

国立情報学研究所

National Institute of Informatics

Shinichi Honiden

Deputy Director General, NII

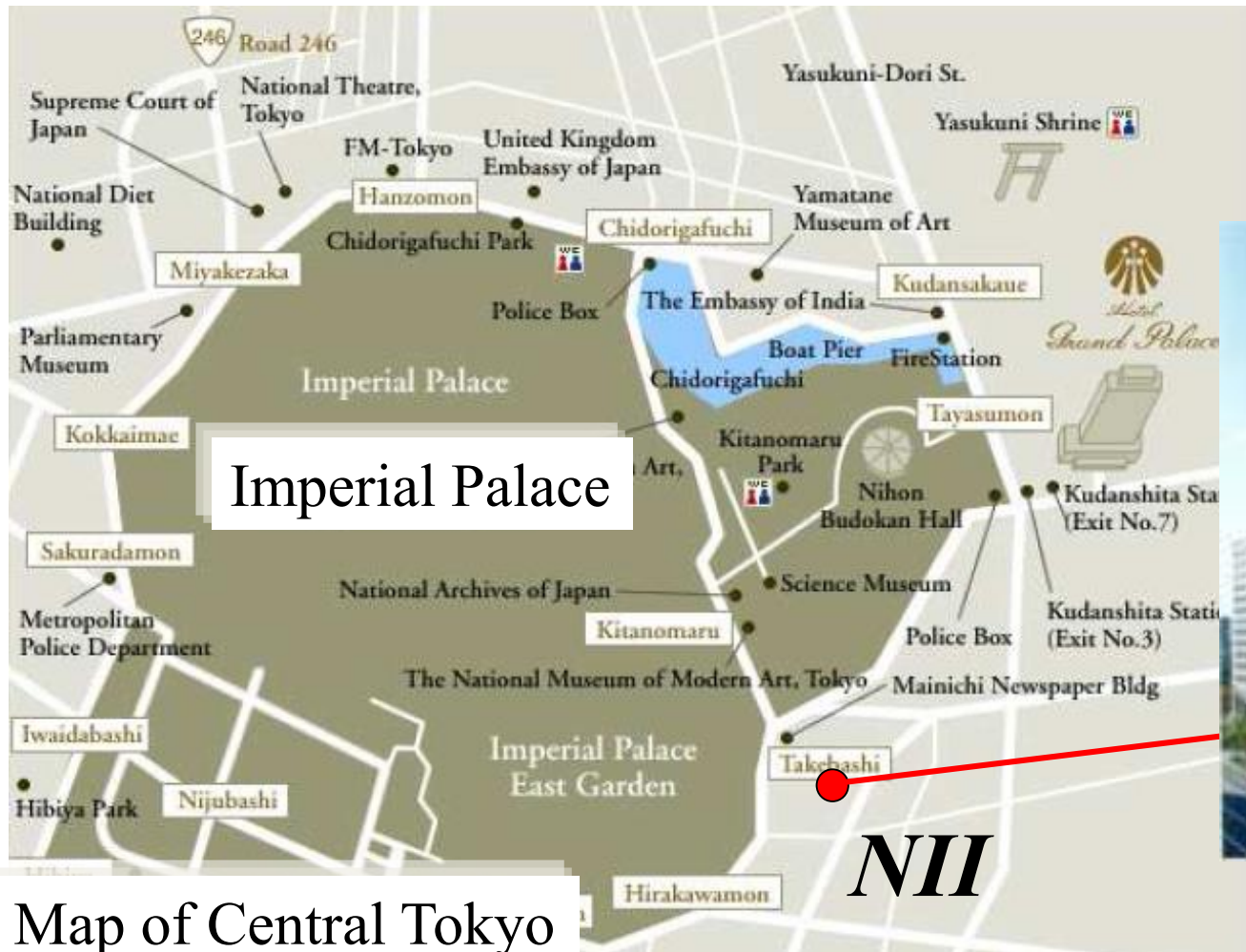
Chair of Steering Committee of Shonan Meeting

September, 2015



National Institute of Informatics

National Institute of Informatics



Map of Central Tokyo



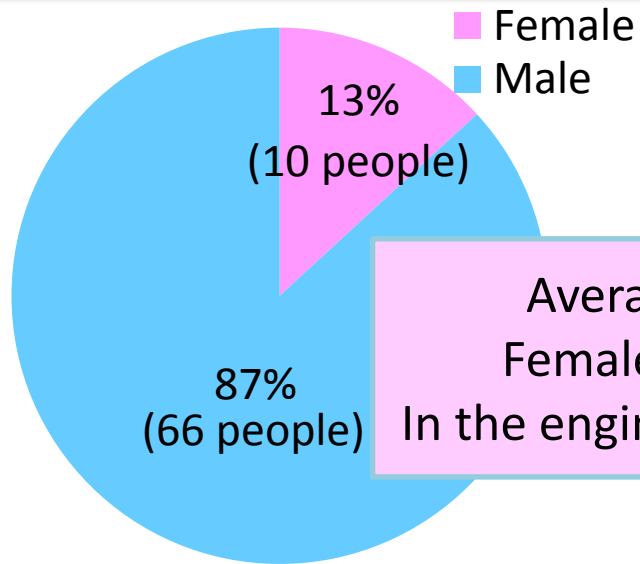
- National Institute of Informatics (NII) was established when April 2000.



- National Institute of Informatics (NII)
 - Staff:
 - 76 Professors and 191 Visiting Profs.
 - 88 Project researchers, etc.
 - 128 Graduate students (University of Tokyo, etc.)

