

**Initiatives for Increasing the Number of
Standardization Experts in Japan**
-Education and Training in Standardization-

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ICES - Asian Perspective

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Contents

- Organization Structure of METI and JISC
- METI/JISC's Action Plan for Enhancing International Standardization Activities of Japan
- Types of Standardization Experts
- Training Courses for Standards Writers and Developers
- Development of Teaching Materials and Lectures at Universities
- Future Challenges

Organizational Structure of METI

Ministry of Economy, Trade and Industry.

Industrial Science and Technology Policy and Environment Bureau

Technical Regulations, Standards and Conformity Assessment Policy Unit

Number of staff: 108

Director-General

Technical Regulations, Standards and Conformity Assessment Policy Division

Standards Planning Office

Standardization Office for Industrial Infrastructure

Standardization Office for Consumers and Environment

Standardization Office for Information Technology and Electrotechnology

Standardization Office for Management System

International Standardization Policy Office

Conformity Assessment Division

Mutual Recognition Office

Products Accreditation Operation Office

Measurement and Intellectual Infrastructure Division

Metrology Policy Office

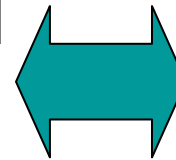
Independent administrative agencies;

.AIST (The National Institute of Advanced Industrial Science and Technology)

NITE (National Institute of Technology and Evaluation)

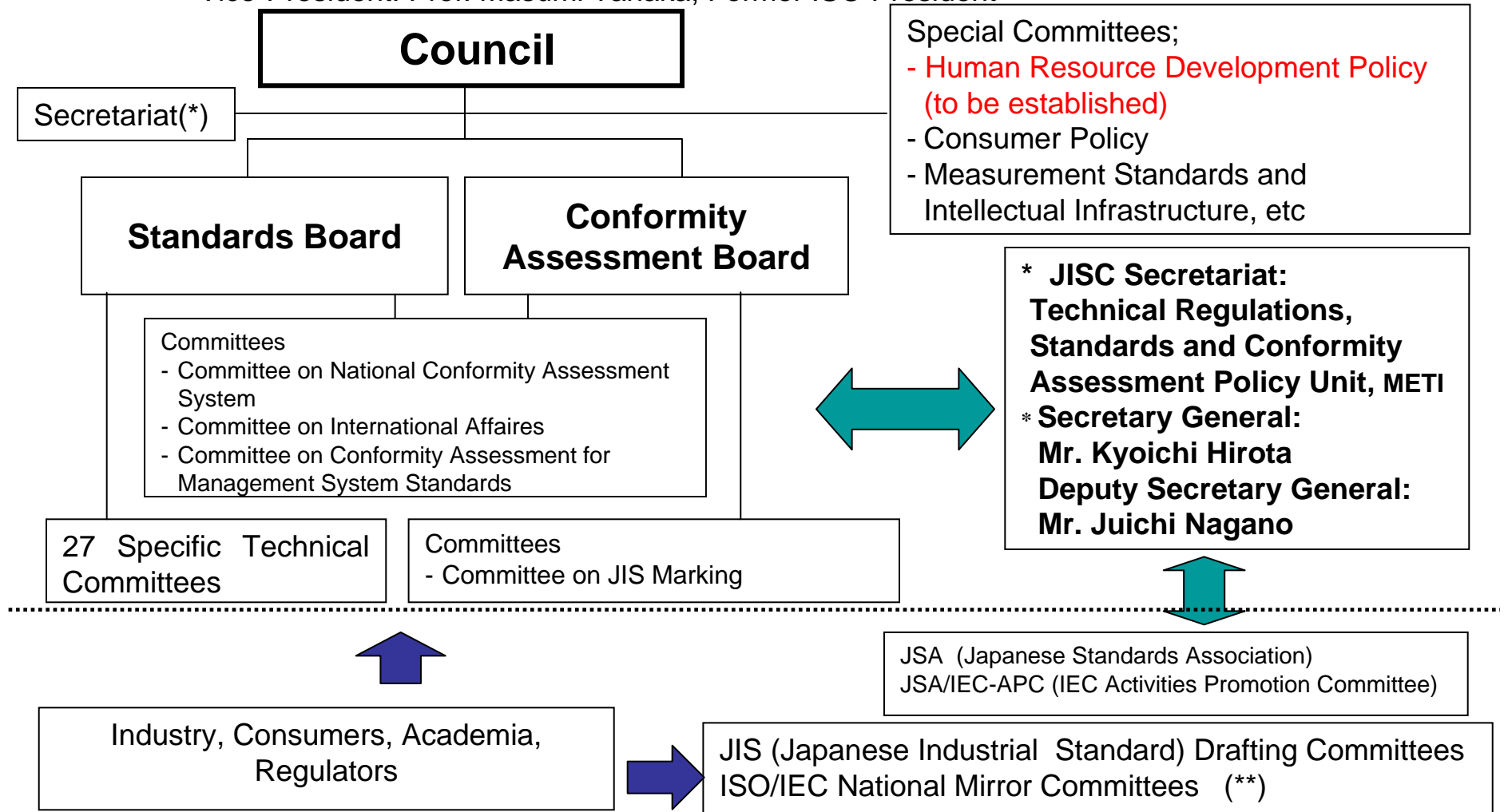
.JETRO (Japan External Trade Organization)

