SOME RESULTS AND IMPACTS OF 55TH EOQ CONGRESS IN BUDAPEST

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SUMMARY

The 55th EOQ Annual Congress was organized by the HNC for EOQ in Budapest between 20th-23rd June 2011. This Congress was simultaneously also a World Quality Congress taking place triennially alternately in the United States, Europe and Japan. Considering that in this period Hungary had the Presidency of the EU Council, importance of this year’s World Quality Congress was underlined by the fact that it was also registered in the official EU calendar. Other important prestige increasing factors were the meeting of the representatives of the World Alliance for Quality (WAQ), and the General Assembly of the International Academy of Quality (IAQ) after the Congress. The most important presentations of the Congress are reviewed. In addition, some conclusions and recommendations are summarised.

1. INTRODUCTION

The main topics of the Congress events were followings:
- Innovation and Quality
- Education of Quality – Quality of Education
- Repositioning the Quality Issues in Manufacturing
- Quality Management and Quality of the Management
- Corporate Social Responsibility and Sustainable Development
- Quality Improvement Methods, Six Sigma and Lean
- People Involvement and Motivation
- Quality Situation in following Sectors: Agrifood, Healthcare, Public Administration, Pharmaceutical Industry, Automotive Industry, Construction Industry, Services and Tourism

The Pre-Congress Seminars were held on Agrifood, Healthcare and Public Administration.

2. RESULTS

Since the beginning great interest was shown towards the World Quality Congress. Recognized quality professionals and general managers submitted altogether nearly 300 presentation proposals being outstandingly high number in the history of the EOQ Congresses from which 149 papers were accepted from 44 countries and presented in the Pre-Congress Symposia, in the Opening and Closing Plenary Sessions as well as in the 24 Concurrent Sessions (Table 1).

As regards participants: from 61 countries, nearly 620 participants registered and graced the Congress with their presences (Table 2). Many participants arrived from China, Russia, Germany, Japan and Norway. Every continent was represented at the Congress.
In cooperation with the VSL Consultancy and Servicing Ltd. also a widespread participants’ satisfaction survey took place. It should be mentioned and recognized that 30-60% of the participants completed evaluation forms in every session, so scores can be considered as representative.
Table 2. Number of Pre-Congress and Congress Participants per Countries

| Country               | Pre-Congress | Congress | Together | Country               | Pre-Congress | Congress | Together |
|-----------------------|--------------|----------|----------|-----------------------|--------------|----------|----------|
| Albania               | 2            | 1        | 3        | China                 | 2            | 30       | 32       |
| Angola                | 0            | 1        | 1        | Republic of Kosovo    | 0            | 1        | 1        |
| Argentina             | 0            | 2        | 2        | Latvia                | 2            | 3        | 5        |
| Australia             | 3            | 2        | 5        | Liechtenstein         | 0            | 2        | 2        |
| Austria               | 1            | 3        | 4        | Libya                 | 2            | 1        | 3        |
| Belgium               | 2            | 12       | 14       | Luxembourg            | 0            | 1        | 1        |
| Bosnia-Herzegovina    | 0            | 1        | 1        | Malta                 | 0            | 2        | 2        |
| Brazil                | 2            | 3        | 5        | Moldova               | 1            | 1        | 2        |
| Comoro-Islands        | 0            | 4        | 4        | Morocco               | 0            | 1        | 1        |
| Hungary               | 212          | 330      | 542      | Germany               | 7            | 18       | 25       |
| Italy                 | 1            | 1        | 2        |          | 1            | 1        | 2        |
| Portugal              | 0            | 9        | 9        |          | 1            | 1        | 2        |
| Romania               | 2            | 3        | 5        | Spain                 | 1            | 2        | 3        |
| Spain                 | 1            | 2        | 3        | Switzerland           | 2            | 7        | 9        |
| Sweden                | 2            | 11       | 13       | Austria               | 1            | 1        | 2        |
| South Korea           | 2            | 3        | 5        | Moldova               | 1            | 1        | 2        |
| Czech Republic        | 2            | 4        | 6        | Italy                 | 1            | 1        | 2        |
| Denmark               | 0            | 1        | 1        |          | 1            | 1        | 2        |
| Republic of South Africa | 4          | 2        | 6        | Russia                | 3            | 29       | 32       |
| Egypt                 | 2            | 1        | 3        | Rome                  | 1            | 1        | 2        |
| Estonia               | 2            | 3        | 5        | Greece                | 0            | 1        | 1        |
| Finland               | 1            | 7        | 8        | Georgia               | 0            | 1        | 1        |
| Greece                | 0            | 1        | 1        | Singapore             | 0            | 1        | 1        |
| Hong Kong             | 0            | 1        | 1        | Slovakia              | 0            | 2        | 2        |
| Iran                  | 0            | 1        | 1        | Slovenia              | 6            | 5        | 11       |
| Israel                | 0            | 4        | 4        | Ten                    | 3            | 3        | 6        |
| Israel                | 0            | 4        | 4        | Thailand              | 3            | 3        | 6        |
| Israel                | 0            | 4        | 4        | Ukraine               | 0            | 3        | 3        |
| Japan                 | 8            | 13       | 21       | Ukraine               | 0            | 1        | 1        |
| Japan                 | 8            | 13       | 21       | Vietnam               | 1            | 1        | 2        |
| Kazakhstan            | 3            | 2        | 5        | Altogether            | 318          | 614      | 932      |

