The year ending 2016 glimpse of hope and looking forward to a better and more promising 2017.

As a young agency under the purview of Ministry of International Trade and Industry (MITI), MSI had undergone a number of development phases since our establishment. The year 2016 saw MSI kicking off the campaign on consolidation for the industry and our Human Capital development programme. With several new team members on board, MSI is gearing up for more exciting programmes and activities and looking forward for a better year in 2017. Facing expectations from various stake holders of the industry, MSI pledges to continue performing at our level best to serve the nation and the iron and steel industry; which is the main reason MSI was formed initially.

As the facilitator of the consolidation effort, MSI intends to embark three phases over a five year period, from 2016 to 2020. The first phase is to promote and gather feedback on what would be feasible and pragmatic for the consolidation effort in order for the industry to become sustainable and more competitive. Charging ahead to 2017, MSI will continue to complete the first phase and proceed to the second phase which will focus on the implementation and monitoring of the consolidation plan and activities and finally in the third phase, MSI will facilitate the industry on venturing into new product and/or human capital development along with industry experts and/or universities.

Essentially, when a company is no longer able to face the increasing challenges from the global market, it is time to move out or face the possibility of being exposed to more serious risks. The current scenario of the market requires a collective set of strong fundamental, i.e. financially with advance technical capabilities and strategically lean to become more efficient.

MSI has been working closely with industry players, identifying their needs and will be designing and coordinating programmes or curriculum based on industry requirements. The training programmes will address topics on safety, industrial and manufacturing technologies, mega trend associated with the global iron and steel industry and human capital development. MSI will also incorporate Measurable Learning Outcome in our programmes to ensure the impact of each programme offered and conducted. MSI’s Training Programmes for iron and steel industry will provide a long term platform with comprehensive coverage for the industry’s growth and development.

A well-functioning iron and steel industry with a strong foundation is vital for any developing countries. It provides for important material supplies to many categories and layers of development. And eventually, it can even affect the pace of a country’s development. Paving our way forward, MSI is putting plans in place and look toward implementing them to facilitate a sustainable and fruitful outcome. In order to achieve this, MSI will continuously share our thoughts with the industry on what we are trying to do, getting feedbacks on how to do it better; and constantly improving the way we are doing it.

Jarrod Lim
Chief Executive Officer
Malaysia Institute

SAFEGUARD MEASURES – PRACTICES OF WTO MEMBERS – SAFEGUARD DUTY APPLICATION

In this issue let us examine the practices of WTO Members when imposing the safeguard (SG) measures by making a comparison of the specific provisions of interest in the safeguard measure such as the form and quantum of safeguard measures.

All data used are extracted from the provisional/final determination reports notified to the WTO. The samples are also taken from the most recent (five years) notifications based on safeguard measures in place. Again the information is based on notifications from developing countries (as they are now the only/main users of safeguard measures), comprising samples from seven (7) flat, fifteen (15) long and one (1) semi-finished products.
Types/Forms Safeguard Measures

Articles 5 and 6 of the WTO Agreement on Safeguards provides for the form/type of application of safeguard measures. This is generally in the form of a quantitative restriction which is based on the average of imports in the last three (3) representative years using import statistics. There will be a restriction on imports based on volume or value and is administered in the form of a quota; or a tariff imposed on imports which can take the form of an ad valorem duty (as a percentage on value of declared import value e.g. 30% of declared value) or a specific duty (based on per unit of measurement e.g. RM50 per MT).

Safeguard Measures – Types/Form, Rate and Period of Application

The categorisation of the products, as mentioned above, is as follows:

