UNION OF RAILWAYS

# UIC CODE

569

Leaflet to be classified in Volumes :

IV - OPERATING

V - TRANSPORT STOCK

2nd Edition, 1-7-79

UDC: 629.45.021.2: 629.46.02.12

REGULATIONS TO BE OBSERVED IN THE CONSTRUCTION OF COACHES AND VANS SUITABLE FOR CONVEYANCE BY TRAIN FERRY

NUMERISATION DANS L'ETAT DU DOCUMENT

569 1 - 1 W. S. 25 - 1 - 1

. 2 .

## REVISIONS

Leaflet 569, 2nd Edition, 1-7-79									
	Amendment	Amendment							
No.	Date	No.	Date						
malum	1-11-79								
1	1-01-83								
2	Z8-fo.k								
<u>:</u>									
· · · · · · · · · · · · · · · · · · ·			<del></del>						
			<u> </u>						
, j. , , , e			<u> </u>						
<u> </u>									
			<u> </u>						

569

ñ

This leaflet applies to coaches and vans suitable for conveyance by the train ferry services shown in the list contained in Appendix 1.

- 1. The width dimensions of the vehicles must comply with the conditions of the Railways' Technical Unity (TU).
- 2. The vehicles which are required to be conveyed on train ferry services must be able to negotiate a broken angle of 2°30' and curves with a radius of 150 m. Only the sign shall be shown, incorporated with the RIC

sign, on these vehicles.

3. - Generally speaking, vehicles which are required to use train ferry services must be fitted with 2-axle bogies.

The distance between the bogie pivots must not be more than 19.5 m, the length over buffers not more than 27.5 m, and the bogie wheelbase not more than 4 m.

It must be possible for the bogies to swivel horizontally through a certain angle in both directions, from the median position. The size of this angle for a maximum distance between bogie pivots of 19.5 m is given in the following table:

For a distance between pivots of	Minimum angular movement of the bogies in the case of Radius R≥150 m
10 m	3°
17.2 m	5°
19 m	5° 3'0'
19.5 m	5° 40'

Apart from this horizontal angular movement, it must be possible for the bogies to become inclined at an angle of  $\pm~2^{\circ}~30^{\circ}$ , in all positions.

- 4.1 As regards vehicles which are required to be conveyed on the Helsingör Hälsingborg train ferry (in which case there is no curve on the approach track to the upper movable gangway), it is sufficient to take account of a bogie angle of inclination of  $\pm 3^{\circ}30^{\circ}$ .
- 4.2 Vehicles suitable for running on train ferries under more difficult conditions than those described in Point 2 shall, in addition, bear the abbreviated designations of the authorised train ferry services listed in Appendix 1, incorporated with the RIC sign.
- 5. When the vehicle is loaded coaches are considered as «loaded» when the height of the buffing plane reaches the minimum dimension allowed under operating conditions, i.e. 980 mm and stands on level track, no permanent part of the body or underframe must be situated at a distance above rail level «h min» less than that given by the following formulae, in the respective cases:
- for parts situated inside the pivots:

$$h_i \min = \frac{n_i \cdot (a - n)}{a} tg \alpha + 0.06 in metres,$$

- for parts situated outside the pivots :

h min = n. tgα + 0.06 in metres:

n = distance from the part in question to the nearest pivot.

a = distance between pivots.

tga: = tangent of the vertical elbow angle formed by the gangway, as obtained from the list of services.

6. - It must be possible to carry out pole shunting on lateral tracks, with the couplings loose.

- $\overline{I}_{*}$  The lateral play of the draw hook must be such that it is not subjected to any excessive bending stress when running over S curves.
- 8. In the area of the bogies and at the vehicle ends, each sole-bar must be fitted with securing rings spaced approximately 5 m apart and with a minimum opening 120 mm long and 85 mm high; an unobstructed space of 85 mm must be left round each ring, i.e. on all its faces, except the one to which it is fixed, thus enabling the vehicle to be made fast without difficulty by means of two hooks pulling from opposite directions. The section of the operational part of the ring must be in the form of a circle 35 ± 5 mm in diameter, or that of a polygon with rounded angles of at least the same strength.

Use of tubular-steel securing rings may be permitted providing the strength of their connection is comparable to that of round steel or polygonal rings.

9, - In order to prevent any rolling movement of the coach during the crossing, the vehicles must possess, at a maximum distance of 300 mm from each ring, a jacking point suitable for the vertical placing of a jack with a supporting head of 75 x 120 mm.

In cases where these jacking points are not readily recognizable or accessible, they shall be marked by means of an upright yellow-painted triangle with sides measuring 40 mm.

