



Over view of Strategic Basic Research Programs (CREST, PRESTO)

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科学技術振興機構

Contents

- ◆ Overview of JST and Strategic Basic Research Programs (CREST, PRESTO)
- ◆ CREST & PRESTO Call for proposals (Term2) in FY 2015

Transformation into National Research and Development Agency

On April 1, 2015, the government of Japan established the National Research and Development Agencies by transforming the former Independent Administrative Agencies for R&D, including JST.

Fundamental goal : Maximize research achievements

- ◆ greater flexibility in institutional management based on the characteristics of R&D agencies
- ◆ greater responsibility to maximize research achievements

Mission

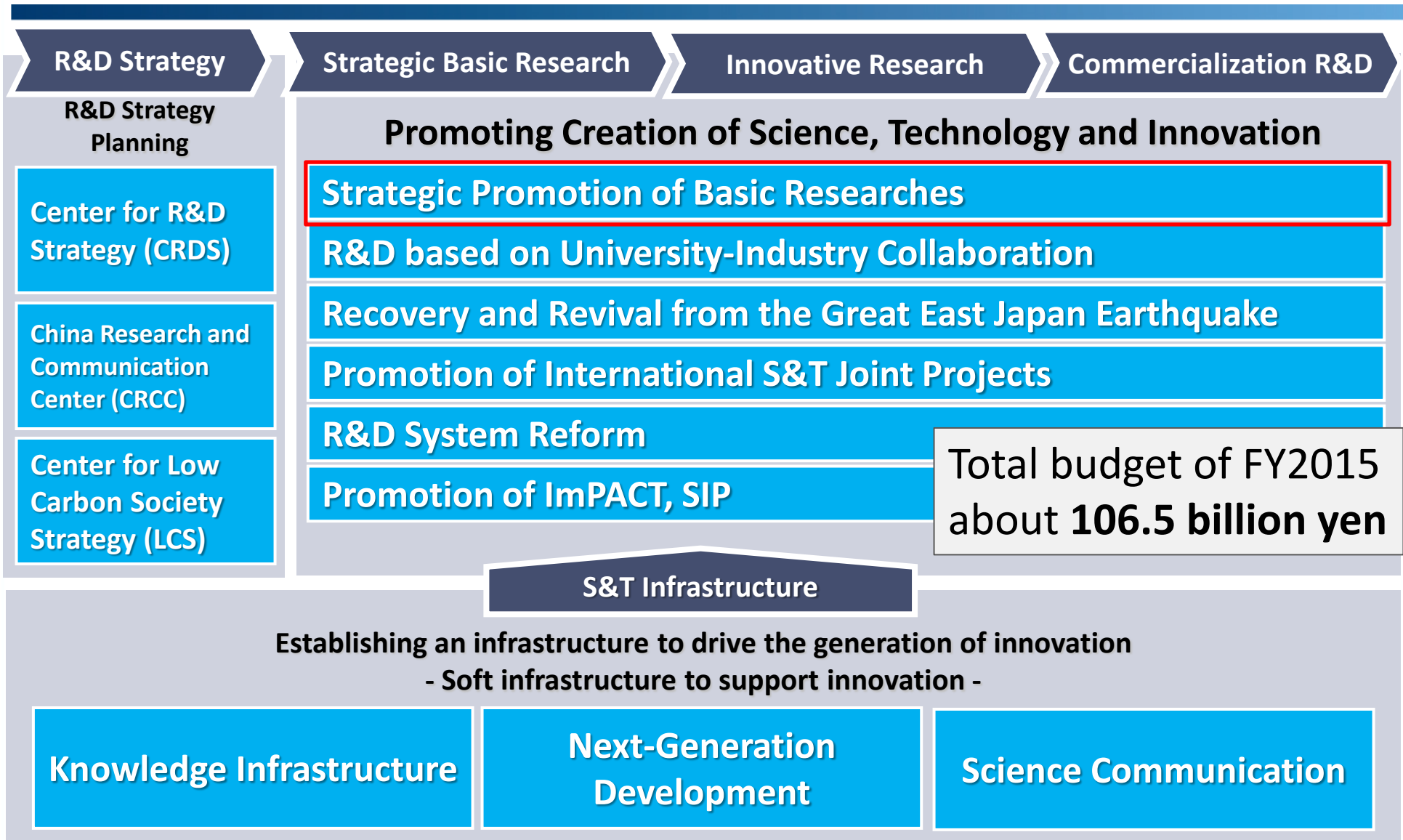
Contribute to the creation of innovation

