

“For future prosperity of ASIAN countries” Collaborative Innovation and Industrialization toward SDGs among Science Cities of ASEAN, IORA and JAPAN

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Director General



RDMM Promotion Center
Public foundation of
Kansai Research Institute

History of Keihanna Science City

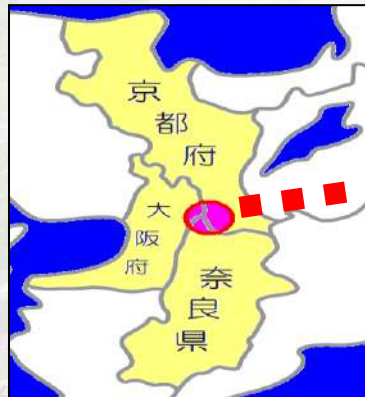


Established by the 1987 Construction Promotion Law for Kansai Science City, a vast 15,000 hectare area has been developed for the Keihanna Science City



The Keihanna Science City stretches over the verdant hills of the **Kyoto, Osaka, and Nara prefectures**

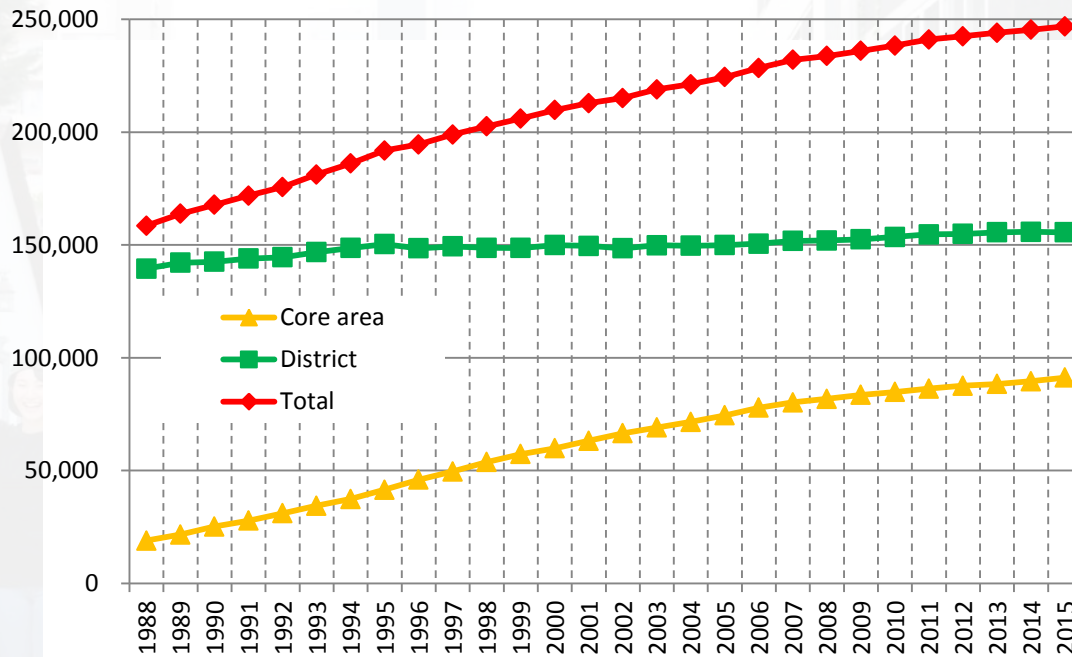
Total Area	15,000 ha
Developed for facilities	3,600 ha (12cluster)



