Half-Day Forum on "Shipbuilding/Ship Repair Industry Strategic Plan 2020"

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MARINE ENGINEERING AND NAVAL ARCHITECTURE TECHNICAL DIVISION

INTRODUCTION

The objective of the forum, organised by the Marine Engineering and Naval Architecture Technical Division (MNATD) at Wisma IEM on 4 November 2011, was to invite views and comments from IEM members and also those representing the engineering fraternity, which would then be incorporated into the final preparation of the Shipbuilding/ Ship Repair (SBSR) Industry Strategic Plan 2020 before it was announced by the country's Prime Minister at the Langkawi International Maritime Aerospace Exhibition (LIMA) on 6 December 2011.

FORUM PANELLISTS

The panel members presiding over the forum were the presidents of the Association of Maritime Industry of Malaysia (AMIM) Admiral Tan Sri Dato' Seri Ahmad Ramli Nor, and the Malaysian Shipowners Association (MASA) Ir. Nordin Mat Yusoff, as well as the Vice President of the Institute of Marine Engineering Science and Technology (IMarEST) First Admiral Adjunct Prof. Dato' Ir. Ahmad Murad Omar (Rtd).

The panellists from left First Admiral Dato' Ir. Ahmad Murad, Tan Sri Dato' Seri Ahmad Ramli Nor and Ir. Nordin Mat Yusoff

Chairman of MNATD handing over a certificate of appreciation to Lt. Kol. (Rtd) Ir. Kamarulzaman Zainal

The Chairman of MNATD presenting a certificate of appreciation to Ir. Nordin Mat Yusoff

KEY ISSUES AND CHALLENGES

Admiral Tan Sri Dato' Seri Ahmad Ramli, in his opening remarks at the forum, stated that while Malaysia is indeed a maritime nation and straddles one of the busiest sea lanes in the world, it has yet to tap the full potential of this industry.

First Admiral Dato' Ir. Ahmad Murad emphasised the importance of international recognition in professional competency as an element to facilitate global engagement in order to support the local industry. Ir. Nordin then expressed his thoughts relating to the challenges that the industry was facing, the nation's focus on the SBSR, and why government intervention is crucial in achieving success.

Many issues were raised and questions put forward to the panellists. Responses were offered with full clarity and, in some cases, supported by examples. It is evident that during the question and answer session, the participants had a good understanding of the SBSR and was supportive of the intended goal of the SBSR Strategic Plan.

STRATEGIC PLAN OBJECTIVES

When one speaks of shipbuilding and ship repair, the first impression that comes to mind is that shipbuilding is a manufacturing based industry while ship repair is a service based labour intensive industry. Whether it is the shipbuilding or ship repair industry, the strategic intent of the blueprint is in line with the Third Industrial Master Plan (IMP3), where the two industries were identified under the marine transport sector to be the ones which can transform Malaysia into becoming a developed nation by 2020.

The strategies that have been laid out in this plan were carved out of a multi-complex industry base that analyses current market trends and the tendencies of economic base drivers. Simply put, the shipbuilding industry is very much driven by supply and demand, while ship repair ensures the upkeep of existing assets.

The government has now declared the need to propel the maritime industry to a greater height, and has invited both the public and private sector to join hands to support the plan. In order to avoid such enthusiasm to remain rhetoric, such calls must be translated into action and such actions must not only be heard but also be executed. Otherwise, an excellent attempt in developing the strategic plan will remain as a file in the drawer.

GLOBAL FACTORS AFFECTING THE LOCAL INDUSTRY

On the global scene, China is leading in the shipbuilding industry compared to Korea and Japan. Between the three nations, they represent 85% of the world's order book. There is also clear indication of an upturn in demand for ships both in the transportation sector as well as the oil and gas industry. This trend impacts the ship repair industry favourably.

Locally, the shipbuilding/ship repair industry has been in existence from as early as the 1900s. Shipyards are scattered all over the country and this was due to needs at that time that were based on locality. As such, the industry is not well-coordinated and concerted towards one direction. This is the reason why the industry has not been recognised globally.

As Malaysian ship owners are from both the private and public sectors, it is only sensible for the two sectors to join hands and move in concert to expand the industry. As it stands now, inter-government coordination is already interlaced by differences in policy guidance, budgetary allocations and diversity in key result areas which are customised to suit the relevant departments. Although working in concert may be a challenge, it is not impossible.

INDUSTRY CLUSTERS

Today, most shipyards are clustered on both sides of the Peninsula, namely in Penang, Perak, Selangor, Terengganu and Johor, as well as along the coast of East Malaysia. The two clusters vary in the types of shipbuilding and classes of ships being constructed. The east focuses on steel vessels for the offshore industry, barges and river ferries, while the west concentrates of both steel and aluminum vessels for the government as well as oil and gas customers.

MARKET ANALYSIS

Although the outlook for shipbuilding/ship repair is an average 300 vessels per year, local shipbuilders only managed to capture 50% of the domestic market in 2010. This loss of opportunity is equivalent to RM2.04 billion. In relation to the Offshore Support Vessel (OSV) demand which is increasing, out of a total of 72 vessels ordered, 22 were built in foreign yards. This contributed to a loss of market share that is equivalent to RM1.5 billion.

Malaysia's oil and gas industry is indeed expanding, and the service providers to Petronas Carigali and other petroleum supporting companies are providing various types of OSVs to support the upstream oil and gas activities. To date, service providers are serving more than 350 offshore platforms, which own a total of 450 OSVs, throughout the country. However, only 40% of these vessels are built locally.

