

DIN EN 12896-1:2026-11 (E)

Erscheinungsdatum: 2026-10-09

Public transport - Reference data model - Part 1: Common concepts; English version EN 12896-1:2026

Contents

Page

European foreword	5
1 Scope.....	7
2 Normative references.....	7
3 Terms and definitions	7
3.1 General information technology terms.....	7
3.2 Domain-specific terms	9
4 Abbreviations.....	10
5 Common concepts domains	11
5.1 Introduction to the common concepts	11
5.1.1 General.....	11
5.1.2 Core framework mechanisms	11
5.1.3 Generic framework elements.....	11
5.1.4 Reusable framework components.....	12
5.2 Versions and validity	15
5.2.1 Introduction.....	15
5.2.2 Version and Validity – Model overview	15
5.2.3 Generic Entity – Conceptual MODEL.....	16
5.2.4 Generic Versioning.....	16
5.2.5 Generic Version Frame	17
5.2.6 Generic Validity – Conceptual MODEL.....	19
5.2.7 Generic Delta – Conceptual MODEL.....	19
5.2.8 Generic Type of Value – Conceptual MODEL	20
5.3 Responsibility	21
5.3.1 Introduction.....	21
5.3.2 Responsibility – Model overview	22
5.3.3 Generic Responsibility.....	22
5.3.4 Responsibility Role – Conceptual MODEL	23
5.3.5 Generic Organisation.....	25
5.4 Explicit frames	27
5.4.1 General.....	27
5.4.2 Composite Frame – Conceptual MODEL.....	27
5.4.3 General Frame – Conceptual MODEL	28
5.4.4 Resource Frame – Conceptual MODEL	28
5.4.5 Service Calendar Frame – Conceptual MODEL	29
5.4.6 Other explicit frames.....	30
5.5 Generic framework model.....	31
5.5.1 Overview	31
5.5.2 Generic framework - Overview.....	31
5.5.3 Location Systems – Conceptual MODEL	32
5.5.4 Generic Grouping.....	33
5.5.5 Generic Points and Links.....	34
5.5.6 Generic Point and Link Sequences.....	37
5.5.7 Generic Zones and Features.....	38
5.5.8 Generic Layer – Conceptual MODEL	40
5.5.9 Generic Projection.....	41

5.5.10	Generic Place – Conceptual MODEL.....	46
5.5.11	Generic Path and Navigation MODEL – Conceptual Model	46
5.5.12	Generic Assignment – Conceptual MODEL.....	47
5.5.13	Generic Loggable Object – Conceptual MODEL	48
5.5.14	Generic Event – Conceptual MODEL.....	49
5.5.15	Generic Security List – Conceptual MODEL	49
5.5.16	Generic Accessibility	50
5.5.17	Alternative Text – Conceptual MODEL	53
5.5.18	Generic Views – Conceptual MODEL	54
6	Reusable Components.....	54
6.1	General	54
6.2	Reusable Components – Modes	55
6.2.1	General	55
6.2.2	Transport Mode – Conceptual MODEL	55
6.2.3	Transport Submode – Conceptual MODEL.....	55
6.2.4	The Transport Mode of Operation – Conceptual MODEL	56
6.3	Reusable Components – Place & Organisation.....	57
6.3.1	General	57
6.3.2	Topographic Place – Conceptual MODEL.....	58
6.3.3	Transport Organisation.....	58
6.3.4	Additional Organisation – Conceptual MODEL.....	60
6.3.5	Employee – Conceptual MODEL	61
6.3.6	Role Models.....	61
6.4	Reusable Components – Time Element Models	67
6.4.1	Service Calendar	67
6.4.2	Availability Condition – Conceptual MODEL	69
6.4.3	Transfer Times – Conceptual MODEL.....	70
6.5	Reusable Components – Vehicle Types.....	71
6.5.1	General	71
6.5.2	Vehicle Type – Conceptual MODEL	71
6.5.3	Train Types – Conceptual MODEL.....	72
6.5.4	Train Element Type – Conceptual MODEL	74
6.5.5	Fleet Equipment – Conceptual MODEL.....	75
6.5.6	Deck Plan - MODEL	76
6.5.7	Seating Plan – Conceptual MODEL	81
6.5.8	Seat Affinity – Conceptual MODEL	82
6.5.9	Deck Path – Conceptual MODEL.....	83
6.6	Reusable Components – Vehicles and Fleets	84
6.6.1	Vehicle – Conceptual MODEL	84
6.6.2	Fleet – Conceptual MODEL.....	85
6.6.3	Train Composition – Conceptual MODEL	86
6.7	Reusable Components – Equipment	87
6.7.1	General	87
6.7.2	Facility – Conceptual MODEL	88
6.7.3	Generic Equipment – Conceptual MODEL	88
6.7.4	Actual Vehicle Equipment – Conceptual MODEL	89
6.7.5	Onboard Vehicle Recharging Equipment Profile – Conceptual MODEL	90
6.7.6	Energy Equipment – Conceptual MODEL.....	91
6.7.7	Spot Equipment – Conceptual MODEL.....	92
6.7.8	Vehicle Passenger Equipment – Conceptual MODEL	93
6.7.9	Deck Sensor Equipment – Conceptual MODEL	94
6.8	Reusable Message Model	95

6.8.1	General.....	95
6.8.2	Notice – Conceptual MODEL	95
6.8.3	Notice Assignment – Conceptual MODEL.....	96
6.8.4	Message – Conceptual MODEL	97
6.8.5	Publication Scope – Conceptual MODEL	98
6.9	Reusable General Elements.....	99
6.9.1	General.....	99
6.9.2	Alternative Name – Conceptual MODEL.....	99
6.9.3	Service Restriction – Conceptual MODEL	99
6.9.4	Environmental Properties – Conceptual MODEL.....	100
6.9.5	Booking Arrangements – Conceptual MODEL.....	100
6.9.6	Check Constraint – Conceptual MODEL.....	101
6.9.7	Schematic Map – Conceptual MODEL.....	102
Annex A (normative) Data dictionary.....		108
Annex B (informative) Data model evolution.....		216
Annex C (informative) Transmodel development history		219
Annex D (Informative) Conventions and Methodology for Conceptual Modelling		227
Annex E (informative) Understanding transmodel		250
Annex F (informative) Functional domains and Modes of operation		255
Annex G (informative) Significant technical changes between this document and the previous edition		262
Bibliography		263