

## **Changing climate – Preparing for the future**

### **Speech of Mr. Geert van KEER, President of the CCNR**

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This afternoon's discussions are placed under the watchword "changing climate". This expression can be taken in its direct meaning, namely climate change and its signification for inland navigation. Yet, of course, we should also understand it in a figurative sense, referring to the changing conditions in which waterborne transport is developing with the emergence of new opportunities.

Changing climate for inland navigation demands not just one measure but a large set of complementary and integrated policies. Navigation relies very much on meteorological climate, but equally important for the development of inland navigation is the political, social and economic climate as well as an appropriate regulatory and institutional framework. The idea of a systematic set of actions and strategies is at the basis of the NAIADES programme. As a representative of the Central Commission for the Navigation of the Rhine, I will speak about the measures that are being developed within this institution.

As everybody knows, the CCNR is the oldest international organisation active in inland navigation. If age is not a virtue in itself, experience, knowledge of history and capability to put trends into a historical perspective are most valuable to understand what is going on and where the future is leading us. In the CCNR, historical experience inclines us to look at the topics of the day from a long-range point of view. The navigation of the Rhine has prospered in the past 200 years, despite or because of changing climates. The Central Commission has been the key instrument of its member states and the shipping industry to bring about this prosperity.

Since 1815 the CCNR has developed principles which were then revolutionary and seem obvious today:

- Freedom of navigation;
- Equal treatment;
- Uniformity of regulations.
- Absence of duties or charges on navigation;
- Continuous and rapid adjustment of regulations to technical developments.

Initially, the scope of the CCNR was limited to the Rhine. Today, it has adapted itself to a significant change as Rhine navigation has become part of European navigation. It is the essential part of it, but it is fully integrated in this European network. The organisation which has assumed for 200 years the management of the Rhine now carries on its tasks in the new European framework.

I will give you some information about the way we tackle climate change in the direct meaning, namely meteorological change, and about means to mitigate this evolution. Then I will speak about more immediate concerns,

- innovation and inland navigation , and
- social questions.

I will end with some reflections on the regulatory framework and the issue of institutional organisation.

But first, I shall make some comments on the economical situation.

1.      Waiting for an economic climate change
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Before speaking about the future and how to prepare for it, let me devote a short time to the present. An intervention on behalf of the CCNR cannot ignore that the present is still made of a very difficult economic situation and that the most urgent change that industry is waiting for is change on the market and in business. Indeed, the crisis that started in 2008 did seriously affect inland waterway transport. Important sectors such as the steel industry and the chemical industry but also the transport of containers slowed down in such a way that the entire fleet was faced with a historic drop in demand.

Today, we may conclude that the dominant industries have recovered and that the transport volume on the IWT market is back to the level of 2007. But if transport demand is again improving, it will take a certain time until complete recovery. Moreover, freight levels are still very low. At least, the freights in the dry bulk sector show upward trends, but there is still a loss of balance between demand and supply. Some observers fear that, beyond the level of activity, there are structural problems that need to be addressed.

We must acknowledge in this respect that the IWT sector has known a high level of investments, in particular during the last decade and at least partly thanks to the restructuring programme of the 90's. A lot of new buildings came into the market, increasing the fleet capacity. Due to a long lead time of the new building projects, a substantial number of new vessels even entered the market during and after the outbreak of the crisis. The tanker business still represents more worries. The restructuring under the actual conditions of the fleet from single to double hull vessels is a process that needs full attention. The introduction of new double hull capacity does not automatically keep pace with the withdrawal of the single hull tankers that in a few years will become obsolete.

In addition, over the years, the performance of the fleet has been improved, mainly by virtue of the increase of ships' dimension and capacity. Almost without exception, new vessels constructed in the last two decades are vessels in the range from 2000 t and upwards. The capacity of dry cargo vessels above 2000 t increased from 20% to 40% of the actual fleet; in the tanker fleet it increased from 60% to almost 80%.

