

2009-2019

10th

anniversary of the
entry into force of the CDNI

COLLECTION OF CONTRIBUTIONS
FROM THE FOUNDING MEMBERS





**Convention on
the collection, deposit and reception of
waste generated during navigation
on the Rhine and other inland waterways**



CDNI



TABLE OF CONTENTS

Foreword CDNI 10 years (p.6)

Ms Katrin Moosbrugger, Executive Secretary of the CDNI and Deputy Secretary General of the CCNR

A few key messages marking the 10th anniversary celebrations... (p.10)

Contributions (p.12)

Movement towards an international Convention for regulating waste produced during inland navigation (p.14)

Ms Clothilda Zwartepoorte, Chair of the CCNR's Committee for waste disposal and environmental issues in the navigation of the Rhine

Mr Hans Van der Werf, Deputy Secretary General of the CCNR then first Executive Secretary of the CDNI

How the "Strasbourg Convention" came into being (p.20)

Mr Albert Jan Veraart, Rhine Commissioner responsible for technical and nautical matters and environmental affairs

Thoughts on vessel waste disposal (p.32)

Mr Eckhart Treurnert (Dr.), member of the German delegation to the CCNR's Committee for waste disposal and environmental issues in the navigation of the Rhine

Reminiscences (p.44)

Mr Herman Verschueren, member of the Belgian delegation to the relevant CCNR and CDNI bodies

Involved from the outset... (p.48)

Mr Georg Hötte, representing the industry

Conclusions from the Round Table (17 December 2020) (p.52)

List of authors (p.58)

The roles referred to here are the principal roles performed by the author(s) during the work resulting in the foundation of the Convention.

Photo (left): the Secretariat of the CDNI is located in Strasbourg (France), in the Palais du Rhin.

FOREWORD: CDNI 10 YEARS

Original language: French

Welcome behind the scenes of the CDNI!

It is a tremendous opportunity that the CDNI's¹ **founders** are sharing their astonishing history with us. It all began on 29 November 1989. Cast your minds back: we are three years on from the Schweizerhalle environmental disaster that polluted the Rhine, a serious economic crisis is haunting the IWT sector and the Berlin wall has just fallen a mere 20 days earlier. That is the moment the plenary session of the Central Commission for the Navigation of the Rhine (CCNR) instructs the ad hoc committee to study "the possibility of introducing **international regulations** addressing all the issues associated with eliminating **waste** produced during **navigation** on the Rhine².

The protagonists then at the helm treat us to their **unmediated accounts** and **perspectives**, illuminating for us the emergence of the CDNI and its uptake on waterways beyond the Rhine. Who were the **players** involved, how did the international **negotiations** proceed, what considerations guided them, which **obstacles** had to be overcome, which **alliances** were forged, what role did the matter of the **practicality** and **applicability** of the standards enacted play...?

We will discover that these are high-level experts, aware of the **paradigm shift**, of the ever-increasing importance of **preserving natural resources** and **mindful** of **public opinion**. Together, with a combination of boldness, perseverance and rigour, they successfully defined the **relevant, detailed and operational rules** governing this new field of IWT regulation: the collection, deposit and reception of waste produced during inland navigation,

Ever since, this "CDNI" has acted as the bridge between inland waterway transport and the regulations **protecting water** quality and **waste** management.

Above all, you will discover passionate personalities who enthusiastically responded to our invitation to celebrate the **10th anniversary of the entry into force of the CDNI**. The hearing of the approved organisations of the Conference of the

¹ *Convention on the collection, deposit and reception of waste produced during navigation on the Rhine and inland waterways, signed on 9 September 1996, which came into force on 1st November 2009.*

² *CCNR Protocol 1989-III-3*

Contracting parties on 17 and 18 December 2019 was an opportunity for the founders to appreciate the **progress made** by “their” Convention and to **share their experience**. Their successors at the helm today benefited from a valuable **spotlight** on their “heritage”. There is no doubt that this exchange is a source of **inspiration** in rising to the challenges of the **environmental transition**, especially international greenhouse gas emissions reduction targets. They are all convinced that innovative and courageous waste management will play an important role and that the CDNI will certainly be involved in it.

One thing is certain: we are all called upon to **remain agile**, and to **anticipate** and **support** the environmental transition. The CDNI, rooted since its inception in a holistic and responsible approach, provides a mechanism for acting appropriately in the face of current and future **developments**.

Allow me to mention but a few examples:

- **Protecting air quality:** the first amendment to the Convention will broaden its scope to encompass the protection of air quality and will introduce mandatory international procedures for treating **gaseous residues** of harmful liquid cargoes. The resolution was adopted in June 2017, **ratifications** are currently in progress. A 95% reduction in emissions of harmful gaseous residues and profound changes in market structure to reduce the required number of degassing operations are anticipated.
- **Alternative fuels:** **GTL**¹ has already been equated with gasoil. The debate on the reform of fossil fuel taxation is attracting close scrutiny, the CDNI currently being based on zero-rated gasoil, which is the norm in inland waterway transport.
- **Digitalisation:** the CDNI was a **pioneer** in the digitalisation field. Originally, the international financing of oily and greasy waste was to be based on excise tax stamps, but this format was abandoned in favour of an entirely digitalised international system, a real revolution in all modes of transport. Once the financing mechanism was introduced in 2011 the oily and greasy waste disposal charges were paid using an international electronic payment system (SPE-CDNI) and a magnetic card, “the **ECO-card**”, deployed in

¹ GTL = Gaz to liquid

the **entire** relevant **fleet**. Modernised in 2018, contactless payment is now possible, with the ECO-card enabling the use of non-CDNI services to make life ever simpler for navigation personnel (e.g.: access to drinking water, electricity, charging stations...). The next steps will be **statistical analysis**, for example of gasoil consumption, the **electronic recording** of the depositing of waste, and the use of electronic documents, such as the used-oil log and unloading certificates.

- **Accessibility of the standard:** in the conviction that a well applied standard is a well understood standard, the CDNI publishes a map, complete with geo-location data, of the waste reception stations, practical guides and an animated video¹. In the form of an electronic application “**WasTo**”, it created a practical tool for users to familiarise themselves with and understand the goods unloading standards.
- **Monitoring:** the reception of oily and greasy waste by a suitably equipped **network** of reception stations is constantly tracked. There is regular close collaboration with the profession that benefits from and finances the available services. In future, the **fleet** of forty or so **separator vessels** will have to be **replaced** by **double-hull** craft; this challenge is instigating a debate on the future of the network and its financing.

We are not short of ambitious and important fields of endeavour! We hope that this compendium will help entrench the CDNI's identity since this “heritage” encourages us, engages us, and places us in a position of responsibility, or as Aldous Huxley put it:

“What you are depends on three factors: what you have inherited, what your environment has made of you, and what you have freely chosen from your environment and heritage”²

Finally, I would like to express my very warm thanks to the Chair of the Independent Port of Strasbourg, the Coordinator of the European North Sea-Baltic corridor, for her stirring address, the Secretary General of the CCNR for his welcome, the first Executive Secretary of the CCNR for his advice, all the contributors to this

¹ All these elements are available on the CDNI website: www.cdni-iwt.org

² Aldous Huxley, *Stimmen der Zeit*, volume 191, edition 1, page 165, Verlag Herder (1973)

compendium, the moderator and participants in the round table, the delegates and representatives of the profession, as well as our colleagues in the Secretariat for their assistance.

Happy reading!

Katrin Moosbrugger,
*Executive Secretary of the CDNI
and Deputy Secretary General of the CCNR
(February 2020)*

A FEW KEY MESSAGES MARKING THE 10TH ANNIVERSARY CELEBRATIONS...

” *The CDNI demonstrates yet again that precursors are often ahead of their time. But they end up being emulated. I will endeavour to convince other States to join the Convention*

Ms Catherine Trautmann,

President of the Independent Port of Strasbourg,
Coordinator of the North Sea-Baltic Corridor,
Vice-Chair of the Eurométropole de Strasbourg

” *It is with joy this evening that we celebrate an international convention born under the benevolent auspices of the Central Commission for the Navigation of the Rhine. On this occasion, we wish to applaud the commitment and steadfast determination of all inland waterway transport stakeholders to make this mode of transport ever more environmentally friendly. We wish the CDNI continued success and perseverance in confronting the challenges of the next few year.*

Mr Bruno Georges,

Secretary General of the Central Commission for the Navigation of the Rhine

” *Water knows no borders. Which is why it is important for states in river catchment areas to collaborate in keeping our waters clean. In the face of global environmental problems such as climate change or the increasing pollution of the world's oceans, ever more people are demanding that we do more to protect the foundation of our natural world. This requires the efforts of all stakeholder groups. If everyone plays their part in their own area, we can achieve a great deal. One such beacon for me is the CDNI Convention. In the past 10 years, the six signatory states of this Convention have made great progress both in avoiding shipboard waste and disposing of it in an environmentally friendly way. Congratulations on the anniversary! I look forward to further progress toward an environmentally and climate-friendly inland navigation sector.*

Ms Veronica Manfredi,

Chair of the International Commission for the Protection of the Rhine

The CDNI Convention which is now the only international legally binding regime in the field of the prevention of pollution from inland vessels applied on the Rhine and other inland waterways, is an encouraging example of a successful and efficient international treaty in the field of environmental protection and improving navigation safety for other international rivers.

Mr Yuwei Li,

Directeur of the UNECE (United Nations Economic Commission for Europe)
Sustainable Transport Division

The CDNI has found its way over the past 10 years and it's very encouraging!

Mr Patrice Chamillard,

French delegation,
first Chair of the Conference of the Contracting Parties (CCP)

In 1990, associating river navigation and clean transport with low CO₂ emissions was not entirely self-evident.