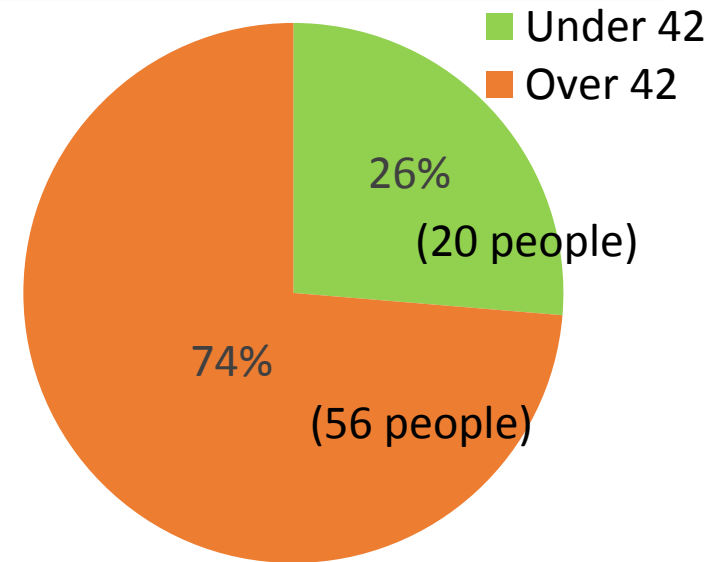
76 Professors

Ratio of Female Professors

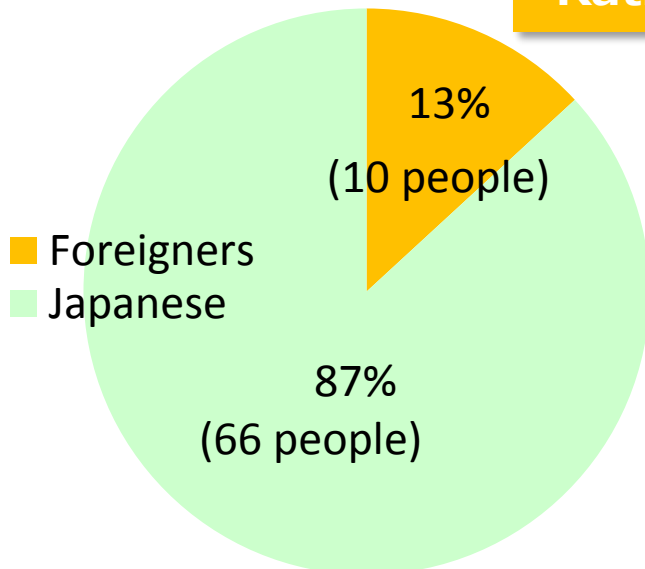


Average ratio of
Female Professors
In the engineering field: 5%

Ratio of Young Professors



Ratio of Foreign Professors



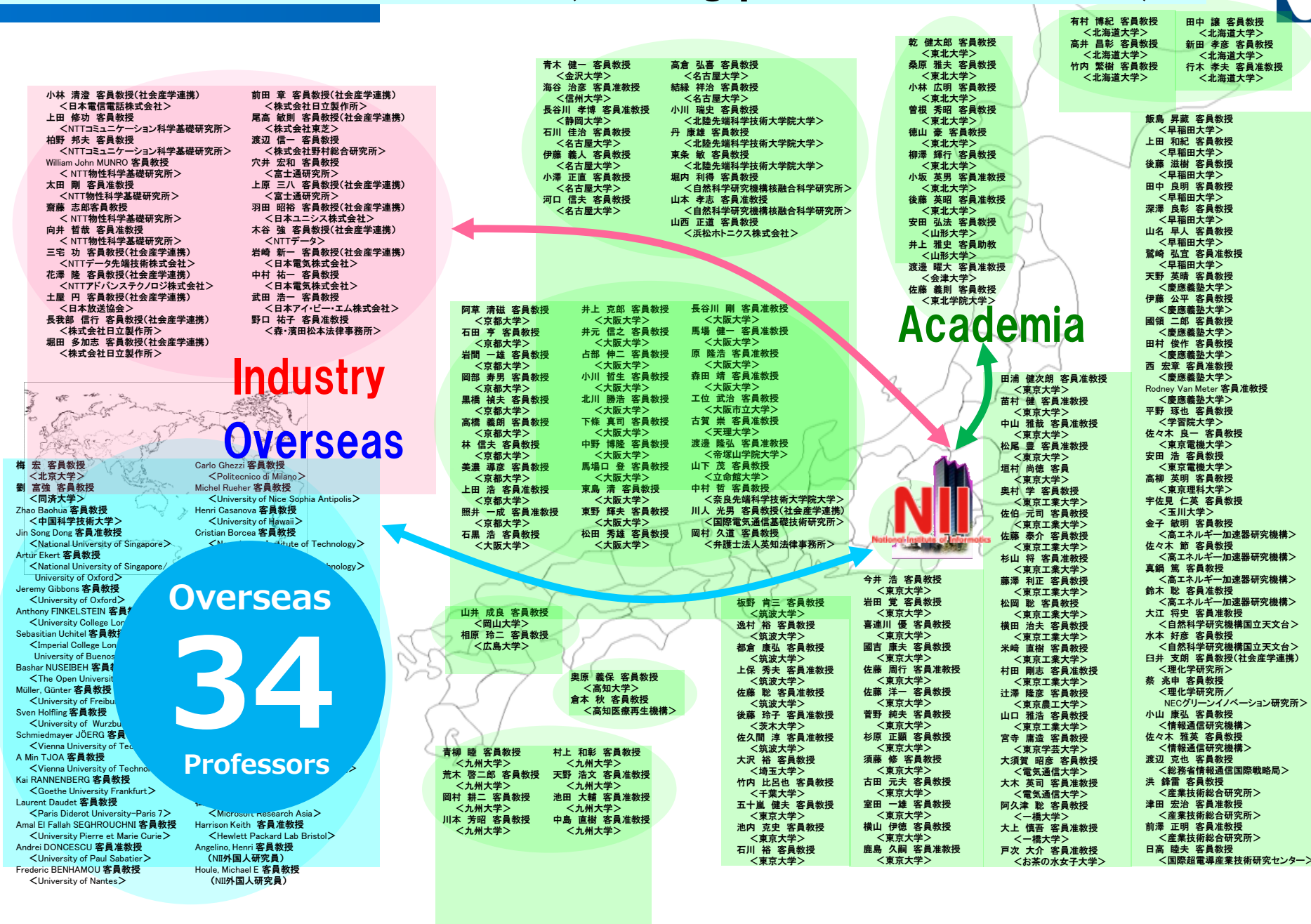
as of May 2014



