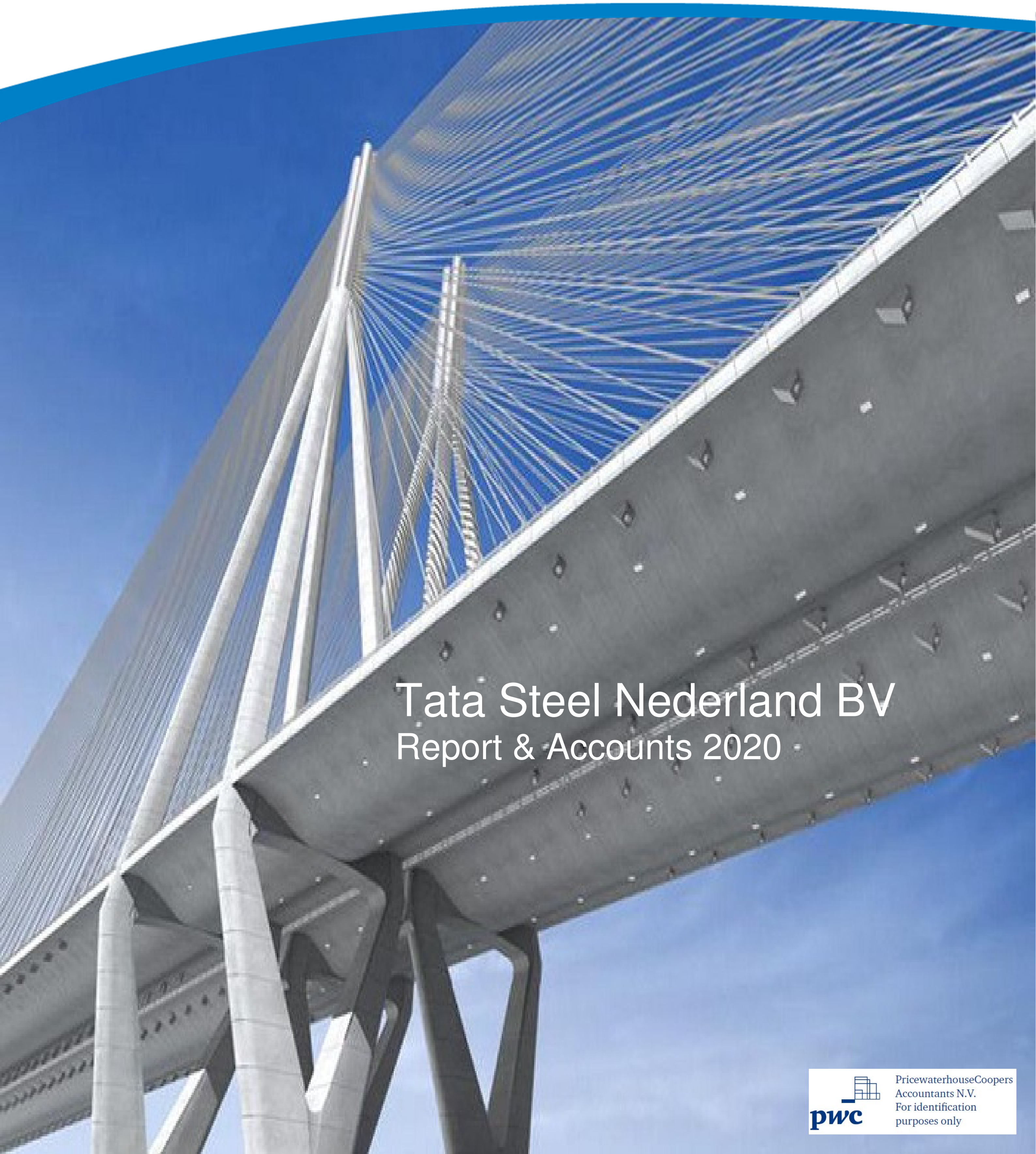
TATA STEEL

TATA



Tata Steel Nederland BV
Report & Accounts 2020

Contents

A. Report of the Supervisory Board

Introduction

The Supervisory Board (hereafter: 'the Board') supervises the policies pursued by the Board of Management (hereafter: 'the BoM') and the general course of affairs of Tata Steel Nederland B.V. (hereafter: 'TSN' or "Company"). The Board takes into account the interests of all the Company's stakeholders and advises the BoM thereon. The Board regards good corporate governance as an essential foundation for the long-term success of TSN and the Tata Steel Group, and an essential element to the delivery of its strategy.

Composition of the Board

The members of the Board are appointed by the General Meeting of Shareholders in TSN, at the recommendation of the Board itself. The Board and its members are not bound by any instructions and shall not receive a binding mandate. At least half of the members of the Board are not in any way involved in the management or supervision of companies belonging to the Tata Steel Group. A quarter of the members of the Board is female. The board will strive for equal gender representation with future appointments. Every third member of the Board is appointed considering the enhanced right of the Central Works Council of TSN. During the year, the Board consisted of Mr. P.M.M. Blauwhoff (Chairman), Mr. M.J.L. Jonkhart, Mrs. L.M.T. Boeren and Mr. J.L.M. Fischer. In September 2019 Mr Fischer resigned as he had resigned as CEO of TSE. On 30 September 2019 Mr. H. Adam, CEO of TSE, was appointed as a member of the Board. Considering its relative limited size, the Board has not established formal separate commissions. Nevertheless, Mr. Jonkhart has a focus on audit issues besides his regular duties as a member.

Meetings and activities

Seventeen meetings of the Board were held during the year. All the Board members were present at each of the regular Board meetings. Due to the corona/COVID-19 crisis, meetings as from mid-March onwards were held by teleconference. In addition, members of the Board attended Central Consultative Meetings of the BoM and the Central Works Council, providing information on the meetings of the Board. From time to time they interacted with management and members of the Central Works Council outside the formal meetings, both collectively and individually.

The Board was briefed in all the regular meetings on safety, health & environment performance, the developments regarding the company and its financial, business and operational performance, the progress of the STAR investment schemes, the status of the repair of the Blast Furnace 6 in March 2022, the CO2 issues and the overall license to operate, and relevant developments in TSL and TSE. The Board also discussed the operational and financial risks and their mitigations. In addition, the Board discussed several recurring subjects, such as HR related matters, operational and financial risk management, the financial situation and the governance of IJmuiden's pension scheme, environmental matters, corporate social responsibility, and internal and external audit activities.

In its meeting on 26 June 2019 the Board evaluated its functioning over 2018, and the main items on the agenda were safety, health & environment, the annual accounts for FY2019 and the report of the external auditor, the financial position of TSN, including financial support to the Group, an update on the possible joint venture, an introduction to a new initiative from the shareholder the TSE Transformation Programme (TTP), and Optimal Cash Management part X.

In its extra meeting on 6 August 2019, the main items on the agenda were the update on the cash position of TSN, the STAR investment scheme and the repair of Blast Furnace 6.

In its meeting on 10 October 2019, the main items on the agenda were safety, health & environment, the financial position of TSN, including financial support to the Group, risk management, analysis of the IJmuiden configuration, an update on TTP, and a strategic review of TSN Tubes.

In its extra meeting on 25 November 2019, the main item on the agenda was a discussion on Mr. Adam's role in the TTP as CEO of TSE and Mr. Adam's role as member of the Board.

In its extra meeting on 29 November 2019, the main item on the agenda was the TTP, which was explained by Mr. Adam in his role as CEO of TSE.

In its meeting on 5 December 2019, the main items on the agenda were safety, health & environment, the TSN strategy, the financial position of TSN, including financial support to the Group, and audit.

In its extra meeting on 17 January 2020, the main item on the agenda was approval by the Board of a decision by the BoM to enter into a TSN dedicated EUR 150 million credit facility, replacing the R2 of the RCF.

In its extra meeting on 28 January 2020, the main item on the agenda was again approval by the Board of a decision by the BoM to enter into a TSN dedicated EUR 150 million credit facility, replacing the R2 of the RCF.

In its extra meeting on 30 January 2020, the main items on the agenda were the downstream businesses, the necessary turnaround of TSN Tubes BV and a report of an assessment by the BoM of the challenges faced by TSN and how to address those in the context of the TTP.

In its meeting on 10 February 2020, the main items on the agenda were safety, health & environment, an update on the Roadmap 2030, dust reduction measures on the site in IJmuiden, and the financial position of TSN, including financial support to the Group.

In its extra (Supervisory Board only) meeting on 5 March 2020, the main items on the agenda was feedback on an exploration by Mr. Fischer of the cooperation between the shareholder and TSN and a discussion on the existing requirements for and the future roles of the members of the BoM taking into account the organization changes foreseen in the TTP and the potential consequences for the composition of the BoM.

In its extra meeting on 27 March 2020, the main items on the agenda were the corona/COVID-19 crisis and its implications for business continuity, TS Tubes BV, a first view on the TSN part of the TTP including a view on the commercial organisation, and the intended decision of the BoM on Optimal Cash Management part XI.

In its meeting on 20 April 2020, the main items on the agenda were safety, health & environment, an update on corona/COVID-19 and business continuity, the TTP, developments on the STAR investment program and Blast Furnace 6, audit, the financial position of TSN, including financial support to the Group, and Optimal Cash Management part XI.

In its extra (Supervisory Board only) meeting on 29 April 2020, the main item on the agenda was the advice of the Board on a desire by the shareholder to end the relation with the Chairman of the BoM of TSN. The Board has an advisory right on such proposals and advised against the proposal.

In its extra meeting on 12 May 2020, the main items on the agenda were the financial situation of TSUK and liquidity support to the shareholder outside of the Optimal Cash Management structure.

On 18 May 2020 it was announced by TSE that Mr. Th. J. Henrar, Chairman of the BoM of TSN, would release his position per 1 June 2020 and leave the company as per 31 December 2020. The Board would like to express its gratitude towards Mr. Henrar for his functioning as Chairman of the BoM for 12 years and the excellent way in which he represented the interest of the company, both internally and externally. A successor of Mr. Henrar had not yet been appointed at the time of this writing. Until such time the BoM is chaired by its vice-chairman Mr. H. van den Berg. The SB also has an advisory right on succession proposal, as has the CWC of TSN.

In its extra (Supervisory Board only) meeting on 19 May 2020, the main item on the agenda was the (intermediate) composition of the Board of Management.

In its meeting on 26 June 2020, the main items on the agenda were safety, health & environment, an update on corona/COVID-19 and business continuity, the TTP, developments on the STAR investment program and Blast Furnace 6, tax planning, the financial position of TSN including financial support to the Group, Optimal Cash Management XI and the TSE Quality Function.

Financial statements

For the financial year 2019/20, the consolidated income statement shows a net loss after taxation (including minority interests) of €(125)m compared to a profit of €177m in 2018/19, mainly on the back of lower steel margins and lower volumes.

Pursuant to Article 29 of the Articles of Association, we hereby present the Annual Accounts for adoption by the General Meeting of Shareholders of TSN. The external auditors, PricewaterhouseCoopers Accountants N.V., have audited the Annual Accounts for 2020 and have issued an unqualified independent auditor’s opinion. The members of the BoM and the Board, after discussion with the external auditors, have approved these Annual Accounts.

We recommend that the General Meeting of Shareholders adopts the Annual Accounts for the financial year 2019/20 as presented, and discharges the members of the BoM and the Board of responsibility in respect of their management and supervision respectively.

The Board is grateful to the BoM and all TSN employees for their efforts and dedication during the financial year 2019/20.

On behalf of the Supervisory Board

P.M.M. Blauwhoff, Chairman

M.J. Wisselink, Secretary

IJmuiden, 25 August 2020

Introduction

The Board of Management ('BoM') herewith presents the annual report together with the audited accounts of TSN, and its subsidiary companies, for the year ended 31 March 2020 ('FY20').

TSN is a wholly owned subsidiary of Tata Steel Netherlands Holdings B.V. ('TSNH'), an unlisted company based in the Netherlands. TSNH is owned by Tata Steel Europe Limited ('TSE'), an unlisted company based in the UK. The ultimate parent company is Tata Steel Limited ('TSL'), which is a company incorporated in India with shares listed on BSE Limited (formerly the Bombay Stock Exchange Limited), Mumbai and the National Stock Exchange of India, and with global depositary receipts listed on the London and the Luxembourg Stock Exchanges.

TSN holds all shares in Tata Steel IJmuiden B.V. ('TSIJ'), whose main assets are the steelmaking hub Strip Products Mainland Europe ('SPMLE') and Packaging manufacturing activities in the Netherlands and Belgium. Other subsidiaries cover various activities in markets such as building & construction, automotive, colour coated steels and packaging, both in Europe and the rest of the world.

The BoM hereby declares that, to the best of its knowledge, the Company's financial statements give a true and fair view of the assets, liabilities, financial position and profit or loss of the Company and the undertakings included in the consolidation taken as a whole and that the Report of the BoM gives a true and fair view concerning the position at 31 March 2020, the development and performance of the business during the financial year of the Company and the undertakings included in the consolidation taken as a whole.

The BoM would like to express its gratitude to all TSN employees for their contributions to the Company's performance in FY20 and their support to realise the result for the current year.

Principal business activities, objectives and strategy

The principal activities of the Company comprise the manufacture and sale of steel products throughout the world. The major operating site of TSN is the integrated steelworks at IJmuiden in the Netherlands, which also has a number of rolling mills and processing lines. In FY20 it produced 6.8mt of carbon steel by the basic oxygen steelmaking method (FY19: 7.1mt). Further processing is done at other TSN sites, including the coating works in Maubeuge, France, the galvanizing line in Flemalle, Belgium, the tube mills in Oosterhout, Zwijndrecht and Maastricht, the Netherlands, the cold narrow strip mills and plating lines in Düsseldorf, Germany, and in Warren and Bethlehem, USA. TSN has an extensive network, both in the EU and outside the EU, of sales offices, stockholders, joint ventures or similar arrangements, such as agents, in various markets for the distribution and further processing of steel products. The Company organises its commercial activities into strategic sales sectors and these sales sector teams identify demand, which is met from a single, pan-European, supply chain function. TSN's principal end-markets are the automotive, engineering, packaging and construction sectors, Europe being the most important market.

The Company's main business is Strip Products Mainland Europe ('SPMLE'). Other large businesses are Packaging, Tubes, Distribution and Building Systems.

TSN is continuing with its strategy of focusing on carbon steel to create long-term value for its stakeholders within a sound financial framework through:

- A top quartile cost position in Europe;
- Continuously improving the service performance;
- Increasing the sales volumes of speciality products;
- Continuing to move the product sales mix to more attractive automotive and construction markets; and
- Capturing growth opportunities with new and existing customers.

Important for the future of the Company is the investment program referred to as the Strategic Asset Roadmap (STAR). This program will enable a state-of-the art asset base and an extension of the product portfolio in high value products whilst at the same time maintaining the Company's low-cost position in Europe. TSN can grow in high-value markets, such as Automotive, Lifting & Excavating, Packaging and Building Systems. This requires a complete product portfolio, very stable production and the highest delivery performance. Targeted investments will allow TSN to meet these requirements and will contribute to a sustainable profit for Tata Steel in IJmuiden. In FY18, the first series of investments from this programme have been initiated. In the summer stop of 2019, the first step in increased hot rolled capabilities and the first step in continuous cold rolling was executed. In addition, a second STAR programme is being developed.

On 10 May 2019 TSL and thyssenkrupp AG announced that activities to complete the joint venture had been suspended, as it was anticipated that the joint venture would not receive merger control approval from the European Commission ('EC'). The anticipated refusal for merger control approval was subsequently confirmed by the EC on 17 June 2019.

Across the wider TSE Group there is a focus on simplifying the corporate structure by reducing the number of separate legal entities. This is intended to reduce costs, reduce complexity, aid in transparency and improve corporate governance. As part of this wider goal during the year TSN has eliminated 7 of its non-trading subsidiaries. This was achieved by entering 6 non-trading subsidiaries into liquidation and merging Tata Steel Europe Metals Trading B.V. into Tata Steel IJmuiden B.V. For full details of companies involved please see the full subsidiary listing in note 33 of the consolidated accounts.

Dynamics of the business

The steel industry is cyclical. Financial performance is affected by general macroeconomic conditions that set the demand for steel from downstream industries, as well as by available global production capacity, raw material prices and exchange rate relativities. As integrated steel players seek to maintain high capacity utilisation, changes in margins across regions lead to changes in the geographical sales pattern. As a result, in addition to market developments in Europe, changes in the global market for steel influence the financial performance of TSN.

Economic climate

Global GDP growth decelerated in 2019 to 2.6% (2018: 3.2%). Growth was negatively impacted by the slowing Chinese economy and US protectionism which impacted global trade. The eurozone economy grew by 1.2% (2018: 1.9%). GDP growth in China continued its gradual slowdown in 2019 to 6.1% (2018: 6.7%). Consumption is gradually becoming a more important economic growth driver as China is slowly losing its cost advantage.

Global steel market

Global steel demand growth in 2019 decelerated to 3.4% (2018: 4.6%). Demand for steel in China increased by 8.0% (2018: 8.5%). Steel demand in the EU declined by -5.6% (2018: 2.4%).

Output growth in the steel-using sectors in the EU declined in 2019, especially in the automotive sector. Output of passenger cars was negatively impacted by the introduction of new emission testing procedures and a slowdown in demand both inside and outside the EU. Construction output remained relatively stable due to more locally based demand.

In 2019 global steel production decelerated to 3.0% (2018: 4.7%). Steel production in China increased by 7.7% (2018: 6.4%) and equated to 54% of global steel production. In the EU production was reduced by -5.3% due to low demand and margins (2018: -0.5%).

Raw materials

The principal raw materials used in TSN's carbon steelmaking processes are iron ore, metallurgical coal and steel scrap. The market reference price of iron ore fines (China CFR 62%) increased in 2019/20 to US$95/t (+$24/t). The price increased due to strong demand from China and reduced seaborne supply as a result of Vale's Brumadinho dam disaster in Brazil and cyclones in Australia. The hard-coking coal spot price (Australia FOB) decreased to US$165/t (-$36/t) as demand ex-China was weak and China put in place coal import restrictions. The German benchmark E3 scrap price decreased to €221/t (-€40/t) compared to the previous fiscal year.

The price of CO2 emission rights increased to €25/t (+€6/t) in 2019/20, reaching an all-time high in July 2019 at €28/t. Reforms of the EU Emissions Trading System have reduced the supply of permits causing prices to rise.

The European steel spot Hot Rolled Coil price (Germany, parity point) weakened in 2019/20 to €469/t (-€82/t). Margins have declined in Europe due to low demand and still high levels of imports.

Trade

In 2019 imports into the EU were 34.7mt (2018: 39.2mt). Low margins made it less profitable for exporters to sell material into the EU. In 2019 the market share of imports in the EU declined to 15.2% (2018: 17.0%). The market share of imports in the EU remains historically high.

The EU remains a net importer of steel at 12.7mt (imports: 34.7mt, exports: 22.0mt). The region became a net importer in 2015.

Financial review

The Company's turnover decreased from €5,381m in FY19 to €4,709m in FY20 as a result of poor market conditions. Operating profit decreased from €248m in FY19 to €(176)m in FY20, mainly due to lower commercial results and lower volumes. The result before taxation decreased from €245m in FY19 to €(175)m in FY20. The consolidated net loss after taxation (including minority interests) amounted to €(125)m, a decrease of €302m compared to FY19.

Consolidated capital and reserves (including non-controlling interests) decreased by €152m to €2,662m at the end of FY20.

The decrease of €152m consisted of:

- Loss for the period of €(125)m;
- Other comprehensive loss for the year of €(27)m mainly attributable to losses arising on cash flow hedges.

Net cash flow from operating activities totalled €340m, an increase of €59m compared with FY19. Net cash flow from investment activities amounted to €(302)m (FY19: €(299)m). Including movements in cash flow from financing activities, the net movement in cash and cash equivalents amounted to an inflow of €44m (FY19: €22m inflow).

An important strength of TSN is its solid balance sheet, with only a limited level of borrowing.

TSN has a revolving credit facility in place, agreed in 2020, of €150m for three years (this facility may be extended up to a maximum of six years if certain conditions are met). This facility is for the exclusive use of TSN. TSN also has access to a €400m intercompany loan facility with Tata Steel UK Ltd ('TSUK') and TSNH expiring on 1 April 2023.

At the end of the financial year, no money had been drawn by TSN under the revolving credit facility and no drawings were made under the intercompany loan facility.

Depending on TSN's actual cash positions and its cash flow forecasts and considering the Company's Policy for Surplus Cash, various amounts have been lent to TSNH and TSUK for various periods. No dividends were paid in FY20 (FY19: nil).