Source: conference organizers of 55th EOQ Congress in Budapest 2011
General evaluation of the Congress is included in Table 3.

Table 3. General evaluation of the Congress

| Topic                                              | Average |
|----------------------------------------------------|---------|
| Global index of the 55th EOQ Congress              | 4.34    |
| Congress venue                                     | 4.47    |
| Cultural and social programs                       | 4.41    |
| Services (registration, lunch, coffee etc.)        | 4.40    |
| Preparation of the Congress (information, correspondence) | 4.34    |
| Organization of the Congress                       | 4.31    |
| Professional level                                 | 4.29    |

Source: conference organizers of 55th EOQ Congress in Budapest 2011

The positive picture of the Congress was strengthened by the altogether 11 exhibitors as well as by the factory visits at the Herend Porcelain Manufactory, Grundfos Manufacturing Hungary and in Dreher Breweries.

3. SELECTED PRESENTATIONS

3.1. NATIONAL PLAN FOR EUROPE 2020 STRATEGY

Balázs Hidvéghi, Deputy State Secretary for European Union and International Affairs of the Ministry for National Economy, Hungary

Having reviewed Hungary's key macroeconomic indicators, main items of the Hungarian National Reform Program are the following: 1. Measures to reduce public expenditure and debt to a sustainable level, 2. Building better business environment in Hungary, 3. Structural reforms to enhance and dynamising the economic growth, 4. Long-term structural reforms and 5. Fostering employment. These objectives are well in line with the national strategic programs as well as the EU 2020 strategies and main national targets:

- Increasing employment rate to 75%;
- Lowering the number of people living in poverty by 5%;
- Increasing the level of R&D expenditures to 1.8% of GDP;
- Increasing the share of population aged 30-34 having completed tertiary level education to 30.3%;
- Increasing the share of renewable energy sources to 14.6%.

3.2. EUROPEAN QUALITY POLICY

Zacharias Bilalis, European Commission, DG Enterprise and Industry, Brussels, Belgium

The European Quality Policy does not plan to widen Community legislative activity nor envisions a more "interventionist" role for the Commission: namely it wants to act as a "facilitator", a catalyst for the projects and initiatives to be carried out in a decentralized manner, by fixing a reference point and by providing direction for thought and action. A European Quality Policy must lead to:

- Satisfied citizens, consumers and customers;
- Well-trained and motivated staff;
- Efficiently managed companies;
- Respected environment;
Well-used resources;
- Strengthened employment on the basis of overall competitiveness, innovation and creativity.

