Division Guide
Working together to deliver ingenuity for life
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This Division Guide provides you with everything you need to know about the structure of our business here in the UK.

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Building Technologies (BT)

What we do:
We live in a world where demand for better use of data is escalating. No more so than in the safeguarding of critical assets and management of vital energy resources.

With a 75-year pedigree in electronic security, fire safety and energy performance, our Building Technologies division is skilled in the delivery and integration of these core services to generate greater intelligence, safer environments and a more efficient workplace. Our ethos of ‘creating perfect places’ drives customer focus, attention to detail and the highest professional standards.

And what’s more, we understand the complexities facing our customers in managing and maintaining a culture of security, adhering to ever more stringent health and safety regulations and the pressure to achieve those green credentials.

Our approach is to work closely alongside customers to help improve the assessment, management and transparency of their essential building systems, whether that’s ensuring the safety of millions of visitors to London landmarks every year, or reducing energy use per patient for major UK hospitals.

Who our customers are:
Our customers span every industry, from commerce, manufacturing and finance, to utilities, transportation and the police, as well as education, health, retail and the public sector. A key strength is our ability to operate in testing environments where specialist services are required and business continuity is central; often delivering complex critical national infrastructure projects for high risk applications.

To give a snapshot of what we do, we tailor our solutions and services to meet the exacting needs of our customers; this can be as small as a single technology installation across a single site, right up to a multi-discipline, multi-site, fully integrated solution.

Fast facts:
- Our Intelligent building automation can reduce building energy consumption by up to 30%
- 40,000+ New system installations globally each year
- 27,000+ employees worldwide, including 10,000 service technicians
- By adding Siemens controls to a domestic heating system, running costs can be reduced by up to 40%
- Over 100 utility locations across the UK have invested in our advanced security and fire safety solutions
Energy Management (EM)

What we do:
Our daily lives depend on a steady supply of affordable electricity. Our Energy Management Division is committed to meeting this energy challenge through the supply of products, systems, solutions, and services for the economical, reliable, and intelligent transmission and distribution of electrical power.

We develop innovative solutions which have the potential to cope with the new challenges our energy systems worldwide are facing. This includes a growing range such as the efficient transmission of bulk volumes of green power over long distances, enabling dedicated power exchange between power grids and connecting micro grids with the main grids.

A further challenge is to maximise the intelligence we have to put into our distribution power grid. Our Digital Grid business develops and delivers innovative smart metering services and solutions for the electricity, gas and water markets. We provide cutting edge technology to enhance our customers’ operational system to deliver the flexible networks of the future.

Through Energy Automation, Energy Management can provide intelligent power supply systems for the entire energy value chain from generation to industry with a portfolio covering protection, substation automation and micro grid solutions. Our Transmission Solutions business can provide complete turnkey solutions for major grid connection projects, with a proven track record with major projects in the offshore wind, HVDC interconnector and transmission network markets.

Who our customers are:
We work with utility companies and industries to provide them with all their power infrastructure needs. This includes smart grid and energy automation solutions, power supply for industrial plants and high-voltage transmission systems. Industries we provide energy management solutions for include: renewables, automotive, chemicals, metals, oil and gas, transport and logistics, mining, and sports stadiums.

Fast facts:
- Globally Siemens Energy Management...
- Employs 53,000 people
- Generates €11 billion in revenue
- Generates €350 million investment in R&D
- Based in 100 production locations
What we do:
The world has never been as networked as it is now. Whether in gas turbines, trains, manufacturing facilities or medical imaging technologies, our reality is taking on a digital dimension.

Our Digital Factory division offers a comprehensive portfolio of seamlessly integrated hardware, software and technology-based services in order to support manufacturing companies worldwide in enhancing the flexibility and efficiency of their processes. Whether that’s providing the automation to bottle different products on a factory production line without having to stop and restart machines, or providing software to help manage workflows and streamline manufacturing processes. A good example of this is our market-leading SIMATIC S7 range of controllers, which has revolutionised automation across a variety of industries. From Formula 1 race cars and passenger cars, to America’s Cup yachts, products are smarter and more connected than ever before.

Our Product Lifecycle Management (PLM) software helps manufacturers transform their operations into digital enterprises. At the heart of PLM is the ability to realise products by the simulation of a digital twin – essentially a virtual copy of the end product in which its individual components can be inserted in different configurations and tested – along the entire development chain.

