IMPACT OF THE NEW SAFETY AND ENVIRONMENTAL REGULATIONS ON THE SHIPBUILDING INDUSTRY

(Paper by China)

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ON THE SHIPBUILDING INDUSTRY

1. In recent years, the international community puts forth increasingly higher requirements for the safety of ships and environmental protection. There have been frequent preparation and modification of international maritime rules and new standards, which are made more and more strict. For example, International Maritime Organization (IMO) proposes the “Goal-Based Standard (GBS)”, which aims at further strengthening the safety management at sea; the International Association of Classification Societies (IACS) releases the Common Rules which aims at building “more solid” tankers and bulk carriers ships; IMO releases the Supplementary Article VI of MARPOL Protocol to prevent the air pollution arising from ships’ exhausts. It is undeniable that these standards and codes have a positive impact on the protection of the marine environment and the safety at sea. But we have also noticed that the adjustment of these rules and regulations also have brought forth a great impact on the shipbuilding industry.

2. The new safety and environmental protection regulations have a great impact in many aspects of the world shipbuilding industry, e.g. the market demand for new ships, the development of ship types, the shipbuilding technologies and the shipbuilding cost, etc. Probably you also have the similar feeling in this regard. Now, I’d like to share with you my personal views about the impact from the perspective of shipbuilding industry.

3. Firstly, the moving up of the time for scrapping of single hulled tankers has greatly promoted the thriving of the world tanker building market. In recent years, the tanker demand primarily comes from the demand for renewal. Presently, the orders for tankers have already been extended to the year 2010 in shipyards all over the world. As to Aframax and Suezmax tankers, the current volume of order for new ships has far exceeded that of the single hulled tanker under operation. Regarding the very large crude carrier (VLCC), IMO predicts that about 170 single hulled VLCC will be scraped before 2010. According to Clarkson’s statistics, by late October this year, there will be 153 VLCC on order worldwide, having a load-carrying capacity is basically equivalent to that of the existing single hulled VLCC. The earlier scrapping of the single hulled tanker has lead to a substantial growth in new orders for tanker in recent years, and it is estimated that the above-mentioned rules will continue to act positively on the tanker building market.

4. Secondly, the fact that increasing importance attached to the safety of ships has brought forth higher requirements to ship design and ship structure, etc., and the implementation of aforesaid new rules has an impact on the shipbuilding cost. The attention to safety is primarily reflected in the Goal-Based Standard proposed by IMO. Once GBS is implemented, it will lead to the thorough updating of ship design philosophies and design standards. It concerns not only the safety of a single ship but also the impact of ship maneuvering on environment, and aims at minimizing the number of accidents at sea arising from the defects of ship structure. Besides, IACS’s Common Structural Rules (CSR) also has a great impact on ship design and structure, and it is also a main component part of the fourth section of the GBS standard system. For the shipbuilding sector, the implementation of CSR will set restrictions on the possibility of utilizing different rules for market competition by shipyards and will normalize the order of the shipbuilding market; on the other hand, the new regulations increase the quantity of steels used in shipbuilding and consequentially increase the cost. In addition, as the new regulations convert from the traditional
dimensional design system to net dimensional design system, a huge amount of the original design
drawings have to be entirely modified and reviewed, which puts forward higher requirements for ship
design. Furthermore, the use of the high-tensile steels of higher-grade also leads to the higher technological
requirements. Hence all these as mentioned above have put forward new requirements to the shipbuilding
enterprises in terms of further enhancing their technical development and innovation activities.

5. The Performance Standard for Pure Ballast Tank Coating (PSPC) also has a large impact on the
safety of ship structure. PSPC aims at reducing the impact of the corrosion of ballast tank on the ship
structure safety by raising the standard of coating performance. To raise the coating standard will not only
make the ships safer, but also play an active part in enhancing the shipyards’ management and technical
level and promoting the establishment of modern shipbuilding mode. However, it will probably increase
the shipbuilding cost and lengthen the shipbuilding period.

