

DIN EN 15528:2013-01 (E)

Railway applications - Line categories for managing the interface between load limits of vehicles and infrastructure (includes Amendment A1:2012)

Contents	Page
Foreword.....	4
Introduction	5
1 Scope	6
2 Normative references	6
3 Terms and definitions	6
4 Classification system	8
4.1 Definition of line categories.....	8
4.2 Correlation between line category and speed	9
5 Classification of infrastructure.....	10
5.1 Civil engineering structures	10
5.2 Track constructions, track substructures and earthworks	11
5.3 Infrastructure classification results.....	11
6 Categorisation of railway vehicles.....	11
6.1 General rules	11
6.2 Freight wagons	12
6.2.1 Specific rules for freight wagons	12
6.2.2 Resulting load limits for freight wagons	13
6.3 Locomotives including power heads	13
6.3.1 General.....	13
6.3.2 Vehicles with intended equal axle loads	14
6.3.3 Vehicles with different axle loads	14
6.3.4 4-axle locomotives.....	15
6.3.5 6-axle locomotives.....	15
6.4 Passenger carrying vehicles	15
6.5 Other non-powered railway vans	15
6.6 Special vehicles	15
6.7 Vehicle categorisation results.....	16
7 Compatibility of the interface between vehicle and infrastructure	16
Annex A (normative) Reference wagons and load models representing the line categories.....	18
Annex B (informative) Flow chart: Classification of infrastructure and categorisation of vehicles	22
Annex C (informative) Comparison of RA-classification with line categories	23
Annex D (informative) Typical maximum speeds for different traffic types.....	24
Annex E (informative) Methods used to determine the load carrying capacity of existing structures	25
Annex F (informative) Line classification information	26
F.1 General.....	26
Annex G (informative) Example of calculation methodology	28
G.1 General.....	28
G.2 Tables of calculation results for example in Annex G	30
G.3 Diagram of calculation results for example in Annex G	32

Annex H (informative) Maximum permissible axle load P – Wagons with two 2-axed bogies	34
Annex I (informative) Maximum permissible axle load P – Wagons with two 3-axed bogies	36
Annex J (informative) L4 locomotive classes (4-axle locomotives).....	38
Annex K (informative) L6 locomotive classes (6-axle locomotives).....	40
Annex L (informative) Example of correspondence between a national track classification system and line categories	42
Annex M (informative) Weight note for locomotives	44
M.1 General	44
M.2 Example of a weight note for a series A locomotive	45
M.3 Example of a weight note for a series B locomotive	46
M.4 Example of a weight note for a series C locomotive	47
Annex ZA (informative) [A] Relationship between this European Standard and the Essential Requirements of EU Directive 2008/57/EC [A]	48
Bibliography.....	51