TSN's financial risk management is based upon sound economic objectives and good corporate practice. The Group's main financial risks are related to the availability of funds to meet its business needs, including the ability to continue the strategic investments in the STAR program which has been further described in the next paragraph. To manage this risk, the Group continues to focus on generating positive cash flows and keeping sufficient access to internal and external funding possibilities. Despite the implications of COVID-19 and associated uncertainties, as further described in the Annual Accounts on page 24, the Group is confident that the financial risks are managed to an acceptable level.

Other financial risks relate to movements in interest rates, exchange rates and commodity costs. Derivative and other financial instruments are used to manage any exposures where considered appropriate. Further details of its financial risks, and the way the Group mitigates them, are set out in note 20.

Capital expenditure

Capital expenditure on tangible fixed assets (including loose plant, tools and spares additions) in FY20 amounted to €300m (FY19: €308m). Significant capital expenditure has been committed in the SPMLE business on the STAR programme to support the strategic growth of differentiated, high value products in the automotive, engineering and construction market sectors. During FY20, these included the installation of a new caster (Continuous Caster 23) to allow enhanced casting capabilities for advanced products, the upgrade of the hot strip mill, the upgrade of a cold mill and preparation for a walking beam furnace in the hot strip mill.

Other major projects ongoing throughout the year in SPMLE included the cold blast supply to the blast furnaces, the new coke oven gas holder, and renovation of the ovens in the coke & gas plants. Significant capital expenditure on intangible fixed assets has been committed to the Smart Steel Factory project. The site invested in several process safety and environmental projects. During the year the site started with the construction of a new facility to process steel plant slag to cope with graphite dust emissions. For the delivery of our high-end products a fully automatic logistics warehouse was commissioned during FY20.

TSN Business review

Tata Steel Strip Products MLE

SPMLE manufactures hot rolled, cold rolled and metallic-coated steels for the automotive and transport industries, building and construction, consumer appliances and electronics, and general engineering.

The Lost Time Injuries (LTI) rate is a measure of our safety performance, expressed as the number of incidents leading to absence from work per million worked hours. For SPMLE employees the LTI rate was 0.8 in FY20 , which was 0.4 better than last year. The LTI rate for contractors was 3.2 bringing the combined (i.e. employees and contractors) LTI rate to 1.3 (0.4 better than last year).

The FY20 operating result after restructuring, impairment and disposals was lower than in FY19 due to worse commercial results. Deliveries in FY19 decreased by 360kt compared to last year, particularly in the second half of the year.

The lower deliveries were also the main reason for the reduction in liquid steel production by 307kt compared to FY19. The direct sheet plant realised a new annual record output of 1,430kt. Furthermore, the rolling and coating lines incurred an extended summer maintenance stop to implement phase one of the STAR Programme. For the Hot Strip Mill this was the first phase for increased hot rolled capabilities. For the cold mill this was the first phase for continuous cold rolling.

Tata Steel Packaging

Tata Steel Packaging is a supplier of light-gauge steel for packaging and non-packaging applications, based in IJmuiden, the Netherlands, with an additional production facility in Duffel, Belgium.

The LTI rate in FY20 was 1.5, which was 0.4 worse than the previous year.

The FY20 operating result after restructuring, impairment and disposals was below the previous year, due to lower margins and lower volumes. Activity levels in the IJmuiden installations were affected by the weaker order book in Europe and by production related issues.

Tata Steel Nederland Tubes

Tata Steel Nederland Tubes is one of Europe's leading manufacturers of welded steel tubes offering one of the widest ranges of welded steel tubes available for greenhouses, construction projects, steel structures and the automotive industry. Going forward, focus will be on implementing a restructuring plan with re-assessment of the situation before the end of 2020.

During the fiscal year there was 1 lost time injury (FY19: 1).

The FY20 operating result after restructuring, impairment and disposals was better than the previous year due to the better demand in the Construction market. The demand in automotive market was weaker. The operational performance has recovered against last year performance.

The business made two strategic investments in the year:

- Initials preparation and spend on cut-to-length facility to serve automotive.
- The EEP programme has been started in Maastricht and Oosterhout.

Tata Steel Distribution Europe

Tata Steel Distribution Europe comprises a network of service centres and further processing capabilities across Europe.

There was 1 LTI in FY20.

The FY20 operating result after restructuring, impairment and disposals was lower compared to FY19, caused by both lower sales volume and lower margins.

The operations at Degels have been wound down in the last quarter of FY20.

Tata Steel Building Systems

Tata Steel Building Systems comprises a network of manufacturing operations providing a wide range of steel products for the building industry worldwide.

There were 2 LTI's in FY20 compared to 3 in FY19.

The FY20 operating result was lower compared to the previous year due mainly to lower results at Monopanel and Montana sites but better results at the Fischer site.

During the year the business commissioned a new SAB panel production facility at Geldermalsen.

Tata Steel Colors

Tata Steel Colors is an international business with significant experience in developing and manufacturing colour-coated pre-finished steels. Applications include building envelope, roof and wall cladding, domestic appliances, consumer products, bake ware and specialist applications.

The LTI frequency rate of employees in FY20 was 2.5 compared to 2.6 in the previous year.

The FY20 operating result after restructuring, impairment and disposals was better compared to the previous year.

Tata Steel Plating

Tata Steel Plating specialises in the rolling, annealing and electrolytic plating of cold-rolled narrow steel strip and its downstream processing. The business is the world's leading supplier of materials for the production of battery cases and its products are used for diverse applications in the automotive industry.

As in FY19, in FY20 there were no LTI's.

The FY20 operating result after restructuring, impairment and disposals was marginally better than FY19 due to higher selling prices and improved operating costs.

In FY20 Tata Steel Plating progressed the commercial launch of its new products, bright nickel on ferritic stainless and a one-sided nickel-plated stainless steel for rechargeable batteries.

Tata Steel Regional Market Development Europe

Tata Steel Regional Market Development Europe is the specialist supply chain management business unit of the Tata Steel Europe Group. The business manages an international network of offices in nearly fifty countries and stock facilities in strategic locations worldwide.

As during the previous financial year, there were no LTI's.

The FY20 operating result after restructuring, impairment and disposals improved significantly from the previous year.

Research & development

Research & Technology programme

Approximately 78% of the TSN technology programme was developed under the governance of the Global Expert Committees ('GECs') of Tata Steel Europe. The GECs cover process and product market sector developments. The remaining capacity was primarily allocated to the Strategic Thrust programme for various projects including:

- HIsarna technology: Environmentally friendly, low CO2 (at least 20% reduction without Carbon Capture and Storage (CCS), up to 80% with or even negative with also renewable carbon sources) and economic ironmaking. The pilot plant has been transferred to production but studies on this plant to further understand the process and to design the next generations are ongoing. Engineering for upscaling (a 1 mln tonnes demo plant) has commenced and will continue in FY21;
- Graphene based value added product development, focused on high value niche products that need both corrosion protection as well as electrical conductivity. Graphene on nickel plated steel has become part of normal new product developments and upscaling is being investigated;
- Physical vapour deposition, a cold zinc coating technology that allows an extension of the zinc coated product range towards the future UHSS automotive grades well above 1000 MPa;
- Laser texturing of strip surfaces to create unique roughness profiles that combine both formability and paint appearance;
- Use of advanced analytics to introduce fundamental changes in manufacturing and all business processes like sales and marketing;
- Various developments on the blast furnace process, including modelling and experimental testing of ceramic materials, to prolong the operating times for blast furnaces beyond current limits.

Process development

The process technology programme in 2019/20 was focused on lean and robust manufacturing processes, better use of raw materials and resolution of quality issues. The programme supports the Group's manufacturing and differentiated product strategy. Key achievements during 2019/20 were:

- Our new Rapid Alloy Development Route (RADaR) was opened, enabling rapid development of new alloys, starting with casting and ending with a tensile test;
- Implementation of advanced cooling paths during rolling of high carbon steels using STORM-lite;
- Implementation of several improvements in the DSP process route, e.g. a novel approach to improving

the lifetime of the Submerged Entry Nozzle, and the detection of so-called stickers at the start of a cast;

- The castability of several new grades was assessed on feasibility to implement in our lines;

- This year also the resources aimed towards Direct Business support to deliver quick wins for the business, where R&D effort can make a difference, were increased. Examples are burner tests for the galvanising lines, strip steering in Zodiac, improving performance of the IJmuiden HSM, and improvements in the undesired bending of furnace rolls.

Product market sector developments

A key element of the Group's strategy is the development of new steel products. Structured programmes are initiated with emphasis on the automotive, construction, packaging, engineering and infrastructure sectors.

During FY20 a total of 22 new products were introduced, including:

- VALAST range of abrasion resistant steel grades for the engineering sector;
- MagiZinc full finish for the automotive market;
- Cr6+ free TCCT as replacement for ECCS and CFPA products for the packaging market;
- R&D is assisting Tubes in the design of the first production installation for Ultra-flexible annealing of tubes that allows multiple end product specifications to be produced from a limited number of chemistries, whilst improving the properties of the end product.

People

Health and safety

Health and safety continue to be TSN's first priority as it strives to be the industry benchmark.

Health and safety plans continue to be deployed across the sites, including deployment of approved TSE Health and Safety standards and codes of practice. TSN's safety performance improved in FY20 with the LTI rate reducing from 1.66 in FY19 to 1.40 in FY20. The sickness rate of 4.84% in FY20 - which saw a spike at the end of March 2020 due to the Corona virus - compares to previous fiscal year result of 5.05%.

Pension scheme

Stichting Pensioenfonds Hoogovens (SPH), the main pension scheme within TSN, operates the pension scheme of the IJmuiden site in the Netherlands. At the end of its reporting year 2019, SPH had 9.832 still 'active' participants and 14.730 people receiving pensions. The 12-months moving average ('policy') funding ratio was 106 % end of March 2020.

The Company has agreed with the Dutch Trade Unions to fix the Company's contribution level at 29% of pensionable earnings for the three-year period from 1 January 2018 to 31 December 2020. The SPH pension scheme is classified in the financial statements as a defined contribution scheme.

Employment policies

There are established arrangements for communication and consultation with Works Councils and Trade Union representatives, to share information on matters of mutual concern.

During the year several requests for advice on organisational and financial subjects were discussed and concluded with the Central Works Council.

In 2019 a new TS IJmuiden collective labour agreement has been agreed with the Trade Unions for a two-year period starting 1 April 2019 up to 31 March 2021.

The average age of our workforce is increasing and, due to the higher retirement age, employees will have to continue to work to a higher age than before. These developments call for policies aimed at improving both the ability and the willingness to continue to work longer. Key programmes are agreed with and supported by the Trade Unions and Works Council. An example is the retirement Generation Pact program. Tata Steel and the Trade Unions recognise the importance of employees reaching retirement in a good and healthy way. The Generation Pact offers the opportunity to work less to reduce the workload in the last years before retirement. Various improvement programs aim to keep the total employment costs competitive.

Tata Values

As part of TSE, TSN embraces the five 'Tata Values' which are shared by all Tata companies worldwide and inform expected behaviours and practices throughout the TSE Group (Pioneering, Responsibility, Excellence, Unity, Integrity).
TSE's purpose, values, vision, mission, strategy and key messages are communicated to the Group through internal communications, senior manager updates, senior leadership conferences, CEO videos and Town Hall briefings. More detailed information relating to TSE's strategy and values can be accessed on the TSE website https://www.tatasteeleurope.com/en/about–us/strategy.

Environment

Sustainable in Every Sense

Steel is at the heart of our homes, cities, agriculture, transport systems, energy infrastructure, and consumer goods. Infinitely recyclable, steel continues to evolve. Indeed, increasingly advanced steel products and services are ready to support society's increasing demands for a sustainable future.

TSN creates true value in the way it works together in partnerships with employees, customers, communities, and all other stakeholders. The company's strength lies in its people and the pride they take in their work. Whether producing today's steel, researching tomorrow's new products, or working closely with customers to make them even more successful in their markets, the pride in the people who work in the steel sector drives everything the company does. It makes all those who work for the company want to exceed customer expectations, invest in cleaner, safer and more sustainable processes, give back to the communities they live and work in, and build and maintain a company fit for generations to come.

Policy

TSN is committed to minimising the environmental impact of its operations and its products through the adoption of sustainable practices and continuous improvement in environmental performance. To implement its environmental ambition, TSN continuously strives to improve the systems that are in place to manage and minimise the effects of the Company's operations. For example, 100% of manufacturing operations within TSN are independently certified as meeting the international environmental management system standard, ISO 14001:2015. Furthermore, 100% of TSN's products manufactured in the Netherlands are independently certified as meeting the requirements of the sustainable sourcing standard, BES6001.

Climate change is one of the most pressing issues the world faces today, and the wider Tata Steel group aims to play a leadership role in addressing the challenge. Whilst steel is considered a 'hard to abate' sector globally, it is nevertheless an integral part of the solution to climate change as it is durable, adaptable, reusable and recyclable. It is used, for example, in affordable and energy-efficient homes, in lighter, stronger and safer transport systems and in innovative packaging design which contributes to the avoidance of food waste and helps to build resilience through the food supply system. As such, steel will be fundamental to the development of low carbon transportation, renewable energy infrastructure and the sustainable cities of the future.

The Netherlands has set clear climate targets, in line with the signing of the Paris Accord, aiming to reduce CO2 emissions by 49% (compared to 1990) by 2030 and 95% (compared to 1990) by 2050. TSN has made good progress in embedding a climate perspective into its business operations and decision-making to ensure that its goal of becoming carbon neutral by 2050 will be realised. In the meantime, coordinated actions are being developed to deliver a reduction in carbon emissions by 2030 by a percentage equal to or bigger than that expected from industry in the Dutch Climate Agreement.

TSN established a Carbon Reduction programme for its IJmuiden site in 2016 and, through this programme, continues to build a comprehensive strategy and engage in a wide range of collaborations with external partners developing the feasibility of technologies from carbon capture, use and storage (CCUS) to hydrogen-based steelmaking, from the use of more scrap in the steelmaking process to innovative new smelting technologies.

HIsarna

The Company continues to work on a major long-term project to develop HIsarna, a new smelting reduction technology for which it co-owns the intellectual property rights, to produce steel without the need for coke making or agglomeration processes, thereby improving efficiency, reducing energy consumption and reducing CO2 emissions. The pilot plant is located at IJmuiden. HIsarna development aims for stepwise scale up from: 1) current pilot plant in IJmuiden, towards 2) a larger installation planned in Jamshedpur in India to 3) the option for a full 1-1,5 mt pa plant in IJmuiden. Trials with Indian raw materials were postponed due to outage of the IJmuiden pilot plant, due to revamp activities and permitting requirements. A joint technology/engineering team has started the pre-engineering for the larger plant in Jamshedpur.

H2ermes

TSN, Nouryon and Port of Amsterdam have started a feasibility study (H2ermes) on building a 100 MW green hydrogen plant at the Tata Steel site in IJmuiden. This hydrogen plant will be an important first step for the parties involved. The availability of green hydrogen will also have advantages for the entire Amsterdam metropolitan region as TSN is not the only party to benefit from this new resource.

Feasibility of Carbon Capture, Use & Storage (CCUS)

TSN is a partner in a new project for the construction of a basic capture- and transport infrastructure in the North Sea Canal area which will enable the utilisation or storage of CO2 under the North Sea. The project is a joint initiative between Gasunie, EBN, TSN and The Port of Amsterdam. TSN also has plans to split blast furnace gas and use the carbon monoxide from the process in order to convert it into raw materials for the chemical industry. The joint expertise of the partner companies offers a unique opportunity to realise a CCUS infrastructure: Tata Steel will capture CO2 and be one of the providers storing its emissions. Gasunie has experience in building infrastructure and transport, EBN has knowledge of geology & storage, and the Port of Amsterdam will provide overall coordination with other companies in the area.

Energy efficiency and CO2 emissions

Even with TSN's decarbonisation activities moving forward at pace, it is nevertheless still important to ensure that its assets remain highly efficient in the short term, and IJmuiden is one of the most carbon efficient integrated steelworks in the world, with a CO2 emissions intensity of 1.85 tonnes of CO2/tonnes crude steel in FY20.

TSN is participating in a voluntary agreement (MEE Covenant) with the Dutch government regarding energy efficiency improvements over the period 2017 to 2020 (with the previous agreements extending from 2009-2012 and 2013-2016 inclusive). The primary requirement of the agreement is the implementation of energy efficiency projects of 2% per annum, covering both process efficiency measures within the manufacturing process and energy saved across the product lifecycle. For 2019 there was a total energy efficiency improvement of 3.8% (2018: 6%), comprising 1.3% process efficiency improvement and 2.5% from the product lifecycle.

The allocation of CO2-credits to the operations of Tata Steel Netherlands under the EU Emissions Trading System (EU ETS) continued to be lower than the emitted volume, with the shortfall between free allowances and actual emissions in 2019 exceeding two million tonnes of CO2, despite IJmuiden being amongst the most carbon efficient integrated steel plants in the world. This ongoing shortfall can be attributed to the use of unachievable benchmarks for the allocation of allowances to steel producers and the application of a cross sectoral correction factor to downwards adjust the free allocations to installations across all so-called carbon leakage sectors.

Environmental Permit issues

Since Summer 2019, the Dutch Government has been taking further actions to implement EU legislation on nitrogen deposition around so-called Natura 2000 areas. In the Netherlands this is generally referred to as the 'PAS discussion'. The IJmuiden site is in close proximity to a Natura 2000 area, which implies that no additional nitrogen deposition is permitted due to the impact that this could have on eutrophication (the effect where excessive nutrients build up in natural systems). This has had several implications for TSN's operations, such as complicating permitting for a new reheating furnace at the Hot Strip Mill, with consequential impacts on energy efficiency and delaying the restart of the HIsarna pilot plant, which is now planned to take place later in 2020. From a broader perspective, political parties and provincial authorities in the Netherlands are keen to see further investments in nitrogen emissions reductions. The Dutch governmental Inspection for Local Environments and Transport (ILT) wants the 'Omgevingsdienst' (OD) to enforce a NOx reduction (deNOx) installation on the IJmuiden Pellet Plant. TSN has agreed that it will deliver the provincial authorities an assessment of the cost-effectiveness of applying de-NOx to pelletising, a scheme that could involve an investment in the order of €100m.

During 2019, the provincial authorities demanded that TSN should take further actions to ensure compliance with dust emission limits for the sinter cooler set out in the environmental permit. The authorities have demanded that extra filtering capacity be installed in the first quarter of calendar year 2021. A €15m scheme to achieve this has been worked up and is being progressed.

Environmental complaints

Companies are part of society. TSN's license to operate depends on the balance the company achieves between the value of its products and services to society, the jobs it creates, the contributions it makes to communities and local economies and its environmental footprint. In the period covered in this report, the number of environmental issues and related complaints and health concerns from residents near TSN's main steelworks in IJmuiden rose and the company responded by increasing its direct contact with the local communities closest to the manufacturing operations. In December 2019, TSN opened an office in Wijk aan Zee in order to get closer to the surrounding communities. Members of the public are now able to walk into the office with questions. The office is also used to hold regular information evenings on topics related to community and environment. Regular meetings are also in place with local community boards from the IJmond region. The purpose of these meetings is to inform the local community about measures taken by Tata Steel to reduce emissions and avoid environmental nuisance and listen to those involved about their main concerns regarding Tata Steel's activities. TSN also continues to publish an online environmental news report to inform stakeholders about new developments and possible activities that could cause environmental nuisance.

In the period covered by this report (the 12 months ending 31st March 2020) the number of complaints from members of the public relating to environmental issues decreased by 16% compared to the previous 12-month period. 80% of the complaints related to concerns about dust, 17% to odour and 3% to noise.

Regional developments

Although the local air quality is currently in compliance with European air quality standards, local politicians have the ambition to look for improvement opportunities. This is the main subject of an environmental dialogue that is ongoing with all relevant governmental and other organisations in the Region.

National and European Policy developments

On 11th December 2019, the European Green Deal was launched by the European Commission. This includes proposals to support zero carbon steelmaking by 2030, a proposal for a Carbon Border Adjustment (CBA) and a proposal for a chemical strategy for sustainability, to ensure a toxic-free environment.

The Dutch government has launched an air quality plan (Schone Lucht Akkoord). The target is to reduce the health impact of national air pollution by 50% by 2030. The contribution from industry will be achieved through improved BAT implementation in permits, stricter cost-effectiveness criteria and stricter emission levels in air legislation.

From the start of 2021, all companies in The Netherlands have an obligation to report on substances that may impact on public health (so-called Zeer Zorgwekkende Stoffen, or ZZS). This includes a requirement to prepare an inventory of substances and to undertake analysis to understand emissions. TSN is actively progressing its inventory development and analysis.