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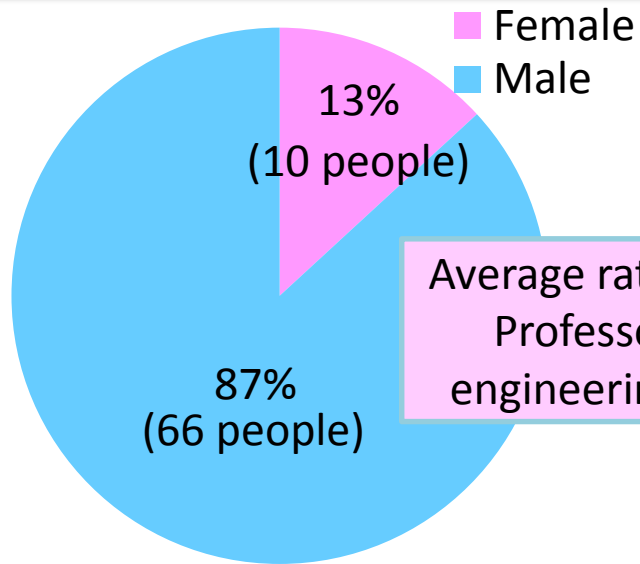
Horizontal collaboration of NII (Visiting professor's network)

NII



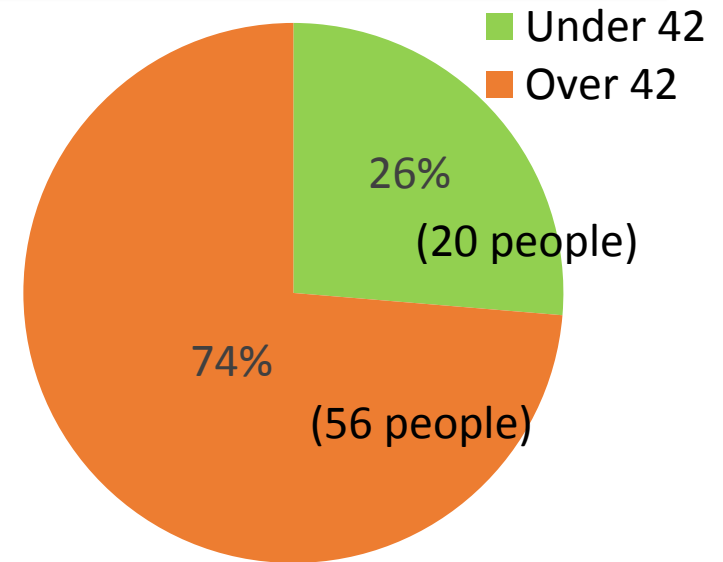
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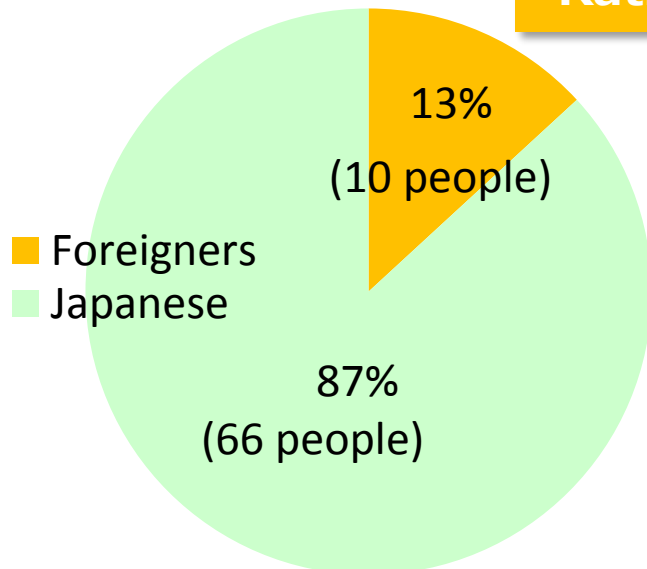
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Ratio of Young Professors