Mr Dr. Eckhart Treunert,

founding member of the CDNI

I hope with all my heart that the CDNI prospers and progressively extends its reach in terms of content and geographical coverage.

Mr Gérard Criqui,

founding member of the CDNI and originator of the clearance formula

What has always set the CCNR apart was its pioneering role in promoting regulations ensuring legal certainty and the safety and ease of navigational traffic, having regard to the state-of-the-art and environmental awareness.

Mr Winfried Kliche,

member of the German delegation

(From left to right) The founding members: Dr. Treunert, Mr Hötte, Mr Criqui, Mrs Zwartepoorte, Mr Van der Werf, Mr Veraart and Mr Reutlinger

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CONTRIBUTIONS



MOVEMENT TOWARDS AN INTERNATIONAL CONVENTION FOR REGULATING WASTE PRODUCED DURING INLAND NAVIGATION

Ms Zwartepoorte, Chair of the CCNR's Committee for waste disposal
and environmental issues in the navigation of the Rhine

Mr Hans Van der Werf, Deputy Secretary General of the CCNR then
first Executive Secretary of the CDNI

Original language: Dutch

Back in the 1980s, a growing appreciation of the importance of environmental management, and waste management in particular, required a practical system, free of charge to those involved in disposing of the waste, to be put to the test. What was the problem?

Motorised inland navigation vessels generate oily waste comprising used oil and a mixture of oil and water from leaks of all descriptions in the engine room. To this we can add filters and cans and other materials used by the crew in operating and maintaining the vessel and plant. These products referred to as waste had for some decades been the subject of a sort of informal recycling economy in which the offloading of waste from vessels, free of charge, at the bunkering stations had in turn been financed by them through the onward sale of the oil element, with companies with boilers featuring prominently among the customers.

As this cycle was not subject to any environmental monitoring mechanism and contained numerous combustible substances, the idea was to transfer this cycle from the bunkering stations to professional, licensed reception stations. The German and Swiss method of waste collection on the Rhine was to act as a regulatory model in the Netherlands. But such a switch to professional reception stations would have jeopardised the cycle and the associated financing. This confronted the Netherlands with a problem which was very much latent in Germany and Switzerland but had not yet openly manifested itself. In both countries, the privately organised waste deposit system worked thanks to public subsidy. However, this contradicted the polluter pays principle, which at the time enjoyed broad support in the Netherlands. But the introduction of a national payment system was also not an option for a predominantly international inland navigation sector. Furthermore, the inland navigation sector took the view that if mandatory payment was to be introduced, it would also have to be put on a legal footing. Given the circumstances, this goal could only be achieved at international level. International regulation looked to be the way forward.

Developing this idea was probably one of the last major initiatives by the Rhine International Navigation Consortium (CINR). In the intervening period the importance of this “problem” had grown, because cargo-related waste produced by inland navigation vessels was also appearing on the environmental management agenda. Cargo residues and wash water from holds and tanks in need of cleaning and oily waste were to be deposited with licensed companies. The aforementioned “polluter pays principle” was also to become a guide to assigning responsibilities,

which in this case would fall not on the vessel, but on the cargo. Here too, given the international character of inland navigation, it was appropriate to set up such a system. All the more so as the planned new responsibilities were to be transferred to the individuals associated with the relevant cargoes, irrespective of those individuals' location and without reference to Member States. To minimise the generation of cargo-related waste, one of the first objectives of an international regulatory regime was to optimise the unloading of solid or liquid cargo.

All good things come in threes – meaning therefore that there was to be one final element within a waste management system, specifically the domestic waste water from passenger vessels and domestic waste for all vessels.

To avoid different regulations in each country – the Netherlands had after all traditionally accounted for a considerable proportion of European inland navigation – in September 1989 the Dutch delegation to the CCNR proposed to the Central Commission that international regulations be introduced. A resolution to this effect was passed in November 1989. The International Commission for the Protection of the Rhine in Koblenz was not consulted. At the time they were focused on other important industrial discharge-related issues and the waste problem caused by inland navigation was not seen as a priority. The CCNR welcomed this position, fearing as it did that other agencies with little or no knowledge of inland navigation would otherwise have enacted impracticable and prohibitively expensive regulations.

The willingness to introduce an international system was therefore widespread but a legal basis for it was yet to be created. The Mannheim Act, the “Basic Law for the navigation of the Rhine”, seemed inappropriate for defining new obligations for waste management, especially, but not exclusively, for waters beyond the conventional Rhine. But transitional regulations were required to deal with the biggest problems pending the possible introduction of an international legal framework. This then happened in the Netherlands, in three respects what's more.

The sector was supposed to add a financing module to the German and Swiss model for collecting and financing oily waste. The details were to be worked out at a later date, but the most important element, the setting up of a management body modelled on the Bilgenentwässerungsverband (bilge water disposal federation – BEV) was to be taken care of by the Netherlands. This would enable the implementation and administrative infrastructure to be developed in a future treaty to be set up prior to the treaty coming into force. Until such times as there

was a legal basis for an inland navigation payment regime, the costs of depositing waste would provisionally be borne by the government. This “provisional” regime was ultimately to last several years, regularly causing annoyance in the process. The payment of the administrative costs by the authorities was justified on the grounds that it was intended to facilitate the depositing of waste. This lowering of barriers to the depositing of waste under the polluter pays principle would be in the form of an indirect financing mechanism separate from the actual depositing of the waste but related to the operation of the vessel. And the digest of inland navigation discharges entitled “Morsingen in de binnenvaart”, regularly published in the 1980s and 1990s by the Rijkswaterstaat, was literally and metaphorically then supposed to dry up.

In the cargo-related residues field as well, a *modus vivendi* was to be found in advance of the treaty. The first step was conclusion of a “lighter agreement”, an arrangement between lighter operators, charterers, stowers and (semi) public agencies for jointly tackling the most pressing problems arising from the cleaning of installations. These arrangements were intended to act as the basis for implementation and as a guide to case law in the Netherlands pending the advent of the final Convention.

Inspired by the dynamism witnessed in the dry goods shipping sector, tanker navigation was supposed to follow suit with the “tanker navigation agreement” concluded in 1992, specifically containing arrangements on fitting vessels with stripping equipment and for including this additional step in unloading processes.

As already mentioned, the Dutch proposal to introduce international regulations for the disposal of waste produced during navigation of the Rhine was discussed at the CCNR’s plenary session in November 1989. This proposal is unanimously adopted. The delegations are requested to report on the current waste situation in 1990 and to examine the possibility of enacting regulations under the Mannheim Act.

Consideration should be given in the process to national legal requirements, equipment available aboard and the polluter pays principle.

An ad hoc working group starts work. Following an interim report in 1990, guidelines for the collection and disposal of waste produced during navigation of the Rhine are submitted at the autumn plenary session in 1991. The Ad hoc working group is instructed to consult all interested parties. The discussion then primarily concentrates on the payment methods for oily and greasy waste.

When it transpired in 1992 that regulations cannot be restricted exclusively to the Rhine, the Member States are requested to apply it to the other waterways as well. In 1993 Luxembourg is also invited to participate in the discussions. In the same year it also becomes evident that the Mannheim Act does not provide an adequate framework for the planned international regulations and it is decided to develop a Convention. A draft agreement is available in 1995. At the last minute there is yet another obstacle, the EU taking the view that EU Member States are not permitted to sign a Convention without the EU's approval, and the EU announcing that it would like to accede to the convention in its own right. Fortunately, further delays can be avoided by agreeing that the text can be amended in due course.

After seven years of negotiations the Convention on the collection, deposit and reception of waste produced during navigation and the Rhine and inland waterways, subsequently abbreviated to CDNI from the French, is signed by all six contracting parties on 9 September 1996 and can then be ratified.

HOW THE “STRASBOURG CONVENTION” CAME INTO BEING

Mr Albert Jan Veraart, Rhine Commissioner responsible for technical and nautical matters and environmental affairs

Original language: Dutch

40 years ago, there were scarcely any rules for dealing with waste produced during navigation of the Rhine. Nobody saw the need. Accompany me on a trip back in time to this era. I am of course describing my own personal experiences through the prism of someone who was closely involved, and above all from the Dutch perspective¹. A description based on historical fact would comb through all the national archives, but that is not what I have done. This document is a revised version of the address I gave in November 2009 in Strasbourg when the treaty came into force.

What was going on at this time?

Back in the 1980s growing environmental awareness was universal. After years of efforts water quality in the Rhine was improving. Industry's approach to reversing water pollution was bearing fruit. Endosulfan pollution after the fire in Basel in 1986 was a serious setback but lent an enormous additional impetus to further measures to improve water quality in the Rhine.

Back then, Great Britain was still a member of the Central Commission for the Navigation of the Rhine, the CCNR.

In the CCNR we were discussing the consequences of German unification for the navigation of the Rhine.

The RVIR² also prescribed the need for an additional crewman aboard pushed convoys once women or children were aboard. This rule was abolished because it was deemed discriminatory.

Back to the matter of water pollution: Serious attention was now being paid to local authority waste water discharges as well. Restaurants along the river were complaining about unfair competition from passenger cabin vessels. The International Commission for the Protection of the Rhine (Koblenz) spoke to the CCNR in 1984. The CCNR responded to the ICPR in 1987: "Stationary passenger cabin vessels are considered a problem. But there is no urgent need to combat the pollution caused by these vessels. There are two possible solutions: On-board collection tanks with the contents deposited ashore, or on-board purification. Waste deposit

¹ The author was an expert serving with the Dutch delegation at the CCNR from 1985 to 1995 and subsequently the Dutch Commissioner at the CCNR until 2006.

² Rhine Vessel Inspection Regulations, the CCNR's regulations governing ship construction and equipment

facilities need to be developed and there will be discussion on standards for sewage treatment plants.”

