

PART 1 NATURE OF BUSINESS

1. Policy and Business Overview

Business Description of the Company

Tata Steel (Thailand) Public Company Limited (TSTH), formerly known as Millennium Steel Public Company Limited was established as a joint venture between NTS whose shares were held by Horrungrueng Group and SISCO and SCSC whose shares were held by Siam Cement Holding Limited.

The company operates its business as a holding company with shareholding in its three subsidiaries namely NTS, SISCO and SCSC. The three subsidiaries produce Reinforcing bars (Rebars), wire rods, small section and Special Bar Quality Steel administered by an experienced and knowledgeable management team.

The company's operations are undertaken as a group with the Company as the top policy maker and the 3 subsidiaries responsible for carrying out the operations according to the prescribed policy with regard to marketing & sales, production, raw material sourcing, finance, human resources management and other aspects of the business.

The Company's major shareholder is the Tata Steel Global Holdings Pte. Ltd. ("TSGH"), a wholly owned subsidiary of Tata Steel Limited ("TSL") and which operates its business as an investment company with its head office at Singapore. TSL is a registered company incorporated under Indian Laws and is among top three integrated steel producers of India. Though TSL (Indian operations) is in the same industry as the Thailand based Company, its product range is much more diversified and the company caters to a wider group of customers. TSL extends support to TSTH in the business operations by providing assistance in technology knowhow, treasury and finance, training of people, safety, information technology and International sales through its network of offices around the world. Along with operations in Singapore, TSL drives the long products strategy in India & SE Asia in an integrated manner.

1.1 VISION

VISION

Tata Steel (Thailand) shall **delight the Customers through innovative best in class products & services in construction steels** and thus **create value for its shareholders**.

We will realize our vision by fostering a **culture of trust & continuous improvement** while keeping employees happy and adhering to highest standards of business conduct.

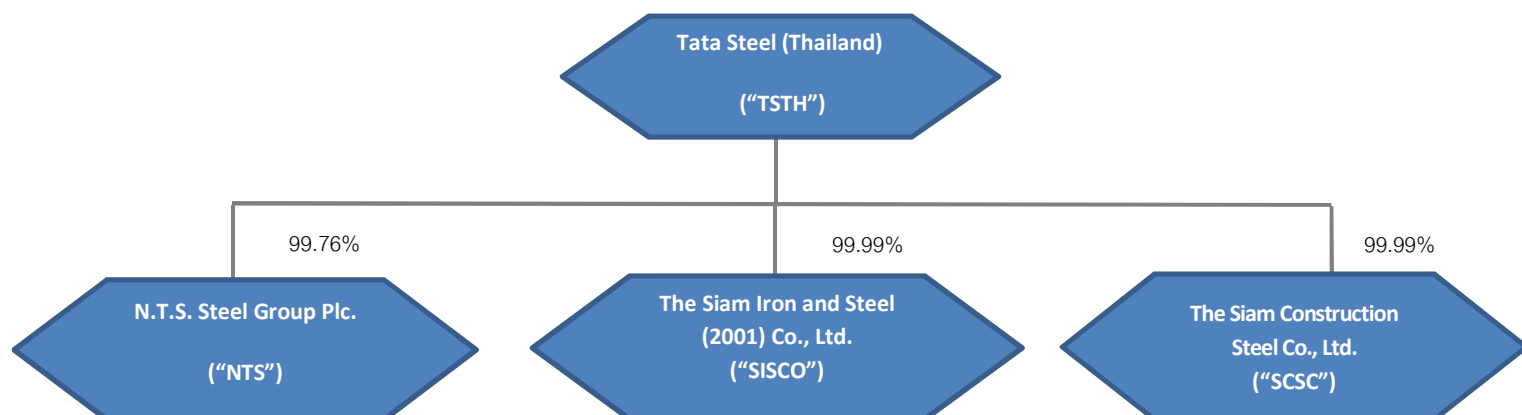
1.2 Significant Developments

Previous significant profile and developments as follows:

2002	- The Company established as a Public Company Limited named “Millennium Steel Public Company Limited” (MS). - Successfully merged the Company business among NTS, SISCO and SCSC, last two of which were subsidiaries of Cementhai Holding Company Limited (CHC).
2005	CHC agreed to sell all MS shares pursuant to the Blinding Offer of Tata Steel.
2006	- Tata Steel Groups submitted their voluntary tender offer to all Company’s shareholders. - The Company major shareholders changed from “CHC” to “Tata Steel Group” - The Company name changed from “Millennium Steel Public Company Limited” to “Tata Steel (Thailand) Public Company Limited”. - The SET announced the change in stock symbol trading from “MS” to “TSTH”.
2007	The Company paid the annual dividend payment for the year 2006 to all preferred shareholders and ordinary shareholders at the rate of Baht 0.03 per share (38% of its net profit).
2008	The Company paid the annual dividend payment for the year 2007-2008 to all preferred shareholders and ordinary shareholders at the rate of Baht 0.076 per share (20% of its net profit).
2009	The Mini Blast Furnace (MBF) which is steel production project using iron ore as raw material completed. This was considered first of its kind project in Southeast Asia.
2011	- The SET announced to regroup the Company securities to be under the sector of “STEEL” - Mini Blast Furnace mothballed in August 2011 due to cost of imported raw materials. - TATA Tiscon Branded rebar launched in August 2011.
2012	- The Company entered the Special Bar Quality steel market, only producer of this product in Thailand. - The Company launched seismic resistant rebar for earth quake prone areas, first time in Thailand.
2013	- The Company was recognized by the SET for CSRI Recognition Award. - NTS was awarded Prime Minister’s Industry Award - Safety Management.
2014	- The Company was recognized by the SET for Outstanding CSR Award and CSR Recognition award. - NTS was awarded Prime Minister’s Industry Award - Quality Management.
2015	- The Company listed on Thailand Sustainability Investment 2015 for its outstanding performances in Environment, Social and Governance aspects with potential of giving long-term profit to the investors by the SET. - The Company was 1 of the first 30 companies in Thailand that joined The Children Sustainability Forum to make a commitment in protecting Children Rights. - SCSC received ‘Green Mining Award 2015’ from Department of Primary Industries and Mines (DPIM).

