1. The members of the WP.1 will find hereafter the text relating to the panels with variable messages (background document: ECE/TRANS/WP.1/2005/6/Rev.4) such as adopted by the Working Party during its fifty-fourth session (see ECE/TRANS/WP.1/115, paragraph 35).

2. The contents of this text will be included in overall Resolution R.E.2 (document ECE/TRANS/WP.1/112) as a new section V of this Resolution.
V. VARIABLE MESSAGE SIGNS

5.1. Context

The variable message signs (VMS) were officially introduced into the 1968 Vienna Convention on Road Signs and Signals by an amendment that entered into force on 30 November 1995. However, the related provision contained in article 8, paragraph 1 (bis), gave only some very general principles.

Taking into account the significant development of this type of signalisation on the roads and in particular the motorways of the UNECE, the need for defining rules aiming to harmonise and unify the conditions of use of these signs appeared obvious. This is the objective of the recommendations that are presented below. Their goal is to define not only the rules for the use of VMS, but also the signs of the current Vienna Convention that can be used on the VMS, as well as the specific signs intended for the VMS for which there is no equivalent signal in the Convention and the European Agreement supplemented it.

5.2. Definition

A Variable Message Sign (VMS) is a sign for the purpose of displaying one of a number of messages that may be changed or switched on or off as required.

5.3 Recommendations

5.3.1 Signs that can be used on VMS

The signs recommended for use on VMS as mentioned in below paragraphs 5.3.1.1 and 5.3.1.2 are reproduced in Annexes 1 and 2 of this document.\(^1\)

5.3.1.1 Existing signs of the 1968 Convention on Road Signs and Signals

The signs of the Vienna Convention on Road Signs and Signals which can be used on VMS are the following:

**Danger warning signs**

- A, 4
- A, 5
- A, 9

- Carriageway narrows
- Swing bridge (*used to indicate that the bridge is lifted*)
- Slippery road

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\(^1\) To modify as follows when incorporated in the R.E.2: "in annexes 9 and 10 of this Resolution".
A, 16 Road works
A, 17 Light signals
A, 23 Two-way traffic
A, 24 Traffic congestion on the section of the road ahead
A, 31 Strong crosswind on the section of the road ahead
A, 32 Other dangers

Prohibitory or Restrictive signs
C, 1a No entry
C, 2 Closed to all vehicles in both directions
C, 3c No entry for goods vehicles
C, 10 Driving of vehicles less than … metres apart prohibited
C, 13aa Overtaking prohibited
C, 13ba Overtaking by goods vehicles prohibited
C, 14 Speed limit
C, 17b End of speed limit
C, 17c End of prohibition of overtaking
C, 17d End of prohibition of overtaking for goods vehicles

Mandatory signs
D, 1a Direction to be followed
D, 9 Snow chains compulsory

Special regulation signs
E, 3a One way

Direction, position or indication signs
G, 1a Advance direction sign
G, 1b Advance direction sign
G, 1c Advance direction sign
G, 11b Indication of the number and direction of traffic lanes
G, 12a Indication of the closure of a traffic lane
G, 17 Advisory speed

Additional panels
H, 1 Distance to the section of road or the zone to which the regulation applies
H, 2 Length of the dangerous section of road or the zone to which the regulation applies
H, 5a Restriction to goods vehicles (semitrailers)
H, 5b Restriction to goods vehicles (lorries with trailers)

Note: As stated in article, 8, paragraph 1 bis, of the Vienna Convention on Road Signs and Signals, the prescribed dark-coloured signs or symbols used for VMS may appear in a light colour, light-coloured backgrounds then being replaced by dark backgrounds, but the red colour of the symbol of a sign and its border shall not be changed.
5.3.1.2 New signs to be used on VMS

Danger warning signs

In brackets, possible numbers to be attributed to these signs.

(A, 33) Pedestrians walking along the road
(A, 34) Road ahead is slippery - ice or snow
(A, 35) Accident ahead
(A, 36) Reduced visibility - fog, rain or snow

Special regulation signs

(E, 19) Sign notifying a lane allocation
If there is no possibility to show the signals over the traffic lanes, the lane allocation can be shown in one sign. Any other combinations of crosses and arrows are allowed, even for roads with more than two lanes.

Note: This as an alternative to “lane signals” above each lane of a carriageway, proposed in the Vienna Convention as modified by the amendment entered into force on 30 November 1995.