# LIST OF TRAIN FERRY SERVICES

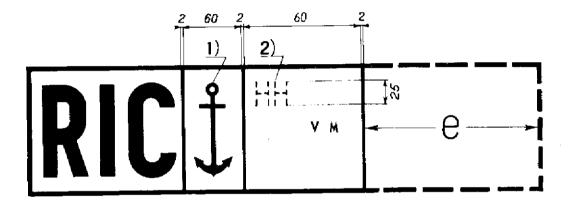
O APPENDIX 1

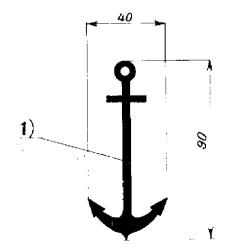
Vehicles accepted for conveyance without prior agreement must be able to negotiate the curves and «broken» angles for the service in question

ſ		Abbreviated designation	πhe	S CURVES		Maximum	_		
ļ,	SERVICE			Radius R <150 metres	Length of intermediate straight track	Radius R <150 metres		Tangent of the maximum elbow angle tge	OBSERVATIONS
_	Helsingör-Hel sing borg	<b>†</b> нн	1	_	_	_	30 30'	0,0612	Electric heating
:   :	Korsør-Nyborg.	Ĵ	3 - 4	-	_	-	2º 30'	0.0437	Electric heating
	Gedser-Warnemünde	‡	3	-	-	_	2° 30'	0,0437	DR train ferries : steam heating
Geose	Geosel-vvariendinge	Î GW					3º 30'	0.0612	DSB train ferries : electric heating
	Rødby Faerge - Puttgarden	Ţ	3	_			2º 30'	0,0437	Electric heating
ſ	Sassnitz Hafen - Trelleborg	<b>+</b>	4	_	_	_	2° 30′ 0.0437		
appendix	Sassing Transfer Frenching		5	_	_	<del>-</del>			Electric heating
	Villa San Giovanni - Messina	Ĵ	3	-	_		io 30'	0,0262	
	Reggio CMessina	Ů VM, RM	4	110	21,25	110			

ANLAGE 2

SIGNES SUPPLÉMENTAIRES DANS LE CADRE DU SIGNE RIC POUR LES VÉHICULES SATISFAISANT AUX CONDITIONS IMPOSÉES POUR LEUR PASSAGE SUR FERRY BOATS ADDITIONAL SIGNS TO BE SHOWN IN THE FRAME OF THE RIC SIGN FOR VEHICLES COMPLYING WITH CONDITIONS IMPOSED FOR THEIR CONVEYANCE ON TRAIN FERRIES ZUSÄTZLICHE ZEICHEN IM RIC-RASTER FÜR WAGEN, DIE DEN BEDINGUNGEN DES FÄHRVERKEHRS ENTSPRECHEN





1) Les véhicules qui répondent aux conditions du paragraphe 2. pour le passage sur ferry-boats reçoivent ce signe figurant une ancre.

The vehicles which fulfil the conditions of Paragraph 2 for their conveyance on train ferries shall bear this sign representing an anchor.

Wagen, die den Bedingungen für den Fährverkehr nach Ziffer 2. entsprechen, erhalten dieses Ankerzeichen.

2) Désignation abrégée du trajet de ferry-boat selon l'annexe 1, que les véhicules sont aussi aptes à emprunter, selon les conditions du paragraphe 2, cf paragraphe 3.

Abbreviated designation of the train-ferry crossing, in accordance with Appendix 1, by which the vehicles may also be forwarded, according to the conditions laid down in Paragraph 2, compared with Paragraph 3.

Kunzbezeichnung der Fährlinie nach Anlage 1, für die die Wagen nach Ziffer 2. im Vergleich zu Ziffer 3 ausserdem zugelassen sind.

future and existing vehicles)

#### **APPLICATION**

All Railways in the Union.

### RECORD REFERENCES

Headings under which the question has been dealt with:

- Preparation of conditions for the access of coaches on train ferries. (5th Committee -C. & W. : Paris, May 1963).
- DR request with a view to a clearer definition of the term «loaded» in UIC leaflet 569 «Regulations to be observed in the construction of coaches and vans suitable for conveyance by train ferry».

(Joint Sub-Committee for Coaches : Paris, January 1975).

- Question 45/A/FIC: Decision concerning the date on which UIC
  Leaflet 569 «Regulations to be observed in the construction of coaches and vans suitable for conveyance by train ferry» will come into force.
  (Joint Sub-Committee for Coaches: Paris, January 1979).
- Question 45/A/FIC Approval of modifications to Leaflet 569 «Regulations to be observed in the construction of coaches and vans suitable for conveyance by train ferry».

(Joint Meeting of the Operating and Traction and Rolling Stock Committees : Paris, October 1982).

569 0

#### APPLICATION

As from 1 January 1980 as regards all coaches and vans.

All Railways belonging to the Union.

# RECORD REFERENCES

Headings under which the question has been dealt with

- Preparation of conditions for the access of coaches on train ferries.

(5th Committee - C. & W. +: Paris, May 1963).

- DR request with a view to a clearer definition of the term aloaded» in UIC leaflet 569 «Regulations to be observed in the construction of coaches and vans suitable for conveyance by train ferry».

(Joint Sub-Committee for Coaches: Paris, January 1975).

Question 45/A/FIC Decision concerning the date on which UIC Leaflet 569 «Regulations to be observed in the construction of coaches and vans suitable for conveyance by train fewers will come into force.

(Joint Sub-Committee for Coaches : Paris, January 1979).

5 6 9

- 12 -

- Question 45/A/FIC Revision of UIC leaflets.
- 4.4 UIC Leaflet 569. (Joint Sub-Committee for Coaches, Paris, January 1985).