2016	• The Company received “Thailand ICT Excellence Award 2017” for “Core Process Improvement Project”. • SCSC won the Prime Minister’s Industry Awards 2016 on Safety Management Category. • SCSC represented at ICQCC 2016 (International Convention on Quality Control Circle 2016) held in Thailand. The team received Gold Award. • SISCO won Corporate Social Responsibility - Department of Industrial Works Award. • SCSC received Green Star Award 2016.
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1.3 Shareholding Structure



Policy on division of operation between companies within the group

The Company has a policy to allocate production at each of its subsidiaries with an objective to maximize contribution of the company as a whole. The product mix is derived based on the technical and production capability of each plant and specific decisions to roll a particular product is based on the market needs and customer requirements.

Subsidiary	Paid up Capital (Million Baht) As at March 31, 2017	Business Type	Product
N.T.S. Steel Group Plc. ("NTS")	4,627.96	Manufacture steel	Rebars and wire rods
The Siam Iron and Steel (2001) Co., Ltd. ("SISCO")	120.00	Manufacture steel	Wire rods and small sections
The Siam Construction Steel Co., Ltd. ("SCSC")	1,750.00	Manufacture steel	Rebars

2. Nature of Business Performance

Structure of Revenues

The Group's operations involve the single business segment of the manufacture and sales of long steel products. The proportions of the Company's revenue from the sales by product lines, as produced by subsidiaries, are as follows:

Line of Products	Year 2016 - 2017		Year 2015 - 2016		Year 2014 - 2015	
	Million Baht	%	Million Baht	%	Million Baht	%
Domestic Market						
Rebars	12,929	65.6	10,545	63.0	13,772	64.5
Wire Rods	4,263	21.6	3,115	18.6	4,505	21.1
Small Sections	1,106	5.6	1,295	7.8	1,403	6.5
Others	95	0.5	53	0.3	81	0.4
Total Revenues from Domestic Sales	18,393	93.3	15,008	89.7	19,761	92.5
Exports						
Rebars	1,295	6.6	1,705	10.2	1,488	7.0
Wire Rods	13	0.1	20	0.1	99	0.5
Small Sections	-	-	-	-	-	-
Others	-	-	-	-	7	0.0
Total Revenues from Exports	1,308	6.7	1,725	10.3	1,594	7.5
Total Revenues	19,701	100.0	16,733	100.0	21,355	100.0

2.1 Nature of Product

1. Reinforcing Bars

consists of

- 1.1 Round Bar in the size range of 6-25 mm. diameters is manufactured in accordance with Thai Industrial Standard (TIS) No. 20-2543, grade SR24.
- 1.2 Deformed Bar in the size range of 10-40 mm. diameter is manufactured in accordance with Thai Industrial Standard (TIS) No. 24-2548, grades SD40 and SD50.

These Rebars are marketed under 'TATA TISCON' trademark through a pan Thailand network of dealers and retailers. Major usage is in the construction sector in concrete reinforcement such as beam, column and road surface, bridge, stadium, dam, house and building, etc.

In addition, the Company markets special quality Rebar suitable for earthquake prone zones like North and North-east Thailand. These are sold under trademark 'TATA TISCON S'. Here S indicates super ductile. These products are available in size range of 10-40 mm diameter and grade SD 40. These Rebars has special characteristic to withstand the earthquake shock for a longer period of time (compared to standard Rebars) and thus facilitating safety of people. The Company is developing next generation of Rebars equivalent to SD 60 grade and Tata Tiscon S in SD 50 grade.

2. Wire Rod

Major types of products in this category are:

- 2.1 **Low Carbon Wire Rod:** These are produced in the size range 5.5-17 mm diameter, conforming to SWRM 6-22 grade and in accordance with Thai Industrial Standards (TIS) No. 348-2540. Major applications of wires made from Low Carbon wire rods include binding wire, nail, wire mesh, galvanized wire, barbed wire, numeral wire and chain, etc.
- 2.2 **Carbon Wire Rod for Head Heading Quality:** These conform to SWRCH 6A-22A grade and are produced in the size range of 5.5-17 mm. in diameter. The wire rods are manufactured in accordance with Thai Industrial Standards (TIS) No. 2243-2548 and end application of wires includes nut, bolt and screw, etc.
- 2.3 **Wire Rod for Electrode Quality:** These comply with SWR Y11 grade, are produced in size range of 5.5-17 mm. in diameter and in accordance with Thai Industrial Standards (TIS) No. 2244-2548. Wires from these wire rods are used for making stick welding electrodes.
- 2.4 **High Carbon Wire Rod:** These are produced in the size range of 5.5-17 mm diameter, conforming to SWRH 27-82 grade and manufactured in accordance with Thai Industrial Standards (TIS) No. 349-2548. These wire rods serve as raw material for making prestressed concrete wire, strand wire, compression spring, binding spring, torsion spring and sling, etc.

3. Small Section

This product range consists of angle and channel steel complying to SM400-570 and SS400-540 grade and is manufactured in accordance with Thai Industrial Standard (TIS) No. 1227-2539 under trademark 'BorKorSor'. Small section finds extensive usage in general engineering, signboards, support for roofs, transmission line towers etc.

4. Special Bar Quality

Carbon steel round bar with SS 330-540 Quality Class and 6-70 mm. in diameter is manufactured in accordance with JIS G3101 (1995) grade for general use and with S10C-S50C grade in 6-70 mm. of diameter is manufactured in accordance with JIS G4051 (1979) grade for application in automobile and general engineering sector.

5. Cut and Bend

These consist of ready to use Rebars at the construction site. Conventional Rebars are produced in straight length or in coil form and then cut to required shape and size at the site. This results in generation of waste at the site and needs space along with skilled manpower to produce. Cut and Bend Rebars are made on state of the art machinery at the steel plant and transported just in time at the construction site. As construction practices mature, space and availability of skilled workforce becomes a constraint, proportion of Cut and Bend Rebars increases.