I am convinced that in some time demand is going to reach supply levels again and that the capacity of the fleet will be completely requested. But in the mean time, it is difficult to find solutions in order to mitigate the effects of the present situation. Most of the possible actions fall within the competence of the European Union or of the Member States and belong to the responsibility of the industry itself. On the side of the CCNR, we have decided to apply a very comprehensive interpretation of the hardship clause contained in the Rhine ship inspection regulation with a view to granting more flexibility in the implementation of provisions whose application requires supplementary investments when these investments need to be delayed by reason of the economical situation.

With the support of the European Commission and in close cooperation with the shipping industry, ESO and EBU, the CCNR also develops a market observation for inland navigation in Europe. This instrument provides a regular evaluation of the IWT sector, of its strengths and weaknesses, as well as its competitive position. To improve this market observation, the Central Commission endeavours to collect all the economical data that can help decision makers in their economic forecasts and their strategic decisions.

## 2. The challenge of meteorological change

Operating in a changing meteorological climate is not new for inland navigation and inland navigation has since long learned to cope with low water levels. Even in 2003, when as a result of an unusually dry summer the water levels of the Rhine between Bingen and Koblenz were the lowest ever recorded, the total amount of cargo carried on German waterways shrank only by 5 % in 2003 and inland navigation caught up again with the other transport modes in the following year. Nevertheless, the Central Commission has placed mitigation of climate change and adaptation to possible effects at the top of its agenda.

The 2009 CCNR conference "Navigation on the Rhine and Climate Change – A Challenge and an Opportunity" brought all major stakeholder groups together, including the freight forwarders, for a first comprehensive analysis of the topic. They concluded that indeed climate change will have an impact on Europe's inland navigation, but that there is sufficient time to develop and implement a strategy for adaptation, combining measures of which most are already known today. Based on these findings, the CCNR has developed a comprehensive work programme, which is now going into its second year.

A key aspect of our activity within this field is of course close cooperation with other international organisations, such as the International Commission for the Hydrology of the Rhine and the International Commission for the Protection of the Rhine. The CCNR will be using studies undertaken by these commissions and their respective conclusions on the development of the waterflow in the Rhine basin, when developing its adaptation strategy. I refrain from presenting the results of these studies, as Mr. Nilson, a real expert on climate change and its impacts on waterflow, will do so later in the session.

At the end of 2011, the Central Commission will publish its findings on possible effects of climate change on Rhine navigation and which adaptation measures may be taken if the waterflow of the Rhine should indeed change significantly

However, inland navigation will also contribute to climate change mitigation. Transport greenhouse gas emissions, basically CO<sub>2</sub>, continue to rise. Inland navigation offers a solution to this problem! A compilation of several international studies undertaken by the CCNR secretariat shows that the CO<sub>2</sub> emission intensities of freight transport modes differ substantially, and that inland navigation has the lowest CO<sub>2</sub> emission intensity.

Besides increasing the vessel size, numerous other measures can be taken to further reduce CO<sub>2</sub> intensity of inland navigation. We have at our disposal a comprehensive list of technical, operational and transport management measures for mitigation of green house gas emissions from navigation. Some studies estimate the reduction potential of different techniques between 10% and 25%. The most effective measures relate to the operation of the vessel.

Therefore, the Central Commission will organise a workshop in spring 2011 dedicated to the reduction of greenhouse gas emissions stemming from inland navigation.

In other words, the CCNR will try to provide reliable input for answering the question whether certain cargo should go on road, rail or inland waterway. This tool will show that inland navigation is a sustainable mode of transport.