Who our customers are:
Our customers are essentially every business that manufacturers a product – be it a biscuit factory, an automotive factory or an aerospace company. We partner with companies large and small to offer them digital manufacturing solutions to boost productivity, improve energy efficiency, reduce overheads and improve output.

Fast facts:
Our technology helps process
72 million
passengers’ luggage at Heathrow
Siemens drives power the most efficient baggage handling system in the world

Siemens automated the production line at Heinz helping them to make
1.5 million
tins of baked beans every day

Our drives, automation and processing technology helps pump 7 billion litres of waste water per day across the UK

We have
54,000
customers globally who use some form of PLM digital software ranging from Dyson to Rolls-Royce

Our factory automation technology is behind every Aston Martin made in the UK
What we do:
When we think of Siemens we tend to think of innovation and technology so financial services is perhaps not the most obvious part of our business. However, Siemens Financial Services (SFS), is the backbone of what we do. It is a reliable financing and risk management partner for our businesses and our customers in times when financing of investments becomes increasingly important.

Automation, electrification and digitalisation are rapidly changing the way we do business – and the way we live. We support our customers’ investments in related technology by offering project finance, equipment and leasing solutions, structured finance, capital loans and advisory services.

In the UK we offer a range of financial services, including:
• Equipment Financing – We combine equipment and technology with smart finance so that businesses can tap into tomorrow’s equipment and technology to build a better future.
• Project Financing – We provide the structure a project needs to excel in every phase, ensuring it meets its financial goals and achieves a return on investment.
• Financial Advisory and Structuring – We act as a financial adviser to Siemens divisions and third parties in the UK, arranging and implementing project and structured financing worldwide.
• Working Capital Financing – From revolving lines of credit and term loans to trade-finance facilities and invoice financing solutions, we provide customers with flexibility and cost-effectiveness within a stable, long-term partnership.
• Insurance
• Investment and Pension Management

Who our customers are:
We offer business-to-business finance solutions worldwide. SFS serves Siemens as well as other companies – primarily in the energy, industry, healthcare, technology and infrastructure, and cities markets. Our customers range from large and medium-sized companies, international corporations, municipalities and public sector entities, to small, privately owned businesses.

Fast facts:
• SFS has more than 200,000 customers in 55 countries
• SFS employs 250 people in the UK
• We finance more than 4,000 software projects
• £10,000 to £100m

• 85% of the FTSE 250 companies have financing agreements with SFS
What we do:
The healthcare market faces huge challenges with an ageing population and increasing cost of healthcare. Our mission is to become the trusted partner to healthcare providers and help them become more efficient at a reduced cost.

Passionate about affordable, high-quality patient care, our innovations combine state-of-the-art laboratory diagnostics, imaging technologies and IT solutions to pinpoint disease early on, enhance diagnostic precision and optimise patient care.

Our portfolio includes:

- **Medical imaging** – we are the market leader in diagnostic imaging solutions, creating MR, CT scanners, molecular imaging and X-ray solutions. Our advanced solutions help the detection of illness as well as prevention and therapy.
- **Laboratory diagnostics** – Our state-of-the-art immunoassay, chemistry, hematology, molecular, urinalysis, and blood gas testing systems, deliver clinical and workflow excellence.
- **Healthcare IT and infrastructure** – we provide efficient and integrated solutions for hospitals: business consulting, planning future facilities and optimisation of existing ones to Public Private Partnerships, IT solutions for medical and diagnostic equipment and hospital IT.
- **Managed equipment services** – we can supply healthcare providers with all medical equipment to furnish a hospital, including purchase, installation, maintenance and user training. We’re able to manage this on the hospital’s behalf.
- **Education and training** – we provide educational resources for healthcare professionals, ongoing training, and support across a number of channels to suit the individual’s preference.

Who our customers are:

Our customers are healthcare providers, predominantly the NHS. The second largest sector is private healthcare providers, many of whom provide equipment and services to the NHS. We also collaborate with universities in the UK on research projects.

Fast facts:

- More than 70% of critical clinical decisions are influenced by the type of technology we provide.
- 12,500 granted patents globally.
- Over 46,000 employees.
- Direct presence in 75 countries.
- 209,000 patients per hour.
- 4,200 research collaborations.
- Over €1bn R&D spent.

What we do:
From delivering and servicing trains for use in the UK, to intelligent signalling and traffic systems, our mission is to help get people and goods to where they need to go. Our solutions improve and support rail and road traffic flow in congested urban and inter-urban areas, as well as connecting our cities. Our innovation in mobility makes our cities more liveable and appealing, by making them more efficient and environmentally-friendly, and improving their transport network performance reliability.