For the last two years, the Company is also manufacturing finished Stirrups that are marketed under trademark 'Tiscon Superlink' and finished dowel under trademark 'BorKorSor'. Tiscon Superlink is used during construction of house and condominiums while dowel finds application in road construction and reinforcing rocks.

Management Standard System

All subsidiaries at Tata Steel (Thailand) i.e. NTS, SISCO and SCSC are committed to Quality Management Systems of international standards. Accordingly they are certified to ISO systems as follows: SISCO and NTS are certified to ISO 9001:2015. SCSC is certified to ISO 9001: 2008.

In addition, the Company realizes the importance of the environment management in the best interest of the stakeholders. Certification in this area is as follows: SISCO and NTS are certified to ISO 14001-2015. SCSC is certified to ISO 14001:2004

The Company promotes good practices in occupational health and safety of employees and contract workmen at work place. All the three subsidiaries are certified to International standard of Occupational Health and Safety Management System as follows: SISCO, SCSC and NTS are certified to TIS 18001:2554 and BS OHSAS 18001:2007.

Additionally, at TSTH, Procurement division is certified to ISO 9001: 2008 for the scope of sourcing and procurement of materials and service. Marketing and Sales division also is certified to ISO 9001: 2015.

During the year, NTS and SCSC plants were certified to The Australasian Certification Authority for Reinforcing and Structural Steels, "ACRS" from Australia. NTS and SCSC are currently working on certification to ISO/IEC 17025 for their Testing and Calibration Laboratories.

Investment Promotion License-Based Privilege

The Company can enjoy certain privileges from the BOI and its subsidiaries as of March 31, 2017 as follows:

	Production Quantity (tons per year)	Privileges Received
NTS Phase II	500,000	- Tax exemption for 8 years for the net profit from the first income (April 2006 – April 2014) - Net loss incurred between 1st – 8th year can be realized against taxable profits during the next 5 years.
MBF*	500,000	- Tax exemption for 8 years for the net profit from the first income (November 2009 – November 2017) - Net loss incurred between 1st – 8th year can be realized against taxable profits during the next 5 years.
SISCO Phase I	372,000	- Import duties exemption for machinery. - Tax exemption for 3 years for the net profit from the first income does not exceed 70 percent of the value of the investment (December 2015 – November 2018) - Net loss incurred between 1st – 8th year can be realized against taxable profits during the next 5 years.

*Mini Blast Furnace Project

2.2 Industrial Situation

Domestic Market

1. Reinforcing Bars

The Company distributes this product through dealers in Bangkok and provinces in every region of the country. It also directly sells to selected construction companies and project owners. The trademark used is TATA TISCON which is widely recognized and accepted in Thailand and neighboring countries. The Company actively promotes the brand via social media, radio, printed ads and public transportation both in Bangkok and upcountry.

The Company continuously evaluates the need to increase dealers in provinces based on the reach and potential in the area. It regularly organizes various types of marketing activities for every group of customers. Since last two years, it also distributes product through regional warehouses at Chiang Rai, Songkhla, Surat Thani and Udon Thani to facilitate easy delivery of product to local customers in that area and those who need small quantity.

In addition, the Company has a Market Development team for new products such as seismic rebar, SD50 high strength rebar, cut and bend, stirrup and dowel. This team regularly meets designers, project owners, government agencies, construction work supervisors, construction contractors and dealers to explain the techno-commercial aspects of the new products.

2. Wire Rod

The Company directly sells to the manufacturer of wires or selectively distributes via trader in few cases. The Company has created sound platform for continuously improving product and service offering to the Customers through creation of customer service teams. The team comprises of representatives from production, marketing and sales, quality assurance and new product development and production planning department. The team regularly meets the customers to proactively work in win-win manner. In recent past, the company has focused on making customized products as per customer processing and end applications. During the financial year, the Company has started trial supplies of Tire Cord which is a high end application.

3. Small Sections

The Company distributes this product via dealers in Bangkok and provinces in every region. During the current year, the Company has added new dealers in the provinces with high potential and also organized marketing activities in various forms. Moreover, the Company regularly visits end customers such as tower fabricators and EGAT to understand the demand trend and changes expected in product and service offerings in the future

4. Special Bar Quality

The Company directly distributes to the manufacturers of vehicle components and manufacturers of bright bar.

5. Cut and Bend

The Company sells this via the dealers in Bangkok and provinces in every region and also directly sells to the construction companies and project owners. During the financial year, the Company completed third phase of expansion at NTS. With this, total capacity of Cut & Bend Products in the company has reached 10,000 ton/month. A new machine was added at SISCO for making stirrups to service the rising demand in North and North East Thailand. Besides, the Company organized a separate project management team to coordinate with project owner about production plan and transportation to match with project site's requirement in full and on time.

Export Market

The Company regularly exports Rebars and wire rods to Asean region such as Laos, Cambodia, Myanmar, Indonesia and Philippines. The products are distributed through a dealer network and also to direct customers. In addition, the Company exports rebar under TATA TISCON Trademark to India which is supported by dealer network of Tata Steel India. During the year, the Company got accreditation for supplies of Rebars to Australia and New Zealand markets. Total exports during the year were approximately 7 percent of the total sales.

Distribution Proportion

Distribution Channel	Financial Year (%)				
	2016-2017	2015-2016	2014-2015	2012-2013	2011-2012
Direct Sales	39	34	33	38	46
Regional Agent	18	19	18	16	13
Agent in Bangkok Metropolitan Region	43	47	49	46	41
Total	100	100	100	100	100

Business Environment

In 2016, global steel demand of finished steel products was estimated for approximately 1,501 million tons, increased by 0.2% over previous year (Ref: World Steel Association). Thailand steel demand of finished steel products was 19.30 million tons, increasing by 15% over 2015. Import volume stood at 12.61 million tons or 65% of Thailand steel demand of finished steel products, increasing by 10% when compared with last year (Table for Thailand Usage Requirement of Finished Products).