Even though it was not expressed in that way, sustainability has always been one of the guiding principles of the work of the CCNR. It is our experience and our belief that inland navigation is a water use which does not need to be antagonistic to the goals of water protection. The implementation of the Water Framework Directive, when done in a way of mutual understanding and cooperation, can be a useful instrument to demonstrate the compatibility between inland navigation and biodiversity. I am sure that Philip Weller, Executive Secretary of the International Commission for the Protection of the Danube River and the last speaker of this session, will further explore the potentially positive relation between inland navigation and environmental protection. The CCNR is also taking part in PIANC's progressive work on sustainable development. Eric van den Eede, the Chairman of PIANC and second speaker this afternoon, will present the Concept of Working with Nature, which the CCNR helped to develop. The CCNR translated the concept into its working languages in order to facilitate understanding and implementation.

3. Innovation for a changing inland navigation
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Adaptation to climate change and the remarkable advances of the ecological performance of inland navigation, which we are currently witnessing, are largely based on its ability to innovate. Contrary to superficial impressions, inland navigation is an innovation friendly mode of transport. Many changes attest to this trend towards modernisation. Let me recall the impressive number of new ships having entered the market in the last 8 years: more than 1100 representing more than 2,5 millions tons!

The RIS technology has now become a very common tool in inland navigation and helps to integrate it more effectively in the logistical chains. New logistical concepts have been adopted or are in experimentation. New engines, adoption of low sulphur fuel, new hull design and use of light weight material for ship building, new techniques in the cargo handling, new safety measures (double hull) are other examples.

The CCNR has very often been the driving force behind these innovations by bringing together experts representing different parts of the waterway system.

It was the CCNR working group on technical requirements for vessels that initiated and drafted the first regulations on gaseous pollutants and particulate matter for inland navigation engines. And even in the field of River Information Services, the CCNR has been and continues to be at the heart of innovation: the first technical standard for the River Information Services was developed by a CCNR working group

Innovation refers also to education and training concepts. Simulators can supplement and accelerate the acquisition of navigation experience. Yet, a new approach of training which would encompass the use of simulators supposes that clearly identified and approved standards regarding the soft and hardware for IWT ship handling simulators are agreed upon.

The CCNR has launched thoughts on this subject and intends to carry out this task in consultation with the relevant stakeholders, professional organizations, education institutes, and the industry involved in the development of simulators.

During its long history, the Central Commission has always encouraged the adoption of new technologies by the high standards of its regulations. In the present time however, good technical prescriptions are even harder to make. We have to take into account the current trends for deregulation and simplification of administrative and technical rules with a view to checking if some of them are not superfluous or overly meddlesome.

On the other hand, the high level of safety of inland navigation is considered to be one of its assets, particularly with regard to the transport of hazardous substances. To maintain this high level of safety is a widely accepted aim. Our challenge will be to release some regulatory constraints, with the objective to promote the dynamism of the sector without affecting the level of safety.

#### 4. Changes in the field of social questions

Preparing for the future, we should further pay special attention to the social climate. My conviction is that we should look closer at the risks of deterioration in this domain. The sector suffers from an acute lack of personnel and the situation worsens over the years. At the same time, precarious employment in inland navigation is rising.

In a way, inland navigation is currently experiencing similar social-related concerns as those witnessed in maritime navigation some decades ago. Young people in Western Europe have lost interest in working on inland navigation vessels, and crew members are increasingly recruited in Eastern European, African or Asian countries. At the same time, social legislation is becoming more 'flexible', allowing shipping companies to hire personnel without making the regular contributions to the social security scheme of riparian States. Scarcity of human resources as well as tax and social legislation differences among EU member States prompt shipping companies to relocate in new EU member States.

Employment of personnel from outside the Rhine basin may have positive aspects. It is probably unavoidable in many cases in order to fulfil the manning requirements. Besides, these crew members help the shipping companies to keep costs low and remain competitive in the overall transport market. However, there are also negative effects resulting from this practice. Inadequate language and other skills reduce the ability of crew members to work safely and efficiently, thereby increasing the risks of accidents.

