GOVERNMENT OF INDIA
MINISTRY OF COMMUNICATIONS
DEPARTMENT OF TELECOMMUNICATIONS

LOK SABHA
UNSTARRED QUESTION NO. 4582
ANSWERED ON 20TH AUGUST, 2025

SAKSHAM-3000

†4582. MS KANGNA RANAUT:

Will the Minister of COMMUNICATIONS be pleased to state:

(a)   the key features and capabilities of the indigenously developed SAKSHAM-3000 Switch cum-Router;

(b)   the specific applications and areas in which SAKSHAM-3000 is used; and

(c)   the timelines and steps taken/being taken for commercial deployment of the said technology and its adoption by the large enterprises and telecom operators?

ANSWER

MINISTER OF STATE FOR COMMUNICATIONS AND RURAL DEVELOPMENT
(DR. PEMMASANI CHANDRA SEKHAR)

(a) & (b)   The SAKSHAM-3000 is a high-performance switch-cum-router indigenously designed by the Centre for Development of Telematics (C-DOT), the research and development arm of the Department of Telecommunications. It offers a switching capacity of 25.6 terabits per second and supports various types of network connections. The device is built to fit standard equipment racks and includes features that ensure reliable operation, such as backup power supplies and cooling fans that can be replaced without shutting down the system. It is designed for flexibility, supporting a wide range of network functions and communication methods. These capabilities make it suitable for use in modern digital networks, where high performance, reliability, and adaptability are essential. SAKSHAM-3000 can be effectively utilized across various application areas, including deployment as a Leaf Switch, Spine Switch, or Super-Spine Switch in data centers, as well as serving as an Edge Router or Core Router in telecom and IP networks.

(c)   To enable the commercial deployment and adoption of the SAKSHAM-3000 technology by large enterprises and telecom operators, several steps have been taken. The production technology has already been transferred to a Public Sector Undertaking (PSU) partner, M/s Electronics Corporation of India Ltd. (ECIL), to achieve large-scale manufacturing and deployment. Additionally, the product is being showcased at various telecom product exhibitions where C-DOT is participating.

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