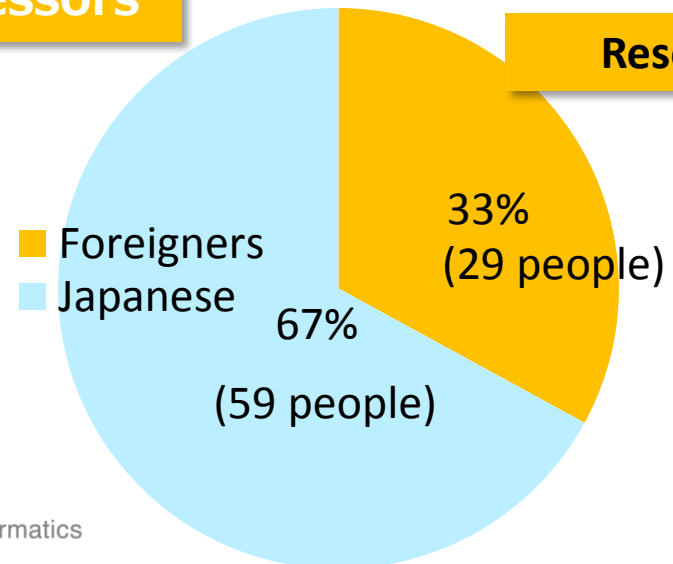


Ratio of Foreign Professors

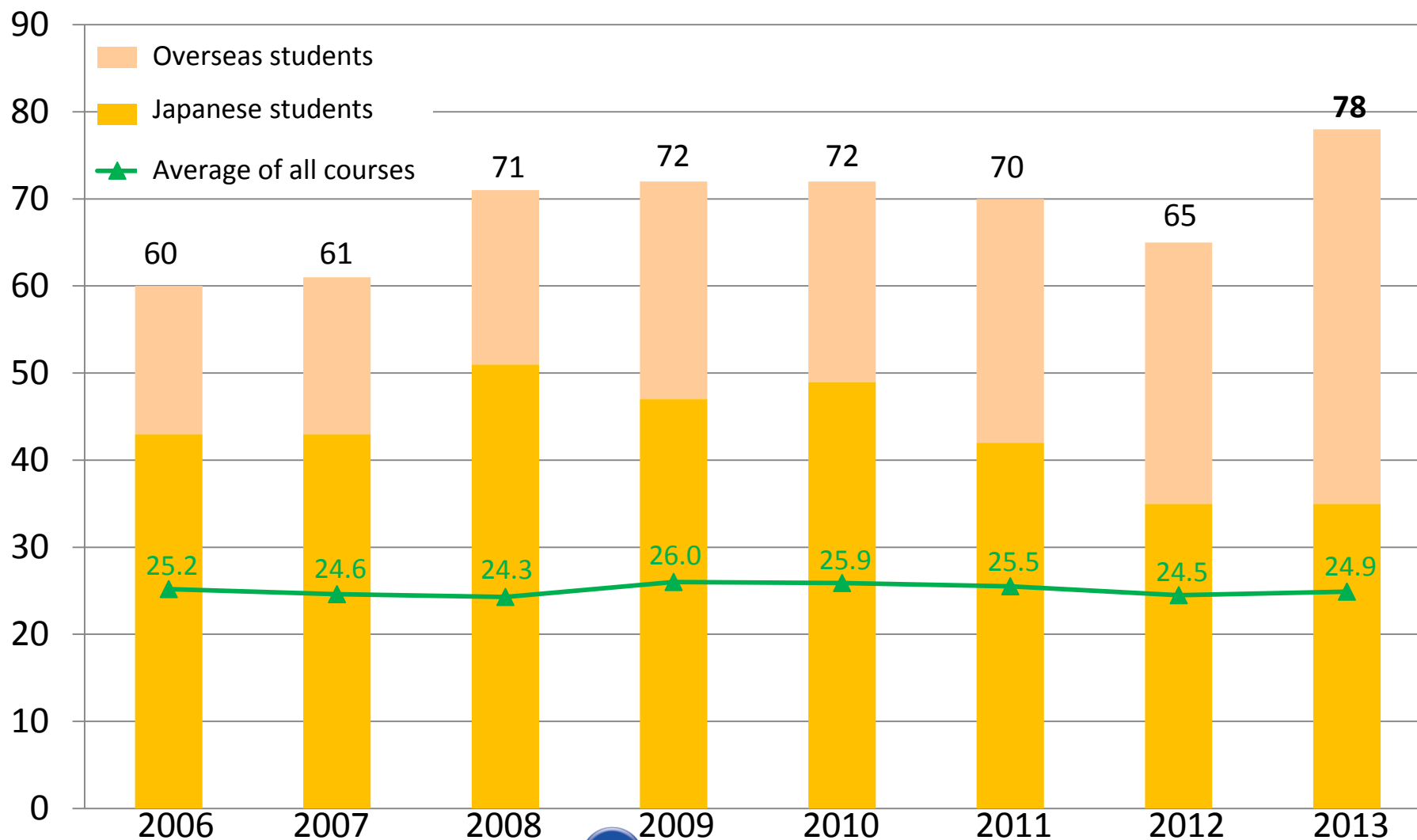
as of May 2014



Researcher



- National Institute of Informatics (NII)
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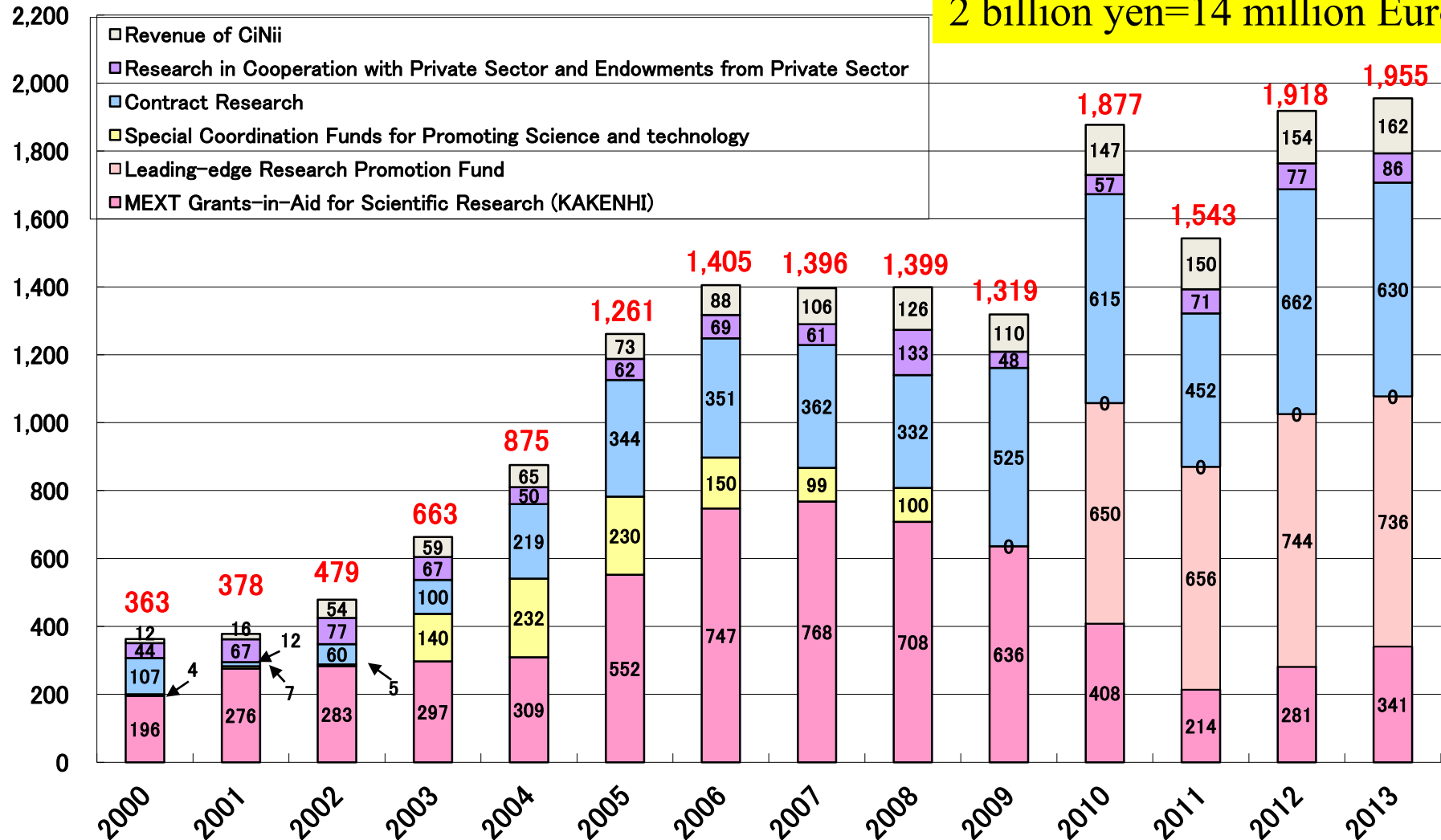


- National Institute of Informatics (NII)
 - Staff:
 - 76 Professors and Visiting Profs.
 - 88 Researchers.
 - 128 Graduate students (University of Tokyo, etc.)
 - Budget:
 - About 12 billion yen (84 million Euro)

