Bosch worldwide
The internationalization of the company

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The major strengths of the Bosch Group include not only its innovative ability, its product quality, its values, and the commitment shown by its associates, but also – and above all – its global presence. The company can look back on a long tradition of international activity.

In 1898, Robert Bosch set up a sales office in London, the company’s first branch office outside Germany. In 1905, he then set up a small production facility in France. His company established a presence in the U.S. in 1906 and in China in 1909. In 1913, Bosch generated 88 percent of its sales outside Germany and was represented on all continents. Robert Bosch never allowed himself to be discouraged by the impact of the two world wars on his company’s international business. He believed that business should know no boundaries, a view he expressed in 1932: “After all the technological progress that has been made, our world has now become too small for any nation to consider shutting itself off from the others. Despite everything, interests are now so closely intertwined that the only possible form of economic activity is global.”

And technological progress continues to bring the world closer together. Over the past decades, Bosch has helped shape these developments. For a long time now, in fact, many of the company’s outstanding innovations have been the result of collaboration between engineers in all major economic regions. Today, “creative space” can include the whole world.

However, this internationalization also demands that we make the most of the opportunities presented by cultural difference. It is no coincidence that preserving cultural diversity is one of the core values that underpin our corporate culture. Only when associates from different regions of the world work together can we deliver beneficial and fascinating products and services – in keeping with our strategic imperative “Invented for life.”

Volkmar Denner
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1898–1945
Stuttgart and beyond

By Christine Siegel

Advertising poster in a Bosch Car Service garage in the Philippines, 1939. As the poster proclaims, by that year Bosch was already "famous in five continents."
The last two decades of the 19th century were a time of optimism in the German economy. The “new industries” were on the rise, creating high levels of exports. In addition to chemicals and mechanical engineering, these industries included electrical engineering – an area in which Robert Bosch showed interest early on. His “Workshop for Precision Mechanics and Electrical Engineering,” established in Stuttgart in 1886, made him one of the pioneers of this emerging industry.

Soon after setting up his company, Robert Bosch gave serious thought to selling his products outside Germany as well, and to taking advantage of the potential of cross-border trade. It had become much easier to export goods thanks to the worldwide standardization of units of measurement, the introduction of Greenwich Mean Time, and the adoption of the gold standard. All leading trading nations pegged their currencies to this standard, which greatly facilitated international trade. New means of transportation such as the railroad and steamships also led to considerable reductions in travel and transportation times.

**Launch of international business**

A cosmopolitan figure like Robert Bosch welcomed this development. Before setting up his business, Robert Bosch had spent some time working in the U.S. and the U.K., becoming acquainted with the two major industrial and trading nations of the age. In fact, he made the two most important decisions of his company’s start-up phase in collaboration with a British businessman. At the suggestion of Frederick R. Simms, Bosch installed a low-voltage magneto ignition device in a motor vehicle in 1897 – and the results were promising. And it was also in cooperation with Simms that Bosch launched his international business. The number of cars sold in Germany was still relatively low at that time. If Bosch wanted to manufacture and sell the magneto ignition device on a major scale, he had to look beyond Germany’s national borders.
First agents and sales offices
As a first step, Bosch and Simms set up a company in 1898 to market Bosch magneto ignition devices in the United Kingdom. In 1899, the joint venture extended its business activities to include France and Belgium. That same year, to optimize sales in Austria-Hungary, Bosch concluded an agency agreement with Dénes & Friedmann, a company that had offices in Budapest and Vienna.

The worldwide commercial breakthrough for Robert Bosch came in 1902 with the high-voltage magneto with spark plug, which became established as the best ignition system in the market. It proved particularly invaluable in the up-and-coming sport of motor racing. Most winning cars were equipped with a Bosch ignition system, and the company exploited this success in its first advertising campaigns. The “Red Devil” figure that was used in international advertisements for products from Stuttgart before the first world war was based on the Belgian racing driver Camille Jenatzy, who went from victory to victory thanks to the Bosch ignition system and his daredevil style of driving.

Focus on Europe
In 1903 and 1904, additional agents were appointed throughout Europe. Willem van Rijn in Amsterdam became the agent for the Netherlands in 1903. The following year, Dénes & Friedmann also took on responsibil-
Around the world

There was a buzz of excitement in the air as associates from the New York City branch gathered in Times Square on February 12, 1908. At 11:15 a.m., six teams were setting off on the first round-the-world car race – many equipped with Bosch ignition systems. Would the magneto ignition systems pass the estimated half-year endurance test and make it all the way to Paris, more than 20,000 kilometers away? That is precisely what they did – “without the slightest malfunction,” as the winner Hans Koeppen reported in a letter to Bosch after the race. The magneto ignition system even survived an engine fire unscathed. Koeppen was the first to reach Paris in his Protos car on July 26, but was later disqualified for transporting his car part of the way by rail. However, the second-placed American George Schuster, driving a Thomas Flyer, was also impressed by the Bosch ignition system: “The performance of the Bosch Magneto was just as remarkable as the performance of our Thomas car. At times when it was necessary to ford streams, and water was thrown over the top of the bonnet of the car, I was sure we’d have magneto difficulties. On the contrary, we had no trouble during the entire trip. Perfect ignition all the way from New York to Paris. The Bosch Magneto is perfect!” Such praise no doubt made the Bosch associates in New York City very proud.

Dieter Schmitt

In 1950, the “Bosch-Zünder” associate newspaper sketched out the route of the first round-the-world car race, which took place in 1908.
ity for supplying the Italian market, founding a branch office in Milan. From 1904, Bosch products were also sold in Russia and Switzerland, and also in Scandinavia, where Bosch concluded an agency agreement with the Stockholm-based company Fritz Egnell for Sweden, Denmark, Norway, and Finland.

The long-held plans for establishing manufacturing facilities outside Stuttgart were carried out in 1905. In a small factory in Paris, Compagnie des Magnétos Simms-Bosch began producing magneto ignition systems using the Bosch design, with the aim of bypassing trade barriers such as customs duties and transportation costs. When Bosch and Simms went their separate ways in 1906, Bosch was then able to independently supply customers in France and – a little later – Britain. At the time, these countries were the biggest automotive markets in Europe. The ever growing number of orders pushed the capacity of the Stuttgart factory to its limits. Bottlenecks were eased with the help of the factory in Paris.

Crossing the pond

Soon however, these capacity bottlenecks became even more acute. In 1906, the sales manager Gustav Klein set up a branch in New York City and secured orders worth a million dollars. This was equivalent to more than the company’s total annual sales at that time. The U.S. business fundamentally transformed the company. In 1907, company sales nearly doubled in comparison with the previous year, with export figures rocketing skywards. In 1899, exports amounted to just under 16 percent; in 1907, they were already around 79 percent.
Meeting in Paris

When Bosch’s European sales representatives convened in Paris on December 11, 1910, the main item on the agenda was greater uniformity among the Bosch locations in Vienna, Geneva, Brussels, and London. Both salesmen and engineers attended the meeting. More than two dozen participants from around Europe traveled to Paris, where they were brought up to speed on the latest technological developments used in Bosch products. The goal of the event was to give representatives the information they needed to provide customers in Milan, Amsterdam, and Stockholm with expert advice on the functions and benefits of the products they sold. Robert Bosch himself was also in attendance.

The highlight of the meeting was an English-language presentation about spark plugs given by Gustav Klein, the head of sales at Bosch. Gottlob Honold, the chief engineer, was happy to let Klein, who had a better grasp of English, give the presentation, and even loaned him original drawings of the new spark plugs to make the presentation livelier. As it turned out, this was a mistake. The participants were impressed by the presentation, but Klein forgot to return the drawings to Honold afterwards. Instead, he took them with him to the sales office in New York City and promptly left them there. Back in Stuttgart, Honold frantically searched for the drawings and begged the New York office to “urgently send me the documents, as these are original drawings and I urgently need them.” Today, thanks to scanners and the internet, this would of course be no problem, but poor Honold had to wait weeks to get his documents back.

