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The psychologist Abraham Maslow described a so-called “hierarchy of needs” pyramid. The lower part of the pyramid includes basic needs such as safety, security and shelter. The top sections describe higher-order needs related to responsibility, achievement, and respect by and for others.

The theory is that you must reasonably satisfy lower-level needs before being in a position to meet higher-level growth needs. Only once all of these have been satisfied is it possible to arrive at a state Maslow referred to as “self-actualization”. In 1998, WHO refined its definition of “health” as not just an absence of disease or infirmity, but as a “resource for everyday life, not the objective of living. Health is a positive concept emphasizing social and personal resources, as well as physical capacities”. Live longer. Live better. Health is not simply a matter of meeting basic needs.

It can be said that ISO has excelled at providing solutions to meet a great many basic global needs over the years, by delivering an array of International Standards that address some of the world’s most basic safety, health, performance and security needs.

But does ISO have a role to play in helping to satisfy these soft, higher-level expectations, pushing the envelope to include higher aspirations? The answer is “Yes”. This issue of ISO Focus+ reveals how a number of important (and yet not-so-obvious) projects and ideas have a part to play in helping to satisfy these needs emanating from issues related to self-esteem, independence and fulfillment.

Aromatherapy, for example, is used to enhance psychological and physical wellbeing. It provides a potentially effective treatment using natural oils extracted from flowers, bark, stems, leaves, roots or other parts of a plant.

The rising interest in aromatherapy and the use of essential oils translates into increased global attention to the quality, safety and confidentiality of these products. ISO standards can help provide the confidence needed so that these aspects are taken into consideration, and the potential for their beneficial effects can be achieved, without unnecessary worry.

ISO has excelled at providing solutions to meet basic global needs.

Without a doubt, cosmetics contribute positively to people’s perception of themselves, directly affecting issues of self-esteem. ISO standards from technical committee ISO/TC 217, Cosmetics, help to ensure that the cosmetics consumers choose are both safe to use and deliver on their promises.

Assistive devices can provide a disabled person needed independence that all individuals desire, and have a right to.

ISO standards help ensure that these products are safe, effective and durable, helping to reduce disabled individuals’ reliance on others to perform everyday activities.

The ability to relax, to reflect and to achieve needed rest! – although some may help you fall asleep and get needed rest!

But reading this ISO Focus+ issue will show you how certain standards and projects play their part in helping us realize higher-level needs on our own paths to self-actualization .

Kevin McKinley
ISO Deputy Secretary-General
The Canadian Government has proposed a programme for Kids’ ISO 14000 Programme. A training course for Eco-Kids’ Instructors will be held on 1-3 August 2012 at UNESCO headquarters in Paris, France, within the framework of the United Nations Decade of Education for Sustainable Development (UNDESD 2005-2014). This 10th International Seminar and Training Course for Eco-Kids’ Instructors of Environmental Education for Sustainable Development is organized by ArTech and UNESCO.

The programme is based on the celebrated Kids’ ISO 14000 programme started by ArTech (founded by the late Prof. Takaya Kawabe and Ms. Miyuki Koyama). Kids’ ISO 14000’s sphere of influence has now expanded internationally through UN organizations. The programme will start with a one-day seminar and then embark on a two-day training course and workshops concentrating on stimulating the environmental awareness of children, teaching simplified methodology of environmental management and giving children the concept and experience of working together and networking locally and internationally to solve current local and global environmental issues.

This event will be supported by ISO and the United Nations Environment Programme, in addition to UN-DESD. Several Japanese government ministries will participate along with some of Japan’s most prominent private sector corporations providing sponsorship.

Danish sustainable Presidency

Denmark wished to conduct the EU Presidency as sustainably as possible. This took place by reducing the direct environmental impact of meeting activities by simultaneously displaying social and economic responsibility.

At the end of its six-month term in June 2012, the Danish Foreign Ministry logistics team supported the organization of 100 meetings serving 15,000 total participants. The implementation of ISO 20121 for sustainable events management played a key role in these events. The logistics team delivered an EU Presidency at a fraction of the total cost of past Presidencies. The savings were an important result of the sustainable event management system.

One of the important objectives of the sustainability initiative was to demonstrate that a large-scale project such as the EU Presidency could be conducted sustainably without any additional costs. It is hoped that the experience and initiatives of the Ministry of Foreign Affairs, together with ISO 20121, will serve as an inspiration for others.

Workshop on e-Health

ISO took part in a workshop organized by the International Telecommunication Union (ITU) and the World Health Organization (WHO) on the use and implementation of e-Health standards in low-, middle- and high-income countries, in April 2012. Worldwide, health services and systems must improve the quality, safety and cost-effectiveness of care. E-Health is already making a valuable contribution. As e-Health continues to increase its influence, it must integrate legacy systems with medical devices and information systems. E-Health will also need to provide a foundation for stakeholders to innovate, as it will only reach its potential if based on global, common and interoperable standards.

WHO has produced a survey “e-Health Standards and Interoperability” of all its member bodies. In low- and middle-income countries, e-Health is most often carried out using mobile phones (m-Health). However, very important security issues have arisen in connection with m-Health (problems with patient security).

Christopher Chute, Chair of ISO technical committee ISO/TC 215, Health informatics, pointed out the importance of sharing experience gained from partner standards organizations, and the need to identify the barriers to the broad adoption of successful initiatives. It is essential to determine why standards are not used and applied in certain settings.

International Standards developed by ISO/TC 215 contribute to the efficiency and dissemination of medical technologies and are a key element for getting access to global markets. More importantly, however, the spirit of the commitments to serve all stakeholders worldwide – industry, the business community, governments and other international organizations, users, including consumers – leads to synergies and innovation in its work.

Paul Bulcke has been Chief Executive Officer of Nestlé S.A., since April 2008. After a brief period as a financial analyst with Scott Graphics International in Belgium, Paul Bulcke joined the Nestlé Group in Vevey, Switzerland as a marketing trainee in 1979. Over the next 16 years, he held various positions in marketing and sales, was appointed Division Head in Peru, Ecuador and Chile, before moving to Portugal as Market Head, a position he subsequently held in the Czech and Slovak Republics and finally in Germany.

In July 2004, Paul Bulcke joined the Nestlé Executive Board as Executive Vice President with responsibility for Zone Americas. In April 2008, after a career of almost 30 years with the Nestlé group, Paul Bulcke was appointed Chief Executive Officer.

Mr. Bulcke graduated from the University of Leuven (Belgium) with a degree in commercial engineering, followed by a postgraduate degree from the Vlerick Management School. He also attended the programme for Executive Development at the International Institute for Management Development (IMD) in Lausanne, Switzerland.
ISO Focus+: Nestlé produces a wide range of products from ready meals to chocolate, and from mineral water to coffee. How does Nestlé manage to maintain a worldwide consumer base when traditions and tastes vary from one country to the next? What is the key ingredient to its success? How have International Standards contributed?

Paul Bulcke: How can Nestlé be so active worldwide and connect with consumers in a meaningful way? Actually, the answer is that we are very decentralized, because we believe consumers and food are always “local.” Very much from the beginning, over 145 years ago, we commercialized our products outside of our home market Switzerland. So, right from the start, we were decentralized and present in many markets with local structures. We are a global company, but one that is very connected on a local level to our consumers.

Our great variety of products are manufactured in 461 factories in 83 countries around the world. Our factories are located there where consumption is. Local raw materials, local tastes, the dietary needs of the local population demand it.

Handing over real decision-making power to the markets demands alignment behind a common vision. We have a very strong, explicit corporate objective and strategic roadmap which is very simple, straightforward, and shared with the 330,000 employees that make up Nestlé. Our strategic ambition is to be the pre-eminent nutrition, health and wellness company.

Then, the long term has always dictated our strategic direction. Yes, we do also focus on delivering short term, but never sacrifice the long term.

And finally, a very important aspect is our corporate culture, our people living up to the same values such as thinking long term, openness to diversity, passion for quality in products and relations.

This is how we run our business and this is the basis of our success: facilitating decentralization while ensuring everybody is singing from the same song sheet. We maintain our internal alignment behind a global corporate vision.

On the subject of International Standards, a global company like ours has a common strategic objective. Just as we have to have common values and a common culture, we need common standards as well.

International Standards provide a framework for the world. Tastes may differ, but health requirements and minimum standards are the same the world over. International Standards, therefore, help to shape our company so that we can be a global player through the outside world.

Need to meet the demands coming from the outside world.

International Standards help me to apply, throughout the company, the same dimension of judgment and the same terms of reference. In turn, this helps me scale up efforts to comply with these standards. If I have a standard that is the same the world over, I can muster the resources to achieve or, whenever relevant, surpass the requirements of these standards.

As for ISO’s 1,000 food-related standards, we are a food and beverage company so those are the minimum with which we comply.

But we comply as an operation, as a part of society, with many other standards, too. We also provide services and operate factories where we apply standards on health and safety. We are committed to environmentally sustainable business practices, so we also comply with environmental standards. And these are just some examples.

There are many standards beyond those concerned with food that are important for us. Because ISO’s impact goes beyond product criteria to best practices in factories, and even to our environmental performance, these standards are part of an overarching reference framework.

ISO Focus+: What is the strategic value of International Standards to a company like Nestlé, with an international workforce of 330,000 people? ISO has developed 1,000 food-related standards. How many does Nestlé implement and what are the benefits?

Paul Bulcke: One of our basic strengths is that we have deep-rooted principles which put value on compliance. I could hardly steer a company like ours if I could not trust our people to comply with our own values, culture and strategic direction.

Beyond our internal functioning, they also need to meet the demands coming from the outside world.

ISO Focus+: Can you describe the use made by Nestlé of ISO’s management systems standards ISO 9001 for quality and ISO 14001 for environmental management and how this has evolved over the years?

