

GOVERNMENT OF INDIA
MINISTRY OF ELECTRONICS AND INFORMATION TECHNOLOGY
LOK SABHA
UNSTARRED QUESTION NO. 1408
TO BE ANSWERED ON 04.12.2024

NATIONAL BLOCKCHAIN FRAMEWORK

1408. SHRI GAURAV GOGOI:

Will the Minister of ELECTRONICS AND INFORMATION TECHNOLOGY be pleased to state:

- (a) the current status of the National Blockchain Framework (NBF) and the time by which it is expected to be fully operational;
- (b) the key sectors and Government services that the NBF is specifically designed to target?;
- (c) the measures being taken to ensure the security, privacy and confidentiality of data stored on the NBF; and
- (d) whether the Government plans to collaborate with private sector entities to accelerate the development and adoption of blockchain solutions and if so, the details thereof?

ANSWER

MINISTER OF STATE FOR ELECTRONICS AND INFORMATION TECHNOLOGY
(SHRI JITIN PRASADA)

(a): National Blockchain Framework

Blockchain is a technology suitable for developing applications with transactional data stored in distributed ledger across network of nodes. It provides time sequenced & tamper resistant storage with audit trail for future verification. Hence this technology has the potential to provide better accountability in any digital system involving public transactions.

National Blockchain Framework (NBF) has been launched on 4th Sep, 2024 to offer Blockchain-as-a-Service (BaaS). The NBF is fully operational with geographically distributed infrastructure. The NBF supports distributed infrastructure, smart contracts, security, privacy, interoperability and development & deployment of permissioned blockchain based applications. The NBF was initiated in the year March, 2021 with a total budget outlay of Rs. 64.76 crore. The NBF is for a duration of 4 years.

(b): Key sector for National Blockchain Framework usage

NBF is a permissioned Blockchain platform which may be used for development and deployment of Government Services which need secured and verifiable records of transactions. It is more suitable for permissioned Blockchain applications where only selected or authorized users can access the Blockchain network. NBF may be used in various sectors, such as healthcare, education, agriculture, administration, etc. The pilot implementation of the few applications have already been completed which includes Praamaanik- Solution to verify mobile app origin, Property Chain- Solution for recording property transactions and its verification for the State of Karnataka and Jharkhand, Certificate Chain- Blockchain based solution for education certificates for Central Board of Secondary Education (CBSE) for the State of Karnataka, eStamps- Solution to provide a tamper-proof & secure record of eStamp transactions, etc. with the Government financial agencies.

(c): NBF security, privacy and confidentiality of data

The transactions are recorded in Blockchain network using cryptographic techniques. The NBF has been designed as a permissioned Blockchain with controlled access to ensure the security, privacy and confidentiality of data. The best practices such as use of data encryption, proving the existence of data without revealing the data, and indigenous certifying authority, etc. have been implemented in the design.

(d): Startup/ industry collaboration

The Government is promoting the NBF for use by startup/ industry to collaborate with the Central/ State ministries and department to develop suitable models for Blockchain-based applications using NBF.