NOW

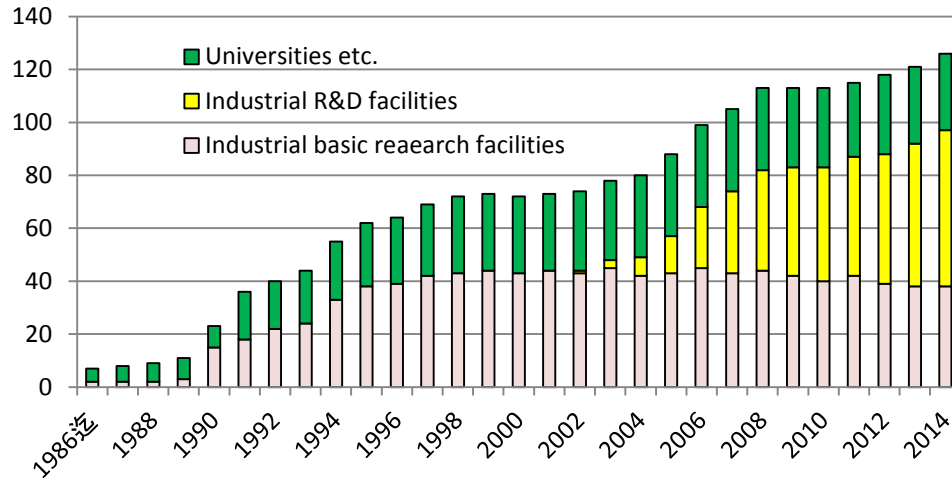


けいはんなプラザ西から現況写真

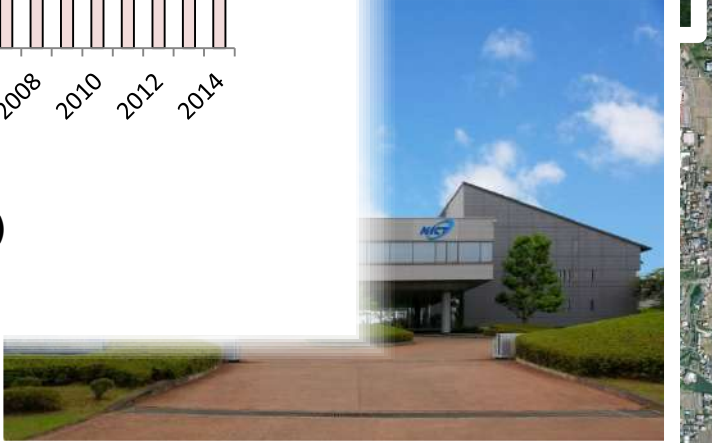
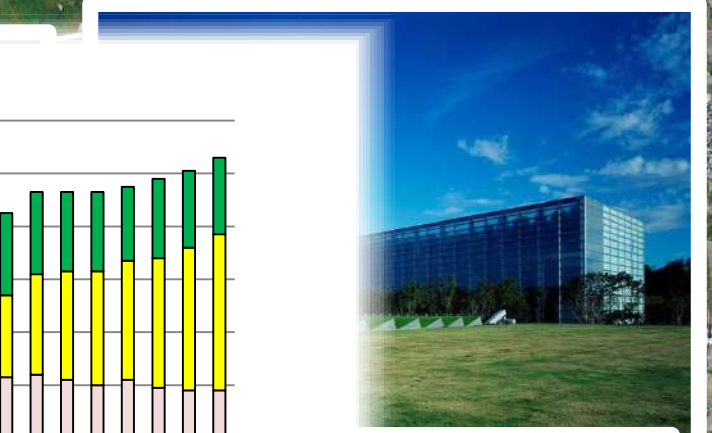
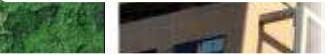


Population of Keihanna Science City
Approx. 250 thousand people at end of 2017

Keihanna Science City Now



**Number of R&D facilities
(143 facilities at end of Oct 2018)**



Potential of Keihanna Science City

- National Strategic Special Zone

- providing platforms for demonstrating experiments, like smart car test drives and drone test flights.



- Collaboration with public organizations

- National Diet Library, AIST, NICT, ATR, NTT, Kyoto prefectural office



- Collaboration with universities

- Osaka University, Kyoto university, Kyoto prefectural University, Nara Institute of Science Technologies, Doshisha University, etc.

- Creative Keihanna Community

- Experiments with resident participation



Establishment of a Hub organization for open innovation and Industry, Gov't and Academia Collaboration



Public Foundation of Kansai Research Institute



RDMM Promotion Center



The RDMM promotion center is a hub organization for open innovation and collaboration among various enterprises, universities and public institutes. The objective of the center is to speed up the creation of a smarter and more prosperous society through the development of new industries and communities. RDMM stands for Research and Development for Monodzukuri through Marketing.

