How should signs warn of ruts?

Information for UNECE Expert Group on Road Signs and Signals

M. Pronin, 31 May-1 June ‘18, Geneva
Longitudinal ruts on paved and unpaved roads are a hazard requiring a warning to road users.

- When it rains, one wet rut and one dry rut may propel a vehicle out of its lane.
- When both ruts fill with water, vehicles may hydroplane (total loss of traction leading to loss of vehicle control).
- On wet rutted roads, turning and changing lanes are especially unsafe.
- Rut length varies from a few hundred meters to hundreds of kilometers.

Water-filled Ruts – Danger of Hydroplaning


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Some Contracting Parties use 1 of 4 Convention signs to warn of ruts.

- A, 7a suggests an irregular grooved pattern, potholes, or one or more natural humps.
- A, 7c suggests a lateral depression in the road.
- A, 9 does not indicate that the road’s surface is irregular.
- CPs that do not consider A, 7a, A, 7c, or A, 9 to be specific enough use A, 32 with an additional panel.
These road surfaces are uneven, but each in different ways.

- Bumpy road
- Lateral depression
- Longitudinal rut or ruts
How Poland interprets uneven road vs. ruts.

*On left*: rough road surface, potholes, and/or natural humps.  *On right*: lengthy longitudinal depressions.

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**On left**: Rough road surface with potholes and natural humps. 

**On right**: Lengthy longitudinal depressions.

*Courtesy of © Olsztyński District. Jezioran, Poland, 2017. Photo cropped.*

Several CPs created new signs, resulting in various ways to deliver the same message.
Additional Panels

Ruts Symbol with Inscription

Austria
not in national code

Bosnia & Herzegovina, Croatia

Macedonia

Serbia, Slovenia

Czech Republic

Inscription Only

Belgium
not in national code

Germany

Luxembourg
not in national code

France
not in national code

Fahrbahnsschäden / Spurrinnen
up . . km up
Austria
(inscription on sign board)
not in national code
Poland
Germany

Germany

© MOR, On the state road to Eschenbach. Germany, 2016.
Germany

Courtesy of © J. Martens, Neue OZ (Osnabrücker Zeitung), noz.de. Germany, 2011.
Luxembourg, Belgium, and France

© A. Tignon, Belgium, 2014.

© Anon, Déjà un voyage. Mayenne, France, ~2015.

Austria

© Salzburger Nachrichten, Damaged road. [Warning sign points to kilometers of ruts.] Salzburg, Austria, 2016.
Austria

Austria

Croatia

Serbia
Czech Republic

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© Noviny VM.cz, Czech Republic, 2016. Photo cropped.
Switzerland and Slovenia

© Fotolia, Switzerland, no year.

© Cost 354.zag, Slovenia, no year.
Lithuania
To prolong the life of the road, an experiment in 2010 advises drivers not to drive in the ruts.

New signs, shown on the next slide, with an altered symbol, appear in 2015.
City in Russian Federation
Village in Sweden


TRANSLATION

Drive here!

Good for ROAD, CAR, and WALLET
Sweden

**Translation**

- Drive in 3 ruts
  - Good for road

- Drive this way!
  - Good for road, car and wallet
Because rutted roads differ in number of ruts (one or more), width and depth of ruts, and presence or absence of longitudinal humps, one symbol cannot accurately depict the rut pattern for all roads.
Who Is Responsible for Dealing with Ruts?

Posting signs costs less than fixing ruts, but the signs pass accountability from the government to drivers.

According to D. Shinar:

You are!
The Problem

✧ CPs as a whole are adding, deleting, and revising signs faster than the Expert Group on Road Signs and Signals can review them.

✧ While doing so, the requirement of Convention Article 8, ¶2, has been forgotten or ignored for practical reasons. Not adhering to the requirement has become the norm.

✧ CPs ignore Article 8, ¶2, because WP.1 approval may take years and CPs cannot wait for years to introduce new signs aimed at improving road safety.
The Convention does not require WP.1 to review CP sign proposals in a timely manner, nor do WP.1 members have the expertise and time to analyze and reach a decision on the proposals. Sign proposals are therefore held for years without a decision.

WP.1 must set up a mechanism for timely review of sign proposals. This may or may not require funding.
To Promote Harmonization

✧ According to Article 8, ¶2, regional agreement is to be sought for new signs and symbols. It means notifying WP.1 of proposed new designs before they are finalized. Because this notification usually does not occur, as time passes, less rather than more harmonization of signage results.

✧ Including an item on every WP.1 meeting agenda that invites delegates to share new design proposals would ensure awareness of Article 8, ¶2, and should promote future harmonization if the sign review is timely.
Redefine seeking “regional agreement” to include more changes to national sign codes – revision of sign definitions, revision of sign designs (symbol, color, shape), sign reclassification, and sign deletion. Changing signs creates as much disharmonization as not presenting proposals for new signs to WP.1. Redefining signs while retaining the symbols used in other countries may endanger cross-border road users on both sides of the border. The hazard is that foreign drivers may assume the symbol has the same meaning as it does in their country.