Categorisation of Iron & Steel Products

<table>
<thead>
<tr>
<th>FLAT Products</th>
<th>Long Products</th>
<th>Semi-Finished Products</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Hot Rolled Coils/Plates (alloy &amp; non-alloy)</td>
<td>• Bars/Rebars/Wire Rods Wire/Mesh (Carbon Steel/ Alloy Steel)</td>
<td>• Slabs/Blooms/Billets (These are inputs for Flat and Long Products)</td>
</tr>
<tr>
<td>• Cold Rolled Coils/Sheets (Carbon Steel)</td>
<td>• Other Bars: Angles/Shapes/Sections (Alloy or Non-Alloy Steel)</td>
<td>• Billets</td>
</tr>
<tr>
<td>• Flat Coated Coils/Sheets (Carbon Steel)</td>
<td>• Seamless Tubes/Pipes/Hollow profiles (iron or steel)</td>
<td></td>
</tr>
<tr>
<td>• Flat Stainless Steel Coils/Plates/Sheets</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Each of the SG cases is examined to get some idea of the practices of the application of the SG measure - types/form, rate and period of application. The sample comprises

Types/Forms of SG Measures

The following Chart 1 provides an over view of the form/type of SG measure taken:

![Chart 1: Categories of Sample and Form/Type of SG measure](chart.png)

Imposition of a tariff/duty increase accounts for 21 of the 22 sample size while imposition of a quota accounts for only one (1) in the Iron & Steel sector. Breaking down further, ad valorem SG duty is imposed on 14 of the SG measures, specific SG duty on seven (7), and one in the form of quota. The SG measure in the form of quota is applied to the Long Product category. The only SG measure applied on the Semi-Finished Product is in the form of ad valorem duty.
The most ‘common’ period of SG measure based on these samples is 3 years accounting for 52.6% followed by that of 2.5 years accounting for 26.3% and finally the 4-year period accounting for 21.1% of the 19 samples used in this paper.

It is to be noted that the SG measures that are initially applied for 3 years or less totals 78.9% of the 19 cases. Why are SG measures generally kept at less than 3 years? The reason is, for any SG measure applied for more than 3 years, especially those SG measures imposed based on absolute increase of imports, the imposing country will have to give concessions to those countries that have substantial import interest. To avoid giving concessions, which could complicate matters in implementing the SG measure, the imposing countries generally prefer to keep the SG measure in place for 3 years or less.

In the next issue we will examine other aspects of SG measure and practices of other countries.

DEVELOPMENT OF NATIONAL OCCUPATIONAL SKILLS STANDARD (NOSS) FOR IRON & STEEL INDUSTRY

SUB-SECTOR “FORMING”

Background

The Malaysia Steel Institute (MSI) was appointed as the Industry Lead Body (ILB) for the Iron and Steel Sector by the Department of Skills Development under the Ministry of Human Resource, effective 2015 end to 2016.

In the first year of appointment, MSI undertook their first project which was to develop the Occupational Analysis (OA) for the iron and steel industry. The objectives of developing the OA are as follows:

i) to identify the Occupational Structure (OS) and Occupational Area Structure of the iron and steel industry; and
ii) to have clear Occupational Descriptions for each job title in the iron and steel industry.

The development of the Occupational Structure is a preliminary process in developing the relevant NOSS. In addition, the identified job areas obtained during the OA will be used as a reference for the development of NOSS.

Based on the findings obtained throughout the OA on the Iron and Steel Industry, a total of six (6) subsectors have been identified, namely; ironmaking, steelmaking, forming, forging, casting and moulding. However, the NOSS for foundry, steelmaking and metal forming had already been developed in the year 2012 and 2013. Hence, the following subsectors were recommended for NOSS development:
i) iron making;
ii) forming; and
iii) moulding.

The National Occupational Skills Standard (NOSS)

NOSS is a national document that outlines skills and competencies required for a specific occupation. In Malaysia, the Department of Skills Development (DSD) is entrusted with the development of the NOSS document.

Based on NOSS, skill trainings and certifications conducted allow new potential talent to undergo structured training and experienced personnel to obtain relevant certification. This is possible as the NOSS will act as the basis for the Malaysian Skills Certificate, Diploma, Advanced Diploma, etc.

The skills standards are the performance specifications that identify the knowledge, skills and attitude needed in order to succeed in the workplace. These standards are beneficial to all the stakeholders; i.e. employers, employees, training institutions, etc.