Principal risks and risk management

Within the wider TSE group, active risk identification and mitigation management is an integral part of all business management processes.

Building on the risk management procedures and reporting framework that are applied throughout TSE, TSN has a robust process to identify and monitor the significant risks and associated mitigating measures for its operations and activities.

Risk registers that are prepared by the individual entities of TSN are consolidated in an overall TSN risk register, highlighting potential impact of the risks as well as probability of occurrence. The TSN risk register is updated every six months.

After every update a selection of the "Top 10" risks and mitigation measures is reviewed by the BoM together with the Supervisory Board.

Critical risks can be summarised as follows:

Risks	Mitigating factors
Health, safety, environmental and other compliance matters	
TSN businesses are subject to numerous laws, regulations and contractual commitments relating to health, safety, the environment and regulatory compliance in the countries in which it operates. The risk of liabilities, costs and damage to reputation related to these laws and regulations are an inherent part of the Group's business. TSN's "license to operate" is at risk from increased costs related to the European Union Emissions Trading Scheme (EU ETS) and a reduction in the free allocation of CO_2 emissions rights. There is an expectation that after 2020 CO_2 allocations under EU ETS are likely to be lower than TSN's projected emissions. The EU ETS and TSN energy costs continue to absorb additional resources when compared to competitors not subject to the same legislation. A CO_2 EU Border Tax as part of a drive to reduce CO_2 emissions from what the EU consumes as well as from what it produces continues, however the impact of Brexit on this scheme and TSN is currently unknown.	TSN has policies, systems and procedures in place aimed at ensuring compliance and there is a strong commitment from the TSN Board to enforce compliance, to continuously improve health and safety performance and to minimise the impact of TSN's operations on the environment. TSN continues to engage with EU legislators to secure a level playing field, for example in areas such as the REACH (Registration, Evaluation, Authorisation & restriction of Chemicals) scheme and the EU ETS. A focus for operations and procurement is to minimise environmental impacts by selecting raw materials on their environmental credentials (as well as quality) in order to minimise landfill tonnages and identify external opportunities for use/sale of by-products. TSN continues to invest in short to medium term CO_2 emission reduction and energy efficiency improvements. In addition to these improvements, a pilot plant is operational in IJmuiden to develop a new smelting reduction technology ('HIsarna') to produce steel without the need for coke making or agglomeration processes, thereby improving efficiency and reducing energy consumption as well as reducing CO_2 emissions.
Long term competitiveness	
TSN's manufacturing facilities are predominantly in Europe, which is a relatively high cost area and where demand growth for steel products is lower than in developing parts of the world. Increasing raw material costs and competing materials challenge the long-term competitiveness of TSN's products. Overcapacity remains, and the raw materials supply market has greater consolidation than steel, which means that suppliers with strong market power may use this position to their advantage.	TSN targets to sell a high value, differentiated product mix and will continue to invest in commercial and operational improvement initiatives, delivering significant cost savings and differentiated propositions in the steel market. In order to maintain its ability to successfully compete in the long term. TSN is participating in various workstreams of the TSE wide Transformation programme, undertaking a number of initiatives, including cost reduction measures and business specific improvement plans.

Risks	Mitigating factors
Trading in the global steel market	
The recent COVID-19 pandemic is having a very severe impact on demand in most of our markets and puts great pressure on profitability and cash flows.	Scenario plans have been developed to assess the impact of COVID-19. Production levels and raw material intake have been adjusted to the lower levels of activity. Prioritised efforts have been put in place to acquire additional cash funding opportunities, in particular GO-C and securitisation funding. An invoice securitisation program is in place since August 2020.
TSN's financial performance is influenced by the global steel market and the economic climate in Europe. Uncertainty about consequences of Brexit continues but is likely to provide TSN with both opportunities and threats.	TSN continues to plan for and address the changes and impacts of Brexit on its customers markets and the procurement decisions of end users.
Regulators from around the world are protecting national steel industries from foreign competition, with the US in particular imposing additional duties of 25% on imports of steel from the European Union, Mexico and Canada. However, as US steel manufacturers cannot currently meet in full market demand in the US, TSN alongside US customers continues to lobby the US Government. These tougher international trade practices will impact the global market, further driving overcapacity and price pressures.	US steel manufacturers cannot currently meet in full the market demand and lobbying by TSN alongside US customers will continue.
Our workforce	
COVID-19 has a distinct impact on our workforce, causing uncertainty about future prospects and leading to working away from the workplace for many employees.	Active and regular communication to the workforce about COVID-19. Specific arrangements have been made to protect the workforce on our sites like 1.5m distance zones, separation of walking lanes, plastic screens in pulpits and wearing personal protection equipment like face shields. Creating adequate home-working conditions, esp. IT connections. Preparations for 'Return to the Workplace' are underway.
The economic climate, the global steel market and related challenges for TSN continue to put pressure on industrial relations and maintaining a critical mass of engineers and other specialist functions.	The long-term success and competitiveness of steel making in the EU requires the ongoing partnership with trade bodies and continuance of beneficial industrial relations. Strong succession planning must be implemented to ensure continuity in the management of the complex challenges facing TSN. Strategic collaborations continue with technical universities and other relevant schools and talent programmes for graduates, functional trainees and apprentices to improve quality and retention. TS IJmuiden has a dedicated Training Academy ('Bedrijfsschool') to provide a pipeline of qualified technical employees.

Risks	Mitigating factors
Raw materials and energy	
TSN has limited access to captive iron ore and coal supplies. Therefore, access to and pricing of raw materials supplies depend, to a large extent, on worldwide supply and demand relationships, notably iron ore, metallurgical coal and scrap.	TSN maintains operations through strong supplier relationships and flexible sourcing. TSN continues to closely monitor market conditions and seek to put in place contractual arrangements to ensure security of critical supplies. TSN is working with suppliers to agree competitive prices and has agreed a range of pricing bases, whilst adjusting its commercial portfolio to maximise opportunities presented by moves to shorter term pricing. Exposure to energy shortages and price increases are mitigated by accelerating the implementation of initiatives to improve the Group's energy efficiency which include capital expenditure.
Performance and operations	
Even though steel margins have improved in Europe, there are ongoing challenges due to the overcapacity in Europe and the slowdown in China. The persistent overcapacity in Europe is expected to continue with demand forecast to increase by around 1% p.a. over the next 10 years.	Whilst TSN seeks to increase differentiated/premium business that is less dependent on market price movements, it still retains focus in IJmuiden on improving its operations, consistency, and taking measures to protect against unplanned interruptions and property damage. Best practices in asset management, enhancing technical knowledge and skills, improving process safety, targeted capital expenditure and focused risk management.
Asset integrity	
Aging assets have an increased risk for asset failures, potentially resulting in unplanned downtime and costs, loss of customers and orders due to inability to deliver quality products to time and increased safety risk profile. Selective capital and operational expenditure limitations restrict the repairs and replacements of our assets. Efficient management has reduced stock of spares and this potentially decreases the speed in which we can return the asset to operation.	Our priority at all times is health and safety: the Capital Expenditure process prioritizes Health, Safety and Environment spend, the remaining budget is available for essential replacement, strategic developments and other payback schemes. This is a risk based approach aligned to a common TSN risk appetite and ensures adequate investment to maintain business interruption insurance cover. Capital expenditure is an essential part of our mitigation strategy. Further mitigation is done by adequately following the maintenance process, as per the Journey to Reliability and adequately funding the maintenance budget, both in regular and corrective maintenance budgets as well as in risk based improvements.

Risks	Mitigating factors
Cyber Crime	
Recent Cyber Crime incidents indicate a focus of demanding ransom and/or blackmailing of larger companies worldwide. Cyber Crime could lead to business interruption and significant loss of assets.	The Tata Steel Europe Group has a dedicated team of IT security experts, which is continuously assessing and addressing potential risk. Use is made of specialised companies to regularly test the security of IT systems. In addition, Tata Steel Europe Group is increasing its resources to increase the security of its systems and networks.
Exchange rates	
TSN derives most of its revenue in the EU. Major raw material purchases are denominated mainly in US dollars. As a result, TSN is impacted by the relationship between the Euro and the US dollar. In general, a strengthening of the Euro reduces the Euro value of export revenues from the EU, it improves the relative competitiveness of steel producers in countries with weaker currencies enabling them to discount prices in the EU market, and it exposes customers to similar pressures leading to a reduction in demand for steel in the EU. In contrast, a strengthening of the Euro reduces the Euro cost of the raw materials, which are purchased predominantly in US dollars.	TSN operates a hedging policy to minimise the volatility of rapid and significant movements in these exchange rates. TSN is also actively diversifying its geographic customer base which helps mitigate dependence on particular currency zones.

Composition of the Board of Management

During FY20 the Board of Management was composed of Mr. Th.J. Henrar, Mr. J.E. van Dort and Mr. J. van den Berg. The Board will strive for equal representation with future appointments. On 18 May 2020 it was announced by TSE that Mr. Th. J. Henrar, Chairman of the Board of Management of TSN, would release his position per 1 June 2020 and leave the company as per 31 December 2020. The Board of Management would like to express its gratitude towards Mr. Henrar for his functioning as Chairman of the BoM for 12 years and the excellent way in which he represented the interest of the company, both internally and externally. A successor of Mr. Henrar has not yet been appointed. Mr. Van den Berg replaced Mr. Henrar as (acting) Chairman.

Prospects for 2020/21

Before the onset of the COVID-19 pandemic, the World Steel Association predicted that EU steel demand in 2020 was expected to recover slightly by 1.2% and that margins were expected to increase in the EU as demand recovers and supply is reduced. However, considering the effects of the COVID-19 pandemic, the Word Steel Association now predicts that EU steel demand will contract by 15.8% in 2020 before recovering by 10.4% in 2021.

Post balance sheet events

Industrial action and agreement with the Unions

On 10 June 2020 the unions started a series of relay strikes at the IJmuiden works, the first one after 28 years. Main drivers for this industrial action were uncertainty about jobs and the impact of the Transformation Programme on employment and organisation structure. After 25 days of strikes an agreement was reached with the Unions which was also supported by the CWC. Some key elements of this agreement are no forced redundancies and no outsourcing of activities related to the Transformation programme and an extension of the '*Werkgelegenheids Pact (WGP)*' and the *'Generatie Pact'* until 1 October 2026.

Securitisation programme

An invoice securitisation programme for Tata Steel IJmuiden BV is in place since August 2020.

Board of Management

J. van den Berg, Chairman

J.E. van Dort

IJmuiden, 25 August 2020

Consolidated income statement

For the financial year ended 31 March

	Note	2020 €m	2019 €m
Revenue	1	**4,709**	5,381
Operating costs	2	**(4,885)**	(5,133)
Operating (loss)/profit		**(176)**	248
Finance costs	5	**(9)**	(7)
Finance income	5	**7**	7
Share of post-tax profits/(losses) of joint ventures and associates	10(iii)	**3**	(3)
(Loss)/profit before taxation		**(175)**	245
Taxation	6	**50**	(68)
(Loss)/profit after taxation		**(125)**	177
Attributable to:			
Owners of the Company		**(125)**	176
Non-controlling interests		**-**	1

All references to 2020 in the Financial Statements, the Presentation of accounts and accounting policies and the related Notes 1 to 35 refer to the financial year ended 31 March 2020 or as at 31 March 2020 as appropriate (2019: the financial year ended 31 March 2019 or as at 31 March 2019).

Notes and related statements forming an integral part of these consolidated accounts appear on pages 24 to 57.

Consolidated statement of comprehensive income

For the financial year ended 31 March

	Note	2020 €m	2019 €m
(Loss)/profit after taxation		**(125)**	177
Items that will not be reclassified subsequently to profit or loss:			
Actuarial losses on defined benefit pension and other post-retirement plans	30	**(10)**	(14)
Items that may be reclassified subsequently to profit or loss:			
(Losses)/gains arising on cash flow hedges	20 (iv)	**(24)**	18
Exchange rate movements on currency net investments		**1**	3
Income tax relating to items that may be reclassified	20 (iv)	**6**	(5)
Other comprehensive (loss)/income for the year net of tax		**(27)**	2
Total comprehensive (loss)/income for the year		**(152)**	179
Attributable to:			
Owners of the Company		**(152)**	178
Non-controlling interests		**-**	1

Notes and related statements forming an integral part of these consolidated accounts appear on pages 24 to 57.

Consolidated balance sheet

As at 31 March	Note	2020 €m	2019 €m
Non-current assets			
Goodwill	7	**8**	8
Other intangible assets	8	**86**	100
Property, plant and equipment	9	**2,038**	1,920
Equity accounted investments	10	**42**	42
Other investments	11	**6**	7
Other non-current assets	12	**3**	3
Deferred tax assets	22	**64**	16
Non-current tax assets	14	**1**	2
		2,248	2,098
Current assets			
Inventories	13	**986**	995
Trade and other receivables	15	**964**	1,252
Current tax assets	14	**39**	27
Cash and short-term deposits	16	**49**	29
		2,038	2,303
TOTAL ASSETS		**4,286**	4,401
Current liabilities			
Borrowings	18	**(33)**	(29)
Trade and other payables	17	**(1,025)**	(1,048)
Current tax liabilities	14	**(142)**	(135)
Retirement benefit obligations	30	**(1)**	(6)
Provisions for liabilities and charges	21	**(73)**	(61)
		(1,274)	(1,279)
Non-current liabilities			
Borrowings	18	**(92)**	(61)
Deferred tax liabilities	22	**-**	(1)
Retirement benefit obligations	30	**(132)**	(124)
Provisions for liabilities and charges	21	**(120)**	(114)
Other non-current liabilities	19	**(2)**	(3)
Deferred income	23	**(4)**	(5)
		(350)	(308)
TOTAL LIABILITIES		**(1,624)**	(1,587)
NET ASSETS		**2,662**	2,814
Equity			
Called-up share capital	24	**388**	388
Share premium account		**17**	17
Other components of equity		**2,257**	2,409
Equity attributable to owners of the Company		**2,662**	2,814
Non-controlling interests		**-**	-
TOTAL EQUITY		**2,662**	2,814

Notes and related statements forming an integral part of these consolidated accounts appear on pages 24 to 57.

Consolidated statement of changes in equity

	Called-up share capital €m	Share premium account €m	Retained earnings €m	Hedging reserve €m	Translation reserves €m	Total €m	Non-controlling interests €m	Total equity €m
Balance as at 31 March 2018	**388**	**13**	**2,220**	**1**	**10**	**2,632**	**(1)**	**2,631**
Profit after taxation	-	-	176	-	-	**176**	**1**	**177**
Other comprehensive result for the year	-	-	(14)	13	3	**2**	**-**	**2**
Total comprehensive income for the year	-	-	162	13	3	**178**	**1**	**179**
Share premium contribution	-	4	-	-	-	**4**	**-**	**4**
Balance as at 31 March 2019	**388**	**17**	**2,382**	**14**	**13**	**2,814**	**-**	**2,814**
Loss after taxation	**-**	**-**	(125)	**-**	**-**	**(125)**	**-**	**(125)**
Other comprehensive result for the year	-	-	(10)	(18)	1	**(27)**	**-**	**(27)**
Total comprehensive result for the year	-	-	(135)	(18)	1	**(152)**	**-**	**(152)**
Balance as at 31 March 2020	**388**	**17**	**2,247**	**(4)**	**14**	**2,662**	**-**	**2,662**

Notes and related statements forming an integral part of these consolidated accounts appear on pages 24 to 57.

Consolidated statement of cash flows

For the financial year ended 31 March

	Note	2020 €m	2019 €m
Operating activities			
(Loss)/profit after taxation		**(125)**	177
Adjustments for:			
Tax	6	**(50)**	68
Profit on disposal of property, plant and equipment	2	**-**	(21)
Profit on disposal of group companies	31	**-**	(2)
Interest income	5	**(7)**	(7)
Interest expense	5	**9**	7
Share of results of joint ventures and associates	10(iii)	**(3)**	3
Depreciation and amortisation including impairments (net of grants released)	2	**260**	215
Movement in pension prepayments and provisions		**(9)**	9
Movement in insurance and other provisions		**4**	(8)
Movement in loose plant, tools and spares		**16**	11
Movement in inventories		**9**	16
Movement in receivables		**263**	(166)
Movement in payables		**(33)**	14
Rationalisation costs provided	21	**20**	2
Utilisation of rationalisation provisions	21	**(5)**	(2)
Cash generated from operations		**349**	316
Interest paid		**(4)**	(4)
Interest element of lease rental payments		**(5)**	(3)
Taxation paid		**-**	(28)
Net cash flow from operating activities		**340**	281
Investing activities			
Purchase of property, plant and equipment	9	**(300)**	(308)
Sale of property, plant and equipment	9	**4**	24
Purchase of other intangible assets	8	**(16)**	(25)
Disposal of subsidiaries	31	**-**	(4)
Dividends from joint ventures and associates	10	**3**	7
Interest received		**7**	7
Net cash flow used in investing activities		**(302)**	(299)
Financing activities			
Movement in loans to Group companies	29	**9**	(1)
Movement in loans from Group companies		**(4)**	6
Movements in other loans		**3**	2
Deposits		**-**	1
Proceeds from issue of equity		**-**	4
Capital element of lease rental payment	29	**(24)**	(5)
Net cash flow (used in)/from financing activities		**(16)**	7
Increase/(decrease) in cash and cash equivalents		**22**	(11)
Cash and cash equivalents at beginning of period		**22**	33
Cash and cash equivalents at end of period		**44**	22
Cash and cash equivalents consist of:			
Cash and short-term deposits	16	**49**	29
Bank overdrafts	18	**(5)**	(7)
		44	22

Notes and related statements forming an integral part of these consolidated accounts appear on pages 24 to 57.

Presentation of consolidated accounts and accounting policies

I Introduction

Tata Steel Nederland BV ('TSN') is based in IJmuiden, in the municipality of Velsen, the Netherlands, and forms part of the Tata Steel Group. The Chamber of Commerce number for the company is 34005278. The ultimate parent company is Tata Steel Limited ('TSL'), which is a company incorporated in India with shares listed on the BSE Ltd (formerly the Bombay Stock Exchange Ltd, Mumbai) and the National Stock Exchange of India, and with global depository receipts listed on the London and the Luxembourg Stock Exchanges. The shares of TSN are held by Tata Steel Netherlands Holdings BV ('TSNH').

TSN and its subsidiaries ('the Group') form an international steel group that manufactures, processes and distributes steel products.

The 2020 Annual Accounts of TSN were authorised for issue by the Board of Management on 25 August 2020.

II Basis of preparation

TSN is a private limited company incorporated in the Netherlands. The consolidated financial statements of the Group for the year ended 31 March 2020 comprise the Company and its subsidiaries and the Group's interest in its joint venture and associated undertakings.

The consolidated accounts have been prepared in accordance with International Financial Reporting Standards ('IFRS') as adopted by the European Union ('EU') and interpretations issued by the International Financial Reporting Interpretations Committee ('IFRIC'). IFRS as adopted by the EU differs in certain respects from IFRS as issued by the International Accounting Standards Board ('IASB'). However, the consolidated financial statements for the periods presented would not be materially different if the Company had applied IFRS as issued by the IASB. References to IFRS hereafter should be construed as references to IFRS as adopted by the EU. The functional and presentational currency of the Company is the Euro.

The financial statements also contain the separate accounts for the parent company, TSN. The accounts of the parent company are prepared in accordance with Part 9 of Book 2 of the Dutch Civil Code.

The financial statements for the parent company and Group have been prepared under the historical cost convention, unless otherwise stated.

The Group has prepared consolidated financial statements under the IFRS accounting policies set out below and these policies have been applied consistently to all the periods with the exception of comparatives relating to IAS 17 and IFRIC 4 leases in 2019 financial period not having been restated for the adoption of the new IFRS 16 Lease standard reporting requirements.

Going concern
In March 2020, the TSN Group first started to experience the negative effects of the global COVID-19 pandemic on the demand for its steel products. In particular the demand in its core automotive and engineering market sectors have reduced significantly, while the demand in the packaging market sector remains stable.

The Group has taken steps to respond to the consequences of these significant steel demand reductions with the objective to preserve liquidity and safeguard continuity of its companies:

- acquiring volumes of additional 'flex' sales, albeit at less attractive margins;
- implementing additional cost control measures;
- conserving cash by reducing or deferring spend including on capital expenditure projects;
- utilising available government support measures, in particular NOW and deferral of payroll tax payments;
- ensuring that production capabilities can be maintained and operated in a way compliant with governmental COVID-19 related instructions and guidance.