Christine Siegel
**New bases**

New agencies were set up in Romania in 1906 and Spain in 1908, followed by Portugal and Bulgaria in 1911 and Greece in 1913. While the focus was on Europe in the years up to 1906, the company’s business policy took on a more international dimension in the years that followed, and the geographical distance between the international offices and the Stuttgart-based parent company grew. From 1906, Bosch was represented by Hoppert in South Africa. In 1907, Bosch appointed a representative in Australia and New Zealand. Argentina followed a year later, and Bosch appointed its first agent for the Chinese market in 1909 – the first time Bosch had ever ventured into Asia. In 1910 and 1911, when it began constructing a U.S.-based manufacturing facility in Springfield, MA, Bosch opened further agencies in Brazil, Turkey, and Japan. The last agencies to be set up before the first world war broke out were founded in Egypt and Chile in 1913.

The Lürssen-Daimler motorboat won the 1911 “Champion of the Sea” race in Monaco. Capable of a top speed of 35 knots, it was equipped with a Bosch ignition system.

Associates of the Bosch sales partner C. Illies & Co. in Nagoya, Japan, 1933
Looking back on his first trip to Japan in late 1912, the Bosch mechanic Friedrich Reiser said: “I immediately began looking around for cars and major roads, because they played such an important role for my professional future. I was somewhat disappointed to discover there weren’t any.” Reiser was sent to Japan by Robert Bosch. After 16 days of traveling overland, mostly on the Trans-Siberian railway, he reached the Bosch sales partner Andrews & George in the port of Yokohama at the end of December 1912.

The purpose of Reiser’s journey was to set up a repair workshop and teach Japanese mechanics how to maintain and repair Bosch magneto ignition systems. Bosch wanted to establish a good reputation and gain customers’ trust by providing high-quality and reliable repairs and maintenance. The lack of motorization lamented by Reiser did not seem to be an auspicious sign. But that soon changed, as the “Bosch-Zünder” associate newspaper reported in 1921: “Motorized road traffic has been steadily increasing in Japan since 1914. There were 1,066 cars on the road in 1914; that figure has now increased to almost 8,000.”

Reiser could not have known that a half-century later Japan’s roads would be filled with millions of cars, and that by the end of the 1970s, a quarter of all new cars would be produced in Japan. All the better, then, that Bosch staked its claim in Japan early on.

Dietrich Kuhlgatz
A sudden halt
Between 1895 and 1914, the total volume of global exports had tripled, owing in no small part to Bosch. In 1913, some 88 percent of the company’s total sales were generated outside Germany. The outbreak of the first world war in August 1914 and America’s entry into the war in 1917 had catastrophic consequences for the company’s international business, which ground to a complete halt.

However, demand arose elsewhere. For the first time, motor vehicles were used on a large scale for military purposes. For Bosch, this meant gearing its operations to military production. The Allies also switched to armaments production and began making their own ignition systems. In Paris and London, the Bosch sales offices were put under wartime administration. International patent protection no longer applied under these conditions. As a result, the new factories were able to benefit from decades of Bosch experience in the production of magneto ignition systems. After four years of war, these companies had become established entities and Bosch was faced with some tough competition.

“Red devil” vs. “Armature in a circle”
When the U.S. entered the war in 1917, all Bosch assets in North America also came under government administration. At the end of the war in 1918, they were expropriated and sold to a group of American investors, together with the rights to the brand name. The resulting American Bosch Magneto Corporation now sold its products under the Bosch name, and continued to advertise using the figure of the red devil. Mix-ups were inevitable, and Robert Bosch feared for his company’s good name. In 1921, he therefore founded a new agency in New York City. A new trademark designed by Gottlob Honold in 1918 – the “armature
Pulling together

Cooperation at C.A.V.-Bosch in London had run smoothly since the joint venture was established in 1931. The English associates at this subsidiary got on well with their German co-workers. Their relationship was one of mutual respect, as was the relationship between staff at the two parent companies – Joseph Lucas Ltd. in Birmingham and Bosch in Stuttgart.

In 1938, when the Sudeten crisis threatened to escalate into war and European statesmen yielded to Hitler’s demands for the last time, staff at Lucas sent a remarkable letter to Stuttgart. They wrote, “We wish you to feel that our friendship for you all and our appreciation of all the many kindnesses you have shown us will always endure. May we ask you to join with us a mutual determination to create an atmosphere from which suspicion and mistrust are removed and our peoples move forward in friendliness and common understanding.”

The response from Stuttgart was swift: “We at Bosch, who have long been fortunate to be associated with many of you in the context of our inspiring and successful collaboration, appreciate your message of friendship in these difficult times. [...] May the benign spirit of this promising affirmation of peace and understanding continue to guide our joint efforts in the future.”

War, of course, was unavoidable, but when Bosch re-established a presence in the U.K. in the 1950s, it did so with the help of its old friends at Lucas.

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in a circle” – was now used to differentiate products imported from plants in Germany from those produced by “American Bosch,” as it was known. This trademark is still used today, in a modified form.

A new start with long-standing partners
On the whole, the process of rebuilding the company’s international sales was rather sluggish in the first two years after the war. Luckily, not all agencies had been expropriated. Although business in countries that had remained neutral during the war had ground to a halt due to a lack of supplies, Bosch was able to re-establish business relationships that had been in place before the war. Long-standing business partners such as Willem van Rijn in the Netherlands and Fritz Egnell in Sweden were happy to start selling Bosch products again in their respective countries. The same was true of the agencies in Spain, Romania, Poland, and Turkey. Business had continued without interruption at the agencies in Vienna and Budapest. During the war, Bosch had in fact parted company with Dénes & Friedmann, and founded its own companies.

It proved more difficult to resume business operations in Britain and France. The new companies that had begun to manufacture automotive equipment during the war were now firmly established in their local markets. Due to feelings of national resentment, countries that had fought against Germany in the war were reluctant to buy products from Germany. For Bosch, this made it all the more important to become re-established in the U.K. and France early on, and so it set up agencies in London and Paris in 1920 and 1921.

Overseas
Bosch re-established its business contacts in countries outside Europe as well. By 1920, Bosch had signed new contracts with its representatives in Argentina, South Africa, Japan, and China. Bosch planned to
Top left: Trade fair pavilion of the Bosch sales office Willem van Rijn in Soerabaia, Batavia (now known as Java), 1936

Top right: Associates from the Bosch agency C. Illies & Co. in Japan founded their own baseball team and regularly got together to play, 1930.

make Argentina the new base for its entire South American operations. Robert Bosch therefore traveled there in 1921 to assess the local situation for himself. A new Bosch company was established three years later in Buenos Aires. Moreover, by 1923 Bosch had concluded new agency agreements in Cuba, Syria, Palestine, the British Raj (now India), the Dutch East Indies (now Indonesia), Siam (now Thailand), Egypt, the Malay States and the Straits Settlements (now Malaysia), as well as in Chile and Mexico. A close network of agencies and – from 1921 – licensed repair workshops, known as Bosch Car Service garages, was set up around the world. This helped make Bosch a household name in every corner of the globe.

Free trade or isolation
After the war, most of the industrial nations imposed high protective duties on imports. The political isolationism of the U.S., the world’s largest trading power, led to a self-imposed economic quarantine. The worldwide economic crisis or Great Depression, which began in 1929 with “Black Friday,” paralyzed any international economic cooperation that had been carefully nurtured in the previous years. As a result, many governments further intensified measures to protect their countries against imports. This development was anathema to the principles of liberal economic leaders, including Robert Bosch. He believed that close international cooperation on both an economic and political level was essential to avoid future wars and economic crises.
**Local production**

From the end of the 1920s, crises, customs duties, and Germany’s efforts to achieve economic self-sufficiency prompted Bosch to establish several joint ventures outside Germany with companies that were manufacturing the same products as Bosch. It entered into an alliance with Lavalette in France in 1928, and in 1931 joined forces with C.A. Vandervell Co. Ltd. in the U.K. to create the joint venture known as C.A.V.-Bosch. A similar venture was started in 1935 with the Italian company Magneti Marelli, giving rise to MABO in Milan. In the United States, Bosch merged with American Bosch Magneto Corporation in 1930 to become United American Bosch Corporation. Furthermore, in the 1930s Bosch awarded licenses to assemble Bosch products in Argentina, Japan, and Australia. By the beginning of the 1930s, the company’s international business was back on a solid footing. The Bosch brand and the quality of Bosch products were internationally recognized. When the National Socialists took power in Germany in 1933 and introduced a phase of economic autarky, export levels plummeted – also at Bosch, where they fell from 55.7 percent in 1932 to 9.3 percent in 1939. And when the second world war broke out that same year, the Allies once again put Bosch assets under wartime administration. This marked the end of a chapter of successful internationalization. At the end of the war, the international business of Bosch was once again on the brink of ruin.
1946–1989

