

Inland Navigation

Editorial

Dear readers,

As the Northern hemisphere starts to feel the energy of the new spring season, our readers in the Southern hemisphere are enjoying the advent of autumn. In both hemispheres, new inland waterway projects are taking shape, each time with a creative and innovative touch to match the challenges of the business and operating area. As always, Bureau Veritas is available to partner you in any project, and our teams are continually working to improve and expand their services to meet the demands of this fast-moving world.

While strongly linked to innovation, we believe the value of classification is prized by all stakeholders in the global maritime and inland navigation business. We are keen to remind readers of the fundamental principles and values which stand behind our services. We are confident our contribution can enhance trust among the various stakeholders, and believe classification is an important step in the path to improving the safety and reliability of inland shipping.

Truly Yours, Jean Michel Chatelier / Director

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Bureau Veritas backs expansion in French river cruising

Bureau Veritas participated in the 5th edition of the national conference on river tourism in Auxerre, France, on February 5-6. This biennial business event is organized by VNF ("Voies Navigables de France"), and is dedicated to the development of inland waterway tourism and to other economic activities involving waterways. The event brought together 500 professionals with the common objective of developing waterway cruising, together with other related cultural and leisure activities. According to VNF, fluvial tourism is a \in 1.4 billion business in France, with \in 410 million alone generated by the 215,000 passengers taking river cruises. There is room for development in France, however, since just 19 cruise vessels operate on the River Seine, compared to 136 vessels on the River Rhine.

According to the CCNR (the Rhine Commission), Europe enjoys the biggest fleet of river cruise vessels in the world, representing 360 vessels out of a global fleet of 880. It is known to be the most prized by tourists, ahead of River Nile cruises.

"Green" tourism is also becoming increasingly important commercially due to the number of nature-oriented passengers and lovers of river cruises. New projects involving modern eco-friendly vessels with ecological modes of propulsion - principally batteries and fuel cells – are appearing on various rivers and waterways.

Bureau Veritas met with a wide range of shipowners, operators and travel agencies at the conference to present the advantages and added value inherent in classification. The 🛛 🖝

Summary

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- BV's global inland navigation activities gain ISO 9001: 2015 certification
- Fruitful collaboration with the Luxembourg Authorities
- Classification works hand in hand with statutory regulators
- European regulatory news

event offered a good opportunity to explain the differences between classification and compulsory regulations. Indeed, there is sometimes confusion between class procedures, which cover the construction elements of a new build vessel, and the application of the relevant statutory requirements.

Classification provides a higher safety standard and greater reliability, thus conferring a higher valuation on a vessel due to the comprehensive approval and survey process. This is well understood by most of the participants in the cruise market, and in particular the travel agencies that must guarantee passenger safety and vessels reliability when contracting with operators and shipowners. Class rules and guidelines also provide the necessary approval and inspection when new technologies, improved equipment, or innovative materials are introduced.

Although classification is now a requirement for most seagoing ships, for many decades - even centuries – it has been adopted at a much slower pace in the inland navigation sector. Recently, the recognised European classification societies were given the opportunity to make a presentation to CESNI's technical committee on the range of classification rules relating to the construction and maintenance of passenger vessels, and how these compare to European regulatory requirements. This touched in particular on hull construction (scantling, material, welding, building,



BV's global inland navigation activities gain ISO 9001: 2015 certification

For many years Bureau Veritas' Marine and Offshore internal quality management system has been verified by BSI to ensure conformity with IACS' Quality System Certification Scheme. After successfully conducting audits within our Inland Navigation Network, from this year our Inland Navigation Activities will be included in the certification performed by BSI for ISO 9001:2015 standards. The scope of the certification covers the classification of inland navigation vessels in respect of both new buildings and ships in service, as well as statutory work carried out on behalf of dedicated Flag Administrations. The principal benefits of implementing and receiving ISO 9001 certification are: an increase in the company's standing and greater trust as a business partner; greater competitiveness; improved contacts with customers; better identification of customer needs; a more effective work organization; better process optimization in the company; and a more efficient management of human and material resources, ultimately saving time, money and resources. This success could not have been achieved without close co-operation within the company, and is a result of always striving to improve our services. We are very proud that our worldwide Inland Navigation activities have received a positive recommendation from BSI and are now officially part of the ISO 9001: 2015 Bureau Veritas Marine and Offshore certification.



etc.), and machinery installation (scantling of vital parts, type approval of equipment, design of engines, etc.).