(E, 20) Sign notifying the temporary use of the hard shoulder.
Three different signs may be used in case of the temporary use of hard shoulder:
- E, 20a Hard shoulder may be used,
- E, 20b End of the use of the hard shoulder,
- E, 20c Hard shoulder may not be used

(E, 21) High Occupancy Vehicle lane
Other designs are allowed depending on the occupancy requested per vehicle.

Direction, position or indication signs

(G, 23) Sign notifying a recommended alternative route
(G, 24) Sign notifying that the section of the road ahead is temporary closed and the next exit is compulsory
(G, 25) Sign notifying that the next exit is closed
(G, 26a) Sign notifying that the exit after the next exit is closed
(G, 26b) Sign notifying that the next exit is closed (case of close exits)
(G, 27) Sign notifying congestion
(G, 28) Sign notifying road works
(G, 29) Sign notifying snow/ice
(G, 30) Sign notifying strong wind
(G, 31) Sign notifying slippery road
5.3.2 Rules for message content and message structure for VMS

5.3.2.1 Traffic related VMS messages

1. When using VMS with pictograms the main information is given by the pictogram. The use of specific pictograms instead of generic ones (e.g., the pictogram A, 24 representing “congestion” instead of general danger A, 32) is preferred, when they exist.

2. Make use of graphical elements as much as possible when using text (e.g., pictograms, symbols).

3. Use regulatory messages without any text, if possible.

4. Danger warning messages (using the red triangle) should only be used when the dangerous spot or stretch of road is nearby the VMS (for instance, no more than 2 km). When using words in danger warning messages, place the information about the nature of the danger first and then brief complementary advice can be given under.

5. When a VMS is used to inform about a situation at some distance (for instance, 2 km or more) or in the future (e.g. expected road works), additional information (e.g. distance, or respectively an indication of date and time) is necessary. The recommended structure of the message is the following: first give the information concerning the nature of the event on the first line, then distance and/or time indication on the second line. A third line can be used for additional information (e.g. advice, cause).

6. Avoid alternating messages.

7. Avoid redundancy, except for the purpose of making drivers familiar with new pictograms.

8. Use only well-known and international abbreviations (e.g., ‘Km’ for kilometre, ‘Min’ for minutes, etc.).

9. Minimize the number of words and symbols (e.g. maximum seven).

5.3.2.2 Non-traffic related VMS messages

10. A VMS should be blank when no traffic related messages have to be displayed. An exception could be the display of dots or the time to indicate that the VMS is working.

11. Commercial/advertising messages are not permitted.
**Annex I (future annex 9)**

RECOMMENDED SIGNS OF THE VIENNA CONVENTION FOR USE ON VMS

<table>
<thead>
<tr>
<th>Prohibitory, restrictive or mandatory signs</th>
<th>Danger warning signs</th>
<th>Direction, position or indication signs and additional panels</th>
</tr>
</thead>
<tbody>
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<td><strong>Prohibitory or restrictive</strong></td>
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<td><strong>Additional Panels</strong></td>
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GE.08-
Annex II *(future annex 10)*

New signs for use on VMS

<table>
<thead>
<tr>
<th>Special regulation signs</th>
<th>Danger warning signs</th>
<th>Direction, position or indication signs and additional panels</th>
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<tbody>
<tr>
<td>(E, 19) (lane allocation)</td>
<td>(A, 33) (pedestrians)</td>
<td>(G, 23) (rerouting)</td>
</tr>
<tr>
<td>(E, 20°) (hard shoulder use)</td>
<td>(A, 34) (slippery road – ice or snow)</td>
<td>(G, 24) (road closed)</td>
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<td>(E, 21) (HOV lane)</td>
<td>(A, 35) <em>(accident)</em></td>
<td>(G, 25) (next exit closed)</td>
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<tr>
<td>(G, 26°) (exit after next exit closed)</td>
<td>(G, 26°) (next exit closed – case of close exits)</td>
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(E, 20°, E, 20°, E, 20°, E, 20°)
**Annex II (future annex 10)**
*(continued)*

New signs for use on VMS

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<th>Special regulation signs</th>
<th>Danger warning signs</th>
<th>Direction, position or indication signs</th>
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<tr>
<td></td>
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<td>(G, 27) (reported congestion)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(G, 28) (reported road works)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(G, 29) (reported snow/ice)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(G, 30) (reported strong wind)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(G, 31) (reported slippery road)</td>
</tr>
</tbody>
</table>