

# Points of Science and Technology Basic Plan

(Tentative Version)  
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## Vision and concepts to be an advanced science- and technology- oriented nation

### Circumstances around science and technology

#### A Look back of the 20th century

- Outstanding advances in S&T
- affluence and convenience in daily life
  - better health and longevity
  - negative influence on society/the environment

The outlook for the 21st century S&T, as an engine driving sustainable growth of the world, is expected to unlock the future of mankind.

- industrial competitiveness, employment creation, higher quality of life in aging, IT and recycling society
- international contribution by tackling multiple problems which the world faces on a global scale (population explosion, fresh water management, food & energy security, global warming, infective disease prevention, etc)

### Nation's vision to be attained

“A nation contributing to the world by creation and utilization of scientific knowledge”  
- creation of wisdom -

“A nation with international competitiveness and ability of sustainable development”  
- vitality from wisdom -

“A nation securing safety and quality of life”  
- sophisticated society by wisdom -

## Comprehensive and strategic S&T policies

Comprehensive and panoramic evaluation of S&T positive and negative influence in relationship with people and society

Integration of natural S&T, social sciences and humanities S&T in and for society

Promoting S&T as prior investment toward the future

Creation of wisdom / human resource development  
Dynamic circulative system in which R&D achievements are speedily applied to social/industrial activities, attracting further investment

## Basic concepts for S&T promotion

### Basic policies

To set priorities for S&T resource allocation to make R&D expenditure more effective

To pursue S&T systems which create world-class excellent achievements and to expense on R&D infrastructure for the systems

To pursue restoration of S&T to society

To promote internationalization of S&T

## Increase of governmental R&D expenditure and effective/efficient resource allocation

24 trillion yen of governmental R&D expenditure for 5 years' term (assuming 1% of the GDP and 3.5% nominal GDP growth per year)

Annual budgeting under circumstances of fiscal conditions, R&D system reform progress and other conditions

Upgrading the quality of R&D through accomplishing prioritization, efficiency and transparency of S&T investment

## Strategic priority setting in S&T

Promotion of basic researches, upgrading research quality by fair and transparent evaluation

Prioritization of R&D on national/social subjects: life sciences, information and telecommunications, the environmental sciences, nanotechnology and materials science/technology  
secondary in energy, manufacturing technology, infrastructure, and frontiers (outer space and oceans)

Support for emerging fields with foresight and mobility:

## Internationalization of S&T activities

Initiatives in international cooperation

Enhancement of dissemination of information to the world

Internationalization of domestic R&D environments

## S&T system reforms to create and utilize excellent results

R&D system reforms:

- doubling the amount of competitive funds and allocating funds (30% additional) for indirect expenses
- mobilizing human resources using the fixed-term appointment and the apply-and-review basis recruit
- encouraging self-reliance of young researches (expanding special funds for them and reviewing associate professor's/research assistant's positioning)
- reforming evaluation systems to secure fairness/transparency and to reflect evaluations into resource allocation

Reinforcement of industrial technology and reform of industry-academia-government collaboration

S&T promotion in regions: establishment of “intellectual clusters”

S&T human resource development and S&T educational reforms: education of researchers and engineers, and reform of universities

Promotion of S&T learning and construction of channels toward society

Ethics and responsibility on S&T: bioethics, responsibility of researchers and engineers, accountability and risk management

Maintenance of infrastructure for S&T promotion: improvement of facilities in universities with top priority

## Mission of the Council for Science and Technology Policy to implement the Science and Technology Basic Plan

Acting as a control tower to implement S&T policy under the prime minister's leadership  
Steering S&T with foresight and mobility eliminating administrative sectionalism  
Integrating natural S&T, social sciences and humanities, while holding views to the world  
Playing an active role as a “source of wisdom” integrating natural S&T, social sciences and humanities, while holding views to the world  
Checking positive/negative influences on society and the environment and establishing ethics on S&T

- R&D promotion in prioritized areas
- policy on resource allocation
- promotion of nationally important projects
- settlement of national guidelines for critical issues
- evaluation of nationally important R&D
- follow-up of the basic plan

Basic Concepts

Basic Policies

Mission of the CSTP