After years of intensive investigations, a six-country strong navigation sector association is given the go-ahead for the downstream section of the Rhine and on the Waal. Consequently, after initial hesitation, the environmental movement in the Netherlands comes to the view that inland navigation is the most environmentally friendly means of transport.

Contrary to the Greens in Germany, who believed at the time (and probably still do) that inland navigation is the underlying cause of river quality degradation as a result of straightening, deepening and canalisation. As you know, the situation requires a more nuanced view; river measures were taken for very different important reasons¹.

Environmentally friendly inland navigation

The inland navigation industry at this time is putting itself out as an environmentally friendly form of transport. The inland navigation sector's good reputation is partially attributable to its lower fuel consumption compared with other forms of transport.

But ports are now regularly experiencing major problems with sludge. Initially, this is seen as being caused by earlier pollution caused by industrial emissions and discharges from seagoing vessels. Maritime navigation is subject to the MARPOL agreement dating from 1973, which is not very efficient and the provisions of which are constantly being tightened up. There is a growing realisation that inland navigation is also contributing to pollution in the ports. The absence of regulations for dealing with waste produced during navigation is an additional factor jeopardising inland navigation's good reputation. An image is forming in the public imagination that in the absence of regulation inland navigation's working practices must be dirty indeed.

¹ In the mid 19th century, the CCNR had plans to improve the waterway, but little came of them. The river was altered for safety reasons, "straightened" to prevent flooding, caused by uncontrolled development and silting and, as a consequence, the formation of ice dikes in the wintertime. As happened in the Netherlands. Or as a follow-up measure to the river straightening begun in 1817 by Tulla to improve living conditions in the Upper Rhine Valley, to combat diseases (e.g. malaria caused by the swamps) and to improve agricultural land. Hydropower was added at a later date: Grand Canal d'Alsace. And in the Netherlands: the canalisation of the Lower Rhine to improve water distribution. The shipping industry benefited from these works but they would never have been implemented purely for the sake of navigation.

The PRP¹ has long contained provisions governing oily and greasy waste, which either has to be offloaded onto oil separator vessels or disposed of ashore. Prior to that on-board oil separators were also permitted. The first oil separator vessel enters service in 1958 in the port of Ruhrort. The Port of Basel follows suit in 1963.

Hardly any attention is paid to the fact that it isn't just bilge waste that is produced but other waste as well. In some countries water quality regulations prohibit the discharging of waste. Sometimes action is taken against polluters. At the same time navigation legislation in other inland navigation countries authorises waste to be disposed of overboard.

Who is to pay for this?

The biggest problem is: who is to bear the cost of waste disposal? Inland navigation claims not to be the polluter and does not possess the knowledge, capability and financial resources to ensure responsible waste disposal. The already heavily criticised oil and chemical industry recognises that it has a responsibility here as well. It does nothing for this industry's good reputation if its products enter the water (in large quantities). The search is on for solutions in various countries.

Under pressure from the government, agreements are reached in the Netherlands between the inland navigation federations and their partners ashore. A convention is concluded in 1989 between inland navigation federations, the oil and chemical industry, charterers, terminals, reception points and the government. The convention relates to waste generated by tankers carrying liquid cargoes.

The following observations were made:

- Engine room waste is unavoidable and is already well regulated.
- There is inadequate provision for the disposal of liquid cargo residues, and costs are high.
- There is no sound legal basis for on-board registration and therefore the authorities are unable to carry out adequate inspections.
- Transport contracts need to contain agreements on cleaning costs.
- The Netherlands is attempting to regulate this at international level.

¹ *Police Regulations for the Navigation of the Rhine, the traffic regulations for navigation of the Rhine*

Proposal to the CCNR

Against this background and in order to avoid the introduction of different regulations in different countries, in **September 1989** the Dutch delegation to the CCNR suggested to the Central Commission that regulations be developed for handling waste produced during navigation. This is not self-evident. It is questionable whether the CCNR has the authority to decide environmental regulations. At the same time the CCNR fears that others – “who are naturally enough not fully informed about inland navigation” – will take the matter in hand and create unworkable regulations for the inland navigation sector.

A decision to proceed is taken as early as November 1989 and the CCNR starts work. This also follows consultations with the International Commission for the Protection of the Rhine in Koblenz, which – fortunately – is far too busy combating other environmental pollution. Inland navigation is not yet the top priority in Koblenz. Giving the CCNR a free rein.

As the environment as a subject area cannot be accommodated within the CCNR's organisational committee structure, an ad hoc group is created to address the matter of waste, which is subordinated to the then Ad hoc committee (subsequently the Political Committee, referred to as the Steering Committee). From now on, Environment Ministry representatives will also sit down at the table. In future, the consultation process will not only include inland navigation representatives but shoreside representatives as well – reception stations, storage operations, charterers and the oil and chemical industry.

If we can believe the minutes of the meeting, the discussion of item 3 of the agenda of the autumn plenary session 1989 was brief. The Chair of the Ad-hoc Committee reports to the plenary session that the Dutch delegation had proposed examining the possibility of international regulation of the disposal of waste produced during navigation of the Rhine. The President of the CCNR notes that delegations are unanimously supportive and that environmental issues are very topical, that the public is very concerned about them and that the Commission's proposal for a Regulation governing the disposal of waste produced on the Rhine is a step in the right direction. The CCNR resolves that delegations will submit a report on the current situation and the possibility of entering into agreements under the Mannheim Act¹ in 1990. Consideration should be given in the process to national

¹ *The revised Rhine Navigation Act of 1868 on which the CCNR's powers are based.*

legal requirements, equipment available aboard and the polluter pays principle¹.

Down to work

It was agreed in the “waste” Ad hoc group that the Netherlands and Germany would develop a joint draft. This is done based on the concepts already available in both countries. The LAWA – the joint federal/länder waterways working group – already has a project on various types of waste. There are ideas in the Netherlands for practical guidelines, the outlines of which are already apparent. They include matters such as cleaning standards and a freight logbook. A further point of reference is the Port of Basel where there is already a rigorous waste regime with clear rules. Rapid progress is made at a joint meeting on 22 November 1990 aboard the MV Lely.

Based on this information and having regard to the polluter pays principle, a categorisation is made according to how the waste is generated:

- **waste produced in the course of operating the vessel** (from the engine room or oily and greasy waste);
and:
- **cargo-related waste;**
there is a later addition:
- **household domestic waste** (including from passenger vessels).

For each of these groups it is easy to identify the polluter, and thus who has to pay for the waste disposal.

What is actually being carried?

The industry proposes using the NST/R list, a European goods classification used for customs and statistical purposes, as the basis for cargo-related waste².

This list fits on two A4 pages. As the industry wants maximum discretion on discharges and the supervisory authorities and investigative services are calling for maximum clarity, the system has to be based on individual freight goods and not freight type. Based on this list, freight and aquatic environment specialists rule on whether individual freight goods are permitted to be discharged into the surface

¹ Resolution CCNR 1989-III-3

² Standard goods classification for transport statistics, revised

water or not. This constitutes a “positive list”: a very detailed overview that has since grown to 22 A4 pages specifying how the waste arising from each commodity that might conceivably be transported by inland vessel is to be handled.

Guidelines

There is now increasing pressure in the Netherlands (but elsewhere as well). In 1990 the water protection police in Rotterdam issues a “ticket” to several skippers. This procedure was aborted by the public prosecutor’s office in recognition of the fact that skippers have very few alternatives. There is however renewed agreement with the inland navigation associations that polluting discharges must be halted. Subsequent to the 1989 agreement, 1991 sees the signing of the Guidelines on waste arising from inland tanker shipping, followed in 1993 by the Guidelines on waste residue arising from pushed barges. Until such times as the Convention on waste produced during navigation comes into force, cargo waste in the Netherlands is subject to the provisions in these guidelines.

Following an interim report in 1990, guidelines for the collection and disposal of waste produced during navigation of the Rhine are submitted at the autumn plenary session in 1991. It is assumed that it will suffice to adapt the regulations governing the navigation of the Rhine (RPR, RVIR and ADN¹), supplemented by national regulations. The CCNR notes that the “**Guidelines for the disposal of waste arising from navigation of the Rhine**” are the basis for solving the problems. The Ad hoc working group is instructed to consult the navigation industry and all other sectors concerned².

Unfortunately, the public now concludes that inland navigation must be causing significant pollution if so many waste handling rules are needed. It takes considerable effort to explain that the numerous rules are required because the matter is so complicated. This is the subject of vigorous discussions all the way up to the Dutch Parliament.

Thereafter, most discussions within the CCNR concern the payment method for oily and greasy waste. It is 1992. How will costs be shared equitably, how will payment be enforced, how will invoicing and settlement be managed, and how will

¹ European agreement concerning the international carriage of dangerous goods on the Rhine

² Resolution CCNR 1991-II-5

the waste reception system be organised¹?

It becomes evident in the autumn of 1992 that rules for the Rhine alone will not be sufficient. An additional international coordination body also seems to be needed. The CCNR requests the riparian states of the Rhine and Belgium to collaborate on such a coordination body². The CCNR also calls on these countries to apply the waste regulations defined in Resolution 1991-I-6 on all waters connected with the Rhine within their sovereign territory³.

The principles governing international coordination and clearance are laid down in 1993. The inland navigation sector and oil industry give their consent. Domestic institutions and an international clearance and coordination body are set up. The inland navigation associations, organised reception stations, the oil industry, the relevant authorities and public and private ports are required to be represented within these domestic institutions⁴. The same resolution also says that the disposal charge will be included in the price of gasoil! How this is to be achieved is still being investigated⁵.

Luxembourg is invited to take part on the grounds of its share of traffic on the Moselle.

It is assumed that the regulations will be introduced by 1 January 1996.

We need a standalone Convention.

At the end of 1993 the question arises whether the regulations really can be introduced under the Mannheim Act.