NEDO (The New Energy and Industrial Technology Development Organization)



Organization Structure of JISC

President: Mr. Tadashi Okamura, Director Chairman of the Board, Toshiba
 Vice-President: Dr. Eisuke Masada, Professor, Tokyo University of Science
 Vice-President: Prof. Masumi Tanaka, Former ISO President



** Often established in industrial organizations/ associations

METI/JISC's Action Plan for Enhancing International Standardization Activities of Japan

- Awareness-raising of industry leaders
 - Dialogue with industry leaders, organizing workshops and symposia
- Synergy between R&D and standardization
 - Standards as a target of national R&D
- Increase the number of standardization experts
 - Training and Education programs responding to types of standardization experts

The Seminar for International Standardization

- Towards the greater contribution of standardization to society -

■ Date: November 2, 2007

■ Participants: 300

■ Panel Discussion

. Discussion 1: Towards a safe and secure society (accessible design)

. Discussion 2: Synergy between R&D and standardization (nanotechnology)

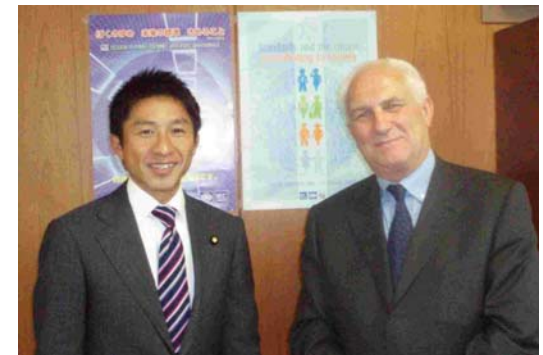
. Discussion 3: Standardization as industrial infrastructure (springs)