ISO has a specific role to play as a truly global, multi-stakeholder, expert-driven, consensus-based standardization organization: it enables us to work efficiently. If that were not the case, if the interpretation of certain dimensions were really local and not relevant and not the same, we would be totally inefficient as a society and as a company in that society.

Paul Bulcke: We pride ourselves on being part of an industry that works with ISO to shape standards, putting at your disposal our knowledge, our expertise. ISO has supported our industry through the publication of internationally consistent measurement and management tools, processes and practices. The extent of your involvement has led to the achievement of improved environmental performance. In other words, ISO helps us work towards our goal, and we encourage the development and use of relevant International Standards.

ISO’s global authority is useful for us. For example, building on the Nestlé Environmental Management System, we have 413 out of our 461 factories which are already certified to ISO 14001. We have distribution centres, R&D centres, all undergoing certification. That is the value ISO gives us: by being a global standard, globally accepted, when we comply with ISO International Standards, people know straight away what they are getting and the level at which we are working.

ISO Focus+: What concrete benefits has ISO 22000 for food safety management brought Nestlé?

Paul Bulcke: Food safety is essential. Since the adoption of ISO 22000:2005, Food safety management systems – Requirements for any organization in the food chain, we were able to measure our own very stringent standards against those stipulated by ISO.

We are again using as our terms of reference a globally accepted standard. This is the best way to get recognition for our own systems for assessing the safety of food. Issues of food safety are not purely intramural. They lead us upstream to our suppliers and downstream to retailers.
Guest Interview

Having a common standard that is globally accepted like ISO’s helps us to neutralize situations where companies all have their own proprietary standards.

**ISO Focus+:** Nestlé recently opened Nestlé Health Science and the Nestlé Institute of Health Sciences, two separate organizations intended to develop the innovative area of personalized health science and nutrition to prevent and treat health conditions such as diabetes, obesity, cardiovascular disease and Alzheimer’s disease. Could you please expand on this? Are there subjects for which standards could facilitate your work and, if so, in which areas?

**Paul Bulcke:** Nestlé Health Science and Nestlé Institute of Health Sciences were launched at the beginning of last year. This brings a new dimension to the nutrition, health and wellness strategy of the Nestlé Group by pioneering the development and application of evolving science to create a new role for personalized nutrition in disease prevention and management.

ISO helps us build bridges.

Nestlé Health Science is going to integrate science and knowledge coming from different disciplines, some of which are quite new to us. We are learning a lot here.

In many of these areas, there are already some standards.

Nutrition is increasingly more sophisticated in how it is defined and how it is perceived. Personalization is based on a deeper understanding of people’s genetic make-up, as well as how genes affect diet and lifestyle factors. This will demand additional standards as we are trying to embrace several disciplines – like diagnostics, nutritional management and therapy – and add them into the mix.

**ISO Focus+:** What is the business case for investing in socially responsible actions that may not be immediately beneficial to the bottom line in a competitive market? How could ISO 26000 on social responsibility contribute to the company’s already well-established CSR programme?

**Paul Bulcke:** Like I said, Nestlé’s orientation is long term. We would not do anything for a short-term advantage which might jeopardize our long-term interests. This reflects how we see our role: evolving with society, safeguarding our relationship with the communities in which we work, because we intend to continue to be a part of those communities. This is why we have linked the concept of corporate social responsibility with our basic activities. Our success must be linked, not only to the creation of value for our shareholder, but also to the creation of value for society.

This is what we call “creating shared value.” It is factored into every step in our value chain, interactions with suppliers, customers and consumers, the business impact on the environment of our products. We also work to create value for society at large. This has many expressions: healthy, sustainable economic activity creates jobs. It also creates opportunities for training and professional growth to give people a more meaningful life. Linking with suppliers in a sustainable way helps us to implement minimum standards upstream as well.

**International Standards provide a framework for the world.**

Nestlé has focused on three priority areas where we add value to society.

Nutrition is first, because that is who we are and where our investment in research and development goes.

Our second focus is on water. Water is one of the most important issues in the world today, and it is particularly important for Nestlé. We are using agricultural raw materials and agriculture uses up 70% of the world’s freshwater supply. We use water in our processes, in our factories. Consumers need water to prepare our products. It is a conditioning factor for the future of the planet. We are, therefore, very supportive of the ongoing work towards the definition of the future ISO 14046 standard on life cycle assessment – Water footprint – Requirements and guidelines.

Our third focus is on rural development. Nestlé’s 461 factories are usually located in rural areas because that is where the raw materials of agriculture are found. We are directly linked to 600,000 farmers, and indirectly linked to millions. Connecting with farmers helps them to be more efficient, have better incomes and helps us to ensure the high quality of our ingredients.

Getting back to ISO, using internationally recognized standards such as ISO 26000 gives us the added authority of a globally recognized body, provided it can be certified. We have been in contact with ISO on this topic and will be happy to make further contributions.

**ISO Focus+:** What would you like to see coming out of ISO?

**Paul Bulcke:** As an international company, we are facing many different evaluation practices, be it of company or of product performance. To eliminate the different yardsticks and the resulting unnecessary administrative burden, a worldwide authority facilitating alignment among rating agencies and evaluation methodologies, would reduce the time lost and volatility involved in judging different standards. Standardization of standards is not a bad thing! Alignment between ISO standards, for instance between ISO 9001 and ISO 14001, possibly merging them into an integrated management system – along with occupational health and safety – would be a step forward.

Like Pascal Lamy, Director-General of the World Trade Organization (WTO), Nestlé actively defends the free movement of goods and the suppression of trade barriers, particularly when standards and regulations are politically motivated and counterproductive for delivering the best value at the lowest cost to consumers.

The technical authority of ISO is important because it is neutral and objective in a society that is subject to so many influences. ISO helps us build bridges. Pascal Lamy is very vocal in his support for ISO and for opening up the world to increased acceptance of global standards.

**ISO Focus+:** May I ask an additional question? What’s your favourite Nestlé product?

**Paul Bulcke:** That is like asking a parent which child is their favourite! I normally do not answer, but sitting in front of me, on my desk, is my Nescafé so that is definitely one of them. But there are so many other Nestlé products that I love. ■

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*The Flowergate Factory in Nigeria is entirely dedicated to the production of MAGGI.*

*Van Roach, client farmer of International Development Enterprises (IDE), winner of the Nestlé Prize in Creating Shared Value was awarded on 25 May 2010 to IDE Cambodia for a project aimed at increasing the standard of living of the Cambodian rural population by improving agricultural productivity and income.*

*Photo: Nestlé*
Your (happy) inner self

How ISO standards contribute to our health and wellness

by Elizabeth Gasiorowski-Denis

Today’s consumers seek to look better, feel better, gain more energy, improve their health, and strengthen their performance in daily activities and sports. This implies that they need to feel better as they age, and that illness will be prevented as much as possible.

And here’s where the health and wellness industry comes into the equation, as it caters to the need and desire of people to stay in shape and live up to the old adage that an ounce of prevention is worth a pound of cure.

As explained by Paul Zane Pilzer, economist and author of, The New Wellness Revolution: How to Make a Fortune in the Next Trillion Dollar Industry, the wellness industry includes products and services provided proactively to already healthy people to make them feel even healthier and look even better, to slow the effects of aging and to prevent diseases from developing in the first place.

With the rapid progression in public interest in wellness, the growth potential of the health and wellness industry is indeed very high. One only needs to look at the recent committees created, or standards work undertaken by ISO, to confirm this. The July/August 2012 issue of ISO Focus+ explores key issues arising from the health and wellness trend. A portfolio of articles highlight the progress and usefulness of ISO standards aimed at ensuring quality and safety in this growth industry.

At a meeting convened by the Government of Bhutan on, “Happiness and Well-being: Defining a New Economic Paradigm”, UN Secretary-General Ban Ki-moon stressed that sustainable development is intricately linked to happiness and well-being.

While the content of the majority of ISO standards is technical, their implementation goes beyond solving technical problems to delivering positive results in all three pillars of sustainable development – economic, environmental and social. And since ISO standards contribute to sustainable development, they are also indirectly responsible for creating happiness and well-being.

In an exclusive interview in this ISO Focus+ issue, Paul Bulcke, Chief Executive Officer of Nestlé, says, “International Standards provide a framework for the world.” And a framework they are, not only for Nestlé, but for all companies, countries and people around the world with whom we share this planet.

Elizabeth Gasiorowski-Denis is Editor in Chief, ISO Focus+. 
Not just skin deep

Changing the face of cosmetics

by John L. James

Cosmetics have long been an important part of daily life. Imagine a world without soap, toothpaste, hair products, deodorants or decorative cosmetics. They are essential for hygiene and self-esteem, and support personal image. The availability of cosmetics has even been shown to improve the behaviour of prison inmates.

We regularly use about four products a day. Globally the USD 136 billion a year cosmetics market is split roughly into 40% Europe, 30% Asia and 30% USA, with Africa becoming increasingly important.

While there are a significant number of multinational cosmetic companies, there are also thousands of smaller businesses manufacturing and supplying many individual products for consumers. The market is highly competitive and product formulation and manufacture are usually closely guarded secrets. Cosmetics manufacturers justifiably pride themselves on high-quality products that meet the needs of their customers.

Best practice

Manufacturers are in favour of necessary regulation, so long as rules are sensible and do not restrict innovation or market opportunities. This is why the “best practice” route, through the adoption and implementation of ISO standards, is always the preferred way.

Developing globally acceptable standards might have proved difficult. This has not been the case, however, due to sound reasoning and careful, clear justification.

