



# PARLIAMENT QUESTION: PHYSICAL DATA CENTRES

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ISRO is engaged in the study of various next generation satellite technologies that also include on-board data processing and data storage.

The preliminary evaluations indicate that developing a proof of concept on edge computing infrastructure in space is feasible and such a system is being conceived. However, a full-fledged edge computing infrastructure to become a reality, breakthrough development in several areas including in-orbit power generation, radiation hardened GPUs/ CPUs, security shield for orbiting satellites, etc need to be pursued.

As the study was preliminary, it was carried out within the department.

The Satellites equipped with on-board data processing would enable transmission of only the required information to the ground, hence reducing latency for time critical application such as Disaster management and strategic applications. Further, on-board processing enables flexibility for communication satellites, as the satellite can be reconfigured in-orbit.

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