However, despite the relatively slow take-up in the inland sector, it seems the need for improved safety, reliability, and environmental protection is now growing faster among charterers, contractors and underwriters, all of whom need assurance and support in respect of their responsibilities.



Fruitful collaboration with the Luxembourg Authorities

Cooperation between the Luxembourg National Authorities and Bureau Veritas is an important part of the effective implementation of the country's applicable regulations and processes. Strengthening the interactive communication and cooperation mechanisms between the two parties is a key objective for this constructive and trusted relationship. The annual meetings between BV and the Luxembourg Authorities contribute to the creation of global, international and regional networks in support of the implementation of the statutory regulations. They also provide important opportunities to discuss specific issues, updates, requirements, and application of relevant procedures. Cooperation is most effective when the cooperating parties share the same principles and have the same, or largely similar, institutional frameworks and supervisory standards. Our last annual meeting between BV and the Luxembourg Authorities took place in Antwerp on February 13. The class society is responsible and accountable to the Flag Administration for the work that it carries out on its behalf. Verification by Bureau Veritas that an inland navigation vessel is in compliance with the applicable statutory requirements or regulations at the time of the survey or inspection requires appropriate training, gualified surveyors, and the issuance of

appropriate attestations or checklists that have been previously approved by the National Administration. The aim of an annual meeting with the Flag Administration is to optimise the work and increase overall effectiveness by avoiding gaps and overlap in processes, while sharing and enhancing knowledge in order to provide the best support to all our customers.





In the maritime industry, statutory regulations and classification rules closely linked and are complementary. As a result of the continuous evolution of technical knowledge over the last two centuries, plus the need to increase harmonization in maritime safety, some rules became common to both classification and statutory regulation and now follow a parallel evolution. Originally, ship classification was a function of underwriters' needs and later on that of shipowners, National Authorities, and the buyers and sellers of vessels, all of whom needed to know the quality of a ship in order to reduce the risk inherent in their various activities.

Indeed, classification societies were created in the 1830's as a result of significant human loss. Their knowhow subsequently led to the development of rules covering all the main topics relating to the quality and safety of ships (hull, propulsion, electricity, bilge systems, equipment, pressure vessels, etc.). This ensured the quality of ships under construction, and the subsequent maintenance of this quality level during the ship's life. Based on their rules, classification societies grant class notations to ships, reflecting the level of confidence in the vessel and its maintenance.

The need for national and international statutory regulations evolved for the same reason, to ensure human safety. Initially, regulations were focused on areas not covered by classification (salvage, wellness of crew, freeboard, navigability). However, they were subsequently expanded to take into account technical evolutions (fire prevention, pollution, the transport of dangerous goods and passengers, organisation on board, security).

Nevertheless, these regulations often request measures without setting any technical parameters. Thus, several topics which are handled by class are complemented at the statutory level, thereby bringing international standardisation to regulations which deal with safety of life at sea.

When it comes to inland waterway navigation, the need for classification is less widespread (applying in some countries, some types of vessels, some types of dangerous goods). Often, the national or international regulations for a group of countries (e.g. ES-TRIN and ADN in Europe) take precedence. However, these regulations may require the classification of vessels, or a specific technical intervention by a classification society (strength of hull, survey of gas detection installation ...). Only a few countries delegate part or all of the statutory surveys to the recognized classification societies.

