

Administration

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1. Outline

In the beginning of 1995, the SPring-8 project had to contend with problems caused by the January 17 Kobe earthquake. Fortunately, the SPring-8 facility (which was some 60 km from the quake's epicenter) escaped damage, but there were many problems with the surrounding area's transport infrastructure. While this caused considerable delays in equipment deliveries to the SPring-8 construction site, close cooperation amongst the SPring-8 Planning and Coordination Group, the Accelerator Group and the project's equipment suppliers, made it possible to catch up with the original schedule.

The Kobe earthquake also affected arrangements for the Fourth Meeting of the SPring-8 Project's International Advisory Committee (IAC), planned for January 18-20, 1995. Although the quake forced the cancellation of the first day's program, IAC members' enthusiasm and dedication enabled almost all of the intended agenda to be completed in the remaining two days.

During fiscal year 1995, the Japanese Government's provision of two supplementary budgets created scope to bring the SPring-8 construction schedule forward by one year. As a result of these supplementary budgets, some public beamlines will become available to users in October 1997.

Subsequent sections of this report will address the following topics.

- SPring-8 Project Status
- Additions to First Phase of Construction Schedule
- SPring-8 Project Organization
- Contract Beamlines

2. SPring-8 Project Status

2-1 Budget

The budget plan for the first phase of the SPring-8 project was based on spending

108.9 billion yen over 12-years (1987-1998). However, the provision of two supplementary budgets in fiscal year 1995 will enable completion of the first phase in 1997, one year ahead of schedule. Table 1 shows details of expenditure expressed as a percentage of the total construction budget. These percentages indicate actual payments made to constructors and the total value of contracts currently placed with contractors.

Table 1. Budget plan (1995-1997)

	Percentage of total construction budget	
	Actual payments made to contractors	Total value of contracts placed with contractors
Original 1995 budget	64.3	85.3
Original 1995 budget plus first supplementary budget	76.9	99.3
Original 1995 budget plus first and second supplementary budgets	79.9	99.4
Budget for 1996	90.9	99.8
Budget for 1997	100	100

2-2 Facility Construction

Table 2 shows the extent of completed construction and equipment installation at the end of December 1995.

Table 2. SPring-8 construction and equipment installation (December 1995)

	Percentage complete		
	equipment installation	construction of buildings	equipment installation and construction of buildings
Linac	85.3	100	89.4
Synchrotron	72.8	100	78.0
Storage ring	67.6	72.2	70.2
Beamline	20.9	-	20.9
Other buildings *	-	9.1	9.1
Total	63.9	73.7	68.8

* Main building, cafeteria and experimental facilities

Activities planned for 1996 and 1997 include the following:

1996

August: Linac commissioning
 October: Synchrotron commissioning
 December: Completion of storage ring building
 Beamline installation begins

1997

February: Storage ring commissioning
 April: Beamline commissioning
 October: First experiments using beamlines

3. Additions to First Phase of Construction Schedule

3-1 Additional Facilities

The Japanese Government's provision of two supplementary budgets during fiscal year 1995 (mentioned in Sections 1 and 2.1) will enable SPring-8's first phase of construction to include three facilities previously planned for phase two of construction. These comprise a guest house and two R&D facilities

Guest House

SPring-8's Guest House will provide accommodation for the facility's public beamline users. There will be a total of 240 rooms in four 60-room complexes. The first of these complexes will be available in 1996 and provide living space for researchers participating in SPring-8's beamline construction program.

R&D Facility for Accelerator and Experimental Groups

Construction of a R&D facility for SPring-8's Accelerator and Experimental Groups will enable the Project Team and JASRI staff to develop accelerator and beamline component technology, as well as SASE (Self Amplified Spontaneous Emission) based on applications using electron beams from the linac.

R&D Facility for Biomedical Imaging

Construction of an R&D Facility for Biomedical Imaging will provide three medium-length beamlines for basic research and clinical experiments. Following construction of the building, installation of these beamlines (which are longer than 200 meters) will begin after 1997.

3-2 1.5 GeV Synchrotron Radiation Source

In 1996, the Himeji Institute of Technology (which is funded by the Hyogo Prefecture Government) will construct a 1.5 GeV storage ring for synchrotron radiation using SPring-8's linac as the injector. The Prefecture Government has entrusted preliminary design work for this venture -- known as the "New Subaru Project" -- to JASRI and Spring-8's Accelerator Group. The New Subaru source will provide ultraviolet and soft X-ray radiation.

Figure 1 shows the SPring-8 construction site, including plans for the 1.5 GeV storage ring.

4. SPring-8 Project Organization

4-1 SPring-8 Organizational Structure

A new organizational structure for SPring-8, formed in September 1995, enables both the SPring-8 project team and JASRI staff to make direct contributions to project organization. This dual participation aims to support the smooth transition to JASRI of overall responsibility for the operation and management of the completed SPring-8 facility. As part of this arrangement, the SPring-8 project team will soon transfer staff to JASRI.

At the end of December 1995, the SPring-8 project had a total of 270 staff: 200 of whom belonged to the SPring-8 project team, while the remaining 70 were members of JASRI. Figure 2 shows the project's organizational structure.

4-2 Committees

To promote the effective coordination of work undertaken by JAERI, RIKEN and JASRI, SPring-8 established a Steering Coordination Committee. In addition, JASRI formed an Advisory Committee supported by two sub-committees (Research Theme Assessment and Contract Beamline Committees), dealing respectively with the assessment of research themes and allocation of special-use beamlines (as opposed to public beamlines). Figure 3 illustrates this committee structure.

5. Contract Beamlines

By 1997, the SPring-8 Project Team plans to build ten public beamlines, as well as beamlines for the exclusive use of JAERI and RIKEN. Subject to approval by the Contract Beamline Committee, it will also be possible for external research organizations to construct special-use beamlines. This committee is now considering proposals from the seven organizations listed below.

- Research Center for Protein Engineering, Osaka University.
- Hyogo Prefecture Government (Himeji Institute of Technology)
- Two industrial organizations

- The Institute for Chemical Research, Kyoto University
- National Research Institute for Metals, Science and Technology Agency
- National Institute for Research in Inorganic Materials, Science and Technology Agency