Stability and upswing

By Christine Siegel

Against a backdrop of traditional Mariachi music, a VW Beetle belonging to a Bosch Car Service repair shop rolls into Mexico, 1970.
After the second world war, it proved to be much more difficult for Bosch to re-enter international business than after the end of the first world war in 1918. Bosch had lost all the branches and companies that were located in former enemy territory. Not only that, the London Agreement of June 27, 1946, also withdrew protection for all German patents and trademarks in these countries. German manufacturing facilities had suffered widespread destruction, practically bringing production to a standstill. Germany itself was divided into four zones of occupation, and each of the allied occupying powers was responsible for economic matters in their zone. In the first few months after the war, German companies were not able to engage in foreign trade at all. In the U.S. and British zones, where most of the Bosch plants were located, the Joint Export Import Agency (JEIA) administered all exports. German companies were initially even prohibited from corresponding with other countries.

**Tentative beginnings**

Despite all the difficulties, Bosch endeavored to get the company’s export business off the ground again. Its efforts were rewarded. In 1950, the “Bosch-Zünder” in-house newspaper reported that Bosch was the first German company to get its international business back on its feet. One of the key contributing factors was that Bosch was able to use the contacts it had established in the decades before the war and, in some cases, to pick up relations where it had left off. Some representatives directly approached the company after the war, asking to be supplied with products. This made it easier to restart foreign trade when the Allies relaxed their export restrictions at the end of the 1940s. In 1950, exports amounted to a respectable 11 percent of total Bosch sales.

**Far-sightedness**

European countries accounted for the lion’s share – more than 80 percent – of Bosch exports in 1951. New agencies were appointed in France and Austria as early as 1950. Nonetheless, other markets soon came to the attention of the company during the 1950s. From 1952, German companies were again allowed to make investments outside the country. As a result, the company founded Robert Bosch Corporation in New York City in 1953. In this initial phase, however, conditions for trading with the U.S. were difficult due to high customs
End of the dry spell

“Our strategy in India to date, that of limiting ourselves simply to imports, will not yield success in the long term. On the contrary: if we continue to pursue this strategy, we will be completely squeezed out of the Indian market.” This was the dramatic conclusion of an in-house Bosch analysis conducted shortly after 1950. It certainly hit home. After all, Bosch had been a supplier of automotive parts in India since 1922, but had failed to achieve any real increase in sales, despite changing its local sales partners three times. British and U.S. automotive suppliers were simply too strong. More than ten years after the end of the colonial period, cars and commercial vehicles from these countries still dominated the roads in every Indian city.

So how could Bosch turn the tide? The Indian government’s 1951 five-year plan provided the perfect opportunity. The plan called for some 50,000 stationary diesel engines for irrigating fields to be built by 1956. And who had a better reputation in the field of diesel injection than Bosch?

Bosch therefore joined forces with its Indian trading partner Chaziabad. In 1951, Chaziabad – in conjunction with Indian partners – founded the company Mico, which manufactured Bosch technology under license. Bosch initially secured a shareholding and subsequently a majority stake in this company, which is now known as Bosch India Ltd.

Dietrich Kuhlga tz
duties and the renewed struggle to regain expropriated trademark rights. The situation in Canada, where a new distribution company was set up in Montreal in 1954, was much simpler. It also proved possible to buy back the company’s trademark rights there. The same applied to the U.K., where Bosch bought back the expropriated Bosch Limited in the same year. The company was also able to resume full operations under the Bosch name in numerous other European countries.

**Restarting international production**

In addition to developing and extending a network of sales offices and customer service centers, which by 1956 already covered 130 countries, Bosch increasingly focused on setting up local production facilities. This allowed it to bypass high duties and long transportation routes. In addition, the tax incentives offered by countries such as Brazil were attracting international investors. When German automobile companies settled on the South American continent, founding a Bosch location near São Paulo offered two benefits – Bosch secured supplies to long-standing customers, and it also gained access to a market whose size made it extremely promising.

In the mid-1950s, Bosch also started production in Australia and India. In 1952, it acquired a share in Motor Industries Company Ltd. (Mico), a company that had been founded by several Indian partners for the production of Bosch spark plugs and diesel injection pumps under license. In Australia, Bosch purchased shares in a local company, Pyrox Pty. Ltd., which had previously been granted a license for the production of automotive technology. From 1956 to 1958, Bosch increased its shareholding in the business until the plant came fully under Bosch control, after which it was renamed
Robert Bosch (Australia) Pty. Ltd. Elsewhere in the mid-1950s, Bosch granted manufacturing licenses to local companies in Japan, Spain, and Argentina. It also acquired a majority holding in the Swiss company Scintilla, and took over manufacturing operations in the company’s Solothurn and St. Niklaus plants. It was the first time that Bosch had produced goods on Swiss soil.

Consolidation and new structures
In the second post-war decade as well, the company continued to expand internationally. While Bosch focused on setting up new offices and production facilities in the 1950s, the 1960s were shaped by consolidation and reorganization measures designed to make the company fitter for international markets. One by one, sales offices and companies outside Germany were renamed. Each company bore the name of the company founder and most also featured the country name. Typical examples are Robert Bosch Argentina, founded in 1961, and Robert Bosch (Norge) A/S, founded in 1962. In a further step, the term “regional subsidiaries” was introduced in 1971. The annual report from that year observed that the planned further multinational expansion of the Bosch Group had rendered the traditional distinction between “domestic” and “foreign” companies obsolete.

Focusing on France
The foundation of the European Economic Community (EEC) in 1957 created extra incentives for investing outside Germany. As a result, Bosch began to focus more on its western neighbor France. The company founder Robert Bosch had always been keen to establish close relationships with France, and the foundation of the European Communities, which both countries belonged to, was a belated fulfillment of his
political vision for Europe. Cooperation with Germany’s western neighbor was particularly interesting from an economic point of view. In the 1950s, Bosch was able to re-establish business relations with French contacts that had been built up between the two world wars. In 1962, the production company Les Constructeurs Associés was founded in tandem with several French partners, becoming a wholly owned Bosch company in 1964. From 1966, after merging with the sales company Robert Bosch S.A., the new company traded under the name Robert Bosch (France) S.A. The French regional subsidiary greatly expanded its business in the years that followed, setting up new operations and acquiring companies. France became the second most important market for the Bosch Group after Germany, and remained so until well into the 1980s. In 1983, Robert Bosch (France) S.A. became the largest German employer in France.

New Bosch locations were also set up in Spain and Mexico in the late 1960s. Bosch began production of automotive electrics in Spain when it acquired a 50 percent share in Constructora Eléctrica Española S.A. in Madrid, which later became Robert Bosch Española S.A. In 1966, Bosch joined forces with local partners to establish Automagneto S.A. de C.V. (or AMEX) in Toluca, Mexico, for the production of automotive equipment. Production capacities were expanded by acquiring other companies. Accordingly, by the start of the 1970s, Mexico was able to supply the neighboring U.S. market.

**Good things come in threes**

During the 1970s, international activities focused on one market in particular – the United States. Although the company had already managed to establish itself twice in the U.S. in the face of great adversity, the new start after 1945 proved extremely
Thirty to one

There were almost 30 applicants for just one apprenticeship, and Nelson Mulato was lucky enough to get it. He started his training at the Campinas plant on February 1, 1960, as one of the first Bosch apprentices in Brazil. “My group was the first at the workbench. We assembled the imported machines and waited for instructions from our trainers.”