Nevertheless, the financial results in the first quarter of 2020/21 are severely impacted and the outlook for the remainder of 2020/21 remains uncertain. In this light, the Board has established that the Group and its subsidiaries have access to the following, funding arrangements:

- a €150m revolving credit facility which is fully committed by a consortium of banks and available up to March 2023. As per 31 July 2020, €42m of this facility was drawn;
- loan receivables from other Tata Steel Europe group companies amounting to €161m (31 March 2020: €200m) of which €50m is available on demand and €111m is available as from 7 August 2020 if and when needed. Repayment of these loan receivables is guaranteed by T S Global Holdings Pte Ltd ('TSGH'), which, as a subsidiary of Tata Steel Limited ('TSL'), holds and funds all its global investments outside of India;
- a €200m Debtor Securitisation arrangement which was concluded in August 2020.

At the time of this writing, these funding arrangements amount to €511m in total.

In addition, the Group also has a committed and undrawn intercompany loan facility with TSUKH and TSNH to an amount of €400m. Since other parts of the TSE Group suffer from similar problems as a result of the COVID-19 pandemic, for reasons of prudency we assume that these resources may not always be readily and on first demand, fully or in part, available to TSN.

Furthermore, TSE Limited and the operations of TSE Limited's material subsidiaries (including the TSN Group) are financed in part through working capital support provided by T S Global Procurement ('Proco'), a subsidiary of TSL, under arrangements which have been authorised, and are supported, by TSL. TSL has approved the continued provision of this working capital support by way of a non-binding letter of parental support.

Finally, the Policy for Surplus Cash that regulates the control of the Group's funds, remains in place till at least November 2021.

To estimate the Group's future funding requirements, the Board have considered a number of financial scenarios ranging in severity, depending on how quickly the general economy, and demand for steel, recover from the effects of the COVID-19 pandemic and recognising that the severity and length of the downturn in steel demand in Europe remains uncertain due to the unprecedented nature of the COVID-19 pandemic. Taking into account the availability of the aforementioned funding arrangements as of the date of these financial statements and for the 12 month period after this date, and also taking into account the earlier described measures the TSN Group has taken, despite the financial results being severely impacted with uncertainty over the remainder of the year, the Board is confident that sufficient liquidity remains available.

Therefore, the Board believes that it is appropriate for the Group to apply the going concern assumption as the underlying assumption for the preparation of the financial statements.

III New standards and interpretations applied

The following new International Accounting Standards ('IAS') and new IFRSs have been adopted in the current year:

		Effective Date*
IFRS 16	Leases	1 Jan 2019
IFRS 9 (Amendments)	Prepayment Features with Negative Compensation	1 Jan 2019
IAS 28 (Amendments)	Long-term Interests in Associates and Joint Ventures	1 Jan 2019
IAS 19 (Amendments)	Plan Amendment, Curtailment or Settlement	1 Jan 2019
IFRIC 23 (Revised Interpretation)	Uncertainty over Income Tax Treatments	1 Jan 2019
IFRS 3, IFRS 11, IAS 12 & IAS 23 (Amendments)	2015-2017 Annual Improvements cycle	1 Jan 2019

** periods commencing on or after*

IFRS 16 'Leases' replaces the provisions of IAS 17 'Leases' and IFRIC 4 'Determining whether an Arrangement Contains a Lease' and specifies how to recognise, measure, present and disclose leases. The standard provides a single lessee accounting model, requiring lessees to recognise assets and liabilities for all leases unless the lease term is 12 months or less or the underlying asset is of low value. IFRS 16 'Leases' is effective for annual periods that begin on or after 1 January 2019.

The Group has adopted IFRS 16 'Leases' from 1 April 2019 using the modified retrospective transition approach with right-of-use assets measured at an amount equal to the lease liability recognised at date of adoption. Comparatives for FY20 financial period have not been restated and continue to be reported under IAS 17 and IFRIC 4.

The Group recognised right-of-use assets of €54m and lease liabilities of €54m on adoption per 1 April 2019.

Transition approach and exemptions

The Group has chosen the following:

- Not to make use of the 'grandfather' practical expedient available on transition to IFRS 16, which requires the Group to reassess whether a contract is or contains a lease;
- Not to make use of the practical expedient in IFRS 16 to account for each lease component within the contract as a lease separately from non-lease components; and
- Make use of the practical expedient available to place reliance upon the assessment for onerous leases and transferring the provision currently recognised to impairment of right-of-use assets;

On application of IFRS 16, the Group has applied the following exemptions;

- Exclude short term leases (lease term of 12 months or less); and
- Exclude low-value assets (valued at less than £10,000, such as personal computers and office equipment).
- Exclude intangible assets.

Measurement of lease liabilities

	2020 **€m**
IAS 17 operating lease commitment as at 31 March 2019	101
Short-term leases recognised on a straight-line basis as expense	(2)
Adjustments as a result of a different treatment of extension and termination options	(6)
Adjustments relating to changes in the index or rate affecting variable payments*	(49)
Contracts recognised as leases on transition to IFRS 16 'Leases'	17
Undiscounted operating lease commitments as at 1 April 2019	**61**
Effect of discounting using the lessee's incremental borrowing rate as at 1 April 2019 of 3.3%	(7)
IFRS 16 lease liability as at 01 April 2019	**54**

The Amendments to the other Standards did not have a material impact on the TSN financial statements.

** The amount of €49 million contains a lease contract for which the variable lease payments have been excluded in the lease liability accounted for under IFRS 16.*

IV New standards and interpretations not applied

The International Accounting Standards Board ('IASB') has issued the following Standards, which are relevant to the Group's reporting but have either not been applied as they have not been adopted for use in the EU in the year ended 31 March 2020, or have an effective date after the date of these financial statements:

		Effective Date*
IAS 1 (Amendments)	Updated references to Conceptual Framework	1 Jan 2020
IAS 1 and IAS 8 (Amendments)	New Materiality definition	1 Jan 2020
IFRS 3 (Amendments)	Updated definition of a Business	1 Jan 2020
IFRS 7, IFRS 9 and IAS 39 (Amendments)	Interest rate benchmark reform	1 Jan 2020
IFRS 17	Insurance Contracts	1 Jan 2021

** periods commencing on or after*

Management have performed a review of the expected impact from other standards and interpretations not applied as shown above. Management do not expect a material impact as a result these new standards and interpretations not yet applied.

V Use of estimates and critical accounting judgements

In the application of the Group's accounting policies, which are described in section VI, the BoM are required to make judgements (other than those involving estimations) that have a significant impact on the amounts recognised and to make estimates and assumptions about the carrying amounts of assets and liabilities that are not readily apparent from other sources. The estimates and associated assumptions are based on historical experience and other factors that are considered to be relevant. Actual results may differ from these estimates.

The estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognised in the period in which the estimate is revised if the revision affects only that period, or in the period of revision and future periods if the revision affects both current and future periods.

Critical judgements in applying the Group's accounting policies

The BoM considers there are no critical judgements, apart from those involving estimations (which are presented separately below), that have been made in the process of applying the Group's accounting policies that have a significant effect on the amounts recognised in the financial statements.

Key sources of estimation uncertainty

The key assumptions concerning the future and other key sources of estimation uncertainty at the reporting period end that may have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year, are discussed below.

1) Provisions

Estimates in calculating provisions for environmental remediation, legal claims and employee benefits are based on previous experience and third party advice and are reassessed on a regular basis. Judgement is required in assessing the likely costs and the timing of these costs. Further details on the Group's provisions can be found in note 21.

2) Recognition of deferred tax assets

The recognition of deferred tax assets is subject to estimations of the future available taxable profits that the directors consider to be more likely than not to occur based on the Group's annual plans and future forecasts. Further information can be found in note 22.

3) Post-retirement benefits

The Group's retirement benefit obligations are assessed by selecting key assumptions. The selection of inflation, salary growth, and mortality rates are key sources of estimation uncertainty which could lead to a material adjustment in the defined benefit obligations within the next financial year. The Group sets these judgements with close reference to market conditions and third party actuarial advice.

The Group's defined benefit obligations are discounted at a rate set by reference to market yields at the end of the reporting period on high quality corporate bonds. The most significant criteria considered for the selection of bonds include the issue size of the corporate bonds, quality of the bonds and the identification of outliers which are excluded.

The detailed accounting policies for each of these areas, are outlined in section VI below.

VI Critical accounting policies

(a) Property, plant and equipment

Property, plant and equipment are recorded at original cost less accumulated depreciation and any recognised impairment loss, with the exception of land. Cost includes professional fees and, for assets constructed by the Group, any related works to the extent that these are directly attributable to the acquisition or construction of the asset. This includes borrowing costs capitalised in respect of qualifying assets in accordance with the Group's policy. Amounts incurred in connection with capital projects that are not directly attributable to bringing the asset to the location and condition necessary for it to be capable of operating in the manner intended (which the Group refers to as 'commissioning costs' and which include expenses such as initial operating losses incurred while technical deficiencies on new plant are rectified and incremental operating costs that are incurred while the new plant is operating at less than full capacity) are written off to profit and loss as incurred. Assets in the course of construction are depreciated from the date on which they are ready for their intended use.

The gain or loss arising on disposal of an asset is determined as the difference between the sale proceeds and the carrying amount of the asset, and is recognised in profit and loss.

Included in property, plant and equipment are loose plant and tools which are stated at cost less amounts written off related to their expected useful lives and estimated scrap value and also spares, against which impairment provisions are made where necessary to cover slow moving and obsolete items.

Subsequent costs are included in the carrying value of an asset when it is probable that additional future economic benefits will flow to the Group and the cost of the item can be measured reliably. All other repairs and renewals are charged to profit and loss as incurred.

(b) Depreciation, amortisation and impairment of property, plant and equipment and other intangible assets (including goodwill)

Depreciation or amortisation is provided so as to write off, on a straight-line basis, the cost of property, plant and equipment and other intangible assets, including Right of use assets, to their residual value. These charges are commenced from the dates the assets are available for their intended use and are spread over their estimated useful economic lives or, in the case of leased assets, over the lease period if shorter. The estimated useful lives of assets and residual values are reviewed regularly and, when necessary, revised. Accelerated depreciation or amortisation is provided where an asset is expected to become obsolete before the end of its normal useful life or if events or changes in circumstances indicate that an impairment loss needs to be recognised, as discussed below. No further charges are provided in respect of assets that are fully written down but are still in use.

The estimated useful lives for the main categories of property, plant and equipment and other intangible assets are:

		Life Years
Freehold and long leasehold buildings that house plant and other works buildings		25
Other freehold and long leasehold buildings		50
Plant and machinery:		
Iron and steelmaking	(maximum)	25
IT hardware and software	(maximum)	8
Office equipment and furniture		10
Motor vehicles		4
Other	(maximum)	15
Patents and trademarks		4
Product and process development costs		5

At each reporting period end, the Group reviews the carrying amounts of its property, plant and equipment and other intangible assets (including goodwill) to determine whether there is any indication that the carrying amount of those assets may not be recoverable through continuing use. If any such indication exists, the recoverable amount of the asset is reviewed in order to determine the extent of the impairment loss (if any). Where the asset does not generate cash flows that are independent from other assets, the Group estimates the recoverable amount of the Cash Generating Unit ('CGU') to which the asset belongs. Other intangible assets with indefinite useful lives are tested for impairment annually and whenever there is an indication that the asset may be impaired.

Recoverable amount is the higher of fair value less costs to sell and value in use. In assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate, based upon the Group's long term weighted average cost of capital ('WACC'), which also recognises the comparative WACCs of its European peers, with appropriate adjustments for the risks associated with the relevant units. If the recoverable amount of an asset (or CGU) is estimated to be less than its carrying amount, the carrying amount of the asset (or CGU) is reduced to its recoverable amount. An impairment loss is recognised as an expense immediately.

Where an impairment loss subsequently reverses, the carrying amount of the asset (or CGU) is increased to the revised estimate of its recoverable amount, but so that the increased carrying amount does not exceed the carrying amount that would have been determined had no impairment loss been recognised for the asset (or CGU) in prior years. A reversal of an impairment loss is recognised as income immediately, although impairments of goodwill are not subject to subsequent reversal.

(c) Taxation

The tax expense represents the sum of the tax currently payable and deferred tax.

The tax currently payable is based on taxable profit for the year. Taxable profit differs from net profit as reported in the income statement because it excludes items of income or expense that are taxable or deductible in other years and it further excludes items that are never taxable or deductible.

Deferred tax is the tax expected to be payable or recoverable on differences between the carrying amounts of assets and liabilities in the financial statements and the corresponding tax bases used in the computation of taxable profit, and is accounted for using the balance sheet liability method. Deferred tax liabilities are generally recognised for all taxable temporary differences. In contrast, deferred tax assets are only recognised to the extent that it is probable that future taxable profits will be available against which the temporary differences can be utilised. Liabilities are not recognised for taxable temporary differences arising on investments in subsidiaries, joint ventures and associates where the Group is able to control the reversal of the temporary difference and it is probable that the temporary difference will not reverse in the foreseeable future.

Both current and deferred tax items are calculated using the tax rates that are expected to apply in the period when the liability is settled or the asset is realised. This means using tax rates that have been enacted or substantially enacted by the end of the reporting period. Deferred tax is charged or credited in the income statement, except when it relates to items charged or credited directly to equity, in which case the deferred tax is also dealt with in equity.

Deferred tax assets and liabilities are offset to the extent that they relate to taxes levied by the same tax authority and they are in the same taxable entity, or a group of taxable entities where the tax losses of one entity are used to offset the taxable profits of another and there are legally enforceable rights to set off current tax assets and current tax liabilities within that jurisdiction.

(d) Retirement benefit costs

The group operates a number of defined benefit and a number of defined contribution pension plans for its employees. Payments to defined contribution retirement benefit schemes are charged as an expense as they fall due.

For defined benefit retirement schemes the cost of providing benefits is determined using the Projected Unit Credit Method, with actuarial valuations being carried out at each reporting period end. The Group applies IAS 19 'Employee Benefits' to recognise all actuarial gains and losses directly within retained earnings, presenting those arising in any one reporting period as part of the relevant statement of comprehensive income. In applying IAS 19, in relation to retirement benefits costs, the current service cost and net interest cost have been treated as a net expense within employment costs.
Past service cost is recognised immediately to the extent that the benefits are already vested, and otherwise is amortised on a straight-line basis over the average period until the benefits become vested.

The retirement benefit liability recognised in the balance sheet represents the fair value of scheme assets less the present value of the defined benefit obligation as adjusted for unrecognised past service cost. Any asset resulting from this calculation is limited to unrecognised past service cost, plus the present value of available refunds and reductions in future contributions to the plan.

(e) Provisions

Provisions for rationalisation and related measures, environmental remediation and legal claims are recognised when the Group has a present legal or constructive obligation as a result of past events, it is more likely than not that an outflow of resources will be required to settle the obligation, and the amount can be reliably estimated. This involves a series of management judgements and estimates that are based on past experience of similar events and third party advice where applicable. Where appropriate and relevant those provisions are discounted to take into consideration the time value of money.

In particular, redundancy provisions are made where the plans are sufficiently detailed and well advanced, and where appropriate communication to those affected has been made at the end of the reporting period. These provisions also include charges for any termination costs arising from enhancement of retirement or other post-employment benefits for those employees affected by these plans.

Provisions are also created for long term employee benefits that depend on the length of service, such as long service and sabbatical awards, disability benefits and long term compensated absences such as sick leave. The amount recognised as a liability is the present value of benefit obligations at the end of the reporting period, and all movements in the provision (including actuarial gains and losses or past service costs) are recognised immediately within profit and loss.

TSN participates in the EU Emissions Trading Scheme, initially measuring any rights received or purchased at cost, and recognises a liability in relation to carbon dioxide allowances if there is any anticipated shortfall in the level of allowances received or purchased when compared with actual emissions in a given period. Any surplus is only recognised once it is realised in the form of an external sale.

VII Other accounting policies

(a) Basis of consolidation

The consolidated income statement, statement of comprehensive income, balance sheet, statement of changes in equity and statement of cash flows include the Company and its subsidiaries. They also include the Group's share of the profits, net assets and retained post acquisition reserves of joint ventures and associates that are consolidated using the equity method of consolidation.

The profits or losses of subsidiaries, joint ventures and associates acquired or sold during the period are included from the date of acquisition or up to the date of their disposal. All intra-group transactions, balances, income and expenses are eliminated on consolidation, including unrealised profits on such transactions.

(b) Business combinations

On the acquisition of a subsidiary, joint venture or associate, fair values are attributed to the net assets acquired. Any excess of the fair value of consideration given (including the fair value of any contingent consideration) over the fair values of the Group's share of the identifiable net assets acquired is treated as goodwill. The costs of acquisition are charged to profit and loss in the period in which they are incurred. If the fair value of the net assets acquired exceeds the fair value of consideration then these fair values are reassessed before taking the remainder as a credit to profit and loss in the period of acquisition.

Goodwill is recognised as an asset. Although it is not amortised, it is reviewed for impairment annually and whenever there is a possible indicator. Any impairment is recognised immediately in profit and loss and cannot subsequently be reversed. On disposal of a subsidiary, joint venture or associate any residual amount of goodwill is included in the determination of the profit or loss on disposal.

Where an acquisition is achieved in stages, upon obtaining control the previously held equity interest is reassessed at fair value and any resulting gain or loss is recognised in profit and loss.

The Group has applied IFRS 3 (Revised) 'Business Combinations' to business combinations after 1 April 2010. The accounting for business combinations transacted prior to this date has not been restated.

(c) Revenue

The Group's revenue is primarily derived from the single performance obligation to transfer steel products under arrangements in which the transfer of control of the products and the fulfilment of the Group's performance obligation occur at the same time. Revenue from the sale of goods is recognised when the Group has transferred control of the goods to the buyer and the buyer obtains the benefits from the goods, the potential cash flows and the amount of revenue (the transaction price) can be measured reliably, and it is probable that the Group will collect the consideration to which it is entitled to in exchange for the goods.

(i) Sale of goods
The group manufactures and sells a range of steel products. Sales are recognised when control of the products has transferred, being when the products are delivered to the customer. Delivery occurs when the products have been shipped to the specific location, the risks of obsolescence and loss have been transferred, and either the customer has accepted the products in accordance with the sales contract, or the group has objective evidence that all criteria for acceptance have been satisfied.

The steel is often sold with volume discounts based on aggregate sales over a 12 month period. Revenue from these sales is recognised based on the price specified in the contract, net of the estimated volume discounts. Accumulated experience is used to estimate and provide for the discounts, using the expected value method, and revenue is only recognised to the extent that it is highly probable that a significant reversal will not occur.
A contract liability is recognised for expected volume discounts payable to customers in relation to sales made until the end of the reporting period. No element of financing is deemed present as the sales are made with a credit term of 60 days, which is consistent with market practice. Any obligation to provide a refund is recognised as a provision.
A receivable is recognised when the goods are delivered as this is the point in time that the consideration is unconditional because only the passage of time is required before the payment is due.

The group does not have any contracts where the period between the transfer of the promised goods or services to the customer and payment by the customer exceeds one year. As a consequence, the group does not adjust any of the transaction prices for the time value of money.

(ii) Rendering of services
In addition to the sale of steel, the group provides the following post-sale services which have been identified as distinct performance obligation under IFRS 15:

1) Bill and Hold Arrangements
A bill and hold arrangement arises when a customer is invoiced for steel that are ready for delivery but are not shipped to the customer until a later date. These sales are recognised when the following criteria are met:

a. the reason for the bill-and-hold arrangement must be substantive (for example, the customer has requested the arrangement);
b. the product must be identified separately as belonging to the customer;
c. the product currently must be ready for physical transfer to the customer; and
d. the entity cannot have the ability to use the product or to direct it to another customer.

Any significant custodial element included in the sales price should be separately recognised over the term of the holding period. On assessment of this requirement, TSN has noted that the effect was immaterial and no adjustment is required.

2) Shipping and Handling Activity
Some shipping arrangements result in TSN incurring the costs to deliver goods to the named port of destination (which include insurance and freight) which are considered to be distinct performance obligations under IFRS 15 as control of the goods passes at the port of shipment but the seller still has a separate obligation to arrange and pay for the freight and/or insurance to the port of destination.
The majority of steel supply contracts will include charges in relation to shipping and handling. There may be a separate fee for shipping and handling costs or shipping and handling might be implicit in the price per ton of the product.

The estimated impact of the deferral of shipping revenue is immaterial to warrant the business to make a regular adjustment in respect of this.

(d) Government grants
Grants related to expenditure on property, plant and equipment are credited to profit and loss over the useful lives of qualifying assets. Grants related to revenue are credited to the income statement in line with the timing of when costs associated with the grants are incurred. Total grants received less the amounts credited to profit and loss at the end of the reporting period are included in the balance sheet as deferred income.

