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Road Restraint Systems

- 440 -

The Implementation of EN 1317 in Germany

by

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Auditorium II

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General Remarks:

- EN1317 is mandatory for all CEN-Members and automatically transferred into a national standard.
- EN1317 regulates the CE-marking of safety barriers.
- EN1317 is performance driven, only. 
  *(Barrier designs and implementation rules are not harmonized.)*
National Decision:

- EN1317 determines the conditions under which a road restraint system is allowed on EU market but the National Road Authorities decide which containment level is valid for which road type and where to install it

\textit{id est}

Which containment level for which hazard or danger?
System Selection:

The selection process of a suitable barrier system can be approached by the following proceeding:

1. Identify dangerous areas / black spots

2. Identify hazards
   (obvious dangers or accident hotspot)

3. Preliminary hazard elimination
   (optimize road design, eliminating obstacles)

4. Choose optimal road restraint system (RRS)
German Guidelines

The general conditions for choosing a system in Germany are prescribed by the RPS:


Based on the EN1317, the RPS is the German guideline for the implementation of safety barriers. Referring to the different locations like lateral or median, junctions and turns, transitions and terminals.
## Safety Barrier System Selection:

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<tr>
<th>Criterion</th>
<th>EN 1317</th>
<th>National Decision</th>
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<tr>
<td>Containment capacity</td>
<td>Definition of 9 containment levels (EN1317-2)</td>
<td>Choosing any of the given levels</td>
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<tr>
<td>Deflection</td>
<td>Definition of 8 working width classes (EN1317-2)</td>
<td>Choosing any of the given classes or levels</td>
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<td>Impact severity</td>
<td>Definition of 3 Impact severity levels (EN1317-2)</td>
<td>Choosing any of the given levels</td>
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<tr>
<td>Barrier design</td>
<td>No design specified</td>
<td>Choosing any design that matches the criteria above</td>
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<td>Manufacturer’s performance</td>
<td>Production control by notified bodies and self assessment (EN1317-5)</td>
<td>Choosing any certified manufacturer</td>
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</table>
Safety Barrier: Containment Levels:

According to the RPS, the suitable containment level for barriers on road side edge is mainly dependent of:

- Type and severity of the hazard
- Speed limit / design speed of the road
- Traffic volume (passenger cars and trucks)
- Road design
Guidelines for Passive Protection on Roads using Vehicle Restraint Systems
Many Thanks for your Attention!

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