Brazil and its fast-growing automotive industry offered a wealth of opportunities for Bosch. The company had already established a small production facility for diesel equipment in Campinas in 1956, but this was soon bursting at the seams, and so construction began on a new building on the outskirts of the city. Bosch invested not only in the location, but also in training. After all, it could only achieve its growth targets if it managed to recruit enough well-trained associates. It was with this in mind that Bosch started to offer apprenticeships as part of the state training program SENAI (Serviço Nacional de Aprendizagem Industrial) in 1957. Children and family members of Bosch associates were eligible to apply for these apprenticeships. The selection process was tough and only the most talented candidates were chosen. Applicants not only had to have an impressive school record, they also had to demonstrate their commitment to pursuing a technical career. But it was truly a unique opportunity, and one for which Nelson Mulato was very grateful later in life: “I believe my training at Bosch was the single most important thing in my career!”

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difficult, particularly with regard to production. In fact, the breakthrough only came 25 years after the end of the war, when, in 1973, Bosch started construction of a plant for the production of diesel injection equipment in Charleston, SC. Further manufacturing sites followed, not only for automotive technology, but also for the products of the other business sectors. In the mid-1980s, the U.S. became the Bosch Group’s most important sales market outside Germany, thus replacing France as the front-runner. Consequently, at the end of the decade, the company decided to focus its international investments on North America. In just two decades, Bosch had managed to re-establish itself in the U.S. market. To crown this success, the company managed to reacquire its trademark rights after almost 40 years.

**Global activities**

Although the U.S. was the focus of the company’s activities outside Germany, the company by no means neglected other markets. In 1972, Bosch was one of the first European companies to start production in Penang in Malaysia. A year later, in cooperation with partners, it opened its first factory in Japan. It also began manufacturing operations in Tienen in Belgium, Bursa in Turkey, and Ghazwin in Iran. In 1974, for the first time since the end of the second world war, the Bosch Group generated more than 50 percent of its sales outside Germany. However, the strong German mark proved an obstacle to exports. The solution was to open up additional manufacturing sites outside Germany. The acquisition of a majority share in the Spanish automotive supplier Fábrica Española Magnetos S.A. (or FEMSA) in 1978 facilitated the supply
Rolf Elsässer needed plenty of courage and a spirit of adventure to take on the role of workshop manager for Bosch in Chile in 1960. He had already been working at the EMASA Bosch affiliate in Santiago, Chile, for two years, and now he was being tasked with outfitting a copper mine in the Andes with Bosch power tools. The mine was located about 350 kilometers north of Santiago at an altitude of approximately 3,600 meters. To get there, the convoy first drove north along the Panamerican Highway, where progress was swift. They spent their first night at a campsite near the town of Illapel. The last few kilometers, which they covered shortly before midnight, left a particularly strong impression on Rolf Elsässer: “We crossed raging mountain streams and passed sleepy huts, catching an occasional glimpse of dim candlelight. […] The headlights cast eerie shadows and illuminated strips of mountainside covered with cactus forests in full bloom.” The next morning, the equipment was transferred onto mules. Because there was no road for vehicles at that time, pack animals had to be used for the last 25 kilometers of the journey. “Sometimes it took a full week to get there,” he remembers. Once he had arrived, he immediately started setting up the drilling equipment, which comprised electric hammer drills and a generator. There was difficulty starting the motor due to the thin air at that altitude, but an improvised glow tube soon solved the problem. Using the new power tools, each blast hole could be drilled in around 20 minutes. This not only saved a considerable amount of time, it also meant the long, difficult journey had not been made in vain.

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of goods to the Spanish market. Moreover, FEMSA also owned plants in Central and South America. In the same year, production got under way in Guarda in Portugal. By acquiring the remaining shares in Friedmann & Maier AG, Hallein, in 1986 (Bosch had held a minority share since 1969), Bosch began to manufacture goods in Austria. It also used the Austrian capital Vienna as its base for coordinating its activities in central and eastern Europe. At that point, nobody could have guessed that only three years later the Berlin Wall would fall, thus opening up a brand new growth market. With the establishment of offices in Hong Kong and South Korea, and liaison offices in Beijing, Bangkok, and Taiwan from the mid-1980s, the Bosch Group strengthened its presence in Asia Pacific, thus laying the foundations for the expansion of its activities there in the decades that followed.

International division of labor and manufacturing network

Even in the first decade after the second world war, the international division of labor – in this context, a global network for the manufacturing of Bosch products – was declared a long-term goal of the Bosch Group. As early as 1960, investments outside Germany focused more on establishing the Bosch Group’s own manufacturing sites than on strengthening the sales network. There were plenty of reasons for making this decision. First, for large domestic and international companies, customer proximity was crucial. Second, it provided a way of gaining access to difficult markets. Third, there were local-content regulations. For example, some countries had fixed quotas on how many products could be imported and how many had to be manufactured within the country. Fourth, the decision to select a particular site was governed by
Tradition and modernity

In 1970, the corporate department for manufacturing planning sent an associate to Bursa, Turkey, to gauge its suitability as the site of Bosch’s first plant in the country. The associate came back charmed – and convinced. The city, with its many architectural highlights, had recently become the center of Turkey’s emerging automotive industry. The number of vehicles had skyrocketed in 15 years, from 82,000 in 1957 to 560,000 in 1972. Both factors were seen as good reasons for establishing the first Turkish location for Bosch in Bursa.

It did not take long to find a suitable plot of land, and construction of the Robert Bosch Türk plant was completed two years later. The assembly lines began rolling in the fall of 1972, providing a local base from which Bosch could serve the growing Turkish automotive market. At the time the plant opened, Renault and Fiat already had manufacturing facilities in the immediate vicinity.

The plant, like the city itself, combined tradition and modernity. Despite being a state-of-the-art facility, ancient Turkish customs were observed in its construction and inauguration. For example, in accordance with old practices, the building’s foundations were anointed with the blood of a slaughtered sheep, and when the plant opened in May 1973, the meat of ten sheep was distributed among all associates.

The location has been expanded many times. Outside Germany, Bursa now employs more associates (roughly 6,500) than any other plant in Europe.

Christine Siegel
In England, Bosch advertises for new recruits on a van belonging to Oxford University’s venerable Bodleian Library, 1989.

considerations such as access to raw materials, and the availability of energy and a local workforce. Last but not least, manufacturing in a network of plants inside and outside Germany resulted in significant cost reductions. The path Bosch took generally followed the same pattern: mature and established products were increasingly to be manufactured at several locations worldwide. The first such products were gasoline and diesel components. By the end of the 1980s, the Diesel Systems division had the broadest international footprint in manufacturing. But promising new products that were expected to generate high growth, such as the ABS antilock braking system, were increasingly also manufactured worldwide. While series production of this system began in Germany in 1978, ABS was already being manufactured in Japan by the mid-1980s and the U.S. by 1988.

A similar pattern can be seen in research and development. While Germany was initially the hub of those activities, this changed as the number of specifically regional customer requirements grew. As a result, certain products intended for just one country also underwent further development in that country. It became increasingly clear that research and development should take place worldwide, and not just in Germany.

In the 1980s, this led to the creation of engineering centers at strategically important locations around the world, including the U.S. (Farmington Hills), France (Paris), and Japan (Yokohama). Bosch engineers at these centers were responsible for developing the next generations of automotive technology for local vehicle models. And it was not only in the first four decades after the war that the international manufacturing network was an important part of corporate strategy. In conjunction with the international research and development network, it remains so to this day.
International standards
Bosch was quick to implement international quality standards, and these standards have lost none of their validity. The Bosch logo outside meant a product had to have Bosch quality inside — regardless of whether the product was manufactured in Clayton in Australia, Toluca in Mexico, or Feuerbach in Germany. During the 1970s, senior Bosch executives throughout the world were strongly encouraged to exchange information and ideas. For example, they committed themselves to implementing the same production and quality standards on a global scale. The same applied to the principles of leadership, which were valid worldwide. If high quality standards were to be applied, then it was also important to have efficient local suppliers. And if the company did not want its manufacturing operations in the individual countries to remain dependent on imports, it had to approach potential partners. Bosch supported these partners by providing them with customized training courses and helping them set up and expand their businesses.

