SECTION 38
QUALITY IN WESTERN EUROPE

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INTRODUCTION

Europe is composed of many different nations, cultures and languages. From whatever point of view you consider it, its differences are easier to pinpoint than its similarities. The current move toward economic and political integration—a long and difficult process—should eliminate the remaining pockets of economic and social backwardness and boost the continent's political and economic strength, while maintaining legitimate differences and the specific cultural identity of each nation. Quality, which is a cultural issue first and a technical issue second, is no exception as far as diversity is concerned. There is no such thing as European quality. Significant differences exist among and even within the various countries. The quality profiles of the nations vary enormously, too. Germany, for example, has a solid reputation for product quality; many Northern European countries provide excellent service quality. Other countries offer outstanding quality in specific sectors: France and Italy are typical examples. France is famous for its *haute couture* and its food and wines, while Italy has a reputation for design, fashion, and goldwork. But despite these great differences, over the last 10 years, Europe has made up a great deal of ground in relation to the United States of America and Japan. In the second half of the 1980s, large corporations still employed the services of non-European specialists to plan their Total Quality Management (TQM) strategies. Today, halfway through the 1990s, both the corporate sector and the leading quality consultants—a small minority, but this is the situation everywhere—stand up well to comparison with the United States and even with Japan.

In discussing quality in Western Europe, this section provides a brief overview of the main development trends and then looks at a specific and highly important issue: the impact of the Single Market on the quality culture (the Single Market is the term normally used in Europe to refer to the market formed by the 12 original members of the European Community, which has gradually extended to the Free Exchange Zone and continues to expand as new member states join what is now called the European Union). At the level of the individual nations, only Germany, France, and Great Britain are analyzed separately, since they represent three typical examples of the evolution of quality in Europe after the Second World War and thus cover the main trends in the other nations. The country-by-country analysis ends with a brief summary of distinctive developments in other West European countries. This section then looks at the European quality organizations, which have played an important part in recent quality developments, and discusses Europe's quality awards. The final portion of this section discusses environmental quality.

QUALITY DEVELOPMENT TRENDS IN EUROPE AFTER THE SECOND WORLD WAR

In Western Europe as in other areas of the western world, from the 1950s to the 1970s, quality was considered a priority issue mainly in defense, aerospace, telecommunications, electronuclear energy and energy in general, chemicals, and other high-technology sectors. An indication of the level of interest in quality disciplines (specifically, in statistical quality control) was the formation of national quality associations in many European countries during the early 1950s. In the area of consumer durables and consumer goods in general, which were enjoying a period of high demand, a capacity for innovation and the ability to produce large volumes at low costs were the main priorities. Healthy market performance meant staying more or less in line with the typical (and often mediocre) quality standards of the relevant price/performance class, which, given the lack of specific competitive stimuli, tended to remain stable. Certain niches, brands, or even entire geographical areas stood out for the high quality and reliability of their products, but as a rule, higher quality positioned a product in a higher price class compared with products offering similar performance. Countries like Germany, for instance, had a reputation for superior product quality, especially in niche markets (e.g., luxury automobiles, electric home appliances), but since this quality stemmed from high professional skills and craftsmanship, product prices were usually higher. (See Quality in Germany below.)

For the strategic sectors in the first group, quality, reliability, and safety were essential. Price was a secondary variable. Many suppliers financed R&D work for their commercial productions with the margins on their military sales. On the other hand, these sectors occupied a position of strategic importance for Europe during the period concerned: the defence sector in relation to the cold war, the others in relation to postwar reconstruction and creation of the infrastructures needed for new growth. Taken together, these considerations explain the development of a quality culture and quality practices predominantly based on the specific characteristics of this group of sectors.

The first characteristic is the contractual relationship between the supplier and the customer. The supplier provides goods for a specific customer, who stipulates requirements in a contract, in as precise and as clear a form as possible. The supplier undertakes to provide what the contract requests, and therefore regards quality as conformity with predefined specifications and standards. This produced a quality culture based on the concept of standards conformity and fulfillment of specifications. The focus was on execution (engineering and production) rather than on goals, which had already been set. This was a "reactive" approach to quality: the customer orders; the supplier provides what has been ordered—and (if possible) nothing more, since any extra is not paid for.

The second characteristic of this first group of sectors is that quality and reliability requirements are generally very high. Preventing failures is essential. The focus on ensuring reliability meant that engineering techniques improved. Progress was slower in production, where the quality and early-life reliability levels requested were often achieved not through process improvements but through final-product testing and screening (prolonged testing, run-ins, burn-ins), which raised costs significantly.

As product quality requirements rose, producers acquired greater skills in technical quality disciplines geared to technology and the product. Among customers, the 1960s witnessed a continuous increase in the number of inspectors appointed to approve products and plants. (See Quality in Great Britain, which discusses the role of the British Ministry of Defence).

Quality took a major step forward with the move from inspection to preventive assessment of suppliers' quality systems. Once again, the development originated in the defense field, following the introduction of NATO's APAQ standards (1968). In similar fashion, the U.K. BS 5750 standard (1979) was drawn up on the recommendation of the Ministry of Defence, to replace the endless series of second-party audits with third-party certification (Hutchins 1995).

At the beginning of the 1980s, therefore, the quality culture and quality practices in Europe were closely associated with the concept of conformity with standards or previously defined specifications. Table 38.1 summarizes the situation of quality standards during 1980.

In the second half of the 1970s, however, word had begun to spread about the success achieved by Japan with a "proactive" approach that perceived quality as a competitive factor. Doctor Juran's article "Japanese and Western Quality: a Contrast" (Juran 1979) was a revelation in many quarters. Large companies operating in highly competitive international markets were a particularly receptive audience. In the early 1980s, these companies began to experiment with total quality, often with little success in the first instance. For a number of years, the standards-based quality culture and the new concept of continuous improvement, customer focus, and process control evolved separately: two converging tributaries, the temperature, speed, and composition of whose waters are so different that they flow side by side without mixing. At this point, the EC Council began examining the question of the technical barriers inside the Single Market.

THE CREATION OF THE EUROPEAN SINGLE MARKET AND ITS IMPACT ON THE EVOLUTION OF THE QUALITY CULTURE

The European Community (EC) Council Resolution Of May 1985. On May 7, 1985, the EC Council adopted a resolution regarding technical harmonization and standardization which was designed to bring about the rapid elimination (by the end of 1992) of the technical barriers that, together with physical and fiscal barriers, were obstructing the creation of the Single Market. The EC strategy, known as the *nouvelle approche,* was based on the following principles:

1. Limitation of compulsory technical regulations to the essential issues of security and protection of health and the environment.
2. Harmonization of member states' voluntary technical standards, through discussions among the national and European standardization bodies. Implementation of specific measures by the Council to provide guidance for these bodies and strengthen their role.
3. Rapid definition of a testing and certification strategy to permit mutual recognition of certifications.
4. Acceptance of a manufacturer's declared standards conformity once that manufacturer's quality system is certified as compliant with European quality assurance standards.

TABLE 38.1 Quality Standards

	Market sectors	
Type of standard	Strategic (defense, etc.)	Commercial
Product	Defined by customer	Defined by a market which was sometimes indifferent to quality
Quality system and processes	Developed through cooperation within the sector; widely available and widely applied	Not generally available or applied

At this point, however, work on the ISO 9000 standards (published in 1987) had reached an advanced stage.

With the approach of January 1, 1993, and the official launch of the Single Market, the European political system made the pleasant discovery that a regulatory tool intended for worldwide application was about to be introduced, paving the way to elimination of technical barriers in Europe (McMillan 1994). The European Standardization Committee (CEN) immediately incorporated the ISO 9000 standard into the European standards with the name EN 29000 (now EN 9000) and initiated an emergency procedure to complete work on the remaining standards (EN 45000). For national governments, which apart from a few notable exceptions had until then lent a very half-hearted ear to the messages on total quality coming from various sectors of private industry, the ISO 9000 standards presented quality in a formulation that was much closer to their way of thinking. The simplicity of certification and mutual recognition had enormous appeal, especially for those with no previous experience of quality, who tended to overestimate the potential of the certification approach, hailing it as a sort of magic wand for the development of quality in Europe.

In this period, the European Foundation for Quality Management (see below) was set up, for the specific purpose of focusing the attention of senior executives from business and state administrations on the question of total quality. Despite the EFQM's high-level sponsors (the chairmen of 14 leading European companies), the interest it attracted in political circles and the media was small in comparison with the interest fueled by certification. The EC allocated abundant funds to the national standardization bodies, to be used, rightly, for the rapid harmonization of standards across Europe. Less justifiably perhaps, these funds helped to spread a standards-based quality culture, which was clearly out of step with the times.