Vision

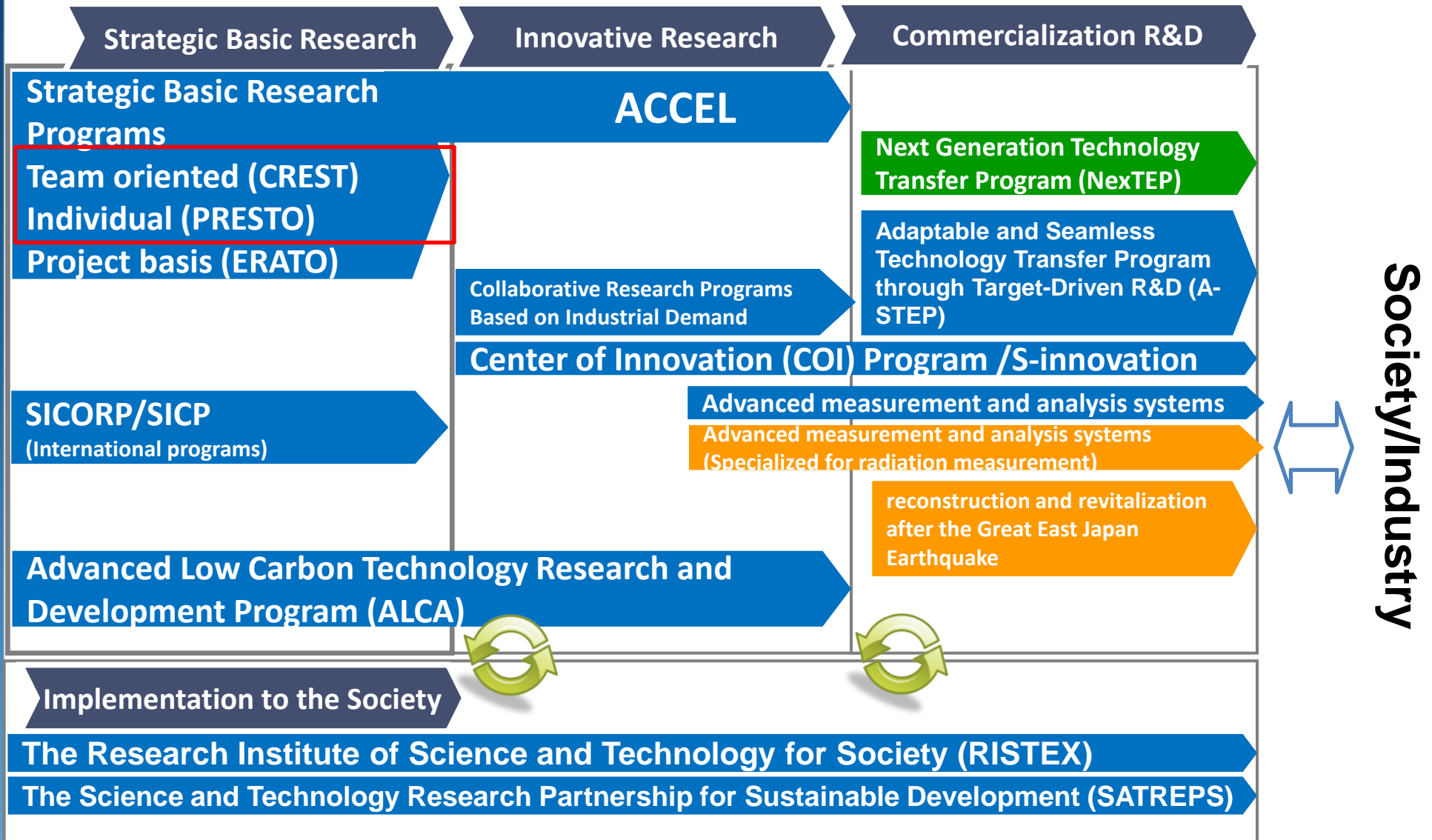
- I. Achieving innovations in science and technology through creative research and development
- II. Maximizing research outcomes by managing research resources on a virtual network
- III. Developing Japan's infrastructure for science and technology so as to accelerate innovation in science and technology

<http://www.jst.go.jp/EN/about/message.html>

Major Operation of JST



Major Funding Programs of JST



About Strategic Basic Research Programs

Strategic Objectives designated by the Government

Development and Operation of Virtual Networking Research Institutes

- Program Director oversees the overall system and considers management direction
- Establishment of Research Areas and Program Officers (Research Supervisors, etc.) best suited for achieving objectives
- Identification of researchers with exceptional pioneering qualities and originality, based on the Program Officers judgment
- Flexible, dynamic decision-making on research plans and research funding allocation in accordance with research progress achieved and other factors.

**Creating the Seeds for
New Technology
(CREST, PRESTO,
ERATO, ACCEL)**

<Research Programs>
**Advanced Low Carbon
Technology Research and
Development Program
(ALCA)**

**Research Institutes of
Science and
Technology for Society
(RISTEX)**

Prioritized
Area

Green Innovation

Life Innovation

Nanotechnology and
Materials Science

ICT

S&T for Society and
Social Infrastructure

Towards Science and Technology Innovation

Approaches of JST and JSPS (KAKEN)

JST



Top-down approach

- ❖ R&D strategy based on S&T and socio-economic trends
- ❖ R&D strategy aiming at creation of innovation