Endeavours should therefore be made to improve social conditions in inland navigation in order to stop the spiral and make this sector attractive again. To improve the working conditions first supposes that rules and mechanisms be set up in order to prevent social dumping. To determine the rules applicable to those "mobile workers" and to ensure effective controls thereof trigger very specific and challenging issues.

The CCNR is one of the few international instances which can claim some expertise in this field. The Administrative Centre for the Social Security of Rhine boatmen is a forum comprised of social partners and government representatives from social affairs.

Likewise, rules concerning labour conditions have long been adopted under the aegis of the CCNR. In recent years, the legal committee of the CCNR has on several occasions organised meetings in order to find effective ways to prevent illegal work in inland navigation. As a result of these consultations, and in agreement with the European Commission, the CCNR is about to adopt a new regulation which will create an international attestation proving legality of employment.

#### 5. Climate change in the regulatory framework

The climate for inland navigation is changing for the better with regard to its legal framework. The Central Commission has contributed to the emergence of a common set of regulations in Europe. Unification is almost achieved in the field of technical prescriptions for vessels and transport of dangerous goods. Progress is ongoing regarding other rules:

- The European Directive 2006/87 on technical requirements for vessels contains the same technical specifications as the Rhine vessel inspection regulation. Now that a significant number of Danube states have joined the European Union, these technical rules will also apply to a considerable length of the Danube.
- Regarding the transport of hazardous substances, the ADNR enacted within the CCNR has served as the basis for defining the pan-European ADN agreement which will enter into application at the beginning of next year. The CCNR has decided to substitute the ADNR by the ADN.. Here again, uniformity of regulation is almost completed.
- In the field of boatmaster certificates, a similar process is in hand. The CCNR has put forward proposals to the European Commission for a harmonised framework. In parallel, the CCNR has recognized numerous national boatmaster certificates and set up with the concerned states consultation structures
- Next week the CCNR and several inland navigation states are going to sign a multilateral administrative arrangement for the mutual recognition of service booklets. .
- The CCNR has been the leading institution in the elaboration and adoption of the CMNI Convention, which sets up a common European regime for the contract for the international transport of goods on inland waterways. The convention is now ratified by 15 States.
- The CCNR is also preparing amendments to the CLNI convention on limitation of liability in inland navigation in view to allowing all inland navigation states to accede to this convention.

#### 6. Changes in the international organisation system concerning inland navigation

These changes in the regulatory framework have transformed the position of the Central Commission within the institutional system of inland navigation in Europe. Taking into account the fact that the regulatory framework has gained a European, sometimes a pan-European dimension, and that the regulations it works out are often destined to be applied beyond the Rhine in the whole European waterway network, the CCNR is concerned about adapting its organisation and working methods in order to further an effective participation of non member states in its work:

- In cooperation with the European commission, it has created the joint working group on technical requirements for inland waterway vessels in which the other river commissions and all EU member states can take part. This "JWG" draws up proposals for the implementation and the development of technical prescriptions at the European level.
  - Regarding the field of boatmaster certificates and service booklets, the CCNR has concluded or is about to conclude administrative arrangements with numerous States,

- The CCNR has also communicated concrete proposals to the European Commission with the objective of reinforcing the cooperation between both institutions. In line with the already existing collaboration in the field of market observation, the CCNR could take on other “mandates” in the interest of European inland shipping. There are many fields where the Central Commission owns the best level of expertise and is ready to serve the whole European inland navigation network as effectively as it serves the Rhine axis. Over the years, this central instance has become a consultation platform where all matters regarding the European navigation are discussed.

Let me conclude my remarks with an optimistic consideration. We are indeed preparing for the future. Even if the present is still full of challenges and struggles, we can look with confidence to this future. What we have experienced in the last decade was not only a changing climate for inland navigation but a real renaissance a rebirth of the waterborne transport. The fight for a new image is already won. We now have to draw consequences of this rebirth. That’s the objective of the CCNR, which on its side has undergone a process of real refoundation in the ten last years, to stay not only the oldest but one of the best supports of inland navigation.

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