(e) Insurance
Most of TSN's insurances are arranged by Tata Steel Europe ('TSE'). Insurance premiums in respect of those insurances placed by TSE on behalf of TSN and those arranged directly by TSN with insurers are charged to the income statement in the period to which they relate.

(f) Financing items
Interest income is accrued on a time basis, by reference to the principal outstanding and at the effective interest rate applicable.

Interest expense, excluding that related to financing the construction of qualifying property, plant and equipment is expensed as incurred. Dividend income is recognised when the right to receive payment is established.

(g) Foreign currencies
Monetary assets and liabilities in foreign currencies are translated into euros at the quoted rates of exchange ruling at the end of each reporting period. Income statement items and cash flows are translated into euros at the average rates for the financial period. In order to hedge its exposure to certain foreign exchange transaction risks, the Group enters into forward contracts and options (see (h) below for details of the Group's accounting policies in respect of such derivative financial instruments). In preparing the financial statements of the individual companies, transactions in currencies other than the entity's functional currency are recognised at the rates of exchange prevailing on the dates of the transactions.

Exchange differences on the retranslation of the opening net investment in foreign enterprises and the retranslation of profit and loss items from average to closing rate are recorded as movements on reserves. Such cumulative exchange differences are transferred to profit and loss on subsequent disposals of the foreign enterprise and for other substantial reductions in capital in these enterprises during the period.

Under IAS 21, cumulative translation differences on the consolidation of subsidiaries are only being accumulated for each individual subsidiary from the date of acquisition.

Goodwill and fair value adjustments arising on the acquisition of a foreign entity are treated as assets and liabilities of the foreign entity and translated at the closing rate.

(h) Financial instruments

Financial assets and financial liabilities are recognised on the Group's balance sheet when the Group becomes a party to the contractual provisions of the instrument.

Financial assets and financial liabilities are initially measured at fair value. The detailed accounting treatment for such items can differ, as described in the following sections:

(i) Financial assets

All regular way purchases or sales of financial assets are recognised and derecognised on a trade date basis. Regular way purchases or sales are purchases or sales of financial assets that require delivery of assets within the time frame established by regulation or convention in the marketplace.

All recognised financial assets are measured subsequently in their entirety at either amortised cost or fair value, depending on the classification of the financial assets.

Classification of financial assets

Debt instruments that meet the following conditions are measured subsequently at amortised cost:

- the financial asset is held within a business model whose objective is to hold financial assets in order to collect contractual cash flows; and
- the contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

Debt instruments that meet the following conditions are measured subsequently at fair value through other comprehensive income ('FVTOCI'):

- the financial asset is held within a business model whose objective is achieved by both collecting contractual cash flows and selling the financial assets; and
- the contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

By default, all other financial assets are measured subsequently at fair value through profit or loss ('FVTPL').

(ii) Impairment of financial assets

The Group recognises a loss allowance for Expected Credit Losses ('ECL') on investments in debt instruments that are measured at amortised cost or at FVTOCI, lease receivables, trade receivables and contract assets. The amount of expected credit losses is updated at each reporting date to reflect changes in credit risk since initial recognition of the respective financial instrument.

The Group always recognises lifetime ECL for trade receivables, contract assets and lease receivables.

For all other financial instruments and in the case of the company intercompany receivables, the Group recognises lifetime ECL when there has been a significant increase in credit risk since initial recognition. However, if the credit risk on the financial instrument has not increased significantly since initial recognition, the Group measures the loss allowance for that financial instrument at an amount equal to 12 months of ECLs.

The measurement of expected credit losses is a function of the probability of default, loss given default (i.e. the magnitude of the loss if there is a default) and the exposure at default. The assessment of the probability of default and loss given default is based on historical data adjusted by forward-looking information.

(iii) Financial liabilities

All financial liabilities are measured subsequently at amortised cost using the effective interest method or at FVTPL.

Financial liabilities are classified as at FVTPL when the financial liability is (i) contingent consideration of an acquirer in a business combination, (ii) held for trading or (iii) it is designated as at FVTPL.

Financial liabilities at FVTPL are measured at fair value, with any gains or losses arising on changes in fair value recognised in profit or loss to the extent that they are not part of a designated hedging relationship (see Hedge accounting policy). The net gain or loss recognised in profit or loss incorporates any interest paid on the financial liability and is included in profit or loss.

Financial liabilities that are not (i) contingent consideration of an acquirer in a business combination, (ii) held-for-trading, or (iii) designated as at FVTPL, are measured subsequently at amortised cost using the effective interest method.

(iv) Derivative financial instruments and hedge accounting

In the ordinary course of business the Group uses certain derivative financial instruments to reduce business risks which arise from its exposure to foreign exchange, base metal prices and interest rate fluctuations. The instruments are confined principally to forward foreign exchange contracts, forward rate agreements, interest rate swaps and London Metal Exchange ('LME') contracts. The instruments are employed as economic hedges of transactions included in the accounts or forecast for firm contractual commitments. Contracts do not generally extend beyond 6 months, except for certain interest rate swaps and commodity contracts.

Derivatives are initially accounted for and measured at fair value from the date the derivative contract is taken out. Following this, at each subsequent reporting period end the derivative is re-measured at its current fair value. For forward currency contracts, interest rate swaps and commodity contracts the fair values are determined based on market forward rates at the end of the reporting period. The Group seeks to adopt hedge accounting for these currency, interest rate and commodity contracts. At inception of the hedge relationship, the group documents the economic relationship between hedging instruments and hedged items including whether changes in the cash flows of the hedging instruments are expected to offset changes in the cash flows of hedged items. This documentation includes, inter alia, items such as identification of the hedged item or transaction and the nature of the risk being hedged. At inception each hedge is expected to be highly effective in achieving an offset of changes in fair value or cash flows attributable to the hedged risk. The methodology of testing the effectiveness and the reliability of this approach for testing is also considered and documented at inception. This effectiveness is assessed on an ongoing basis throughout the life cycle of the hedging relationship. In particular, only forecast transactions that are highly probable are subject to cash flow hedges. Changes in the fair value of derivative financial instruments that are designated and effective as hedges of future cash flows are recognised directly in equity and the ineffective portion is recognised immediately in profit and loss. If the cash flow hedge of a firm commitment or forecasted transaction results in the recognition of a non-financial asset or liability, then, at the time the asset or liability is recognised, the associated gains or losses on the derivative that had previously been recognised in equity are included in the initial measurement of the asset or liability. For hedges that do not result in the recognition of a non-financial asset or a liability, amounts deferred in equity are recognised in profit and loss in the same period in which the hedged item affects profit and loss.

For an effective hedge of an exposure to changes in fair value, the hedged item is adjusted for changes attributable to the risk being hedged with the corresponding entry in profit and loss. Gains or losses from re-measuring the associated derivative are also recognised in profit and loss.

Changes in the fair value of derivative financial instruments that do not qualify for hedge accounting are recognised in profit and loss as they arise.

Hedge accounting is discontinued when the hedging instrument expires or is sold, terminated, exercised or no longer qualifies for hedge accounting. At that time, any cumulative gain or loss on the hedging instrument recognised in equity is retained in equity until the forecasted transaction occurs. If a hedged transaction is no longer expected to occur, the net cumulative gain or loss recognised in equity is reclassified to net profit or loss for the period.

(v) Embedded derivatives

An embedded derivative is a component of a hybrid contract that also includes a non-derivative host with the effect that some of the cash flows of the combined instrument vary in a way similar to a stand-alone derivative.

Derivatives embedded in hybrid contracts with a financial asset host within the scope of IFRS 9 are not separated. The entire hybrid contract is classified and subsequently measured as either amortised cost or fair value as appropriate.

Derivatives embedded in hybrid contracts with hosts that are not financial assets within the scope of IFRS 9 (e.g. financial liabilities) are treated as separate derivatives when they meet the definition of a derivative, their risks and characteristics are not closely related to those of the host contracts and the host contracts are not measured at FVTPL.

If the hybrid contract is a quoted financial liability, instead of separating the embedded derivative, the Group generally designates the whole hybrid contract at FVTPL.

An embedded derivative is presented as a non-current asset or non-current liability if the remaining maturity of the hybrid instrument to which the embedded derivative relates is more than 12 months and is not expected to be realised or settled within 12 months.

(i) Other intangible assets

Patents, trademarks and software are included in the balance sheet as intangible assets where they are clearly linked to long term economic benefits for the Group. In this case they are measured initially at fair value on acquisition or purchase cost and then amortised on a straight-line basis over their estimated useful lives. All other costs on patents, trademarks and software are expensed in profit and loss as incurred.

Expenditure on research activities is recognised as an expense in the period in which it is incurred. Costs incurred on individual development projects are recognised as intangible assets from the date that all of the following conditions are met:

(i) completion of the development is technically feasible;
(ii) it is the intention to complete the intangible asset and use or sell it;
(iii) it is clear that the intangible asset will generate probable future economic benefits;
(iv) adequate technical, financial and other resources to complete the development and to use or sell the intangible asset are available; and
(v) it is possible to reliably measure the expenditure attributable to the intangible asset during its development.

Costs are no longer recognised as an asset when the project is complete and available for its intended use, or if these criteria no longer apply. The approach to amortisation and impairment of other intangible assets is described in section VI (b) above.

Where development activities do not meet the conditions for recognition as an asset, any associated expenditure is treated as an expense in the period in which it is incurred.

(j) Leases

As a lessee, the Group assesses if a contract is or contains a lease at the inception of the contract. A contract is or contains a lease if it conveys the right to control the use of an identified asset for a period of time in exchange for consideration.

The Group recognises a right-of-use asset and a lease liability at the commencement date, except for short-term leases of twelve months or less, leases for which the underlying asset is low value and leases of intangible assets, which are expensed in the consolidated income statement on a straight-line basis over the lease term.

The lease liability is initially measured at the present value of the lease payments that are not paid at that date, discounted using the interest rate implicit in the lease, if that rate can be readily determined. If that rate cannot be readily determined, the Group uses the incremental borrowing rate.

Lease payments can include fixed payments, variable payments that depend on an index or rate known at the commencement date and extension options, if the Group is reasonable certain to exercise the option. Lease liabilities are classified as part of borrowings.

The associated right-of-use asset is capitalised equal to the lease liability and disclosed together with property, plant and equipment. The right-of-use asset is subsequently depreciated on a straight-line basis over the lease term. Right-of-use assets are also subject to testing for impairment if there is an indicator for impairment.

Variable lease payments not included in the measurement of the lease liabilities are expensed in the consolidated income statement in the period in which the events or conditions which trigger those payments occur.

(k) Joint ventures, joint operations and associates

The results and assets and liabilities of joint ventures and associates are incorporated in the accounts using the equity method of accounting, except where classified as held for sale (see section (l) below).

Investments in joint ventures and associates are initially measured at cost. Any excess of the cost of acquisition over the Group's share of the fair values of the identifiable net assets acquired, being goodwill, is included within the carrying value of the joint venture or associate and is subsequently tested for impairment on an annual basis.

Any deficiency of the cost of acquisition below the Group's share of the fair values of the identifiable net assets acquired is credited to profit or loss in the period of acquisition. The Group's share of post-acquisition profits and losses is recognised in profit and loss, and its share of post-acquisition movement in reserves are recognised directly in reserves. Losses of associates in excess of the Group's interest in those associates are not recognised, unless the Group has incurred obligations or made payments on behalf of the associate.

Unrealised gains on transactions with joint ventures or associates are eliminated to the extent of the Group's interest in those entities and, where material, the results of joint ventures and associates are modified to conform to the Group's policies.

A joint operation is a joint arrangement whereby the parties that have joint control of the arrangement have rights to the assets and obligations for the liabilities relating to the arrangement. Joint operations are accounted for by recognising the share of assets, liabilities, expenses and income relating to the joint operation.

(l) Non-current assets held for sale and discontinued operations

Non-current assets and disposal groups classified as held for sale are measured at the lower of their carrying amount and fair value less costs to sell. Assets and disposal groups are classified as held for sale if their carrying amount will be recovered through a sale transaction rather than through continuing use. This condition is only met when the sale is highly probable and the asset, or disposal group, is available for immediate sale in its present condition and is marketed for sale at a price that is reasonable in relation to its current fair value. The Group must also be committed to the sale, which should be expected to qualify for recognition as a completed sale within one year from the date of classification.

Where a disposal group represents a separate major line of business or geographical area of operations, or is part of a single coordinated plan to dispose of a separate major line of business or geographical area of operations, then it is treated as a discontinued operation. The post-tax profit or loss of this discontinued operation together with the gain or loss recognised on its disposal are disclosed as a single amount on the face of the income statement, with all prior periods being presented on this basis.

(m) Inventories

Inventories of raw materials are valued at the lower of cost and net realisable value. Cost is generally determined using the weighted average cost method. Inventories of partly processed materials, finished products and stores are individually valued at the lower of cost and net realisable value. Cost comprises direct materials and, where applicable, direct labour costs and those overheads that have been incurred in bringing the inventories to their present location and condition. Net realisable value is the price at which the inventories can be realised in the normal course of business after allowing for the cost of conversion from their existing state to a finished condition and for the cost of marketing, selling and distribution. Provisions are made to cover slow moving and obsolete items based on historical experience of utilisation on a product category basis, which involves individual businesses considering their local product lines and market conditions.

(n) Cash and cash equivalents

Cash and cash equivalents includes cash in hand, deposits held at call with banks, other short term highly liquid investments with original maturities of three months or less, and bank overdrafts. Bank overdrafts are shown within borrowings in current liabilities on the balance sheet.

(o) Equity

Share capital: Ordinary shares are classified as equity.

Dividend distribution to the Company's shareholders is recognised as a liability in the Company's annual accounts in the period in which the dividends are approved by the Company's shareholders. Where dividends are paid in kind the asset transferred is measured at fair value and any difference between the fair value and the carrying value of the asset is recognised in the income statement.

(p) Cash flow statement

The Cash flow statement has been prepared using the indirect method. Cash flows in foreign currencies have been translated into euros using average exchange rates, approximating the foreign exchange rate at transaction date. Exchange rate differences on cash items are shown separately in the Cash flow statement.
Receipts and payments with respect to income tax and interest are included in the Cash flows from operating activities. The cost of acquisition of subsidiaries, associates and joint ventures, and other investments, insofar as it was paid for in cash, is included in Cash flows from investing activities. Acquisitions or divestments of subsidiaries are presented net of cash balances acquired or disposed of, respectively. Cash flows from derivatives are recognized in the Cash flow statement in the same category as those of the hedged item.

Notes to the consolidated accounts

1. Revenue

	2020 €m	2019 €m
Revenue by destination:		
The Netherlands	**716**	795
Europe excluding the Netherlands	**3,087**	3,535
North America	**547**	689
Rest of the world	**359**	362
	4,709	5,381

2. Operating costs

	2020 €m	2019 €m
Costs by type:		
Raw materials and consumables	**2,380**	2,555
Maintenance costs (excluding own labour)	**337**	356
Other external charges (including fuels and utilities, hire charges and carriage costs)	**567**	652
Employment costs (Note 4)	**1,017**	1,027
Depreciation, amortisation and impairments (Note 8 and 9)	**260**	217
Regional development and other grants released (Note 23)	**(1)**	(2)
Other operating items (including rents, rates, insurance and general expenses)	**331**	376
Changes in inventory of finished goods and work in progress	**39**	23
Own work capitalised	**(45)**	(48)
Profit/(Loss) on disposal of property, plant and equipment	**-**	(21)
Profit/(Loss) on disposal of group companies (Note 31)	**-**	(2)
	4,885	5,133

The above costs include €55m in respect of restructuring and impairment which relate to Employment costs (€18m), Depreciation and amortisation (€35m) and Other operating items (€2m). Further analysis of restructuring and impairment costs is presented in Note 3.

	2020 €m	2019 €m
The above costs are stated after including:		
Amortisation of other intangible fixed assets (Note 8)	**11**	10
Impairment losses related to other intangible fixed assets (Note 3)	**-**	1
Impairment losses related to property, plant and equipment (Note 3)	**35**	5
Depreciation of owned assets (Note 9)	**196**	196
Depreciation of leased assets (Note 9)	**19**	5
Short term lease costs	**2**	-
Low value lease costs	**1**	-
Variable lease costs	**15**	-
Costs of research and development (gross)	**57**	71
Recoveries on research and development	**(3)**	(3)
Impairments against trade receivables (Note 15(ii))	**2**	2
Net exchange rate results	**(1)**	(17)
Emission rights costs	**52**	22

The Group recognised €16m depreciation of right of use assets as a result of the adoption of IFRS 16 ‘Leases’ during 2020.

3. Restructuring and impairment costs

	2020 €m	2019 €m
Provision for restructuring and related measures:		
Redundancy and related costs (Note 4)	**18**	2
Impairment losses related to other intangible assets (Note 8)	**-**	1
Impairment losses related to property, plant and equipment (Note 9)	**35**	5
Other rationalisation costs	**2**	-
	55	8

4. Employees

	2020 €m	2019 €m
The total employment costs of all employees (including directors) in the Group were:		
Wages and salaries	**780**	807
Social security costs	**123**	121
Pension costs (Note 30)	**96**	97
Redundancy and related costs (Note 3 and 21)	**18**	2
	1,017	1,027

The average number of the Group's employees during the year was 11,643 (2019: 11,493). The analysis by business area and by country was:

	2020	2019		2020	2019
Strip Product Main Land Europe	**7,564**	7,361	The Netherlands	**9,573**	9,364
Speciality Businesses	**3,156**	3,163	France	**730**	736
Distribution & Sales Network	**418**	448	Germany	**699**	735
Corporate	**505**	521	Other	**641**	658

Other pension costs can be further analysed as follows:

	2020 €m	2019 €m
Defined benefit schemes (Note 30)	**1**	7
Defined contribution schemes (Note 30)	**95**	90
	96	97

5. Financing items

	2020 €m	2019 €m
Interest expense:		
Bank and other borrowings	**(4)**	(4)
Leases	**(5)**	(3)
Finance costs	**(9)**	(7)
Interest income:		
From Group companies	**7**	7
Finance income	**7**	7
	(2)	-

The Group recognised €2m interest expense on leases as a result of adoption of IFRS 16 'Leases' during 2020.

6. Taxation

	2020 €m	2019 €m
Dutch corporation tax	**(28)**	71
Dutch prior year corporation tax	**21**	(10)
Other corporation tax	**(2)**	2
Other prior year corporation tax	**2**	5
Current tax	**(7)**	68
Dutch deferred tax	**(42)**	-
Other deferred tax	**(1)**	-
Taxation	**(50)**	68

In addition to the total taxation charged to the income statement, an amount of €6m has been credited in other comprehensive income in the year (2019: a charge of €5m).

The total charge for the year can be reconciled to the accounting profit as follows:

	2020 €m	2019 €m
(Loss)/profit before taxation	**(175)**	245
(Loss)/profit before taxation multiplied by the applicable corporation tax rate of 25.73% (2019: 24.94%)	**(45)**	61
Effects of:		
Adjustments to current tax in respect of prior periods	**19**	(5)
Adjustments to deferred tax in respect of prior periods	**(26)**	-
Change in tax rates(i)	**(2)**	-
Changes in unrecognised losses and other tax benefits	**10**	13
Other differences	**(6)**	(1)
Total taxation	**(50)**	68

(i) €2m credit relates to the deferred tax impact of the increase in the future Dutch corporate income tax rate from 20.5% to 21.7% effective from 1 January 2021.

The applicable corporation tax rate of 25.73% for 2020 is the average tax rate weighted in proportion to the accounting (losses)/profits earned in each geographical area.

7. Goodwill

	2020 €m	2019 €m
Net book value	**8**	8

Goodwill acquired in a business combination is allocated, at acquisition, to the cash generating units that are expected to benefit from that combination. TSN tests goodwill annually for impairment, or more frequently if there are any indications that goodwill might be impaired. In addition, property, plant and equipment (included within note 9) is tested for impairment where there are indicators of impairment.

The outcome of the Group's goodwill impairment test as at 31 March 2020 resulted in no impairment of goodwill (2019: no impairment).

