

해외출장 복명서

- World Habitat day 2012 기념 세미나 참석 -

2012. 10

국토연구원

I. 출장개요

1. 출장목적

- World Habitat day 2012 기념세미나에 초청받아 한국의 스마트도시를 소개하고 관련 사례 발표 및 토의

2. 출장개요

- 출장일시: 2012.9.30(일) ~ 2012.10.2(화) (1박 3일)
- 출 장 지: 말레이시아 푸트라자야
- 출장목적: World Habitat day 2012 기념세미나 발표
- 출장일정:

일 자		주요 수행사항	대상도시
9월	30일	인천국제공항 출발 및 푸트라자야 도착	인천→ 쿠알라룸푸르 -> 푸트라자야
10월	1일	World Habitat day 2012 기념 세미나 참석	푸트라자야
	1일/2일	쿠알라룸푸르공항 출발 및 인천 도착	푸트라자야→ 쿠알라룸푸르 -> 인천

3. 출장경비

항공료 및 숙박비는 주최 측에서 제공

4. 출장 중 주요 수행내용

(1) World Habitat day 2012 기념세미나 발표 및 참석

- 발표자: Hamdan Majeed (Executive and Founding Director of Think City Sdn Bhd.), Data' Ismail Ibrahim(CEO of Iskandar Regional Development Authority), William Lau Hui Lay(President of Singapore Institute of Planners), Jae Yong Lee (Associate Research Fellow, KRIHS)
- 주요 논의사항
 - World Habitat day 2012를 기념하여 UN에서 선정한 테마인 “Change Cities, Building Opportunities”라는 주제를 가지고 각국의 도시계획 방향 및 경험에 관련된 발표 및 토론

II. 출장내용

1. World Habitat Day 기념세미나 참석 및 발표

- 시간 : 2012년 10월 1일(월요일)
- 장소 : Putrajaya Convention Center, Putrajaya Malaysia
- Program

PROGRAMME	
Session 1 - Seminar	
8.00 am	Registration of Participants & Refreshments
9.00 am	Opening of Conference MC Welcome Remarks and Doa Ratical Welcome Address by Organising Committee Chairman <i>YBrs. Tuan Yong Bun Fou, Deputy Secretary General (Policy & DEvelopment) Ministry of Housing and Logal Government, Malaysia</i>
9.15 am	Lead Paper Cities, People and Economy Hamdan Majeed, Executive and Founding Director of Think City Sdn Bhd, an urban regeneration company of Khazanah Nasional Berhad
10.00 am	Paper 1 A Changing Urban Region - Opportunities for Economic and Social Growth in Iskandar Malaysia and the Role of Governance Dato' Ismail Ibrahim - CEO of Iskandar Regional Development Authority
10.45 am	Coffee Break
11.00 am	Paper 2 Singapore Changing City - Challenges and Opportunities in Managing Resources William Lau Hui Lay - President, Singapore Institute of Planners
11.45 pm	Paper 3 Implementation of Smart City in Korea in response to Climate Change Dr. Jae Yong Lee, Korean Research Institute on Human Settlements (KRIHS)
12.15 pm	Panel Discussion Moderator <i>Madam Khairiah Talha, Honorary President of EAROPH</i> Panelist <i>Dato' Ismail Ibrahim, CEO IRDA</i> <i>William Lau Hui Lay - SIP President</i> <i>Dr. Jae Yong Lee - KRIHS</i> Appreciation To Paper Presenters
12.55 pm	Reflection and Closure of Conference <i>Norliza Hashim</i> <i>Secretary General, EAROPH</i>
1.15 pm	END OF CONFERENCE (Lunch at restaurant, concourse level)
Session 2 - Habitat Celebration	
1.30 pm	Arrival of Guest
2.00 pm	Arrival of YBhg. Datuk Arpah Binti Abdul Razak Secretary General, Ministry of Housing and Local Government Malaysia Arrival of YB Dato' Seri Chor Chee Heung Minister of Housing and Local Government Malaysia
2.30 pm	Choir : Negaraku and 1Malaysia Do'a recitation Welcoming Address <i>by YBhg. Datuk Arpah Binti Abdul Razak</i> Opening Remark <i>by YB Dato' Seri Chor Chee Heung</i> Prize Giving Ceremony <i>by YB Dato' Seri Chor Chee Heung</i> Hi Tea
3.10 pm	Multimedia presentation Choir Performance End of Programme