Socio-economic goals



Ministry's policy based on the National S&T Basic Plan



Determination of strategic sector



Design of research areas, appointment of research supervisors



Creation of innovation seeds from research results

JSPS



Promotion of a broad range of academic works



Support to the creative and pioneering research with academic excellence



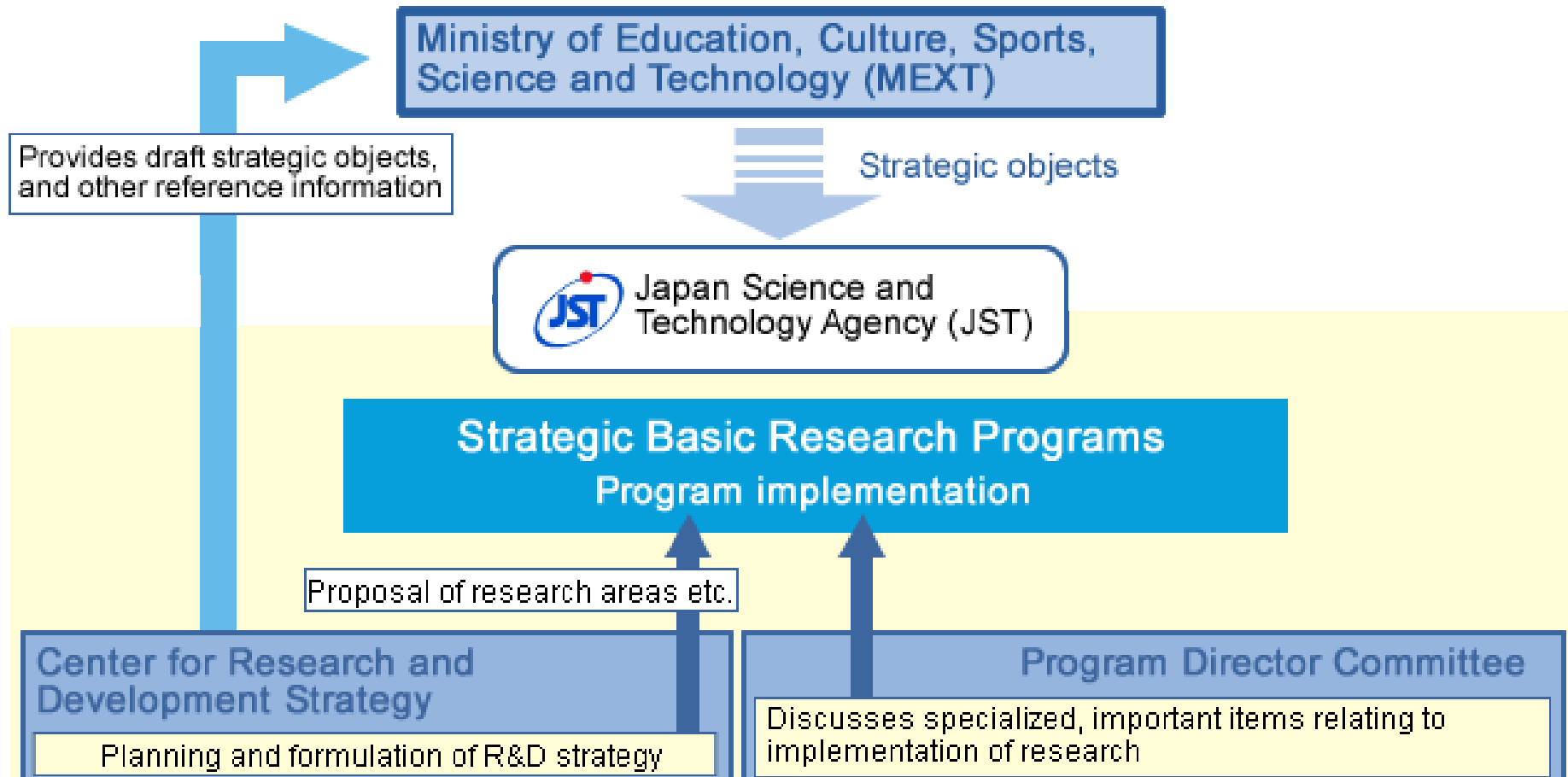
Research proposals based on the scientists' freedom with their own goals



Bottom-up approach

- ❖ Depending on freedom and originality of researchers
- ❖ Not necessarily relevant to socio-economic trends

