2008 EUVP Brussels, February 25 - 29, 2008

# New Initiatives for Research Funding Administration Reform in Japan

- Activities of "ORFA (Office of Research Funding Administration)" -

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# Content

- What is "ORFA" ?
- Background
- "moth" or "mold" ?
- Countermeasures for misuse
- Steps toward effective and efficient funding system

# What is "OR FA" ?

- ORFA = "Office of Research Funding Administration"
  - since October, 2007
  - Science and Technology Policy Bureau Ministry of Education, Culture, Sports, Science and Technology (MEXT)
  - 9 staff

# What is "ORFA"?

1. Planning and conducting countermeasures against misuse of research fund

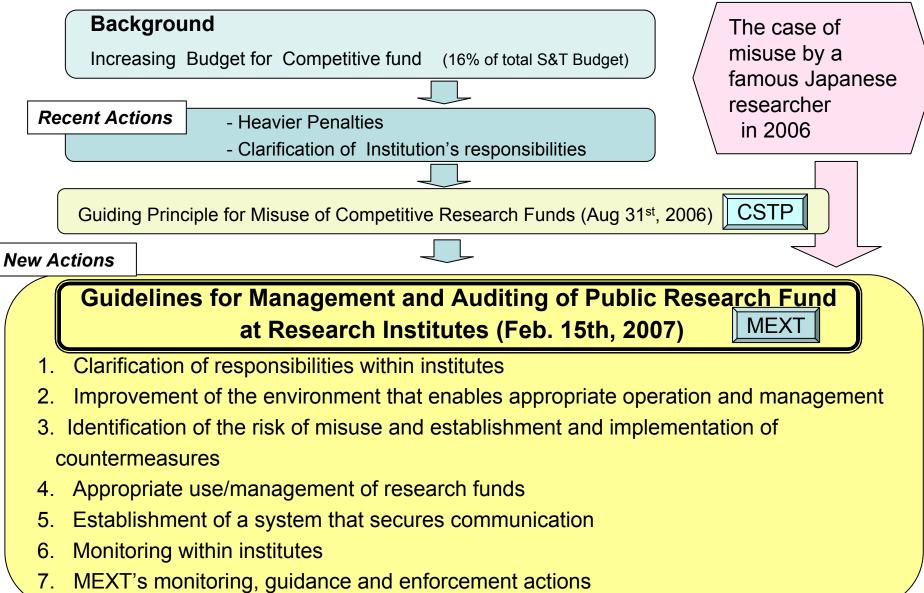
### 2. Developing research funding reform

ex. - Cross-Ministerial "R&D management system"

- Common rules for funding administration

\* Other division covers "Scientific misconduct" issues.

# Countermeasures against misuse of research fund



## **Science and Technology Basic Plans**

S&T Basic Plans are formulated to implement a 5-year S&T policy with a 10-year outlook, based on the S&T Basic Law.

<b>-</b> FY1996	[ First S&T Basic Plan ] Total expenditures for governmental R&D investment: approx. 17 trillion yen System reforms for construction of a new R&D system
	[ Second S&T Basic Plan ]
<b>-</b> FY2001	Total expenditures for governmental R&D investment:
	approx. 24 trillion yen (21 trillion yen including local gov.)
	Clarification of Japan's objectives
	Strategic priority setting for S&T
	Promotion of basic research
	Priority setting for four prioritized fields, etc.
	S&T System Reforms
	Building a competitive environment for research
	Human resource-fostering and university reform, etc.
- FY2006	[ Third S&T Basic Plan ]

### Third S&T Basic Plan (FY2006 - FY2010)

#### Total expenditures for Governmental R&D Investment: approx. 25 trillion yen

#### < Basic Stance >

- 1. Continuous improvements in the level of science, and returning the fruits of research to society and the public through innovation.
- 2. Emphasis on the training of human resources and the establishment of a competitive environment.