Ratified by the 1987 Single Market Act, the 1985 Resolution of the EC Council would have unforeseen effects on the evolution of quality both in and outside Europe.

Fears of "Fortress Europe." In 1987, the Malcolm Baldrige Award was launched. For the next few years, the TQM model used by the award was the center of U.S. attention, and many companies adopted it as a self-assessment guideline, even though they were not competing for the award itself. The introduction of the ISO 9000 standards therefore went almost unnoticed in the United States. Nevertheless, the Malcolm Baldrige model provided for product and service quality—the key issue of the ISO 9000 standards—in category 5. It was not until 1990 that the excitement in Europe about the ISO 9000 standards began to arouse the interest of the United States. At this time, Europe's sights were firmly set on the 1993 deadline, fueling suspicions in non-European political and economic circles that construction of a "Fortress Europe" was the ultimate goal. The ISO 9000 standards and the growing demand for preventive certification of the conformity of suppliers' quality systems with those standards resembled nothing if not a bulwark of that fortress.

In May 1990, the ASQC invited European quality specialists to attend its congress, as did the Juran Institute and a number of other bodies, in an attempt to find out what lay behind the European craze for ISO 9000. This was followed by a general rush to the ISO 9000 camp in North America, too, a trend that could be justified from a commercial point of view. It is less easy to explain when one considers the content of the standards. After a decade of total quality and continuous improvement, it is strange, to say the least, that quality assurance—an essential issue, but only one aspect, indeed a preliminary condition, of the wider theme of total quality—should have attracted such enormous attention.

The reaction in Japan was less extreme. The ISO 9000 standards were analyzed in detail (Kume 1990) and compared with current practice. Without doubt, Japan grasped the commercial significance of certification, as well as the value of adopting the criterion of ISO 9000 conformity in contractual relations, especially in geographical areas where partnership between customer and supplier is difficult to achieve. Its verdict on the ISO 9000 standards as such was favorable, with the proviso that the concept of continuous improvement should be integrated into the standards approach.

Midterm Effects of the Emphasis on ISO 9000 and Certification. The political focus on the ISO 9000 standards and certification has had positive and negative repercussions for

quality in Europe. The effects on the process of market unification, which was the main goal, are positive. As far as the effects on the development of quality itself is concerned, it is too soon to draw conclusions, but a brief analysis is possible.

The main benefit is the rapid spread of basic quality assurance know-how. Huge numbers of small to medium enterprises, operating mainly in domestic markets or in fields that are still unexposed to international competition, have had their attention drawn to quality system certification by industrial customers, distributors, and clients in the public sector. Other operators have been involved in an indirect way, often through sectoral associations. Without doubt, had the need to remove technical barriers within the Single Market not been such an urgent priority, the number of companies reached by the quality message would have been on a far smaller scale.

The reverse of the picture is that the emphasis on ISO 9000 and certification has distracted attention away from competitive quality for too long; certification is an important requirement, but it is a precompetitive requirement. Moreover, this "distraction" appeared at a critical time, just when total quality concepts were beginning to make headway in corporate culture. A groundless antagonism frequently developed between the two approaches, which can only be explained as the result of political intervention in quality issues (in many European countries, state economic intervention was a significant factor during the period considered) and the appetizing business potential of certification.

Unfortunately, the quality organizations jumped on the bandwagon, too. Certification was the sole focus of interest of many national quality associations for years. The EOQ congresses at the end of the 1980s were dedicated almost entirely to standards-based quality [see The European Organization for Quality (EOQ) below]. No decisive change occurred until 1992, when the EOQ took active steps to redress the balance with TQM. The European Foundation for Quality Management, which was set up in 1988 to promote TQM, has played an important role in re-establishing an equilibrium, most notably with the launch in 1991 of the European Quality Award.

Table 38.2 illustrates the singular attention to certification in Europe.

TABLE 38.2 ISO 9000 Certifications Awarded in Europe

Country/region	1989	January 93*	March 95*	December 95*
Austria		101	667	1,133
Belgium		180	1,226	1,716
Denmark		326	1,183	1,314
Finland		185	646	772
France		1,049	4,277	5,535
Germany		790	5,875	10,236
Greece		18	162	248
Ireland		100	1,410	1,617
Italy		188	3,146	4,814
The Netherlands	250 (KEMA)	716	4,198	5,284
Norway		91	679	890
Portugal		48	257	389
Spain		43	942	1,492
Sweden		229	871	1,095
Switzerland	150 (SQS)	410	1,520	2,065
United Kingdom	10,000 (BS5750)	18,577	44,107	52,591
Other Europe		41	751	1,419
Total Europe		23,092	71,917	92,610
Europe excluding U.K.		4,515	27,810	40,019
Rest of world		4,829	23,559	34,779
World total		27,921	95,476	127,389

***Source:** *The Mobil Survey,* 6 August 1996

The 1990s: Setting a New Course. Around 1994, European and national government bodies began to set a new course. After extensive consultations, in 1994 the Directorate General III (DGIII) of the European Commission (responsible for internal market and industry) published a working paper entitled "A European Quality Promotion Policy." This document stated that, with the completion of the regulatory phase designed to create the correct operating conditions for the Single Market, the Commission intended to launch a new phase of promotion and support to enable business enterprises in any part of Europe to pursue their goals within a balanced European competitive environment. The paper listed the following strategic objectives:

- Satisfaction of the expectations of consumers and of the community in general
- Development of human potential
- Respect for the environment
- Prudent use of resources
- Efficient and effective enterprise management
- The ability to create jobs, in particular through creativity and innovation

The strategies outlined in the paper are largely derived from TQM strategies. Three main groups of measures are identified—development of human resources, improvement of production structures, and development of a European quality image—which are intended to support TQM strategies in business and in state administrations.

The European Quality Promotion Policy document was endorsed by the European Union's Industry Council in November 1996.

In 1995, the European Union promoted the following initiatives: a European Quality Award for small to medium enterprises to flank the current Award, which is open to companies with more than 250 employees, and an annual European Quality Week (to be held the second week of November). These initiatives are organized by the two European quality organizations, the EOQ and the EFQM, under the umbrella of the European Quality Platform (see below).

COUNTRY-BY-COUNTRY ANALYSIS

Quality in France. Many large French companies were nationalized in the immediate postwar period (Renault in 1945 for example); others were nationalized during the early 1980s. The trend has been reversed since the mid-1990s. The decline in quality generally associated with nationalization—which many European countries have experienced—has not been seen in France. Many state-controlled French companies have been leaders in quality in Europe during the 1980s and 1990s: Renault is a case in point, its leadership exemplified by the success of the Espace automobile and the Formula I engine. This is probably a result of the high quality of managers trained in France's *grandes écoles,* which provide the country's major corporations with approximately 80 percent of their management recruits (the management schools such as the Ecoles des Hautes Etudes Commerciales, and the scientific schools, e.g., the Ecoles Polytechniques) (Gogue 1988).

The key elements of the French approach to quality from the mid-1940s to the mid-1990s are as follows:

1. The central role of the State in promoting quality, as a result of its dominant presence in the economy (the above-mentioned nationalizations are the most extreme manifestation of this). State intervention appears to have been beneficial, again very probably due to the high quality of management (in this case, the quality of managers in the state administration, which is superior to that of other European countries).
2. The deliberate focus on the regions and, in particular, on small to medium enterprises (SMEs). This has stimulated dynamic territorial activity and created a flourishing bottom-up movement.

3. The particular characteristics of the French Quality Award, which was introduced in 1993: The award is for SMEs (companies with fewer than 500 employees) and is based on a two-tier bottom-up selection procedure, from regional to national level.

This is the background to the development of quality in France following the formation in 1957 of the French Quality Association (AFCIQ), a particularly significant event (Dragomir and Halais 1994).

In 1975, the Ministry of Industry set up an Office for Industrial Product Quality and Standardization (SQUALPI). In 1978, the Loi Scrivener consumer protection law was passed. In 1980, the French Association for Standardization (AFNOR) published the NF X 50-110 quality management and assurance standard, which was abandoned in 1987 with the introduction of the international ISO 9000 standards. Also in 1980, the AFCIQ and a number of other groups instituted the "Industrie et Qualité" Award.

1981 was proclaimed Quality Year by the Ministry of Industry; the following year, together with the Ministry for Higher Education, the Ministry of Industry created the "Club Enseignement-Qualité" (Quality Training Club).