Governing System of Strategic Basic Research Programs



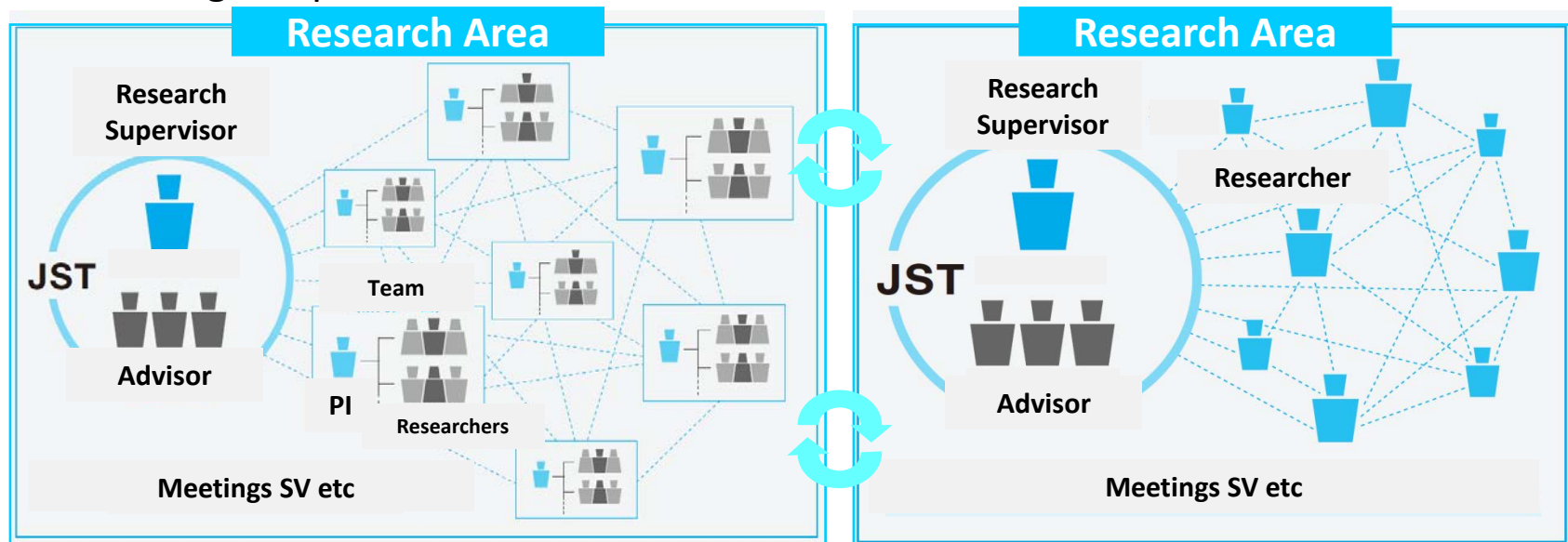
<http://www.jst.go.jp/kisoken/en/about/index.html>

CREST and PRESTO

Strategic Objectives by MEXT

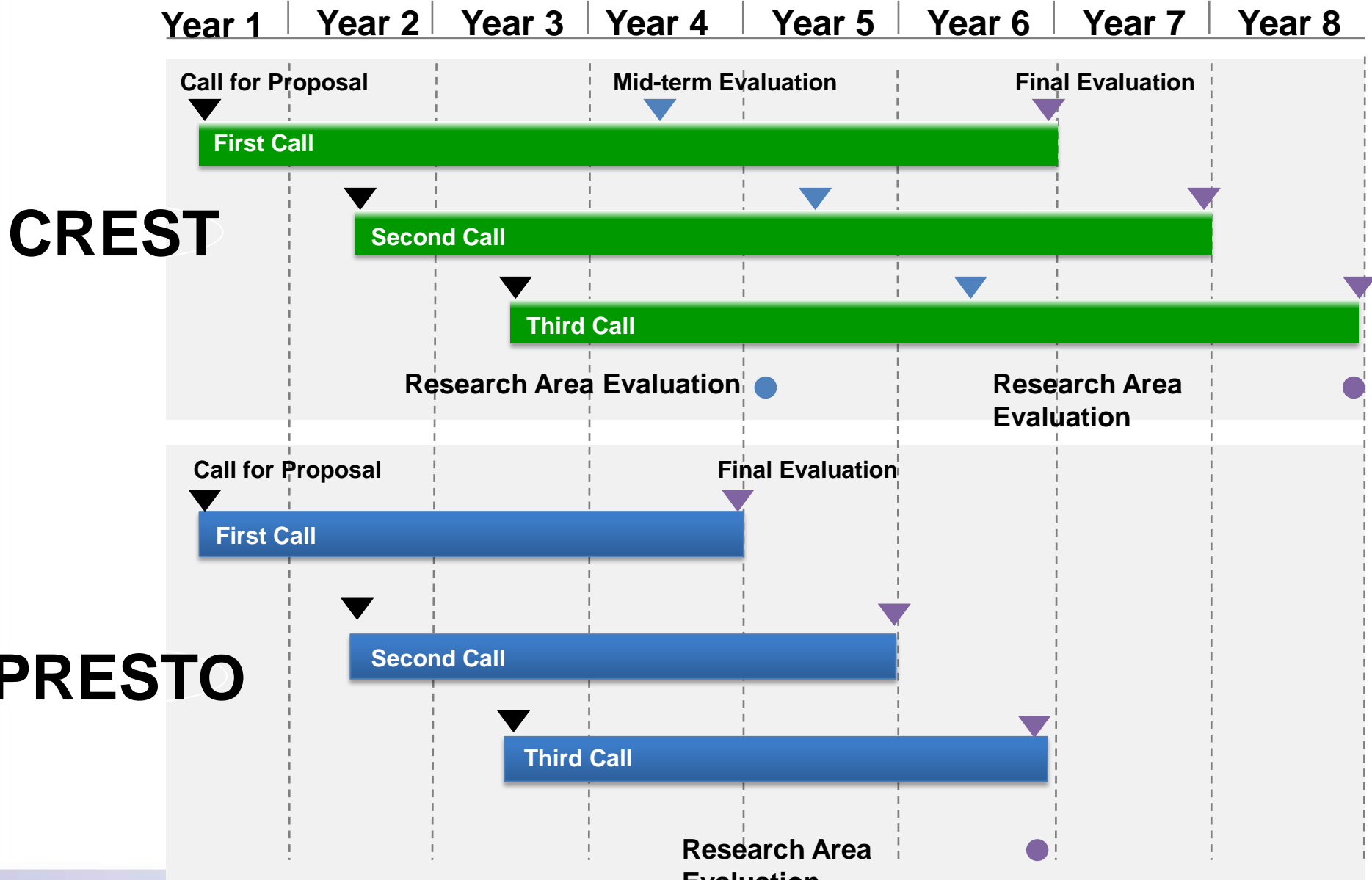
CREST Team Oriented
Pursuing Team-Oriented Research that Strives to Generate High-Impact Seeds of Innovation.

