## GOVERNMENT OF INDIA MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE

## RAJYA SABHA UNSTARRED QUESTION NO. 3736 TO BE ANSWERED ON 03.04.2025

## AI enabled system to prevent elephant death

3736. SHRI DEREK O' BRIEN:

Will the Minister of ENVIRONMENT, FOREST AND CLIMATE CHANGE be pleased to state:

- (a) whether the Union Government or any other State Government is using AI-enabled systems to prevent elephant deaths on railway tracks;
- (b) if so, the details thereof;
- (c) whether such systems have been successful in preventing deaths of elephants;
- (d) whether Government plans to invest in and scale up such systems across all states with high elephant population to prevent elephant deaths on railway tracks; and
- (e) if so, the details thereof and if not, the reasons therefor?

## **ANSWER**

MINISTER OF STATE IN THE MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE (SHRI KIRTI VARDHAN SINGH)

(a)to(e)As per the information received from Ministry of Railways, an innovative measure has been taken by the Indian Railways for detecting presence of elephants on railway tracks through the development of Artificial Intelligence enabled Intrusion Detection System (IDS) using Distributed Acoustic System (DAS). The system is designed to generate alerts for loco pilots, station masters and Control Room about the movement of elephants / lions in proximity of railway tracks, for taking preventive action timely.

Presently, IDS system is working over 141 Route Kilometres (RKms) on critical & vulnerable elephant corridors identified by forest department in the jurisdiction of Northeast Frontier Railway zone. This device has been reported to be very effective in protection of elephants and no elephant death has been reported in the section since its commissioning.