

AEBS deactivation - Specific HDVs need

Some typical cases:

- Slippery and/or curvy roads (the “Norwegian case”)
 - need of a “permanent” deactivation;
 - Need a deactivation while driving
 - Skilled drivers, able to determine when AEBS should be on or off
- Construction areas on motorway
 - Wide vehicle in a narrow path; mobile barriers which may be misaligned / slightly overlapping on the path
 - Need a deactivation while driving (e.g. at least until 60kph)
 - Speed usually below 60 or 70kph
- Coaches in “Serpentines”
 - Need a deactivation while driving
 - Speed usually below 60 or 70kph (in between two 180° curves)
- Milk collectors (or trucks used in closed or construction sites / gravelled path)
 - Drive both on national and secondary roads, but also on narrow paths to the farms
 - Need a deactivation while driving (even if stopping on a path to deactivate AEBS is feasible)

Different solutions

R152 / GRVA

5.4.1.3. It shall not be possible to manually deactivate the AEBS at a speed above [10] km/h.

ETSC

5.4.1.3. It shall not be possible to manually deactivate the AEBS at a speed above [50] km/h.
The AEBS shall automatically be reinstated after a cumulated time of 10 minutes above [60km/h].

JPN

“after a cumulated time of 10 minutes.” (unclear on what type of wording: ETSC or industry)

Industry:

5.4.1.3. Once manually deactivated, the AEBS shall be automatically reinstated after a cumulated time of 10 minutes above [60km/h].

Norway: [need for a “permanent / long enough” deactivation]

Solution	Safety risks		How does different solutions cover the needs ?			
	May encourage drivers to deactivate for longer periods than necessary	Driver may forget to reactivate	Slippery and/or curvy roads (the "Norwegian case")	Construction areas on motorway	Coaches in "Serpentines"	Milk collectors
1. It shall not be possible to manually deactivate the AEBS at a speed above [10] km/h.	Yes	Yes	Partly fulfilled: <ul style="list-style-type: none"> Permanent deactivation. Poor feature: Cannot be deactivated while driving. 	Not fulfilled: <ul style="list-style-type: none"> Cannot be deactivated while driving. 	Not fulfilled: <ul style="list-style-type: none"> Cannot be deactivated while driving. 	Partly fulfilled: <ul style="list-style-type: none"> Cannot be deactivated while driving. However it may be acceptable for driver to stop (e.g. on a gravelled narrow road)
2. It shall not be possible to manually deactivate the AEBS at a speed above [50] km/h. The AEBS shall automatically be reinstated after a cumulated time of 10 minutes above [60km/h].	Mitigated	Mitigated (except for cities)	Partly fulfilled	Partly fulfilled Poor feature	Partly fulfilled Poor feature	Partly fulfilled
	New risks: may prevent drivers from deactivating when really needed. Difficult for driver to understand how it works					
3. "after a cumulated time of 10 minutes."	No	Low risk	Not fulfilled	Solution 2 + 3		
	New risk: driver may forget to deactivate (Norwegian case)			Solution 2 + 4		
4. Once manually deactivated, the AEBS shall be automatically reinstated after a cumulated time of 10 minutes above [60km/h].	No	Mitigated (except for cities)	Rather well fulfilled if the threshold speed would be increased to 70kph	Rather well fulfilled if the threshold speed would be increased to 70kph		

Solution	Safety risks		How does different solutions cover the needs ?			
	May encourage drivers to deactivate for longer periods than necessary	Driver may forget to reactivate	Slippery and/or curvy roads (the "Norwegian case")	Construction areas on motorway	Coaches in "Serpentines"	Milk collectors
1. It shall not be possible to manually deactivate the AEBS at a speed above [10] km/h.	<ul style="list-style-type: none"> • Does not fulfil the needs; creates new risks vs today • May (will) be rejected by drivers • GRVA-compatible 			<p>Compromise proposal:</p> <p>It shall not be possible to manually deactivate the AEBS at a speed above 60 km/h. The AEBS shall automatically be reinstated after a cumulated time of 10 minutes above 70km/h.</p>		
2. It shall not be possible to manually deactivate the AEBS at a speed above [50] km/h. The AEBS shall automatically be reinstated after a cumulated time of 10 minutes above [60km/h].	<ul style="list-style-type: none"> • Mitigated risks vs solution 1 (Yet driver may forget to reactivate: risks only in cities) • Partly fulfils the needs, but poor feature; • May prevent drivers from deactivating when really needed. • Difficult for driver to understand how it works • May be rejected by drivers 					
3. "after a cumulated time of 10 minutes."	<ul style="list-style-type: none"> • Solves risks of solution 1 • Does not fulfil the "norwegian case" (safety and feature issue) 					
4. Once manually deactivated, the AEBS shall be automatically reinstated after a cumulated time of 10 minutes above [60km/h].	<ul style="list-style-type: none"> • Fulfil the needs (yet, 70kph would fulfil better the "Norwegian case") • Mitigated risks vs solution 1 (Yet Driver may forget to reactivate: risks only in cities) 					

Compromise proposal (industry):

It shall not be possible to manually deactivate the AEBS at a speed above 60 km/h.

The AEBS shall automatically be reinstated after a cumulated time of 10 minutes above 70km/h.