PRESTO Individual Basis
Promoting Individual Research to Nurture the Seeds of Future Innovation.

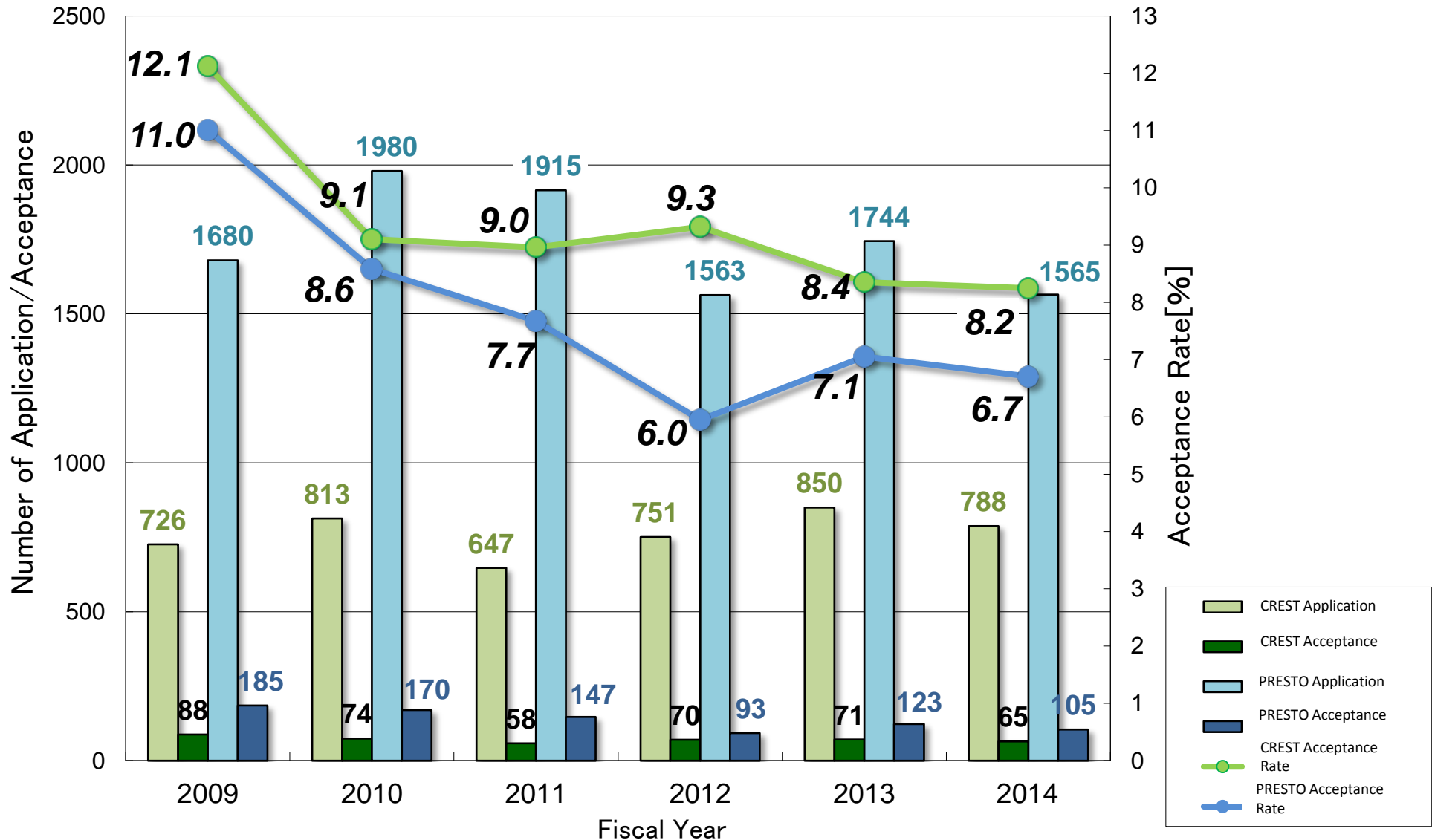


Research Type	Budget per year	Total Budget	Research Period
CREST	¥30 - 100 Million /yr	¥150 - 500 Million	~ 5.5 years
PRESTO	¥10 Million /yr	¥30 - 40 Million	~ 3.5 years

Typical Operation of CREST and PRESTO



Statistics of CREST and PRESTO



CREST

Pursuing Team-Oriented Research that Strives to Generate High-Impact Seeds of Innovation.