As part of these regulations, it is determined that for some important areas, such as vessel strength, the responsibility should be left to the design company involved in the project, or to the shipowner, without the need for checks by an authorized authority or person.

Likewise, these regulations specify only a few construction requirements, which are sometimes fragmentary and not explicitly stated in the construction and periodical surveys, in contrast to the requirements and practice of classification societies.

For their part, classification societies have developed rules that cover most of the areas needed to ensure a vessel's safety. These rules govern vessel components (materials, welding, hull scantlings, propeller shaft, propeller, equipment certification, etc.), and involve surveys during vessel construction. Societies perform periodical surveys to confirm the level of safety. These interventions are based on comprehensive documentation, including rules, procedures, and instructions appropriate to each type of vessel, which are applied by trained and qualified surveyors.

To date, the evolution towards delegating more inspection to classification societies for inland navigation, and to some extent seagoing maritime activities, has been slow (classification and statutory delegation). However, the privatization of statutory activities is increasing, and could lead to this objective.

Nevertheless, vessel classification is increasingly being requested by charterers or the shipowners themselves, mainly in regions outside of Europe and in order to distinguish themselves from inferior competition.

With our capacity to jointly perform classification and statutory surveys, and our ability to converse with the authorities regarding the interpretation of technical requirements, Bureau Veritas is in an ideal position to play the role of facilitator during the compliance process for inland waterways vessels.



ADN - Membrane tanks

The Safety Committee has adopted the amendments proposed by the informal working group on membrane tanks (see Annexes I and II of

ECE/TRANS/WP.15/AC.2/2020/11) with some modifications. The use of membrane tanks will be authorized by the ADN 2021 (which comes into force on 01.01.2021).

ADN Safety Committee

The 36th Session of the ADN Safety Committee took place January 27-31. This was the last session during which amendments could be adopted for the next version of ADN (ADN2021, which enters into force on January 1, 2021). The Committee decided to adopt amendments to the table in 1.6.7.2.2.2 (general transitional provisions), making them applicable for certificates of approval issued after December 31, 2020 instead of December 31, 2024: 9.3.x.20.4 (arrangement of cofferdams), 9.3.x.21.1 (sampling devices), 9.3.x.22.4 (cargo tank openings) and 9.3.x.26.2 (residual products).

The eight signatory Contracting Parties were invited to revoke M018 (explosion group II B3) as of January 1, 2021. This M018 Agreement is currently valid until December 31, 2021 for carriage in the territories of those ADN Contracting Parties which are signatory to the Agreement. However, it can now be revoked in advance on 01.01.2021.

If it is revoked by one of the signatories, it shall remain valid until December 31, 2021 only for carriage in the territories of those signatory ADN Contracting Parties which have declined to revoke it. Meanwhile, it was reconfirmed by the Safety Committee that an

approved stability booklet is sufficient if the loading cases used are well defined. However, the Committee underlined that equipping vessels with such a loading instrument was nonetheless very useful and therefore highly recommended.

The Classification Societies, in collaboration with TNO from the Netherlands, have demonstrated the necessity to update article 9.3.4 (which was drafted 25 years ago) relating to alternative construction when the double hull is smaller, or the tank volume higher, than the requirements. A working group within the Group of Recommended Classification Societies will be created.

ESTRIN and CESNI/PT

Provisions for electric propulsion systems in ES-TRIN:

ES-TRIN 2019 (in force since 01.01.2020) has introduced a new set of technical requirements for electric propulsion systems (Chapter 11), which will incorporate the latest state-of-the-art technologies and ensure a high level of safety for inland navigation. In preparing ES-TRIN Chapter 11, CESNI/PT paid special attention to ensuring electric propulsion systems operate to the same safety levels as conventional propulsion systems, particularly taking into account the various energy sources involved (generating sets, batteries, etc.).

With the preliminary experience gained by inspection bodies, CESNI/PT is now working on a FAQ document to facilitate the implementation of Chapter 11. The publication of this FAQ is expected in 2020.