Minister Amari and the ISO
Secretary General

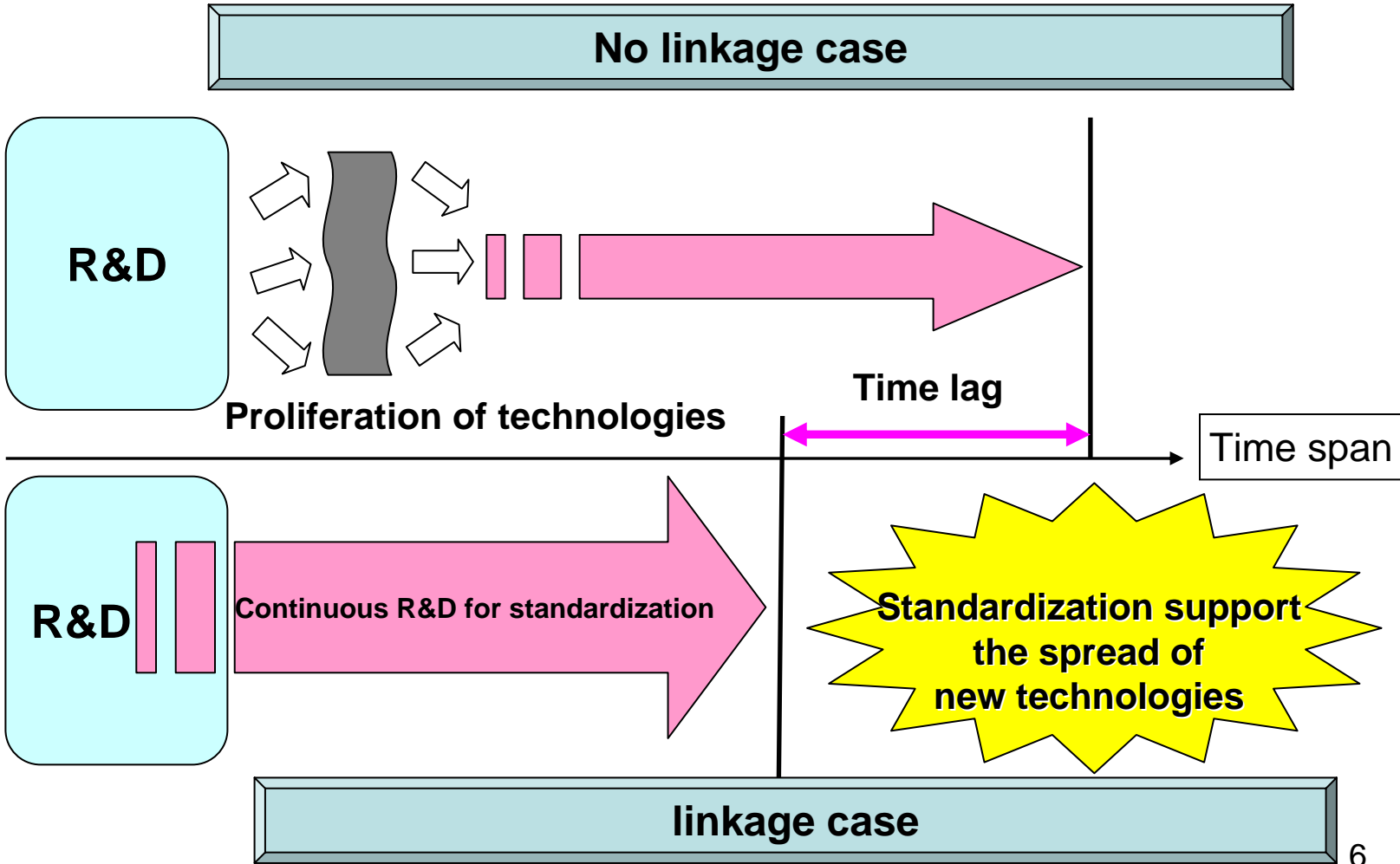


Panel discussion



Parliamentary Secretary Ogiwara
and the ISO Secretary General

Synergy between R&D and Standardization

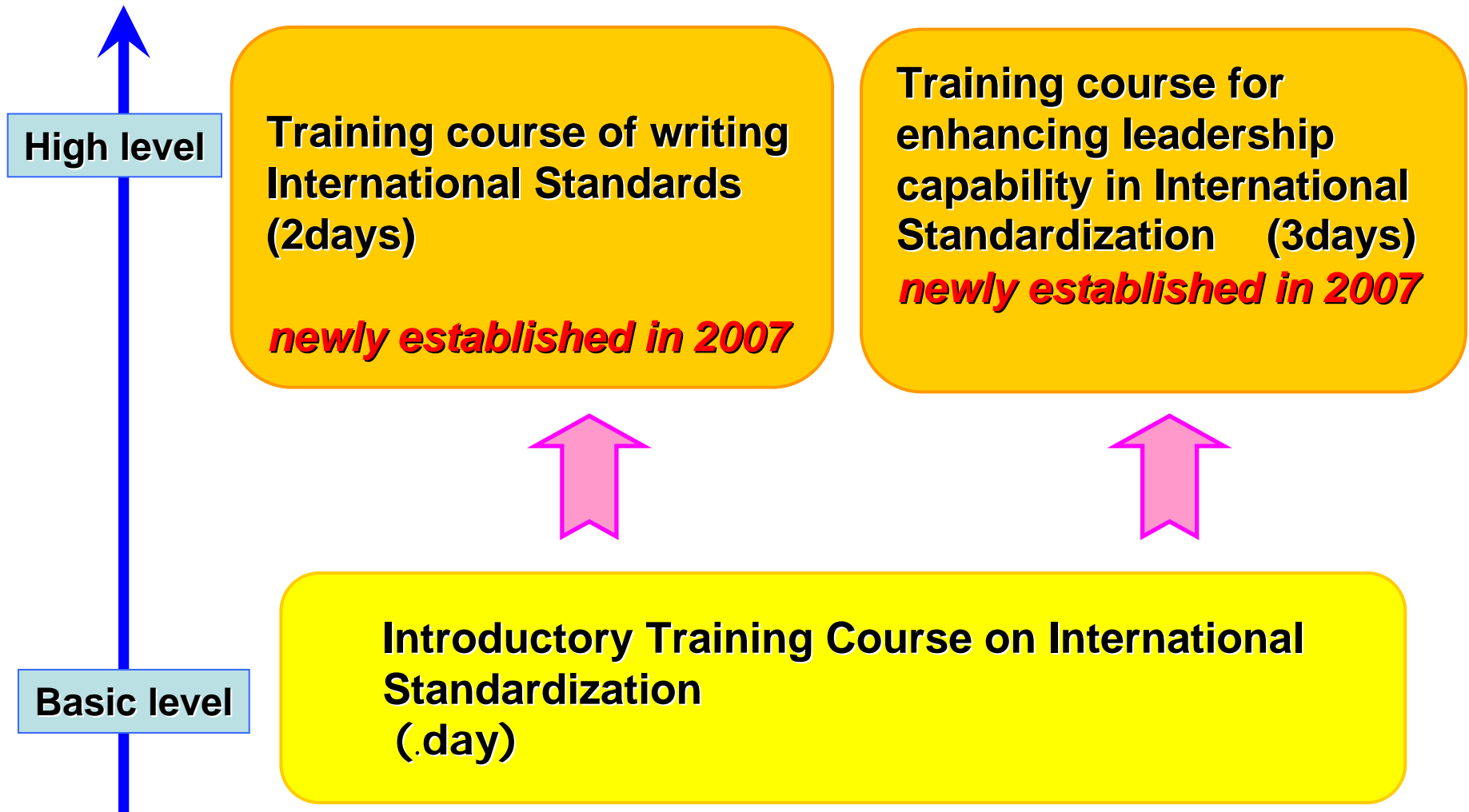


Types of Standardization Experts

- Standards writers and developers (e.g. chairs, conveners, project leaders, secretaries)
=> need to educate these experts for the next generation
- Researchers of technologies necessary for standardization
=> need for them to be aware of the importance of standardization in their R&D activities for enhancing synergy between R&D and standardization
- Planners deciding what is to be standardized, and when and how
=> need for them to be aware of the importance of incorporating standardization in their business strategies and planning

Training

Training Courses for Standards Writers and Developers



Development of Teaching Materials and Lectures at Universities

Developing Teaching Materials on Standardization

- General Knowledge *(FY 2005-2007)*
- Sector Specific Case Study
 - Machinery
 - Machinery Safety
 - Electrotechnology
 - Chemistry

Utilizing



Feedback



- **Providing Special Lectures at Universities**
- **Sponsoring and Supporting lectures at Graduate Schools** *(newly started in 2007)*
 - One term course at Graduate School of Business (MBA), Kwansai Gakuin university
 - One term course at Graduate School of Innovation Management (MOT), Tokyo Institute of Technology
 - Open lecture series at Chiba University

Project of Developing Standardization Education Material (FY 2005-2007)

- A pair of **lecture material** and **reference material**

(Lecture material)

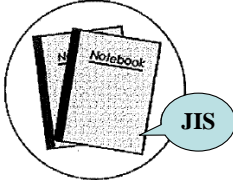
(Reference material)

1 JIS Mark Scheme Page 3

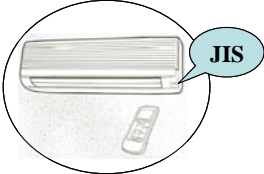
1.1 What is “JIS Mark” ?
 When products satisfy all requirements of JIS, a JIS Mark is affixed on products.

■ *Example*

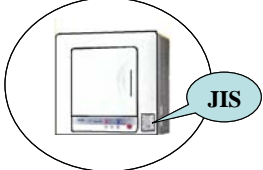
- Stationery
(Notebook, Scale etc.)
- Electric household appliances
(Air conditioner, Drier, Lamp etc.)



Notebook



Air Conditioner



Drier

Page 3

1 JIS.....

1.1 JIS.....

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Standardization Education at Graduate School (MOT, MBA)

- Change a typical perception that standardization is purely a technical matter into a strategic way-of-thinking so that standardization should be considered in relation to business strategies and intellectual property rights