Research Period : maximum 5.5 years Funding : 150-500 million Yen / team

PRESTO

Promoting Individual Research to Nurture the Seeds of Future Innovation.

Research Period : 3.5 years Funding : 30-40 million Yen

Application deadlines:

CREST: **Tuesday, August 4, 2015 at 12:00 noon, Japan time**

PRESTO: **Tuesday, August 4, 2015 at 12:00 noon, Japan time**

For more information:

<http://www.senryaku.jst.go.jp/teian-en.html>

Department of Innovation Research, Japan Science and Technology Agency (JST)

E-mail (preferred): rp-info@jst.go.jp

Telephone (for urgent matters): 03-3512-3530

(Office hours: 10:00-12:00/13:00-17:00, except Saturdays, Sundays, and National Holidays)

Call for Proposals in FY2015

✓ 1st Term

Research proposals are invited for 9 CREST Research Areas and 8 PRESTO Research Areas

✓ 2nd Term

Research proposals will be invited for new Research Areas established in based on the Strategic Objectives of FY2015 designated by MEXT.

※A researcher who submits a proposal for the Call for Research Proposals (First Term) may also submit a proposal for the Call for Research Proposals (Second Term).
Proposal selections, however, will be limited to only one research area.

Application Guideline: Chapter 1 Overview of Research Proposal Solicitation

CREST Research Area established in FY2015

CREST

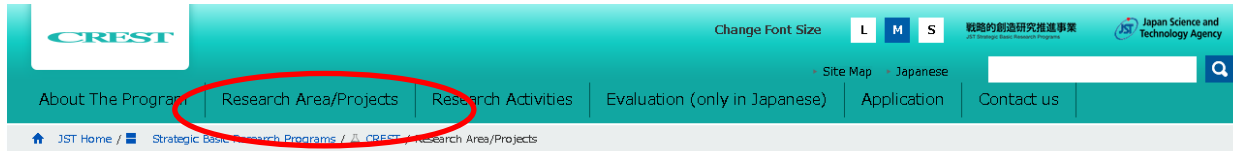
Keyword	Research Areas	Supervisor / Deputy Supervisor
Advanced photonics	Advanced core technology for creation and practical utilization of innovative properties and functions based upon optics and photonics	Ken-ichi Kitayama
Energy Harvesting	Scientific Innovation for Energy Harvesting Technology	Kenji Taniguchi / Hiroyuki Akinaga
Innovative Catalysts	Innovative catalysts and creation technologies for the utilization of diverse natural carbon resources	Wataru Ueda
Robustness in Plants	Creation of fundamental technologies contribute to the elucidation and application for the robustness in plants against environmental changes	Satoshi Tabata

PRESTO Research Area established in FY2015



Keyword	Research Areas	Supervisor / Deputy Supervisor
Frontier	Fully controlled photons and their proactive usage for new era creation	Ken-ichi Ueda
Energy Harvesting	Scientific Innovation for Energy Harvesting Technology	Kenji Taniguchi / Hiroyuki Akinaga
Innovative Catalysts	Science and Creation of Innovative Catalysts	Hiroshi Kitagawa
Materials Informatics	Advanced Materials Informatics through Comprehensive Integration among Theoretical, Experimental, Computational and Data-centric Sciences	Shinji Tsuneyuki
Control of field-grown plants phenomena	Creation of Next-generation fundamental technologies for the control of biological phenomena in field-grown plants	Kiyotaka Okada
Cultivation with information science	Innovational technical basis for cultivation in cooperation with information science	Seishi Ninomiya

On-going Research Projects of CREST and PRESTO



Quick Access

- News
- On-going
 - Green Innovation
 - Life Innovation
 - Nanotechnology & Materials
 - Information & Communications Tech.
- Completed
- Index
 - On-going
 - Completed

Research Area/Projects

On-going

Green Innovation

- Creation of Innovative Core Technology for Manufacture and Use of Energy Carriers from Renewable Energy
Research Supervisor: Koichi Eguchi
- Phase Interface Science for Highly Efficient Energy Utilization
Research Supervisor: Nobuhide Kasagi
- Creation of essential technologies to utilize carbon dioxide enhancement of plant productivity and the exploitation of
Research Supervisor: Akira Isogai

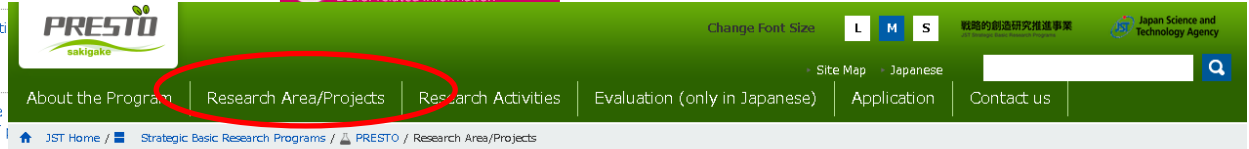
Research Area/Projects

Research Area

Please Select

Brochure
DL for related information

<http://www.jst.go.jp/kisoken/crest/en/>



Quick Access

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Research Area/Projects

On-going

Green Innovation

- Creation of Innovative Core Technology for Manufacture and Use of Energy Carriers from Renewable Energy
- Phase Interfaces for Highly Efficient Energy Utilization
- Creation of essential technologies to utilize carbon dioxide as a resource through the enhancement of plant productivity and the exploitation of plant products