The RDMM Promotion Center hosts the Keihanna R&D Innovation Consortium



Utilizing unique resources of the Keihanna Science city

Speeding up an early stage R&D with design thinking methods

Adjustment of Interests and IPs among corporations and organizations

Global human resource development

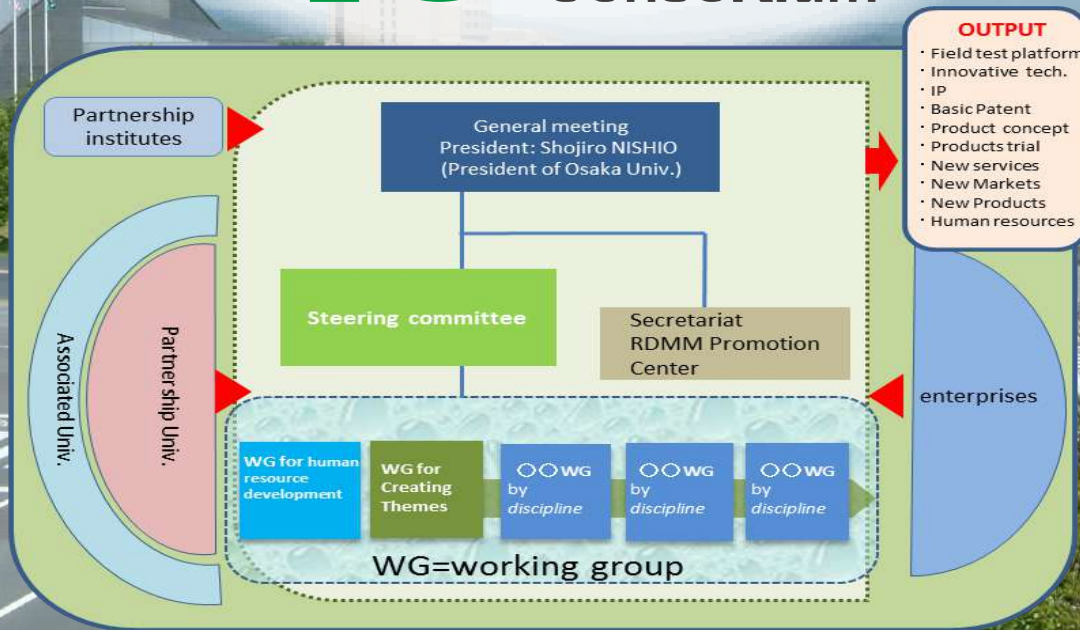
Platform for open innovation



RDMM
Promotion Center



Keihanna
R&D
Innovation
Consortium



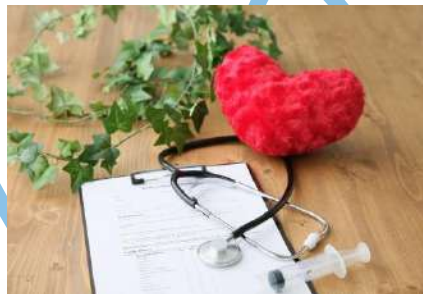
Current Members (Excluding Chairs) and WG Activities (As of September 2018)

- ❑ 2 core institutions, 71 companies (4 in KICK), 11 cooperating facilities, and 12 experts from universities: total of **96** members
- ❑ Currently 40 members (about 60 people) take part in WG activities in fields they are interested in 4 main WG which promote creation of joint R&D projects.

Agriculture/Foods



Health



Mobility/Energy



New Theme Creation



Global human resource development

Also, a global human resource development WG started for providing practical education programs and seminars to the members.



Resident Supporters' Organization "Club Keihanna"

Mission: To reflect local residents' opinions and creativity in R&D, industrialization, and community building

Forming a community centered on Keihanna residents

(Voluntary registration syst.)

*** As of October 2018
more than 2,100 members**



Reflecting Residents' Creativity

○ Surveys



○ Workshops
(Discuss ideas, efficacy)



○ Experiments



Creation of Prosperous Future

★ Town development
★ Creation of new business/industries



- New products/business plans
- Turning R&D into new business ventures
- Community-building project