Growth of Competitive Research Funds

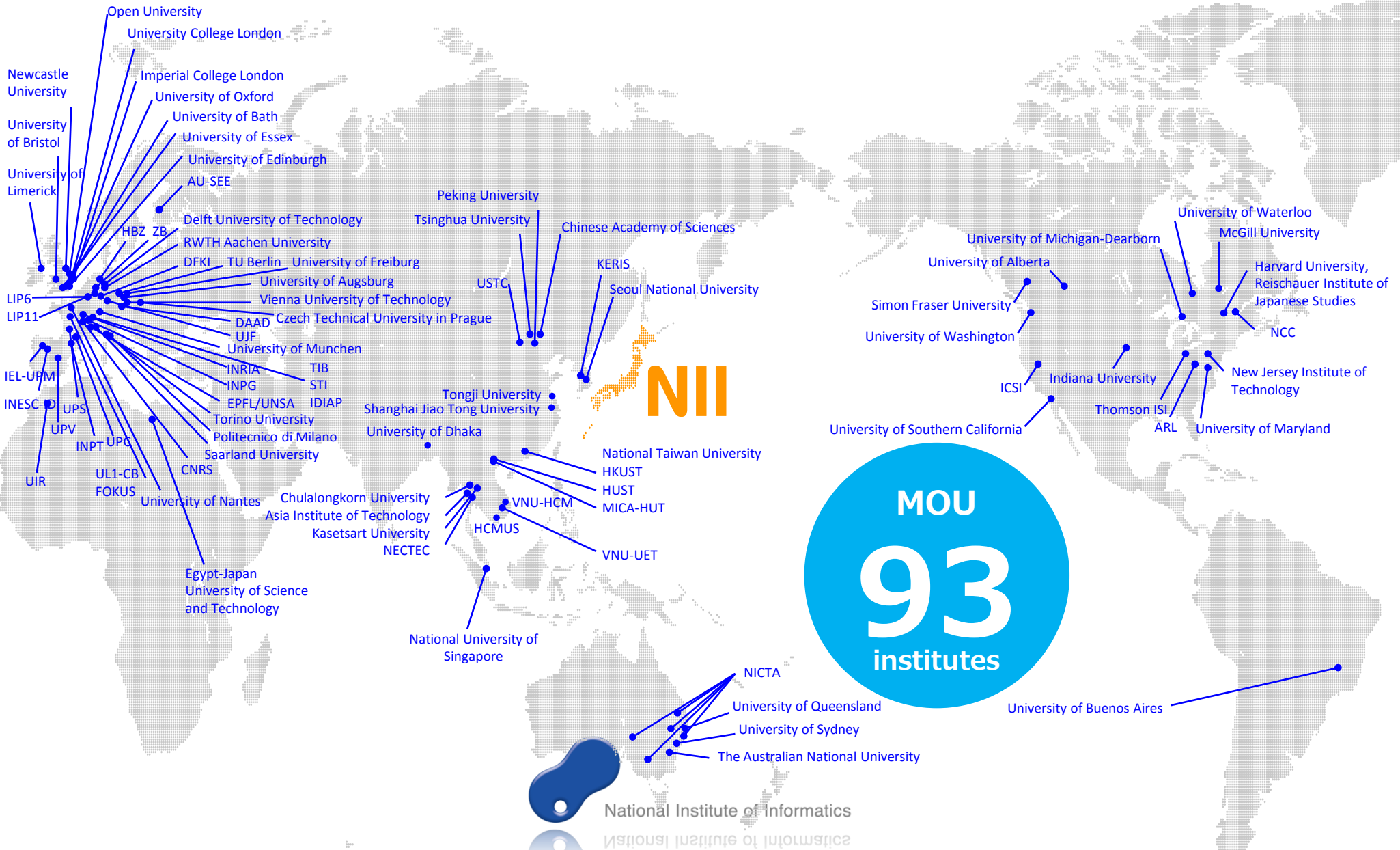
Unit: million yen

2 billion yen=14 million Euro

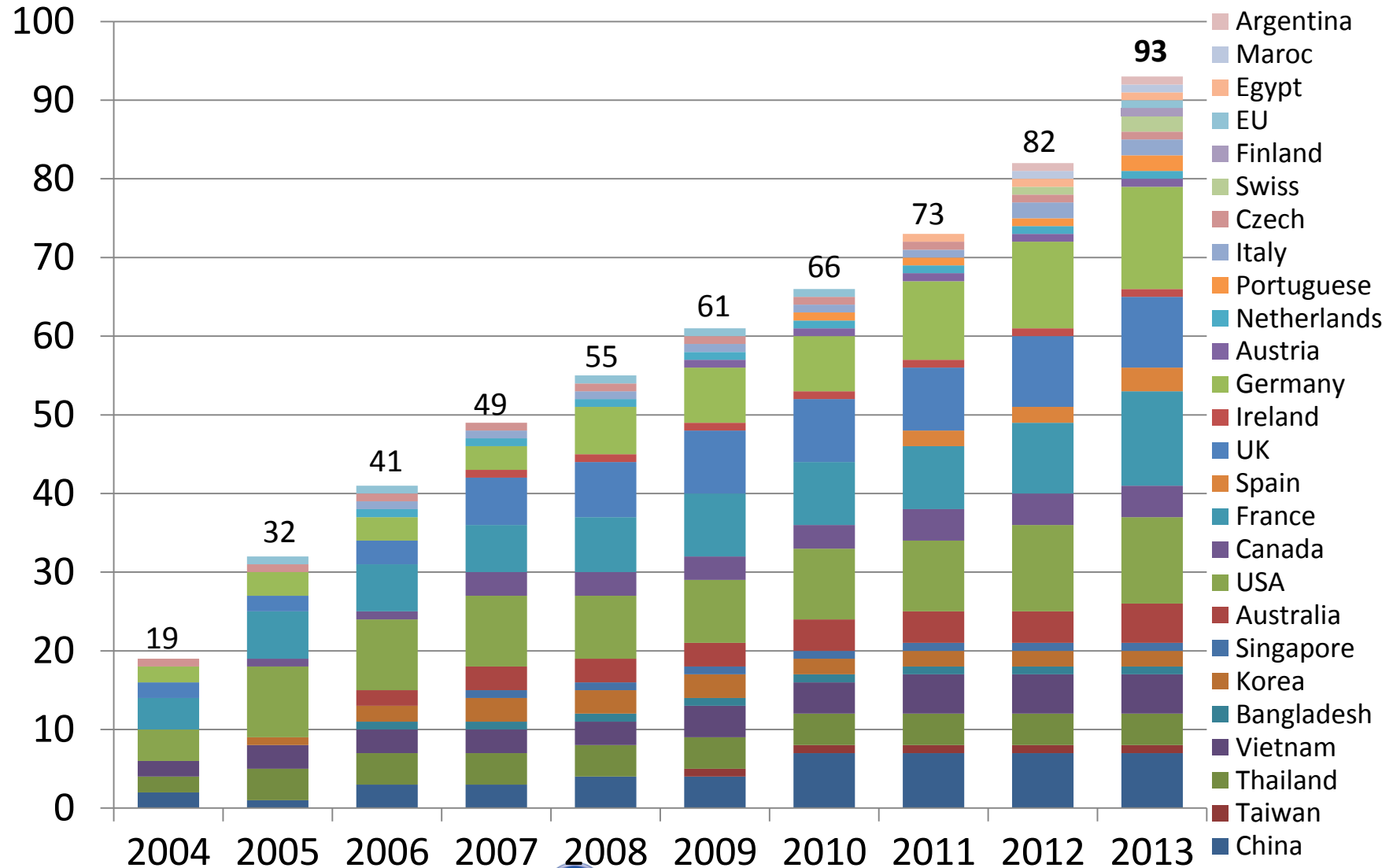


MEXT: Ministry of Education, Culture, Sports, Science & Technology
 (Ministère de l'Éducation nationale, de l'Enseignement supérieur et de la Recherche)