Research Area/Projects

Research Area

Please Select

Brochure
DL for related information

<http://www.jst.go.jp/kisoken/presto/en/>

CREST - Requirements for Research Project Applicants

Applicants must be affiliated with a domestic Japanese research institution, where they will organize and pursue the proposed research
(The nationalities of research project applicants are not considered.)

a. The following types of people may also submit research project proposals.

- Researchers who have foreign citizenship, but are associated with a domestic Japanese research institution.
- Researchers who are not currently affiliated with a research institution, or are affiliated with an overseas research institution, and, if selected as a Research Director, would be able to organize and pursue research as a researcher affiliated with a domestic Japanese research institution. (Nationality will not be considered.)

This also covers those affiliated to private sector companies and other non-university research institutions.

b. Researchers who are able to bear overall responsibility for a research project as the party responsible for the research team throughout the entirety of the research period.

c. The applicant must either: Have already completed the educational program for research integrity at his/her affiliated research institution; or complete the JST-provided educational program by specified period.

d. The following two items must be verifiable upon submission.

- If the research proposal is accepted, the Research Director and research participants must not engage in misconduct in their research (fabrication, manipulation, and plagiarism) nor in inappropriate usage or unlawful use of research funds.
- The research project applicants and research participants must not have engaged in misconduct in the past to achieve the research results that are mentioned in the submitted research proposal. The above verification will be part of the e-RaD Submission Information Entry screen.

Application Guideline: Chapter 2.2.4

PRESTO - Requirements for Research Project Applicants

- a. A research project applicant must be the person himself/herself who is going to be the **individual researcher**.
- b. A research project applicant must be the proposer of the subject research initiative and be the researcher who will independently perform research work in pursuit of the research initiative.
- c. Research project applicants must **hold Japanese citizenship or be a foreign researcher who will pursue research work within Japan**.
- d. The researcher must take responsibility for his/her PRESTO research project throughout the entire research term and be capable of overseeing it to its completion.**
- e. The applicant must either: Have already completed the educational program for research integrity at his/her affiliated research institution; or complete the JST-provided educational program by specified period.
- f. The following two items must be verifiable upon submission.
 - If the research proposal is accepted, the individual researcher must not engage in misconduct in their research (fabrication, manipulation, and plagiarism) nor in inappropriate usage of research funds.
 - The research project applicant must not have engaged in misconduct in the past to achieve the research results that are mentioned in the submitted research proposal.The above verification will be part of the e-RaD Submission Information Entry screen

Application Guideline: Chapter 3.2.4

Points of Concern -1

◆ Application of proposal is implemented

via **e-Rad system** (<http://www.e-rad.go.jp/>)

Researchers who do not have a login ID and password should immediately complete the researcher registration procedure. As the application deadline approaches, heavy demands on the e-d system could slow the application process and even cause the application deadline to be missed. Please give yourself plenty of time to complete submission of proposal.

◆ Application deadlines

CREST: **Tuesday, August 4, 2015 at 12:00 noon, Japan time**

PRESTO: **Tuesday, August 4, 2015 at 12:00 noon, Japan time**

<http://www.senryaku.jst.go.jp/teian-en.html>

Points of Concern -2

◆ Conflicts of Interest involving Research Project Applicants and the Research Supervisor

Research project applicants shall be excluded from selection consideration when involved in a relationship involving a Research Supervisor, as described application guideline.

When it is unclear whether a condition applies, an inquiry should be made to rp-info@jst.go.jp before submitting a research project proposal by preparing Inquiry Form.

Inquiry Form: <http://senryaku.jst.go.jp/teian-en.html>

For inquiries submitted by July 7:

responses as to whether any of the relationship conditions described above have been violated shall be provided by the proposal deadline.

For inquiries submitted after July 8:

such responses may not be provided by the proposal deadline.

Acceptance of research project proposals may be canceled if it is determined following the proposal deadline that any of the relationship conditions described above have been violated.

Application Guideline: Chapter 2.2.5 & 3.2.5

Points of Concern -3

◆ Preliminary Selection

Depending on the number of applicants and other factors, documentation-based selections can be performed for individual Research Areas by beginning with a preliminary selection relying mainly on:

CREST Form 2

“Research Proposal Overview and Major Achievements of the Research Director”

PRESTO Form 2

“Research Proposal Overview and Major Achievements of the Research Project Applicant”

1. Outline of Research Project ***Do not exceed two A4-size sheets***
2. List of principal research papers / invited lectures ***Do not exceed one A4-size sheet***

This preliminary selection is performed with attention paid mainly to whether proposals are suited to the purpose of the subject Research and whether the proposed research is suited to the purpose of the CREST/PRESTO program.

