

# Fire Detection and Suppression System (FDSS)

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In news

DRDO developed Fire Detection and Suppression System in buses

What is Fire Detection and Suppression System (FDSS)?

- FDSS is a **fire mitigation system in buses, which can detect fires in less than 30 seconds and extinguish it within a minute**
- DRDO's Centre for Fire Explosive and Environment Safety (CFEES), Delhi has developed the technology
- As per the Road Transport Ministry demonstrations were given on water mist-based FDSS for the passenger compartment and aerosol-based FDSS for engine fire
- The Ministry also said that FDSS for passenger compartment comprises a water tank of 80 litre capacity, a 6.8 kg nitrogen cylinder pressurised to 200 bar and a network of tubing with 16 number of atomizers
- FDSS for the engine comprises an aerosol generator with which the fire suppression could be achieved within 5 seconds of the system activation.
- The active fire protection system has been developed by the Centre for Fire, Explosive and Environment Safety (CFEES), a DRDO laboratory.

## Significance

The wider rollout of this technology will come as a big help to check mishaps, which often result in claiming multiple lives, particularly in sleeper buses.