Cosmetics-related standards aim to:

- Harmonize technical rules
- Improve health and safety
- Boost environmental protection
- Enhance product quality
- Reduce costs
- Create a level playing field, making the global market accessible to all types of business

There has been great enthusiasm for, and effort by, the cosmetics industry to address these issues, especially by ISO technical committee ISO/TC 217, Cosmetics.

ISO/TC 217 has achieved much, particularly for consumers worldwide and the industry’s smaller, less well-resourced companies. International Standards in areas such as sun protection have improved the health and well-being of millions, and even billions, of people.

Customer focused

Until ISO/TC 217, there was no worldwide mechanism to bring together the many expectations for product safety and the effects on individual (and community) health of using personal care products.

One of the outstanding features of ISO/TC 217 is that its experts are so attuned to stakeholders. While most of its experts are from cosmetic production companies or trade associations, ISO/TC 217 is unquestionably a consumer-focused group.

Microbiological and chemical testing ensures that possible contaminants are identified and quantified to confirm that consumers are not put at risk of harm, and that the product will remain viable for the stated lifespan under the environmental conditions where the products are marketed.

Package labelling assists the consumer and is essential for traceability in cases of alleged problems.

Consumers will be able to buy products confident that the protection factors stated on a product are universal.

Terminology and definitions need to be clear and unambiguous. For example, work is underway to define terms such as “fresh” and “organic” when applied to cosmetics.

Over time, regulatory authorities and consumer interests have become more involved in the work of ISO/TC 217, particularly where its standards have been recognized as having the potential to support legislation.

One such example is that of ISO 22716:2007, Cosmetics — Good Manufacturing Practices (GMP) — Guidelines on Good Manufacturing Practices. This has been accepted as being appropriate to underpin the requirements for GMP under the European Cosmetic Regulations.

GMPs provide guidelines for the production, control, storage and shipment of cosmetic products intended to cover the quality aspects of cosmetics. Such quality aspects have the inherent expectation that the end user will have access to reliable and safe products that support their healthy lifestyle and well-being.

Dynamic and innovative, the cosmetic industry constantly seeks to improve and excel. ISO/TC 217 continually receives reviews of stakeholders’ needs and aspirations from government agencies, consumer representatives, experts and liaison bodies.

Such feedback indicated the need for an ISO standard for sun protection test methods. For many years, the determination of sun protection values has been open to manufacturer interpretation. ISO/TC 217 working group WG 7 project groups researched the literature and undertook primary research and ring tests to ensure scientifically supported recommendations for SPF (sun protection factor) and UVA (ultraviolet A) test methods in the sun protection standards.

Consumers will be able to buy such products confident that the protection factors stated on a product are the same across a wide range of suppliers who claim to test to the relevant standards.

About the author

John L. James is Chair of ISO technical committee ISO/TC 217, Cosmetics, with nearly 35 years of experience in standardization at both the national and international levels. A Chartered Scientist with several professional qualifications in medical laboratory science and in risk management, he holds an MSc and a Diploma in Management Studies. Mr. James has been a consultant in the cosmetics industry for the past 16 years, following a career as a healthcare professional, including his role as advisor to the United Kingdom Department of Health.
**Special Report**

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used in perfumery. Around 300 essential oils

phytotherapy and aromatherapy. in

health-related fields such as pharmaceuticals,

the food and perfumery industries and, in

water or steam, dry distillation or mechanical

volatile liquids extracted from vegetable

oil of the plant from which it was extracted.

by Arantxa Bordas and Esther Bermejo

and cosmetics, and were once considered more valuable than gold.

Alternative health therapies

could soon increase the

use of essential oils.

Essential oils are subtle, aromatic and

volatile liquids extracted from vegetable

raw materials by distillation processes using

water or steam, dry distillation or mechanical

processes. Essential oils are widely used in

the food and perfumery industries and, in

smaller amounts, in cosmetics and some

health-related fields such as pharmaceuticals,

phytotherapy and aromatherapy.

The food industry consumes about 60% of

essential oils production, while the rest is

used in perfumery. Around 300 essential oils

are commonly used in making fragrances

and flavours, including the essential oils of

lemon, peppermint and rosemary.

Boosting the benefits

By ensuring product quality and safety, essential oils standardization has boosted the

trade of the principal essential oils used in

the food, perfumery and cosmetic

industries. Standards are becoming increasingly important too, due mainly to

the introduction of new technologies and

market globalization.

In addition, and as a result of some of these factors, analytical methodologies are being

continually improved to obtain more precise and accurate results. This solves authentic-

ity problems and facilitates the detection of adulterated essential oils. Therefore, with the

industry’s growing unification of analytical methods, which aims to expand the trade in

essential oils, the analytical methods of ISO

technical committee ISO/TC 54, Essential oils, are gaining global significance.

Regarding cooperation with other organi-

zations, ISO/TC 54 works closely with the

European Directorate for the Quality of

Medicines & HealthCare (EDQM), which

is responsible for developing and revising the

European Pharmacopoeia monographs.

ISO/TC 54 participated in the latest revi-

sions and new European Pharmacopoeia

monographs. The technical committee has

taken the cosmetics regulations, European

Pharmacopoeia and aromatherapy as social,

safety, health, environmental or cultural

issues related to the sectors, products, materi-

als, disciplines or practices in its work.

Key liaison body, the International Fra-

grance Association (IFRA), participates in the

development of ISO/TC 54 standards and

methods and, likewise, IFRA standards are

taken into account in standards elaboration.

The committee is open to collaborate with other organizations such as the United States Pharmacopeia Convention (USP).

This makes sense, since the USP aims to improve people’s health through public standards that help to ensure the quality, safety and benefit of medicines and foods.

The USP is responsible for revising the

Food Chemicals Codex monographs of

essential oils and analytical methods. These are

valuable reference standards for the food

industry and the USP and National Formulary monographs.

Changing market

Essential oils production has moved to
developing countries, while quality control and consumption tend to take place in
developed countries.

There have also been trends towards market

globalization, the lowering of some trade

barriers, the growth of big companies and
greater specialization by small companies.

Against this background, ISO/TC 54 aims to:

• Facilitate the global trade in essential oils

• Enhance the quality of essential oils on the market

• Protect the health of essential oils consumers

• Enhance the safety of essential oils products and processes

• Promote the use of advanced industrial technology

Standardization is remarkable techni-
cally because it is an important reference in the investigation of new varieties, and, commercially, standards are an information source that provides the industry with the properties of products’ natural components.

Current and future developments

Due to Europe-wide interest in essential oils, the European Committee for Standardi-
zation (CEN) chose years ago to adopt two


ISO/TC 54 aims to provide the best possible service to its members, to help

generate strong profits for the sector and to continue standardization work of interest and relevance to its members.

ISO standards expand the global trade in essential oils, and ensure their quality and safety.

Acting as a central point and focus, ISO/TC 54 unifies and manages essential oils knowledge and information, and is a reference source for all its members. Since the main essential oils companies collaborate with their national standardization bodies participating in ISO/TC 54, its standards and methods of analysis are widely used as homologated working references.

People’s growing interest in alterna-
tive health therapies, and collaboration between ISO/TC 54 and bodies such as the European Pharmacopoeia and USP, could soon increase the use of essential oils in aromatherapy, pharmacueticals and other areas of medicine.

About the authors

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ficer in the chemistry

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ish standardization body. She is Secre-
tary of ISO/TC 54, Essential oils.

The sweet smell of standards

For more than 65 years, ISO technical committee ISO/TC 54, Essential oils, has been active in developing International Standards. ISO standards help encourage innovation and expand the global trade in essential oils, and ensure their quality and safety.

Today, ISO/TC 54 comprises 18 participating country members, with another 29 as observers, and five liaison organizations. It represents most of the main producers, suppliers and consumers of the world’s essential oils industry.

ISO/TC 54’s international standardization of analytical methods and specifications involves:

• Developing specific monographs for quality standardization of every essential oil

• Standardizing analytical methods to control the quality of essential oils

• Setting requirements for transport, labelling and marking

• Deciding nomenclature and botanical names

The committee’s international membership ensures that developed standards represent and reflect wide-raging experiences, test methods and techniques. The committee has published 129 standards with another 14 being developed.

At plenary meetings held every two years, ISO/TC 54’s members set priorities and schedules in standards development, revise the work programme and solve difficult issues. The next meeting will be held in Sydney in September 2012.

What is known as an “essential oil” is the oil of the plant from which it was extracted. It is “essential” in the sense that it carries a distinctive scent, or essence, of the plant.

ISO Focus • July-August 2012

ISO Focus • July-August 2012
Wellness spas
Indulging in high quality service

by Supol Sripan and Tanin Sonthiraksa

A wellness spa provides a secluded, relaxing, revitalizing environment and a range of services to promote and balance people’s physical, mental, emotional, social and spiritual health. Wellness spa clients, or guests, expect “pleasure at leisure”.

According to ISO 18513:2003, Tourism services – Hotels and other types of tourism accommodation – Terminology, a “spa” is an acknowledged health resort with specific natural factors – natural remedies of the soil (such as a mineral spring), the sea, or the climate – sometimes complemented by appropriate health treatments.

With the increasing popularity of wellness spas and a plethora of standards, ISO is working to identify the essence of wellness spa services by introducing a reference standard.

Health, disease and wellness

Since 1947, the World Health Organization (WHO) has stated: “Health is a state of complete physical, mental and social well-being, and not merely the absence of disease or infirmity.” The WHO definition focuses on the key ideas of well-being and disease/infirmity. However, the perception of health generally has disease/infirmity at its core. Healthcare is currently disease-oriented: prevention, control and treatment. This emphasis on the absence of sickness is negative and unsuitable for a dynamic programme to improve wellness.