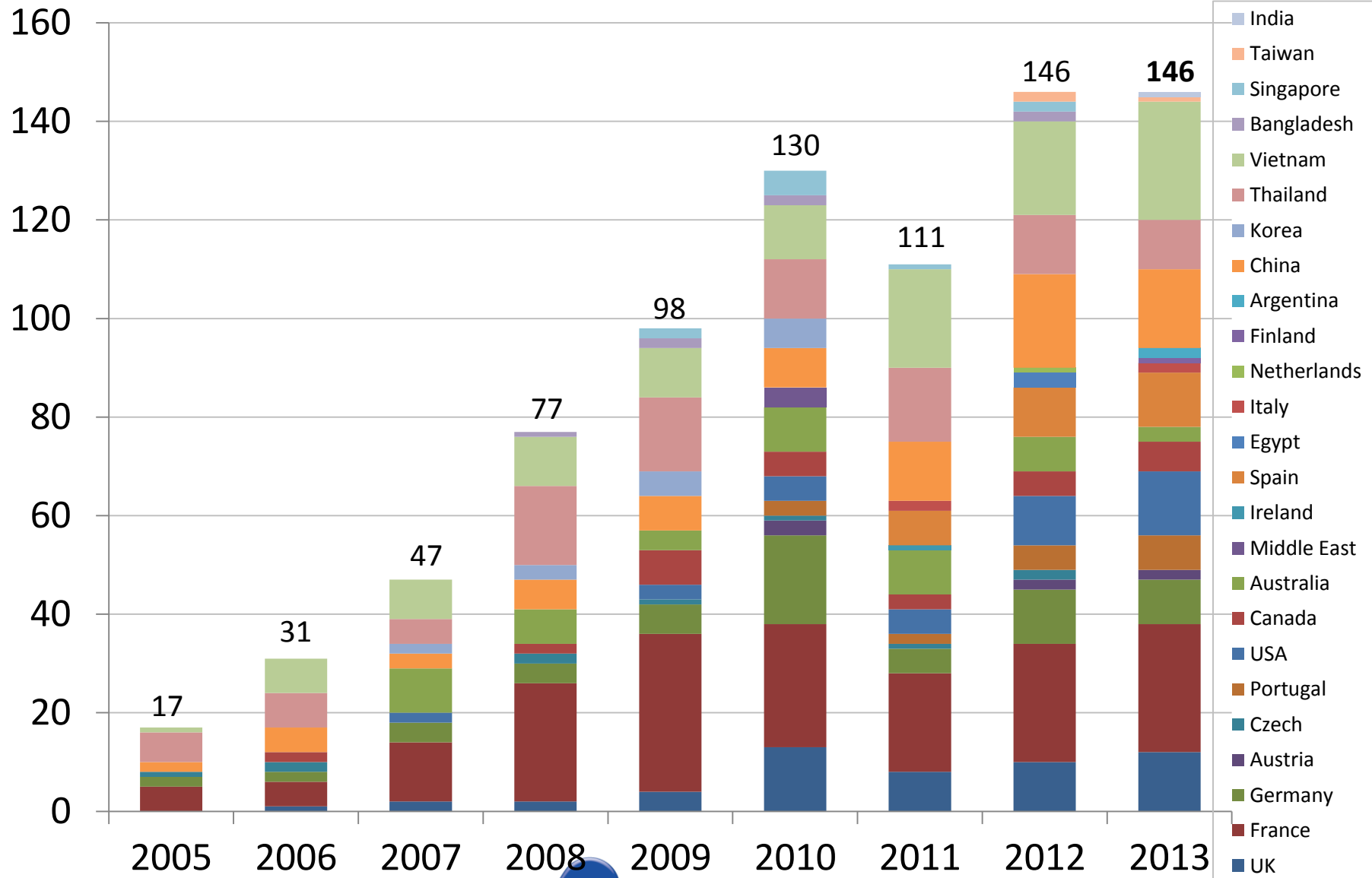
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 - Staff:
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 - Budget:
 - About 12 billion yen (84 million Euro)
 - MOU with foreign Universities



International Arrangements (MOUs)



International Internship Program



Trends in international joint papers



NII's R&D Structure



Dual Target Research System

**Fundamental
Research**

**Research
Division**

Principles of Informatics

Information Systems Architecture Science

Digital Content and Media Sciences

Information and Society

Strategic Research

Research Centers

- **Research Center for Community Knowledge**
- **Research Center for Quantum Information Science**
- **Research Center for Big Data Mathematics**
- **Research Center for Knowledge Media and Content Science**
- **Research Center for Cyber-Physical Systems**
- **GRACE Center: Center for Global Research
in Advanced Software Science & Engineering**

- Cyber-Science
Infrastructure Construction
- Cutting-edge Research
Activities



- Construction and Operation of Cyber Science Infrastructure

Network & Contents



SINET : Japanese academic backbone network for more than 800 universities and research institutions



Authentication Federation (GakuNin) : Academic Authentication infrastructure

CiNii : Scholarly paper search portal



Science Information Network (SINET)

- SINET is a Japanese academic backbone
- The current SINET4 will be upgraded to SINET5 in 2016

Participating
SINET Institutions

800

SINET Users

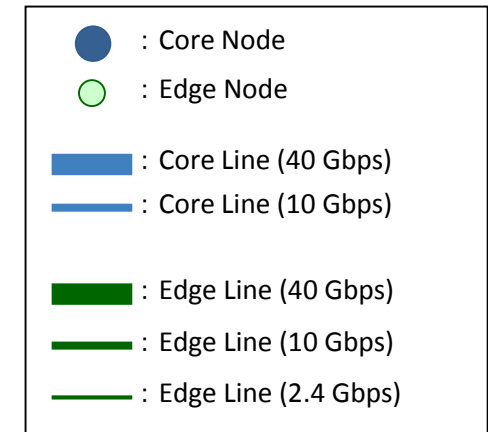
2 Mill.

