

## INFRASTRUCTURE FACILITIES

### 1. COMPUTER CENTRE

A brief description of the various development and support activities set up during this period are :

- Commissioning of 8-node high performance computing cluster for CPU intensive scientific applications.
- Two new telephone exchange have been commissioned one each for laboratory area and residential area.
- Enhancements in Intranet web site. Many new features have been added to CAT Intranet.
- OFC backbone up-gradation has been taken up during the last six months and in Phase-I major R&D laboratory buildings have been connected on Gigabit backbone using OFC as physical media.
- Users in CAT have been provided with high-speed Internet access on desktop and email access is also provided on desktop.
- "Infinity" - financial software for DAE Head Office Mumbai has been developed by Computer Centre and is implemented in DAE HO.
- To support authentication mechanism for various Intranet services, one centralized authentication using LDAP has been developed and implemented
- Parallelization of Computation of Magnetic Field in Wiggler Magnet in 3 D space program was taken up by Computer Centre and completed successfully.
- Training programs in "C", FORTRAN and MS office and FrontPage were conducted for employees. Large number of users attended the training programs.
- Development of Prototype of RDBMS Component for the POOL project has been taken up under DAE-CERN software protocol.

- NIS (Network Information Service) setup has been put up among the computing servers to give a single system image to the user. By using this feature users are provided access to multiple computing resources with single user area.

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### 2. CIVIL WORK

1. Construction of three pre-engineering sheds for R&D Block C.

Size of column free halls	: 20mX28m
Purlins	: ISMC 200 cold rolled steel.
Steel portals	: Built up sections made of 340Mpa steel.
Purlins	: ISMC 200 cold rolled steel.
Metallic sheets	: Galvalume color coated made of 550Mpa steel.

These are the structures having large column free halls. The hybrid structures founded on RCC foundation has brick walls up to lintel level, over which color coated metallic roof sheets and wall cladding has been provided.

Buildings for manufacture of industrial and medical lasers of 2100Sq M and Cryogenics lab of area 400Sq M have also been handed over.

Forty eight efficiency quarters and twelve type III-C have been handed over.

#### Construction work in progress.

Construction of several buildings such as high power laser and laser plasma lab, information technology, accelerator technology development lab, administration building, inflammable stores, remaining type -C, houses, six type E houses are in progress.

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Indus-2 Building