Thailand steel demand of long steel products was at 7.57 million tons, increasing by 23% mainly due to government sector investment particularly for large-scale public infrastructure such as rail, road, dam and bridge, etc. Investments by private sector in the country have been on lower side. Steel price have been quite volatile during last year due to increase in local demand in China in second half of the year and changes in the prices of raw material like iron ore and coal. China continues on the path of cutting excess capacity. It has announced plan to cut capacity by approx. 150 MT during 2015-2021. These reasons affected the market sentiments in the market and also led to speculation by dealers. End result of this was that dealer inventory went up towards the end of the financial year in March.

Table for Thailand Usage Requirement of Finished Products

Year	Production Quantity (Million Tons)	Growth (%)	Import (Million Tons)	Growth (%)	Export (Million Tons)	Growth (%)	Usage Requirement (Million Tons)	Growth (%)	Import (% of Usage Requirement)
2016	8.00	23	12.61	10	1.29	8	19.30	15	65
2015	6.50	-4	11.44	-4	1.20	-11	16.74	-4	68
2014	6.80	-4	11.90	-3	1.35	-4	17.35	-3	69
2013	7.12	1	12.25	9	1.40	0	17.97	6	68
2012	7.02	1	11.29	25	1.40	4	16.91	15	67

Source : Iron and Steel Institute of Thailand

Competition Situation

Domestic Market

Competitors of the company can be classified into two as per details below:

1. The manufacturer with Electric Arc Furnace (EAF) or Induction Furnace (IF) using scrap from domestic and import route as raw material. They manufacture semi-finished product called billet to produce finished steel products such as rebar, wire rod, structural steel and special steel.
2. The manufacturer who does not have in-house steel making facilities and are dependent on buying billets from open market to roll into finished products.

After considering production capacity and demand of long steel product in Thailand, data shows that sufficient production capacity exists in the country to support demand in the near future. In the previous year, steel business saw intense competition among local producers and imported steel particularly from China. Import volume from China increased by 11% when compared with last year. The Company keeps a close watch on the imports and the origin of the same. Through steel associations in the country, the Company has regularly engaged with the Ministry of Commerce to highlight the injury to domestic players from unfair dumping. During the year, government of Thailand revised the anti-dumping duty on High Carbon Wire Rods (HCWR) and the same for Low Carbon Wire Rods (LCWR) is under consideration. This has resulted in reduction of imports from China in second half of the financial year. At the same time, the competitive intensity in the domestic market is increasing with technological upgradation undertaken by few players.

Exports

The Company has focused on exports to Asean region such as Lao, Cambodia, Myanmar, Vietnam and Indonesia including export rebar to India to gain the highest revenue. Major competition in Lao and Cambodia is from Vietnam steel manufacturers. China is dominant player in Myanmar. 'Made in Thailand' and Tata Tiscon enjoys good reputation in the neighboring countries. Hence the Company has been working to strengthen the network in these countries.

Trend of Industry in 2017

International Monetary Fund (IMF) has estimated world economic growth at level of 3.4%. There is an improvement expected in the economies of USA, Europe and Japan. China continues to rebalance its economy and is expected to clock approximately 6.5% growth. Asean region is expected to deliver healthy growth. Forecast for Thailand is at a level of 3.3 supported by continued investment by government in infrastructure strengthening projects like double track, electric train, airport and port expansion projects and Eastern Economic Corridor (EEC), etc. These are supported by expected growth in tourism, exports and agricultural income. Neighboring countries Lao, Cambodia and Myanmar are expected to deliver growth rates over 6% thereby offering opportunity to steel makers in the region and Thailand in particular.

However, there is a rising concern from trade uncertainties with many countries resorting to protectionism. Many tariff and non-tariff barriers have been put in last 1-2 years thereby impacting free trade adversely.

World steel demand is expected to grow by 1% in 2017 over previous year. China domestic consumption is expected to see a decline. As per Iron & Steel Institute of Thailand (ISIT), steel demand in Thailand is likely to see a minor improvement over 2016 and reach around 19.5 million tons. It is estimated that long steel product demand will be at level of 7.80 million tons, increasing by 3% in line with growth in construction sector. This is largely driven by public sector investments as private sector investment continues to be relatively less. High Imports continue to pose risk to the domestic market. As China shuts down inefficient induction furnaces, there is a risk that these outdated machines may get shifted to Asean region and also in Thailand. A new Thai Industrial Standard (TIS) has been announced for Rebars. While it allows Induction route material to be produced under TIS license, at the same time, it also makes imports more difficult. This should facilitate domestic production and sales of Rebars in the country.

2.3 Procurement

The company pays due attention running the business on the fundamentals of long term sustainability and accordingly setting the performance KPIs. Also, the company takes into account social and environmental issues as a part of vision, mission, strategy and working process to maintain fine balance between economic, social and environmental aspects of the business. The company regularly communicates the policies to all concerned in supply chain and to relevant business partners so that they can develop proper systems in the area of Ethics, Corporate Governance and Safety Standards.

Procurement team consists of around 80 professionals, located at the Head Office in Bangkok and at three plant sites in Chonburi (NTS), Saraburi (SISCO) and Rayong (SCSC) responsible for the purchase of steel scrap, steel billets, raw materials, goods for maintenance repair and operations (MRO Goods), services, inbound logistics and Store management. Procurement division emphasizes on sourcing as per 'value in use' of products and services within required lead time to match with the inventory and production plan so as to maximize value and benefit to the Company. The team regularly communicates with Supply Chain department and plant Operations team to review and procure raw materials to comply with the customer schedule and also maintain inventory level suitable for compliance to production plan and to support production process on a continual basis.

The local sourcing strategy is aligned to the procurement strategy of the Tata Steel Group and derives synergy by continually exchanging the valuable information within the affiliates to ensure raw materials and other goods used at Tata Steel (Thailand) are purchased at per desired strategy.