Taking on responsibility
In this drive to internationalize, it was important to take account of regional and cultural peculiarities. Nonetheless, there were — and still are — universal rules that apply without exception. The Bosch Group has always been committed to corporate social responsibility. In 1976, Bosch accepted the OECD Guidelines for Multinational Enterprises as the basis for its activities outside Germany. These guidelines — which were revised in 2000 and are still in force today — define principles for labor relations and employment practices, fair competition, and combating bribery. Such international standards are particularly important in countries where there are no equivalent legal regulations. Bosch has always felt a moral duty to comply with the principle of legality, and applies its internal guidelines consistently all over the world.
Since 1990
Facing up to new challenges

By Christine Siegel

Opened in Shanghai in April 2011, the new Bosch headquarters for China was designed for minimum environmental impact and equipped with eco-friendly Bosch technologies.
As the millennium drew to a close, the Bosch Group’s continued internationalization gathered considerable pace. In just ten years, the share of Bosch Group sales generated outside Germany rose enormously – from 51 percent in 1990 to 72 percent in 2000. The company’s strategy was to strengthen its presence in existing markets and to gain a foothold in a host of further countries. A combination of profound political changes – the fall of the Iron Curtain, the associated upheaval in the socialist countries of eastern Europe, the opening up of China – and the rapid development of information technology ushered in a new era of international business activity, and this not only at Bosch. The term “globalization” – global interdependence in all areas of activity – was suddenly heard the world over. In the company’s established European business, new and attractive markets now opened up in central and eastern Europe. At the same time, Asia Pacific became the growth market par excellence. However, Bosch also continued to focus on harnessing the potential of the Americas. This globalization strategy has shaped corporate policy at Bosch since the 1990s.

International manufacturing and development network

In 1998, the regional subsidiary in the U.K. – the company’s first – celebrated its 100th anniversary. In the same year, the number of Bosch associates employed outside Germany exceeded the number of those employed in Germany for the first time. But globalization was not only a source of opportunity. There were also challenges to be faced, such as increasing international competition. To hold its own in this new arena, Bosch not only strengthened its global sales and manufacturing networks, but also expanded its global engineering network. Worldwide product responsibility was transferred to the individual divisions. Associates from different locations around
the world now worked together right from the development phase, helped significantly by the increasing speed of data transfer and the opportunities offered by the internet. Moreover, it was important to adapt each product to the specific conditions of local markets.

**Developments in eastern Europe**

At the same time, Bosch expanded into eastern Europe. The company was very quick to respond to the political upheaval and opening of eastern Europe that began in 1989. When the Soviet Union broke up in 1991, the management board also turned its attention to the successor states of the USSR, particularly Russia. A huge market was opening up, and Bosch wanted to take full advantage of these new opportunities right from the start. Initially, the Austrian regional subsidiary in Vienna was tasked with coordinating the establishment of sales companies in eastern Europe. From 1991, to advertise the company’s products and win customers, associates traveled through cities in eastern Europe with a mobile exhibition. In 1993, regional subsidiaries were finally set up in seven former socialist countries of eastern Europe and in two former Soviet republics. The managers of the new locations prepared for their new tasks in Vienna. From 1995 onwards, the ongoing expansion in the Baltic states was coordinated by the Finnish regional subsidiary, which had been founded four years previously. Bosch began its first Russian manufacturing operations in Saratov in 1995, followed by a second production plant in Engels in 1996. In 2004, these two sites were combined to form one location. The Russian regional subsidiary opened a new research and development center in St. Petersburg in 2008. A new headquarters for Russia is currently being constructed in Khimki near Moscow. All sales, customer service, and training activities will be based at this new location, which is set to open in 2013.
“Bosch made in China”

“Joint ventures in China were not even an option for Bosch when I took charge of operations there in 1986,” says Klaus Dieter Schwantes, the first head of the liaison office in Hong Kong. “As a first step, I came up with the idea of establishing a service network for drivers, but putting it into practice was anything but easy and required major adjustments in thinking. The Bosch service agreement started off as a four-page pre-printed document, but following weeks of negotiations with the local authorities, it had ballooned to 40 pages. And for final authorization of the first Bosch Car Service, we needed approval from no less than 250 different officials! Thankfully, it got easier with time.”

It must have, since following protracted negotiations, Bosch established its first joint venture in China in 1994. Doing so enabled Bosch to work with Chinese partners to manufacture products to its own high quality standards locally – a decisive factor in the success Bosch now enjoys in China. According to Klaus E. Majer, the Bosch management representative responsible for activities in China at the time, “The major benefits of a joint venture were the partner’s knowledge of the markets, their contact with customers, authorities, and ministries that is so incredibly important in China, and, quite simply, their knowledge of how business is done here. This prevented us from losing sight of the big picture, from making too many cultural blunders, and ultimately from having to pull out.”

Dietrich Kuhlgatz
From liaison office to sales and production

Liaison offices were set up in Poland, Hungary, and what was then Czechoslovakia as early as 1990 to explore the situation in these markets at first hand. Wasting no time, Bosch set up regional subsidiaries in these countries the following year. In the Czech Republic, Bosch established its first eastern European manufacturing facilities in České Budějovice and Jičín in 1992. In 2005, one of the company’s biggest manufacturing facilities, with a total manufacturing floor space of 25,000 square meters, was built in Jičín, while Robert Bosch spol. s.r.o. set up a research and development center in České Budějovice. Bosch was also quick to establish a presence in Slovenia, with BSH Bosch und Siemens Hausgeräte GmbH starting to produce small household appliances in Nazarje in 1993. With the acquisition of the brake operations of AlliedSignal in 1996, Bosch took over numerous plants across the world, including a site in Twardogóra in Poland. This signaled the start of Bosch manufacturing operations in Poland. These leased premises were replaced by a new plant for the production of brake accessories in Mirków near Wrocław in 2003. BSH Bosch und Siemens Hausgeräte GmbH also opened a production plant in Łódź in 1998. In 2009, the Polish regional subsidiary moved into its new headquarters in Warsaw.

In Hungary, production of automotive electronics components began in Hatvan in 1998. A second plant, opened in Miskolc in 2002, initially produced power tools, but later expanded its capacities to include starters, wiper motors, and alternators. In Blaj in Romania, Bosch Rexroth opened a linear-motion technology plant in 2007. From 2013, this plant will also produce automotive accessories, with 1,000 new jobs being created by 2020. In 2008, Bosch acquired Holger Christiansen A/S, including a plant in Bernolakovo, Slovakia. All in all, therefore, today’s company is well represented with sales and manufacturing companies in eastern Europe.
Thereby hangs a tale ...

Bosch was no stranger in the city of Jihlava when a Bosch diesel joint venture was set up there in October 1992. Josef Poláček had opened a small car repair workshop there in 1927, which was quickly integrated into the Bosch Car Service network. The owner underwent extensive training at Bosch in Prague, and not only sold products from Stuttgart, but also professionally installed and repaired them. He became such an expert that operators of other repair workshops turned to him if they had problems installing or repairing electrical accessories. His workshop continued to grow and, in 1940, he opened a repair workshop for diesel pumps and batteries as well as additional salesrooms.

In 1948, the workshop was nationalized under the new political regime in Czechoslovakia. Josef Poláček did not want to continue working under these conditions, nor did he want to share his Bosch expertise with the new regime. As a result, he withdrew from the business.

After an absence of almost 50 years, Bosch has now opened another production facility in Jihlava – one of the biggest in Europe. And who should work there today but Josef Poláček’s grandson, Milan.

