

ISO 17488:2016-10 (E)

Road vehicles - Transport information and control systems - Detection-response task (DRT) for assessing attentional effects of cognitive load in driving

Contents		Page
Foreword		iv
Introduction		v
1	Scope	1
2	Normative references	1
3	Terms and definitions	2
4	Abbreviated terms	5
5	DRT methodology: Principles and overview	5
6	Measurement methods and procedures	6
6.1	Participants	6
6.2	Experimental setup	6
6.2.1	Non-driving experimental setup	6
6.2.2	Surrogate driving experimental setup	6
6.2.3	Driving simulator experimental setup	6
6.2.4	On-road experimental setup	6
6.3	Stimulus presentation	6
6.3.1	Stimulus presentation timing	7
6.3.2	Visual stimulus specifications	8
6.4	Response method	10
6.5	Primary driving task	11
6.6	Instructions to participants	11
6.7	Training procedure	11
6.7.1	Secondary task training	12
6.7.2	DRT training	12
6.7.3	Primary task training	12
6.7.4	Training on multitasking	12
6.8	Performance measures	12
6.9	Analysing and interpreting DRT performance data	13
6.10	Checking data quality	13
6.11	Use of DRT data in decision making	14
Annex A (normative) Rationale		15
Annex B (normative) Guidelines for selecting between variants of the DRT method		23
Annex C (normative) Additional factors affecting DRT performance		25
Annex D (informative) DRT variants		27
Annex E (informative) Summary of results from the ISO-coordinated studies		38
Bibliography		69