In France as in other European countries, the 1980s witnessed a proliferation of quality associations. However—and this is another positive element that distinguishes France from other nations—in 1991 these groups merged into the French Quality Movement (MFQ). Jean-René Fourtou, the chairman of a major French company, Rhône Poulenc, was appointed president of the MFQ.

In 1984 the French government drew up a first program of measures to improve quality in French industry. A far more complete, wider-ranging second program covering quality, certification, safety, and training was launched in 1993. Initiatives included the introduction of an environment mark, a food mark and a new Quality Award.

Measures taken to involve the Regions included the Quality Train in 1985 and the "Tour de France" in 1987. A second, more incisive Tour was organized in 1993 to mark the introduction of the new Quality Award, with an average of 2000 businesses taking part in each stretch.

The Prix Français de la Qualité (PFQ, French Quality Award) was launched in 1993 by the Ministry of Industry and the MFQ (which runs the award). A particularly interesting feature of the French scheme is that although it is related conceptually to the European Quality Award (EQA), it is geared to small- and medium-sized businesses and operates at two levels, regional and national (*Prix Français de la Qualité* 1994). Companies wishing to apply for the award must first compete successfully at the regional level in order to qualify at the national level. (In the first year alone, approximately 1000 companies competed for the 22 regional awards. Thirty-six regional winners then went on to compete for thenational prize, which was awarded to one company); a further three won a special mention (Qualité en Mouvement 1993).

The high level of participation in the regional awards reflects the strong French focus on SMEs. These companies usually find it difficult to take part in national awards, let alone European awards: For them, the regional level is the natural starting point. Companies that win regional awards have already acquired a certain degree of experience, self-confidence, and determination and find it easier to qualify at national level. In 1995, the French model was taken as the reference by the two European organizations, the EOQ and the EFQM, when they were asked by the EU Commission to plan a European Award for SMEs. And in fact, this Award is organized at a third level, after the regional and national prizes.

To conclude, within the general European quality scenario, the French situation is notable for the stronger, more dynamic presence of the State, at both central and regional levels. With a few rare exceptions, most notably in the automobile sector, the response of the business community has been less forceful. Progress in product and service quality does not as yet appear to match the efforts of central and local government.

Quality in Germany. Although the concepts of scientific management and Taylorism came to Germany, as to other countries, with widespread industrialization, they developed through the filters of the German manufacturing culture, which was strongly rooted in the guilds and in the skills training

and apprenticeship systems. The guilds had established precise quality standards for their members and for the training of artisans and shopkeepers. These standards, typically based on a 3- to 4-year apprenticeship, still constitute the basic model today. Awareness of the merits of this system and the consequent determination to defend its values meant that German industrialization developed on the basis of the skills of the country's workers. This is the reason for the "craftsmanship" of much of German industry, even in medium to large organizations; routine tasks are performed by low-skilled labor (often temporary immigrant workers), while highly skilled experts always play a key role in guaranteeing quality.

While Germany's large and, above all, its medium-sized companies retain a highly skilled, craftsmanlike approach, its small businesses (with fewer than 10 employees), which represent approximately 12 percent of gross domestic product (GDP) and employ about 16 percent of the workforce, are still heavily influenced by the imprint of the guilds. They account for more than 40 percent of apprentice training (Schlötel 1988).

Another significant factor in the rationalization of the German industrial system, which has had considerable benefits for quality, is the great emphasis on standardization. The Deutscher Normenausschuss (DNA), the German standards committee which drew up the Deutsche Industrienorm (DIN) standards, was formed in 1926. The DNA has always been a positive embodiment of the typical German industrial policy, in which the intervention of the State has tended to converge with the interests of the private sector, producing great competitive advantages for the economic system as a whole. The DIN standards apply German rationality to the industrial system in order to optimize overall benefits for consumers and manufacturers. They have played a leading role in the creation of standards, not only in Germany, but also in Europe and worldwide.

Another important organization is the VDE Pruf-und-Zertifierungsinstitut (Test and Certification Institute), which was formed by the Verband Deutscher Elektrotechnicker (VDE) in 1971 from a test laboratory that had existed since 1920. The VDE quality and safety mark for electrical products is granted in accordance with rules that for the most part have become DIN standards. The VDE mark is regarded as a guarantee of high quality and safety for the consumer, in and outside Germany.

A further step forward in the rationalization of the industrial system was the creation of the Rationalisierungs-Kuratorium der Deutschen Wirtschaft (RKW, Board for the Rationalization of the German Economy), which coordinates the activities of all the various rationalization bodies. The RKW is another example of broad cooperation among social and economic groups for the common good (Lerner 1995).

The traditional high quality of German products is also linked to another distinctive feature of the system, its trademarks and quality marks. The use of the trademark to guarantee product quality stems from the guilds. On the German market, Fugger, Welser, and Henkel's Zwilling Factory in Solingen were familiar names to everyone, and their products were automatically accepted without any form of inspection. Paradoxically, it was a defensive move by the British Parliament (the Merchandise Marks Act of 1887) that fueled awareness of the quality of German products outside Germany. People began to associate the "Made in Germany" mark with high quality, specifically quality in terms of above-average reliability and solidity (and often weight!).

Frequently, this higher quality and reliability was and still is coupled with a premium price, which the purchaser looking for a superior product is willing to pay. The premium price is usually the consequence of higher costs, as a result of overdimensioning and higher skilled labor content. As a result, German products tend to be regarded as niche products, offering craftsmanlike quality and reliability. Many of these niche markets are highly sophisticated, covered by a large number of small and medium high-tech enterprises, which are often worldwide market leaders (Simon 1996).

As far as quality marks are concerned, the Reichs-Ausschuss für Lieferbedingungen (RAL) was set up in 1925. Another broadly held private-public concern, the RAL ensures that product and service quality marks are properly used. Today, it also supervises use of the environmental mark created by the Federal Ministry of the Interior, to guarantee product environment-friendliness (Schlötel 1988).

Another guarantee of product quality is the Stiftung Warentest, a product testing foundation founded in 1961, which conducts systematic tests on different competitors' products and publishes the results in *Test* magazine. Its findings are usually reported by the media and used in advertising and are therefore an extremely significant factor in consumers' purchasing decisions.

In Germany, therefore, the emphasis on product quality predominates. Quality has been the main focus of German industry to date, and will probably continue to be so for the foreseeable future. Nevertheless, the risk of problems emerging in relation to other industrial systems that have had greater success in combining quality with efficiency and resolving the apparent conflict between quality and large-scale production should not be underestimated.

In this connection, German industry has been slow to grasp the importance of Quality Management, first at the level of quality assurance and later at the level of Total Quality Management. Its leadership in technical quality seems somehow to have overshadowed the development of a systemic, integrated vision of quality. As far as the ISO 9000 standards are concerned, Germany has made up rapidly for lost time: by 1995 approximately 10,000 companies had obtained certification. The absence of a strong military production sector and the corresponding focus on the market could be the reason for the relatively low importance previously attached to quality system standards, which are essential factors in the customer-supplier relationship in the military, nuclear, and space industries. Comparison with the situation in Britain supports this theory.

Germany has only just moved into the age of TQM; it remains to be seen whether its recovery here will be as rapid as it was in the ISO 9000 area. Greater problems could well emerge, given the enormous importance that corporate Germany attaches to professional skills. A strong sense of profession creates a strong functional identity (people who work in the R&D field—or in production, etc.—take pride in their specific skills). This makes it more difficult to achieve the interfunctional integration at process level that is vital to optimize costs and times together with quality. Similar difficulties could arise in attempting to obtain significant improvements, which always require interfunctional groups. Combining efficiency and quality is the challenge that many German companies will be facing in the next few years.

The Deutsche Gesellschaft für Qualitat (DGQ) has had an important role in spreading the quality culture in Germany. It was founded in 1952 and has been a full member organization of the EOQ since the latter was formed. In 1995 it had more than 6000 members, of whom about 25 percent were corporate members and 75 percent individual members. The DGQ is based in Frankfurt and has approximately 60 full-time employees. Its main activity is education and training, with approximately 1500 courses per year, attended by more than 30,000 people. These figures refer to 1993, when 7500 diplomas were awarded to participants at courses that have become *de facto* qualifications on the labor market. The DGQ also has a research unit, which conducts applied research jointly with business and universities.