Then, as of 1 January 1994, Great Britain left the CCNR. The British also did not participate in the discussions on waste disposal having established that their vessels fall under maritime traffic.

¹ Resolution CCNR 1992-I-6

² Resolution CCNR 1992-II-8

³ Resolution CCNR 1992-II-9

⁴ Resolution CCNR 1993-I-8

⁵ Resolution CCNR 1993-I-8, Annex I

In the spring of 1994, an alternative financing mechanism to the gasoil price has to be considered. Both because of resistance from the oil trade and because of the possible threat to the gasoil agreement¹.

In Germany, Switzerland and the Netherlands, the government is now bearing the cost of bilge water oil separation. The pressure is increasing, the federal states are threatening to suspend their contribution to financing collection. A payment system **using vouchers**² is then proposed by Belgium. This seems to be common practice in Belgium, for example for paying fines to authorities.

The term now in use is “Convention on standard regulations”. It would also seem necessary for a European Union representative to attend the consultations. Because of its role as a permanent observer of the plenary session, the EU was aware of the ongoing discussions.

In the autumn of 1994, the working group is instructed to develop a “Convention” in consultation with the industry.

After considerable hesitation France also agreed to the voucher-based payment system at the beginning of 1995. The Netherlands, playing their usual role as bull in the china shop, allow themselves to be persuaded by an ill-considered proposal for digital vouchers. For Belgium this is over-hasty. The fragile agreement that has only just been reached on the financing system is almost in tatters.

But there is a draft treaty as early as the spring of 1995! Minor problems remaining are to be resolved by the autumn.

But then (the spring of 1995) the EU throws a spanner in the works declaring that EU States are not permitted to sign a treaty without the EU's consent. In a letter to the EU dated December 1995, the CCNR requests clarification. Brussels no longer blocks the plan but asks to accede to the Treaty itself. As this requires a protracted process within the EU, the CCNR countries agree to amend the text in due course if the EU wishes to become a contracting party.

¹Agreement on the customs and tax regime for gasoil consumed on-board ship for the purpose of navigation of the Rhine, Strasbourg, 16.05.1952. The agreement states that no import duties or other taxes may be levied on gasoil consumed on-board.

²This entails the purchase of vouchers depending on the amount of gasoil purchased, which are used to pay for the disposal of oily and greasy waste produced in the course of operating the vessel.

Owing to the mass of detail involved in the numerous regulations, the Netherlands proposes only including the broad outline in the Treaty and relegating the details to the guides. This provokes a predictable Pavlovian reaction from all the other delegations: "No more changes!". The form and content of the Treaty are now clear.

After seven years of negotiations, the "**Strasbourg Convention, the Convention on the collection, deposit and reception of waste produced during navigation on the Rhine and inland waterways (CDNI)**"¹ is signed by all six contracting parties on 9 September 1996 and passed for ratification. The Convention is anticipated to come into force in 2000. This is supported by the dates mentioned in Chapter IX, art. 9.01 on discharges by passenger vessels (prohibited in 2005 and 2010).

The reality is somewhat more problematic; the six ratification documents are finally deposited, approximately every two years to start with, then at longer intervals.

SWITZERLAND	16 July 1998
NETHERLANDS	10 July 2000
LUXEMBOURG	14 May 2002
GERMANY	10 March 2004
FRANCE	15 September 2005
BELGIUM	22 September 2009

A piquant detail is that Belgium, constantly being urged to complete the ratification, is then requested to delay ratification for more than a year because the other delegations have not yet concluded their preparations!

¹ *Convention relative à la collecte, au dépôt et à la réception des déchets survenant en navigation rhénane et intérieure*

In accordance with the provisions of the Convention, it came into force on 1 November 2009.

By that time the text of the Convention was more than 15 years old. In order not to jeopardise the ongoing ratifications, no changes were permitted in the intervening period. Even talking about change requests was only grudgingly tolerated. That doesn't mean that there was no need for improvement and modernisation. This is an ongoing task and things have moved on in the past ten years.

But times change. We may well ask for how much longer the waste Convention will still be required. Are we perhaps en route to a time in which waste will no longer be waste but a valuable raw material which no one would consider simply discarding?

THOUGHTS ON VESSEL WASTE DISPOSAL

Mr Eckhart Treunert (Dr.), member of the German delegation to the CCNR's Committee for waste disposal and environmental issues in the navigation of the Rhine

Original language: German

The starting point was to ask, “How can traffic growth be made environmentally friendly?” or conversely “What makes traffic growth harmful to the environment?”

Historical background

At issue here is the modern and environmentally aware development of traffic. North Rhine Westphalia is in the very heart of Europe. This has both advantages and disadvantages. The whole of Europe is readily accessible from here. But most traffic, be it from north to south or from west to east, impacts North Rhine Westphalia. NRW's paramount interest is therefore to make this traffic as environmentally friendly as possible.

The key issue was therefore to develop inland navigation and ports with environmentally friendly traffic very much centre stage.

The starting point was therefore to ask, “How can traffic growth be made environmentally friendly?” or conversely “What makes traffic growth harmful to the environment?”

The answers to this are clear: Traffic causes environmental damage as a result of:

- high land usage
- transport movements without a cargo or only a limited ability to add additional cargo to the individual means of transport
- emissions caused primarily by high fuel consumption and the associated CO₂ footprint
- high wear and tear and a short lifespan of the means of transport and transport routes

Compared with the various modes of transport, inland navigation scores highest against these criteria. It therefore rates highly in terms of environmentally friendly traffic growth.

It is thus regrettable that its share of transport volume has declined and that forecasts point to a further fall.

Admittedly, the absolute figures in NRW are somewhat better, because we have

one of the densest waterway networks here and a large number of important ports. But it would be a mistake to allow oneself to be deceived by the high share of local transport volume. This only applies to individual types of freight and particular routes. Overall, the waterway network is far from being at maximum capacity in the Federal Republic, including NRW. Despite that, most forecasts do not point to an increase.

In my opinion, the explanation for this is not to be found in a detailed analysis of the situation in which navigation finds itself, the flows of individual goods or the navigability of individual waterways.

The explanation is more readily found in the accusations levelled at greater use of inland navigation:

- Vessels are slow.
- Vessels cannot serve the whole of a country's territory.

A vessel's slow speed is relative. It is offset by a large freight cargo. This is certainly a problem when just-in-time is the rule and inventories are being switched to road transport. This is undeniable. The HGV is faster but is also increasingly unacceptable.

This erroneous assessment of transport speed is also related to the other criticism that the vessel does not serve the whole of a country's territory.

At first sight this is of course true – inland navigation cannot deliver goods to the door in Düsseldorf, for instance. To achieve this, the various means of transport need to cooperate and be dovetailed with one another. The important thing is that goods and freight are loaded onto the HGV at the production site and quickly conveyed to the processor or consumer. But many goods simply don't need this; there is no requirement to arrive at their destination within one day. And if this is an urgent requirement, then it can frequently be achieved cheaply and with minimal environmental impact by skilful integration of the transport chain.

Transport service providers cannot turn their backs on this need for speed, they need to be able to accommodate it. It is in their interests to integrate the vessel into as many transport chains as possible, namely, to achieve smooth transitions

between different means of transport. In practice, this is the only way to leverage inland navigation's value in terms of environmentally friendly traffic growth.

It is important to develop ports into traffic hubs. Ports need to become modern intermodal transloading locations, ports being the only places where vessels can be integrated. Downstream processing operations need to be set up here, receiving their supplies directly from the vessel, loading their own products back onto the vessel, thereby bringing them closer to the eventual distribution area via the destination port.

The transloading and transshipment facilities also need to meet modern requirements.

But I would like to highlight two further critical points:

- Integration of the vessel directly relieves pressure on roads. That is desirable.
- Developing ports as an industrial and commercial location reduces not just road traffic but also land use for settlement elsewhere – ports have land available.

A closely related topic is one that directly affects the Ministry of the Environment, and which has already resulted in numerous contacts with the navigation industry.

The inland navigation sector as well causes various environmental impacts. Some of these impacts are caused by the operation of the vessel and some of it by loading and unloading.

Operating inland vessels generates oily waste and both cargo-related and crew-related waste water. Then there are several other types of hazardous waste and slops, albeit in small quantities.

For example, when loading and unloading, especially in the case of loose dry cargo, some parts of the cargo can go overboard or be blown away by the wind. But above all, residue is left behind in the cargo holds that need to be removed before the next cargo can be loaded. Previously this was achieved mainly by washing out. What happens to this wash water with its cargo residue? Simply discharge it over the side? That's not what you would call an environmentally friendly vessel.

The CDNI Convention on Waste

Enhancing the navigation industry's environmentally friendly credentials and documenting them vis-à-vis third parties requires the drawing up of waste disposal regulations.

All these areas have been successfully regulated within a single convention and on an international basis, what's more. Otherwise you will find the regulations scattered across laws of every conceivable description, be it for waste disposal, waste water disposal and the Federal Immission Control Act as well, with its regulations.

Following preparatory work in the German Commission for the Protection of the Rhine, the early 1990s saw negotiations begin on a Convention on the collection, deposit and reception of waste produced during navigation on the Rhine and inland waterways, under the aegis of the Central Commission for the Navigation of the Rhine in Strasbourg. This Convention was signed on 09 September 1996. As such, inland navigation was the first inland mode of transport to have internationally agreed regulations on the handling of waste and waste water regulating both inland navigation vessel operators' obligations and the obligations of consignees in the member states.

This Convention supplements the already existing international MARPOL Convention for maritime navigation. The Waste Convention's scope of application extends far beyond the Rhine. In Germany alone, it encompasses all inland waterways used for general traffic. This means that the Convention applies to all waterways from the Belgian frontier to the Oder and from the Danube to the Elbe North Sea estuary. The other Member States of the Central Commission for the Navigation of the Rhine acceded to it. What is important for North Rhine Westphalia, for example is that all waters accessible to inland navigation in Belgium and the Netherlands are covered.