#### < 6 Policy Goals >

- 1. Quantum jumps in knowledge discovery & creation 2. Breakthroughs in advanced S&T
- 3. Sustainable development economic growth & environment protection -
- 4. Innovator Japan strength in the economy & industry –
- 5. Nation's good health over a lifetime 6. Making Japan the world's safest country

#### < Strategic Priority Setting in S&T>

- 1. Promotion of basic research
- 2. Four primary priority fields, four other fields to be promoted, promotion strategies of each of the 8 fields
- 3. Strategic Prioritized S&T topics

(Key technologies of national importance, Safety and security, International competitiveness)

#### < Reforming the S&T System >

1. Developing, securing and activating human resources

(young researchers, female researchers, foreign researchers)

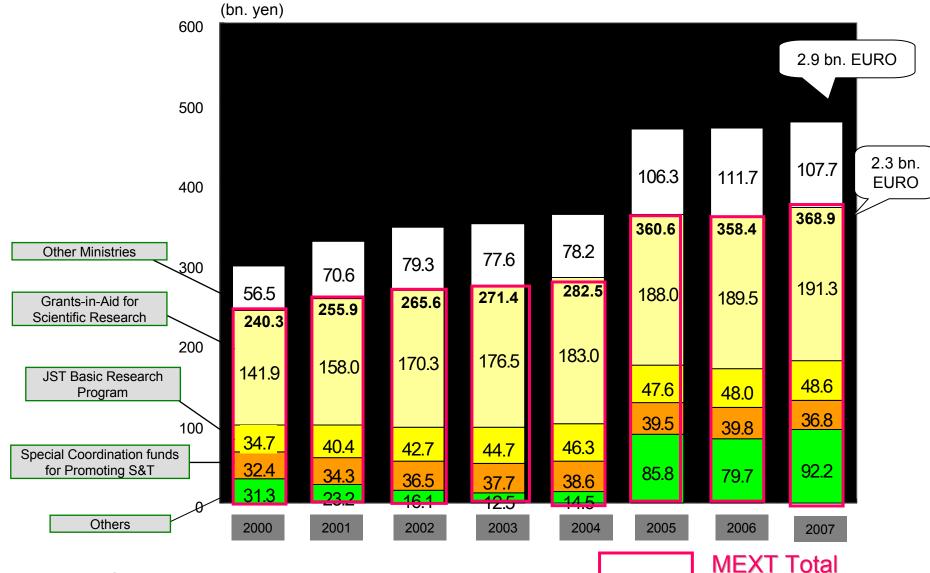
Enhancing the human resource development functions in universities

- 2. Creating scientific development and persistent innovation
- 3. Reinforcing the foundation for promoting S&T

<Strategically promoting International Activities (Cooperating with Asian Nations)>

< S&T to be support from the society and the public >

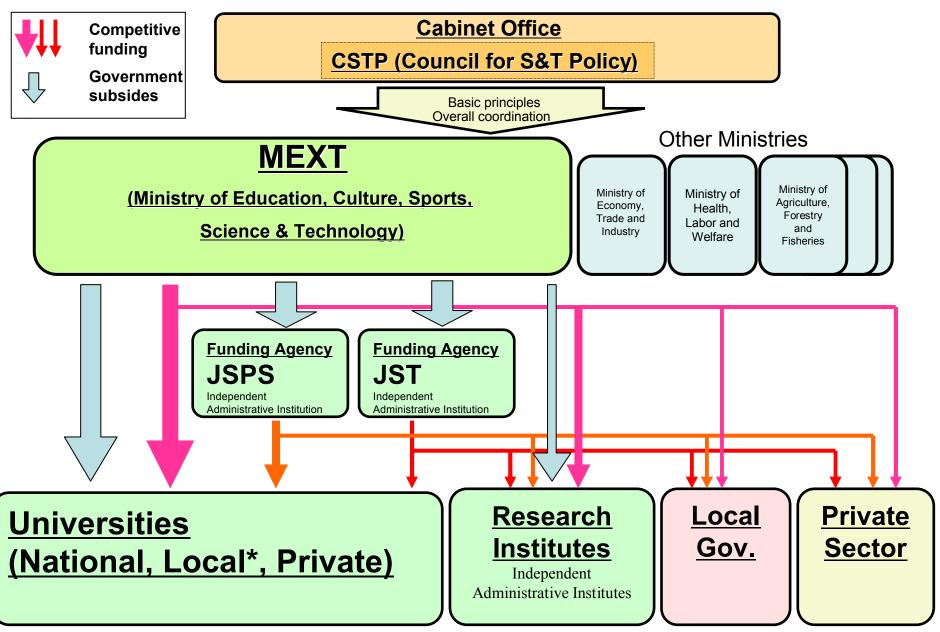
## **Time-trend of Competitive Research Funds**