Christine Siegel
Growth market Asia Pacific

It was not only the eastern European countries that were becoming increasingly important for Bosch. From the mid-1990s, the fast-emerging markets of southeast Asia also came increasingly into focus. New markets were explored — for example, Bosch set up a liaison office in Manila, the capital of the Philippines, in 1992. Trading activities were pooled in particular in the regional subsidiaries in Bangkok, Hong Kong, and Singapore, with the aim of pressing forward with the creation and expansion of the sales organization in the Asean states (Association of Southeast Asian Nations) and China. Corporate strategy now turned increasingly to the enormous potential of the Chinese market. Activities there culminated in the establishment of several joint ventures in the mid-1990s. As early as 1996, Bosch was the leading non-Asian supplier of power tools in the region. Three years later, it founded the holding company Bosch (China) Investment Co. Ltd., which coordinates all Bosch activities in China to this day. In 2004, the company opened the Bosch Engineering Center in Suzhou, and the Chinese regional subsidiary moved into its new headquarters in Shanghai in 2011. This building was designed for minimum environmental impact, and is equipped with eco-friendly Bosch technologies. The company relied on manufacturing alliances with national partners in other regions of southeast Asia as well, thus expanding its global network of international manufacturing sites. In 1994 in South Korea alone, Bosch established five joint ventures with local partners. In 1997, the South Korean company opened an engineering center in Yongin (Seoul). Further engineering centers followed in Singapore in 2008 (the Research and Technology Center Asia Pacific) and in Malaysia in 2009. In 2011, Robert Bosch Vietnam Co. Ltd., which had been founded in 2008, started production in Ho Chi Minh City.

Familiar faces

However, the focus of international corporate strategy from 1990 was not solely on tapping into new markets. It also concentrated on expanding and optimizing the company’s presence in existing markets. And India, one of the biggest growth markets, played a key role in this context.
“Bringing Bosch closer to people”

“How can we communicate the company’s fundamental values to associates at Bosch in Japan?” This was what Ryunosuke Uchida, the CIP coordinator at the time, asked in 2007. He had the apt idea of telling the life story of Robert Bosch. Not in a film or in a brochure, but in the form of a manga, which is similar to a comic, but more challenging content. Adults in Japan read manga as they would a novel.

Manga are extremely popular in Japan. The hope was that this format would help Bosch associates in Japan identify more with the company – and the Bosch values. This presented a whole new set of challenges. The project involved collaboration between a Japanese manga artist and Ryunosuke Uchida, the Japanese project coordinator, in Tokyo and German copywriters and company historians in Stuttgart.

A total of ten books were published, spanning the entire life of Robert Bosch, from his childhood right through to his death. As well as portraying Robert Bosch the entrepreneur, the books show their protagonist as a private person, critical observer of events, and humanist – and reflect his values, which still permeate the company to this day.

Initial skepticism soon gave way to a fascination with the idea of promoting cultural diversity within the global group and, using a medium that is deeply embedded in Japanese tradition and culture, of helping associates in Japan feel closer to the company.

Dietrich Kuhlgatz
Through its subsidiary Mico, Bosch had been running manufacturing facilities at several locations in India since 1953. Finally, at the end of 1997, Robert Bosch India Ltd. was founded in Bangalore. Today, Bosch employs more than 25,000 associates in India.

For Bosch, another important goal was to strengthen its position in Japan to make sure that the company, as a supplier, was close to the major Japanese automobile companies. The Bosch Group took an important step in 1999, when it acquired a majority holding in the Japanese automotive supplier Zexel, based in Tokyo. Integrating Zexel Corporation, a company that for decades had had close ties with Bosch, into the international manufacturing and development network was of great importance to the company – not only for the Japanese market, but for the entire region as well.

**Milestones in the U.S. market**

Nonetheless, the U.S. remained the Bosch Group’s biggest market outside Germany for some time. Two major acquisitions on the North American continent in 1996 represented a milestone in the Bosch Group’s development. Bosch acquired the entire brake equipment business for cars and light and midsize commercial vehicles from AlliedSignal Inc., based in the U.S. state of New Jersey. The previous year, this company had employed 11,000 people and recorded sales of 2.1 billion U.S. dollars. Bosch also became the sole owner of S-B Power Tool Company, which it had founded in 1992 in cooperation with the U.S. company Emerson Electric Co. in St. Louis, MO. In sales terms, Bosch was now the world’s biggest manufacturer of power tools. As a result of these acquisitions, the number of Bosch associates outside Germany rose within one year (1995 to 1996) from 66,000 to 81,000, while the number of associates in Germany remained constant at 91,000. Bosch sales generated in the U.S. more than doubled between 1995 and 1997, from 2.7 to 6.4 billion German marks. As a result of acquisitions in nearly all its areas of business, Bosch has considerably expanded its presence in the U.S. over the past two decades. In the area of healthcare in particular, Health Hero and ViTel Net were acquired. In 2011, this led to the establishment of Robert Bosch Healthcare Systems Inc. in Farmington Hills.
Bosch on Mars

The discovery of water on Mars by the Phoenix Mars lander in 2008 caused a huge sensation. It was a discovery in which Bosch technology also played a part, since a special drill made by the Bosch subsidiary RotoZip was attached to the lander’s robotic arm. Capable of penetrating the red surface of Mars to depths of half a meter, the drill extracted a soil sample for examination in the lander’s onboard mini-laboratory. The findings were remarkable: when heated, the sample produced steam. This not only confirmed the presence of water on the planet, but also the possibility of life on Mars.

Surprisingly, NASA decided to use the RotoZip Duracut drill only shortly before the start of the mission. The robust drill was designed for drilling into particularly hard materials such as granite or concrete, but no one had thought of using it on Mars. “We knew our RotoZip bits were able to perform under harsh conditions but never imagined that something right off hardware shelves would also penetrate the surface of Mars,” said Terry Horan, the president of RotoZip.

RotoZip became part of the Power Tools division in 2003. In recent years, Bosch has significantly expanded its position in the U.S. through acquisitions such as the high-profile Nelson, CST/Berger, and Gilmour brands.

Adrian Keim
**International cooperation in research and production**

However, these new companies and acquisitions around the world were not the only signs of ongoing internationalization. Global cooperation in development and production within the Bosch Group was taken to a new level in 1996. Production of the ABS 5.3 antilock braking system, which had been developed in an international project, was launched virtually simultaneously in Germany, Australia, Korea, Japan, and the United States. Bosch engineers in development teams in Germany, the U.S., and Japan had worked together to create the new product. This was only the beginning of further activities in simultaneous engineering. In the years that followed, more and more virtual teams were set up, with team members from different locations around the world working together to develop new products. This process was strongly supported by new technologies such as computer-aided design (CAD). With a single mouse-click, users anywhere in the world could now access the “electronic drawing board” that this software provided. This dramatically cut the time needed for development.

With the Bosch international research network becoming more closely knit all the time, the Corporate Sector Research and Advance Engineering (CR) has established two research and technology centers in recent years: one in Palo Alto for the Americas and one in Singapore for Asia Pacific.

**Data transfer around the world**

These types of international projects were facilitated by greater data networking within the Bosch Group. The year 1995 saw the establishment of the “Bosch Corporate Network” (BCN). This communication
Top left: Bosch research laboratory in Singapore for the production of organic photovoltaic cells

Top right: At its plant in Hallein, Austria, Bosch manufactures the MCRS modular common-rail system for large diesel engines.

network was initially restricted to internal data transfer among Bosch locations in Germany, but was gradually expanded in subsequent years to include international locations. The intranet, which followed quick on the heels of the BCN, was an even more promising development. Now, associates around the globe had access to company information in two languages – German and English. In a period of less than ten years, a network that had begun in 1997 with only 5,000 users had developed into a source of information used throughout the world. The “Bosch GlobalNet” – which replaced the old intranet and whose global roll-out was completed in 2009 – provided for the first time a standardized global structure that opens up new opportunities for international networking and cooperation. Today, the social business network “Bosch Connect” is in a pilot stage, and is being successively rolled out worldwide. It is hoped that this online platform will help promote dialogue and make the knowledge available at Bosch accessible to the company’s associates.

An anchor in a sea of globalization

The farther Bosch reached across the globe, and the faster the worldwide networking of its engineering, manufacturing, and sales operations progressed, the more important it became for the company to sensitize its associates to the benchmarks of its culture. As a first measure to address this need, the slogan “Invented for life” was introduced in 2004, and translated into 42 languages. This slogan helps promote a unified image of the brand and the company across the globe. Indeed, it has today become a strategic imperative guiding the entire company. Since 2005, the in-house newspaper “Bosch-Zünder,” which was founded in 1919 by Robert Bosch, has been published not just in German, but in eight other languages, too.