○ 「한국의 유비쿼터스도시 적용 사례」 발표 자료

National World Habitat Day 2012



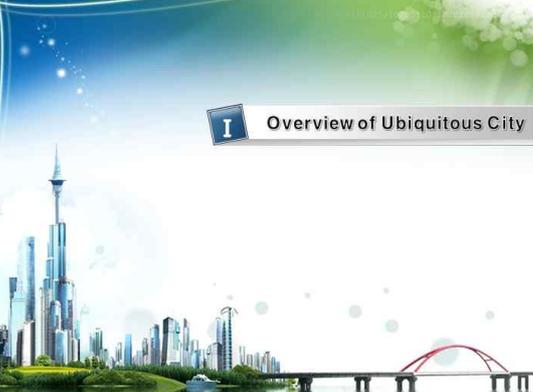
Implementation of Smart City In Korea (U-City)

KRIHS
(Korea Research Institute for Human Settlements)

Dr. Lee, Jae Yong
(leejy@krihs.re.kr)



- I Overview of Ubiquitous City
- II Ubiquitous City Policy
- III Status of U-City in Korea
- IV Current U-City Issues

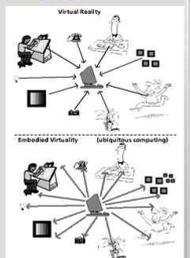


I Overview of Ubiquitous City

I. Overview of Ubiquitous City

Concept of Ubiquitous (1)

- 1 The word "ubiquitous" means that "being everywhere at the same time"
- 2 The word "ubiquitous" is about bringing computing to people's physical world
- 3 New paradigm shift that technology is embedded in our environment and invisible

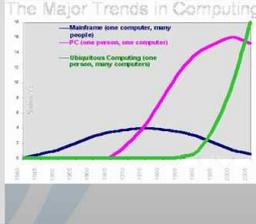


I. Overview of Ubiquitous City

Concept of Ubiquitous (2)

Computing trends are coming from the results of computing getting **smaller, faster, and cheaper**

- The First Wave was many people per computer (Mainframe Era)
- The Second Wave was one person per computer (PC Era)
- The Third Wave will be many computers per person (UbiComp Era)



I. Overview of Ubiquitous City

Stages of Urban Revolution

"A demand for change to resolve urban problems of modern city"



Features:

- Ancient/Medieval City:** Political, Cultural, Fortress City; Establishment of Civil Society
- Pre-Modern City:** Concentration of Population, Capital, and Industry; Urban Post-industrial Economy
- Modern City:** Road, Railroad-Oriented Urban Development; Large Scale of Industrial Development
- Future City:** Human, Information-Oriented City; Intelligent Urban Services and Management Infrastructure

Changes in Urban Paradigm:

- Existing City:** Distances-Centered City; Centralization of Pop., Transport, Business; Environment, Energy Problems; Time-Space Constraints; Limited of New Urban Functions; Producer-Oriented Market System
- Future City (U-City):** Information-Centered City; Dispersion and Compression of Pop., Transport, and Business; Self-Sufficient Eco-Friendly City; Seamless Access to Information; Efficient Urban Management; Creation of User-Oriented Business

I. Overview of Ubiquitous City

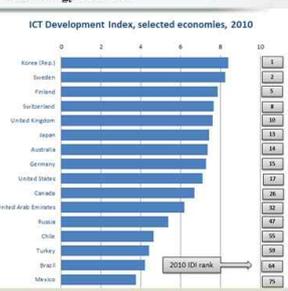
Process of Korean Urban Development



- Postwar Restoration Stage
- Unplanned Urban Development, 1950s
- Industrialization Economic Development Stage
- Innovative Newtown Development, 1960s-1970s
- Industrial Cities, Port Cities
- Housing Shortage Relief Stage
- Housing+Self-Sufficiency Stage
- The 1st Stage of Newtown Development, 1980s-1990s
- 5 Newtowns in Metropolitan Area such as Bundang, Ilsan
- The 2nd Stage of Newtown Development, Early 2000s
- Innovative Cities, FEZ etc.