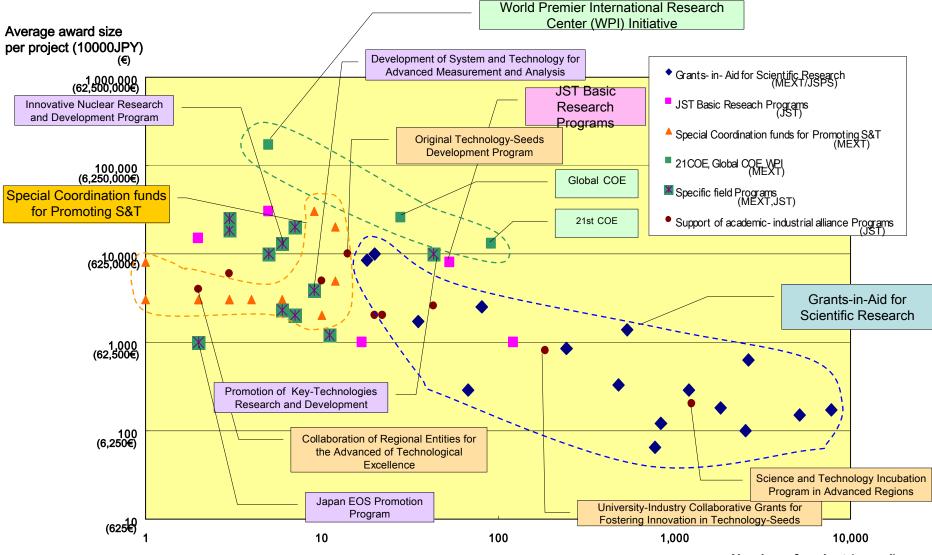
1 E U R O = 160yen

**77%** of total governmental 8 Competitive Research Funds

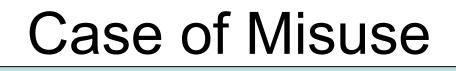
## **Research Funding System in Japan**



#### Distribution Map of programs of MEXT Competitive Research Funds (FY2007)



Number of project (award)



Refund Order for misused expense (2004FY – 2006FY)

- 30 cases
- 0.53 bn. JPY (3.3M EURO)

- \* > 50,000 active projects / year
- \* 997 bn. JPY (6.2 bn. EURO) (MEXT's total expenditure for Competitive funds (2004FY – 2006FY))

# **Cause of Misuse**

(Report "Committee for the countermeasures against misuse of research funding)

(Dec.26th, 2006)

- Researchers (moral issue)

penalties

- Lack of organizational management system within research institutes

guidelines

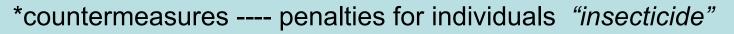
- Inflexibility of funding system

funding system reform

# Law of "moth" and "mold"

### Misuse in U.S. ---- "moth" type

- motivation "personal interest"
- sporadic



#### Misuse in Japan ---- "mold" type

- motivation "organizational interest"
- lasting along with the "position"

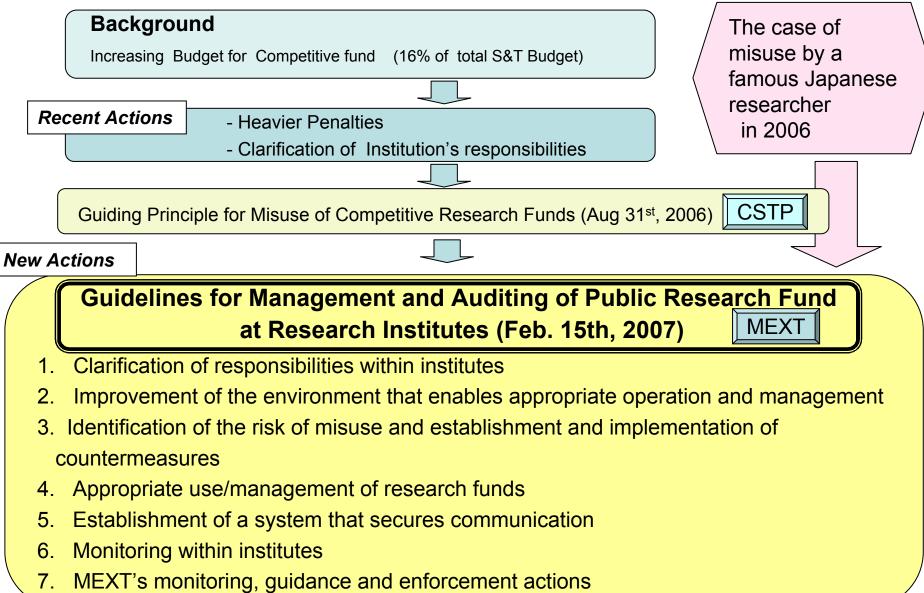
\*countermeasures ---- eliminate underlain factors