Instead, though not measurable, the idea that there are gradations of health is understandable and gaining support. A healthy individual is well-integrated in terms of physical structure and physiological, mental, emotional and spiritual functioning. The completely healthy person meets trouble with equanimity and has the time and inclination for sociability and recreation.

This positive perspective calls for not only the cure, alleviation or prevention of disease. Rather, it looks beyond to strive for the maximum possible physical, mental, emotional, social and spiritual efficiency for the individual, family and community. Progress in science and medicine has led to a better preservation of the body and less disease, yet mental, emotional, social and spiritual problems are often left untreated.

In contrast, high-level wellness can never be achieved in fragments, ignoring the unity of the whole. This special state of health comprises an overall sense of well-being and sees mankind as consisting of body, spirit and mind and all dependent on the environment.

This dynamic state is an ongoing process, not a static state reached and never considered again. Since there are degrees of wellness as there are degrees of sickness, wellness services should focus on identifying causes of wellness rather than causes of sickness.

Hospitals versus wellness spas

People seeking to ensure their own wellness can claim services for their physical well-being that are similar to medical services used by patients in a conventional hospital. Although some hospitals can house both patients and wellness clients, offering them similar services and facilities, plus their know-how, they are not preferred by wellness-seekers.

A hospital is a place to help patients suffering from illness. Healthcare professionals use a wide range of medical technologies to manage the causes of disease or treat the physical symptoms. The main purpose is to maximize biological safety, get rid of the symptoms and eradicate pathogens.

Some clinical interventions are painful. Patients are not allowed to do, or must avoid, many things to make sure that their disease will not return. Their privacy and psychological security are limited according to their illness condition. Although hospitals can often extend patients’ lives, they rarely add life to the years extended.

A wellness spa concentrates on improving the quality of life.

On the other hand, a wellness spa concentrates on improving the quality of life. Its approach is not to avoid all negative things or risk factors, but to focus on more positive things or pleasant factors. It provides a secluded, private, relaxing space that is ideal for quiet reflection. It is a place for everyone: healthy people, patients and people with disabilities.

At a wellness spa a practitioner of wellness philosophy/science, such as a master of tai chi, yoga or meditation, can help clients to learn. Cleansing programmes for body and mind include water treatments, manual treatments and detoxification. When clients feel clean, they tend to feel more positive. Appropriate skincare techniques include scrubs, masks, wraps and baths.

Massage and other treatments are used to help relax clients’ tense muscles, reduce their mental/emotional stress and enable them to see the world more positively. Some techniques from traditional medicine are used to revitalize clients and restore well-being.

Aiming at rejuvenation, many wellness programmes provide modern and advanced healthcare within a holistic framework.

Varying service standards

As our appreciation of health, wellness and longevity grows, the wellness spa is gaining popularity. However, with the increased diversity of wellness spas, there is a growing need to identify and encourage high-quality services, create transparency, increase clients’ confidence and promote the exchange of information.

Wellness spas are often globally traded services and compete in both international and national markets on the basis of quality and/or price.

So-called “low-cost spas” can adversely affect the wellness spa industry by cutting some of the essential services most clients expect. Repeatedly dissatisfied clients, in turn, reduce confidence and damage the industry.

Planned standard

ISO technical committee ISO/TC 228, Tourism and related services, working group WG 2, Health tourism services, is developing an International Standard which aims to define, establish, ensure quality in, and improve wellness spa services. This will enable these services to be monitored and provide guidelines for selecting relevant and effective measurement methods.

ISO/TC 228/WG 2 will ensure the new International Standard respects the principle of cultural identity and cultural differences. The standard will be a much-needed and highly useful reference document for the wellness spa industry. Importantly, it will also help clients to differentiate and choose wellness spa services worldwide.

About the authors

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Establishing a global benchmark
by David Graham

Based on 3000 years of experience, traditional Chinese medicine (TCM) is used in over 160 countries. Including a wide range of medicines, devices, massages and diets, TCM has a common basis with other traditional systems such as Japanese Kampo and Korean medicine. As TCM techniques and medicines are exported globally, International Standards are needed to protect consumers.

An essential component of many health systems around the world, traditional Chinese medicine reflects practices and products that have evolved over many years. They are usually based on experience rather than conventional scientific evidence. TCM adopts a holistic approach to health and well-being. Traditional medicine is widely regarded by people in many countries as integral to their culture. It is also considered an accessible and affordable means of healthcare, particularly in locations with limited access to “conventional” scientific medicine.

Its growing reputation and the movement of people between countries are causing traditional medicine systems to cross borders. While some countries have standards, processes and regulations in place for TCM practitioners and products, many others do not. This makes the need to maintain quality, safety, and efficacy of traditional practices and products even more important.

While many “modern” medicines were originally obtained by extracting single compounds from natural materials, in traditional medicine the therapeutic benefits of natural substances may depend on an intricate range of factors. This complexity must be respected to ensure the quality of such products. For example, the efficacy and safety of a herb can be influenced by its variety and horticulture, collection, processing and storage.

Additional challenges are presented as many traditional medicines are commercialized and provided in more modern pharmaceutical presentations such as tablets and capsules. International Standards can help ensure the same requirements are followed around the world. Moreover, the current lack of adequate quality control makes it more difficult to increase integration of traditional medicine with other healthcare systems in a country.

Responding to the increasing acceptance and global use of traditional medicine, an ISO technical committee ISO/TC 249, Traditional Chinese medicine (provisional title), is developing much needed International Standards to support public health, safety and trade.

Priorities
ISO/TC 249 investigated priority areas for the development of International Standards. These are:

- Quality and safety of products, including medicines and medical devices
- Informatics, including terminology and classification
- Education, training and practices of practitioners
- Methodology for obtaining evidence to support practices and products

To avoid duplication of effort and facilitate cooperation with relevant organizations, ISO/TC 249 took into account work being done elsewhere. For example, it excluded clinical practice guidelines because of the important effort carried out by the World Health Organization (WHO) in this area. It was finally decided that ISO/TC 249 will begin by concentrating on the first two priority areas (quality and safety of products, and informatics), and five working groups were established for this purpose.

Two billion acupuncture needles are used annually.

Strong interest
Generating strong interest and participation from the start, ISO/TC 249, Traditional Chinese medicine, comprises 23 participating member countries and nine observer countries. Participating countries include Australia, Austria, Canada, China, Finland, France, Germany, Ghana, India, Israel, Italy, Japan, Korea, Mongolia, Netherlands, Norway, Singapore, South Africa, Spain, Thailand, Tunisia, USA and Vietnam.

The committee has also established liaisons with WHO, the World Federation of Acupuncture-Moxibustion Societies and the World Federation of Chinese Medicine Societies. The technical committee secretariat is provided by the Standardization Association of China.

Road ahead
Establishing a technical committee in such a complex area has proved challenging. However, by taking a conservative approach to its scope, progress is being made. As the committee grows and gains experience, its scope may expand and diversify, in response to emerging needs. It may be that the committee will even accommodate additional forms of traditional medicine, depending on demand, need and available resources – as this opens a huge area of work.

International Standards will support public health, safety and trade.

It is estimated that more than two billion acupuncture needles are used annually. These may have different shapes and sizes depending on their purpose, but all must be sterile. The committee has therefore started work on the future standard ISO 17218, Sterile acupuncture needles for single use.

Another key project is that of ginseng, one of the most important herbs from the hundreds used in TCM. A dedicated standard, ISO 17217, Ginseng seeds and seedlings, Panax ginseng C.A. Meyer, will focus on the requirements for this herb.

Projects currently being considered include standards for moxibustion and electro-acupuncture devices. ISO/TC 249 is also working closely with ISO/TC 215, Health informatics, to establish a joint working group for relevant standards in informatics. This initiative also involves WHO, responsible for the International Classification of Traditional Medicine project.

About the author
Dr. David Graham is Chair of ISO technical committee ISO/TC 249, Traditional Chinese medicine. He also works on a number of health-related boards. Dr. Graham has held senior management roles in the Australian Public Service, mainly in the health sector. His achievements have included developing national therapeutic products legislation, which had the challenge of incorporating traditional and complementary health products into a regulatory system based on conventional medicinal products.
Oral health

Getting your teeth into dental standards

by Derek W. Jones

Dental standards play an important and vital role in society, enhancing oral health. They contribute to the quality and safety of products used in treatments by dental professionals, as well as hygiene products used by the public.

It is estimated that about 99% of all adults in developed countries suffer from some form of dental disease or malfunction at some time. Most people will therefore require dental care during their lives, making the ultimate consumer of dental standards, directly or indirectly, the general public.

There is no reason to fear the dentist’s office. Over the past five decades, ISO technical committee ISO/TC 106, Dentistry, has made a big difference to the quality of dental treatment received by billions of people worldwide. In today’s global environment, ISO’s wide ranging, far reaching achievements show once again how International Standards make sense.

In the beginning

In 1926, the US National Bureau of Standards developed the very first dental standard, which provided specifications for dental amalgam filling materials – a mixture of metals, including mercury, used to fill cavities caused by tooth decay.

Nine International Standards followed in the 1950s, developed by the International Dental Federation (FDI). ISO/TC 106 was established in 1962 to continue this work. Since then, the committee has collaborated with the FDI in the development of several clinical standards.

Much larger in scope and more complex, today’s dentistry has a greater scientific base and emphasis on conserving natural tissues. But in 2012, the need for international dental standards is as strong as ever.

Today

In recent years, ISO/TC 106 has aimed to develop “horizontal” standards wherever possible. By horizontal we mean standards that are applicable to all areas in a particular field, while vertical standards apply to one particular subject. For example, a standard that outlines requirements for a range of different types of cements or dental handpieces is regarded as horizontal, while a standard on the performance of a single type of dental cement such as zinc phosphate or of a dental (drill) handpiece is vertical.