But in a globalized world, it is paramount to have a corporate culture that is based on shared beliefs as to what is right and wrong, and that is actually embraced and put into practice by a company’s associates. Such a culture is instrumental to the company’s success in constantly changing
Opening of the Bosch software engineering center in Ho Chi Minh City, Vietnam. Second from the right: Uwe Raschke, member of the Bosch board of management, 2011

international markets. Proceeding from the values of the company founder Robert Bosch, the company has developed and codified a vision, a mission, a value code, and a set of core competencies. Taken together, and complemented by the Bosch Business System, they form the frame of reference for the Bosch Group’s day-to-day work. This frame of reference is known as the “House of Orientation.” In its own words, it describes “what drives us, what we have in common, and what we stand for,” and has served as a guideline for all Bosch associates since 2005.

Ecological and social responsibility as a central pillar of corporate policy
Bosch has always been – and continues to be – keenly aware of its special responsibility, which is at the same time entrepreneurial and social. This responsibility manifests itself in the attempt to keep economic, societal, and ecological interests in balance. It was therefore only logical for the board of management and employee representatives to have jointly signed an agreement on the “Basic principles of social responsibility” in 2004. The company’s commitment to eco-friendly and socially acceptable globalization was also evidenced when it signed up to the United Nations’ Global Compact Initiative the same year. In its work to develop and introduce energy-efficient and non-polluting technology for products and manufacturing processes in all areas of business, the company has been contributing to global climate protection for many years now. And in the future, too, Bosch intends to be the global benchmark in environmental protection. As globalization continues and competition becomes tougher, an international presence will be the key condition for the continued success of any corporate policy. Long-term strategy, innovative strength, focused diversification, a high level of loyalty among associates, and stable values are the basis of the company’s success, but so is its broad-based international presence. And the future looks bright. After all, the company has more than 100 years of experience in the international arena.
Outlook

By Dieter Schmitt

To set out into the world, discover new countries, and open up new markets, Bosch associates have always needed to be bold and inquisitive. Without their adventurous, pioneering spirit, Bosch would never have become the successful global company it is today. And this is still as true as it was 100 years ago. The world is growing ever closer thanks to advancements in communication; people and technology are becoming ever more interconnected. Bosch is not just reacting to these developments, but also seizing the chance to actively shape the future. Companies that want to remain successful in the long term must remain curious and dare to head down new paths. And this can only happen in an international team that draws on the strengths of all its associates worldwide.
The success of Bosch is undoubtedly attributable in great part to its global presence. Bosch would not be where it is today were it not for its early and consistent focus on the global market. Robert Bosch stuck to this strategy, never allowing himself to be discouraged by political or economic setbacks. More than one hundred years after Bosch first ventured beyond Germany, its focus is still clear: “We are driving forward our international presence – in the 150 countries in which Bosch is already represented and beyond,” as Franz Fehrenbach, then chairman of the board of management, emphasized in 2012. Over the past decade, the share of total sales generated outside Germany has climbed from 71 percent to 77 percent. In the past five years alone, ten new national organizations have been opened in Peru, Panama, Georgia, Indonesia, Ireland, Cambodia, Vietnam, Egypt, Morocco, and the Middle East.

A new beginning in Africa
In particular, the wave of economic and political renewal sweeping through Africa and the Middle East offers great potential for Bosch. Yet Africa is by no means uncharted territory for the company. In 1906, the Johannesburg branch of the Hamburg-based company Friedrich Hoppert became the Bosch agent in South Africa. The Wisnom company was made Bosch’s first agent in Egypt in 1913. The first African regional subsidiary was opened in Johannesburg in 1965. And ever since Bosch acquired all the shares in Auto Electrical & Engineering Co (Pty.) Ltd. in Brits, South Africa, in 1976, it has had manufacturing operations in Africa. Today, the Brits plant employs around 500 associates, who manufacture products such as starters, alternators, and electronic control units for the automotive industry. And Bosch has even bigger plans for Africa. It plans to double its sales there, from 300 million euros in 2011 to almost 600 million euros by 2015. In 2011, the first
annual meeting of Cam@Bosch took place, a network set up by associates with roots in Cameroon. At the meeting, Rudolf Colm, the management board member responsible for Africa, underscored the importance of the African continent for Bosch: “The African economy is growing at a rapid pace. [This is why] we have to have a presence in Africa right from the start.”

Worldwide growth
Nonetheless, the current core markets in Europe, Asia, and the Americas will continue to be very important. The company is redoubling its efforts and expanding its business in these regions as well. The dynamic economic growth in India and China in particular offers huge potential. In the years ahead, these two countries will account for most of the capital expenditure and new jobs in the company. Bosch is sticking to its strategy of creating a better balance among its regional activities and of placing particular emphasis on the growth markets in the major emerging economies.

Local for local
This will also mean a further dramatic change in the way people cooperate internationally and in the way tasks are distributed within the Bosch Group. At first, most Bosch products were developed in Germany and initially manufactured there before production was extended or transferred to other countries. Then, especially in Automotive Technology, calibration and engineering activities were established and intensified in the regions. In close proximity to international customers, local engineers adapted products to the requirements and wishes of local customers, in what was known as a “local for local” process.

Bosch went one step further in the 1990s. In 1999, for example, it set up its International Simultaneous Engineering Center in Blaichach, Germany, with a view to speeding up the delivery of new ABS and ESP® product generations worldwide. Experts
from different locations and different divisions, including engineers and manufacturing experts, worked together to develop new generations of the ABS and ESP® chassis systems. As a result, production could begin simultaneously at all manufacturing sites worldwide. Each site produced for its regional markets, but the work was done to the same global manufacturing and quality standards.

**Understanding the market**
With continuing globalization and the world becoming interconnected at a rapid pace, Bosch is also facing a turning point in its history. To achieve profitable growth in markets such as India and China, the local development of affordable products tailored even better to customer requirements will play an increasingly important role. As Uwe Raschke, the member of the board of management responsible for Asia Pacific, said in 2012: “This means if the market is neither interested in certain features nor prepared to pay for them, you have to leave them out.” This is not possible unless Bosch has its own engineers and developers in the relevant countries. To quote Raschke: “Asian engineers often have a better understanding of this situation. By the year 2020, we plan to double the number of engineers in Asia from the current figure of nearly 12,000.”

**Local for global**
In the automotive sector, Bosch is also stepping up its efforts to develop customized solutions for these markets. For the one- to three-cylinder cars that play such an important role in the Indian market, Bosch engineers in India have developed a common-rail system with a high-pressure
Bosch worldwide

“We are in an excellent position as a leading supplier of technology and services. Worldwide, there are very few companies that can offer a comparable technological breadth, have such a far-reaching international presence, and can count on so many highly motivated and competent associates.”

Volkmar Denner
Chairman of the board of management,
Robert Bosch GmbH

pump integrated into the engine. This cost-effective solution can also be used in small vehicles in other countries. Bernd Bohr, the board of management member responsible for the Automotive Technology business sector, believes that this takes the company’s business to a whole new level. “‘Local for local’ isn’t the end of the story. Increasingly, our distinctive clout in automotive technology is also a result of a ‘local for global’ exchange of findings and experience.”