"dehumidifying and cleansing"

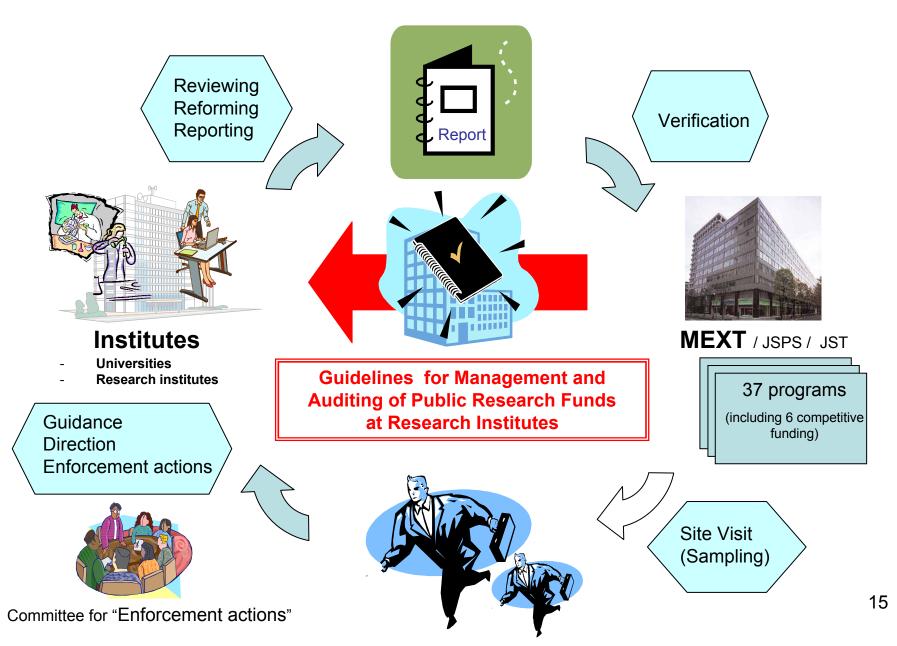
Original source ; Prof. Gohara Nobuo Toin Yokohama University, Compliance Research Center Presentation (in Japanese) at MEXT's Committee for Research Funding Misuse, Oct. 4th, 2006