Companies, universities, research facilities, and government

Domestic agriculture innovation

Rice cultivation



Japanese tea farming



Egg plant farming





未	来	づ	く	り	の
		実	証	実	験
プ	ラ	ット	フ	ォ	ーム

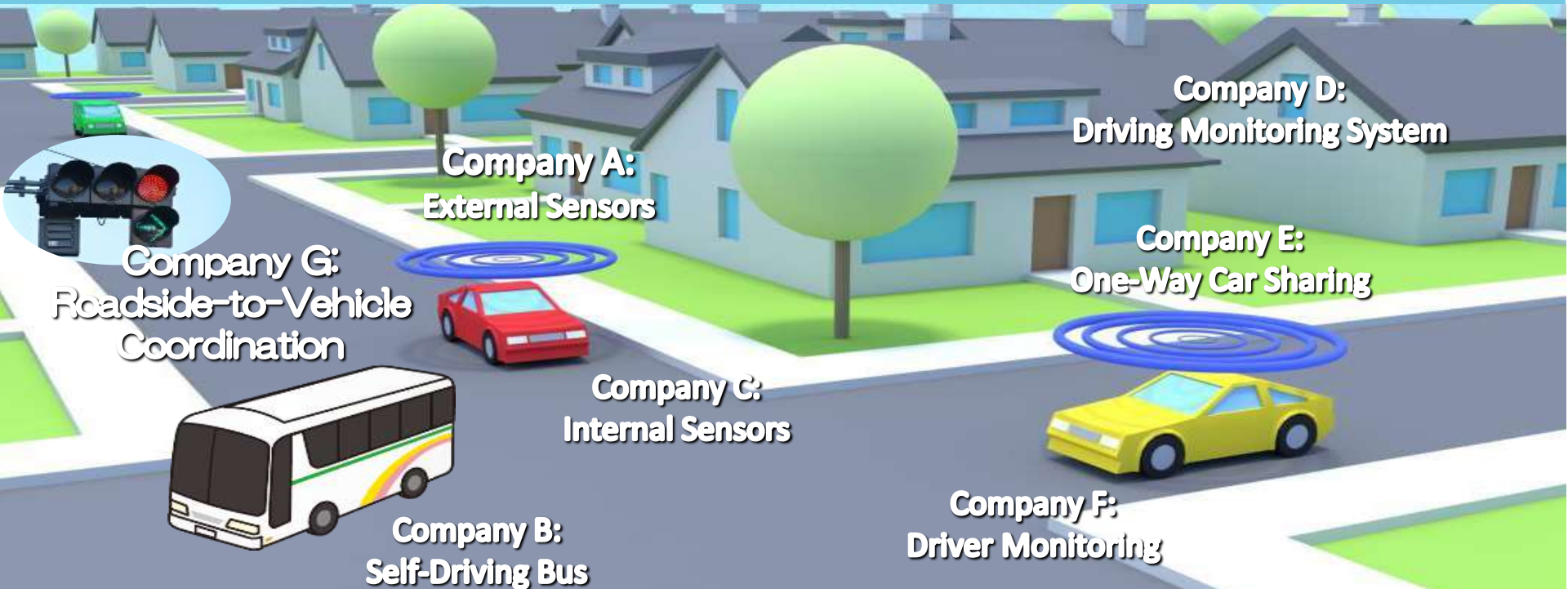
National Strategic Special Zones

Hub for Future Mobility R&D Formed



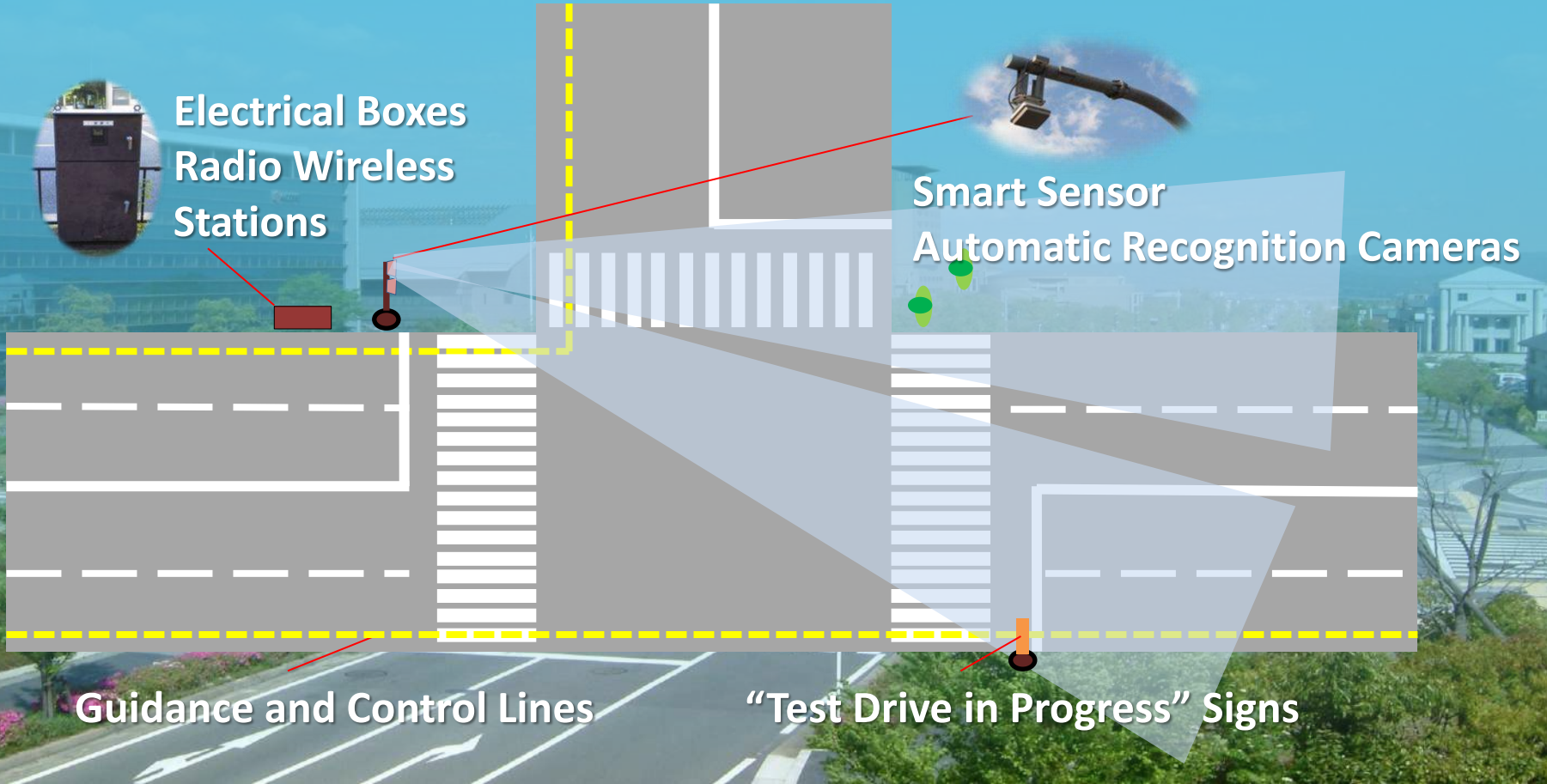
Keihanna Public road Experimental Platform (K-PEP) Created