Our portfolio includes:
- Rail vehicles – we cover everything from trams to light rail vehicles, commuter trains to high speed trains
- Signal and control technology for rail-based passenger and freight traffic
- Electrification solutions for rail and charging solutions for electric vehicles
- Maintenance and service of rail and road infrastructure and rail vehicles
- Road traffic signals, traffic control, management and information systems, road safety and enforcement systems, congestion charging and toll systems
- Consulting, planning, financing, construction and operation of turnkey mobility systems
- 20,000 man hours of industry training offered each year through the National Training Academy for Rail (NTAR)

Who our customers are:
Working across the transport industry, we have a broad array of customers. We work with local authorities and government organisations, such as Transport for London and the Department for Transport.
To keep the railways running, we help to deliver railway infrastructure with Network Rail, lease trains to financing companies, and partner closely with train operating companies.

Fast facts:
4,000 mobility employees of which some 200 are graduate and apprentice level
We manufacture and supply 60% of the UK’s traffic signals
Our traffic management systems provide adaptive traffic control, enabling traffic signals to immediately adapt to demand, in over 100 cities around the world
We supply and maintain trains for networks such as Eurostar, ScotRail, and TransPennine Express
We enable the world-class 36 trains per hour service on the Victoria Line.

We have delivered over 400 trains in the UK, which travel more than 65 million miles per year

Mobility (MO)
Power Generation Services (PS)

What we do:
Within our Power Generation Services Division our goal is simple: to help power plant operators meet the tough challenges of today and to equip them for the future.

Our team of highly qualified engineers, service specialists and project managers has the depth of knowledge and expertise to understand our customers’ needs and deliver safely, on time and to budget.

- **Breadth of capability** – in the UK and Ireland we repair, service and upgrade Siemens gas and steam turbines and generators. We also service the fleet of Parsons and Westinghouse steam turbines and generators around the world.
- **A global presence** – our global service network and huge installed fleet ensures the ready availability of parts to meet our customers’ local needs. They have the confidence of knowing that our technology has been proven in plants around the world and benefit from the engineering knowledge and expertise that exists both in the UK and globally.
- **A range of services** – with some customers we have a parts and labour programme for planned outages; with others we have long-term maintenance programmes covering full turnkey outages and unplanned maintenance. We also operate and maintain power plants under agreements which guarantee plant availability, and we can provide specialist services such as non-destructive testing, rotor and generator balancing, electrical diagnostic testing, condition monitoring, and performance testing.

Who our customers are:
Power plant owners and wind farm operators rely on Siemens to service, repair and upgrade their plants efficiently, cost-effectively and without ever compromising on safety.

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**Fast facts:**

- We are a full service organisation offering framework contracts to full-scope operation and maintenance programmes and remote monitoring.

  - The speed of a spinning engine is the same as a Formula 1 engine at about 17,000 rpm
  - An SGT-400 engine, which we manufacture and service from Lincoln, weighs 5,900kg, the same as a female African elephant
  - We have over 1,500 employees, in four locations. This includes our team of Field Service engineers who support customers and power stations all over the world

- We operate a 24/7 365 days a year support service for our power generation customers.
What we do:
The Power and Gas Division is the trusted partner for world-class products and solutions. We help our customers worldwide to successfully operate fossil power plants and to meet their specific economic and ecological challenges in their market environment.

We offer a broad spectrum of products and solutions for environmentally-compatible and resource-saving power generation, using fossil or renewable fuels for efficient energy production and the reliable transport of oil and gas.

In the UK we offer a range of financial services, including:
- **Gas turbines** with capacities ranging from 5MW to 400MW. Our gas turbines offer high efficiency, reliability, and environmental sustainability, qualities that in turn deliver low lifecycle costs and make power plants highly profitable.
- **Steam turbines** in the performance range from 45kW to 1,900MW with a long tradition in the manufacturing process and as ongoing development.
- **Generators** in the power range from 25MVA to 2,235MVA. Our expertise is based on more than 100 years of experience in the development and production of generators on an installed fleet of more than 3,500 machines.
- **Our compressor portfolio** offers long-term efficiency, availability, and reliability. Our compressors fulfill industry specific customer requirements in the oil and gas segment, onshore gas production, or gas transport through pipelines as well as in industrial applications including air separation etc.
- **Integrated power plant solutions** offer concepts for gas-fired plants at highest quality from extended power train to full turnkey power plants.
- **Our Power & Process Automation family** completes the Division’s portfolio with comprehensive solutions for power plant instrumentation and control, electrical systems, and IT solutions.