NOSS Development for Iron and Steel Industry in “Forming” Subsector

Based on the list of critical job titles and recommendations in the OA report, “forming” is one of the subsectors that has been identified for the development of NOSS where training and manpower development are needed due to the consistent demand in the midstream activities of “forming”. Besides that, there are still many foreign workers at the operation level. Therefore, it is imperative that the skills be honed for the local workforce and not foreigners. This also responds to the current issue of providing more job opportunities to the local manpower.

With the completion of the OA project, the proposal for the development of NOSS(s) in the “forming” subsector was submitted this year and the budget was approved in March 2016 by the Department of Skills Development, Ministry of Human Resource.

After signing the agreement with the Department of Skills Development, the first workshop for the development of NOSS for the “forming” subsector was conducted from 3 to 5 June 2016. During the development of this standard, a group of experts in the area of iron and steel industry performed job and competency analyses, in order to produce the Standard Practice (SP), Competency Profile (CP) and Competency Profile Chart (CPC) for each level of operation involved. During the workshop, five (5) levels of NOSS(s) were identified and developed and they are as follows:

i) Iron and Steel Production Support (Level 1);
ii) Forming Production Line Operation (Level 2);
iii) Forming Production Supervision (Level 3);
iv) Forming Production Implementation and Control (Level 4); and
v) Forming Production Technical Management.

The second workshop was also held to develop the curriculum for the “Forming” subsector based on the CP developed in the first workshop. During the development of the Curriculum of Competency Unit (COCU), the group of experts carried out exhaustive analysis in order to ensure that the main elements of related knowledge, applied skills and attitude/safety/environmental concerns were covered. The development of COCU will contribute towards the development of the National Curriculum for Skills training to be adopted by both the public and private institutions, as required by the National Skills Development Act 652 (NASDA Act 652).

Validation and approval of NOSS(s) on “Forming” Subsector

In order to ensure that the content of NOSS on “Forming” subsector meets the industrial requirement, a Jawatankuasa Teknikal Penilaian Standard (JTPS)/Technical Committee (TC) on Standards Evaluation was formed to validate and endorse the drafted NOSS content. JTPS consists of assessors and expert panels from the industry, Department of Skills Development (NOSS Division), facilitators from Professional & Technical Academy Sdn Bhd (PRITEC), and MSI.

The purpose of this meeting was to seek agreement and validation by the JTPS for the drafted NOSS(s) on SP, CP, CPC and COCU. Two (2) JTPS meetings were held and chaired by MSI on 26 July 2016 and 1 and 2 September 2016. During the meeting, the drafted NOSS(s) were presented, discussed and elaborated on, where opinions and feedback from industry experts on the overall NOSS document were also taken account of.

To date, all five (5) levels of drafted NOSS(s) have been completed and successfully validated by JTPS. These five (5) levels of drafted NOSS(s) will be tabled at the Jawatankuasa Teknikal Standard (JTS)/Technical Committee on Standards meeting (tentatively in December) and the Majlis Pembangunan Kemahiran Kebangsaan (MPKK)/National Skills Development Council for approval.

Only then will the final approved documents become a NOSS for the “forming” subsector that can be used by training institutions or for Pengiktirafan Pencapaian Terdahulu (PPT)/Recognition of Prior Achievement application.
A GLIMPSE OF THE FUTURE SUSTAINABLE CONSOLIDATION EFFORT FOR MALAYSIA’S IRON & STEEL INDUSTRY

The Malaysia Steel Institute (MSI) is undertaking an initiative to promote consolidation within the domestic iron and steel industry in an effort to enhance competitiveness and strengthen the industry. This initiative also aims to facilitate the ability of iron and steel producers to maintain more consistent performance through industry cycles, which can be achieved through greater efficiencies and economies of scale, reducing costs, raising product quality, becoming more environment friendly and by competing regionally and globally.

MSI launched the “Iron and Steel Conference: Sustainable Consolidation Effort for Malaysia’s Iron & Steel Industry” initiative on 22 November 2016, at the MITI Tower, Kuala Lumpur with the aim of getting feedback from the local iron and steel industry on the consolidation effort; finding out its feasibility in the Malaysian context and identifying a pragmatic approach to the consolidation exercise. This conference was officiated by YB Dato’ Seri Ong Ka Chuan, MITI Minister II.