I. Overview of Ubiquitous City

Technology of Korea



Country	IDI Score (2010)	Rank
Korea (Rep.)	9.1	1
Sweden	8.9	2
Finland	8.7	3
Saudi Arabia	8.5	4
United Kingdom	8.3	5
Japan	8.1	6
Australia	7.9	7
Germany	7.7	8
United States	7.5	9
Canada	7.3	10
United Arab Emirates	7.1	11
Russia	6.9	12
Chile	6.7	13
Turkey	6.5	14
Brazil	6.3	15
Mexico	6.1	16

Source: 2011. International Telecommunication Union (ITU)

- (ICT Field) ICT Development Index of Korea is **first-ranked in the World (2010, 2011)**
- (Construction Field) Korea shares **4.3% of the global construction market (9th-ranked)**. Especially, Korea dominated **12.2% of the Middle East Asia construction market (2nd-ranked) - 2009**
- High development of ICT & construction technology in Korea can make consider the **construction technology with ICT convergence**

I. Overview of Ubiquitous City

Background of Korea U-City

Problems Caused by Urbanization	Reaching World Top Class ICT	Creation of Future City
Over-Sized and Overcrowded City Congestion and Decadence of a City Regional Imbalance Traffic Problem Environment Problem Emergency Problem Forestry Crime	World Top Class ICT Infrastructure World Top Class ICT Industry	Sustainable City/Livable City Green City/Self-sustainable City

Future City model is required to increase competitiveness of cities and quality of citizen's life with ICT to solve current problems of cities

I. Overview of Ubiquitous City

U-City is...
 a future city where ubiquitous infrastructure is built by integrating cutting-edge information communication technology(ICT) into urban infrastructure such as roads, bridges, schools and etc. to provide ubiquitous services such as transportation, environment, and welfare at anytime and anywhere

Providing Various Ubiquitous City Services anytime and anywhere

Ubiquitous City Infrastructure
 Intelligent Facility IU-City Operation Center Information Technology Infrastructure

Example: Urban Infrastructure + (Smart Building, Smart Road, Smart Traffic, Smart Environment, Smart Security, Smart Energy, Smart Facility Management) = Technology for Ubiquitous City

I. Overview of Ubiquitous City

U-City Infrastructure and Service

Provide the foundation for realizing U-Service by establishing IT infrastructure (communications network, urban integrated operation center) and spatial infrastructure (sensors) to urban infrastructure

I. Overview of Ubiquitous City

Background of Korea U-City

I. Overview of Ubiquitous City

Background of Korea U-City

I. Overview of Ubiquitous City

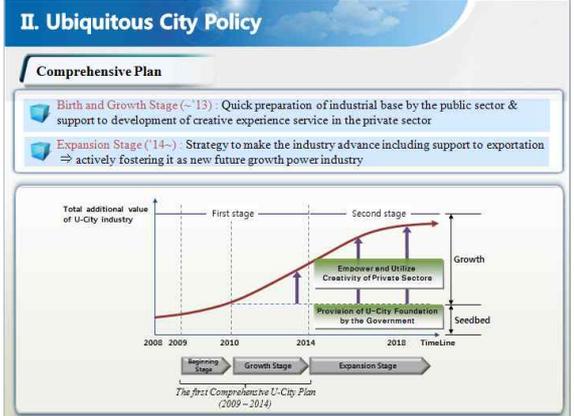
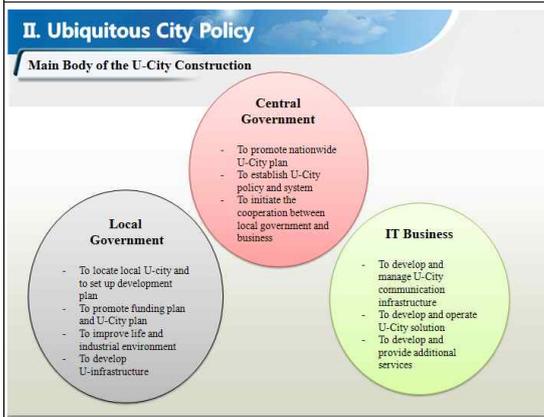
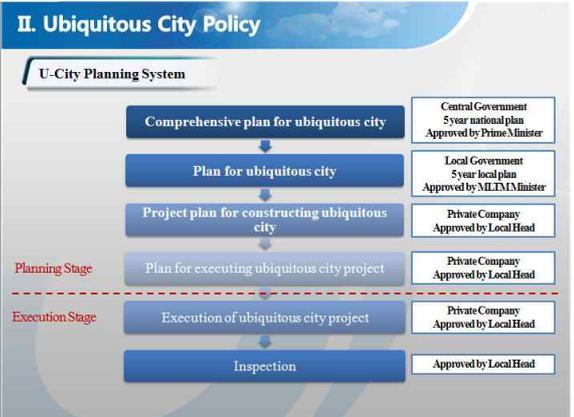
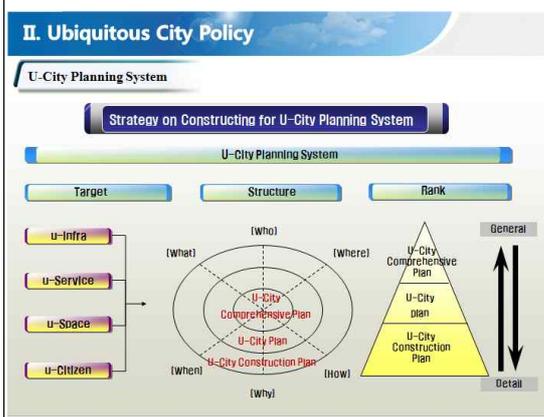
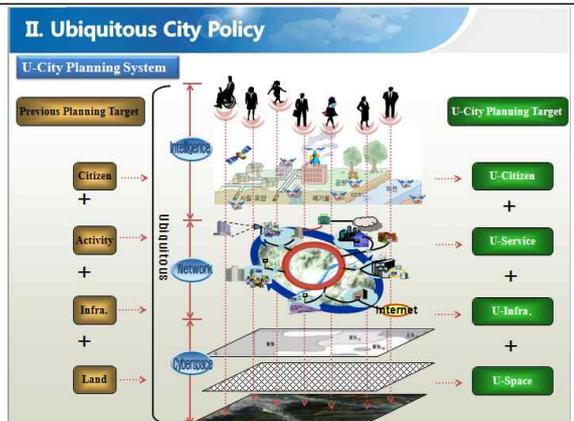
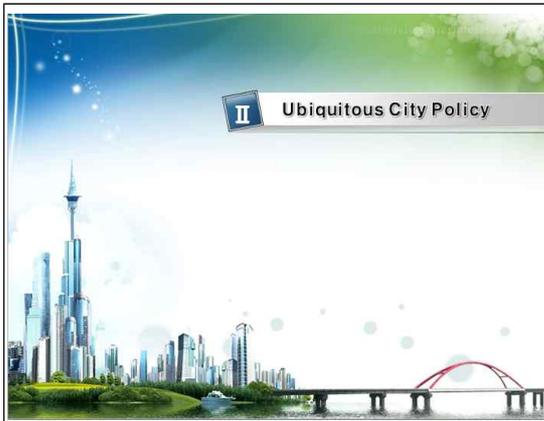
Service Example

