



How to deal with new ships in the CEMT '92 classification - towards a new CEMT (ITF) classification

Terms of Reference

1. Background

In 1992, the Conference of European Ministers of Transport (CEMT) authorised the current classification for inland waterways (see Appendix). In 2007 the CEMT evolved in the International Transport Forum (ITF). PIANC stood at the base of the 1992 CEMT classification. The PIANC Working Group no. 9 produced a report in 1990, titled 'Standardization of Inland Waterway's Dimensions. One of the reasons to install this working group was that the previous CEMT classification of 1954 had no provisions for push convoys of 2, 4 and 6 barges.

Since 1992 however, several developments were experienced again in the size and forms of barges, as well as their means to manoeuvre. Meant are the larger (and often wider) motorvessels, as well as the coupled units that sail the (larger) waterways nowadays. Examples of those are the Rhine max vessel (135 x 17 m.) respectively a coupled unit, which can exist of a common large Rhine vessel (110 x 11.40 m.) combined with a pushed barge upfront. This pushed barge can be a regular Europe II type or a tailor made one, both resulting in a total length of 170 – 190 m. A coupled unit can also be 2 peniches attached.

The CEMT '92 classification has no provisions for those larger motorvessels as well as coupled units. Misunderstandings exist among the different countries as to the classification of the vessels mentioned. In this way, history repeats itself.

For Rijkswaterstaat this caused to study those developments thoroughly (see references below). Underlying reports were written by the Maritime Research Institute Netherlands (MARIN). Data for these studies were obtained from registration of passing ships in the Netherlands (IVS '90) as well as the IVR (Rheinschiffsregisterverband).

The overall conclusion was that the CEMT '92 classification is no longer properly for the current European fleet of barges.

By clustering the existing fleet Rijkswaterstaat developed further its own RWS 2010 Classification, within the CEMT '92 system. Leading for the new classification were the horizontal dimensions of the ships, primarily the beam and secondarily the length.

2. Objective

Objective of the Working Group is to undertake an investigation, merely in the same way the previously mentioned PIANC Working Group no.9 has executed.

An inventory will be made of existing inland waterway classifications and the divergences among them. This inventory will relate to the different continents.

Making an inventory of dimensions of the inland waterway fleet and seeking out the trends in its long term evolution.

The work of Working Group no. 9 was carried out by means of a questionnaire for transmission to the PIANC national sections in the countries concerned. This approach could be repeated. Relevant questions of the questionnaire (partly adapted) are:

1. What is the classification of inland waterway vessels applied in your country, specifying all the dimensions taken into account?
2. Does this classification still correspond to the evolution in respect to shipping, or does it need to be revised and for what reasons?
3. Is navigation by coupled units developed? Does the classification take account of it? If so, how?
4. Is navigation by motorvessels larger than 110 m developed? Does the classification take account of it? If so, how?
5. What is the outlook for development of the fleet and, in particular, towards which dimensions of vessels or coupled units are tending? Will the existing infrastructures be able to cope with these new units, possibly coming from neighbouring countries?

Possible limit of the investigation

The Working Group no. 9 concluded, that apart from Europe, the inland waterway systems show hardly any interconnection; consequently a standardisation did not appear to be useful. If this conclusion is judged still valid, the investigation could be limited to the European PIANC members.

3. Products

The WG should analyse and report on the collected data found by the questionnaire. It should review on the classifications used, the need for revision, and the development of the new vessels mentioned. It should summarise the possible development of the fleet and give proposals for new standardization.

4. References

1. Rijkswaterstaat Adviesdienst Verkeer en Vervoer: Classificatie en kenmerken van de Europese vloot en de actieve vloot in Nederland, Rotterdam 2002.

(Classification and characteristics of the European fleet and the active fleet in the Netherlands)

2. Maritime Research Institute Netherlands (MARIN): Herziening inventarisatie manoeuvreermiddelen, Wageningen 2008.

(Revision inventory means for manoeuvring)

3. Maritime Research Institute Netherlands (MARIN): Scheepskarakteristieken van nieuwe grote schepen, Wageningen 2010.

(Characteristics of newly built large barges).

CLASSIFICATION OF EUROPEAN INLAND WATERWAYS

Type of inland waterways	Classes of navigable waterways	Motor vessels and barges							Pushed convoys							Minimum height under bridges $\frac{H}{m}$	Graphical symbols on maps				
		Type of vessel: General characteristics							Type of convoy: General characteristics												
		Description	Maximum length L(m)	Maximum beam B(m)	Draught $\frac{d}{m}$	Tonnage T(t)															
OF INTERNATIONAL IMPORTANCE	VIII																				
		OF REGIONAL IMPORTANCE	I	1	38.5	5.05	1.80-2.20	250-400													
				II	Kaunpau-Barge	50-55	6.6	2.50	400-650												
					Gustav Koenigs	67-80	8.2	2.50	650-1,000												
		II	Gross Flotow	41	4.7	1.40	180														
			BM-500	57	7.5-9.0	1.60	500-610														
		III	6'	67-70	8.2-9.0	1.60-2.00	470-700														
			Johann Wulker	80-85	9.5	2.50	1,000-1,500														
		IV	Va	Large Rhine vessels	95-110	11.4	2.50-2.80	1,500-3,000													
		Vb	VIa																		
		VIc	VIb	3'	140	15.0	3.90														
VII	VIc																				

Appendix 1. CEMT '92 classification