Tata Steel (Thailand) sources raw materials and other products both from domestic market and through import by emphasizing on Value In Use (VIU). Proportion of domestic and import supply is approximately 75 percent and 25 percent respectively. Share of domestic buying is higher due to shorter lead time, lower transportation costs and to avoid risk due to fluctuation in currency exchange rate.

Moreover, Tata Steel (Thailand) has incorporated safety as an integral part of sourcing strategy. This covers not only employees of the Company, but also contractors, sub-contractors and transportation service providers. The Company has implemented contractor safety management starting from registration, discussion on the safety plan before awarding the contract, audit

during work execution and vendor evaluation to ensure that all contractors who work in the plants follow required safety standards.

Senior management of the company engages with the key supplier partners at multiple level and frequency. For last two years, annual vendor partner meet is organized to share company's plans going ahead and get inputs from the partners.

Structure of Procurement

Procurement Division of the Company is organized as per spend in 7 major functions, described as under:

1. Metallic Sourcing

Steel scrap is the main raw material for electric arc furnace. The company has been working on developing alternate low cost steel scrap thereby increasing sources of the material also. The purpose is to replace costly raw material with suitable substitute as well as increase collection to reduce overall cost of production. The company has set scrap purchasing yards with a view to increase domestic scrap sourcing. The strategy is to maximize domestic scrap as this is the lowest cost option.

2. Maintenance Repairs and Operation Goods

This department is predominantly working on sourcing (technical) MRO Goods, including Bearings, Electrical equipment, Hydraulic system, Fuel and Fluid Systems, Water Treatment System, Natural Gases, Filter, Belt-Chain and etc. These categories typically require close co-operation between (plant) engineers, store and the procurement team. During the year, requirements of the three locations have been combined (where ever possible) to derive the benefit of scale.

Moreover, comparable spare part model and alternative source development are the focus areas of the MRO team along with sourcing from low cost countries like China, India etc.

Graphite Electrode is an important consumable in steel plant production process. Here we combine volume for all the Tata Steel affiliates to increase bargaining power with respect to price and other terms and conditions.

3. Raw Materials

Raw Materials team handles the procurement of Ferro Alloys, Refractory and other additives used in the Electric Arc Furnace. Most of these items are sourced in close cooperation with Tata Steel hubs in India and Singapore. Key strategy is to find the right source of supply with optimum value and price combination suitable for Tata Steel (Thailand) operations.

As a part of Procurement Excellence Project (PEP), the team cooperates with users to develop and source directly from manufacturers in low cost country like China, India, Taiwan, Russia, Malaysia and Pakistan. Off late, China has tightened the environment norms thereby sometimes affecting the supply from there. Development of alternate sources helps to increase competitive position of the company.

To reduce the risk of price fluctuations from the material that are sourced from China, the company has implemented systems to buy directly from manufacturers with fixed price such as fluxes for slag treatment.

4. Logistics Services

Inbound Logistics and related services are structured to handle import cargoes. This team works in close co-operation with logistics service providers. Key goal is to manage inbound logistics in such a way that all cargoes reach the end users on time, with optimal costs and in a safe manner.

Since last year, there was import planning process and logistics development by studying new means of unloading the cargos. This has helped in increasing safety in the working environment and reduces cost in some areas such as Pig Iron using Tipping trailer.

5. Plant Procurement

Primary function of this team is to source services for the users in the three plants. Here the efforts have been to have close cooperation with end users to optimize the services cost. Plant procurement team is positioned at the three plant locations for easy support to the users. The team looks at job requirement from different perspectives of number of persons required vs total job content. The company complies with the minimum wage structure as announced by the government from time to time. Idea is to judge real cost and be fair to the supplier partner at the same time.

Services area work under two important policy guidelines namely select contractors who understand well and work as per set safety rules and prepare contracts in standard price structure.

6. Sourcing Support and Reporting

In order to bring alignment with Tata Steel Group procurement policy, Sourcing Support and Reporting is structured to develop and improve working process, master data maintenance and communicate procurement information in a clear and transparent manner to internal and external stakeholders.

In our journey to become a digital organization, the Company is planning to install SAP ARIBA in FY18. This will facilitate transparent procurement systems, manage documents electronically, have systematic centralize information management and manage contracts. Central IT team of Tata Steel India is facilitating Tata Steel Thailand in this area.

7. Material Supply

This team manages the Stores functions at the manufacturing sites. Primary responsibilities include on time supply of spares and consumables to the users while ensuring that the inventory is kept at an optimal level. The team has been regularly engaging with counter parts in Tata Steel India to improve the processes. Plan is separate the sourcing and storage plan for fast moving parts vs one time used components. During FY17, Stores inventory was reduced by more than 100 MB thereby releasing cash to the system.

Focus area going ahead is to optimize common items between the three plants and improve the spares planning process. This implementation will improve inventory level to be optimal and yet comply with maintenance plan.

Production capacity of Tata Steel (Thailand)

	NTS	SISCO	SCSC	Total
Capacity (tons per annum)				
- Rebars (Including Cut & Bend)	450,000	-	500,000	950,000
- Wire rods	350,000	300,000	-	650,000
- Small Sections	-	100,000	-	100,000
Total capacity	800,000	400,000	500,000	1,700,000

With the total finished goods production of 1,295,100 Tons, the production capacity utilization for the financial year ending in March, 2017 stood at approx. 76%.

Risk Factors
1. Metallic and Raw Material Price Fluctuations

The main raw material for the production system is steel scrap. As the same is available in limited quantity, price of scrap can change quickly with the fluctuation in demand and supply both in domestic and international markets. Last year saw sharp market price fluctuation in line with movement of Iron Ore price changes in international market. This impacted the steel industry significantly. One of the main triggers for this was slow down in domestic consumption of steel in China.

Tata Steel (Thailand) has developed integrated planning models that facilitate close working between sourcing of raw material and marketing of finished products to respond to the rapid changes in market place. The process facilitates optimization of overall system inventory. Procurement team through its strong relationship with the chosen suppliers and using reputed publications maintains close contact with the market related developments. Throughout the year, the Company operated on a lean inventory to minimize the impact of key raw materials price fluctuations.