In summary, an analysis of the market indicated that the Malaysian shipbuilding and ship repair industry only captured 50% of the domestic market and approximately 1% of the global market. In order to optimise its market demand, Malaysia should focus on the types of smaller and medium sized vessels with very high complexity.

In the ship repair business, the market provided by the government and local ship owners must be fully tapped, and preparations need to be made to capture the highly lucrative double hull carrier conversion market.

STRATEGIC ANALYSIS

Looking ahead, we have no choice but to "transform" to remain relevant in the global market place. The key drivers for change, which present both threats and opportunities for Malaysia, include:

- **Pressure on Government Spending** – companies dependent on public procurement may experience fewer contracts, thus forcing them to increase their focus on the export market
- **Intensifying Global Competition** – the growth of marginal oil fields and the uptrend of the OSV sector add pressure to shipping companies to demand a shorter lead time which may result in local yards losing to the likes of China
- **National High Income Agenda** – companies have to uplift the level of sophistication so that more knowledge based, high value jobs are made available
- **High Fuel Price** – a low carbon economy creates the need for efficient vessels which require an innovative approach to ship design, building, retrofitting and disposal
- **Through Life Support** – both the Navy and MMEA are expected to seek a reduction in through life support cost which forces greater efficiencies from contractors

THE PLAN

If Malaysia hopes to capture a bigger market in the shipbuilding and ship repair industry, while at the same time capture the domestic demands of medium sized vessels less than 120m long, serious actions must be put into place. Bold ambitious targets need to be set, and to begin with a vision formulated along these lines:

Vision

By 2020, the Malaysian SBSR industry will be a major player in the small to medium-sized shipbuilding market renowned for its quality and the value of its high technology products and services, which will substantially contribute to the national economy.

Vision Objectives

- to capture 80% of the local new build market
- to capture 2% of the global new build market
- to capture 80% of the South China Sea offshore repair market
- to capture 3% of the Straits of Malacca repair market
- to focus development initiatives on a niche market involving <120m vessels

THE STRATEGY

Setting up a vision is a good and clear start. The journey to 2020 is not going to be smooth sailing, nevertheless, it is going to be guided by the following strategies:

- Establish business-friendly policies that support the growth of the industry
- Strengthen the institutional framework
- Reinforce the regulatory framework to assure the integrity of SBSR companies and the quality of their products
- Attract and prepare an adequate and capable workforce
- Apply local designs and adopt new shipbuilding/ship repair technologies
- Improve financial and incentive packages, and promote inward investment
- Upgrade the competency and level of sophistication of the industry

In most instances, strategy alone will not be enough. Therefore, a series of action plans must be derived from the strategy.

ACTION PLANS

Many actions have been derived from the aforementioned strategies. These actions range from proposing new policies to implementing specific and detailed initiatives that contribute to the shipbuilding and ship repair industry. Actions suggesting initiatives in manpower skills and competency development that are crucial in supporting the industry have also been laid down.

Technological advancement in design applications that will contribute to innovation and turn Malaysia into a leader in shipbuilding in the region has also not been forgotten. Having skills and competencies in the industry without improved marketing skills will not help achieve the targets of the plan.

Therefore, actions related to improving marketing skills and the level of competitiveness have been identified. These are some of the aspects covered in the actions. The success or failure of its implementation would very much depend on the enthusiasm driven from the leaders top-down and the intensity of the workforce who is responsible for realizing the intentions of the plan.

CONCLUSION

The SBSR Strategic Plan 2020 has focused on two key growth levers to transform the industry from its current state to its future in 2020. First, the plan is to capture the market share in both the shipbuilding and ship repair sectors of the industry. Second, to establish "stakeholders' facilitation" involving the seven strategies that are intended to resolve issues surrounding the aspects of policy, institutional, regulatory, human capital, design and technology, finance and incentives.

With the full cooperation and support from all stakeholders, it is expected that the resulting economic impact would be significant by 2020. The anticipated contribution to the GNI would be RM6.35 billion and the job opportunities created in excess of 55,000. Private sector investment may reach up to RM9.76 billion, while the public sector investment is required to be up to RM144 million.

The forum garnered some views from the engineers in attendance, and was accepted by the speakers with gratitude and appreciation. Subsequently, during LIMA 2011, Prime Minister Datuk Seri Najib Tun Razak launched the SBSR Strategic Plan 2020 (as reported in The Star on 7 December 2011). The Prime Minister wants Malaysia's maritime industry to sail as smoothly as its aerospace enterprise has soared. He also called for the public and private sectors to fully support the SBSR Strategic Plan 2020.

With the will of the nation and a well thought through initiative with strategies and action plans in the right perspective, the only thing left is the execution. The latter will involve engineers from various disciplines and competencies to contribute to nation building and successful growth. ■

REFERENCE

[1] Malaysian Shipbuilding/Ship Repair Strategic Plan 2020 by MIGHT and AMIM, MIGHT 2011

1SUDOKU Centerpiece "1"

by Mr. Lim Teck Guan

Fill in the remaining 80 squares with single digits 1-9 such that there is no repeat of the digit in every Row, Column and Block. The number at the top left hand corner of the dotted cage indicates the total for the digits that the cage encompasses.

For tips on solving, visit *www.1sudoku.com.my*

(Solution is on page 41 of this issue.)