace Industries Association(KAIA)'s quarterly magazine since 2001.

The magazine of Authority, Acknowledged by the Government

<Aerospace & Defense> has been recognized as an opinion leader in Korea for its long history of 29 years and professionalism. Especially, the magazine has been acknowledged by the government as of 2007 when it was given the title of an "Outstanding Journal".

In 2009, <Aerospace & Defense> was awarded by the government for contributing to Korea's magazine culture, and it also became the Korean Magazine with "Outstanding Contents" in 2010, 2012, 2015 and 2018

The official "Show News" publisher for the Seoul ADEX

<Aerospace & Defense> has been publishing the official "Show News" for the biennial Seoul ADEX since 1996. The magazine dispatches a task force of specialized journalists during the exhibition to provide coverage to both domestic and foreign businesses in the aerospace industry.



www.aviation.co.kr



HANSEO UNIVERSITY

Founding Spirit

Hanseo University's priority is to create a learning environment that encourages creativity, confidence and contribution.

Educational Purpose

Hanseo University is committed to the educational philosophy of the nation. In this light, the University teaches and researches state-of-the-art theories and their applications for the development of the nation and human society, thus producing a leadership to contribute to various fields of the society.

Brief History

Relatively new in the Korea academic circle, Hanseo University was founded in 1992 to strive for creativity, confidence and contribution. Located on the peaceful hillside of Mt. Gaya, adjacent to Seosan City in Chungnam Province, Hanseo University is an academic community where 8,500 students pursue their academic goals in one of its 50 departments that are staffed by 250 full-time faculty members. From the outset, in tune with the growing importance of globalization, the University has focused on offering innovative, specialized educational opportunities.

What highlights Hanseo University uniqueness is its 2A program of aeronautics and arts. The newly constructed Taeon Airfield and Flight Education Center, the first facility of its kind in Korea, go far in providing specialized training in aeronautics. In addition, the Product Surface Design Innovation Center gives Art program students opportunities to develop their skills in industrial and product designing.

www.hanseo.ac.kr

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We extend our sincere thanks to all Sessions Chairs, our conference hosts and every participant for your kind support!

We look forward to seeing you all next year in Amsterdam!



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