2. Sole Source Risk Manufacturer/ Supplier

As a guideline, the Company tries to have minimum three suppliers for each product. However there are situations where the number of suppliers is less due to propriety or special nature of product or service. Procurement has reduced single manufacturer/ supplier risk through multiple ways. Firstly, working together with end users through Procurement Optimization Team (SPOT), efforts are made to develop multiple suppliers. Plant is encouraged to take controlled trials so that usability of alternate material or supplier is tested. Secondly, in case it is single supplier, effort is made to have long term relationship so that joint development is undertaken to manage the cost effectively. Procurement team regularly reviews the items under single source. Approval is sought from appropriate level in case the sourcing is done on a single supplier basis.

3. Consistency in Quality and Quantity of Raw Materials

One of the major risk in steel manufacturing process is the fluctuation in quality of raw materials specially those of Ferro alloys. This is because Ferro alloys cannot be easily substituted on a short notice. This product is freely traded across the world and hence prices vary. Tata Steel Group has reduced the risk by setting up Lead buy through Singapore, India, Thailand and Europe to follow a consistent strategy within the Group and combine purchase volume to enjoy higher bargaining power. In the process, only reliable suppliers are contracted thereby reducing the risk of inconsistency in quality and to ensure that required quantities are always available.

For other raw materials such as Natural gas which is used as fuel in production process, Tata Steel (Thailand) has entered into a long term contract with leading companies in Thailand. This ensures adequate quantity, required quality and stable price of fuel to all the manufacturing sites.

4. Labor Shortage

The Company engages two types of labor at the manufacturing sites: skilled and general worker. For skilled, Tata Steel (Thailand) has established labor policies as regular employees providing staff training, welfare and emphasizing on safety awareness in the workplace. The Company has policy about other benefits such as overtime wages and additional compensation due to working in a hazardous environment (dust, smoke or heat). These facilitate building up employee motivation and skill development thereby improving plant productivity.

For general workers, Tata Steel (Thailand) outsources contractor and has welfare policies like accident insurance etc. However, this category of workforce is getting scarce in Thailand due to economic development of the country. Therefore, Tata steel (Thailand) compliments the shortage of general workers by engaging legal workers from nearby countries such as Myanmar, Laos and Cambodia to ensure that plant operations are not hampered due to shortage of manpower.

Procurement Vision and Code of Conduct

Tata Steel (Thailand) has adopted Tata Code of Conduct (TCoC) and therefore drives strict compliance to the TCoC clauses across the procurement function. Some of the principles have been embedded as a “standard” across the Group Procurement, details of which are as given below:

- Ensure a single face to the market
- Maximize value and innovation through our supplier & end user relationships
- Seek contract relationship that represents fair value for all stakeholders
- Align and integrate our objectives with those of our end users in the development of sourcing strategy
- To support deployment and use of common tools and standards across procurement
- To facilitate compliance across the business entities
- Maintain highest level of ethical standards, transparency in dealing and compliance to the Code of Conduct

Environmental Impacts

Tata Steel (Thailand) has set up and communicated clear policies to suppliers and business partners to recognize and comply with environmental laws including the rules and regulations prescribed by the law of the land. Presently, the Company has no legal dispute or lawsuits relating to environment problems.

Work related to project or high value of purchases and sales pending the delivery

- Not Applicable -

3. Risk Factors

At Tata Steel (Thailand), Enterprise Risk Management (ERM) framework and the governance structure framework is based on practices from COSO and ISO: 31000. The same is also aligned to Tata Steel (TSL) Group framework. ERM is an integral part of the Long term planning process to enable organizational sustainability. This has helped to develop a forward looking approach to risk management. The approach enables the Company to counter and mitigate various risks and simultaneously allows it to pursue available opportunities for the long term benefit of the business. The Risk Register is reviewed at TSTH executive committee meeting on monthly basis, where the risk owners present the status update on mitigation plan and trend of early warning indicators. Similar process is followed at each division/ department level. The movement of risk is understood through the enterprise risk heat map.

Being an enterprise in the steel industry, the Company encounters several risks in areas of commercial, operations, IT, HR etc. Accordingly, a risk portfolio matrix has been developed consisting of all known business risks, followed up with a detailed analysis of business environment, market condition and risk mitigation plan with process owners. The risks are categorized into A, B & C category based on likelihood of its occurrence & its impact to business. Category A risk is being high on risk metric.

During the year, the Company was assessed the maturity of enterprise risk management by external assessors and got the assessment score at the "Integrated Level" (3.97 out of 5). The recommendations will help the company to transform into a risk intelligent organization.

Given below is an assessment of management approach to various types of risks.

1. Market Risk

Thailand steel demand is linked to the GDP growth of the country. The GDP growth in 2016 and 2017 relied mainly on public investments. Steel demand is likely to get impacted if the public investments are not as per the plan which also impacts the private investments. In addition, higher imports from China affected the production and sales volume of domestic steel producers. Anti-dumping measures announced by the Government of Thailand and the pronouncement of new TIS standard have helped to return some stability in the market place. During the year, the company strengthened its supplies of high strength construction Rebar's, increased capacity & supply of ready to use cut & bend steel. All these product categories saw growth compared to previous year. Besides, promote branding through online social media and marketing activity has helped

to build relationship with customers and end users. Coupled with this, the Company opened regional warehouses at strategic locations in North, Northeast and South of Thailand to improve the service levels.

The Customer Service Teams have helped to capture the specific issues of the Customers and proactively design such products to meet the customer specific needs. Development of such products is under direct supervision of technical expertise from Quality Assurance & New Product Development department. In addition the Company also uses resources at South East Asia regional and Tata Steel Group level. The technical expertise also provides inputs to customer on their operation there by providing complete solutions.

The company also intensified its efforts in export markets to expand market, especially to the Asean countries and India; as additional measure to mitigate the volatility in domestic steel demand. Parallely, this effort is able to increase the customer base and build Tata Tiscon brand to be popular in the new markets in the Asean region.

