
SCIENCE AND TECHNOLOGY PROGRAM - JAPAN

Structure of Science in Japan

Public conduct of, support for, and funding of science in Japan is handled in an even more fragmentary, decentralised, and overlapping manner than it is in Canada. With respect to the formulation of policy for science, the Council for Science and Technology (CST) is the most centralised and influential advisory body. It advises the Prime Minister and indeed, is chaired by him. The members are comprised of four Cabinet Ministers, the Chairman of the Science Council of Japan, two other full-time members, three industrial-sector part-time members and a representative from a non-scientific/engineering field. The Science and Technology Agency (STA) serves as the secretariat for the CST. As a matter of law, CST recommendations to the PM on basic S&T policy are required to be followed by him and these recommendations must then be carried out by the various branches of government.

The formulation of science policy by CST works from the grassroots level on up through the system. There are several levels of committees charged with this task. By the time a policy issue has wound it's way through the labyrinthine network of subcommittees and committees, final approval at the "plenary meeting" level is pretty much a formality. As can be imagined, this whole process is time-consuming, taxing, and difficult to manage. Furthermore, whatever policies there are that survive their journey through the system, emerge emasculated and lack any serious impact as they have been watered down so as not to offend or upset the established order any more than minimally.

In just under a year from now, as a part of the overall reform of their public administration and governmental structures, the CST will be replaced by a new "General CST" (GCST) in the Cabinet Office. The Cabinet Office itself will be new as well. The GCST will have four instead of two full-time members. It also will have more members from the private sector in keeping with the overall governmental policy of providing more freedom and flexibility to its institutions. The GCST will deliberate on all policy matters that are of national importance including matters currently decided at the individual ministries, such as those responsible for space, nuclear energy and the environment. Social science and humanities also will be added. The GCST secretariat will be strengthened in order to expand the GCST mandate beyond that of a recommending body to that of one which formulates strategic policy. The openness and transparency of the GCST is also a matter currently under discussion.

2. S&T Policy Evolution

As time has passed the content of the S&T policy formulation process has evolved to accommodate the social and structural changes Japan has undergone too. As Japan has emerged from the chaos of the last war, it's R&D focus evolved from a huge imbalance favouring technology over science, to the present situation in which there is only a moderate imbalance favouring technology over science. Post-war Japan first entered a phase in which it's S&T concerns were directed foremost to questions of survival, followed by a phase of growth in rudimentary manufacturing capability, and on into the subsequent foci of concern with the environment, issues relating to energy (industrialised Japan is completely dependent upon imported sources for its oil needs) and later into an era of more creative aspects of basic science as Japanese universities matured and adopted Western-oriented values and cultural objectives. Currently Japan offers sophisticated and financially generous research programmes centred around, for example, the ERATO (Exploratory Research for Advanced Technology), CREST