6. In addition, the environmental protection acts that came into force in recent years mainly refer to
the Supplementary Article VI of MARPOL Protocol, according to which ships must be installed with the
exhaust gas cleaning system or other technical alternatives to restrict the exhaust of nitrogen oxides and
sulfur oxides. This will undoubtedly increase the cost of marine diesel engines and eventually increase the
shipbuilding cost. In addition, there are a number of environmental protection acts that are being
considered but not yet executed, including International Convention for the Control and Management of
Ship’s Ballast Water and Sediments and International Convention on Control of Harmful Anti-fouling
Systems on Ships. According to the International Convention for the Control and Management of Ship’s
Ballast Water and Sediments, all newly built ships must be equipped with the certified ballast water
treatment system after 2009, and this will have a certain impact on ship design and structure. According
to the International Convention on Control of Harmful Anti-fouling Systems on Ship, the anti-fouling coating
containing TBT will not be allowed to use any longer after 2008, and this will definitely have a certain
impact on the selection of hull painting and the pollutant disposal in the course of coating application.

7. Dear colleagues, What talked above is my view regarding some major rules and regulations on
safety and environmental protection that have come into force recently. We believe that the issuance and
implementation of these rules conform to the current concept on safety and meet the overall trend of safety
and environmental protection of the international community. With more attention paid to safety and
environmental protection, a type of culture on safety and environmental protection could be established
that militates for ship operation as a whole and promote the sustainable and healthy development of world
shipping industry. The shipbuilding circle ought to attach great importance to and render great support to it.
Just like what I’ve mentioned before, the shipbuilding circle in every corner of the world has duty bound to
practically implement these regulations. On the other hand, we shall try to play our part in the course of
establishing the rules to enhance the utterance right of shipbuilding sector so that the discussion of any new
safety and environmental protection regulation could also give consideration to the actual situation of the
shipbuilding industry and try to avoid such circumstance that IACS would execute in advance PSPC
standard to the ships applicable to common rules without giving the shipyards any time for preparation and
causing a lot of unfavorable factors to the shipbuilding industry. In the meantime, the establishment of any
new safety and environmental protection regulation shall be beneficial to promotion of the technical
renovation and development of the shipbuilding industry and prevent it from becoming any barrier of the
same.

8. I wonder, ladies and gentlemen, whether you have noticed that during establishment of these
rules the classification societies and shipping sector were playing a leading role, whereas the shipbuilding
circle, which is an important component part of the maritime industry, had seldom participated in it or put
forward any comments.
9. We hold that the shipbuilding industry should not be a passive receiver of these rules. The shipbuilding industry together shall actively and timely communicate with the shipping industry, the classification societies, and the related international organizations, and participate in the discussion during establishment of various rules and standards, so as to well protect the interest of the whole shipbuilding industry and gain an even more favorable development space.

10. Nowadays, the shipbuilding circles of China, Japan, Korea and EU are actively communicating and exchanging ideas with each other at the nongovernmental level. As an inter-government organization of the shipbuilding circle, OECD Shipbuilding Working Party ought to play a more important part and act as a good organizer in this field. We propose OECD Shipbuilding Working Party form an effective work mechanism to organize the shipbuilding sector to discuss such issues as the establishment of related regulations and its impact on the shipbuilding industry etc, to enhance the dialog and exchanges with relevant international organizations such as IMO etc. on behalf of shipbuilding sector to reflect the opinions of shipbuilding sector. And when necessary, the OECD Shipbuilding Work Party could invite the IMO personnel to participate the concerning activities of WP6 or participate the establishing of relevant rules and regulations of international maritime organizations. In this way, we can not only change the present dilemma that the shipbuilding sector was put aside in the course of regulation establishment, but can also protect the benefits and rights for development of the whole shipbuilding industry and gain an even more favorable development space for the world shipbuilding as a whole.