Bosch can look back on a long tradition of international activities. The company owes its success to its early and consistent global expansion. Including sales partners, Bosch is now represented in around 150 countries and has been active in many of these for more than 100 years. To quote Hermann Scholl, then chairman of the Bosch supervisory board, Bosch was “already globalized before anyone had even thought of the word.” Scholl coined these words in 2011, the year of the company’s 125th anniversary. In that year, more than half a million people – associates and their families – celebrated at 250 Experience Days worldwide. This was impressive testimony to the global presence and cultural diversity of Bosch. One year later, in 2012, the Bosch Group and its 350 subsidiaries employed more than 300,000 associates in 60 countries.
The **first sales offices and manufacturing sites** around the world: a chronology

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<thead>
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<th>Year</th>
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<tr>
<td>1898</td>
<td>Sales office for the <strong>United Kingdom</strong> in London</td>
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| 1899 | Sales office for **France** and **Belgium** in Paris  
Sales office for **Austria** in Vienna  
Sales office for **Hungary** in Budapest |
| 1903 | Sales office for the **Netherlands** in Amsterdam |
| 1904 | Sales office for **Italy** in Milan  
Sales office for **Sweden, Denmark, Norway** and **Finland** in Stockholm  
Sales office for **Switzerland** in Geneva  
Sales office for **Russia** in Moscow |
| 1905 | Manufacturing site in **France** (Paris) |
| 1906 | Sales office for the **U.S.** in New York City  
Sales office for **South Africa** in Johannesburg  
Sales office for **Romania** in Bucharest |
| 1907 | Sales office for **Australia** in Melbourne  
Sales office for **New Zealand** in Christchurch |
| 1908 | Sales office for **Argentina** in Buenos Aires  
Sales office for **Spain** in Barcelona  
Sales office for **Ireland** in Dublin |
| 1909 | Sales office for **China** in Shanghai |
| 1910 | Sales office for **Brazil** in Rio de Janeiro  
Sales office for **Turkey** in Istanbul |
| 1911 | Sales office for **Canada** in Toronto  
Sales office for **Portugal** in Porto  
Sales office for **Bulgaria** in Sofia  
Sales office for **Japan** in Yokohama |
| 1912 | Manufacturing site in the **U.S.** (Springfield, MA) |
| 1913 | Sales office for **Greece** in Athens  
Sales office for **Chile** in Santiago  
Sales office for **Egypt** in Cairo |
| 1919 | Sales office for **Indonesia** (on Java, then part of the Dutch East Indies) |
| 1920 | Sales office for **Cuba** in Havana  
Sales office for **Czechoslovakia** in Prague  
Sales office for **Korea** |
| 1921 | Sales office for **Venezuela** in Caracas  
Sales office for **Luxembourg** in Brussels |
| 1922 | Sales office for **India** in Calcutta  
Sales office for **Yugoslavia** in Belgrade and Zagreb  
Sales office for **Palestine** in Jaffa  
Sales office for **Syria** in Damascus  
Sales office for **Mexico** in Mexico City |
| 1923 | Sales office for **Colombia** in Bogota  
Sales office for **Kenya** in Nairobi  
Sales office for **Malaysia** in Penang  
Sales office for **Singapore**  
Sales office for **Thailand** in Bangkok |
| 1924 | Sales office for **Persia** in Tehran  
Sales office for **Mauritius**  
Sales office for **Honduras**  
Sales office for **Jamaica**  
Sales office for **Trinidad**  
Sales office for **Ecuador** |
| 1926 | Sales office for the **Philippines** in Manila |
| 1927 | Sales office for **Peru** in Lima |
| 1931 | Manufacturing site in the **U.K.** (London: C.A.V.-Bosch) |
Entrance to the Paris factory of the French Compagnie des Magnétos Simms-Bosch in around 1906, with the Eiffel Tower in the background on the right.
<table>
<thead>
<tr>
<th>Year</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>1935</td>
<td>Manufacturing site in <strong>Italy</strong> (Milan: MABO)</td>
</tr>
<tr>
<td>1953</td>
<td>Manufacturing site in <strong>India</strong> (Bangalore: Mico)</td>
</tr>
<tr>
<td>1954</td>
<td>Manufacturing site in <strong>Australia</strong> (Melbourne) &lt;br&gt;Manufacturing site in <strong>Switzerland</strong> (Solothurn: Scintilla)</td>
</tr>
<tr>
<td>1956</td>
<td>Manufacturing site in <strong>Brazil</strong> (Campinas)</td>
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<tr>
<td>1957</td>
<td>Sales office for <strong>Vietnam</strong> in Saigon</td>
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<tr>
<td>1960</td>
<td>Manufacturing site in <strong>Sweden</strong> (Linköping)</td>
</tr>
<tr>
<td>1966</td>
<td>Manufacturing site in the <strong>Netherlands</strong> (Weert) &lt;br&gt;Manufacturing site in <strong>Mexico</strong> (Toluca)</td>
</tr>
<tr>
<td>1967</td>
<td>Manufacturing site in <strong>Spain</strong> (Madrid) &lt;br&gt;Manufacturing site in <strong>Argentina</strong> (Buenos Aires)</td>
</tr>
<tr>
<td>1969</td>
<td>Manufacturing site in <strong>Austria</strong> &lt;br&gt;(Hallein: Friedmann &amp; Maier AG)</td>
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<tr>
<td>1971</td>
<td>Manufacturing site in <strong>Iran</strong> (Ghazwin)</td>
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<tr>
<td>1972</td>
<td>Manufacturing site in <strong>Turkey</strong> (Bursa) &lt;br&gt;Manufacturing site in <strong>Malaysia</strong> (Penang)</td>
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<tr>
<td>1973</td>
<td>Manufacturing site in <strong>Japan</strong> (Tokyo: JECS)</td>
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<tr>
<td>1974</td>
<td>Manufacturing site in <strong>Belgium</strong> (Tienen)</td>
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<tr>
<td>1976</td>
<td>Manufacturing site in <strong>Greece</strong> (Athens) &lt;br&gt;Manufacturing site in <strong>South Africa</strong> (Bris)</td>
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<tr>
<td>1978</td>
<td>Manufacturing site in <strong>Portugal</strong> (Guarida)</td>
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<tr>
<td>1985</td>
<td>Manufacturing site in <strong>South Korea</strong> (Seoul)</td>
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<tr>
<td>1992</td>
<td>Manufacturing site in the <strong>Czech Republic</strong> (České Budějovice)</td>
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<tr>
<td>1993</td>
<td>Sales office for <strong>Latvia</strong> and <strong>Lithuania</strong> in Riga &lt;br&gt;Sales office for <strong>Slovakia</strong> in Bratislava &lt;br&gt;Sales office for <strong>Slovenia</strong> in Ljubljana &lt;br&gt;Sales office for <strong>Ukraine</strong> in Kiev &lt;br&gt;Sales office for <strong>Belarus</strong> in Minsk &lt;br&gt;Manufacturing site in <strong>Slovenia</strong> (Nazarje) &lt;br&gt;Manufacturing site in <strong>Poland</strong> (Łódź)</td>
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<tr>
<td>1995</td>
<td>Manufacturing site in <strong>China</strong> (Wuxi)</td>
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<tr>
<td>1996</td>
<td>Manufacturing site in <strong>Russia</strong> (Engels) &lt;br&gt;Manufacturing site in <strong>Thailand</strong> (Amata City)</td>
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<tr>
<td>1997</td>
<td>Manufacturing site in <strong>Denmark</strong> (Pandrup)</td>
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<tr>
<td>1998</td>
<td>Manufacturing site in <strong>Hungary</strong> (Hatvan)</td>
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<tr>
<td>2002</td>
<td>Sales office for <strong>Estonia</strong> in Tallinn</td>
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<tr>
<td>2004</td>
<td>Manufacturing site in <strong>Slovakia</strong> (Michalovce)</td>
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<tr>
<td>2007</td>
<td>Manufacturing site in <strong>Romania</strong> (Blaj)</td>
</tr>
<tr>
<td>2008</td>
<td>Sales office for the <strong>Middle East</strong> in Dubai &lt;br&gt;Sales office for <strong>Vietnam</strong> in Ho Chi Minh City &lt;br&gt;Manufacturing site in <strong>Canada</strong> (Burnaby)</td>
</tr>
<tr>
<td>2010</td>
<td>Sales office for <strong>Cambodia</strong> in Phnom Penh &lt;br&gt;Sales office for <strong>Panama</strong> in Panama City</td>
</tr>
<tr>
<td>2011</td>
<td>Sales office for <strong>Georgia</strong> in Tbilisi &lt;br&gt;Sales office for <strong>Bosnia-Herzegovina</strong> in Sarajevo &lt;br&gt;Manufacturing site in <strong>Vietnam</strong> (Ho Chi Minh City)</td>
</tr>
<tr>
<td>2012</td>
<td>Sales office for <strong>Morocco</strong> in Casablanca &lt;br&gt;Sales office for <strong>Laos</strong> in Vientiane</td>
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</tbody>
</table>
Bosch associates in Bangalore, India, 2011. The open space in the background serves as a meeting place where presentations are given on important corporate issues such as the Bosch Production System (BPS).