GOVERNMENT OF INDIA
MINISTRY OF SCIENCE AND TECHNOLOGY
DEPARTMENT OF SCIENCE AND TECHNOLOGY
RAJYA SABHA
UNSTARRED QUESTION NO.938
TO BE ANSWERED ON 24/07/2017

PROGRESS OF NATIONAL SUPERCOMPUTING MISSION

938. SHRIMATI JAYA BACHCHAN:

Will the Minister of SCIENCE AND TECHNOLOGY be pleased to state:

(a) the progress made by the National Supercomputing Mission including its supercomputer proposed to be built by 2017;

(b) whether Government is collaborating with private entities on applications for the supercomputer and if so, the details thereof;

(c) whether Government has taken any measures to develop High Performance Computing (HPC) and the human resource for running these applications and if so, the details thereof; and

(d) whether Government proposes to connect all academic and R & D institutions across the country to the national supercomputing grid and if so, the details thereof and the steps taken in this direction?

ANSWER

MINISTER OF STATE IN THE MINISTRY OF SCIENCE AND TECHNOLOGY AND MINISTER OF STATE IN THE MINISTRY OF EARTH SCIENCES
(SHRI Y.S. CHOWDHARY)

(a) Under the National Supercomputer Mission (NSM) notable progress has been made in many directions in so far as building capacity and capability has made. Building of 2 systems of 500TF Central Processing Unit (CPU) and 1 system of 1.0 PF CPU, under "build" approach, is underway and targeted for operationalizing by March, 2018. Three similar capacity systems, under "buy" approach are also scheduled to be operationalized by March, 2018.

(b) Yes, Sir. Under the NSM, National Expert Group on Applications Development has already been constituted to decide on development of applications of national importance. The areas identified for applications development include Drug Development Platform (DDP); Predictive and Personalized Medicine (PPM); Materials and Computational Chemistry (MCC); Climate, Weather and Disaster Prediction (CWDP); Computational Fluid Dynamics (CFD) for Engineering Applications; Astronomy and Computational Physics (CPA); Geophysical Applications (Oil & Mineral Exploration). Initial scrutiny and approval of projects in the area of DDP; PPM; MCC and CFD has been done in the meeting of NSM - Technical Advisory Committee. We have at least one private entity involved in the DDP and PPM applications development.

(c) & (d): Yes Sir. Under the mission, National Expert Group on Human Resource has been constituted to decide on capacity building. This Expert Group has worked out a framework for running short term, medium term and formal education courses. It has designed the course curriculum for running courses at under graduate, post graduate and post graduate diploma levels. A faculty development program has also been conducted to train the faculties in IITs, IISERs, NITs across the country. This trained faculty and the existing National Knowledge Network are vital for connecting academic and Research and Development (R&D) institutions across the country for operationalization of National Supercomputing Grid (NSG) once sufficient number of supercomputers becomes operational.

****