Framework of a European Quality Policy: Quality Assurance should be “part of Quality Management focused on providing confidence that quality requirements will be fulfilled”. However, a European Quality Policy must also address the whole issue of “quality as such”, go beyond the limits of pure quality assurance and encompass the whole sphere of quality management. It means that the European Quality Policy is directed towards companies, public authorities and consumers alike. It aims to establish the overall framework for the development of technical and political environment essential to the improvement of the quality of products and services, the competitiveness of European companies and the quality of life of the people of Europe. A European Quality Policy intends to develop a favourable environment in which enterprises achieve excellence in terms not only of conformity to regulatory requirements but also of their outputs and internal organisation for the benefit of the society as a whole.

3.3 INTRODUCTION TO THE CHINESE CERTIFICATION AND ACCREDITATION SYSTEM

Che Wenyi, Deputy Chief Administrator, Certification and Accreditation of China (CNCA), China

Certification and accreditation are playing more and more important role in the national economic and social development. Through the certification the quality level of products and services as well as management quality levels has been enhanced vigorously. The average rate of product quality above standard in certified enterprises is 92%, while this rate at the uncertified companies is only 79%. Today in China there are 136 domestic and 37 foreign-invested certification bodies, 33 certification training bodies, 353 certification consultancy bodies and 16 foreign certification bodies. Altogether about 60 thousand certification, accreditation and related personnel cover various industries, products and institutions in China. Regulation on certification and accreditation of the People’s Republic of China was announced in 2003. The supervision system was established by several years’ efforts encompassing the comprehensive supervision by regulations, authorities, accreditation and self-discipline. The comprehensive certification system covers both compulsory and voluntary areas. Legal responsibility systems are based on characteristics of certification and accreditation. There is a unified and active international cooperation system in place.

3.4. RETURNING TO OUR ROOTS: THE FUNDAMENTALS OF MANAGING FOR QUALITY

Gregory H. Watson, Acting Chairman and President, International Academy for Quality (IAQ), Finland

Excellence is a milestone on the quality journey from the creative ideas up to the implementation in practice: the design gap (reliability by design) is between what the customer wants and what he/she is promised. And what the customer gets at last will provide basis for future customer perceptions. Quality management should fill the conformity gap between customer expectations and the real supplies in order to avoid quality losses. Excellence is the good customers’ perception of our goods and services. There exist a lot of tools and methods of quality management to make this long quality journey as efficient as possible: ISO 9000 Standard, Lean Six Sigma Method and Business Excellence (leadership and governance, strategic plans and projects, ethics and social responsibilities, performance measurement and knowledge management – just to mention the most important elements). While the ISO 9000 Standard represents the relatively low-level operational quality, Six Sigma projects are contributing through reiterated self-assessment and benchmarking
activities very efficiently to the development of business excellence (upper strategic quality). Quality is about action – it is not just theory.

3.5. CULTURAL TRANSFORMATION: PROVIDING THE LEADING EDGE IN NAVIGATING GLOBAL QUALITY

Charles Aubrey, Vice President for Quality and Performance Excellence
Anderson Pharma Packaging Inc. an AmerisourceBergen Company, USA

Continuous improvement has become one of the most important processes in organizations today. Whatever the specific approach; TQM, Six Sigma, Lean, Process Management and Improvement or Kaizen, the culture of the organization must support that approach. If the culture does not foster the approach, support the behavior and activities, reinforce the discipline, motivate and reward the actions and results, then the continuous improvement process will fail. It is the senior leadership team who must define what culture they want. Culture must be developed to support the type of continuous improvement process the organization wants to implement. Anderson Pharma Packaging Inc. has recently completed a culture survey and almost 400 employees participated voluntarily. The senior leadership team earlier had articulated 7 values being important to Anderson since 1967, but had never been written down. The senior management team now wanted to determine how well they were accepted, adopted and practiced at the company. As it was the intent of the senior management team to measure them, they developed 87 questions around the 7 values which are: Manage with Information and Metrics, Empower Employees, Teamwork, Respect and Ethical Behavior, Improve and Innovate, Coach/Mentor and Make a Difference, and Surpass Customer Expectations. This was done to make it clear throughout the organization what Anderson stands for, how to operate and what they expect from each employee.