Examples of Companies' Shared Experiments



✘ Every company shares roads, facilities, and equipment to raise cost-effectiveness, the first experiment platform of its kind in Japan

Examples of Shared Public Roads and Facilities



Equipments in KICK and Other Facilities

Roads for Test Drives



Coordination with Government Agencies, Police, Municipalities, and Local Area



2000,01

1998,12

1821,12

2200,15

345,76

2002,35

1898,25

2001,25

2000,25

1863,4

1661,12

9,88

21

27

Resident Collaboration from Club Keihanna

- Online Surveys
- Monitoring
- Prototype Evaluations
- Experiment Feedback and more





**Collaborative Innovation & Industrialization
among Science Cities of
ASEAN, IORA and Japan, Keihanna Science City**

Global Partnerships of RDMM promotion center

- ❑ **Collaboration with Science and Technology Park Chiang Mai University (CMU STeP) and Northern Science Park in Thailand.**
 - considering improvement of performance in the construction of experiment spaces and R&D related to IoT, automatic driving and agriculture etc. (MOU signed on Sep, 2017)
- ❑ **Collaboration with the Joint Research Unit in urban sciences (JRUus) at Laval University in Quebec, Canada**
 - considering collaborating in the fields of urban science, IoT, security and mobility (MOU signed on Sep, 2017)
- ❑ **Collaboration with the world-famous electronics producer imec (Inter-University Microelectronics Center) in Belgium**
 - considering collaborating in the fields of semiconductors, IoT, life science, and mobility.



Platform for innovation and industrialization among science cities of ASEAN, IORA and JAPAN

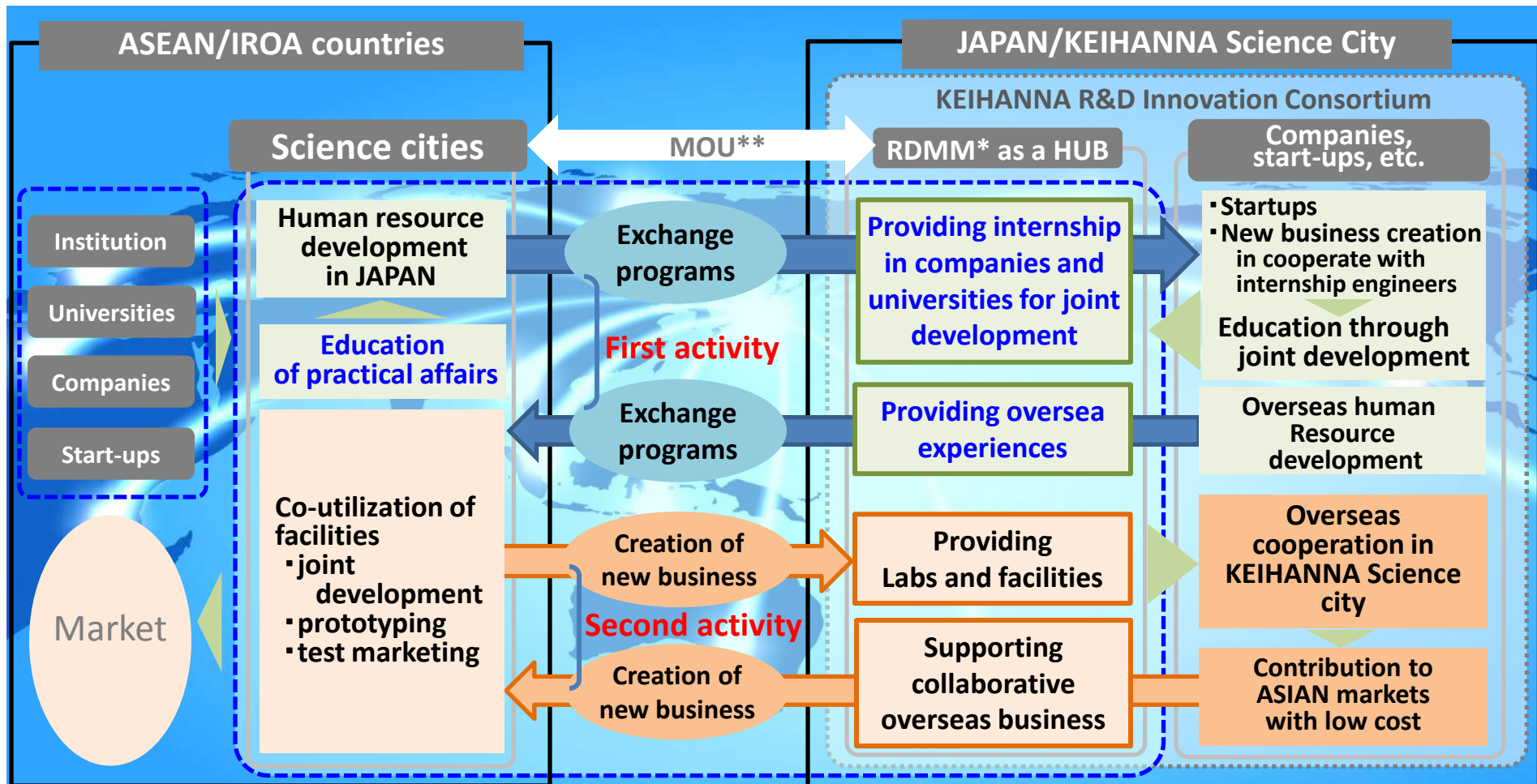
- **For the prosperity of the Asian society and economy in the future, the platform is necessary which promotes the international mutual cooperation among companies, universities, research institutes and economic organizations in Asian countries based on the science cities' scheme as the “Hub of Collaboration” in each country.**
- **The platform will promote mutual utilization of Science Cities/Parks of ASEAN, IORA and Keihanna Japan for realizing innovation and industrialization, and also human resource development exchange programs for prosperous societies.**
- **The platform will also increase the values of Science Cities/Parks in each country and eventually will contribute to so-called UN SDGs (Sustainable Development Goals by United Nation).**