Core Line

40 × 2
Gbps

	National Universities	Public Universities	Private Universities	Colleges	Inter-Univ. Research Institutes	Others	Total
Number of Organizations	86	68	333	60	55	200	802

(As of March 2014)



To Los Angeles

To New York

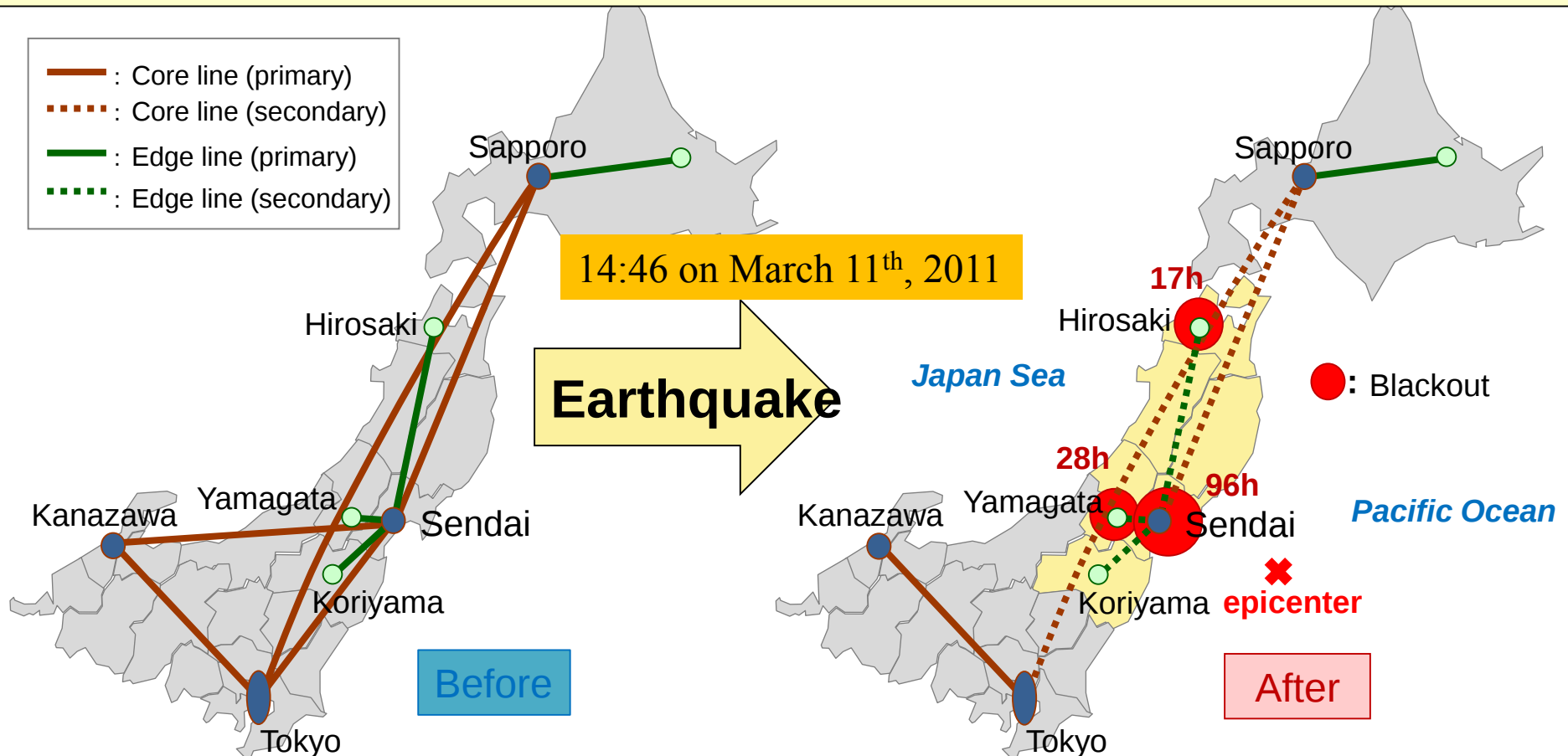
To Washington D.C.

To Singapore

Impacts of Great East Japan Earthquake

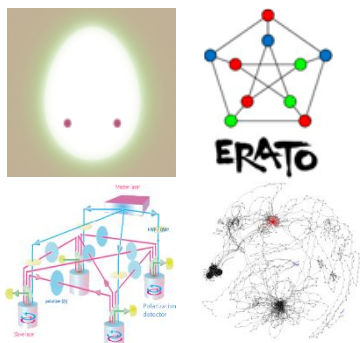
◆ SINET4 did not stop the service operation thanks to its reliable network design.

- Nodes were not damaged and continued to work even in areas where the blackout lasted for long periods of time (96 hours in Sendai).
- Lines were severely affected, but the backbone could keep the routes by surviving secondary circuits between arbitrary nodes; and none of areas was not isolated.



- Cutting-edge Research Activities

NII is an extremely unique research center



Wide range of areas, from basic research like graph analysis and quantum information processing, to applied research in such fields as big data, software engineering, artificial intelligence, and speech synthesis.



Thank you very much!