The importance of these uniform regulations cannot be overstated. Even agreement on a European Union directive would not result in such a uniform outcome. These directives all need to be transposed into national law; each therefore being tailored to the prevailing legal conditions in each individual Member State.

Certainly, nobody expected that ratifying the Convention would take so long. This Convention impinges on numerous areas of national law, without these areas being amended accordingly. Prior to ratification it is therefore necessary to check whether the Convention's regulations will be problematic for individual areas of environmental law.

Oil separation

Oil separation occupies a special place in vessel operation. This waste, which is an unavoidable by-product of navigation, namely an oil/water mixture that accumulates in the deepest part of the vessel, needs to be pumped out regularly. Previously, this was often done without authorisation. But modern analytical techniques enabled oil slicks to be traced to individual vessels, bringing great pressure to bear on the navigation industry.

There are very successful oil separation structures in place for preventing this. On the Rhine this entails small vessels capable of disposing of inland waterway vessel oil waste during their voyage. The first oil separation vessel entered service in 1958. The used-oil log, the first monitoring tool, was introduced in 1962 to ensure proper oil separation.

The oil separation company grew, operating 9 boats in 2005 providing oil separation services for the river Rhine and all its tributaries from the Dutch frontier to the Danube.

Oil separation was to be free of charge for inland waterway vessels. The federal states therefore bore the costs. In the early years, a proportion of the costs was still covered by revenue from the Used Oil Act. When this stopped, the federal states paid the costs incurred in full. In recent years this amounted to approx. €3.8 mio p.a.

The Convention changed that. The federal states are relieved of these costs, except for administrative costs. The navigation industry is willing to assume these costs. Several preconditions needed to be met for these regulations to be effective. The waste disposal Convention first had to be ratified by all member states. Then the appropriate preparations need to be taken within the Federal Republic of Germany to raise the necessary funds from the navigation industry.

What the Convention provides for

The waste falling under the Convention includes:

- Oily and greasy waste
- Cargo-related waste
- Domestic waste
- Domestic waste water
- ... and other special waste.

The Convention provides for different routes for disposing of individual types of waste.

Genuine waste such as cargo residue, domestic waste, special waste in solid form is brought ashore and disposed of in accordance with waste disposal regulations.

The situation is different for liquid waste, which is subject to the waste water regime. This includes:

- bilge water
- wash water from cargo holds and
- domestic waste water from passenger vessels.

Bilge water

The indirect payment for bilge water oil separation had to be retained. The only way possible therefore, as described in the Convention, is to require the navigation sector to cover these costs when availing itself of other services. This was to be achieved by a corresponding fuel bunkering surcharge.

The bilge water occurring aboard motor vessels is more or less contaminated with engine oil, cleaning products and the like, and needs to be disposed of safely. The first oil separators were deployed as early as 1958. Their numbers rose steeply until 1965. The Wasserverband Bilgenentölungsverband (Oil Separation Federation Water Board) was established as a contractor as defined by the Water Board ordinance on 09.02.1965. At that time financing was provided partly by national government and partly by the federal states. The Bilgenentwässerungsverband (bilge water disposal federation, BEV) commissioned the oil separation company to

perform this task. The BEG employed various boats. A total of 8 boats are currently in operation covering the Rhine, the canals, the Moselle, the Rhine-Main-Danube Canal and stretches of the Danube.

It is essential for the navigation sector to be able to deposit bilge oil while in operation, namely during the voyage, because idle time in the form of lay days costs money, jeopardising the objective of zero cost disposal in the process.

With the abolition of the used oil levy and the requirement on oil suppliers to take back used oil, the financing mechanism as it then was was no longer assured. At the beginning of the 1990s, the federal states assumed the full cost of disposal and continued to do so until the Convention came into force. Federal state subsidies were granted annually by special decree. There is no contractual arrangement between the federal states and the bilge water disposal federation such that this federation is not on any long-term financial footing.

The oil separators separate the oil-water mixture, store the oil aboard and discharge the purified water into the Rhine. They each have a discharge permit for the discharging of purified water, which applies for their operating area. For the most part hydrocarbons and Chemical Oxygen Demand (COD) are restricted.

The hydrocarbon limits are complied with courtesy of the technical equipment aboard the vessels comprising the separator and an ultra-filtration plant.

There are additional bilge water disposal facilities on the Weser, Elbe and Berlin's waters, to name Germany's biggest navigation waters. In each case, the technical equipment employed is tailored to the waters. In waters with a slow current, especially Berlin's standing water, it is not possible to discharge purified waste water.

Future organisation

Article 6 of the Convention governs the financing of the receipt and disposal of oily and greasy waste produced in the course of operating the vessel. It provides for a unified system of fees to cover the indirect financing of disposal costs. The incentive to dispose of waste in an unauthorised way, i.e. to discharge the bilge oil into the water, is therefore reduced.

The organisational task of fulfilling the regulations in Article 6 is the responsibility of the domestic national institution. Its tasks include:

1. organising the disposal of greasy waste produced during navigation,
2. financing the system,
3. checking whether fulfilment is as it should be.

The bilge water disposal federation (BEV) was nominated as the national institution, being very experienced with this system within the Rhine catchment area. Once the Convention came into force, it had to assume responsibility for the systems existing in the other catchment areas.

Statutory regulations

The federal government approved two draft acts agreed with the federal states. The Act of Ratification consisted solely of the Federal Republic of Germany's assent to the Convention signed in Strasbourg on 9 September 1996.

The 2nd draft act, the Act of Implementation, relating to the Convention of 9 September 1996, is the crucial one for implementing the Convention. This Act contains the regulations required to give effect to the Convention. These include:

- the ports' responsibility for accepting the waste,
- financial arrangements for accepting and disposing of the oily and greasy waste produced in the course of operating the vessel,
- and a comprehensive catalogue of administrative offences with the aim of ensuring compliance with the Convention's provisions.

For the Federal Republic of Germany these Acts paved the way for the entry into force of the Convention. The undertakings of the various parties involved in disposal were resolved except for two points, who was to pay the administrative costs and regulatory oversight.

Wash water

The holds are cleaned with water, which then needs to be removed from the vessel. It can either be sprayed on the unloaded cargo, sent to a treatment plant, or be discharged into the water.

The measures required in each case depend on the cargo and the hazardous nature of the various substances to be removed from the holds. They are defined in a comprehensive table in the Convention, drawn up by the state environmental agency of the time. Reviews and discussions with the unloaders and relevant ports had established that these regulations were applicable. This table will however need to be updated over time in the light of experience.

Domestic waste water

The domestic waste water aboard cabin vessels can cause pollution on certain stretches of water. It therefore needs to be disposed of safely.

There are two ways of doing this. The waste water can be collected in the vessels' collection tanks and then deposited into the public sewer system ashore for treatment.

Another solution is to treat the waste water aboard the vessel. Suitable technologies were developed for this purpose at the time. They are based on so-called membrane technology. This enables cabin vessel operators to use these plants while underway. They do not therefore need to stop to use facilities ashore.

Other waste

Once the document was ratified, the other regulations in the Convention governing the disposal of cargo residue, domestic waste, domestic waste water, especially from large passenger vessels, and for special waste, came into effect.

North Rhine Westphalia supported the inland navigation sector in solving the problems with three projects.

A few years ago the bilge oil separator boats were equipped with bilge oil processing plants using membrane technology.

The sewage treatment plants previously used to handle the waste water fell far short of the performance required by the Convention. This was borne out by investigations by the Port of Basel. The RWTH Technical University was commissioned to support the navigation sector by testing sewage treatment plants based on membrane technology and ascertaining their performance. The outflow values fall within a range meeting all requirements, including those of the Danube

Commission for its stretch of river. Vessels equipped with these plants can therefore operate without restriction on both river basins.

The field trials were continued aboard a vessel belonging to the Cologne-Düsseldorf shipping company.

The third example: The Convention did not extend to recreational navigation, but this sector was also keen to uphold the navigation sector's environmentally friendly image. A waste disposal station was therefore developed and built with financial support from the proceeds of the waste water levy, enabling recreational boaters to dispose of waste water, bilge water etc. in the correct manner.

Ships benefit considerably from the Convention; a consistent, self-contained body of regulations encompassing the entire Rhine catchment area. You and your vessel can operate in the most diverse river basins without encountering different regulations, potentially requiring you to operate or even equip your vessel differently. You have the certainty that you can rely on being able to dispose of your waste throughout the entire river basin.

Inland navigation is well on the way to improving its environmentally sustainable image yet further. As today's anniversary demonstrates. However, this requires an appropriate economic underpinning and capability. Only with the combination of the two can the ambitious objectives be achieved.

REMINISCENCES

Mr Herman Verschueren, member of the Belgian delegation to the relevant CCNR and CDNI bodies

Original language: Dutch

My reminiscences don't really relate to the origins of the Convention because I wasn't then a member of the Belgian delegation involved in the discussions that led to the signing of the Convention in 1996. Admittedly, shortly thereafter I was involved in preparing the ratification and implementation of the Convention, both at Belgian and international level.

At first this was in my capacity as the senior official of the inland navigation regulatory service (Dienst voor Regeling der Binnenvaart DRB), a semi-public institution with its own legal identity, independent of the Belgian state. This institution was administered by the transport minister and, in addition to market regulation, was also responsible for implementing European restructuring measures. The intention during the early discussions and implementing the Convention was to nominate this institution as the domestic institution. A draft cooperation agreement between the Belgian state, the region of Flanders, the region of Wallonia and the Brussels-Capital region was drawn up and the approval process was already well advanced. However, the European liberalisation of the inland navigation market resulted in this institution being disbanded and the remaining personnel and other responsibilities being taken over by the ministry.