This brief review of the development and current situation of quality in Germany cannot end without mention of Walter Masing, entrepreneur, lecturer, and quality pioneer in Europe, who was a cofounder and the first president of the European Organization for Quality. In addition to the many honors received from national associations and universities, in 1996 Dr. Masing was awarded the EOQ gold medal, a tribute that had previously been given only to Dr. J. M. Juran.

Quality in Great Britain. The main characteristic of the British approach to quality in the period from the early 1970s to the mid-1990s is certainly the great emphasis on standards-based quality and certification. This is not to say that more advanced aspects of quality have been neglected; indeed, Britain was one of the first European countries to introduce the new TQM concepts, especially among large companies operating in highly competitive fields. But in Britain's divaricate vision of quality, certification has certainly predominated, at least at the quantitative level and in terms of image. With more certifications than the rest of Europe put together (see Table 38.2), during the period in question the United Kingdom has been the symbol and reference model for supporters of the standards-based approach to quality. The divergence between this view and the TQM view, a typical trend in Europe from 1987 to 1995, has assumed fairly extreme proportions in the United Kingdom, which can be taken to exemplify the phenomenon. The excessive emphasis on standards-based quality in Britain is probably the reason why the TQM vision has evolved as a counterreaction rather than as a complementary development. The emphasis on standards is itself the outcome of the crucial economic weight of large customers and, in particular, of the Ministry of Defence, the great champion of standards, which, through

its procurement contracts, controlled approximately 10 percent of the products manufactured in the United Kingdom when the Defence Standards for Quality Assurance were introduced in 1973 (Hutchins 1995).

It was toward the end of the 1970s that an approach to quality based on the experience of companies operating on highly competitive open markets, and geared to customer satisfaction and continuous improvement (as opposed to the customer-driven view geared to obtaining products compliant with specifications), began to emerge. This new vision sprang both from the direct experience of British industry and, indirectly, from the experience of U.S. business, which at that time was beginning to come under severe competitive pressure from Japan. This antagonism has created a situation in which, on one hand, the standards-based view has focused so single-mindedly on quality control and assurance that it has often lost sight of the customer; on the other, the TQM vision has sometimes been taken to such an extreme that it has lost sight of the fundamental need to ensure product and service quality through rigorous monitoring of every phase in the life cycle. Although this divergence obviously has no legitimate basis, it has developed nonetheless and has had a negative impact on quality development in every European country.

The phenomenon can be analyzed when discussing the development of quality in Great Britain, since it has acquired such significant proportions there. The split was formalized in 1992, when the British Quality Association (BQA, formed in 1981 to handle quality in the corporate sector) separated from the Institute of Quality Assurance (IQA). Founded in 1919 and granted its present title in 1972, the IQA was a Full Member Organization of the EOQ for both bodies. Officially, the purpose of the separation was to create a new body with the characteristics required by the government to run the new British Quality Award, which is based on the European award and therefore has a strong TQM content. The organization of the award was thus assigned to the BQA, which changed its name to the British Quality Foundation. But although, formally speaking, the division appears to have come about for contingent reasons connected with the award, it was in fact the last act in a deliberate distancing of the new groups that support the TQM approach from the historical nucleus that had promoted quality assurance for so many years. It is a false ideological distinction, which is bound to be a not insignificant obstacle to the correct growth of the quality culture in Europe.

With the loss of its branch that handled quality in the corporate sector, the IQA has abolished the clause that limited membership to professionals and now also welcomes corporate members. To date, quality assurance remains its chief mission, but the association has explicitly acknowledged the need to cover the entire spectrum of issues from control to quality assurance and total quality management.

The BS 5750 Standards and Certification Fever. A comparative analysis of the development of quality concepts in the United Kingdom and in Germany in the postwar period reveals similarities between the United Kingdom and the United States on one side, and Germany and Japan on the other. Here is a possible explanation, based on a plausible interpretation of the facts, which at the very least merits further historical investigation. Like the United States, Britain was one of the victors of the Second World War; like the United States, it regarded defense as a top priority, partly in response to the Cold War. Like the United States at world level, the United Kingdom at European level had the strongest military defense industry, with the Ministry of Defence playing a key role. The strong emphasis on conformity with specifications, an essential requirement in this type of contractual relationship, could hardly fail to have a decisive impact on the development of the quality culture. Whereas the military commitments of Germany, like those of Japan, were no longer of a level to make the respective ministries of defense key "accounts" of industry. In Germany and Japan, industry was driven, first, by the needs of postwar reconstruction and later by the desire for expansion on the international marketplace, and therefore tended to regard quality as competitive added value for customers rather than as conformity with standards. These similarities should not be taken too far, however: Japan has tended to set its sights on high-volume markets and therefore on process-based quality, at minimum costs; Germany has concentrated on niche markets with high added value, where quality may involve higher costs. But certainly in both countries the approach to quality has been driven by the need to boost market share rather than to comply with standards and specifications.

The United Kingdom's particular focus on standards-based quality dates back to 1968 and the Raby report. The Ministry of Defence formed the Raby Committee to resolve the problem of inspections, which had grown out of all proportion, revealing all their intrinsic limitations in assuring the quality of purchased products. The Raby report led to the creation and approval in 1973 of the Defence Standards for Quality Assurance, based on NATO's AQAP standards (Allied Quality Assurance Publications).

During the same period, a number of other large organizations in both the public and the private sectors, including the Central Electricity Generating Board and a number of automobile manufacturers, had developed their own standards for auditing the quality systems and processes of their suppliers. Multiple audits thus began to be a serious problem for many companies. In 1979, the BSI published the BS 5750 standard, which was immediately adopted by the Ministry of Defence (Hutchins 1995) and, after some initial difficulties, by an increasing number of organizations and businesses. This was the start of the certification phenomenon in the United Kingdom, which would have significant repercussions on the history of quality, not just in Britain, but throughout Europe.

In 1987, when the ISO 9000 standards (which were based on the BS 5750 standards) were introduced, the number of certified operations was approximately 7000; in 1993, it had risen to approximately 19,000, and by the end of 1995 to approximately 53,000 (see Table 38.2).

It was not until 1994 that the first detailed critical reviews of Britain's attitude to certification were conducted (as opposed to the criticisms regularly made by the opposing group). The SEPSU report (SEPSU 1994) commissioned by the Royal Society and the Royal Academy of Engineering and, in the same year, a report by the BFQ put the spotlight on the following problems:

- In many cases, BS 5750 (or ISO 9000) certification is wrongly seen as an almost miraculous event, which makes companies automatically capable of generating quality, instead of as a first step toward competitive quality.
- Certification is unrelated to customer satisfaction; it has effectively shifted attention away from product quality and customer satisfaction.
- The certification business has led to the creation of a surplus of certifying bodies (more than 40 in 1995), and this has certainly lowered average quality. Significant inconsistencies exist among the approaches of these bodies, because of their number and the shortcomings of the National Accreditation Board (NAB).
- The economic support of certification provided by the State has encouraged a marketing-type approach by ISO 9000 consultants.
- High demand for consultants to help prepare companies for certification has led to a decrease in the quality of the service offered and to a tendency to sell standard solutions for situations and needs that vary widely.
- There is a general tendency to neglect specific technological and sector characteristics.

The rapid growth of the certification business in Britain has been amplified by the creation of extensive consultancy opportunities abroad as certification fever has spread to Europe and the rest of the world. These opportunities have been fueled by Britain's image as a leader in certification, which is leveraged, at times deservedly, at other times less so, by British certification bodies and consultancies, and by the fact that English is so widely used around the world. Consultancy work and certification of both companies and assessors outside the United Kingdom has reached huge proportions, generating a captive market and stimulating a desire to exploit demand by extending standards and certification to pathological levels (the creation of TQM standards, for example).

The most significant step taken by the British government to promote standards and certification was the publication of the "Standards, Quality and International Competitiveness" white paper and the simultaneous launch of the National Quality Campaign, to promote the BS 5750 quality assurance system standards in British industry. From 1983 to 1989, the Department of Trade and Industry spent around £19 million in a series of quality initiatives (Lascelles and Dale 1989). The fact that in 1983, when the need for research into the competitive dimension of quality as introduced by the Japanese had already become evident, a major national campaign focused on promotion of standards

and certification is symptomatic. To quote David Hutchins: "It seems that rather than discover why the approach did not provide a remedy for a worsening of Britain's competitive position with regard to the Far East, the advocates [*of the campaign*] were saying that all that was necessary was the same medicine but with a larger spoon." (Hutchins 1995.)

