

Juha Luoma, Virpi Harjula, Merja Penttinen: RDS-TMC –viestien ymmärrettävyyden kehittäminen. (*Development of comprehension of RDS-TMC messages*). Helsinki 1998. Finnish National Road Administration. 23 p. TIEL 4000184.

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ABSTRACT

This study investigated the comprehensibility of messages selected to be used in RDS-TMC service. Sixty licenced drivers were interviewed. The drivers varied in age from 18 to 65 years old. The interview consisted of three parts. The first part was a comprehension test, followed by a preference test. The last part of the interview was about finding out how long drivers expect to wait when they hear about a traffic event that may cause delays in traffic.

The results showed that most drivers understood correctly the following phrases, in both four-lane motorway and two-lane road environments: *lane closed, only one lane in use* and *carriageway reduced (from two lanes) to one lane*. There were no major problems understanding the phrases *single alternate line traffic* (two-lane road) and *slip road* (four-lane motorway).

The phrases *two lanes closed, carriageway closed* and *contraflow* - in the context of the four-lane motorway - were not clear; every third driver misinterpreted them.

The phrase *people on roadway* was understood better than *pedestrians on roadway* as indicating events involving unexpected pedestrians in any part of the roadway.

The phrase *expected* was understood as more certain than *danger of* or *possible*. In addition, there was a slight tendency indicating that the phrase *expected* was preferred if the uncertainty was about the nature of the event (e.g. the amount of traffic), while the phrase *danger of* was preferred if the uncertainty was about the time of the event (e.g. the length of delay).

Traffic and traveller information often consist of information on a cause and a consequence. These two parts of the message can be provided in two orders (i.e. the cause followed by the consequence or the consequence followed by the cause). The interviewed drivers preferred the first option, with the cause followed by the consequence (e.g. *lane closed. queuing traffic*). The consequence segment that stated *directing traffic* was judged by drivers to be the most essential one.

In the last part of the study the drivers estimated the duration of a regular delay and a long delay in connection with four different events. In the case of accidents, the mean estimate of the delay was 17 minutes. A 48 minutes delay was considered long. The estimated delays in case of road resurfacing works, sports events, and hoisting bridges, were 9-12 minutes; 24-29 minutes were considered a long delay in those cases. Drivers clearly anticipated longer delays as a result of accidents. However, there was a wide range of estimates of delays by different drivers.