However, I remained involved in the discussions via the ministry. They did not proceed smoothly, jurisdiction for waste management residing with the three regions.

A cooperation agreement was still required, and it was no easy matter to find an institution capable of discharging the responsibilities of a domestic institution while commanding the confidence of all partners. Finally, we on the federal government side proposed entrusting the Institute for Inland Navigation (ITB) with the responsibilities of a domestic institution. The ITB is a non-profit organisation but with a management board comprising equal numbers of representatives of the Federal Ministry and the inland navigation sector. This proposal met with resistance but in the absence of practicable alternatives, agreement was ultimately reached after lengthy discussion.

This did not resolve all the problems. Both in Belgium and in the other contracting states there were major doubts whether a voucher-based payment system could work. It was considered far too cumbersome and seemed unachievable in an ever more digital world.

A special committee (Excom) was set up at international level to look into the possibility of an effective implementation of the Convention. The primary objective

was to enable the disposal fee to be levied by digital means instead of using physical vouchers.

Ultimately this led to the EPS system with payment being made by card at a terminal. Even this outcome was not achieved without difficulty. I recall the difficult discussions with the bunkering industry, which considered it to be unacceptable that bunker stations should be called upon to perform additional duties and checks in addition to supplying fuel.

There was also the problem of ratifying the Convention. Some countries had already ratified it, but the Convention could only come into force once all countries had completed this step. Belgium was the last country to complete, and ratification had to be based on the original text (with the vouchers), despite there now being an international agreement on the EPS system. We therefore had to support the Contracting Parties Conference amending the text as soon as possible after the Convention had come into force.

The Act of Consent was finally passed in Belgium on 19 June 2008. Belgium could in principle have lodged its declaration of ratification on this basis. The problem was however that development of the EPS system had not yet been completed and that therefore no immediate implementation was possible.

Belgium was requested through Excom not to lodge its instrument of ratification immediately but only once all the obstacles to commissioning the system had been overcome. Consequently, the Belgian instrument of ratification was lodged in September 2009 and the Convention came into force on 1 November 2009.

The rest is history. Until the end of 2017 I was still very closely involved with the CDNI working group and with the Convention's Contracting Parties Conference. In Belgium as well I have remained closely involved with the CDNI Convention's work, both via the ministry (renamed the Mobility and Transport FPS some time ago now) as well as in my capacity as Chair of the ITB Board of Directors.

I hope therefore that I have been able to convey some background information on my involvement in the CDNI Convention. I wish you and your co-workers and all the members of all the Contracting Parties' delegations an enjoyable celebration of the Convention's 10th anniversary. I also wish you all an abundance of inspiration in developing this Convention yet further and, if possible, extending it to other states. This can only be beneficial to the environment.

INVOLVED FROM THE OUTSET...

Mr Georg Hötte, representing the industry

Original language: German

The CDNI was drawn up within a mere five years, an incredibly short period for the preparation of an international convention in such a difficult field involving so many different interested parties and was signed by the Riparian states and Luxembourg in 1996.

It was in fact a twin birth, ushered in almost concurrently in the Netherlands and Germany in the mid-80s. The Netherlands saw the development and signing of the agreements on waste arising from tanker and dry goods shipping, while in Germany a small working group within the “Länder Arbeitsgemeinschaft Wasser“ (LAWA), representing both the federal states and the Federal German Ministry of Transport, as well as a permanent guest from the inland navigation industry, developed the “overall inland navigation disposal concept”. In the lead were the representative of the German Ministry of Transport, head of department Mr Haendel, on the administrative side, and Mr Hötte, representing the shipping industry. This concept already differentiated between different types of waste, namely used oil/bilge oil, cargo-related waste, special waste – small quantities, domestic waste and domestic waste water.

The Netherlands were the first to float the idea of international regulation within the CCNR. It was precisely because of this preparatory national work that Germany was able to join in and massively support this initiative. The idea of an international convention for the orderly disposal of waste arising from the navigation of the Rhine, under the aegis of the CCNR, was thus not merely born but set in train.

Deliberations on the “waste” issue began in the CCNR’s Police Regulations Committee, because the Police Regulations for the Navigation of the Rhine included environmental regulations, specifically on bilge water oil separation. It was however quickly recognised just what potential this topic would have, and what importance it would assume, in discussions on inland navigation policy. The working group within the Police Regulations Committee therefore very quickly became a committee in its own right, drawing up the content of the future regulations. It was also recognised that while the work could take place within the CCNR, it would be best for the regulations per se to be adopted within a separate international convention. There are many arguments for this, including that it entailed the adoption of regulations exceeding the CCNR’s traditional jurisdiction, affecting shore installations for example, and there was unanimity that, as far as possible, the regulations should also apply far beyond the Rhine.

The CDNI was drawn up within a mere five years, an incredibly short period for the preparation of an international convention in such a difficult field involving so many different interested parties and was signed by the Riparian states and Luxembourg in 1996. That it took a further 13 years before the convention came into force, at least in part, was attributable to the difficult ratification processes in the participating States, where it was once again evident that bold steps were required by all parties affected by the convention when it came to their respective contributions to bolstering inland navigation's good reputation as an environmentally friendly mode of transport. Finally, in 2011, Part A of the CDNI¹ came into force as well. Its ingenious financing system was particularly demanding in terms of preparation.

Nowadays, the mechanisms introduced by the CDNI for the orderly disposal of waste in inland navigation typically work well and effectively. Of particular note is that, notwithstanding all the criticism on points of detail, which is examined in the competent bodies and used where appropriate for making improvements, the regulations are recognised, and used, by the participants as an outstanding waste disposal tool. This is especially apparent in that the CDNI has to a large extent become a model for the corresponding regulations in the Danube region, although full adoption of the regulations by an accession of the Danube states to the CDNI is currently stymied by differences of opinion regarding the financing of Part A of the CDNI.

The overall observation is that the CDNI created the first international regulations for dealing with waste arising from the inland navigation sector, which could act as a model for other transport areas. The principle of solidarity in particular that is expressed in the CDNI in financing the cost of transport-related waste could point the way forward, whereby everyone operating, using, earning money from or otherwise participating in a means of transport recognises their shared responsibility for the generation of waste, and assumes responsibility for bearing their share of the disposal costs.

¹ The implementing regulations make a distinction according to the origin of the waste occurring on board, taking into account the corresponding responsibilities: oily and greasy waste (Part A), cargo-related waste (Part B) and other waste (Part C).

Round table with the founding members on 17 December 2019, in the Grande Salle of the Palais du Rhin in Strasbourg (France)

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CONCLUSIONS FROM THE ROUND TABLE (17 DECEMBER 2020)



WHAT DO THE FOUNDING MEMBERS WANT FROM CDNI 2030?

Concluding the remarkable Round Table as part of the celebrations of the 10th anniversary of the CDNI, moderator Winfried Kliche (German delegation) asked the founding members present to articulate what they wanted from the CDNI in 2030.

Mr Winfried Kliche:

Ladies and gentlemen, I would now like to open the concluding session and ask you this question: What do you want from CDNI 2030?

Mr Albert Jan Veraart:

I would like to mention two things.

At the beginning of this century or even earlier we were in regular contact with the Danube Commission on this convention and what I understood from your report today is that it is still under discussion. At the time the Danube Commission expressed the desire to accede to the CDNI. I would like to see the convention include the Danube region within the next ten years. Which means amending the CDNI.

And the other thing, not an issue back then, is: exhaust emissions from inland navigation. I understood that you are on the point of regulating this as well and what I want is that this really is regulated as well.

Mrs Clothilda Maria Zwartepoorte:

I think and hope that it has become clear from this discussion to all those who are now actively involved, how important the way in which the CCNR works was to the conclusion of the convention.

We were in constant consultation with the industry and were looking for the best solutions for the environment, for practical implementation, but also for costs.

My wish for the CDNI in the next ten years would be the ability to continue working in this way in partnership with all those who actually have to implement it.

So that results can be achieved in the most unbureaucratic and practically focused way possible.

Mr Gérard Criqui:

My wish would be for 20-30% more revenue for Part A within ten years for the same fees because there are 20-30% more vessels operating on the Rhine. That would be my perhaps somewhat utopian, wish.

Mr Dr. Eckhart Treunert:

The big political topic of the moment is climate protection and clean air: In the Cologne region, politicians are in the process of identifying the navigation sector as the guilty party for the entire malaise. But it would be desirable for exhaust emission issues to be incorporated into the convention so that we have some facts to fire back at politicians.

Mr Peter Reutlinger:

Dr. Treunert has put his finger on it: we've recently had elections with the Greens making very big gains. There were some vehement discussions, with implications for the state government.

What I hope is that based on this discussion and when thinking about climate protection, we also think about good navigation, and what it has always contributed in terms of environmental protection.

Mr Georg Hötte:

Actually, it is difficult to add anything of my own to this panoply of wishes. But I would endorse what Mrs Zwartepoorte said. On the one hand that future regulations, no matter what for, are developed in the same spirit as they were back then: through collaboration between the authorities and the sector; through constant dialogue and that the ideas put on the table were always considered. One thing is important to me in all this: this basic premise of the CDNI, that all those involved in the inland waterway system show solidarity in finding solutions for the problems that occur; and for those future issues that require resolution.