The committee’s recent focus has also been on performance-based standards rather than prescriptive standards.

Open your mouth to ISO

Dental standards are developed in response to consumer pressure for higher-quality dental care. For example, standardized packaging and labelling information, helps dentists compare products enabling them to choose the best ones for their patients.

Artificial materials are used to replace dental tissues more than in any other part of the human body. The varying pH in the mouth and the stresses of mastication (chewing of food), however, have an aggressive effect on the integrity and wear of materials replacing natural tooth structure. Dental restorative materials must therefore have particular chemical, physical and biological characteristics, which are specified in ISO/TC 106 standards.

International Standards make a significant contribution to oral health.

ISO standards have been developed for casting alloys, ceramics and cements. They outline requirements for setting time, strength, colour stability, biocompatibility, expansion and contraction of dental restorative materials, including limits for physical and chemical properties.

Dental amalgam fillings are made up of a mixture of metals, including mercury. ISO/TC 106 has also developed a range of standards for dental amalgam fillings – which outlines requirements for a range of different types of amalgam fillings – and the Committee has also collaborated with the FDI in the development of several clinical standards.

Another important subject is radiopacity, which helps dentists diagnose recurrent caries. An improved standard for determining the radiopacity of restorative materials is being developed.

ISO/TC 106 has also developed standards for the complex variety of instruments and devices used by dental professionals, as well as the range of equipment in the dental operatory. For example, an ISO standard specifies the limits for exposure to ultraviolet irradiance from dental operating lights, protecting both the dentist and the patient.

An interesting issue is that of dental mercury – used in amalgam fillings – which has raised public concern. In order to address the wider social implications of the release of mercury from the dental office, the committee developed ISO 11143:2008, Dentistry – Amalgam separators, which addresses the question of protection of the environment.

The biocompatibility of medical devices used in dentistry are covered by ISO 7405:2008, Dentistry – Evaluation of biocompatibility of medical devices used in dentistry, which specifies test methods for the evaluation of biological effects. It includes specifications for testing the pharmacological agents that are used by the devices.
There are even standards for ensuring that the materials used on the external surfaces of dental equipment can resist the chemical disinfectants used in dentistry. And the road is not ending anytime soon. The committee plans to start work on a classification of both caries (dental decay) and types of prepared cavities in teeth. This initiative is driven by today’s trend towards a more conservative approach and minimal intervention.

Billions of people benefit

Globally, around a million dental professionals are using materials, devices, equipment and procedures covered by International Standards. And billions of consumers use over-the-counter dental hygiene products that also benefit from International Standards. And billions of people benefit from dental standards improving or maintaining the microbiological quality of water used in dental units.

The wide stakeholder participation involved in the development of ISO standards improves information flows between manufacturers, the dental profession, academics and government regulators. ISO dental standards also facilitate the availability of devices that meet important clinical requirements, and help encourage successful clinical outcomes.

Above all, International Standards make a significant and positive contribution to the quality of oral health and the safety of dental care, as well as stimulating the development of improved products. They also help to break down trade barriers, thus making a wider range of quality dental products available to more people in more places.

About the author

Derek W. Jones, BSc, PhD, DOhc., Chartered Chemist, is Chair of ISO technical committee ISO/TC 106, Dentistry, and has been involved with standards development since 1971. He is a Fellow of the British Royal Society Chemistry, a Fellow of the Institute of Materials, Mining, and a Fellow, Biomaterials Science and Engineering. He is currently Professor Emeritus of Biomaterials, Dalhousie University, Canada.

Designing for people

How technology can support a healthier lifestyle

by Tom Stewart

Standards development is an important but potentially dull activity. It involves reading and commenting on a large number of documents, some of which are long and complex. It also involves attending many meetings and taking part in often lengthy and detailed discussions.

Of course, we would not get involved in standards making if we did not believe that the final results were worthwhile and that the world was improved in some way as a result of our efforts. But in the midst of the detailed documents and formal procedures, it is easy to forget the big picture and what we are really trying to achieve. For this reason, it is occasionally useful to stand back and consider our work in the context of the wider world.

This article is therefore a good opportunity for me to reflect on the relationship between ISO technical committee ISO/TC 159, Ergonomics, subcommittee SC 4, Ergonomics of human-system interaction, and health and well-being.

Understanding human factors

People are using technology for ever more hours a day, potentially leading to problems with their health. Fortunately, ISO standards are ensuring that technology is highly usable, therefore contributing to users’ health and well-being.

In some ways, the relationship is obvious. ISO/TC 159, Ergonomics, defines ergonomics (also known as human factors) in its business plan as: “Ergonomics is the scientific discipline concerned with the understanding of the interactions among human and other elements of a system, and the profession that applies theory, principles, data and methods to design in order to optimize human well-being and overall system performance.”

This definition comes from the International Ergonomics Association, which has almost 50 national professional societies as members. But many people still misunderstand ergonomics. This may be because its origins come from the Greek words ergon (work) and nomos (natural laws) and it received its biggest impetus after the Second World War.
War where improved ergonomics in the industrial workplace was seen as a key part of the economic recovery. Post-war, the focus of ergonomics was on productivity, especially industrial output.

One of the classic ergonomics illustrations by the pioneer Tom Singleton showed “Cranfield man” – a person “redesigned” to suit a specific machine tool (see Figure 1). Trying to recruit people with these rather strange characteristics (just over one metre tall, with one arm longer than the other and so on) was clearly not a good solution.

**Technology can contribute directly to our health and well-being.**

The ergonomics approach, redesigning the machine tool to suit real people, was clearly more effective. Applying ergonomics to productivity problems resulted in a boost to industrial output between the 1960s and 1980s.

**Health and safety**

In Europe, ergonomics has more recently become part of health and safety legislation following the so-called “six-pack” of European Economic Community directives introduced in 1992. Two of these directives (one concerned with manual handling and one with display screen equipment) have been instrumental in making European employers take ergonomics seriously. As a result of this link to health and safety, many people now see ergonomics as being focused primarily on reducing accidents and injuries.

This health and safety milestone was not a sudden development. It emerged after growing concern in the 1980s over the issues the six-pack addressed. One of these issues, work with display screen equipment, was the incentive for the formation of ISO/TC 159/SC 4 in 1983 to deal with a new work item with the title, Visual information processing, which had just been approved.

Several years’ work later, this resulted in a six-part standard published under the general title, ISO 9241, Ergonomic requirements for office work with visual display terminals (VDTs). The focus on office work reflected concerns in the 1970s and 1980s about the impact of display screen use on people’s health. These concerns included the impact on vision and visual health and musculoskeletal issues including discomfort and repetitive strain injury (RSI).

Health risks associated with visual display screens had been highly controversial and repetitive strain injury (RSI). However, most scientific and regulatory authorities recognized that the risks were relatively minor compared with such areas as manufacturing and construction work, where serious injury and even death are still far too common.

Nonetheless, the arguments in favour of regulation were that many more people were using display screen equipment for an increasing amount of time and that there was a significant collective risk for society.

In this context, ISO/TC 159/SC 4 developed a series of ISO 9241 standards aimed at ensuring a minimum ergonomic quality in computer displays (Part 3), computer keyboards (Part 4), computer workstations (Part 5) and the office working environment (Part 6).

From the start, we recognized that even if someone were provided with the ideal ergonomic screen, keyboard, desk and environment, the nature of the job could still give rise to problems through long working hours, repetitive work and so on. Part 2 of ISO 9241 was therefore developed to provide guidance on task and job design to mitigate against such problems.

We also recognized early on that software played a major part in determining the user’s experience, and so several other parts were added dealing specifically with broader usability and software interface issues.

ISO 9241 has been an influential standard across the world. The best way of making sure these two issues do not cause problems is to encourage people to take frequent short breaks and change their postures. As mentioned earlier, ISO 9241:1992 contains just such guidance (among other job and task design issues). This guidance was aimed at employers to ensure they did not create unhealthy jobs.

However, most organizations rely on their staff to deliver good customer service. In my 40 years as an ergonomics and usability consultant, I know that one of the key drivers of customer service is motivated and effective staff. Ensuring that the technology they use is usable is therefore far from a luxury.

**Usability**

One of our most purchased standards is ISO 9241:210: Ergonomics of human-system interaction – Part 210: Human-centered design process for interactive systems. This is a revision of ISO 13407:1999. These standards have been widely accepted as the recommended approach to developing usable systems, services and products. Our definition of usability, which comes from ISO 9241-11:1998, Ergonomic requirements for office work with visual display terminals (VDTs) – Part 11: Guidance on usability, explains that usability is about much more than making things easy.

Usability is the extent to which a product can be used by specified users to achieve specified goals with efficiency, effectiveness and satisfaction in a specified context of use. Although efficiency, effectiveness and satisfaction map directly to productivity and safety, they go beyond simply ensuring that technology does not injure its users. User satisfaction might seem like a luxury to those concerned with work systems, despite the evidence that if people get satisfaction from their work, the quality of their work is also likely to be higher.

In today’s computer-based workplace, however, many organizations rely on their staff to deliver good customer service. In my 40 years as an ergonomics and usability consultant, I know that one of the key drivers of customer service is motivated and effective staff. Ensuring that the technology they use is usable is therefore far from a luxury.

**Technical explosion**

One of the biggest changes to technology (and also the work of ISO/TC 159/SC 4) in recent years is the explosion of personal computer use and the explosion of personal information technology ranging from personal computers to laptops, netbooks, personal digital assistants, tablets and smartphones.

Usability and user interface design affect far more people today than when we started in 1983 where computers were mainly confined to business. The IBM PC had only just been launched in 1981 and was still expensive for use at home, where games and hobby computers were beginning to make a mark.