Today, halfway through the 1990s, it is still too soon to draw any conclusions about the effectiveness of such a massive drive toward standards and certification. The impression is that the results in terms of improvements in products and services and increased productivity are well below expectations. Britain is certainly the most important test bench as far as certification is concerned, since no other nation has achieved a similar scale. We can only hope that in the United Kingdom and the rest of Europe, the artificial separation between quality assurance and approaches that put the emphasis on the customer and continuous improvement can be resolved, in the interest of European industrial competitiveness, with a global vision based on a correct balance of all the various elements. (Signs of a move in this direction are already beginning to emerge.)

The Citizen's Charter. In the area of government services for citizens, the British Government was one of the first in Europe to introduce systematic quality promotion schemes, as part of its program of privatization of government services. It has since been imitated by other European governments with the wave of privatizations in the 1990s.

In the 1980s, the U.K. government introduced significant reforms in the way public services were organized and run. These reforms addressed the problems of efficiency and effectiveness in central government, local government, and the National Health Service.

The first objective was to abolish bodies that filled no useful function. Those remaining were divided into two categories: those to be privatized, and those to remain in the public sector. In 1994 almost 1 million jobs passed to the private sector. Moreover, in areas where the public sector continued to be responsible for the provision of a function, an assessment was made of whether government should provide the function directly or through the private sector. The purpose was evidently to improve efficiency through competition.

The Citizen's Charter is designed to ensure that citizens receive adequate standards of service, irrespective of the provider. Basically, the idea is to create a competitive situation wherever possible, as a precondition for achieving quality. And since the focus is on services for the public, the government wishes to guarantee that the quality made possible by competition is actually produced. In cases where competition cannot be created, action is being taken—including incentive schemes— to guarantee the required quality.

The Citizen's Charter was launched in 1991. It is a 10-year rolling program of improvements to public services, based on the following principles (Hilton 1994):

- To set and monitor standards for services and to publish performance results
- To provide openness and full information about how services are run and what they cost
- To provide choice wherever possible
- To make services available equally to all who are entitled to them
- To provide courtesy and helpfulness
- To put things right
- To improve value for money

Special charters are planned for each of the main public services. By 1994, 38 sectors had published charters, including central and local government, schools, universities, hospitals, police services, rail services, prisons, tax collection, and the regulated utilities: gas, electricity, water, telecommunications.

A charter mark scheme has been devised as recognition for organizations that, in the opinion of users, deliver outstanding service. The earnings of those who run the services are in part performance-related.

The Citizen's Charter has been running for a number of years, and assessments of its success are many and varied. Once again, the results have been lower than expected: It is difficult to change peo-

ple's attitudes, especially in the state administration. Nevertheless, some admirable improvements have been achieved, for example in the Post Office: in 1989–90, 78.1 percent of first-class letters were delivered on the next working day after mailing. This figure rose to 89.8 percent in 1991–92 and to 92 percent in 1993–94.

One significant merit of Britain's Citizen's Charter is that it has led to the introduction of similar schemes by other European governments, giving fresh stimulus to a sector that is traditionally extremely static. This is why the Charter is discussed at some length here, despite the fact that, in terms of real quality of public services, a number of northern European countries could justifiably claim superiority.

Notes on Other Countries. Although detailed descriptions of every West European country are not possible here, a series of comments and clarifications are provided to complete the picture.

We can begin with Switzerland, which has a well-deserved reputation for the quality of its manufactured goods (e.g., wristwatches, large electromechanical equipment, chemicals) and its services (e.g., banking and tourism). Switzerland was one of the first countries in Europe to institute a national quality system certification organization (the SQS, formed in 1983) and it has one of the highest certification rates. Many of its manufacturing companies and service providers pursue TQM strategies.

The Netherlands also has a long-standing quality tradition and was one of the first countries to introduce certification (1982). The Dutch Quality Foundation dates back to 1953 and was a founder member of the EOQ. In 1984, the Dutch government launched the first national quality program, intended primarily for SMEs, which form the backbone of the country's economy. A second program, introduced in 1988, provided 50 percent government funding for more than 100 projects designed to promote quality principles and methodologies within the corporate sector. Dutch universities also play a significant role. Finally, mention should be made of the Dutch Quality Award (which is based on the European Award but introduces a number of interesting differences). The Award is run by the Dutch Quality Institute, which was set up in 1992.

Scandinavia, too, woke up to quality issues in the 1980s. In 1984, Sweden instituted the first TQM chair, at the University of Linköping. In 1990, the Swedish Quality Institute was formed to run the Swedish Quality Award (1992), which is based on the Malcolm Baldrige model. In the business world, the wave of privatization at the beginning of the 1990s encouraged the spread of TQM. Certification is also strongly promoted, especially in Denmark. All three Scandinavian nations pay particular attention to the quality of services, most notably in health care, and to environmental quality. Sweden takes a special interest in customer satisfaction issues, at both the academic level and in practical applications. It was the first country to introduce a national customer satisfaction observatory, the Swedish Customer Satisfaction Barometer (SCSB), which was created in 1989 and was the model for the American Customer Satisfaction Index formed in 1994. The SCSB monitors customer satisfaction in a number of industries and individual corporations within those industries. It has five objectives:

1. To compare industries
2. To compare individual firms with the industry average
3. To make comparisons over time
4. To predict long-term performance
5. To answer specific questions

Germany also has a Customer Satisfaction Index, which was created in 1992. Research is currently underway to assess the possibility of introducing a European customer satisfaction index.

Certification also has an important place in Ireland and Italy. The situation in Italy (whose national certification body, the AICQ, was one of the five founder members of the EOQ) merits a brief comment. In the corporate world, the various sectoral associations (for the mechanics industry, electronics, chemicals, etc.) effectively control certification in their respective sectors, even though the market is open to anyone wishing to enter the certification business. It is obviously in these associations'

interests to keep certification quality high; moreover, since assessors are frequently recruited from the ranks of those who have spent their working life in the particular sector, they are able to assess the factors that really count, and avoid the bureaucratic approach adopted by assessors who are familiar with the standards but not with specific processes. This combination of factors has tended to keep the level of certification relatively high in Italy, compared with countries where the business aspect of certification tends to predominate.

THE EUROPEAN QUALITY ORGANIZATIONS

The European quality organizations have been a major contributing factor to the rapid growth of interest in quality over the years. So a specific section is dedicated to them here. Readers wishing to examine in greater detail the issues discussed here, which are necessarily touched on only very briefly, should refer directly to these bodies. Two major organizations operate at the European level, the EOQ and the EFQM; the bodies active at the national level are usually the member associations of the EOQ and in some cases the organizations that run the awards.

The European Organization for Quality (EOQ). The European Organization for Quality is the federation of the European national quality organizations. Its aims are specified in the following mission statement:

> To facilitate the exchange of information and experience of quality theories and best practices across Europe, in order to enhance the competitiveness of the European economic system, with special attention to small and medium enterprises; to promote the growth of quality in public services and the educational system.

To accomplish these missions the EOQ:

- Promotes and coordinates the activities of its member organizations and all working units
- Organizes annual congresses, seminars, and forums
- Publishes the journal *European Quality*
- Participates in and contributes to projects at European level

The EOQ was founded in 1957 by the national quality organizations of France, the Federal Republic of Germany, Italy, The Netherlands, and the United Kingdom as the European Organization for Quality Control (EOQC). Since then, membership has expanded to other national quality organizations, as shown below. By 1996, thirty-one national quality associations had become Full Member Organizations (FMOs) of the EOQ.

Date	*Country*
1961	Denmark, Sweden
1962	Norway
1963	Czechoslovakia
1966	Yugoslavia
1970	German Democratic Republic
1971	Portugal
1972	Hungary
1974	Belgium
1976	Turkey

Date	*Country*
1979	Austria, Greece
1980	Ireland
1989	Iceland
1991	The former Union of Soviet Socialist Republics becomes Russia and the Federal Republic of Germany incorporates the former German Democratic Republic
1992	The former Yugoslavia splits into separate states; Slovenia is the first of the new states to enter the EOQ
1993	Croatia and Estonia; the former Czechoslovakia splits into the Czech Republic and the Slovak Republic
1994	The former Yugoslavian Republic of Macedonia
1995	Latvia
1996	The Ukraine

In 1989, the EOQC changed its name to European Organization for Quality (EOQ), to take account of the new developments in quality concepts after quality control: quality assurance, quality management, Total Quality Management.

One of the outstanding characteristics of the EOQ in its early years was its policy of accepting organizations from all over Europe, West and East, in a period when the continent was deeply divided. Promoting exchanges of experience between quality specialists within the two extremely different economies was considered of greater importance than the political divisions on the two sides of the Iron Curtain. This was demonstrated to the world when an Annual Congress was organized in Czechoslovakia as early as 1969 and when a Soviet citizen was elected President in 1978.