Document-based selection, using CREST Form 3 / PRESTO Form 3, will then be conducted only for the research proposals suited to these purposes.

Application Guideline: Chapter 2.2.6 & 3.2.6

In Issuing the Invitation for Research Proposals

◆ Proactive Participation in and Contribution to the Programs by Young Researchers

◆ Promotion of Diversity

◆ Promotion of Fair and Honest Research

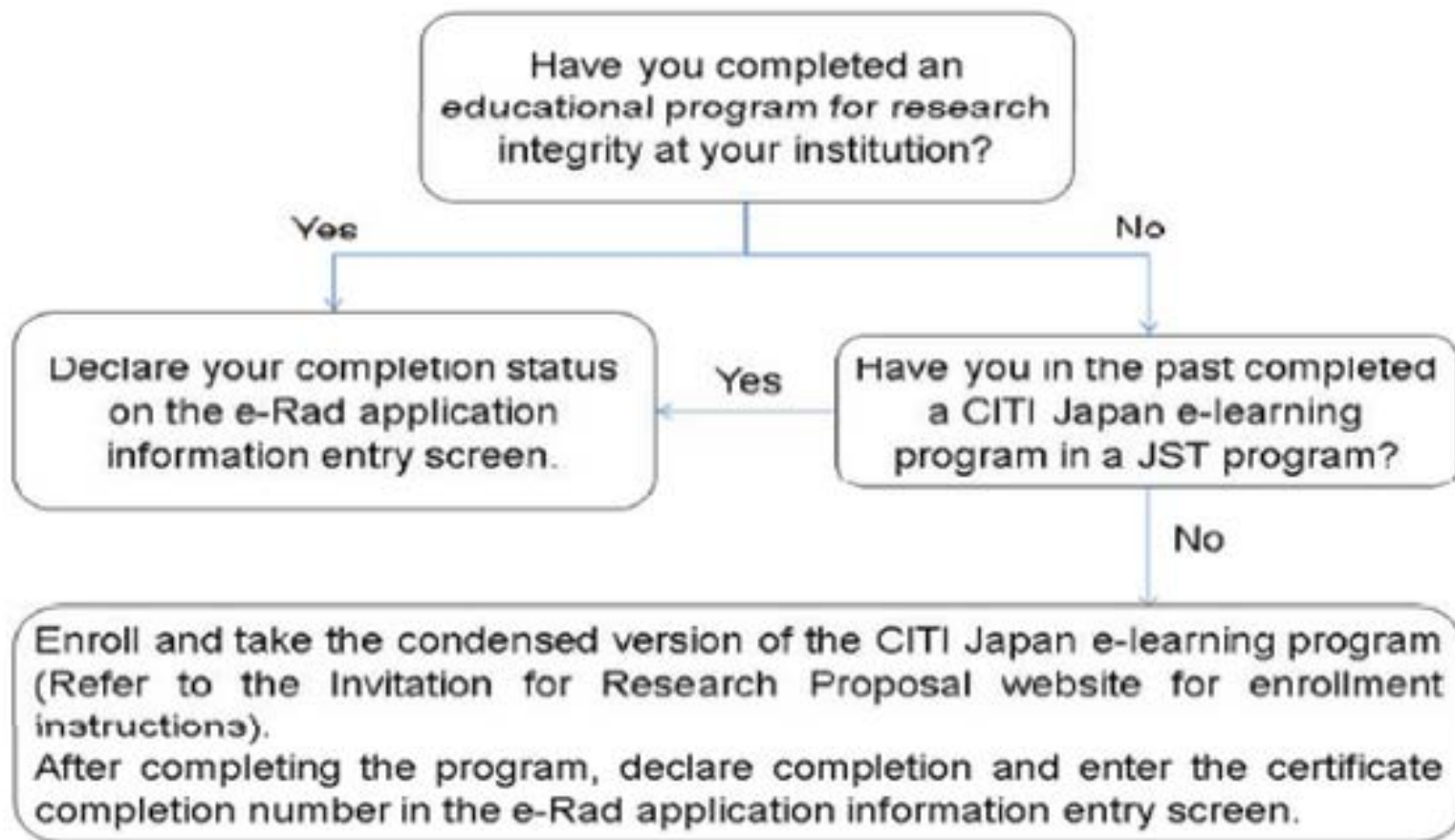
- Enrolling in Educational Programs on Research Integrity
- Measures Regarding the Inappropriate Usage of Research Funds
- Measures Regarding the Implementation of Research Funding Management/Auditing Systems and Responses to Misconduct at Research Institutions
- Measures Regarding Misconduct in Research Activities

◆ Compliance of Laws and Regulations

Application Guideline: Introduction and Chapter 6

Enrolling in Educational Programs on Research Integrity

The research project applicant must complete the educational program for research integrity as a prerequisite for application. Note that if completion of the program cannot be confirmed, the application will be disqualified for failing to meet the requirements



Application Guideline: Chapter 6

Thank you for your attention

For more information:

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