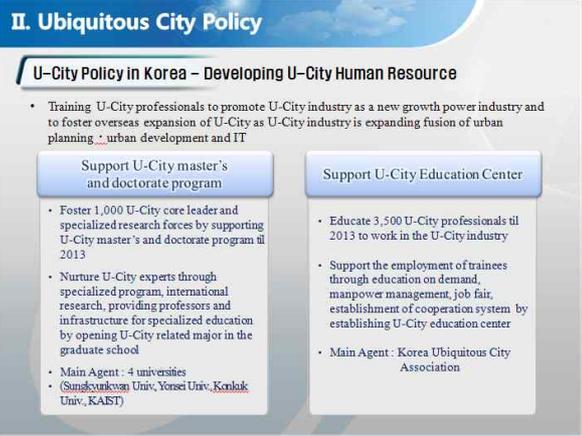
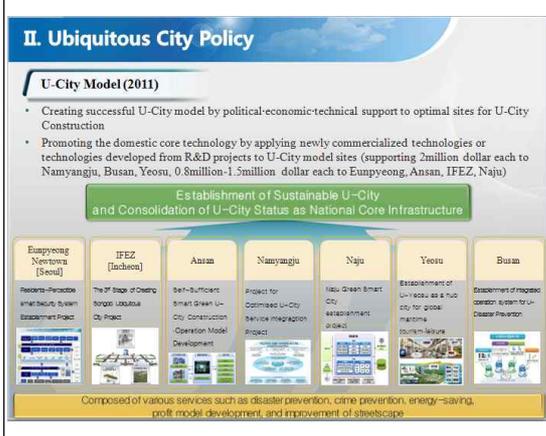
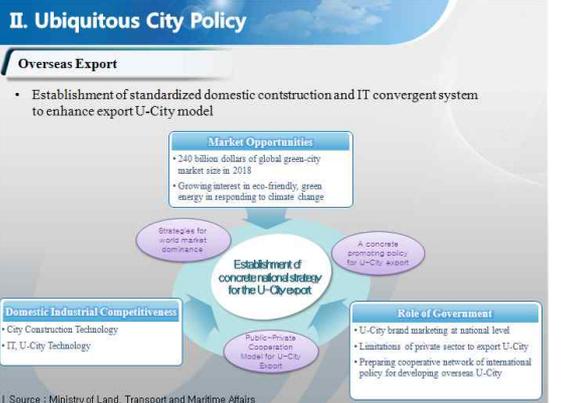
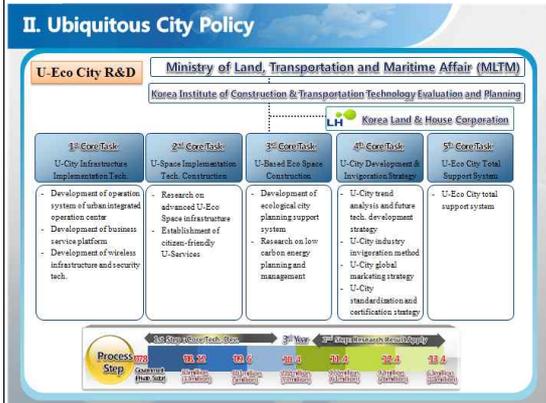
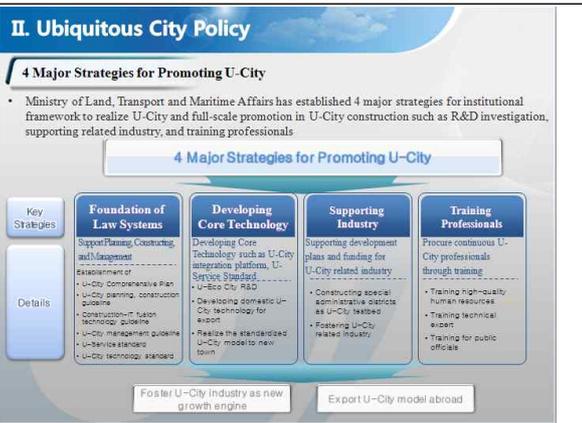
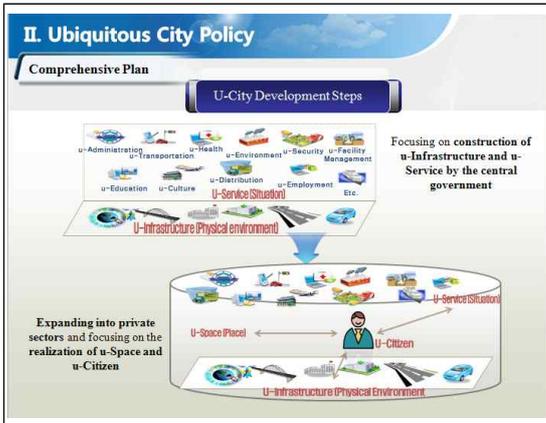
I. Overview of Ubiquitous City