The EOQ is governed by Swiss law. Its General Secretariat is located in Bern, Switzerland, and is currently composed of three people. This low number is a significant indication of the difference between the EOQ and other quality organizations, such as the ASQC. Whereas the latter is a national association (covering the entire U.S. territory, although it is a highly decentralized organization consisting of territorial divisions), the EOQ is a federation of national associations (the Full Member Organizations). The EOQ reflects the political organization of Europe, a continent composed of separate sovereign states, which are gradually moving toward economic integration and partial political unification (among the 15 member states that make up the European Union and other states that will gradually join the EU), without to date at least overriding the absolute preeminence of each country's national identity. Similarly, within the EOQ, the national quality associations tend to maintain their specific prerogatives and dedicate most of their attention and resources to national initiatives. The limited proportion of resources that go to the EOQ (to cover membership fees and the participation of their representatives at the meetings of the statutory bodies, committees/sections, and workgroups) enables the federation to provide harmonization, coordination, and leadership on special strategic initiatives of European significance or on operations for which a centralized organizational approach improves efficiency by enhancing synergies among the various bodies.

The prevalence of the FMOs' national activities over the European activities conducted by the EOQ is confirmed by staff figures. If the staffs of the 31 national organizations are added together, the total is approximately 250 people, compared with 3 at the EOQ General Secretariat. The national bodies also rely on the work of many volunteers. The EOQ executive organs feel, however, that the central structure should be strengthened to take account of the expansion of activities at the European level fueled by the growing economic and political integration of the EU.

Table 38.3 lists the FMOs of the EOQ, showing their individual and corporate members.

Structure and Activities. The decision-making organ of the EOQ is the General Assembly. It consists of the representatives of the Full Member Organizations, the members of the Executive, and the

TABLE 38.3 EOQ Full Member Organization (FMO) Membership, January 1996

FMO	Individual	Corporate
Austria	40	430
Belgium		1,900
Bulgaria	N.A.	N.A.
Croatia	240	60
Czech Republic	1,350	25
Denmark	1,011	744
Estonia	86	23
Finland	2,400	300
France	1,000	2,000
Germany	6,000	1,500
Greece	3,980	382
Hungary	850	260
Iceland	188	282
Ireland		2,200
Italy	2,000	800
Latvia	176	52
Macedonia (except Yugoslavia)	60	55
The Netherlands		350
Norway	1,910	1,010
Poland	N.A.	N.A.
Portugal	1,487	928
Romania	15	265
Russia	320	—
Slovakia	115	151
Slovenia	650	—
Spain	3,211	1,113
Sweden	3,500	160
Switzerland	30	1,820
Turkey	1,701	3,661
United Kingdom	13,000	600
Total EOQ	45,320	21,071

N.A.=not available.

General Secretariat. The General Assembly meets twice a year: at a summer session during the Annual Congress and at a winter session. The Executive is composed of the President, the Immediate Past President and four Vice Presidents. The activities of the EOQ are conducted through:

- The Annual Congress
- The official EOQ journal, the *European Quality Journal*
- The Committees and Sections
- The Unit for the Registration and Qualification of Quality Professionals
- The Evolution of Quality Working Group

The Annual Congress. Held every year since 1957, the EOQ Congress is hosted by the member countries on a rotating basis. The first Congress, chaired by Walter Masing, was held in Paris in 1957. The Congress calendar has already been drawn up until 2005 (1997: Trondheim, Norway; 1998: Paris; 1999: Spain; 2000: Hungary; 2001: Turkey; 2002: United Kingdom; 2003: The Netherlands; 2004: Bulgaria; 2005: Italy).

The Congress is usually held in the month of June; every other year it ends with the election of a new president and Executive.

The European Quality Journal. The *European Quality Journal* is the EOQ's official journal. A bimonthly magazine, it was introduced in January 1994, when it replaced the *EOQ Journal.* The journal is owned by the EOQ and published by European Quality Publications, J. & M. Kelly. Its editorial position is decided by an Editorial Board consisting of the Editor, the Secretary General, and another EOQ representative. The journal also has the support of an Advisory Board of United States and Japanese as well as European experts. The journal is a managerial rather than technical publication; it is intended for managers in general, in every type of organization, public or private, profit-making or not, and for the academic world.

The Committees and Sections. The number of committees and sections has varied over the years, depending on requirements and on individual FMO availability to chair new groups. In 1995, the following sections were operational: Automotive, Pharmaceutical Industry, Construction Industry, Consultancy, Healthcare; the following committees were operational: Education and Training, Dependability, Glossary, Statistical Methods, Software, Human Factors in Quality Management, Environmental Quality, Service Quality.

The Unit for the Registration and Qualification of Quality Personnel. The Unit runs the Harmonized Scheme for the Qualification and Registration of Quality Personnel, which was introduced by the EOQ in January 1994 as a means of establishing high standards for the training and qualification of quality personnel throughout Europe and paving the way toward mutual recognition of all the relevant professional figures. As of 1996, the EOQ Scheme identifies three categories of quality personnel: the Quality Professional, the Quality System Manager, and the Quality System Auditor. The Scheme is based on the training experience of a number of FMOs, who in 1991 decided to launch a process of harmonization in order to create a common scheme. It has also been adopted by the FMOs who were not involved in its planning and has thus become the official EOQ Scheme. If it is accepted by the relevant bodies, it will also become the European Scheme. Today, the Scheme is run by the EOQ in line with the requirements of the EN 45013 and ISO 10011 standards. The EOQ therefore acts as a *de facto* accrediting body and will officially be recognized as such if the Scheme is integrated into the European system. The EOQ's FMOs act as certifying bodies for professional figures in their respective countries. Under EU rules, this function is not confined to the FMOs but may also be performed by other bodies that meet the requirements specified in the relevant EOQ document. Nevertheless, the FMOs are the EOQ agents in their respective countries and guarantee correct application. Figure 38.1 illustrates entry requirements and the certification process.

The Evolution of Quality Working Group. This group monitors and, when possible, anticipates the evolution of quality theories and practices, in order to help keep Europe at the forefront of developments. One of the reasons behind the formation of the Group in 1994 was the realization that, over the years, quality had developed in a one-sided manner in Europe and within the EOQ itself, with the result that the organization was in danger of losing the leadership envisaged by its vision and mission statements, and confirmed by its history. After 1987, quality system certification based on the ISO 9000 standards had become the key issue in Europe and in the EOQ Congresses. High demand for certification had created new opportunities for the national quality associations, which were able to offer their experience in quality training and launch new activities in the area of assessor certification. This increase in activity not only boosted the importance and visibility of the national organizations, it also led them to enlarge their structures, with the result that technical structures gradually came to prevail over professional skills. More and more time was spent resolving problems related to budgets, expansion, internal organization, and competition with other groups attracted by the new business opportunities. Specialist, professional issues were neglected or, often, not even perceived. Developments in the field ofTotal Quality Management were relegated to the sidelines in the FMOs and consequently in the EOQ, because of the overwhelming priority given to certification.

The Evolution of Quality Working Group was set up to provide the EOQ with an observatory that would identify and analyze major trends in quality as distinct from specific issues—albeit legitimate ones—of contingent concern, business opportunities of interest to certain groups or the latest fads.

