ACSF - Traffic Jam Assist on all roads

OICA and CLEPA proposal for the IG Group ACSF
Tokyo, 2015, June 16-17
Traffic Jam Assist on all roads

- HCV manufacturers have a high interest for ACSF at “cruise speed” (90km/h), but also for ACSF in traffic jam conditions at lower speeds (e.g. below 40km/h).
- We agree it is a reasonable way to start implementing in a limited environment, i.e. on highway with constructional separation between the two traffic directions.
- However, this condition should only apply to “cruise speed” ACSF functions, but not to “traffic jam assist” ACSF, since limited to lower speed.
- Thus our proposal is to open ACSF “traffic jam assist” functions on all type of roads, including those without constructional separation, this on the following basis:
  - Low speed traffic jam assist ACSF (below [40km/h]; without lane change capabilities) is not as safety critical as cruise speed ACSF (90km/h and lane change capabilities), thus the condition for constructional separation looks over-specified (unnecessary) for traffic jam assist.
  - The “use rate” of the function would be highly increased if permitted on all roads, which would relief truck drivers from very tiring and boring tasks, leading to unnecessary tiredness, which is indirectly positive for safety.
  - In a traffic jam, constructional separation may be hidden behind 1 or 2 lanes of stopped vehicles (if the truck is on the right lane, and the two other lanes on the left are crowded with vehicles), making the detection of the separation by the system erratic (which would lead to ACSF unwanted disabling).
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- A way forward could be to define different types of ACSF, with different requirement levels, for example:

<table>
<thead>
<tr>
<th>ACSF type</th>
<th>Requirements</th>
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</thead>
<tbody>
<tr>
<td>ACSF &lt; 10km/h</td>
<td>same requirements as today</td>
</tr>
<tr>
<td>ACSF &lt; [40km/h] ACSF with LK only</td>
<td>“traffic jam assist” allowed on all type of roads (even without constructional separation) provided lane change is disabled when used in traffic jam</td>
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<tr>
<td>ACSF &lt; [130km/h]</td>
<td>the system shall have some means to detect “highway conditions”. When the system detects the vehicle is on highway, the system is enabled.</td>
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</table>
  - ACSF with LK only
  - ACSF with LK and Lane Change