2. Risk of Raw Material Supply

The Company has the risk from the requisition of raw material supply (domestic scrap) where the supply is less than demand and has high fluctuation of price which relates to international market price movement. The Company has managed risks of price inconsistency through the balancing of inventory level. The risk of competition in the market has been relieved with the initiative of utilization of alternative materials, low cost scrap, which is also an important factor to reduce the total cost of production.

3. Risks Associated with Mini Blast Furnance (MBF)

The continued relative high prices of coke and iron ore as compared to scrap, coupled with high volatility in the international prices of raw materials has compelled the Company to continue with mothball of the furnace. The Company's management is actively looking into the options to monetize the MBF assets.

4. Safety, Health and Environment Risks

The steel making operation has an inherent safety and workplace environment risk. While, steel operations per se do not involve hazardous materials, the operations are at high temperature and heavy loads are involved. Since, the steel plant has manning of contractor and own employees, it is essential to have a comprehensive safety management program. The Company had embarked on Safety Excellence Journey (SEJ) based on guidelines from TSL as well as the Environment Management System (ISO14001) and Occupational Health and Safety Assessment Management System (OHSAS 18001). The Company focused more on tracking lead indicators by using Lost Time Injury (LTIF), First Aid Case (FAC) and Property Damage as indicators related to safety. The employees are motivated to report Near misses, Safety Observation and Fatal Risk Control Program (FRCP). This highlighted vulnerable areas and thereby helped increase focus on the same. At TSTH Group level, Safety, Health and Environment (SHE) organization was defined by Apex Safety Council (ASC) with President and CEO as a chairman and Vice Presidents as the members. The six Apex Sub Safety Committee (ASSC), Plant Implementation Committee (PIC), Department Implementation Committee (DIC) and Safety Occupation Health and Work Environment Committee were appointed. Some of

the key initiatives launched during the year such as Contractor Safety Management (CSM) to take the same safety standards for contract employees as for own and encourage "FIND IT- OWN IT- FIX IT" campaign to identify hazard and control.

The Company focuses on health by providing good working environment and regularly monitor on industrial hygiene such as dust, noise, chemical and heat. The Company provides physical health check for employees, follow up and do a treatment in case of abnormal result related to work. The Health Index is the indicator for measure of the health level of employees.

The Company and its subsidiaries emphasize on Environment by monitoring the CO₂ Emission to measure and control greenhouse gases, follow up the Environment Impact Assessment (EIA) by monitoring gas such as NOx Sox CO and dust in all plants. As well as, effectively utilize water and apply Zero Discharge principle in water management. For waste management, the Company applies the 3R concept in order to maximize recycle waste by targeting 99% of waste back in process.

The Company and its subsidiaries accord high priority to utilize resources effectively and efficiently with appropriate environmental management regulation to minimize adverse impact to the community. The main raw material used across all three locations is ferrous scrap and is fully recyclable. Company has adopted TPM framework and under loss structure reporting, employees identify the areas of wastage and implement project to minimize the energy consumption. Company conducts yearly energy audit by experts from Tata Steel Group. This enables appropriate warning system for any related risks.

5. Human Resource Risks

Operating in the industrial zone and with low unemployment rate in Thailand, business challenges and competition as well as head-hunting by other companies with higher compensation package may lead to risk of retaining employees in the long run. Although the attrition rate of the Company maintains at a good level; a decrease from 8.1% to 5.2% in the current year, the Company still has risk of losing employees in key strategic positions. The Company has prepared for succession plan of management positions and key strategic positions to avoid such risk. There is a bench strength model to create manpower pipeline for engineers. At the same time, various improvements are made to ensure that the attrition rate is at minimum level. To understand the concerns of employees, the Company availed the services of external HR consultants to do the Employee Engagement Survey. The outcome of the survey was discussed in detail at the Human Resources Committee Meeting to further identify the improvement plans. In addition, the Company provides career growth opportunities and promotes the internal recruitment program which opens for career opportunity as well as extensive development programs on functional, business acumen, managerial and leadership to improve the competency level of employees. "LOT" (Leaders of Tomorrow) programmes are conducted to give a fast track career growth opportunity to employees for their development. Welfare and benefits are constantly improved to be competitive, based on market survey and benchmark with other leading companies. Team building sessions were also initiated across TSTH locations to foster team working spirit and engagement.

6. Financial Risk

Financial risk covers all financial commitments the Company has to the external world. Ensuring that the commitments are honored as per contracts, assumes highest importance within the TSL group. The Company has adhered to all its commitments during the year and will keep a close watch with zero tolerance to noncompliance. The Forex volatility is being addressed

through a Hedging mechanism in line with a structured hedging strategy, monitored by the Regional Treasury Committee, with a formal reporting mechanism to the Board. The Company has also appropriate insurance policies to cover assets and business.

7. Risks Associated with Natural Calamity

Due to its operations spread in four different locations, the Company's inherent risk to natural calamity is relatively moderate. However, the Company is aware of the risk associated with operating in industrial areas and has accordingly taken extensive insurance coverage related to natural calamity and all industrial risks. The Company does emergency handling procedures at all its facilities, and structured periodical 'mock drills' are done to ensure effectiveness of such procedures. Disruption to business operation is effectively addressed by flexible supply chain management and switching operation amongst the three production units.