8. Other intangible assets

2020	Computer software €m	Development costs €m	Patents and trademarks €m	Emission Rights €m	**Total €m**
Cost at beginning of period	120	39	1	23	**183**
Additions	15	-	-	-	**15**
Utilisation	-	-	-	(18)	**(18)**
Cost at end of period	135	39	1	5	**180**
Amortisation at beginning of period	47	35	1	-	**83**
Charge for the period	8	3	-	-	**11**
Amortisation at end of the period	55	38	1	-	**94**
Net book value at end of the period	80	1	-	5	**86**

2019	Computer software €m	Development costs €m	Patents and trademarks €m	Emission Rights €m	**Total €m**
Cost at beginning of period	96	39	1	42	**178**
Additions	25	-	-	-	**25**
Exchange rate differences	1	-	-	-	**1**
Disposal of group companies	(2)	-	-	-	**(2)**
Disposals	-	-	-	(19)	**(19)**
Cost at end of period	120	39	1	23	**183**
Amortisation at beginning of period	41	31	1	-	**73**
Charge for the period	6	4	-	-	**10**
Impairment charge for the period	1	-	-	-	**1**
Exchange rate differences	1	-	-	-	**1**
Disposal of group companies	(2)	-	-	-	**(2)**
Amortisation at end of the period	47	35	1	-	**83**
Net book value at end of the period	73	4	-	23	**100**

The remaining amortisation period for development costs is less than 1 year (2019: 1 year).

9. Property, plant and equipment

2020	Land and buildings €m	Plant and machinery €m	Assets under construction €m	**Total €m**
Cost or valuation as at 31 March 2019	1,153	6,858	477	**8,488**
Adoption of IFRS 16	23	31	-	**54**
Cost or valuation as at 1 April 2019	1,176	6,889	477	**8,542**
Additions	2	83	248	**333**
Exchange rate movements	1	6	-	**7**
Transfers to/(from) assets under construction	(3)	139	(136)	**-**
Disposals	(1)	(60)	-	**(61)**
Cost or valuation at end of period	1,175	7,057	589	**8,821**
Depreciation at the beginning of period	897	5,671	-	**6,568**
Charge for the period	20	195	-	**215**
Impairment charge for the period	-	32	2	**34**
Exchange rate movements	2	4	-	**6**
Disposals	-	(40)	-	**(40)**
Depreciation at end of period	919	5,862	2	**6,783**
Net book value at end of period	256	1,195	587	**2,038**

2019	Land and buildings €m	Plant and machinery €m	Assets under construction €m	**Total €m**
Cost or valuation at beginning of period	1,095	6,623	515	**8,233**
Additions	-	75	249	**324**
Exchange rate movements	3	14	-	**17**
Transfers to/(from) assets under construction	66	221	(287)	**-**
Disposals	-	(53)	-	**(53)**
Disposal of group companies	(11)	(22)	-	**(33)**
Cost or valuation at end of period	1,153	6,858	477	**8,488**
Depreciation at beginning of period	888	5,508	21	**6,417**
Charge for the period	17	184	-	**201**
Impairment charge for the period	-	5	-	**5**
Exchange rate movements	3	12	-	**15**
Transfers to/(from) assets under construction	-	21	(21)	**-**
Disposals	-	(38)	-	**(38)**
Disposal of group companies	(11)	(21)	-	**(32)**
Depreciation at end of period	897	5,671	-	**6,568**
Net book value at end of period	256	1,187	477	**1,920**

There were no borrowing costs capitalised during the year (2019: nil).

Consistent with the annual test for impairment of goodwill as at 31 March 2020 (see note 7) property, plant and equipment was also tested for impairment at that date where indicators of impairment existed with the recoverable amount determined using a value in use calculation. The calculation uses cash flow forecasts based on the most recently approved financial budgets and strategic forecasts which cover a period of three years, future projections taking the analysis out to 15 years and terminal values where applicable. Key assumptions for the value in use calculation are those regarding expected changes to selling prices and raw material costs, EU steel demand, business disruption caused by the Covid-19 pandemic and the ability of the entity to realise significant savings from approved internal efficiency and improvement programmes currently being implemented, and a discount rate of 8.0% (2019: 8.2%). Changes in selling prices, raw material costs and EU steel demand are based on expectations of future changes in the steel market based on external market sources. Forecast savings from approved internal efficiency and improvement programmes are based on the Group's experience of implementing and deriving benefits from these programmes. A nil growth rate is used to extrapolate the cash flow projections beyond the three-year period of the financial budgets and the pre-tax discount rate of 8.0% (2019: 8.2%) is derived from the Group's WACC and the WACCs of its main European steel competitors.

The outcome of this test indicated that the value in use of the Group's CGU's against which property, plant and equipment is included using a discount rate of 8.0% (2019: 8.2%), was higher than their carrying value, except for one company, Tata Steel France Bâtiments et Systèmes SAS and one cash generating unit, Tata Steel Nederland Tubes. Therefore, an impairment charge has been recognised as a result of this exercise in the current year of €28m (2019: €nil). An impairment charge of €7m (2019:€5m) has also been recognised in the year on specific assets in Tata Steel IJmuiden.

Net book value as at March	**2020 €m**	2019 €m
The net book value of land and buildings compromises:		
Freehold	**180**	199
Long leasehold (over 50 years unexpired)	**-**	9
Short leasehold (in less than 50 years expired)	**76**	48
	256	256
Which may be further analysed as:		
Assets held under lease:		
Cost	**117**	84
Accumulated depreciation	**(41)**	(36)
	76	48
Owned assets	**180**	208
	256	256

The net book value of plant and machinery compromises:		
Assets held under lease:		
Cost	**134**	109
Accumulated depreciation	**(90)**	(84)
	44	25
Owned assets	**1,150**	1,162
	1,194	1,187

Right of use asset balances in 2020 include assets recognised upon adoption of IFRS16 of €54m. The 2019 balances represent the finance leases that have been accounted for under IAS 17 and IFRIC 4 up to implementation of IFRS 16 as per 1 April 2019 (for the fiscal year 2020). Refer to section 'III New standards and interpretations applied' for further details with respect to the adoption of the new lease accounting standard.. The additions to the right-of-use assets during the 2020 financial period were €9m.

10. Equity accounted investments

As at 31 March	Interest in joint ventures €m	Investments in associates €m	**2020 Total €m**	2019 Total €m
Cost at beginning and end of period	7	8	**15**	15
Share of post-acquisition reserves at beginning of period	16	11	**27**	32
Share of results in period retained	-	3	**3**	2
Dividends	-	(3)	**(3)**	(7)
Share of post-acquisition reserves at end of period	16	11	**27**	27
Net book value at end of period	23	19	**42**	42
Net book value at beginning of period	23	19	**42**	47

For further details of these companies, please refer to note 33. Subsidiaries and investments.

(i) Summarised information in respect of the Group's joint ventures is presented below:

As at 31 March	**2020 €m**	2019 €m
The share of assets and liabilities of the Group's joint ventures is as follows:		
Non-current assets	**15**	14
Current assets	**27**	33
Current liabilities	**(15)**	(19)
Non-current liabilities	**(4)**	(5)
Group's share of net assets	**23**	23
The share of revenue and expenses of the Group's joint ventures are as follows:		
Revenue	**89**	102
Expenses	**(89)**	(100)
Group's share of joint ventures' profit for the period	**-**	2
Dividend received	**-**	(2)
Group's share of retained profit for the period	**-**	-

(ii) Summarised information in respect of Group's associates is presented below:

As at 31 March	**2020 €m**	2019 €m
Summarised balance sheet information		
Total assets	**93**	101
Total liabilities	**(33)**	(41)
Net assets	**60**	60
Group's share of net assets	**19**	19
Summarised income statement information		
Revenue	**314**	340
Profit for the period	**7**	2
Group's share of associates profit for the period	**3**	-
Dividend received	**(3)**	(5)
Group's share of retained profit for the period	**-**	(5)

(iii) The share of post-tax (losses)/profits of joint ventures and associates as disclosed in the income statement arose as follows:

	2020 €m	2019 €m
Group's share of joint ventures' profit for the period	**-**	2
Group's share of associates profit for the period	**3**	-
Sale adjustment	**-**	(5)
Total profit/(loss) on joint ventures and associates for the year	**3**	(3)

11. Other investments

	Other loans and receivables €m	Other investments €m	**2020 Total €m**	2019 Total €m
Carrying value at beginning of period	5	2	**7**	6
Additions	-	-	**-**	16
Disposals	(1)	-	**(1)**	-
Impairment	-	-	**-**	(15)
Carrying value at end of period	4	2	**6**	7

12. Other non-current assets

As at 31 March	**2020 €m**	2019 €m
Other receivables	**3**	3

13. Inventories

As at 31 March	**2020 €m**	2019 €m
Raw materials and consumables	**334**	304
Work in progress	**313**	328
Finished goods and goods for resale	**339**	363
	986	995

The value of inventories above is stated after impairment of €26m (2019: €16m) for obsolescence and write-downs to net realisable value. Work in progress includes semi-finished and partly processed materials.

14. Tax assets/(liabilities)

2020	**Assets €m**	**Liabilities €m**
Other corporation tax – Non-current	**1**	**-**
Dutch corporation tax – Current	**35**	**(138)**
Other corporation tax – Current	**4**	**(4)**
	40	**(142)**

2019	Assets €m	Liabilities €m
Other corporation tax – Non-current	2	-
Dutch corporation tax – Current	23	(133)
Other corporation tax - Current	4	(2)
	29	(135)

As at 31 March 2020 the Dutch corporation tax balances contain a €103m net payable owed to TSNH (2019: net payable of €110m).

15. Trade and other receivables

As at 31 March	2020 €m	2019 €m
Trade receivables	**443**	560
Less provision for expected credit losses	**(6)**	(7)
	437	553
Amounts owed by other Tata Steel companies (Note 32)	**195**	358
Amounts owed by joint ventures (Note 32)	**9**	14
Amounts owed by associates (Note 32)	**10**	-
Derivative financial instruments (Note 20)	**8**	17
Derivative financial instruments owed by Group companies (Note 20 + Note 32)	**4**	-
Other taxation	**16**	11
Prepayments	**20**	29
Other receivables	**46**	42
Loans to other Tata Steel companies (Note 32)	**218**	227
Interest owed by other Tata Steel companies	**1**	1
	964	1,252

(i) Trade receivables are further analysed as follows:

As at 31 March 2020	Gross amount €m	Subject to credit insurance cover €m	Impairment provision €m	Net credit risk €m
Amounts not yet due	**405**	**(379)**	**-**	**26**
One month overdue	**21**	**(20)**	**-**	**1**
Two months overdue	**3**	**(3)**	**-**	**-**
Three months overdue	**4**	**(2)**	**-**	**2**
Greater than three months overdue	**10**	**(3)**	**(6)**	**1**
	443	**(407)**	**(6)**	**30**

As at 31 March 2019	Gross amount €m	Subject to credit insurance cover €m	Impairment provision €m	Net credit risk €m
Amounts not yet due	521	(500)	-	21
One month overdue	22	(20)	-	2
Two months overdue	4	(4)	-	-
Three months overdue	1	-	-	1
Greater than three months overdue	12	(2)	(7)	3
	560	(526)	(7)	27

The Group considers its maximum exposure to credit risk with respect to third party customers at 31 March 2020 to be €30m (2019: €27m), which is the fair value of trade receivables (after impairment provisions) less those that are subject to credit insurance cover as shown in the table above. The other classes of financial assets within trade and other receivables do not contain impaired assets. There is no concentration of credit risk with any particular third party customer.

Credit risk management is discussed further in Note 20(d).

(ii) Movements in the provision for impairment of receivables are as follows:

As at 31 March	2020 €m	2019 €m
At beginning of period	**7**	7
Impairments in the period (Note 2)	**2**	2
Amounts utilised, exchange rate translation and other movements	**(3)**	(2)
At end of period	**6**	7

(iii) The loans to other Tata Steel companies include amounts of €218m (2019: €209m) at a weighted average floating interest rate of 3.8%. There are no loans at a weighted average fixed interest rate (2019:€18m).

(iv) Loans to other Tata Steel companies can be further analysed by currency as follows:

As at 31 March	**2020 €m**	2019 €m
Euros	**206**	206
US Dollar	**12**	18
Swedish Krona	**-**	3
	218	227

(v) Loans to other Tata Steel companies at 31 March 2020 include a loan to TSNH of €150m and a loan to Tata Steel UK Limited ('TSUK') of €50m. In view of the full guarantees for these loans that have been provided by T S Global Holdings Pte Ltd ('TSGH') to TSN, Management is confident that these loans are fully recoverable. In addition, there are opportunities for future settlement of these loans with amounts payable to TSNH and TSUK.

(vi) Amounts owed by other Tata Steel companies include €138m (2019: €295m) owed by TSUK and €57m (2019: €63m) owed by other Tata Steel companies.

16. Cash and short-term deposits

As at 31 March	**2020 €m**	2019 €m
Cash at bank and in hand	**49**	29
	49	29

The currency of cash balances of the Group is as follows:

	2020 €m	2019 €m
Euros	**36**	7
US Dollars	**4**	12
Other currencies	**9**	10
	49	29

17. Trade and other payables

As at 31 March	**2020 €m**	2019 €m
Trade payables	**460**	478
Amounts owed to other Tata Steel companies	**82**	65
Amounts owed to associates	**3**	3
Other taxation and social security	**39**	48
Capital expenditure creditors	**133**	107
Derivative financial instruments (Note 20)	**29**	1
Derivative financial instruments owed to Group companies (Note 20 + Note 32)	**-**	4
Derivative financial instruments owed to joint ventures (Note 20 + Note 32)	**2**	-
Advances from customers	**-**	1
Other payables	**277**	341
	1,025	1,048

Other payables include amounts provided in respect of insurances, holiday pay, other employment costs and sundry other items.

18. Borrowings

	2020 €m	2019 €m
Current:		
Bank overdrafts	**5**	7
Loans from other Tata Steel companies	**9**	13
Lease liabilities	**19**	9
	33	29

	2020 €m	2019 €m
Non-current:		
Lease liabilities	**91**	61
Bank and other loans	1	-
	92	61
Total borrowings	**125**	90

In the previous year, the Group only recognised lease liabilities in relation to leases that were classified as 'finance leases' under IAS 17 and IFRIC 4. The closing balances under 'Lease liabilities' in FY20 include leases recognised under IFRS 16. Adoption of IFRS 16 resulted in the recognition of €54m of additional lease liabilities.

(i) The currency and interest rate exposure of gross borrowings of the Group at the end of the period is as follows:

	2020				2019			
	Fixed rate borrowings €m	**Floating rate borrowings €m**	**Zero rate borrowings €m**	**Total €m**	Fixed rate borrowings €m	Floating rate borrowings €m	Zero rate borrowings €m	Total €m
Euros	**111**	**4**	**7**	**122**	73	9	8	90
USD	**1**	**1**	**-**	**2**	-	-	-	-
Other	**1**	**-**	**-**	**1**	-	-	-	-
Total	**113**	**5**	**7**	**125**	73	9	8	90

	2020		2019	
	Weighted average fixed interest rate %	**Weighted average time for which rate is fixed Years**	Weighted average fixed interest rate %	Weighted average time for which rate is fixed Years
Euros	**4.7**	**7.4**	4.9	4.7

The weighted average interest rate on short-term borrowings from other Tata Steel companies was 0.2% (2019: nil).

(ii) The maturity of borrowings is as follows:

	2020 €m	2019 €m
In one year or less or on demand	**37**	32
Between one and two years	**18**	10
Between two and three years	**15**	9
Between three and four years	**12**	8
Between four and five years	**17**	8
More than five years	**47**	41
	146	108
Less: amounts representing interest in future minimum lease payments	**(21)**	(18)
	125	90
Analysed as:		
Current liabilities	**33**	29
Non-current liabilities	**92**	61

(iii) Amounts payable under leases are as follows:

	Minimum lease payments		Present value of minimum lease payment	
	2020 €m	2019 €m	**2020 €m**	2019 €m
Not later than one year	**23**	12	**19**	9
Later than one year but not more than five years	**61**	34	**49**	24
More than five years	**47**	42	**42**	37
	131	88	**110**	70
Less: future finance charges on leases	**(21)**	(18)	**-**	-
Present value of lease liabilities	**110**	70	**110**	70

The lease portfolio of the Group consists of leases of land, building, machinery and vehicles.

(iv) The maturity of undrawn committed borrowing facilities of the Group is as follows:

	2020 €m	2019 €m
Later than one year but not more than five years	**550**	517
	550	517

TSN has exclusive access to a revolving credit facility of €150m which was negotiated during the year to replace the prior facility. Each advance would bear interest equal to EURIBOR + 2.20% per annum. The full €150m was undrawn on 31 March 2020 (31 March 2019: £100m undrawn, under previous facility). See Financial Review on page 6 for further details.

TSN also has an internal loan facility available of €400m with TSUKH and TSNH, due to expire in April 2023. Each advance would bear interest equal to LIBOR plus a margin of 0.5% per annum and there are no financial covenants. The full €400m facility was undrawn on 31 March 2020 (31 March 2019: €400m undrawn)

TSUKH and TSNH agreed that in the event the €400m internal loan facility and the €150m RCF are fully drawn by TSN or not available, TSN may approach, at its own discretion and independently, the banking syndicate in TSNH's SFA directly for additional credit lines.

(v) Furthermore the Group has uncommitted short-term bank facilities in various countries (the Netherlands, France, Germany, Belgium and Switzerland) mostly within the framework of daily treasury operations such as cash pooling but also in order to have guaranteed facilities available related to commercial transactions.

19. Other non-current liabilities

As at 31 March	**2020 €m**	2019 €m
Other creditors	**2**	3

20. Financial instruments and risk management

(i) Financial assets and financial liabilities recognised in the balance sheet

The carrying amounts of the Group's financial assets and financial liabilities (excluding derivative assets and liabilities) are:

	2020 €m	2019 €m
Financial assets		
Other loans and receivables (Note 11)	**4**	5
Trade and other receivables (Note 15) 1	**918**	1,195
Cash and cash equivalents (Note 16)	**49**	29
Other non-current assets (Note 12)	**3**	3
	974	1,232
Financial liabilities		
Financial liabilities at amortised cost:		
Trade and other payables (Note 17) 2	**(955)**	(994)
Current borrowings (Note 18)	**(33)**	(29)
Non-current borrowings (Note 18)	**(92)**	(61)
	(1,080)	(1,084)
	(106)	148

1 Excludes derivatives, other taxation and prepayments
2 Excludes derivatives, other taxation, social security, and advances from customers

The carrying amounts of financial assets and financial liabilities recorded at amortised cost in the financial statements approximate their fair values with the exception of current and non-current borrowings. The fair value of these are €32m and €89m respectively. The fair value of borrowings would be classified as Level 3 within the fair value hierarchy. The fair value is based on discounted cash flows and reflects the credit risk of counterparties.

(ii) Fair value measurements recognised in the balance sheet

The following table categorises the Group's financial instruments held at fair value by the valuation methodology applied in determining this value. Where possible, quoted prices in active markets for identical assets and liabilities are used (Level 1). Where such prices are not available, the asset or liability is classified as Level 2, provided all significant inputs to the valuation model used are based on observable market data (this includes the Group's forward currency and commodity contracts). The Group's derivative financial assets and liabilities are categorised as Level 2 and their valuation is based on future cash flows (estimated from observable data such as forward exchange rates and yield curves) which are, where material, discounted at a rate which reflects the credit risk of counterparties. If one or more of the significant inputs to the valuation model is not based on observable market data, the instrument is classified as Level 3.

2020	Level 1 €m	Level 2 €m	Level 3 €m	**Total €m**
Financial assets at fair value through other comprehensive income:				
Commodity contracts	-	**5**	-	**5**
Forward foreign currency contracts	**-**	**7**	**-**	**7**
	-	**12**	**-**	**12**
Financial liabilities at fair value through other comprehensive income:				
Commodity contracts	**-**	**(26)**	**-**	**(26)**
Forward foreign currency contracts	**-**	**(5)**	**-**	**(5)**
	-	**(31)**	**-**	**(31)**

2019	Level 1 €m	Level 2 €m	Level 3 €m	Total €m
Financial assets at fair value through other comprehensive income:				
Commodity contracts	-	11	-	11
Forward foreign currency contracts	-	6	-	6
	-	17	-	17
Financial liabilities at fair value through other comprehensive income:				
Commodity contracts	-	(3)	-	(3)
Forward foreign currency contracts	-	(2)	-	(2)
	-	(5)	-	(5)

There were no transfers between any of the levels during the periods represented above.

(iii) Financial risk management and financial instruments

The Group uses certain financial instruments to reduce business risks arising from its exposure to fluctuations in exchange rates and base metal prices. The instruments used, which are confined principally to forward foreign exchange contracts and London Metal Exchange contracts, involve elements of credit and market rate risk in excess of the amount recognised in the accounts.

Risk management is carried out by a central Treasury department and by a central commodity derivative trading team under policies approved by the BoM. The treasury department as well as the central commodity derivative trading team identify, evaluate and hedge financial risks in close cooperation with the Group's operating units.

