GOVERNMENT OF INDIA DEPARTMENT OF SPACE

LOK SABHA UNSTARRED QUESTION NO.2416

TO BE ANSWERED ON WEDNESDAY, AUGUST 01, 2018

ELECTRIC PROPULSION SYSTEM

2416. SHRI A. ARUNMOZHITHEVAN:

Will the PRIME MINISTER be pleased to state:

- (a) whether ISRO is working on the Electric Propulsion System

 (EPS) which will help reduce dependence on chemical propellant and if so, the details thereof;
- (b) whether with the help of EPS, ISRO can reduce the weight of a satellite and if so, the details thereof;
- (c) whether a 4 tonne satellite with EPS can do the work of a 6 tonne satellite with the same efficiency; and
- (d) if so, the details thereof?

ANSWER

MINISTER OF STATE IN THE MINISTRY OF PERSONNEL, PG & PENSIONS AND IN THE PRIME MINISTER'S OFFICE

(DR. JITENDRA SINGH):

(a) Yes Madam, ISRO is working on Electric Propulsion System (EPS) which can reduce the dependence on chemical propellant. The EPS system was first flown on South Asia Satellite (SAS) – GSAT-9 launched in the year 2017 and is working satisfactory. (b) Yes Madam, with the help of EPS, satellite weight can be reduced as the chemical propellants are replaced by electrical system, the weight of which is not so significant compared to chemical propellant.

(c) & (d)

Yes Madam. A 4 tonne satellite with EPS can do the work of 6 tonne satellite with the same efficiency. In addition, it will also have few extra years of life compared to chemical propulsion.
