

DIN EN 16803-1:2021-07 (E)

Space - Use of GNSS-based positioning for road Intelligent Transport Systems (ITS)
- Part 1: Definitions and system engineering procedures for the establishment and
assessment of performances

Contents	Page
European foreword	3
Introduction	4
1 Scope	8
2 Normative references	8
3 Terms and definitions	8
3.1 General terms	8
3.2 Specific terms	10
3.3 Abbreviations	15
4 Description of the generic architecture of a Road ITS System based on GNSS	16
4.1 Generic architecture	16
4.2 Components	16
5 Definition of performance metrics for positioning terminals	18
5.1 General	18
5.2 Outputs of the Positioning terminal	18
5.3 Inputs to the performance characterization process	20
5.4 Performance features	20
5.5 Performance metrics	21
5.6 Introduction to Performance Requirements	34
6 Operational scenarios	37
6.1 Definition	37
6.2 GNSS environments classification and characterization	39
7 Sensitivity Analysis	42
7.1 General	42
7.2 Presentation of the method	42
8 PVT error models	48
8.1 General	48
8.2 Different types of error models	49
8.3 Conformity assessment of the PVT error models	49
Annex A (informative) Positioning performances metrics rationale	51
A.1 General	51
A.2 Performance metrics	51
Bibliography	57