(a) Market risk: Foreign exchange risk and management

It is the Group's policy that substantially all the net currency transaction exposure arising from contracted sales and purchases over an approximate 6 month time horizon is hedged by selling or purchasing foreign currency forwards. At 31 March 2020 the notional amounts of outstanding foreign currency contracts was €1,018m (2018: €1,746m) with a net fair value asset of €2m (2019: €4m asset).

As at 31 March 2020, a 10% appreciation of the Euro against the US dollar would decrease the net assets of TSN by approximately €2m (2019: €2m), decrease equity by approximately €2m (2019: €2m) and have no impact on the operating profit (2018: no impact). The sensitivity analysis has been based on the composition of the dollar denominated financial assets and liabilities of the Group at 31 March, excluding trade payables, trade receivables, other non-derivative financial instruments not in debt, and financial lease obligations, all of which do not present a material exposure.

As at 31 March 2020, a 10% appreciation of the Euro against the Sterling would have no impact on the net assets of TSN (2019: €1m decrease), no impact on equity (2019: €1m decrease) and have no impact on the operating profit (2019: no impact).

The net positions of the Euro versus other currencies are of less importance and the sensitivity of a 10% weakening/strengthening of the Euro is therefore not significant.

(b) Market risk: Commodity risk and management

The Group makes use of commodity futures contracts to manage its purchase price risk for certain commodities. Forward purchases are made for zinc, tin and nickel to cover sales contracts with fixed metal prices and for carbon emission rights based on predicted future emission deficit. At 31 March 2020 the Group had commodity contracts with a total notional value of €229m (2019: €129m) and a net fair value liability of €21m (2019: €8m asset).

As at 31 March 2020, a 10% decrease of the market prices of zinc, tin, nickel and carbon emission rights would decrease the equity of TSN by approximately €7m (2019: €8m). There was no significant market risk relating to the income statement since the majority of commodity derivatives are treated as cash flow hedges with movements being reflected in equity and the timing and recognition in the income statement depending on the point at which the underlying hedged transactions are also recognised.

(c) Market risk: Interest rate risk and management

The financial structure of the Group includes only a small percentage of net assets that have been financed by loans. During 2020 and 2019, most of the Group's borrowings were denominated in Euros. The Group did not enter into interest rate swap contracts or forward rate agreements. For further details of the borrowings, such as maturity and interest rates, see Note 18.

As at 31 March 2020 the Group had fixed rate borrowings of €113m (2019: €73m), floating rate borrowings of €5m (2019: €9m) and zero rate borrowings of €7m (2019: €8m). If at 31 March 2020 the interest rate would have been 100 bps higher/lower, with all other variables held constant, there would be no impact on profit after taxes (2019: no impact). There would also have been no impact on the cashflow (2019: no impact).

(d) Credit risk

Cash deposits, trade receivables and other financial instruments give rise to credit risk for the Group arising from the amounts and obligations due from counter-parties. The credit risk on short-term deposits is managed by limiting the aggregate amount and duration of exposure to any one counter party, depending on its credit rating and other credit information, and by regular reviews of these ratings. The possibility of material loss arising in the event of non-performance is considered unlikely.

Sector sales teams, supported by TSE's central credit risk management department, are responsible for controlling the credit risk arising from the Group's normal commercial operations, although they must act within a series of centrally agreed guidelines. Trade receivables are, where appropriate, subject to a credit insurance programme, and regular reviews are undertaken of exposures to key customers and those where known risks have arisen or still persist. Any expected credit losses are reflected in the income statement.

Credit risk also arises from the possible failure of counter-parties to meet their obligations under currency and commodity hedging instruments. However, counter parties are established banks and financial institutions with high credit ratings and the Group continually monitors each institution's credit quality and limits as a matter of policy the amount of credit exposure to any one of them. The Group's theoretical risk is the cost of replacement at current market prices of these transactions in the event of default by counter-parties. The Group believes that the risk of incurring such losses is remote and underlying principal amounts are not at risk.

(e) Liquidity risk

Liquidity risk is defined as the risk that the Group could not be able to settle or meet its financial liabilities on time and at a reasonable price. The Treasury department is responsible for liquidity and funding, and manages the liquidity risk by maintaining sufficient cash resources and by maintaining the availability of funding through available committed and uncommitted credit facilities, for further information on the credit lines see Note 18. The management of the liquidity risk is based on the calculation of the future net liquidity which results from the expected cash outflows and inflows.

The following table is a maturity analysis of the anticipated contractual cash flows including interest payable for the Group's derivative and non-derivative financial liabilities on an undiscounted basis, which therefore differs from both the carrying value and fair value. Floating interest rate is estimated using the prevailing interest rate at the end of the reporting period. Cash flows in foreign currencies are translated using the period end spot rates at 31 March 2020.

Liquidity risk

	Maturity of contractual undiscounted cash flows			
At 31 March 2020	**Contractual cash flows €m**	**In one year or less or on demand €m**	**Between one and five years €m**	**More than five years €m**
Non-derivative financial liabilities				
Trade and other payables 1	**(955)**	**(955)**	**-**	**-**
Borrowings				
Repayment	**(125)**	**(33)**	**(50)**	**(42)**
Fixed interest	**(21)**	**(4)**	**(11)**	**(6)**
	(1,101)	**(992)**	**(61)**	**(48)**
Derivative financial assets/liabilities				
Foreign currency contracts				
Payables	**(1,111)**	**(1,111)**	**-**	**-**
Receivables	**1,113**	**1,113**	**-**	**-**
Derivatives commodities: net settlement	**(21)**	**(21)**		
	(19)	**(19)**	**-**	**-**
Total	**(1,120)**	**(1,011)**	**(62)**	**(47)**

1 Excludes derivatives, other taxation and social security and advances from customers

	Maturity of contractual undiscounted cash flows			
At 31 March 2019	Contractual cash flows €m	In one year or less or on demand €m	Between one and five years €m	More than five years €m
Non-derivative financial liabilities				
Trade and other payables 1	(994)	(994)	-	-
Borrowings				
Repayment	(90)	(29)	(24)	(37)
Fixed interest	(18)	(3)	(10)	(5)
	(1,102)	(1,026)	(34)	(42)
Derivative financial assets/liabilities				
Foreign currency contracts				
Payables	(1,741)	(1,741)	-	-
Receivables	1,745	1,745	-	-
Derivatives commodities: net settlement	8	8	-	-
	12	12	-	-
Total	(1,090)	(1,014)	(34)	(42)

1 Excludes derivatives, other taxation and social security and advances from customers

(iv) Derivative financial instruments

The Group utilises currency and commodity derivatives to hedge significant future transactions and cash flows. These items gave rise to the following fair values that have been recognised in the balance sheet:

	2020		2019	
	Assets €m	**Liabilities €m**	Assets €m	Liabilities €m
Current:				
Commodity contracts	**5**	**(26)**	11	(3)
Forward foreign currency contracts	**7**	**(5)**	6	(2)
	12	**(31)**	17	(5)

The fair value of derivative financial instruments that were designated as cash flow hedges at the balance sheet date was:

	Forward foreign currency contracts €m	**Commodity contracts €m**	**Taxation €m**	**2020 €m**
Cash flow hedge reserve net of taxation at beginning of period	**11**	**8**	**(5)**	**14**
Fair value recognised	**(5)**	**(19)**	**6**	**(18)**
Cash flow hedge reserve net of taxation at end of period	**6**	**(11)**	**1**	**(4)**

Amounts recognised in the cash flow hedge reserve, excluding deferred tax, are expected to affect profit or loss within one year.

At the balance sheet date the notional amount of outstanding foreign currency and commodity contracts that the Group has committed to is as follows:

	2020 €m	2019 €m
Commodity contracts	**229**	129
Forward foreign currency contracts	**1,018**	1,746

During the year no ineffectiveness from foreign currency hedges was recognised in the income statement (2019: nil).

21. Provisions for liabilities and charges

	Rationalisation Costs (i) €m	Environmental Provisions (ii) €m	Guarantee commitments (iii) €m	Employee Benefits (iv) €m	Other (v) €m	**2020 Total €m**	2019 Total €m
At beginning of period	-	50	7	89	29	**175**	159
Reclassification	-	-	-	-	-	**-**	22
Charged to income statement	24	52	-	6	1	**83**	57
Released to income statement	(4)	-	(1)	(5)	(16)	**(26)**	(32)
Utilised during the period	(5)	(28)	-	-	(6)	**(39)**	(31)
At end of period	15	74	6	90	8	**193**	175
Analysed as:							
Current liabilities						**73**	61
Non-current liabilities						**120**	114

(i) Rationalisation costs include redundancy provisions as follows:

	2020 €m	2019 €m
At beginning of period	**-**	1
Charged to income statement (Note 4)	**18**	2
Released to income statement	**-**	(1)
Utilised during the period	**(4)**	(2)
At end of period	**14**	-

(ii) The environmental provisions consist of remediation and clean-up activities that are likely to be undertaken in the foreseeable future and of which the costs can reasonably be estimated, together with provisions for CO_2 emission rights.

(iii) Guarantee commitments relate to the anticipated cost of any warranties offered to customers.

(iv) Provisions for employee benefits include long–term benefits such as long service and sabbatical leave, disability benefits and sick leave. All items are subject to independent actuarial assessments.

(v) ‘Other’ includes a net release of provisions of €14m (2019: €25m) for costs in respect of anticipated customer claims.

22. Deferred tax

The following is the analysis of the deferred tax balances for balance sheet purposes:

	2020 €m	2019 €m
Deferred tax assets	**64**	16
Deferred tax liabilities	**-**	(1)
	64	15

The following are the major deferred tax assets and liabilities recognised by the Group, and the movements thereon, during the current and prior period.

2020	**Accelerated tax depreciation €m**	**Losses €m**	**Pension €m**	**Inventory €m**	**Provisions €m**	**Other €m**	**Total €m**
At beginning of period	8	-	1	2	4	-	**15**
Credited/(charged) to income statement	9	-	3	1	33	(3)	**43**
Credited to other comprehensive income	-	-	-	-	-	6	**6**
At end of period	17	-	4	3	37	3	**64**

2019	Accelerated tax depreciation €m	Losses €m	Pension €m	Inventory €m	Provisions €m	Other €m	Total €m
At beginning of period	2	6	-	2	4	5	19
(Charged)/credited to income statement	6	(6)	1	-	-	-	1
(Charged) to other comprehensive income	-	-	-	-	-	(5)	(5)
At end of period	8	-	1	2	4	-	15

Deferred tax assets of €64m have been recognised at 31 March 2020 (2019: €16m). In evaluating whether it is probable that taxable profits will be earned in future accounting periods, all available evidence was considered, including TSN BoM approved budgets and forecasts. Following this evaluation, it was determined there would be sufficient taxable income generated to realise the benefit of the deferred tax assets. Deferred tax assets have not been recognised in respect of total tax losses of €337m (2019: €321m) which have no expiry date. Deferred tax assets have also not been recognised on other deductible temporary difference of €91m (2019: €125m) which have no expiry.

At the balance sheet date there are temporary differences associated with undistributed earnings of subsidiaries. No liability has been recognised in respect of these differences because the vast majority of these differences occur in the Netherlands, for which the EU participation exemption applies.

23. Deferred income

	2020 Grants relating to property, plant and equipment €m	2019 Grants relating to property, plant and equipment €m
At beginning of period	**5**	8
Released to income statement (Note 2)	**(1)**	(2)
Disposal of Group companies	**-**	(1)
At end of period	**4**	5

24. Called-up share capital

For more detailed information on called-up share capital, see Parent Company Accounts, Note 7.

25. Future capital expenditure

	2020 €m	2019 €m
Contracted but not provided for	**181**	293
Authorised but contracts not yet placed	**70**	58

26. Exposure for cash outflows relating to leases

	2020 €m	2019 €m
Future exposure for cash outflows to the Group at the end of the period are:		
Future cash outflows relating to termination and extension options	**1**	-
Future cash outflows relating to leases committed but not yet commenced	**7**	-
	8	-

Exposure for cash outflows relating to leases is a new reporting requirement under IFRS 16 'Leases' for 2020 and therefore no comparatives are disclosed for 2019.

27. Contingencies

	2020 €m	2019 €m
Guarantees given under trade agreements	**19**	16
Others	**17**	33

The Group is also party to a number of contingent claims which may provide the Group with a future inflow or outflow of cash. No amount has been recorded in these financial statements on the basis that the Group does not consider it virtually certain that an amount will be received or no reliable estimate can yet be made for amounts to be paid (if any).

28. Reconciliation of net cash flow to movement in net funds

	2020 €m	2019 €m
Movement in loans to other Tata Steel companies	**(9)**	(4)
Movement in cash and short-term deposits	**22**	(11)
Movement in debt	**26**	2
Change in net debt resulting from cash flows in period	**39**	(13)
Effect of other non-cash movements	**(63)**	(2)
Movement in net debt in period	**(24)**	(15)
Net funds at beginning of period	**166**	181
Net funds at end of period	**142**	166

29. Analysis of changes in net funds

	2019 €m	Cash Flow €m	Other non-cash movements €m	**2020 €m**
Loans to other Tata Steel companies	227	(9)	-	**218**
Cash at bank and short-term deposits	29	20	-	**49**
Bank overdrafts	(7)	2	-	**(5)**
Cash and cash equivalents	22	22	-	**44**
Borrowings	(13)	2	-	**(11)**
Lease liabilities	(70)	24	(63)	**(109)**
Total debt excluding bank overdrafts	(83)	26	(63)	**(120)**
Total net funds	166	39	(63)	**142**

Other non-cash movements in respect of borrowings relate to €54m liability recognised upon adoption of IFRS16 and lease additions in the year of €9m.

30. Pensions and post-retirement benefits

Defined contribution schemes
TSN participates in a number of defined contribution plans on behalf of relevant personnel. Any expense recognised in relation to these schemes represents the value of contributions payable during the period by TSN at rates specified by the rules of those plans. The only amounts included in the balance sheet are those relating to the prior month's contributions that were not due to be paid until after the end of the reporting period. The total cost charged to the income statement in 2020 amounted to €95m (2019: €90m). Of the total cost of €95m, €91m (2019: €87m) related to payments to the Stichting Pensioenfonds Hoogovens ('SPH') pension scheme.

Defined benefit schemes
TSN operates a number of defined benefit pension and post-retirement schemes. There are multiple plans, the most significant of which are in Germany and the USA. Benefits offered by these schemes are largely based on pensionable pay and years of service at retirement. With the exception of plans in Germany and France, the assets of these schemes are held in administered funds that are legally separated from the company. The trustees of the pension fund are required by law to act in the interest of the fund and of all relevant stakeholders of the scheme, and are responsible for the investment policy with regard to the assets of the fund.

Within Germany, there are three types of defined benefit pension schemes, two of which are closed to new entrants. All of the schemes are unfunded. The scheme for active members in Germany is a pension commitment based on a percentage of the yearly income paid via the pension organisation 'Essener Verband'. The defined benefit schemes in the USA are closed for future accrual. TSN makes sufficient contributions required to fund the cost of benefits provided by the USA schemes and to increase the funding ratio to 100% over a period of 15 years. Pension provision for new entrants in the USA is by means of a defined contribution scheme.

During the year there has been a past service credit of €4m recognised. This relates to pension restructuring activities in the pension scheme at Fischer Profil GmbH in Germany (€2m) and at Thomas Steel Strip Corporation in the USA (€2m).

TSN accounts for all pension and post-retirement benefit arrangements using IAS 19 '*Employee Benefits*' with independent actuaries being used to calculate the costs, assets and liabilities to be recognised in relation to these schemes. The present value of the defined benefit obligation, the current service cost and past service costs are calculated by these actuaries using the projected unit credit method. However, the ongoing funding arrangements of each scheme, in place to meet their long-term pension liabilities, are governed by the individual scheme rules and national legislation. The accounting and disclosure requirements of IAS 19 do not affect these funding arrangements.

Actuarial assumptions
A range of assumptions must be used to determine the IAS 19 amounts and the values to be included in the balance sheet and income statement can vary significantly with only small changes in these assumptions. Furthermore, the actuarial assumptions used may vary according to the country in which the plans are situated.

The key assumptions applied at the end of the reporting period for the purposes of the actuarial valuations were as follows:

2020	Germany %	USA %	Other %
Salary growth	2.00	2.00	1.00 to 2.00
Pension increases	1.00 to 1.75	0.00	0.00
Discount rate	1.65	3.20	0.30 to 0.46
Inflation	2.00	3.00	1.00 to 1.70

2019	Germany %	USA %	Other %
Salary growth	2.00	2.00	1.00 to 2.00
Pension increases	1.00 to 1.75	0.00	0.00
Discount rate	1.35	3.95	0.80 to 1.32
Inflation	2.00	3.00	1.00 to 2.00

The discount rate is set with reference to the current rate of return on AA rated corporate bonds of equivalent currency and term to the scheme liabilities. Projected inflation rates and pension increases are long-term predictions based mainly on the yield gap between long-term fixed interest and government bond securities.

Demographic assumptions are set having regard to the latest trends in life expectancy, plan experience and other relevant data, including externally published actuarial information within each national jurisdiction. The assumptions are reviewed and updated as necessary as part of the periodic actuarial funding valuations of the individual pension and post-retirement plans.

Income statement costs
Under IAS 19 costs in relation to pension and post-retirement plans mainly arise as follows:

- The current service cost is the actuarially determined present value of the pension benefits earned by employees in the current period. It excludes any charges or credits in respect of any deficit or surplus in the scheme respectively and so the cost is unrelated to whether, or how, the scheme is funded.
- Net interest cost / (income) on the liability or asset recognised in the balance sheet.

These items are treated as a net operating cost in the income statement within employment costs.

Variations from expected costs, arising from the experience of the plans or changes in actuarial assumptions, are recognised immediately in the statement of comprehensive income. Examples of such variations are differences between the discount rate used for calculating the return on scheme assets and the actual return, the remeasurement of scheme liabilities to reflect changes in discount rates, changes in demographic assumptions such as using updated mortality tables, or the effect of more employees leaving service than forecast.

Income statement pension costs arose as follows:

2020	Netherlands €m	Germany €m	USA €m	Other €m	**Total €m**
Current service cost	-	1	1	1	3
Net interest cost	-	1	1	-	2
Past service credit	-	(2)	(2)	-	(4)
Defined benefit schemes	-	-	-	1	1
Defined contribution schemes	91	-	1	3	95
Total charge for the period	91	-	1	4	**96**

2019	Netherlands €m	Germany €m	USA €m	Other €m	Total €m
Current service cost	-	2	1	1	4
Net interest cost	-	1	2	-	3
Defined benefit schemes	-	3	3	1	7
Defined contribution schemes	87	-	-	3	90
Total charge for the period	87	3	3	4	97

Plan assets
The asset classes include national and international equities, fixed income government and non-government securities and real estate. The pension funds invest in diversified asset classes to maximise returns while reducing volatility. The percentage of total plan assets for each category of investment was as follows:

2020	USA %	Other %
Quoted:		
Equities	59.5	15.0
Bonds – Fixed Rate	14.8	75.0
Other	5.2	-
	79.5	**90.0**
Unquoted:		
Real estate	5.4	5.0
Cash and cash equivalents	15.1	5.0
	20.5	**10.0**
Total	**100.0**	**100.0**

2019	USA %	Other %
Quoted:		
Equities	64.3	15.0
Bonds – Fixed Rate	10.8	75.0
Other	4.9	-
	80.0	90.0
Unquoted:		
Real estate	5.1	5.0
Cash and cash equivalents	14.9	5.0
	20.0	10.0
Total	100.0	100.0

Balance sheet measurement
In determining the amounts to be recognised in the balance sheet the following approach has been adopted:

- Pension scheme assets are measured at fair value (for example for quoted securities this is the bid-market value on the relevant public exchange).
- Pension liabilities include future benefits that will be paid to pensioners and deferred pensioners, and accrued benefits which will be paid in the future for members in service taking into account projected earnings. As noted above, the pension liabilities are discounted with reference to the current rate of return on AA rated corporate bonds of equivalent currency and term to the pension liability.