Service Example

I. Overview of Ubiquitous City

Service Example





III. Status of U-City in Korea

- Types of U-City in Korea
- Status of U-City Promotion in Korea
- Examples of U-City Construction Project in Overseas

III. Status of U-City in Korea

Types of U-City in Korea

- U-City is a project for providing U-Service through ubiquitous infrastructure built all around a city, while U-Town provides U-Service through buildings or infrastructure built in some part of a city

	U-Town	U-City
Space	Part of City, Building Complex	New town and City
Main Agents	Private Sector or Public-Private Cooperation	Public Sector or Public-Private Cooperation
Scale	A complex or areas less than a city	A city or areas larger than a city
Target	Schools, Streets, Silver town (retirement village)	Newtown, Company City, Innovation City, FEZ, etc.
Example	u-Campus, Sangam DMC, Konkuk u-Star City Provide service to town	Gwangju, Pangyo, Sejong, Paju, and other U-City Projects in Major Metropolitan Area Provide service to the whole city

III. Status of U-City in Korea

U-Town: Sangam DMC

- Sangam DMC (Digital Media City): World best IT infrastructure

III. Status of U-City in Korea

U-Town: U-Star City

- StarCity for Old People

III. Status of U-City in Korea

Dongtan, Hwasung U-City

- Integrated Operation Center
 - Safety Service
 - Transportation Service
 - Environment Protection Service
 - Facility Management Service
- Project Period
 - 05.2006 ~ 09.2008

III. Status of U-City in Korea

Dongtan, Hwasung U-City

- Bus Information System
- Safety Service
- Project Period
 - 05.2006 ~ 09.2008

III. Status of U-City in Korea

Status of U-City Promotion in Korea(1)