The programme included:

i. Presentations made by MSI and consultants from PricewaterhouseCoopers (PwC) and SAGE 3 Capital Sdn Bhd., which followed the welcome speech by MSI Chief Executive Officer, Mr. Jarrod Lim Keng Yow and the opening address by YB Dato’ Seri Ong. The session focused on introducing the concept of consolidation and the importance of restructuring and consolidation for a sustainable iron and steel industry in Malaysia.

ii. A Panel discussion, moderated by Y. Bhg. Datuk N. Rajendran, Deputy Chief Executive Officer (II), Manufacturing & Services Development, Malaysian Investment Development Authority (MIDA). The panellists comprised captains of the industry representing the three main local iron and steel associations: Malaysia Iron and Steel Industry Federation (MISIF), Malaysia Steel Association (MSA) and Malaysia Steel and Metal Distributors Association (MSMDA), as well as a representative from The Japan Iron and Steel Federation (JISF). The panellists from the Associations shared their thoughts on consolidation of the iron and steel industry from the viewpoint of the different segments of the industry they represented i.e. Upstream, Midstream and Downstream, while the JISF representative contributed some Japanese views on consolidation.

The thrust for consolidation is a result, among others, of the Iron and Steel Industry Lab, a workshop held in 2015, with the objective of charting the way forward for the iron and steel industry in Malaysia. The Lab was facilitated by the Performance Delivery and Management Unit (PEMANDU) and included participation by all local iron and steel industry stakeholders, including industry players and related Government agencies. It was decided during the Lab that consolidation was a crucial industry-driven effort for a sustainable iron and steel industry in Malaysia. Following this, MSI was tasked to facilitate this initiative.

MSI intends to embark, as the facilitator in this consolidation effort, in three stages or phases over a five - year period. The first phase is to promote and gather feedback on what would be feasible and pragmatic for the consolidation effort in order to become more competitive. The second phase will focus on the implementation and monitoring of the consolidation plan and activities; and finally in the third phase, MSI will facilitate the industry by venturing into new products and/or in human capital development with industry experts and/or universities.

2017 STEEL OUTLOOK IN MALAYSIA - CHALLENGES AND OPPORTUNITIES

According to World Steel, the annual global steel consumption is currently 1.5 billion metric tons. Steel consumption of this tonnage is still predominantly in ASIA which accounts for 65% of the global consumption. ASIA as a region, has a large population, and the forecast for steel demand in this region for 2017 is 959 million metric tons compared to the 968 million metric tons in 2016. In the ASEAN region, the steel consumption is expected to maintain a positive growth rate of 6% despite the exposure to China in light of the infrastructural construction activities and is expected to reach 74.6 million metric tons in 2017.

The steel consumption in Malaysia was on a slight positive growth momentum in 2016, and was expected to hit 10.4 million metric ton due to the better than expected forecast for China, along with continued growth in emerging economies. However, the domestic iron and steel industry environment remains challenging as it is manifestly affected by structural and cyclical fluctuations of the national and global economy. The growth momentum in 2017 is expected to remain weak reflecting continued import penetration, high cost of domestic production, and quality of human capital.

Even though the steel consumption of Malaysia is at 10.4 million metric ton this year, approximately half of domestic steel consumption was met by supply from other countries especially China. This has caused many of the domestic iron and steel mills
to operate at only half their production capacity. One of the reasons that has caused the increase in imported steel products is that the cost of domestic iron and steel production is much greater than that of iron and steel mills in Asia. The domestic supply of steel products is not cost-competitive compared to import steel products especially that from China. The most important reason for the high cost is related to raw materials for the iron and steel industry. Despite rich resources of iron ore and coal in Malaysia, very little is consumed in the iron and steel industry. The domestic reserves of iron ore mines are mostly mined on a commercial basis. Due to the demand and existing off-take agreement, most of the iron ore deposits are extracted and exported to China instead of consumed locally. Consequently, domestic iron and steel mills are compelled to use metal scrap as source for iron units. The domestic reserves of coal is not suitable for use in Iron-making and steelmaking and as a result is set aside for power generation. As for the human capital issue, the major barrier for the iron and steel industry to achieve competitiveness and sustainability in the long term is simply in sufficient skilled workers across many disciplines from technical specialists to non-technical specialists.

