Mandatory Advanced Emergency Braking Systems (AEBS) in Cars

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Why in News?

Recently, the Ministry of Road Transport and Highways (MoRTH) issued a draft notification proposing to make Advanced Emergency Braking Systems (AEBS) mandatory for all new passenger cars in India.

Timeline / Effective Date	Mandatory Requirement / Scope	Target Category
October 1, 2027	Revised heavy-vehicle braking standards & Electronic Stability Control (ESC conforming to AIS 162)	Medium and heavy-duty trucks
October 1, 2029	Compulsory advanced driver assistance components (Lane Keeping Assist, Driver Drowsiness Warning, Automatic Steering / ACSF)	Taxis and commercial passenger-registered vehicles ($M1$ CO_2e category)
October 1, 2030	**Advanced Emergency Braking Systems (AEBS)** conforming to standard **AIS-185**	All **new car models** ($M1$ passenger vehicles)
October 1, 2032	**AEBS mandatory across the board**	All existing models still in active production (pre-2030 architectures)

Operational Features of AEBS

- **Working of AEBS -** Utilizes a combination of forward-facing cameras, radars, or sensor fusion to continuously monitor the traffic path ahead.
- If a potential collision is detected, the system issues multi-stage warnings (visual, acoustic, or haptic vibrations). If the driver fails to respond, it automatically applies emergency braking to avoid a crash or mitigate impact severity.
- **Default Settings -** Drivers can override the system via steering input or hard acceleration.
- Per safety guidelines, the system cannot be permanently disabled above low speeds (activates automatically by default every time the vehicle engine is restarted).

Significance for Road Safety

- **Addressing Escalating Accident Statistics -** Government data highlighted that road accidents in India spiked significantly, emphasizing the urgent necessity for automated collision-avoidance interventions.
- **Harmonizing with Global Standards -** Aligns Indian vehicle type-approval protocols with

advanced international UNECE safety benchmarks, ensuring domestic automotive manufacturing remains globally competitive while protecting vulnerable road users.



Reference

[Times of India | Advanced Driver Assistance Systems (ADAS)]

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