Activities in the Platform

2 main activities

- (1) International mutual exchange programs of researchers, engineers and students:
 - **Mutual exchange programs towards human resource development** in the field of R&D and Industrialization.
 - The programs based on Science Cities/Parks of ASEAN, IORA and Keihanna Japan.
- (2) International mutual utilization of science cities in each country for innovations and new business creation:
 - **attracting private companies, universities and national research institutions** of ASEAN and IORA to Keihanna Science City and **vice versa** for promoting cooperative R&D and industrialization.
 - **mutual utilization of the science cities and which facilities** of ASEAN, IORA and Keihanna Japan for prototyping in the pilot plant, test marketing and new business creation.

Scheme of the Platform for the collaborative innovation and industrialization



**MOU: Memorandum of Understanding

*RDMM: RDMM promotion center, Kansai Research Institute

Scheme of the collaborative innovation hub among several countries and Japan

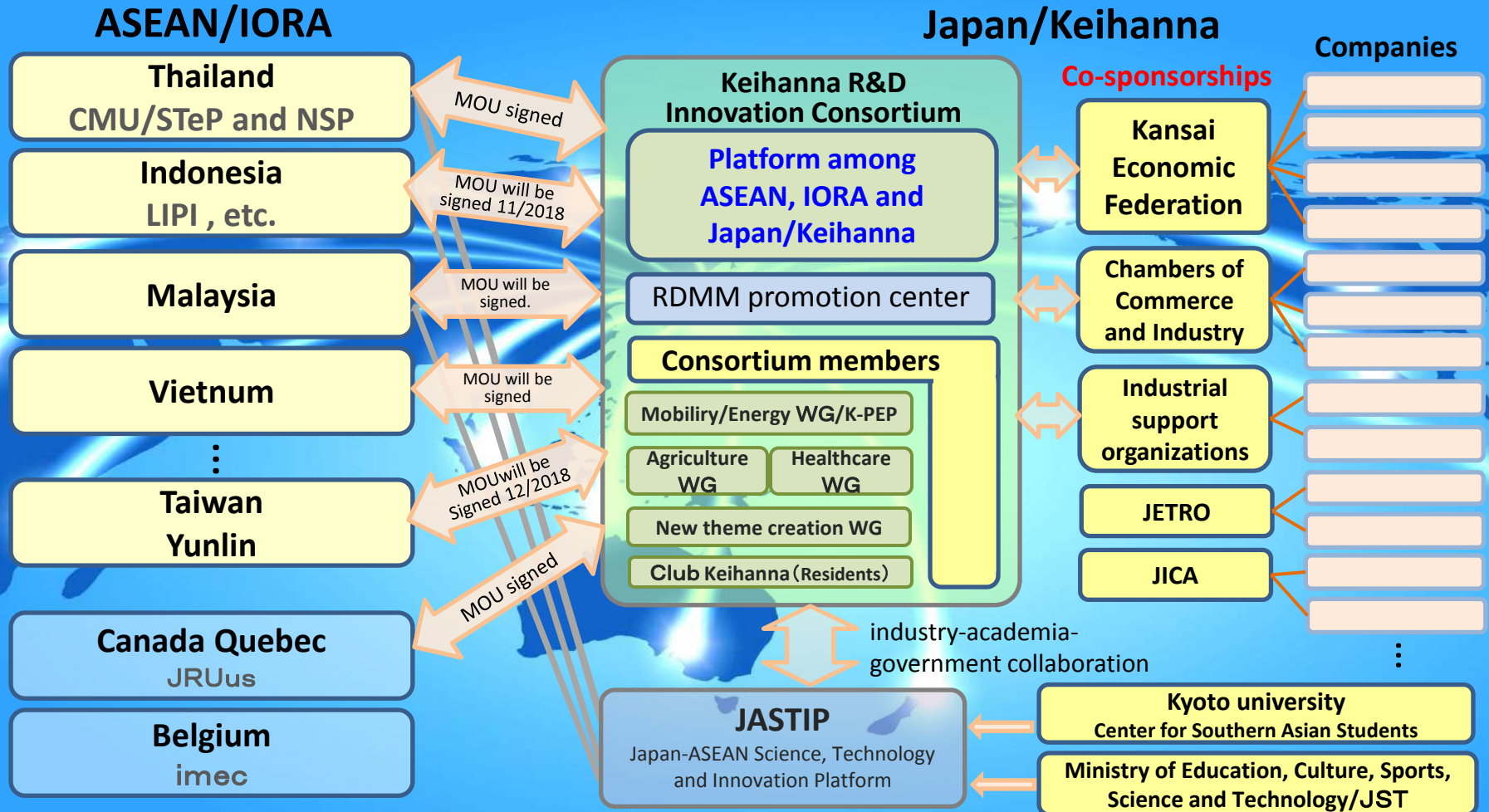
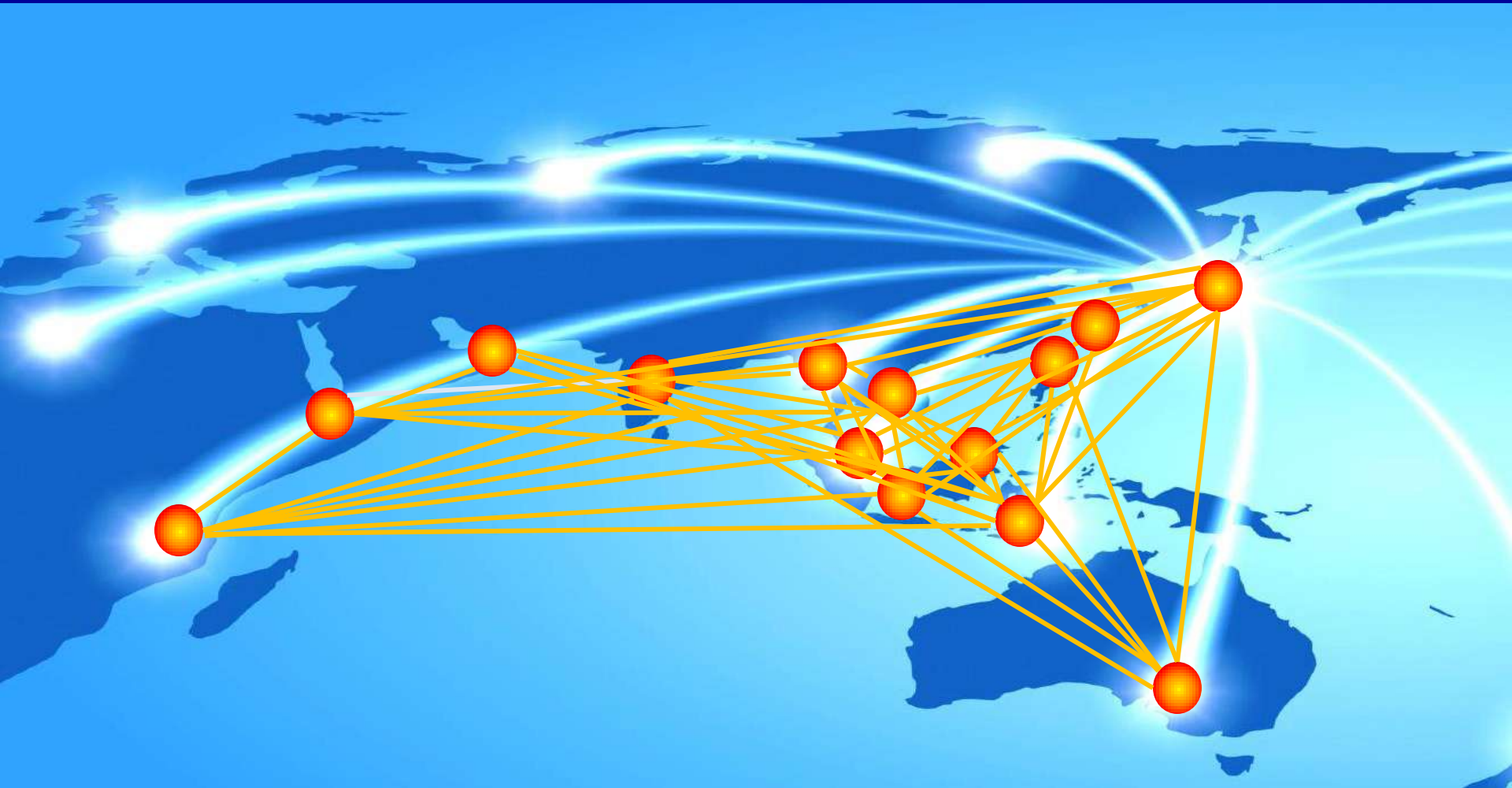