Despite many and varied challenges that exist, there are many significant opportunities for the Malaysia iron and steel industry in the next few years to increase their competitiveness and succeed in the dynamic environment. The Malaysia iron and steel industry shall continue to improve and increase its efficiency, reduce costs, improve quality, and develop higher grades of steel products to meet the needs and expectations of the consumer. Such developments will enhance the competitiveness and result in a reduction in import penetration from other countries. Apart from competitiveness, Malaysia’s iron and steel industry will be able to reinforce sustainability by continuously moving forward to consolidate the iron and steel industry through various means but not limited to mergers, acquisitions and joint ventures with local or foreign partners. This consolidation will result in improved efficiency, reduced costs, and an improvement in quality, a higher grade of product innovation and development, and a wider export market opportunity. With the right restructuring and reform in this industry, the domestic supply of steel products may improve from the current 60% to 70% of the total domestic steel consumption, and also see an improvement in the supply of higher grades of steel products to the market.

**HUMAN CAPITAL DEVELOPMENT**

**1. INTRODUCTION**

The human capital of an organisation consists of the people who work and on whom the success of the business depends on. Personal and material success is increasingly correlated with the possession of skills. We must be cognizant that the development and growth of people in organisations and businesses is an important and essential component to their success. The focus of all Human Capital Development is on building a superior workforce, so that the organisation and individual employees can achieve their work goals, in service to customers. The development of human capital is imperative in nurturing healthy organisations.

Armed with this strong belief, MSI, as an institute formed for the industry, initiated MSI HR Day with the tagline; “Human Capital Development for the Iron & Steel Industry in Malaysia”.

**2. OBJECTIVE**

The objective of this MSI HR Day was to;

- Introduce Malaysia Steel Institute (MSI) & its functions to the Industry.
- Initiate an HR Development Plan @ MSI & to serve the Iron & Steel Industry in its ‘Human Capital Development’ via Training.
- Explore the HR needs & how MSI can facilitate the Iron & Steel Industry through the Training Need Analysis (TNA) survey.
- Establish Networking & idea sharing amongst HR personnel in the Iron & Steel Industry.
3. CONTENT
1. New MANDATE for HR Professionals by Datin Dr Wendy Liow from HELP University
2. Utilisation of Contributions for the Human Capital Development by Tuan M. Za’ba Bin Mohamad Zaham, Director of Training Grant Division, Human Resource Development Fund (HRDF)
3. Skills Development : NOSS & PPT by Tuan Mohd Faisal Bin Ahmad, Chief Assistant Director - Registration, Special Recognition, Certification & Promotion, Department of Skill Development, Ministry of Human Resource
4. The NEEDS of Technical Training for the Iron & Steel Industry by Assoc. Prof Dr U. Johnson Alengaram, CEng MICE (UK) Department of Civil Engineering, Faculty of Engineering, University of Malaya (UM)
5. Importance of Safety & Health Training for the Iron & Steel Industry by Tuan Shaharuddin Bin Abdul Latiff, Health, Safety & Environment Professional (HSE), EnviSafe Training & Consultant

4. MSI HR DEVELOPMENT PLAN

Focusing on four (4) main areas as follows:

SAFETY & HEALTH
- Occupational Safety & Health Awareness
- OSH Safety Management System
- Emergency & Response Plan
- CSDS & Safe Chemicals Handling
- Chemical Spill & Response
- Emergency & Response Plan
- Accident and Incident Investigation
- Heat Stress Management
- Other related programs

TECHNICAL
- Practical Operating skills in processing equipment & related machinery.
- Basic Hydraulic System Application & Pneumatic, Inspection & Maintenance
- Advantage of Grade 600 MPA Deformed Reinforcing Bar for structural application.
- Fire protection of structural steel.
- High & Low temperature Heat exchanger & cooling system.
- National Occupational Skills Standard (NOSS)