3.5. INNOVATION AND QUALITY

Gábor Szabó, President, Hungarian Innovation Association and Rector of Szeged University, Hungary

Donald Stokes American scientist published in the late 1990s a two-dimensional innovation model making balance between demands for understanding the nature as well as demands for solving social and technological problems considering exploitation as well. Every project should be positioned in this co-ordinates system according to the special demands indicated at the axis. For example, Bohr was not interested in the technical details but he wanted to understand nature (theoretical science); on the other hand, Edison dealt only with engineering and technical problems (practical science). As opposed to both of them, Pasteur set out purely from practical approaches but problem solving required some basic research and knowledge with special regard to microbiology. This very interesting quarter on the figure represents problem solving sciences where majority of the modern projects (e.g. genetic mapping and informatics) will come. These projects can only been duly supported within properly efficient innovation systems. Furthermore the speaker showed the number and expenses of the changes as a function of product life cycle during the whole product development period beginning from research up to putting new goods in the market.

3.6. A JOURNEY TO EXCELLENCE IN TWO ORGANIZATIONS

E. David Spong, ASQ Board Chair and President (Ret.) Boeing Aerospace Support, USA

The speaker himself conducted 2 very successful quality journeys: 1) Boeing Airlift & Tanker Programs (1991-2000) with National Baldrige Award reached in 1998; 2) Boeing Aerospace Support (2000-2004) that became Baldrige winner in 2003. The Law of Change says: “If you always do what you have always done you will get what you have always gotten!” The Corollary says: “If you want a different outcome, you must change either the
process, the product, or both.” At first the relationships with internal and external customers have to be reinvented with the assistance of a team committed to program excellence. Also a Customer Satisfaction Model should be set where satisfaction itself consists of two components: performance excellence (quality + cost + schedule) and relationship excellence. Process management should cover everything we do by managing and improving through a single, disciplined approach as well as by empowering associates. All employees must believe in quality! But the most important thing is that leadership shall be committed to quality as Deming said: “Projects are most successful when top management takes ownership.” At new organizations focus should be put on both running and growing the business. Development supported by the Baldrige criteria begins with leadership and – through strategic planning, customer focus, measurement & analysis, knowledge and process management and workforce focus – will culminate in improved business results. Properly motivated employees are key contributors to the excellent business results!

3.7. INNOVATION OF QUALITY – QUALITY OF INNOVATION; THE WAY HOW KNORR DOES IT

István Lepsényi, Director General, Knorr Bremse Hungary Ltd., Hungary

Knorr-Bremse is the world’s leading manufacturer of braking systems for rail and commercial vehicles having 100 years of experience with braking technology. They produce mainly air treatment units and valves for air brake systems. Knorr-Bremse is engaged in research & development activities: a Test Center in Kecskemét supports product development with technical validation tests of new pneumatic and electro-pneumatic concepts with a series of tests: function, endurance, environmental, system and vehicle tests. Quality – as a core value – is the order of the day for any manufacturer of safety-relevant systems: product safety is a critical success factor while individual responsibility and ownership are also essential. As a customer driven company, Knorr-Bremse is committed to continuously advance the quality of their products and services. They accept at the same time, that the responsibility and ownership for quality and product safety rests collectively with each and every one of the employees. The Integrated Product Safety Management System applied ensures the lowest risk on society in the traffic. The Knorr-Excellence (KE) Model introduced in 2007 has envisaged the vision to switch from “very good” to “excellent” in every field in order to reach the strategic purposes. As a part of this model, CVS (Commercial Vehicle Systems) will achieve globally zero defect and outstanding business results through global cooperation and synergy. Knorr-Bremse answers for our days’ world of mobility with the following sentence: Every day, more than 1 billion people put their trust in systems from Knorr-Bremse – in light rail vehicles, metros, high speed trains; in buses, coaches and commercial vehicles.