- IFEZ Songdo (2004~2014): Stronghold in North East Asia focusing on international business. Tested for integration management center, U-City, experience center.
- Incheon(1)
- Seoul(1)
- U-Seoul: Establishing 2008 Master Plan. Applies U-Technology to Newtowns/Cheongcheon/ libraries/traffic management center.
- U-Daegu: Provide future industry & business environment.
- Daegu(1)
- Daegu(1)
- Busan(1)
- Busan U-City (2005~2012): Aims for the economic/cultural/scientific hub city.
- Gwangju(1)
- U-Gwangju (2008~2010): Aims for ubiquitous cultural center.
- U-Deaen: U-Smart Town/U-ITS/U-R&D.
- U-Daegu: Provide future industry & business environment.

III. Status of U-City in Korea

Status of U-City Promotion in Korea(2)

- Seongnam Pangyo (2003~2009)
- Paju Wooneong (2003~2009)
- Gwangju Technovalley (2005~2010)
- Hwasung Dongtan (2001~2007)
- Yongin Heongbuk (2004~2008)
- Ahyang Informatization U-City
- Dongtan FEZ (2008~2012)
- Asan Development town (2008~2012)
- Seong Administrative District (2008~2010)
- Taejeon Company City (2008~2010)
- Chungnam Innovation city (2008~2012)
- Jeonju U-Jeju (2005~2010)
- Mju Company City (2008~2015)
- Jeonbuk Innovation City (2005~2015)
- Muan Company City (2005~2011)
- Yongnam Haeam Company City (2008~2015)
- Gwangju Jeonnam Innovation City (2009~2012)
- U-Gangwon Strategic Plan & Proliferation
- Gangneung U-Blue Trade City (Wonsa company city) (2009~2011)
- Gangneung Innovation city (2008~2013)
- Pyeongchang U-Service for Olympic Winter Games
- U Bio-City construction (2005~2009)
- Chungju company city (2005~2011)
- Chungbuk Innovation city (2006~2012)
- U-Gyeongbuk (2008~2010)
- Pohang Informatization strategic plan (2008~2010)
- Daegu Innovation city (2005~2012)
- Gyeongbuk Innovation city (2008~2012)
- Tongyeong U-Travel City
- Uran U-Ujeon
- Yongju U-City (2008~2010)
- Silhak U-City
- Buam Innovation city
- Ujeon Innovation city (2005~2012)
- Gyeongnam Innovation city (2008~2012)



○ 출장관련 사진



Tuan Yong Bun Fou, Deputy Secretary General, Ministry of Housing and Local Government



Hamdan Majeed, Executive and Founding Director of Think City Sdn Bhd



William Lau Hui Lay, President of Singapore Institute of Planners



Jae Yong Lee, Associate Research Fellow, KRIHS



Panel Discussion



Coffee Break

III 종합

□ **EAROPH (EAsern Regional Organisation for Planning and Housing: 아태지역 개발기구)**

- EAROPH는 총 28개국 82개 기관이 참여하는 UN 산하 비영리 조직이며 현재 국토연구원장이 회장으로 재임하고 있음
- EAROPH는 아시아 태평양 지역의 더 나은 정주환경을 위한 문제 인식 및 해결 방안 모색을 위해 민간, 공공, 학계 전문가와 실무자들이 참석 및 교류를 통해 각국의 도시계획과 주택 등 정주환경과 관련된 정책 발전에 기여하고자 1954년 창설되었으며 2년 주기로 세계 대회 개최

□ **World Habitat Day 2012 세미나**

- EAROPH와 말레이시아의 Ministry of Hosing and Local Governemt가 주도적으로 세미나를 개최함
- 현재는 동남아의 상대적으로 발전된 국가들(말레이시아, 싱가포르, 홍콩 등) 중심으로 다양한 논의가 진행되고 있음을 확인함
- 특히, 말레이시아와 싱가폴은 도시관련 문제의 해결에 있어 많은 관심을 가지고 있으며 이번 세미나에서 발표한 한국의 스마트도시인 유비쿼터스도시에 대한 관심이 지대하였음
- EAROPH는 현재 아시아 지역 뿐만 아니라 차후에는 유럽까지 포괄할 수 있는 조직을 구성하기 위해 많은 노력을 기울이고 있음
- 빠르게 발전하고 있는 동남아시아 국가들에 대한 관심이 높아지고 있기 때문에 EAROPH와의 협력은 지속적으로 진행되어야 함