MEGA TREND RELATED
- Mega Trend : Industry 4.0
- Big Data Program, Data Analysis
- The Digital Edge ‘Exploiting Information & Technology for Business Advantage Program
- E-Commerce Program
- Other related programs

HUMAN DEVELOPMENT
- Strategic Planning & Management
- Human Capital Management
- Assessment of Infrastructure Projects Impact & Outcome
- Project Management Essentials
- Other related programs

5. THE FIVE PILLARS OF MSI

- HUMAN CAPITAL DEVELOPMENT
- TECHNOLOGY ENHANCEMENT
- CONSOLIDATION EFFORT
- INDUSTRY NETWORKING
- SUPPORT FOR NATIONAL AGENDA
1. **HUMAN CAPITAL DEVELOPMENT:**
   - Developing human capital by creating and cultivating environments in which everyone in the Iron & Steel Industry can rapidly learn and apply new ideas, competencies, skills, behaviours and attitudes for a GREATER PERFORMANCE

2. **TECHNOLOGY ENHANCEMENT:**
   - Strengthening the technological capability in enhancing the Industry’s productivity and staying competitive.

3. **CONSOLIDATION EFFORT:**
   - Providing a platform for companies involved in the Iron and Steel industry to discuss issues and challenges faced

4. **INDUSTRY NETWORKING:**
   - Providing a platform for the Iron & Steel Industry to build closer relationships & networking for Industry Sustainability.

5. **SUPPORT FOR NATIONAL AGENDA:**
   - Accelerating Human Capital Development for Advanced Nation status

5. **TALENT DEVELOPMENT**

Talent Development is a set of integrated organizational HR processes designed to attract, develop, motivate, and retain productive, engaged employees. The goal of talent development is to create a high-performance, sustainable organization that meets its strategic and operational goals and objectives.

**CONCLUSION**

Being an Institute for Malaysia’s Iron & Steel Industry, MSI strongly advocates Human Capital Development for the greater growth of the industry as a whole. By having the various components essential for the successful development of human capital in place, by garnering support from the industry as well as by working together with Government bodies, agencies, professionals from universities and colleges as well as industry experts, we can undoubtedly achieve MSI’s vision in facilitating the necessary environment for a sustainable iron and steel industry.

**EVENTS AND ACTIVITIES FOR MSI NEWSLETTER NO.4/2016**

**1. Specialised Building Materials Supply Chain Conference 2017**
   - **Date:** 16 March 2017
   - **Venue:** Perdana Hall, MIDA
   - **Contact Details:** Ms Sabillilah Sari bt Zamri
     - **T:** +603 6208 4656
     - **E:** sabillilah@malaysiasteelinstitute.com

**2. SEAISI Travelling Seminar 2017**
   - **Date:** 27 February 2017 - 8 March 2017
   - **Venue:** Bangkok, Jakarta, Manila, Ho Chi Minh & Shah Alam
   - **Contact Details:**
     - **Bangkok on 27 February 2017**
       - Ms Pimpanit Oonthawatnadda (Fame)
       - **T:** +66 2712 4402-7 ext.124
       - **E:** pimpanit@isit.or.th
     - **Jakarta on 01 March 2017**
       - Ms Eka Rohmayantie
       - **T:** +6287871915757
       - **E:** eka.rohmayantie@gmail.com
     - **Ho Chi Minh City on 06 March 2017**
       - Ms Trang Thu Ha
       - **T:** +84 4 3514 6230
       - **E:** trangha1210@yahoo.com
     - **Shah Alam on 08 March 2017**
       - Ms Titi Marga
       - **T:** +62 81319298085
       - **E:** titimarga@rocketmail.com

**3. EXPORT ACCELERATION MISSION ON ICT TO GERMANY, IN-CONJUNCTION WITH CEBIT 2017**
   - **Date:** 19 - 24 March 2017
   - **Venue:** Hannover, Germany
   - **Contact Details:** Muzzafar Shah Hanafi
     - **T:** +603 62077110
     - **E:** muzzafar@matrade.gov.my

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