GOVERNMENT OF INDIA
MINISTRY OF SCIENCE AND TECHNOLOGY
DEPARTMENT OF SCIENCE AND TECHNOLOGY
LOK SABHA
UNSTARRED QUESTION No. 778
TO BE ANSWERED ON 05/02/2021

Third Phase of National Supercomputing Mission

778. SHRI GAUTHAM SIGAMANI PON:
SHRI SELVAM G.:
SHRI C.N. ANNADURAI:
SHRI DHANUSH M. KUMAR:
SHRI GAJANAN KIRTIKAR:

Will the Minister of SCIENCE AND TECHNOLOGY विज्ञान और प्रौद्योगिकी मंत्री be pleased to state:

(a) whether the Government has announced the third phase of National Super Computing Mission and if so, the details thereof ;

(b) whether the Government has achieved the objective for which Phase I and II of National Super Computing Mission were launched and if so, the details thereof;

(c) whether the Government has conducted any study to assess the developments under the National Super Computing Mission in the last three years and if so, the details of the assessment and action taken thereon;

(d) whether the Government proposes to connect all academic and R&D Institutions across the country to the National Super Computing Grid and if so, the details thereof and the steps taken in this direction; and

(e) the other steps taken/being taken by the Government to make India one among the league of world class computing power stations?

ANSWER

MINISTER OF HEALTH AND FAMILY WELFARE; MINISTER OF SCIENCE AND TECHNOLOGY; AND MINISTER OF EARTH SCIENCES
(DR. HARSH VARDHAN)
स्वास्थ्य और परिवार कल्याण मंत्री, विज्ञान और प्रौद्योगिकी मंत्री और पृथ्वी विज्ञान मंत्री
(डॉ .हर्ष वर्धन)

(a) Yes Sir. All three phases of Build approach of National Super Computing Mission (NSM) started concurrently for creating supercomputing infrastructure in the nation. These Phases are Phase-I: Assembled in India, Phase-II: Manufactured in India & Phase-III: Designed and manufactured in India.

(b) Yes Sir. Six Supercomputing systems of NSM Phase-I and Phase-2 have been installed out of which four are operational. Hardware Subsystems for nine more Supercomputing systems of Phase-II have been manufactured in India and delivered to the host institutes (end users). Thus a total number of 15 Supercomputers with an aggregate compute capacity of 21 Peta Flops are targeted to be deployed under NSM Phase-I and Phase-II, at identified end user host institutes. These systems will be connected via National Knowledge Network (NKN) as its backbone.

(c) NSM – Technical Advisory Committee (TAC) chaired by Dr V. K. Saraswat, Member, NITI Aayog and NSM – Executive Board (EB) co-chaired by Secretary, MeitY and Secretary, DST have been continuously monitoring and providing guidance with new ideas. The Executive Committee's recommendations are implemented by Centre for Development of Advanced Computing (C-DAC) and Indian Institute of Science (IISc), the two implementing Institutes, in a regular manner.

(d) More than 75 academic and R&D institutions are to be connected to the National Supercomputing Grid. The Institutions have been identified. The Phase-1 supercomputing systems are being used by more than 900 academicians, scientists and engineers across the country and have executed more than 14 Lakhs supercomputing jobs till date.

(e) All Phase-II Supercomputing systems are manufactured in India, by local EMS manufacturers and are equipped with indigenous software stack. The Phase-III Supercomputing systems are to be designed by C-DAC and manufactured in India by local EMS manufacturers in line with AtmaNirbhar Bharat Mission. Various hardware and software subsystems of Supercomputer are designed and developed by C-DAC. PARAM Siddhi – AI, the State-of-the-Art large-scale HPC-AI scalable infrastructure of 210 AI Petaflops established under National Supercomputing Mission (NSM) at Centre for Development of Advanced Computing (C-DAC), Pune is currently the fastest and most powerful machine in the country and ranks 62nd among the Top Supercomputers of the world. This infrastructure will help accelerate experiments and outcomes for India-specific grand challenge problems in areas such as Health Care, Education, Energy, Cyber Security, Space, Automotive and Agriculture. It will catalyze partnerships with the Academia, Industry, MSMEs and Start-ups.

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