3.8. THE GOLDEN TRIANGLE OF MANAGEMENT: COMPETITIVENESS, PROFITABILITY AND SUSTAINABILITY – HOW CAN INTERNATIONAL STANDARDS HELP?

Alan Bryden, Immediate Past Secretary General of International Organization for Standardization, France

The general economic and societal context in which organizations operate has drastically evolved in the past decade. The trend is for even greater challenges ahead. ‘Globalization’ and ‘sustainable development’ have become the key words to describe this context. Designing an efficient management system and practice in this global context involves integrating many aspects: knowledge and economic intelligence, innovation, quality, environment, safety and security, occupational health and safety, and, more generally, social responsibility. Overall and lasting success depends on the ability to reconcile competitiveness, profitability and sustainability. The golden triangle of management: reconciling competitiveness, profitability and sustainability. Consensus should always based on
international standards: a treasure chest of proven and globally accepted solutions, because standards are tools for knowledge and innovation and for accessing world markets. Furthermore, they are tools for environmental impacts and energy efficiency, tools for business continuity and risk management as well as tools for social impacts and responsibility. Conclusion: international standards are tools to facilitate market responsiveness, sustainable efficiency and global competitiveness.

3.9. BREAKTHROUGH MANAGEMENT IN INDIA

Shoji Shiba, Professor Emeritus of the Tsukuba University, Japan

Management of global quality is not an easy thing: within the organizations all processes have to be under control while excellent organizations themselves have to be embedded in a harmonious society. Visionary leadership is the key for navigating global quality in the new era (characterized mainly by internal contradictions and environment constraints) enforcing fundamental changes: outside different perspectives have to be fused in order to unlock values as well as to induce new physical infrastructure and mind set changes. On the other side, practices should be reflected inside to shift views and unlocking new values. Global quality itself is originating from perceptions and aftermath it pulls further development of the navigating system. Some arrogance is substantially needed to follow even strengthen this process to reach higher levels of global quality. Consumers' latent needs plus contributions to innovations resemble to a pyramid where non-users lay in the bottom: simple users and dominant majority of users represent the following levels while at the top of the pyramid ('High End') competitive advantages and tangible results (profit) are sought. At the bottom of the pyramid disruptive innovations are needed: the invisible desires and latent needs of masses of people have to be recognized and understood – it is the essence of leadership! For example, the story of CHOTUKOOL (a refrigerator box working without electricity) was a prominent, quite disruptive innovation in India within the Visionary Leaders for Manufacturing (VLFM) Program orchestrated by Shoji Shiba. This initiative addressed the basic needs of the poorest, simple customers with easy and affordable solutions making their family life more happy allowing them to produce and store larger quantities of fruits and vegetables ensuring higher market incomes for them. So disruptive innovations open up the untapped market of the non-users, while at the top of the pyramid typical sustaining innovations are needed. In other words: in order to build new businesses at the bottom of the pyramid, mostly fundamental breakthrough innovations are able to reach out to people (community focus) creating new capabilities for them for additional earning. In this case wide coverage through partnership and community networking are essential.

4. CONCLUSIONS AND RECOMMENDATIONS

The most important statements would be echoed by contributing in all probability to solving the current economic and social problems of the world. It can be pointed out that in the future activities of the participating and of all other quality organizations the sustainability and the corporate social responsibility should play an important role and also quality should be developed from these aspects.