- Just providing knowledge (e.g. what standards are used, how to make standards) is not so interesting
 - > Stimulating lectures, active class discussions and preferably letting students write their study reports for promoting them to think about some concrete standardization issues and develop their solutions and strategies as if they were decision makers

Standards Education Delivery Service

- Period; FY 2007
- Offering Schools; 34 (elementary school 3, junior high school 4, high school 4, technical college 3, University 20)
- Teachers; JSA, METI and Parliamentary Secretary Ogiwara
- Method; Using actual picture writing, marks, accessible designs, those used in standards through presentations and group works.

Parliamentary Secretary Ogiwara



Future Challenges

- 3-year project initially developing teaching materials is near completion. Next step will be the development of a human network/community among industry-academia-government persons participating in standardization education under METI/JISC initiative in 2008
- > 15 professors at 13 universities provide standardization education courses at present => a good start
- > Development of a human network/community would be effective for starting a significant movement among universities, etc.

- **Promote research on standardization from various aspects**

- > Teaching materials providing well-structured, necessary knowledge are absolutely important for high education in standardization.
- > 5-year project (FY 2003-2007) of studying standardization on business strategies will be finalized in due course. This study will provide students of MOT & MBA and business persons with strategic perspectives.
- > Furthermore, academic research on standardization from various aspects, not only business strategies but also safety, environment, legislation, etc. would be effective for further enriching and stimulating high education in standardization. METI/JISC plans to initiate such kinds of research in 2008.

- **JISC will establish a special policy committee to deliberate JISC's policy on human resource development in standardization and will make a policy report in 2008.**

- **We recognize that long-term efforts must be needed for making our efforts fruitful especially in standardization education.**

- **We have just started our human resource development project.**

We really need to exchange experiences and views with ICES colleagues.

Thank you for your attention!