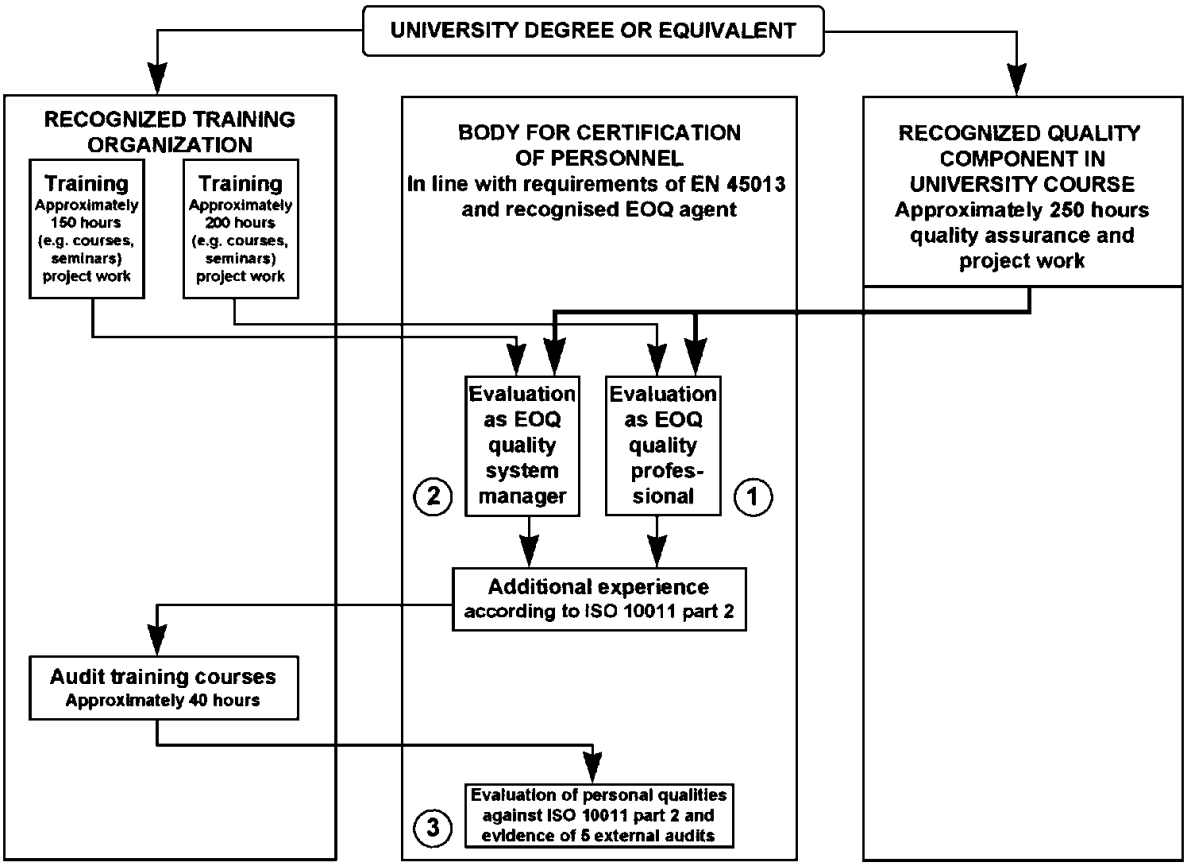

FIGURE 38.1 The EOQ harmonized scheme for the registration and certification of quality personnel (1 = quality professional, 2 = quality system manager, 3 = quality auditor).

The Group is therefore a point of reference for the EOQ and the FMOs, providing support in making the correct decisions and avoiding the pitfalls of fashion. It meets about three times a year and organizes an annual forum to discuss a theme of particular current interest. It also provides support for the FMO that hosts the EOQ Annual Congress, helping to choose the main theme for debate, select speakers, and assess the articles received in response to the call for papers. It also examines the key themes in the papers, before discussion by the Executive.

The European Foundation for Quality Management (EFQM). By the 1980s, the new quality messages had spread to many European companies and many quality managers had experienced their benefits at firsthand. The main difficulty was how to involve top management and line management in general. Sensitive to this problem, the quality associations attempted to draw the attention of corporate chairmen and chief executives on one hand and politicians on the other to the new quality issues, but with little success.

In 1987, the chairman of N.V. Philips Gloeilampenfabrieken, the Dutch electrotechnical and electronics multinational, contacted 13 other major European companies (14 EFQM founder companies) with an idea for the creation of a European body to stimulate corporate interest in Total Quality Management, which was seen as a major strategic factor in the recovery of Europe's industrial competitiveness. The 14 chairmen assigned their quality strategy managers to analyze the project. The result was a proposal to set up an organization that would be complementary to those already operating in the quality field. If the strong point of the existing associations was the know-how and experience of quality managers and quality experts and their weak point was the lack of top management participation, then a highly visible, direct top management presence would be the goal of the new organization. On September 15, 1988, the chairmen of the 14 companies met in Brussels to sign a

letter of intent for the formation of the European Foundation for Quality Management. The Foundation was formally constituted the following year, on October 19, in Montreux (Switzerland), again in the presence of the fourteen chairmen. The Policy Document approved in Montreux set out the vision, missions, and objectives of the EFQM. Specifically, the Foundation's missions were as follows:

- First, to support the management of Western European companies in accelerating the process of making quality a decisive influence in achieving a global competitive advantage
- Second, to stimulate and, where necessary, support the participation of all segments of the Western European community in quality improvement activities and to enhance the quality culture.

For the first five years, the EFQM was directed by a Governing Committee consisting of the chairmen of the founder companies. The policies drawn up by the Committee were transformed into initiatives by an Executive Committee composed of the chairmen's representatives and implemented by a staff headed by a Secretary General. An Advisory Board of representatives of the Executive flanked the Secretary General during the intervals between the meetings of the Executive Committee. In 1994, EFQM membership conditions were changed, with the only distinction now being between Regular Members (public or private companies, or governmental bodies) and Associated Members (nonprofit organizations). Correspondingly, the Governing Committee and the Executive Committee are elected from among the members. The Foundation's official headquarters are in Eindhoven (Netherlands), but since 1992 the 20-strong staff headed by the Secretary General has operated from the EFQM Representative Office in Brussels.

In 1996, the EFQM had approximately 500 members.

EFQM Activities. The main activities of the EFQM are as follows:

- *Recognition:* Covers management of the European Quality Awards (by far the most important activity).
- *Services for managers:* The Annual EFQM Representatives Meeting, the Quality Management Open Days, seminars, common interest days, working groups, etc.
- *Communication:* Publication of the *Quality Link* newsletter and monographs.
- *Education, training, and research:* Organization of the annual Learning Edge Conference and other activities.
- *Winners' conferences:* The conferences at which the winners of the awards illustrate their paths toward excellence for the benefit of other European companies. The conferences are organized by the local EFQM members.
- *Award-related training activities:* Training for award assessors and company internal assessors.

In the main countries in which the EFQM operates, local activity groups have been formed to translate documents and coordinate the national group of award assessors.

The Annual Forum. This is the EFQM's main public event. The first Forum was held in 1989 in Montreux, the second in 1990 in London, and the third in 1991 in Paris. Since 1992 (Madrid), the Forum has also included the European Quality Award presentation ceremony. The Forum has been held in Turin (1993), Amsterdam (1994), Berlin (1995), Edinburgh (1996), Stockholm (1997), and Paris (1998).

Although the presentation of the Award is a key highlight, the Forum offers an intensive schedule of events of great interest to large numbers of European managers: papers by European corporate chairmen and CEOs and workshops on carefully selected issues. The Forum is also the venue for the annual meeting of the Foundation's Governing Committee.

The EFQM 2000 Program. In 1996, the EFQM reviewed its vision and missions and launched a long-term program.

The Foundation's new *vision* is

> To be a leading organization, recognized on a global basis, for the development and promotion of a consistent approach to Total Quality Management as the vehicle for the achievement of business excellence in European organizations.

Its *missions* are

- To stimulate and support the participation of organizations throughout Europe in improvement activities leading to excellence in customer satisfaction, impact on society and business results.
- To support the managers of European organizations in enhancing the role of Total Quality as a decisive factor in achieving a global competitive advantage.

Under the EFQM 2000 program, the Foundation's *objectives* are as follows:

1. For the European Model for Business Excellence to be recognized as the key strategic framework for managing an organization and identifying improvement opportunities, regardless of the nature and size of that organization.
2. For the European Quality Award and Prizes to be recognized internationally as major achievements, and the winners to be acknowledged as role models of business excellence.
3. To provide membership satisfaction, through value-for-money services.
4. For the philosophy, methods, tools, and techniques of Total Quality to be accepted as a key element of education and training in Europe, at every level.
5. To establish constructive relationships with the national quality organizations, the European Organization for Quality, and the European Union.
6. To operate on a sound financial basis.

The EFQM has set itself a membership target of 800 by the year 2000.

The European Quality Platform. Given the complementarity between the EOQ and the EFQM, on September 1, 1994, the two organizations created the European Quality Platform as a means of optimizing the overall benefits for Europe of their activities. The Platform's vision reads as follows:

> The European Quality Platform is the leading body in relation to communication and coordination in the field of quality matters throughout Europe.
>
> The European Quality Platform serves and supports the European Commission and all private and governmental organizations in Europe in their attempt to promote quality at all levels and in all sectors.