Image of the future innovation hub networks among science cities of ASEAN, IORA and Japan





GLOBAL INNOVATION



第1回 SDGs に向けた関西・ASEAN・IORA イノベーション拠点連携サミット 2018

First Global Innovation and Industrialization Summit
toward SDGs
among ASEAN, IORA and JAPAN (GIIS AIJ) 2018

Special Event at Kyoto Smart City Expo 2018

October 4 - 5, 2018

Keihanna Open Innovation Center @Kyoto,

Keihanna Science City, Japan

Program

1. Conference on Collaborative Global Innovation and Industrialization toward SDGs
among Innovation Hubs and Science Cities of ASEAN, IORA and Japan

Date: Fri. Oct 5th Time: 13:00-15:00 Venue: KICK main hall

2. Business Matching and Pitching based on Innovation among
 - companies, startups, universities and institutions in Japan,
(mainly from "Keihanna R&D Innovation Consortium" and Keihanna Science City)
 - companies, universities and startups from ASEAN, IORA and related countries

Date: Fri. Oct 5th Time: 15:30-17:00 Venue: KICK guidance room 3/4

3. Special Exhibition of invited GIIS AIJ members from ASEAN and IORA
 - Technologies, New Products, New Business, and Collaboration scheme, etc.

Date/Time: Thu. Oct 4th 10:00-17:00 Fri. Oct 5th 10:00-17:00

Organized by
 RDMM Promotion Center
Public Foundation of Kansai Research Institute

Cosponsored by : The Organizing Committee of Kyoto Smart City Expo
Kansai Economic Federation

Supported by : Japan-ASEAN Science, Technology and Innovation Platform
National Diet Library
Kyoto Prefecture Osaka Prefecture, Nara Prefecture,
Union of Kansai Government
Keihanna R&D Innovation Consortium



First Global Innovation and Industrialization Summit toward SDGs among ASEAN, IORA and JAPAN

(GIIS AIJ) Oct. 4-5, 2018



「関西・ASEAN・環インド洋連合(IORA)イノベーション拠点連携」サミット カンファレンス ～グローバル・イノベーションと新産業創出を目指して～

- ・バンバン・スピヤント 氏 インドネシア 科学技術庁研究院(LIPI) 副長官
- ・タニヤヌパー・アナントナ 氏 タイチエンマイ大学StEP ディレクター
- ・モッド・ラジ 氏 国立マレーシア国民大学
- ・グエン・カン 氏 ベトナム 教育科学省 シニアリサーチャー
- ・チュエン・ゼン・スー 氏 台湾 雲林国立科学技術大学 副学長
- ・丸野 進 氏 (公財)関西化学工学研究所都市推進機構 RDMM支援センター長

Global Innovation and Industrialization Summit and conference toward SDGs among ASEAN, IORA and Japan 2018

- ・ Dr. Bambang Subiyanto Vice Chairman, Indonesian Institute of Sciences (LIPI)
- ・ Dr. Tanyanuparb Anantana Director, Science and Technology Park (CMU/StEP)
- ・ Dr. Mohd Radzi Abu Mansor National University of Malaysia
- ・ Mr. Nguyen Khang Senior Researcher, Vietnam Institute of Educational Sciences
- ・ Dr. Chwen Tzeng Su Vice President of National Yunlin University of Science and Technology
- ・ Dr. Susumu Maruno Director General of RDMM Promotion Center, Public Foundation of Kansai Research Institute



RDMM推進センター長
丸野 進

Dr. Bambang Subiyanto
Dr. Tanyanuparb Anantana
Dr. Mohd Radzi Abu Mansor
Mr. Nguyen Khang
Dr. Chwen Tzeng Su

First Global Innovation and Industrialization Summit toward SDGs among ASEAN, IORA and JAPAN

Conference and panel discussion



Business Matching and Pitching among companies from ASEAN, IORA and J

Oct.5, 201



Meetings for introducing activities of Keihanna Science City towards future collaboration



Meeting with LIPI



Prof. Dr. Bambang Subiyanto
Vice Chairman of LIPI

Dr. M.Eng Mego Pinandito
Deputy Chairman for Scientific Services




Meeting with RISTEKDIKTI



Director Kemal Prihatman



Deputy Director Yudho Baskoro Muriadi



RDMM promotion center will contribute to the Asian society and economy through the collaboration among ASEAN/IORA countries and Keihanna Science City Japan!



RDMM promotion center