It became obvious that quality has to be interpreted more and more widely because quality of products and services influences substantially the operation of all organizations of society, economy and the cultural sphere but also the everyday life of people. This effect is reciprocal considering that the customers'/buyers' awareness on the other hand will be only stronger and stronger due to the acquisition of knowledge from internet becoming slowly general, changing sharply the vision of quality. This is the case because the more and more conscious customer/buyer/consumer will choose or prefer products and services with the most favourable price/quality proportions in the more and more globalizing world.
It was expressed in several presentations that quality is not principally a type of costs but an very important factor
- of economy, effectiveness and saving approach as well as
- of competitiveness of the enterprises, organizations, countries and regions.
This means that only products and services of top quality meeting customers'/utilizes’ demands at favorable prices could be marketed in the future ensuring their producers a growing market share. Evolution of the first factor is determined primarily by the exact faultless work while the second factor by innovation, visionary strategies, quality-oriented management and owners as well as the character of legal and economic regulations. All those crucially specify positions of countries and regions in the international competition influencing in this way income, living standard and quality-of-life of their populations to some extent.

It also should be underlined that presentations dealing with the quality issues of healthcare and the tightly connected pharmaceutical industry filled up not only a separate symposium but were included in the program as a one-day workshop; what is more, some presentations with similar subject were delivered in other sessions as well. This may be in connection with the health problems of the aging population, the incredible rapid development of medical sciences and technical conditions and the quickly growing related costs as well as with public health quality getting into the focus of attention of people.

Beyond the messages of general character also several conclusions can be drawn based upon the realized Congress program.

First Conclusion: Majority of the high-level presentations gave a real picture on the present situation of quality and quality management on world level and also in a given sector or special field. Operative and strategic tasks of the near or distant future were many times drawn up in a well-founded manner or they could be well deducted.
Second Conclusion: From among the emerging countries India and China are making tremendous efforts as regards quality development. In India Shoji Shiba’s training contribution concerns wide leading professional groups that enjoy the government support. In China the government has treated quality as a central issue for a longer period now supporting beyond the strong government offices also the activities of the civil quality organizations.
Third Conclusion: A general recognition is crystallized – quality in our days has not really been one of the most important key elements of the competitiveness in the economy any more but concerns the whole society. This statement is underlined among others by the fact that major part of the presentations related to health, education and training, public administration, services, tourism, and – prominently – the sustainable development and corporate social responsibility. It should not be disregarded, however, that the developed quality techniques are applied mostly in the industry and from there they are transported through to the above-mentioned areas step-by-step that should be practically facilitated.
Fourth Conclusion: It seems to be decided the old-standing permanent question – whether the management of quality or quality of the management is first. As the organizations have really always only one management system running favourably as an integrated system, its quality determines the operation, performance and position of the organization in the more and more globalizing international competition. Several presentations expressed and verified that according to the most favourable situation quality management takes an outstanding position within the organizational management system. One of the conclusions is that it is necessary to advance further from quality management towards the quality of management, i.e. quality management principles should be more and more intensively included into the comprehensive management system.
Fifth Conclusion: Education level, abilities, competences and commitment of the human resources are the most important differentiating factors between the performance and competitiveness of the companies and organizations. In addition to emphasizing importance of education and training, empowerment and motivation of the counterparts induce synergic effect that could not be neglected.

At present following recommendations can be suggested on the basis of the messages and conclusions of the Congress:
  - Standpoint of the European Commission and Member States’ governments should be revised relating to quality including the confirmation of the role played by quality among competitiveness factors in the development strategies, including the new approach towards recognition of business excellence.
  - In addition to the general quality and methodology items also the branches specific quality questions should be properly addressed on the EOQ Congresses. For this purpose activities of special committees and sections have to be strengthened as well as the cooperation with the competent professional organizations both at international and national level.
  - In Budapest it succeeded in making inventory on the results of WAQ (World Alliance for Quality) achieved in the past three years as well as on its role played now in the world; however it should be further developed if the WAQ wants to complete its mission in the next years.
  - Scientific development of the quality-related special fields appeared even more unambiguously in the 55th EOQ Congress as earlier. It can be stated that quality science is a synthesizing discipline where primarily technical, economic and management sciences are fundamental from among the main disciplines but also the remaining ones are represented at certain level.
  - Relations between quality and services as well as the quality issues of tourism were given large space in the 55th EOQ Congress. Majority of the participants appreciated very positively these presentations. Therefore they should be exploited in the future activities of the EOQ Hungarian National Committee.

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