Who our customers are:
Our customers are utilities, independent power producers, engineering, procurement, and construction (EPCs) companies and industrial customers e.g. the oil and gas industry.

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### Fast facts:

- **Our gas turbines have capacities ranging from 5MW - 400MW**
- **Our steam turbines perform between 45kW - 1,900MW**
- **Our generators have a power range of up to 2,235MVA**
- **Our installed fleet of generators numbers over 3,500**
- **Over 100 years of experience in the development and production of generators**

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Material Solutions, a Siemens Business is a world leader in innovative 3D printing for Industrial Applications:

- Based in Worcester
- Uses additive manufacturing processes (3D Printing) to produce high quality parts for the most demanding applications of Power Generation, Aerospace, Automotive and Process Industry
- February 2017, Siemens achieved a breakthrough in 3D printed gas turbine blades, with the first full scale engine tests for conventional and completely new designed gas turbine blades.
Process Industries and Drives (PD)

What we do:
Process Industries and Drives helps industries to continuously improve the reliability, safety, and efficiency of their products, processes and plants. The division's function is similar to Digital Factory in that it provides businesses with innovative, integrated technology across the entire lifecycle – from design and engineering to modernisation.

Around the world, we provide future-proof process automation, drive technology, industrial software, and services based on best-in-class technology platforms like Totally Integrated Automation (TIA) or Integrated Drive Systems (IDS). We rely on standardised components wherever possible, complementing these with industry-specific solutions to meet customers’ needs in all industry segments. This enables the availability of products, systems, and solutions over the long term, and with our strong focus on resource efficiency, we contribute to environmental sustainability in every application.

Process industries are one of the core markets of Siemens. Countless applications, installed throughout a wide variety of industries, demonstrate our expertise. But even more important is the value we add for our customers, enabling them to increase their productivity in every part of the value chain.

Who our customers are:
Our range of customers are far and wide, covering almost every type of industry in the UK. Our technology supports industries such as chemical plants, pharmaceutical plants, food & beverage factories, water treatment facilities, the pulp & paper industry, and even the Large Hadron Collider at CERN.

Fast facts:
- Our Product Lifecycle Services help keep important UK industries such as power generation, oil & gas, glass and steel production running 24/7.
- Our low voltage (LV) SINAMICS variable speed drives are rated to 6.6MW.
- Our Integrated Drive Systems can boost plant availability up to 99% and reduce engineering time by up to 30%.
- Our high voltage (HV) SIMOTICS motors and generators drive rotating machines like pumps, fans & compressors rated to over 100MW.
- Our hybrid drives help British-built London buses reduce emissions & fuel consumption by 50%.
What we do:
Siemens Gamesa Renewable Energy (SGRE) was formed on April 3rd 2017 from the merger of Siemens AG’s Wind Power and Renewables division and Spanish wind power company, Gamesa. It is an affiliate company of Siemens AG which holds a 59% shareholding, with Iberdrola holding 8% and 33% free float shares.

Legal domicile and global headquarters of the company are in Zamudio (Spain). The Onshore headquarters are also located in Zamudio, whilst the Offshore headquarters are located in Hamburg (Germany) and Vejle (Denmark).

In total, the merged company has close to 27,000 employees. Our products and technology are installed in more than 90 countries. The united company has combined annual revenue of €11 billion, an order backlog of €21 billion and a global installed capacity of 75 gigawatts (GW).

Our offering
- Onshore wind turbines – from 2.1MW to 3.4MW covering low, medium and high wind speed sites.
- Offshore turbines - from 4MW-10MW
- Solar – we have a successful solar power business in India.

Who our customers are:
We supply a wide range of customers from private companies, to large utilities, to sovereign wealth funds.

Fast facts:
- Siemens equipment generates around 50% of the UK’s wind energy
- Siemens onshore and offshore in the UK has an installed capacity of over 6GW generated by approximately 2,500 turbines.

Siemens and Associated British Ports invested £10m in a wind power blade factory, load-out port facility and a Service warehouse in Hull creating 1000 direct jobs.

The single blade length of a 8MW turbine is greater than the entire wingspan of the Airbus A380.