

Outline of the CLUSTER

Circumstances

The Science and Technology Basic Plan

To promote to form “Intellectual Clusters” was placed in The Science and Technology Basic Plan (2001-2005) in March, 2001.

(Unofficial Translation)

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Chapter 2 Important Policies

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II. S&T system reforms

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3. Regional improvement of the S&T Promotion environment

Economic/social globalization and rapid progress and dissemination of IT have been affecting individual regions directly, and local industries are now exposed not only to domestic competition, but also to global competition. At the same time, S&T achievements afford local companies a chance to establish businesses in the international market quickly and easily.

Regional R&D resources/potentials can be utilized to upgrade and vary S&T in Japan, as well as to revitalize the Japanese economy through regional technical innovation and creation of new industries.

(1) Establishment of regional “intellectual clusters”

The “intellectual cluster” is a regional system of technological innovations in which a public research organization uses its R&D potential and other unique abilities to lead companies in and around a particular region.

More specifically, by utilizing a human resource network and systematic collaborative researches, the system fosters interaction between the original technological seeds of the public research organization and the business needs of regional companies to create a chain of technological innovations and new industries. Within such a system, regional development can lead to world-class technological innovations. It is thus imperative that Japan establish and support intellectual clusters in as many regions as possible.

In order to establish the intellectual clusters effectively and efficiently, the government should promote various R&D activities, including collaborative researches, human resource training/securing, and technological transfer functions, etc.

And public research organizations including both national and independent administrative institutions should develop their R&D functions in the region in cooperation with the local government.

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Road to the CLUSTER (FY 2000-2001)

In 2000, Task Force on social distribution policy of the fruit of scientific research activities, which had been set up by the Director-General of the Science and Technology Promotion Bureau of the former Science and Technology Agency, so as to develop new industrial fields brought about by the technological innovation rising from the remarkable results of activities and an efficient staff of researchers and engineers of local universities etc., deliberated about measures to establish highly intellectual clusters of innovation in various parts of the country, and selected a number of areas which should be done feasibility studies for the CLUSTER Project.

The studies were done in 30 areas over a whole country in FY 2001, based on which the local governments concerned proposed their plans, and their proposals were accepted by MEXT, January 2002.

Taking the assessment reports of their proposals and the interviews with them into account, based on advisory opinions by the experts in the third party, with a emphasis on the scientific and technological evaluation about potential for R&D and commercial feasibility, and taking their promotion systems and their attitudes with which to tackle the project into consideration, MEXT examined them from a general point of view.

MEXT subsequently appointed 10 areas (consisting of 12 smaller parts) as the CLUSTER in FY 2002, and actually started the project in July.

1 Purpose

To create a regional base, agglomerating universities, public institutions which accumulate wisdom, relevant institutions, and R&D companies, and planned by local governments.

2 Budget of MEXT

- 6 billion yen (approximately US \$ 50 M, £ 50 M), FY2002
 - 500 million yen (approximately US \$ 4.2 M, £ 4.2 M) for each cluster, each FY (5 years as a total)
 - Subsidizing a central project organization of each cluster, appointed by the local government to promote cooperative activities on science and technology in the region
- (calculated as US \$1 = £1 = ¥120)

3 Abstract

- Setting up the Headquarters of CLUSTER (President, Program Director, Research Director)
- Arranging science and technology coordinators as experts, and utilizing advisers such as patent attorneys
- Promoting joint researches which induct seeds of new technology, considering industrial needs, at the Collaborative Research Center of the university, rental laboratory etc.
- Applying for a patent and Promoting R&D to nourish it
- Holding forums to present research results

Image of “CLUSTER”

Integration of CLUSTER sustaining international competitiveness
 (“Competition” and “Cooperation” based on unique R&D region)