Nowadays, many people use the same technology to run their lives as they use at work. This has two implications for our standards: first, the context of use may now have to include social and leisure uses of computers; and secondly, people expect more from using their technology – they increasingly expect it to be fun and pleasurable.

**Healthy working**

So what has this to do with health? In fact, quite a lot. As far back as 1948, the World Health Organization (WHO) defined health as a state of complete physical, mental and social well-being, and not merely the absence of disease or infirmity.

Technology which is efficient, effective and satisfying to use can, therefore, contribute directly to our health and well-being. However, the widespread adoption of computer-based technology in all aspects of our lives has two potentially negative consequences which pose a challenge for our standards making.

Firstly, many people now spend far longer than a typical working day hunched over keyboards or staring at screens. This increases the likelihood of them developing musculoskeletal symptoms and visual discomfort.

Secondly, many people now work at home or in offices which look more like homes with coffee bars, rest areas and so on. While most people welcome this, the downside is that they are often using computers in less than ideal postures and working environments – the ideal chair for lounging and chatting is not ideal for using a laptop.

**ISO 9241 has been an influential standard across the world.**


**About the author**

Tom Stewart

He is also Executive Chairman of System Concepts, one of the largest ergonomics and usability consultants in Europe.
Accessibility for all

Improving the lives of older people and people with disabilities

by Ken Sagawa and Kenji Kurakata

Accessible design involves considering the needs of older people and people with disabilities. This maximizes potential use when developing products, services, environments and facilities.

Accessible design and similar concepts, such as universal design, design for all and inclusive design, emerged in the 1980s. With ageing populations in many countries, the UN adopted the Convention on Human Rights of People with Disabilities.

Better access, better health

A comfortable, low-stress life improves human health and wellness. Accessible design makes life more comfortable by making products, services, environments and facilities accessible to everyone, including older people and people with disabilities.

A new approach

As people become older, they generally become less able to use the (perhaps still growing number of) goods, services and facilities that are designed mainly for younger people or those without a disability. Products, services and facilities should be accessible to all. Accessible design helps to do this by removing barriers, increasing user comfort and reducing user stress.

As a result, ISO/IEC Guide 71, Guidelines for standards developers to address the needs of older persons and persons with disabilities, was developed in 2001. Since its publication, ISO and other standards bodies have developed many accessibility standards. These aim to improve older and disabled people’s access to products and services – and therefore their lives.

Many accessible design standards have been developed by ISO and other international and national standards organizations. A number of technical committees have recently increased the pace of development, both on new standards and revisions to existing standards.

Three technical committee working groups are taking a leading role developing general or specific standards on accessible design: ISO technical committee ISO/TC 159, Ergonomics; ISO/TC 173, Assistive products for persons with disabilities; and ISO/TC SWG-A, Information technology / Special working group on accessibility.

In ISO/TC 159, standards on visual signs and announcements are being developed to provide a legible font size in public spaces and audible public announcements. Both will improve older people’s lives and increase their involvement in society.

To give another example, since pharmaceutical packages without Braille could increase blind people’s risk of taking the wrong medicine, ISO/TC 122, Packaging, is working with the European Committee for Standardization (CEN) to develop a new standard.

In the USA, medical diagnostic equipment accessibility standards are being developed. By setting design criteria, these will help people with disabilities to benefit from standardized examination tables and chairs, weight scales and radiological and other equipment.

International accessibility standards may also target tele-medication systems.

Revising ISO/IEC Guide 71

The revision of ISO/IEC Guide 71 is currently underway. A joint technical advisory group has been formed and experts invited to discuss how the guide should be updated to further encourage standards developers and those involved in accessibility applications. The new version is expected to be published in 2013.

In addition, an ISO technical report, ISO/TR 22411:2008, Ergonomics data and guidelines for the application of ISO/IEC Guide 71 to products and services to address the needs of older persons and persons with disabilities, is being revised to incorporate new technical information.

Over recent decades, ISO has paid more attention to standards related to human life and, particularly positively, on human-friendly standards that enhance people’s quality of life. ISO/IEC Guide 71 has had a great impact and driven accessibility standardization in ISO and other standards organizations. However, accessibility is a broad field and further development is required, as is more support from social and industrial fields. We look forward to working with our partners and the various stakeholders involved and making an even greater impact.

About the authors

Ken Sagawa is a Professor at Japan Women’s University in Tokyo. Prof. Sagawa’s research field is visual psychophysics and age-related changes in visual functions. He is a Convenor of ISO technical committee ISO/TC 159, Ergonomics, WG 2, Ergonomics for people with special requirements, ISO/TC 159/AG, Advisory group for accessible design, and ISO/TC 122, Packaging, WG 9, Accessible design for packaging.

Dr. Kenji Kurakata is Leader of the Accessible Design Group at the Human Technology Research Institute of the National Institute of Advanced Industrial Science and Technology, Tsukuba, Japan. Dr. Kurakata’s research interests are ageing effects on auditory perception and acoustic design of the human-machine interface. He is Secretary of ISO/TC 159/WG 2 and Convenor of accessibility-related working groups in ISO/TC 159. He is also an expert of ISO/TC 45, Acoustics.
Want to live to 100?

Your chances of reaching age 100 may be better than you think – especially with the expanding health and wellness industry. ISO standards may not guarantee you becoming a centenarian, but they sure can help make you feel and look good!

ISO standards contribute to the three dimensions of health and wellness – physical, mental and social well-being. One only needs to look at the recent committees created, or standards work undertaken by ISO, to confirm this.
The newly published ISO 23599:2012, *Assistive products for blind and vision-impaired persons – Tactile walking surface indicators*, will contribute to high quality and consistency in the use of tactile walking surface indicators (TWSI). Around the world, this standard will make urban streets safer for people with visual impairments.

**TWSIs around the world:** 1. in the United Kingdom – 2. in Germany – 3. in Australia – 4. in Hong Kong – 5. in the USA – 6. in Switzerland.

By providing information for safety and wayfinding, TWSIs improve the confidence, independence and quality of life of people who are visually impaired. This is achieved by enabling them to participate in employment, social, recreational, educational, cultural and religious activities.

There are other systems and devices for providing wayfinding and safety information to people who are visually impaired. These include accessible signals that use sound and/or vibration to provide information for crossing at pedestrian traffic lights (standardized as ISO 23600:2007, *Assistive products for persons with vision impairments and persons with vision and hearing impairments – Acoustic and tactile signals for pedestrian traffic lights*).

ISO 23599 will enable the safe and secure travel of people with visual impairments around the world.

It is now possible for people who are visually impaired to use both GPS-based, real-time wayfinding information and some electronic information systems for public buildings. Such electronic systems can complement, but do not replace, the requirement for tactile information.

Among their advantages, TWSIs can lead users precisely to a destination, can be used to provide information both indoors and outdoors, do not require electric power and do not require users to purchase or maintain any special equipment. TWSIs were originally developed in 1965 by Seiichi Miyake who lived in Okayama, a city about 550 kilometers southwest of Tokyo. He did this with the cooperation of a friend who was becoming vision impaired. TWSIs were first installed to indicate the location of a pedestrian crossing, but they are now used to provide information for wayfinding and safety on railway platforms, pavements and in public facilities.

By providing information for safety and wayfinding, TWSIs improve the confidence, independence and quality of life of people who are visually impaired. This is achieved by enabling them to participate in employment, social, recreational, educational, cultural and religious activities. TWSIs are widely used in many developed and some developing countries to provide wayfinding information to pedestrians who are visually impaired. TWSIs are also used to alert people with visual impairments when they are approaching a hazard such as the edge of a platform, a flight of stairs or the end of the pavement and the beginning of the street. They are used in indoor as well as outdoor locations.

The World Health Organization has reported that the world now has 285 million people with visual impairments, 39 million of whom are totally blind, and 246 million of whom have low vision. Although many people who are visually impaired travel independently, wayfinding can be difficult in congested areas and where there are no features that can be used for guidance, for example walls, kerbs and changes in texture such as between pavement (sidewalk) and grass.

**The role of TWSIs**

TWSIs are widely used in many developed and some developing countries to provide wayfinding information to pedestrians who are visually impaired. TWSIs are also used to alert people with visual impairments when they are approaching a hazard such as the edge of a platform, a flight of stairs or the end of the pavement and the beginning of the street. They are used in indoor as well as outdoor locations.

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Originally, two types of TWSIs were used: a pattern of truncated domes to indicate danger; and a pattern of raised bars to indicate a direction to walk. Their benefit has been well acknowledged, and their use is now quite widespread.

**Consistency is important for people who are visually impaired.**

Over many years, extensive research in various countries has established that both truncated domes and raised bars are highly detectable when used in association with typical walking surfaces, and that they are distinguishable from each other.

**Standardization needed**

Since 1965, TWSI surface textures have been modified, and systems of installation have become somewhat varied, not only between countries, but also within countries. Multiple patterns, sizes, colours and specifications of materials and systems for installation can now be found.

However, consistency is important when providing tactile information for people who are visually impaired. These people are unable, or have limited ability, to use vision to confirm information about the environment. When different TWSIs are used in different ways from one place to another, there is a high probability that pedestrians with visual impairments will find them confusing, and may not use them effectively.

A working group was therefore set up under ISO technical committee ISO/TC 173, Assistive products for persons with disability, to develop standards for TWSIs to ensure they would provide effective information for safety and wayfinding, and would be as consistent as possible globally.

**Challenges involved**

Around 1990, the first working group (WG 6) on the standardization of TWSIs was established under ISO/TC 173. However, the work was cancelled and restarted twice because consensus could not be reached within the ISO time limit. In March 2012, ISO 23599 was finally completed by ISO/TC 173, working group WG 8, Tactile walking surface indicators, under the Chairmanship of Dr. Shigeru Yamauchi of Japan.