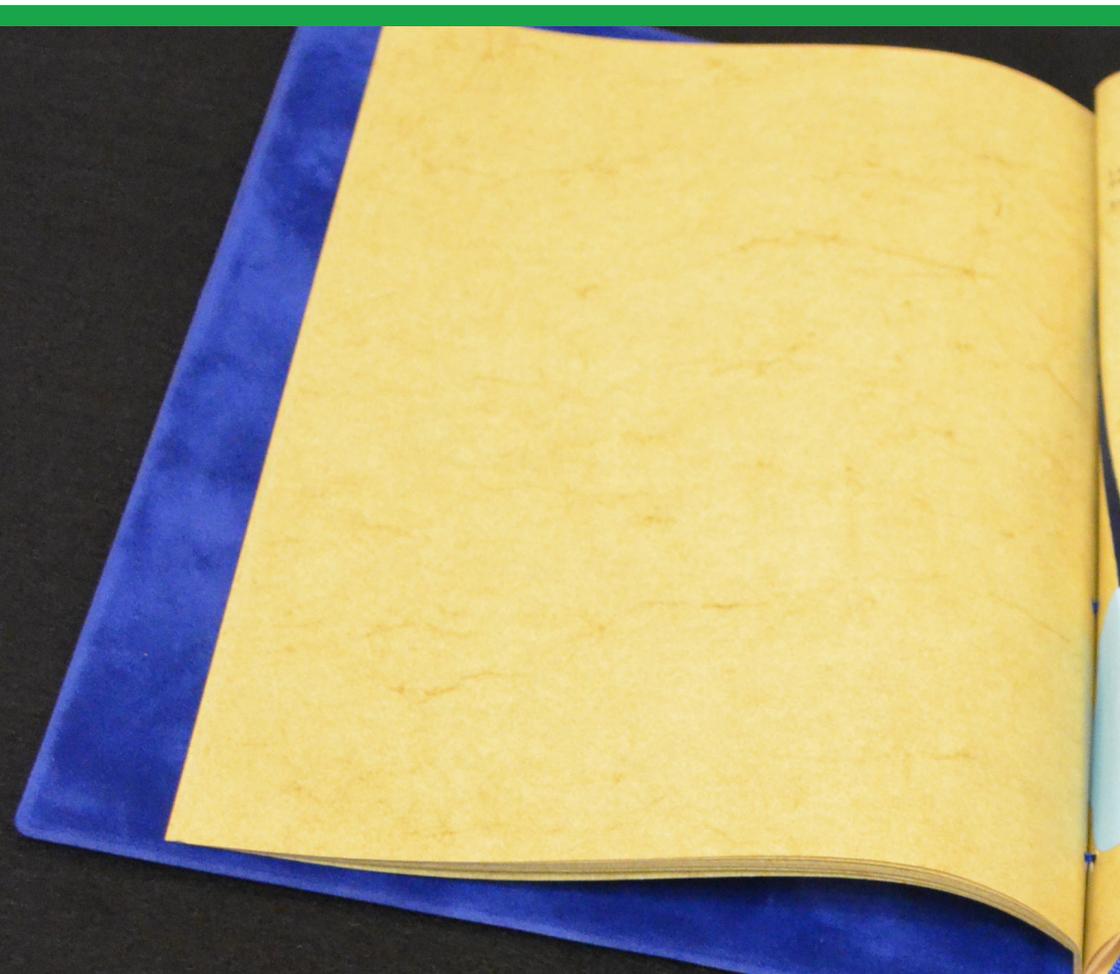
Mr Hans van der Werf:

I personally believe that inland navigation would be well advised to look this “environmentally friendly” attribute squarely in the eye and see whether we can't get an even tighter grip on this waste, especially in Parts A, B and C. And perhaps I may paraphrase Mr Criqui's wishes as follows, that in increasing inland waterway transport, as he envisions, the tariff remains the same inasmuch as the inland navigation sector manages to reduce the quantity of waste and the disposal it necessitates to such an extent that revenues are no longer required.

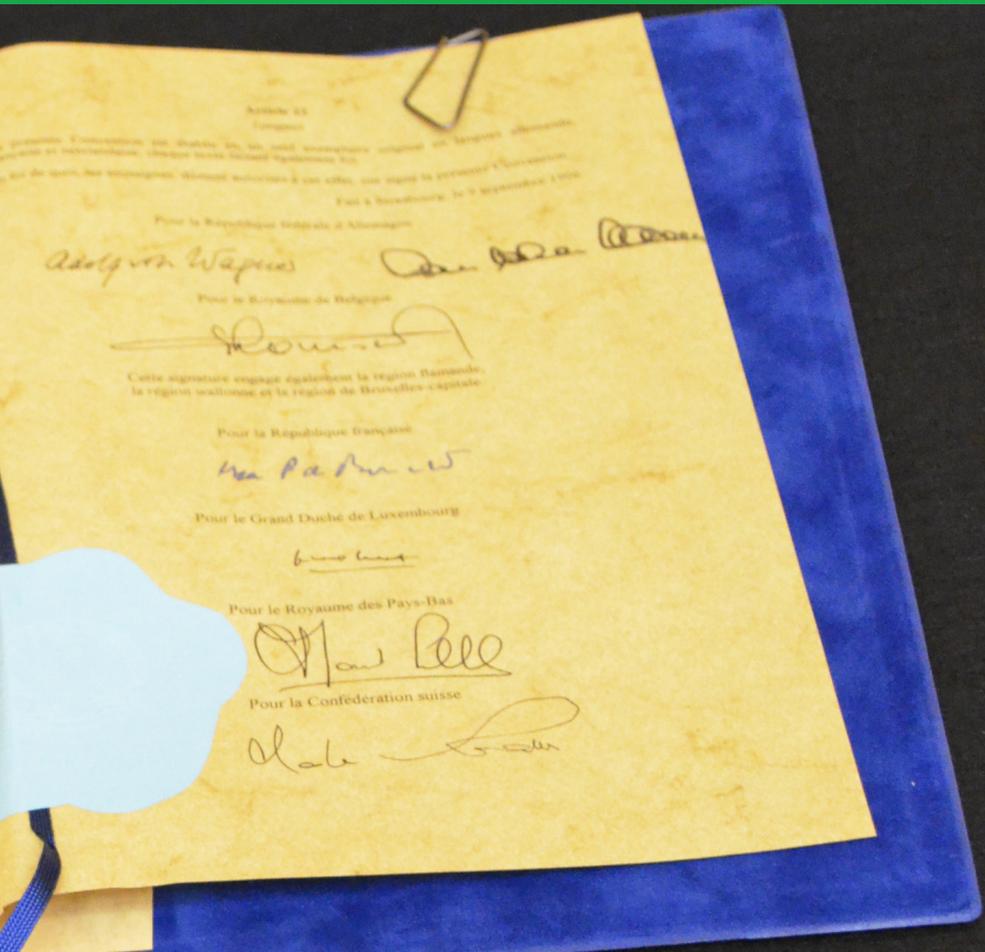
Mr Winfried Kliche:

Thank you, ladies and gentlemen, that concludes the Round Table. I would like to thank you for having shown all of us, and especially me, in what fine fettle you are, bombarding you as I have with questions of which you had no previous inkling; that is highly unusual in today's political climate, in which politicians are given at least two days' notice of the questions and can prepare themselves accordingly. That demonstrates just how committed you were to this topic, and still are, despite having had no responsibility for it for some considerable time now.

The original Convention, signed by the six Contracting Parties, held in the Departmental Archives of the Bas-Rhin, in Strasbourg (France)



LIST OF AUTHORS





Mr Georg Hötte, born 1951, is a lawyer and began work in the inland navigation sector in 1982 with the Bundesverband der Deutschen Binnenschifffahrt e.V. (BDB – Federal German Inland Navigation Association) in Duisburg, the body representing German inland navigation companies. Already by the mid-80s he had been appointed to the BDB's management board, as managing director to the Bilgenentwässerungsverband (BEV) and as Secretary of the Rhine International Navigation Consortium. In 1994, Mr Hötte then moved to the Rhenus PartnerShip, a shipping company,

where he worked as managing director until retiring from active service in 2015.

Since the mid-80s, Mr Hötte had been involved with “waste disposal in the inland navigation sector”, not only as managing director of the BEV, but also initially as a permanent guest of the LAWA committee, the joint federal/länder waterways working group responsible for this issue, which developed the “overall inland navigation disposal concept” in the second half of the 80s, and then from the mid-1990s until the present as the industry representative and member of the German delegation in the CCNR's waste committee, and subsequently also with the Danube Commission. At the same time he has served as superintendent of the BEV since 2016, which now functions as Germany's domestic CDNI organisation.



Mr Winfried Kliche, born 1954, studied electronics technology and precision engineering at Dresden University of Technology and worked as a scientific employee until 1990. On 3.10.1990 Mr Kliche began work at the Federal Institute for Hydrology (BfG) Koblenz, initially in the technical sphere and from 1996 onward increasingly in the environmental arena, specifically on navigation-related noise and air pollutant emissions/imissions.

In 2003, Mr Kliche transferred to the Federal Ministry of Transport, Construction and Housing's inland navigation safety and environmental protection department. He became an adviser on vessel safety and environmental protection technical issues. Mr Kliche was the German deputy Commissioner at the CCNR from 2011.

In 2009 he began work in the inland vessel waste disposal arena. He became head of the German delegation at the CDNI and of the Danube Commission's expert group on waste produced in the course of vessel operation. Mr Kliche is especially committed to efforts to persuade the Danube Commission countries to apply the CDNI. Mr Kliche worked on initiating the development of regulations and on-board sewage treatment plants for passenger vessels, which are now an integral part of the ES-TRIN¹ technical standard. Another major concern of his is that the limit on the regulations banning the discharge of domestic waste water should be reduced from currently 50 to 12 people in the near future.

Mr Kliche worked on behalf of the Federal Ministry of Transport and Digital Infrastructure in the European Union's expert groups on the development of exhaust gas regulations.

In addition to the technical aspects, his focus in all his endeavours is on close collaboration with the sector and industry, on removing obstacles to practical implementation and on the provision of comprehensive information to interested parties.

Mr Kliche ceased his professional duties on 31 March 2020 and retired.

