

ISO/TR 21959-1:2018-11 (E)

Road vehicles - Human performance and state in the context of automated driving - Part 1: Common underlying concepts

Contents		Page
Foreword		iv
Introduction		v
1	Scope	1
2	Normative references	1
3	Terms and definitions	1
4	Purpose	1
5	Human performance in the context of automated driving	2
5.1	General	2
5.2	Transition from manual to automated driving	2
5.2.1	Transition process model	2
5.2.2	Definition of related concepts	2
5.2.3	Measures for human performance in releasing control to automation	3
5.3	Transition from automated to manual driving	4
5.3.1	Transition process models	4
5.3.2	Definition of related concepts	6
5.3.3	Measures for human performance in regaining control from automation	7
6	Human states in the context of automated driving	10
6.1	General	10
6.2	General concepts for mental state related to automated driving	10
6.3	Concepts corresponding to automation related driver states	11
6.4	Concepts corresponding to non-driving related driver states	12
6.5	Driving position and posture	14
7	Driver readiness/availability	15
8	Driver's experiences and attitudes regarding driving automation system	16
8.1	Prior system image	17
8.2	Education and training	17
8.3	User's understanding of driving automation system	18
8.3.1	User's thought about how driving automation system works	18
8.3.2	User's mental attitude to driving automation system	18
8.4	User's use of driving automation system	19
8.4.1	User's behavioural attitude while using driving automation system	19
8.4.2	User's interaction with driving automation system	19
8.4.3	User's behaviour/manner at driving automation system	19
Bibliography		20