The lengthy development period for this standard occurred largely because, both before and during the standard’s development, the use of TWSIs was becoming increasingly widespread and varied. In addition, research was taking place in many countries, and divergent national standards were being developed.

The installation of TWSIs is relatively expensive, and development of a standard that required the retrofit of TWSIs became an impractical goal. If visually-impaired pedestrians and travelers have become used to particular types of installations in an area or country where they live, changing them would lead to confusion and loss of confidence in the system.

Nonetheless, development of a standard based on the consolidated findings of science, technology and experience remained desirable to encourage consistency in new installations of TWSIs, and to improve quality of the products.

The standard is intended to ensure that best practice is followed by countries that do not have TWSIs or do not yet have widespread installations of TWSIs. Travellers who are visually impaired can then have reasonable confidence in the consistent presence, type and meaning of TWSIs as they travel from one country to another.

The scope of the standard says that “it is not intended to replace requirements and recommendations contained in national standards, regulations and guidelines” based on the findings of science, technology and engineering. However, “national design standards should provide for high quality products and consistent TWS systems within a country.”

**Contents of the standard**

ISO 23599 includes both technical standards for TWSI surfaces and principles for installation. Technical standards include the shape, dimensions, arrangements and spacing of texture elements for TWSIs that have been demonstrated to promote accurate detection and identification both under foot and by the use of the long white cane. There is also a technical standard for luminance contrast, assuring that TWSIs will be maximally visible to people with low vision.

Principles for installation are followed by an annex of examples of TWSIs in different situations, including at pedestrian crossings, at grade kerbs, railway platforms, stairs, ramps, escalators, lifts (elevators) and revolving doors.

**Characteristics and use**

Explanatory information with each example always begins with the expression “When used...”. There is, therefore, no absolute requirement for TWSIs to be used in all types of locations. ISO 23599 recognizes that national standards vary in the types of situations or locations requiring TWSIs. This may be because of specific construction design and materials (such as for pavements) and special physical, climatic and/or social situations in different countries.

Two textures (patterns) are used for TWSIs. An “attention pattern” comprises truncated domes or cones, and is used primarily to indicate hazards and decision points. A decision point may be at the intersection of two guiding paths, or at a change of direction along a guiding path. A “guiding pattern” comprises raised bars and is used to guide visually-impaired pedestrians to particular places such as pedestrian crossings, entrances to buildings, lifts and other amenities.

In some countries, attention patterns and guiding patterns are used as a continuous guiding system. In others, attention patterns and guiding patterns are used as a system, but the guiding patterns are not used where good natural guidance is provided by features such as walls, building lines and curbs.

**About the authors**

Dr. Seiji Mitani holds the Secretariat of ISO technical committee ISO/TC 173, Assistive products for persons with disability, working group WG 8. He has been working at the Product Safety Technology Center of the National Institute of Technology and Evaluation in Japan from 2004 to 2011. Mr. Aoki holds a Bachelor of Mechanical Engineering from Hiroshima University in Japan.
Are you happy?

Measuring the well-being of a population

by Phuntsho Wangdi

In seeking a sustainable balance between materialistic and spiritual growth, the Kingdom of Bhutan has developed the idea of Gross National Happiness (GNH). Now a key part of Bhutan’s overall Development Philosophy, GNH is central to ensuring the happiness of its people.

Happiness is a human’s physical and mental well-being. As the ultimate goal, every human hopes to achieve happiness individually and collectively. But how is it achieved?

People in general may argue that happiness depends on economic growth, culture, race and religion. However, the basic factors driving happiness are in fact largely the same in any location or socio-economic environment.

Every human hopes to achieve happiness individually and collectively.

It has been demonstrated that increases in Gross Domestic Product or Gross National Product do not necessarily make people happier. In fact, higher incomes and wealth may induce further wants, cravings and desires that hold back the growth of happiness.

Happiness is what each of us values the most. Governments and institutions must therefore develop the means to deliver services based on GNH.

Happiness explained

Having understood this basic human need – happiness – His Majesty King Jigme Singye Wangchuck has, since 1972, made GNH the guiding philosophy of Bhutan’s development. In these four decades, research, studies and conferences have taken place to develop this concept.

GNH is a unique philosophy stimulating a huge shift from conventional consumer-based development. It aims to achieve a balance between material and spiritual growth, maintaining people’s happiness as a core criterion. Article 9 of the constitution of the Kingdom of Bhutan states: “The State shall strive to promote those conditions that will enable the successful pursuit of GNH.”

For Bhutanese people, GNH is not an optional extra but central to the constitution.

In market-oriented western societies, GNH may be interpreted and construed as an overwhelmingly individualistic culture in which happiness is deemed to be merely quantitative and emotional. Since exotic curiosity cannot blend with current imperatives and social structuring, there may be only superficial acceptance of GNH.

The fact is, even wealthy individuals and societies can be dissatisfied with life. In today’s highly competitive consumer-based economy, people’s lives are ever more regulated, time-bound and tied to responsibilities. At the same time, there seems to be very little room for love, kindness, compassion, sympathy and respect.

Put simply, happiness comes to you when you make others happy. This is achieved by harmoniously combining wisdom, compassion and self-restraint. These sensibilities are derived largely from Buddhist philosophies.

GNH is a holistic approach towards all-round economic and social development that gives equal importance to the physical, emotional, and spiritual aspects of well-being. It recognizes that individual well-being will be achieved sustainably if happiness is pursued in the context of the greater good of society, and it believes that it cannot be left alone as a personal responsibility. The state must, therefore, create the conditions and an enabling environment for pursuing collective happiness and well-being.

In Bhutan, the four priority “pillars of GNH” are:

- Sustainable and equitable socio-economic development
- Conservation of the environment
- Preservation and promotion of culture
- Promotion of good governance

Understanding GNH

The four pillars have been further classified into nine indicators to increase understanding of GNH, and to reveal the holistic range of GNH values. They are:

- Psychological well-being
- Educational development
- Good governance
- Community vitality
- Ecological diversity and resilience
- Cultural diversity and resilience
- Preservation and promotion of culture
- Psychological well-being
- Conservation of the environment

This is important in maintaining a diverse cultural identity. To understand people’s perceptions in this area, the awareness of cultural elements such as language, sense of identity, core values, beliefs, norms and customs, and participation in various cultural activities, are assessed.

- Good governance

Good governance is important as government policies, projects and programmes have a direct impact on society. Since state control helps achieve common objectives, these indicators help ensure governance performance, deliver effective public services and provide fundamental rights.

- Psychological well-being

Psychological well-being is defined in terms of the internal experience of individuals and their own perception of life. Both momentary moods and long-term states of mental well-being are considered. This indicator reflects actual experiences such as the quality of relationships, the regulation of emotions and whether feelings of isolation and depression pervade daily life.

- Health

Identified as a strong determinant of happiness, the enhancement of public health is a state priority. The Royal Government of Bhutan ensures every citizen benefits from free healthcare.

- Education

Education improves literacy, knowledge, skills, creativity and human capital, and in this manner helps to alleviate poverty. This indicator not only tries to assess achievements made through conventional education, but also seeks to measure people’s acquired knowledge and expertise, including historical, cultural, civic and ecological knowledge and skills.

- Time use

Time is a significant but limited resource. Time-use studies show what people actually do in their lives, including how much time is spent on work and leisure (including child care) within households, both at a point in time and over a period of time. This information is used to design inclusive and balanced economic and social policies.

References:

- GNH Centre for Bhutan Studies (CBS) – July 1999
- GNH CBS – 2004; GNH CBS 2009
- The Centre for Bhutan Studies - GNH website (www.grossnationalhappiness.com)
- Conference Proceedings; Second International Conference on GNH – 2005

Many faces

In its goal of meeting basic human needs – particularly ensuring happiness and well-being – Bhutan’s government has developed nine GNH domains and 33 well-being-related indicators. GNH indicators serve as evaluation tools to track developmental progress over time; and they serve as a link between GNH concepts and actual implementation in policies and programmes.

GNH’s many faces include wisdom, insight, kindness towards others, self-restraint and appreciation of things as they are, helping to free us from constant grasping and greed. By incorporating GNH in its development, Bhutan is continually seeking the right balance between materialistic and spiritual growth.

About the author

Phuntsho Wangdi

is Director General of the Bhutan Standards Bureau (BSB), ISO member for the country. Prior to joining BSB, he was in Bhutan’s Department of Roads until June 2008. Mr. Wangdi holds a degree in Civil Engineering from the Punjab Engineering College, India, and is one of the Board Directors of SARSO (the South Asian Regional Standards Organization).
Simpler, faster and better access to information on ISO standards

Simpler, faster and better access to information on ISO standards is the aim of the new edition of ISO’s Website, which has been fully revised with customer focus and readability in mind.

The new Website puts users first. The layout and content have been specifically designed to help visitors find information quickly and easily, in any device.

ISO Secretary-General Rob Steele comments: “This is another example of ISO’s continual goal to be “simpler and faster and better’. We are very excited about the project and hope visitors will enjoy navigating through our new site!”

Today, most of us access the Internet through a variety of platforms. The new ISO Website adopts a “one-Web” approach. Its fluid and responsive layout flexibly adapts to different resolutions, browsers and screen sizes, so that no matter how users access the site (desktop, laptop, tablet, smartphone, etc.), they can read it comfortably and easily. The new site is also much easier to navigate than its predecessor.

Another area where you will see a big difference is the content,” says Luigi Principi, Manager, ISO Web Information Services. “We started by looking at what users were doing and built our new site based on that. Our goal was to increase understanding of what ISO does, and how it does it, without losing our audience to endless information.