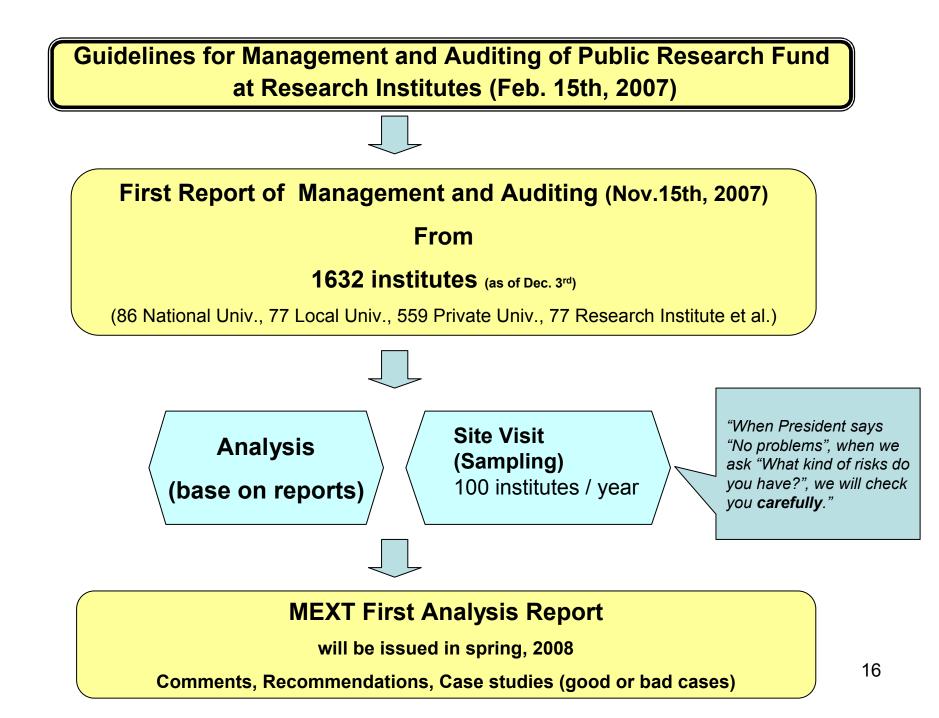


# Countermeasures against misuse of research fund

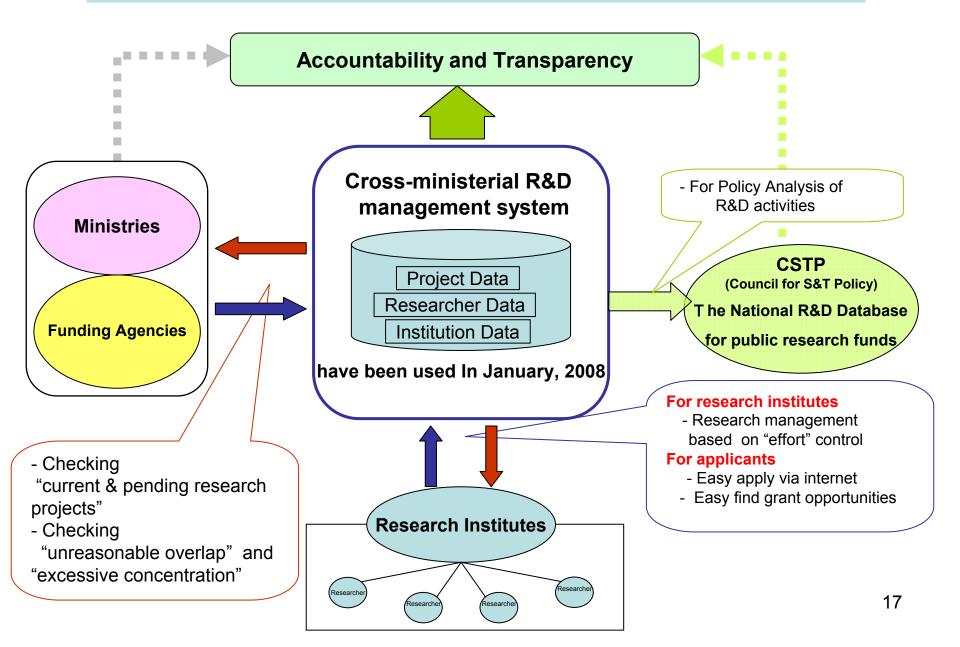


### Audit Cycle based on Guideline





#### Cross-ministerial R&D management system (e-Rad)



# Just taking off..

- An ID Number for every researcher
  > 453,309 person (February , 2008)
- 2. Access
  - researchers: can check own award data
  - **Institutes:** can check their researchers' data
  - Funding Agencies: can check offered proposals and other current

& pending research project for checking "overlaps" and "concentration"

- Reviewers: can check proposals in their assignment, and other current
  & pending research project for checking "overlaps" and "concentration"
- 3. **17 programs** has been open called thought "e-Rad" since January, 2008

# Research Funding System in Japan

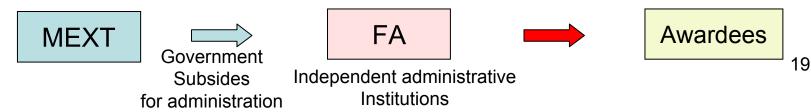
- < 3 major channels > (15 programs, 2007Y)
- 1. Grant type (4programs, 63%)



2. Commission type (4 programs, 16%)

MEXT Awardees

3. Commission type (Funding Agency) (7 programs, 21%)



# **Research Funding System Reform**

- 1. Single Accounting year Principle
  - Exceptional permission system for carry-over
  - More flexible system
- 2. Flexibility
  - Earlier transfer of money in advance
- 3. Comprehensiveness
  - Simplification / unification of complex rules of the jungle of research programs

# **Experiences in Overseas**

### 1. FDP (Federal demonstration partnership)

# in U.S.

### 2. Simplification in the 7th Framework Program

#### in EU



# *Thank you!* tkiyoura@mext.go.jp



The most efficient system in Japan = No administrative cost