Amounts recognised in the balance sheet arose as follows:

2020	Germany €m	USA €m	Other €m	**Total €m**
Fair value of plan assets at end of period	-	79	23	102
Present value of obligation at end of period	(72)	(134)	(29)	(235)
Defined benefit liability at end of period	(72)	(55)	(6)	**(133)**
Disclosed as:				
Defined benefit liability - current	-	(1)	-	(1)
Defined benefit liability - non current	(72)	(54)	(6)	(132)
Defined benefit liability at end of period	(72)	(55)	(6)	**(133)**

2019	Germany €m	USA €m	Other €m	Total €m
Fair value of plan assets at end of period	-	78	21	99
Present value of obligation at end of period	(77)	(126)	(26)	(229)
Defined benefit liability at end of period	(77)	(48)	(5)	(130)
Disclosed as:				
Defined benefit liability - current	-	(6)	-	(6)
Defined benefit liability - non current	(77)	(42)	(5)	(124)
Defined benefit liability at end of period	(77)	(48)	(5)	(130)

The movements in the present value of plan assets and defined benefit obligations in 2020 and 2019 were as follows:

2020	Germany €m	USA €m	Other €m	**Total €m**
Plan assets:				
As at 1 April 2019	-	78	21	99
Actuarial gain due to actuarial experience	-	-	1	1
Actuarial loss due to financial assumption changes	-	(1)	-	(1)
Interest income on plan assets	-	3	-	3
Contributions from the employer	-	6	1	7
Benefits paid	-	(9)	(1)	(10)
Exchange rate movements	-	2	1	3
As at 31 March 2020	**-**	**79**	**23**	**102**
Benefit obligations:				
As at 1 April 2019	(77)	(126)	(26)	(229)
Current service cost	(1)	(1)	(1)	(3)
Past service credit	2	2	-	4
Interest cost on the defined benefit obligation	(1)	(4)	-	(5)
Actuarial gain/(loss) due to financial assumption changes	3	(11)	(2)	(10)
Benefits paid	2	9	1	12
Exchange rate movements	-	(3)	(1)	(4)
As at 31 March 2020	(72)	(134)	(29)	**(235)**

Included within other schemes above are post-retirement medical and similar net obligations of €6m (2019: €6m).

2019	Germany €m	USA €m	Other €m	Total €m
Plan assets:				
As at 1 April 2018	-	76	18	94
Return on plan assets greater than the discount rate	-	(4)	-	(4)
Interest income on plan assets	-	3	-	3
Contributions from the employer	-	4	2	6
Benefits paid	-	(8)	-	(8)
Exchange rate movements	-	7	1	8
As at 31 March 2019	-	78	21	99
Benefit obligations:				
As at 1 April 2018	(84)	(114)	(24)	(222)
Current service cost	(2)	(1)	(1)	(4)
Interest cost on the defined benefit obligation	(1)	(5)	-	(6)
Actuarial loss due to actuarial experience	(2)	(1)	-	(3)
Actuarial loss due to financial assumption changes	(5)	(2)	-	(7)
Benefits paid	2	8	-	10
Disposal of group companies	15	-	-	15
Exchange rate movements	-	(11)	(1)	(12)
As at 31 March 2019	(77)	(126)	(26)	(229)

Actuarial losses recorded in the Statement of Comprehensive Income for the period were €10m (2019: €14m).

31. Disposal of Group companies

During the year, the group entered 6 businesses into liquidation, of which 4 were finalised during the year (as detailed below) and 2 were ongoing as at 31 march 2020 (see note 33). These liquidations resulted in a nil net cash flow and a nil profit/loss.

Beheermaatschappij Industriële Producten B.V. entered into liquidation during the year which was completed on 27 December 2019.

Corus Primary Aluminium B.V. entered into liquidation during the year which was completed on 27 December 2019.

Esmil B.V. entered into liquidation during the year which was completed on 14 November 2019.

Tata Steel Nederland Star-Frame B.V. entered into liquidation during the year which was completed on 27 December 2019.

On 15 August 2018, the Group disposed of its investment in Corus Building Systems Bulgaria AD to Horizont Ivanov EOOD.

On 1 October 2018, the Group disposed of its Kalzip businesses (comprising Kalzip GMBH and Corus Aluminium Verwaltungsgesellschafth GMBH (and its subsidiaries)) to Donges Steel Tec GmbH.

(i) The net liabilities disposed were as follows:

	2020 €m	2019 €m
Property, plant and equipment (Note 9)	-	1
Inventories	-	9
Trade and other receivables	-	17
Cash and cash equivalents	-	1
Trade and other payables	-	(8)
Short term borrowings	-	(21)
Short term provisions and other liabilities	-	(2)
Long term borrowings	-	(2)
Long term provisions and other liabilities	-	(16)
Net liabilities disposed	-	(21)
Gross consideration due to TSN	-	2
Intercompany adjustments	-	(20)
Transaction fees and other adjustments	-	(1)
Profit on disposal	-	2

(ii) Of which net cash flow arising on disposal was as follows:

	2020 €m	2019 €m
Gross consideration due to TSN	-	2
Less: deferred consideration	-	(1)
Less: cash and cash equivalents disposed	-	(1)
Less: transaction costs and other transfers	-	(4)
Net cash flow	-	(4)

32. Related party transactions

The table below sets out details of transactions and loans between TSN, other Tata Steel companies, joint ventures and associates.

	2020 €m	2019 €m
Sales to joint ventures	**95**	109
Sales to associates	**121**	148
Sales to other Tata Steel companies	**349**	509
Purchases from joint ventures	**1**	2
Purchases from associates	**35**	36
Purchases of raw materials from other Tata Steel companies, acting as an agent	**1,191**	1,225
Other purchases from other Tata Steel companies	**235**	265
Net recharges to other Tata Steel companies	**(3)**	(41)
Amounts owed by other Tata Steel companies (Note 15)	**195**	358
Amounts owed by joint ventures (Note 15)	**9**	14
Amounts owed by associates (Note 15)	**10**	-
Derivative financial instruments owed by Group companies (Note 15)	**4**	-
Derivative financial instruments owed to Group companies (Note 17)	**-**	4
Derivative financial instruments owed to joint ventures (Note 17)	**2**	-
Amounts owed to other Tata Steel companies (Note 17)	**82**	65
Amounts owed to associates (Note 17)	**3**	3
Tax payable to TSNH (Note 14)	**103**	110
Loans to TSNH (Note 15)	**150**	150
Loans to other Tata Steel companies (Note 15)	**68**	77
Loans from other Tata Steel companies (Note 18)	**9**	13
Interest receivable from other Tata Steel companies (Note 15)	**1**	1

Under the terms of the Policy for Surplus Cash agreed between TSN, Tata Steel UK Limited ('TSUK') and TSNH, a short-term loan of €150m was granted by TSN to TSNH bearing a floating interest rate based on Euribor. The outstanding balance on this loan as at 31 March 2020 was €150m (31 March 2019: €150m). The interest rate and other conditions of this loan are in conformity with market conditions.

During the year, the were no (2018: €nil) sales or purchases with TSNH.

TSN's Treasury department and a central commodity derivative trading team are responsible for the external hedging of currency and metal risks. They also enter into transactions with TSUK Treasury and other Tata Steel subsidiaries, which are not part of TSN. As at 31 March 2020 the fair value of the currency contracts with these parties was €1m liability (31 March 2019: €nil) and the fair value of the metal contracts with these parties amounted to an asset of €3m (31 March 2019: €nil).

Transactions with related parties are made on terms equivalent to those that prevail in arm's length transactions.

Details of transactions with key management personnel are given in 'Further notes to and signing of the annual accounts' on page 63.

33. Subsidiaries and investments

The subsidiary undertakings, joint ventures, joint operations and associates of TSN at 31 March 2020 are set out below. Country names are countries of incorporation. Undertakings operate principally in their country of incorporation except where otherwise stated.

Subsidiary undertakings
Steel producing, further processing or related activities:

Belgium
Société Européenne de Galvanisation (Segal) SA
Tata Steel Belgium Packaging Steels N.V.
Tata Steel Belgium Services NV

France
CBS Investissement SAS
SCI Corbeil Les Rives (67.3%)
Inter Metal Distribution (I.M.D.) SAS
Tata Steel France Holdings SAS
Tata Steel France Bâtiments et Systèmes SAS
Tata Steel International (France) SAS
Tata Steel Maubeuge SAS
Unitol SAS

Finland
Naantali Steel Service Centre OY

Germany
Degels GmbH
Fischer Profil GmbH
Hille & Müller GmbH
S.A.B. Profil GmbH
Service Center Gelsenkirchen GmbH
Tata Steel Germany GmbH
Tata Steel International (Germany) GmbH

Italy
Tata Steel International (Italia) Srl

The Netherlands
C.V. Bénine (76.93%)
Demka B.V.
Huizenbezit Breesaap B.V.
S.A.B. Profiel B.V.
Staalverwerking en Handel B.V.
Tata Steel Europe Distribution B.V.
Tata Steel Europe Metals Trading B.V. (ii)
Tata Steel IJmuiden B.V.
Tata Steel Nederland Consulting & Technical Services B.V.
Tata Steel Nederland Services B.V.
Tata Steel Nederland Technology B.V.
Tata Steel Nederland Tubes B.V.

Poland
Corus Tubes Poland Spólka z.o.o. (i)

Sweden
Halmstad Steel Service Centre AB

Switzerland
Montana Bausysteme AG
Tata Steel International (Schweiz) AG (i)

USA
Apollo Metals, Ltd
Hille & Müller USA, Inc
Hoogovens USA, Inc
Oremco, Inc (70%)
Rafferty - Brown Steel Co. Inc. of Conn.
Tata Steel USA, Inc
Thomas Processing Comp.
Thomas Steel Strip Corp.

Unless indicated otherwise, subsidiary undertakings are wholly owned within TSN, and TSN holding comprises ordinary shares and 100% of the voting rights.

Joint ventures, joint operations and associates

	Classification	Products	2020 Turnover €m		Issued capital Number of shares	% held
France						
Albi Profils SARL	Associate	Construction of industrial buildings in southern France	-	-	-	30
Mexico						
Hoogovens Gan Multimedia SA de CV	Joint Venture	Inactive company (in liquidation)	-	-	-	50
The Netherlands						
GietWalsOnderhoudCombinatie B.V.	Associate	Maintenance of parts of direct sheet plant	13	Shares of €454	100	50
Hoogovens Court Roll Surface Technologies VOF	Joint Operation	Processing chrome deposit on rolls	4	-	-	50
Laura Metaal Holding B.V.	Joint Venture	Trading and processing of non-prime metal	131	Shares of €454	5,600	49
Wupperman Staal Nederland B.V.	Associate	Purchase, process, refine and sale of steel products and other metal products	301	Shares of €1,000	8,000	30
Norway						
Norsk Stal Tynnplater AS	Joint Venture	Processing of strip and long products	50	Shares of NOK1,000	26,500	50
France						
Albi Profils SARL	Associate	Construction of industrial buildings in southern France	-	-	-	30

Classification key:

(i) Entered into liquidation during the year which was still in progress as at 31 March 2020.
(ii) Company merged with Tata Steel IJmuiden 31 March 2020. Legal entity liquidated 1 April 2020.

34. Events after the reporting period

On 10 June 2020 the unions started a series of relay strikes at the IJmuiden works, the first one after 28 years. Main drivers for this industrial action were uncertainty about jobs and the impact of the Transformation Programme on employment and organisation structure. After 25 days of strikes an agreement was reached with the Unions which was also supported by the CWC. Some key elements of this agreement are no forced redundancies and no outsourcing of activities related to the Transformation programme and an extension of the '*Werkgelegenheids Pact (WGP)*' and the *'Generatie Pact'* until 1 October 2026.

An invoice securitisation programme for Tata Steel IJmuiden BV is in place since August 2020.

35. Ultimate and immediate parent company

Tata Steel Netherlands Holdings B.V. is the company's immediate parent company, which is incorporated and registered in the Netherlands.

Tata Steel Limited, a company incorporated in India, is the ultimate parent company and controlling party.

Copies of the Report & Accounts for TSL may be obtained from its registered office at Bombay House, 24 Homi Mody Street, Mumbai, 400 001.

Parent company income statement

For the financial period ended 31 March

	2020 €m	2019 €m
(Loss)/income group companies excluding parent	**(104)**	196
Other income and charges, after taxation	**(21)**	15
Net (loss)/profit after taxation	**(125)**	211

Parent company balance sheet

As at 31 March Before appropriation of the result for the year	Note	**2020 €m**	2019 €m
Non-current assets			
Financial non-current assets	1	**2,610**	2,742
Loans to group companies	1	**362**	380
		2,972	3,122
Current assets			
Receivables	2	**239**	191
Current tax assets	3	**19**	11
		258	202
TOTAL ASSETS		**3,230**	3,324
Current liabilities			
Borrowings	4	**(492)**	(443)
Other payables	5	**(74)**	(67)
Provisions	6	**(2)**	-
		(568)	(510)
TOTAL LIABILITIES		**(568)**	(510)
NET ASSETS		**2,662**	2,814
Equity			
Called-up share capital	7	**388**	388
Share premium account	7	**17**	17
Legal Reserves	7	**10**	27
Other Reserves	7	**2,372**	2,171
Result for the year	7	**(125)**	211
Equity attributable to owners of the Company		**2,662**	2,814

Parent company 2020 accounts

Introduction

The accounts of the parent company included in this section are prepared in accordance with Part 9 of Book 2 of DCC.

Art. 2:362 part 8 DCC, allows companies that apply IFRS as adopted by the European Union in their consolidated accounts to use the same measurement principles in their parent company accounts. The Company has decided to use this provision from 1 April 2015 onwards. The accounting policies are described in Presentation of consolidated accounts and accounting policies.

Presentation of parent company accounts and accounting policies

The parent company statement of income has been prepared in accordance with Art. 2:402 DCC, which allows a simplified Statement of income in the Company financial statements in the event that a comprehensive Statement of income is included in the consolidated Group financial statements.

Information on the use of financial instruments is provided in Note 20 of the consolidated report and accounts.

Additional information
For 'Additional information' within the meaning of Art. 2:392 DCC, please refer to section D, Other Information and section E. of this Annual Report, Independent auditor's report.

Notes to the parent company accounts

1. Financial non-current assets

	Investments in group companies	Loans to own group companies	**Total**
	€m	€m	**€m**
Balance sheet value at 31 March 2019	2,742	380	**3,122**
Movements in 2019/20:			
Loss group companies	(104)	-	**(104)**
Other comprehensive loss	(27)	-	**(27)**
New loans	-	47	**47**
Loan redemptions	(1)	(65)	**(66)**
At 31 March 2020	2,610	362	**2,972**

Investments in group companies are accounted for using the equity method. Goodwill paid upon the acquisition of investments in group companies is included in the net equity value of the investment and is not separately shown on the face of the balance sheet.

The long-term loans to group companies also include loans, which although formally in the short-term category, are of a long-term economic nature. The list of group companies is presented in Note 33 of the consolidated accounts.

In the loan redemptions is €(57)m included for the loan to Corus Primary Aluminium B.V. which was liquidated in December 2019.

2. Receivables

	2020	2019
	€m	€m
Amounts owed by group companies	**43**	12
Interest receivable from group companies	**2**	2
Derivative financial instruments	**35**	17
Other debtors	**3**	1
Loans to other Tata Steel companies	**156**	159
	239	191

Derivative financial instruments comprise forward foreign currency contracts only.

The Company has received from T S Global Holdings Pte Ltd guarantees of €150m for loans it holds to other Tata Steel companies.

3. Current tax assets

	2020	2019
	€m	€m
Dutch corporation tax assets	**19**	11
	19	11

4. Borrowings

	2020	2019
	€m	€m
Borrowings		
Borrowings from own group companies	**360**	380
Bank and other loans	**132**	63
	492	443

The borrowings from TSN group companies bear interest rates based on EURO Libor or official local rates. These rates are fixed for periods up to six months. The weighted average interest rate on short-term borrowings from other Tata Steel companies was 0.1% (2019: 0.1%).

5. Other payables

	2020 €m	2019 €m
Amounts owed to group companies	**33**	39
Derivative financial instruments	**36**	19
Other payables	**5**	9
	74	67

Derivative financial instruments comprise forward foreign currency contracts only.

6. Provisions

	2020 €m	2019 €m
Environmental Provision	**(2)**	-
Total Provisions	**(2)**	-

The environmental provision relates to cleaning costs of the Demka wharf. This provision was previously recognised in Beheermaatschappij Industriële Producten B.V. which was liquidated 27 December 2019.

7. Capital and reserves

	Share capital €m	Share premium account €m	Legal reserve €m	Retained earnings €m	Result for the year €m	**Total €m**
Balance as at 31 March 2018	388	13	11	2,105	80	**2,597**
Appropriated result	-	-	-	80	(80)	-
Profit after taxation	-	-	-	-	211	211
Actuarial losses	-	-	-	(14)	-	(14)
Translation reserve	-	-	3	-	-	3
Hedging reserve	-	-	13	-	-	13
Share premium contribution	-	4	-	-	-	4
Balance as at 31 March 2019	388	17	27	2,171	211	2,814
Appropriated result	-	-	-	211	(211)	-
Loss after taxation	-	-	-	-	(125)	(125)
Actuarial losses	-	-	-	(10)	-	(10)
Translation reserve	-	-	1	-	-	1
Hedging reserve	-	-	(18)	-	-	(18)
Balance as at 31 March 2020	388	17	10	2,372	(125)	2,662

The authorised share capital of the Company at 31 March 2020 amounts to €1,300,000,000 (31 March 2019: €1,300,000,000) and consists of 130,000,000 Ordinary shares of €10.00 each.

Both at 31 March 2020 and 31 March 2019 38,760,710 Ordinary shares were in issue to a nominal value of €387,607,100. All shares in issue have been fully paid up. All the outstanding Ordinary shares were held by TSNH.

Legal reserves include the cash flow hedge reserve of €(4m) (2019: €14m) and the translation reserve of €14m (2019: €13m).

8. Contingent liabilities

	2020	2019
	€m	€m
Guarantees and securities on behalf of group companies	**97**	31

As of 1 January 2008, Tata Steel Nederland BV and most of its Dutch subsidiaries are part of the fiscal entity "Tata Steel Netherlands Holdings BV", which is the ultimate parent within the fiscal entity. Under the Dutch Collection of State Taxes Act, the Company and its fellow fiscal unity members are jointly and severally liable for any taxes payable by the group.

The Company has provided letters of support to Tata Steel Maubeuge SAS, Tata Steel France Bâtiments et Systèmes SAS, Tata Steel France Holdings SAS, Tata Steel Germany GmbH, Naantali Steel Service Centre OY, Tata Steel Nederland Tubes BV and Unitol SAS to enable these companies to continue their operations until the approbation by the shareholder of the financial statements for the year ending 31 March 2021, and for Tata Steel Germany GmbH for the year ending 31 March 2022.

9. Other

No employees are employed by the Company, unchanged from the previous reporting period.

Regarding the statement of audit fees Tata Steel Nederland BV applies the exemption as referred to in Art. 382a Part 3, Book 2 of the DCC.

Further notes to and signing of the annual accounts

Group and affiliated companies and other capital interests
A list forming part of the Annual Accounts with names and other particulars of companies in which Tata Steel Nederland BV directly or via group companies participates or holds capital interests in other ways has been filed with the Trade Register in Amsterdam.

Remuneration of and loans to members of the Board of Management and of the Supervisory Board*

	2020	2019
	€	€
The total employment costs of the Board of Management of Tata Steel Nederland BV were:		
Short term employee benefits	**1,603,033**	1,917,887
Long term employee benefits	**252,218**	-
Total emoluments of current and former members	**1,855,251**	1,917,887

* Borne by the Company and its subsidiary or group companies

Employment costs relate to all activities within the Group of the members of the Board of Management.

There were no loans outstanding to members of the Board of Management as at 31 March 2020 or 31 March 2019. An amount of €nil was repaid in the 12 months to 31 March 2020 (12 months to 31 March 2019: €nil).

The Annual General Meeting of Shareholders determines the remuneration of the members of the Supervisory Board. This was last done in 2017.

	2020	2019
	€	€
Remuneration of current and former members of the Supervisory Board*	**185,500**	185,500

* Borne by the Company and its subsidiary or group companies

The members of the Supervisory Board do not own any securities in the Company's capital or rights thereto.

Appropriation of the result for the financial year 2020
We propose to deduct the loss of €(125)m over the financial year 2020 from the Retained Earnings.

During the year ended 31 March 2020 no dividend was paid.

Signing of the Annual Accounts
The 2020 Annual Accounts of Tata Steel Nederland BV have been signed by all the members of the Board of Management and by all the members of the Supervisory Board.

Board of Management

J. van den Berg, Chairman
J.E. van Dort

Supervisory Board

P.M.M. Blauwhoff, Chairman
M.J.L. Jonkhart
L.M.T. Boeren
H. Adam

IJmuiden, 25 August 2020

D. Other Information

Independent Auditor's Report
Reference is made to the Independent Auditor's Report as included hereinafter.

Appropriation of result according to Articles of Association
Article 36, of the Articles of Association stipulates that, the profit available for distribution is at the disposal of the General Meeting of Shareholders.