¹ European Standard laying down Technical Requirements for Inland Navigation vessels



Ms Katrin Moosbrugger A lawyer by training, specialising in French, German and European law, Katrin Moosbrugger is a former student at the Ecole Nationale d'Administration (ENA). After graduation, she joined the French Ministry of the Environment. From 2007 onward, her responsibilities as Head of Office then as assistant to the deputy director were in the human resources and subsequently transport fields (in particular ports and inland waterway transport) as well as environmental protection. As an expert for France, she made an important contribution to the work of the

Central Commission for the Navigation of the Rhine (CCNR), especially as regards the early days of implementation of the Convention on the collection, deposit and reception of waste produced during navigation on the Rhine and inland waterways (CDNI). Among other things, she chaired the Conference of the Contracting Parties in 2011.

Since January 2013, Katrin Moosbrugger has been the Deputy Secretary General of the CCNR and Executive Secretary of the CDNI. She is a firm believer in this convention's twin track approach, which lays the foundation for a harmonised international legal framework but also day-to-day operational cooperation. She has made a proactive contribution to rooting the CDNI permanently in the digital era. In particular, in close cooperation with the relevant stakeholders, she led the development and implementation of the electronic payment system SPE-CDNI 2.0, the new digital features of which are making users' day-to-day lives ever easier. For example, the ECO-card, carried on board all craft subject to the CDNI's rules, now works contactlessly, and can be used for other services (e.g.: electricity and quayside water).

Furthermore, the CDNI is now acknowledged beyond the inland navigation arena as an original and pioneering international system for applying the polluter pays principle, and as a model of digital innovation. Katrin Moosbrugger also championed regulatory accessibility and clarity when working to provide other innovative digital tools such as WaSTo (Waste Standards Tool) and the map of geo-located reception stations to enable the relevant stakeholders to better understand and apply the CDNI's rules.

Katrin Moosbrugger organised and supported the diplomatic and technical negotiations culminating in 2017 in the adoption of the first amendment to the Convention with a view to prohibiting the release into the atmosphere of liquid cargo residues. This amendment, which addresses international and European ambitions to protect the environment and cut emissions is currently in the process of ratification. The first ratification instruments were lodged with the CCNR by the Contracting Parties in 2020.

Moreover, in her capacity as Executive Secretary, Katrin Moosbrugger regularly represents the CDNI's interests vis-à-vis international organisations and other river commissions. She has made an active contribution to the young convention's influence and prominence at European level.



Dr. Eckhart Treunert, born 1940, studied civil engineering, specialising in water management. From 1971 to 1986 Mr. Treunert was a State Environmental Agency Head of Unit and team leader. After obtaining his doctorate in 1983, from 1986 onward he headed up the waste water department in the NRW Ministry of the Environment and for a while was Chair of the waste water committee of the Länderarbeitsgemeinschaft Wasser (waterways working group) and waste water committee of the German Commission for the Protection of the Rhine. Retired since 2005.

Dr. Treunert was involved in creating the CDNI.



Mr Hans van der Werf studied shipbuilding and Dutch law. For several years, Mr van der Werf occupied various positions in the shipbuilding organisation CEBOSINE, where his particular responsibilities were for coordinating research. In 1987 Mr van der Werf transferred to inland navigation where his posts included management of the Centraal Bureau voor de Rijn- en Binnenvaart (CBRB) in Rotterdam and as Secretary General of the International Association for the register of inland vessels on the Rhine (IVR). In this first post he was responsible for waste water management

in inland navigation, being instrumental in founding the national institute SAB, becoming its first director. This was followed in 1994 by his appointment as Deputy Secretary General of the CCNR and 18 years later as CCNR Secretary General. He occupied this office from 2012 until October 2016. Within the Secretariat, Mr van der Werf rendered excellent service notably in connection with economic and environmental issues. As such, he played an important role in the introduction and implementation of the CDNI Convention, including in his capacity as executive secretary of its various bodies.



Mr Albert Jan Veraart studied civil engineering at the Technical University in Delft, where he was awarded his degree in 1970. From 1970 onward, Mr Veraart occupied various posts with the Rijkswaterstaat, initially in the water management and river hydrology department, until being appointed to head the Shipping Department of the Bovenrivieren directorate in Arnhem in 1985. Starting in 1993, Mr Veraart was the major waterways network coordinator at Rijkswaterstaat's Department for Infrastructure in The Hague. From 2004 to 2005 he advised Rijkswaterstaat's centre for

traffic and transport studies in Rotterdam on waterway and shipping affairs. From 1985 onward, as a member of the Dutch delegation, he was an expert adviser to the CCNR on shipping matters. From 1995 until 2005 he occupied the office of Rhine Commissioner responsible for technical and nautical matters and environmental affairs.

Mr Herman Verschueren, born 1955, is an economist specialising in the transport industry. After graduating from the University of Antwerp in 1978, MrVerschuere began his career with the Office for the Regulation of Inland Navigation, where he was Commissioner from 1989 to 1999. From 2000 until 2003 he was an adviser to the Ministry of Transport and Infrastructure before transferring to the Federal Public Service Mobility and Transport where he held the post of Director of Inland Navigation until 2008. Until 2012 he was Senior Adviser at the General Directorate of Overland Transportation and until his retirement in February 2018 was Senior Adviser at the General Directorate of Shipping. Since then, in addition to his involvement as Senior Honorary Adviser, he is Honorary Chair of the Belgian Institute for Inland Waterways (Instituut voor het Transport langs de Binnenwateren, ITB), of which he has been a member since 1991, and Chairman of the Board of Directors from 2006 until 2018.

MrVerschuere worked at the CCNR as a member of the Belgian delegation from 2000 until 2017 and was involved in preparing the ratification of the Convention and its implementation. Until the end of 2017 MrVerschuere was involved with the CDNI working group and with the Convention's Contracting Parties Conference. He continued to be involved in the work of the CDNI Convention in Belgium as well, both through the Ministry and in his capacity as Chair of the ITB's Board of Directors.



Ms Clothilda Maria Zwartepoorte is a qualified lawyer. After completing her Masters degree in 1982, she served with the Dutch Ministry for Housing, Spatial Planning and the Environment. In 1988 she transferred to the Ministry of Transport and Water Management where she occupied various positions, including as deputy director for the transport sector / general directorate of freight transport from 1997 to 2000; and as acting director owing to the director's departure on 1 April 2000. In 2001 Mrs Zwartepoorte was appointed Director for Climate Change and Industry at

the Ministry for Housing, Spatial Planning and the Environment. From 2004 to 2009 Mrs Zwartepoorte assumed responsibility for the education, youth and childcare, art and culture, social cultural institutions, economy and employment, tourism and leisure portfolios on the town council of the municipality of Leidschendam-Voorburg and Sijtwende. In 2009, she was transferred to the Ministry for Housing, Spatial Planning and the Environment, where she directed various projects, including as mediator between Association of Netherlands Municipalities (VNG) and industry in the dispute over plastic collection. In 2010 she joined the Ministry of the Interior as director for knowledge and exploration until 1 August 2011. Finally, she occupied various management board positions in Leidschendam-Voorburg.

Between 1988 and 1997 she made an active contribution as an expert to the work of the Central Commission, occupying the post of Commissioner since 1991.

ABOUT

The Convention of 9 September 1996 on the collection, deposit and reception of waste produced during navigation on the Rhine and inland waterways (CDNI) has been in force since 1st November 2009. It has six Contracting States (Germany, Belgium, France, Luxembourg, Netherlands, Switzerland) and aims to protect the environment, particularly water. To this end, the CDNI establishes the rules for:

- **encouraging the prevention of waste production,**
- **directing this waste to a network of dedicated reception stations** throughout the navigable waterway network,
- **providing international financing** for these initiatives having regard to the “polluter pays” principle,
- and **monitoring** compliance with the bans on discharging the waste in question into the surface water.

One amendment to the convention, currently being ratified, concerns the receipt of gaseous residues of liquid cargoes with the aim of protecting the atmosphere.

Online tools and publications

Various tools are regularly added and updated on the website to improve the comprehension and application of the CDNI.

Animated film

Everything there is to know about the CDNI in 5 minutes:

<https://www.youtube.com/watch?v=hrlldlphve8U>



Interactive map of reception stations

A filter enables the user to geo-locate the nearest reception station to his location and the one best suited to his needs.

User guides

Practical guides for the profession are carefully developed by experts and published on the website:

- Guide to the handling of cargo-related waste
- Guide to exclusive / compatible transport operations / specific vessel types for preventing the production of waste produced in the course of operating vessels

WaSTo (Waste Standards Tool)

Applying the CDNI's unloading standards is facilitated by the WaSTo (Waste Standards Tool). Using a search engine, this electronic tool makes quick work of finding the required unloading condition for the cargo being carried. Each cargo contains an information sheet describing the health and environmental hazards: <https://wasto.cdni-iwt.org/>

FAQ

Answers to frequently asked questions (FAQ) are regularly published on the website www.cdni-iwt.org, under the heading "FAQ". The aim of the answers is to make it easier to apply the CDNI and to promote consistent interpretation.

Other publications

To ensure the transparency of the CDNI's activities with the relevant stakeholders and interested public, the CDNI publishes the following on its website:

- resolutions adopted by the Conference of the Contracting Parties,
- meeting agendas,
- press releases and news,
- annual reports evaluating the disposal charge,
- the biannual work programme

EDITORIAL

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Printed: December 2020

This document was created with a maximum of "digital sobriety" to limit the publication's environmental footprint: mainly monochrome page layout, limited number of photos and illustrations, typeface requiring a minimum of printing ink. If you want to print this compendium, we encourage you to do so in black-and-white and in draft mode.

Published by the Secretariat of the Central Commission for the Navigation of the Rhine (CCNR)

2, place de la République - CS 10023 - F-67082 STRASBOURG Cedex

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ISBN 979-10-90735-51-4

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