The Platform comprises a Board with three representatives from each of the two organizations, which meets at regular intervals, a permanent link between the EOQ and EFQM Secretaries General and, primarily, a range of joint activities. Leadership of these activities is always handled by one or another of the organizations, but planning and supervision are conducted jointly by special Steering Committees. From 1994 to 1996, the Platform's joint activities were as follows:

- Creation of the new European Quality Award for Small to Medium Enterprises
- European Quality Week
- Preparation of a book illustrating case studies of TQM strategies developed by European companies.

These three activities were part of the programs of the European Commission (DGIII) and therefore received Commission funding. The Platform's future plans involve activities in education and training, publication of information about quality, and promotion of Professional Quality Figures.

THE EUROPEAN QUALITY AWARDS

The European Quality Prizes and the European Quality Award (EQA) were launched in 1991 by the EFQM, with the support of the EOQ and the European Commission. The EFQM is responsible for their management and funding. To receive a prize, an organization must "…demonstrate that its approach to Total Quality Management has contributed significantly to satisfying the expectations of its customers, employees, and others who have an interest in it, over a number of years.…" Since the candidates do not compete against one another, but are assessed separately against a predefined level of excellence, a number of prizes can be awarded in the same year. The "best of the best" receives the European Quality Award. Originally, the awards were intended for large or medium-large business organizations. In 1996, a separate award was introduced for public service providers. An award for small to medium enterprises (SMEs) will be introduced in 1997 (see notice of brochures about the awards under References).

If the applicant is an independent company, the sole condition for eligibility is that at least 50 percent of its activities over the previous 5 years must have been conducted in Europe. If the applicant is part of a larger organization, the following conditions must also be met: (1) the applicant must have a unique company name and its own unique brands; (2) the applicant must have more than 250 employees (from 1997 on, this will no longer be a condition; 250 employees will be the dividing line between the awards for large organizations and SMEs); (3) output supplied to the parent company must be less than 50 percent of total output; (4) the applicant must perform a sufficiently broad range of business functions (European Quality Award).

The following companies won European Quality Awards from 1992 to 1995 (the first company in the list for each year is the Award winner, the other companies are Prize winners):

- 1992: Rank Xerox Ltd.; BOC Ltd., Special Gases, Industria del Ubierna SA, UBISA, Milliken European Division.
- 1993: Milliken European Division; ICL Manufacturing Division (now D2D).
- 1994: D2D (Design to Distribution); Ericsson SA, IBM SEMEA.
- 1995: Texas Instruments Europe; TNT Express (UK) Ltd.
- 1996: Brisa-Bridgestone Sabanci Tire Co. SA; British Telecommunications plc; Netas, Northern Electric Telekomunikayson AS.
- 1997: SGS Thomson; British Telecommuncations plc; TNT UK Ltd.; Netas, Northern Electric Telekommunikayson AS. 1997 was also the first year of the European quality award for small/medium enterprises: Award winner: Beksa. Prize winners: Gasnalsa, Gas Natural de Alava; DiEU; ABB Semiconductors; DD Williamson; Prec-Cast Foundry Ltd.; Landhotel Schindlerhof.

The EQA timetable is approximately as follows: submission of preliminary application data (information about the company and fulfillment of eligibility criteria), end of January; submission of final Application Document, beginning of March; site visits, June; announcement of the award winners, October/November.

A team of five to seven assessors, headed by a senior assessor, is assigned to each application. After the application is examined separately by each member of the team, the senior assessor calls for a "consensus meeting" to reach qualitative agreement (on strengths and areas for improvement) and quantitative agreement (on scores). The resulting "consensus report" is then presented by the senior assessor to the EQA Jury, which examines all the consensus reports and selects the applicants which will receive a site visit. After the visits have been completed, the EQA Jury meets to reach its final verdict. The number of assessors involved in the process varies, depending on the number of applicants.

The EQA is based on the model in Figure 38.2. The model expresses the concept that *customer satisfaction, people* (*employee*) *satisfaction* and a positive *impact on society* can be achieved through *leadership* as the driving force behind *policy and strategy, people management,* and management of *resources* and *processes,* and that this leads ultimately to excellence in *business results.* The clear division between *enablers* and *results,* with a 50 percent weighting attributed to each of the two blocks, is the distinguishing characteristic of the EQA.

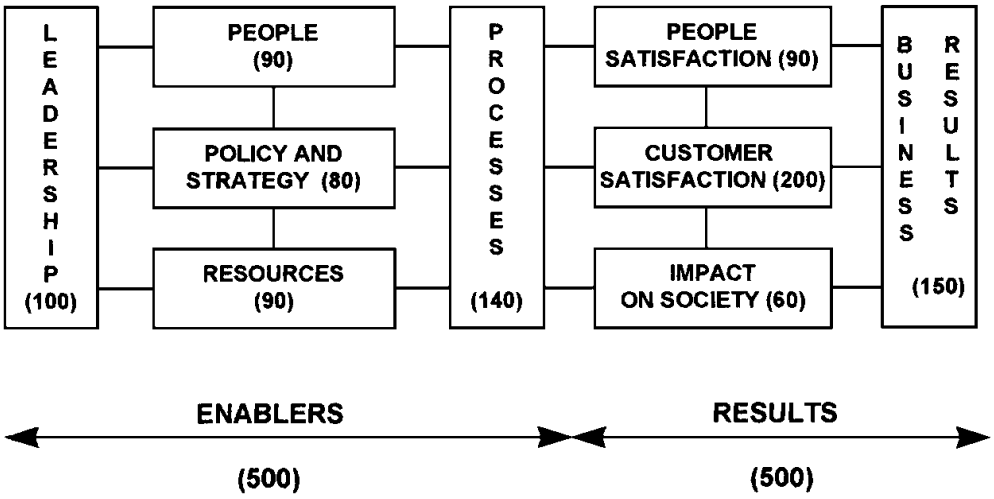

FIGURE 38.2 The European Quality Model, with weights.

THE EUROPEAN ENVIRONMENTAL MANAGEMENT SYSTEM

The world's first set of environmental management system standards, BS 7750, was drawn up by the British Standards Institute (BSI) in 1992. Clearly, in becoming the first body to establish an environmental standard, the BSI was able to capitalize on its years of experience in quality system standards (BS 5750 and, later, ISO 9000).

At the European level, the first Resolution of the EC Council in this field, passed on December 3, 1992, expressed the view that a preventive guideline geared to the market economy in the area of environmental protection could benefit industrial competitiveness and should be adopted wherever possible. The following year saw the publication of EC Ruling 1836/93 on the voluntary compliance of industrial companies with a community eco management and auditing scheme designed to raise the environmental efficiency of industrial operations. In preparation for the introduction of the scheme, the Ruling provided a set of legislative, technical, and managerial guidelines covering the development of "environmental management systems" within companies, the implementation of the necessary audits, and information for the public. The Eco Management and Audit Scheme (EMAS) became operational in 1995. By 1996, therefore, three systems existed: the BS 7750 standard, the EMAS, and the ISO 14000 standard, the final draft of which was approved in Oslo in June 1995. The formal standard is due to be published by the ISO in the second half of 1996 (Kiesgen 1995).

Though similar in many ways, the three systems contain basic differences in emphasis. The ISO standard is considered to be the least prescriptive, because of the compromises introduced to make it internationally acceptable. The EMAS standard is regarded as the most demanding. Many observers in Europe believe that EMAS registration should be the ultimate goal and that both the BS 7750 and the ISO 14000 standards should be regarded as staging posts. However, the CEN (the European standardization body) is examining the possibility of narrowing the gap between the EMAS and ISO 14001, leading ultimately to the adoption of the ISO standard.

The approach of the environmental efficiency certification system for industrial operations outlined by the EU Ruling is similar to that adopted for quality system certification in relation to the free circulation of goods within the Union. The EMAS registration roadmap is as follows (Mullins 1996):

1. Adopt an environmental policy. This must be a corporate policy designed to ensure:

- Compliance with the relevant environmental regulations
- A commitment to continuous improvement

2. Conduct a site environmental review. The aim is to identify the site's environmental impact and relevant issues.
3. Develop an environmental program. The program should be set out in accordance with the company's environmental policy and the outcome of the site environmental review.
4. Set up an environmental management system.
5. Perform an environmental audit using EMAS, BS 7750, or ISO 14001 criteria. The frequency of the audit depends on the specific business, but it must be performed at least once every 3 years.
6. Prepare an environmental statement for publication. The aim is to ensure that all interested parties are aware of the environmental impact of the site and the company's environmental management policy.
7. Validation. An accredited environmental verifier scrutinizes the company's environmental policy, program, management and audit procedures, to ensure that they meet EMAS requirements.

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