4. Operating Assets

4.1 Property, plant and equipment used in business activities for the Company and its subsidiaries

As of March 31, 2017, property, plant and equipment used in business activities can be summarized as below:

Type of Asset	Proprietary right/ownership	Book Value (Baht million)	Obligation
1. Land and land improvement	Ownership	887.39	- None -
2. Buildings and structures	Ownership	1,665.20	- None -
3. Machinery and Equipment	Ownership	2,955.21	- None -
4. Work in progress	Ownership	67.14	- None -
5. Others	Ownership	40.96	- None -
6. Allowance for impairment on plant and equipment		(1,983.06)	
Total		3,632.84	

Details of operating assets can be categorized by each Company as follows:

Tata Steel (Thailand) Public Company Limited ("TSTH")

Type of Asset	Proprietary right/ownership	Book Value (Baht million)	Obligation
1. Work in progress	Ownership	27.45	- None -
2. Others	Ownership	13.01	- None -
3. Allowance for impairment on plant and equipment		(0.03)	
Total		40.43	

N.T.S. Steel Group Public Company Limited (“NTS”)

Type of Asset	Proprietary right/ownership	Book Value (Baht million)	Obligation
1. Land and land improvement	Ownership	803.30	- None -
2. Buildings and structures	Ownership	1,405.61	- None -
3. Machinery and Equipment	Ownership	2,573.20	- None -
4. Work in progress	Ownership	5.44	- None -
5. Others	Ownership	12.86	- None -
6. Allowance for impairment on plant and equipment		(1,939.98)	
Total		2,860.43	

The Siam Iron and Steel (2001) Company Limited (“SISCO”)

Type of Asset	Proprietary right/ownership	Book Value (Baht million)	Obligation
1. Land and land improvement	Ownership	84.08	- None -
2. Building and structures	Ownership	35.48	- None -
3. Machinery and Equipment	Ownership	131.01	- None -
4. Work in progress	Ownership	3.41	- None -
5. Others	Ownership	8.20	- None -
6. Allowance for impairment on plant and equipment		(0.10)	
Total		262.08	

The Siam Construction Steel Company Limited (“SCSC”)

Type of Asset	Proprietary right/ownership	Book value (Baht million)	Obligation
1. Land and land improvement	Ownership	0.00	- None -
2. Building and structures	Ownership	92.75	- None -
3. Machinery and Equipment	Ownership	209.00	- None -
4. Work in progress	Ownership	30.85	- None -
5. Others	Ownership	6.88	- None -
6. Allowance for impairment on plant and equipment		(0.94)	
Total		338.54	

5. Legal Dispute

As of March 31, 2017, the Company and its subsidiaries which include NTS, SISCO and SCSC had no legal dispute, neither as plaintiff nor defender, that have not yet been finalized in the following 3 cases:

- 1) No legal dispute or law suits which may have adverse impact to the assets of the Company or its subsidiaries in the amount of exceeding 5% of the shareholders' equity.
- 2) No legal dispute or law suits which may have material effect to the operations of business of the Company or its subsidiaries.
- 3) No legal dispute or law suits arising from the normal operation of the business of the Company and its subsidiaries.

6. General Information

Company's name	: Tata Steel (Thailand) Public Company Limited (Formerly known as : Millennium Steel Public Company Limited or "MS")
Registration No.	: 0107545000136
Business Type	: Manufacturer and distributor of long steel products
Securities Trading Symbol	: TSTH
ISIN Number	: Local TH0692010000 Foreign TH0692010018 NVDR TH0692010R12
Established	: July 12, 2002
Listing Date	: November 29, 2002
Trading Date	: December 18, 2002
Head Office	: 555 Rasa Tower 2, 20 th Floor, Phaholyothin Road, Chatuchak, Bangkok 10900, Thailand
Telephone	: +66 2937 1000
Fax	: +66 2937 1224
Website	: http://www.tatasteelthailand.com
Ordinary Shares	: 8,421,540,848 Baht
Paid Up Capital	: 8,421,540,848 Baht
Par Value	: 1.00 Baht per share
Registrar	: Thailand Securities Depository Company Limited 93 Ratchadaphisek Road, Dindaeng, Bangkok 10400, Thailand Tel : +66 2009 9000 Fax : +66 2009 9991 Email : SETContactCenter@set.or.th http://www.set.or.th/tsd
Auditors	: Ms. Thanawan Anuratbodee (Certified Public Accountant Registration No.3440) Deloitte Touche Tohmatsu Jaiyos Audit Co., Ltd. AIA Sathorn Tower, 22-27/F, 11/1 South Sathorn Road, Yannawa, Sathorn, Bangkok 10120
Filing a Complaint on Ethics	: Chairman of the Audit Committee Mr. Maris Samaram (Till July 7, 2017) E-mail : msamaram@gmail.com Asst. Prof. Rawewan Peyayopanakul (Starting July 8, 2017) E-mail : veep365@gmail.com

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Corporate Communications and Activity : Mr. Jitti Suwanvajokkasikij
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Email : jittis@tatasteelthailand.com

Subsidiaries Profile (As of March 31, 2017)
N.T.S. Steel Group Public Company Limited

Registration No.	0107536001273
Business Type	Manufacturer of bars, rebars and wire rods
Established	October 4, 1988
Factory	No. 351, Moo 6, 331 Highway, Hemaraj Chonburi Industrial Estate, Bowin, Sriracha, Chonburi 20230 Tel. +66 3834 5355 Fax. +66 3834 5350
Ordinary Shares	4,627,965,356.40 Baht
Paid Up Capital	4,627,965,356.40 Baht
Par Value	1.20 Baht
Held by TSTH	99.76 %

The Siam Construction Steel Company Limited

Registration No.	0105532094348
Business Type	Manufacturer of rebars
Established	October 4, 1989
Factory	No. 1, I-7 Road, Tambon Map Ta Phut, Ampher Mueang, Rayong 21150 Tel. +66 3868 3968, Fax. +66 3868 3969
Ordinary Shares	1,750,000,000.00 Baht
Paid Up Capital	1,750,000,000.00 Baht
Par Value	100 Baht
Held by TSTH	99.99 %

The Siam Iron and Steel (2001) Company Limited

Registration No.	0105544085276
Business Type	Manufacturer of wire rods and small sections
Established	September 3, 2001
Factory	No. 49 Moo 11, Tambon Bang Khamode, Ampher Ban Mor, Saraburi 18270 Tel. +66 3628 8000 Fax. +66 3628 8002
Ordinary Shares	120,000,000.00 Baht
Paid Up Capital	120,000,000.00 Baht
Par Value	100 Baht
Held by TSTH	99.99 %