The site adopts a completely new approach to content management. Developers started by creating a series of “ideal” user profiles by aggregating statistics from ISO’s old Website. The profiles helped identify ISO’s core online audience, their goals and needs – from the occasional visitor who wants the answer to a quick question, to regular and experienced users. All the information on the site has been fully edited to make it more relevant and accessible.

To access the new Website, go to www.iso.org.

The ISO team has been working hard to launch the new ISO Website.

ISO Focus+ magazine now available

Two ISO technical reports will be published later this year on:
- Packaging and the environment – Chemical recovery
- Packaging material recycling – Report on substances and materials which may impede recycling.

The ISO 18600 series on packaging and the environment will deal with general requirements, optimizing the system, reuse, material recycling, energy recovery, organic recycling and composting.

The standards look at how each aspect of packaging relates to another, both before and after its use. Retailers and manufacturers will take responsibility for their role in the sustainable innovation.

Financial summit

ISO technical committee ISO/TC 68, Financial services, met in Chicago, USA, in May 2012. A number of important issues were on the agenda, including the revision of ISO 20022 on the universal financial industry message scheme, its current publication timeline and expected plans for implementation. The new edition of ISO 20022, consisting of eight parts, is scheduled for publication later this year.

The meeting also discussed the publication of ISO 17442 on Legal Entity Identifier (LEI). The new standard provides a global solution for the accurate and unambiguous identification of entities engaged in financial transactions. It is the first ISO standard for the financial services industry to be adopted by global regulators.

Reports were given on the progress of work in mobile banking, ISO 9362 on the Business Identifier Code (BIC), ISO 4217 on currency codes, ISO 6166 on International Securities Identifying Number (ISIN), and ISO 10962 on classification of financial instruments standards, including readiness to proceed with Registration Authority arrangements for ISO 18773 and ISO 18774 on financial instrument short name and abbreviations.

Finally, an advisory group was created to assess arrangements for ISO Registration Authorities and to compile a set of recommendations.

Global human resource standards

The second plenary of ISO/TC 260, Human resource management, will be held to coincide with the World Human Resource Congress in Melbourne, Australia, on 26-27 September 2012.

The ISO committee will explore HR practices around the world with a view to adopting uniform standards in areas such as terminology, measurement and governance. The American National Standards Institute (ANSI) and Standards Australia (SA), ISO members for the USA and Australia respectively, are the joint hosts of the meeting.

The director of HR standards with the US Society for Human Resource Management (SHRM), Lee Webster, said that the meeting “will not only be a fabulous opportunity to further define and advance the practice of human resource management, but will also occur in an environment where an assembly of global experts are sharing their wisdom about how to make workplaces more effective and humane. Clearly the centre of the HR universe will be in Melbourne in September.”

The national president of the Australian Human Resources Institute (AHRi), Peter Wilson, agrees that “by holding the plenary standards meeting in Australia during September, the committee has chosen to be in the right place at the right time. This is a first for much-needed HR standards that will cross borders, and it is very pleasing to see the presence of a high level of collaboration. There will be plenty of interest in the deliberations of the committee and congress delegates will eagerly look forward to hearing a report on its findings.”

AHRi is hosting the 2012 World HR Congress (HRIZON) in Melbourne with a mandate from the World Federation of People Management Associations (WFPMA).
ISO/TC 223 was first initiated in 2001 under the participation of full ISO members. It was to promote the uptake and implementation of standards and the exchange of information and experience in the area of societal security. This was the 4th pre-plenary workshop organized back-to-back with the ISO/TC 223 committee meetings. Thirty-one participants from 19 countries attended this workshop: Argentina, Bolivia, China, Côte d’Ivoire, Cuba, Egypt, Indonesia, Kenya, Malaysia, Mauritius, Peru, Serbia, South Africa, Sri Lanka, Tanzania, Thailand, Trinidad and Tobago, Uganda and the host—Colombia. The three previous pre-plenary workshops were held in Bali, Indonesia (2008), Kuching, Malaysia (2009) and Bangkok, Thailand (2010). The Developing Countries Contact Group (DCCG) leadership and ISO/TC 223 working group convenors and other experts drawn from the committee membership, assist in the delivery of the workshops.

Since the launch of this sponsorship programme, the developing country membership in the committee has increased from 25 to 37. Out of these 37 members in the committee, 25 hold P-member status. Table 1 below indicates the changes in membership of ISO/TC 223 and the sponsorships provided.

<table>
<thead>
<tr>
<th>Year</th>
<th>Total ISO/TC 223 members</th>
<th>Developing countries</th>
<th>Sponsorships provided</th>
<th>Developing country P-members</th>
</tr>
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<tr>
<td>2007</td>
<td>52</td>
<td>25</td>
<td>7</td>
<td>14</td>
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<td>2008</td>
<td>52</td>
<td>26</td>
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<td>2009</td>
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<td>2010</td>
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<td>2011</td>
<td>62</td>
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<tr>
<td>2012</td>
<td>66</td>
<td>33</td>
<td>18</td>
<td>25</td>
</tr>
</tbody>
</table>


A pre-plenary workshop was arranged for developing countries. The workshop’s goal was to update developing country experts on the committee’s current work and to promote the uptake and implementation of standards already published. A competitive selection process in collaboration with the ISO/TC 223 secretariat. Preference is given to participating members (P-member category) and candidates have to satisfy a strict technical profile. Continued support is contingent upon the member establishing and maintaining a national committee (also referred to as a national mirror committee) involving relevant stakeholders. Since the launch of this sponsorship programme, the developing country membership in the committee has increased from 25 to 37. Out of these 37 members in the committee, 25 hold P-member status. Table 1 below indicates the changes in membership of ISO/TC 223 and the sponsorships provided.

A regional training course on “Adapting and referencing International Standards in Burkina Faso” was held in Ouagadougou and hosted by FASONORM, ISO member for Burkina Faso.

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The training course was intended to demonstrate the potential value of using ISO and IEC standards as a basis for technical regulations, and how such standards could be used by governments to Uphold good regulatory practices.

Participants in the course on “Adapting and referencing International Standards in Burkina Faso”

by Pascale Mienville.

ISO/TC 223 has two pre-plenary workshops organized back-to-back with the ISO/TC 223 committee meetings. Thirty-one participants from 19 countries attended this workshop: Argentina, Bolivia, China, Côte d’Ivoire, Cuba, Egypt, Indonesia, Kenya, Malaysia, Mauritius, Peru, Serbia, South Africa, Sri Lanka, Tanzania, Thailand, Trinidad and Tobago, Uganda and the host—Colombia. The three previous pre-plenary workshops were held in Bali, Indonesia (2008), Kuching, Malaysia (2009) and Bangkok, Thailand (2010). The Developing Countries Contact Group (DCCG) leadership and ISO/TC 223 working group convenors and other experts drawn from the committee membership, assist in the delivery of the workshops. A regional training course on “Adapting and referencing International Standards in Burkina Faso” was held in Ouagadougou and hosted by FASONORM, ISO member for Burkina Faso.

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More specifically, the training course’s goals were to:

- Help participants understand the benefits of adopting International Standards as regional or national standards
- Explain the methods for adopting International Standards (and other documents) as regional or national standards (or documents)
### Programme

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
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<tbody>
<tr>
<td>10:50</td>
<td>Lunch</td>
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<tr>
<td>12:20</td>
<td>Group work – Identification (cont.)</td>
</tr>
<tr>
<td>14:00</td>
<td>Organization for International Development</td>
</tr>
<tr>
<td>15:00</td>
<td>Cacao – Quality and sustainability ISO/TC 34</td>
</tr>
<tr>
<td>16:45</td>
<td>End of day 3</td>
</tr>
</tbody>
</table>

### Marketing and promotion training in Saint Lucia

**by Nicolas Fleury**

The first 2012 edition of the series of seminars on the marketing and promotion of ISO standards was held in Saint Lucia, at the invitation of the Saint Lucia Bureau of Standards (SLBS), ISO member for the country.

The seminar was part of a training programme developed by the ISO Central Secretariat to enhance the capacity of developing countries to disseminate ISO standards and publications. It is intended to help ISO members become familiar with and implement the existing procedures to promote standards, increase their dissemination and meet customer expectations in their countries. This course also helps them to gain further knowledge about the basic principles of copyright protection and ISO’s policy in this respect.

About 30 participants, representing 18 countries, were welcomed by Sherry Constantine, Director of SLBS, and by Emma Hippolyte, Minister for Commerce, Business Development, Investment and Consumer Affairs. During this three-day seminar, the participants learnt about aspects related to the dissemination of ISO standards, to customer requests for authorization to reproduce their content, and to copyright protection matters. The course allowed participants to share experience and consolidate links with their marketing and sales colleagues from ISO members and the Central Secretariat.

The seminar also provided trainers with the opportunity to explore the use of social networks as new tools for the promotion of standards and to introduce the new tools developed by the ISO Central Secretariat such as, for instance, the Online Browsing Platform (www.iso.org/obp).

The participants immediately understood the power and the potential, both for themselves and their customers, of the new applications developed using the eXtensible Markup Language (XML). The challenge for the ISO Central Secretariat is to provide the best support to ISO members so that they can harness the full potential of such technology. This is one of the reasons why, from one seminar to the next, the course content changes.

This course took place in April, and the next edition of the seminar is scheduled for October 2012.

For more information, contact dev@iso.org

Nicolas Fleury is Director, Marketing, Communication & Information services, ISO Central Secretariat.
Management Solutions

Management makeover

New format for future ISO management system standards

by Stefan Tangen and Anne-Marie Warris

ISO has just completed work to provide identical structure, text and common terms and definitions for management system standards of the future. This will ensure consistency among future and revised management system standards and make integrated use simpler. It will also make the standards easier to read and, in so doing, be understood by users.

Three management system standards have already been published in this new harmonized format with another seven on the way. Both ISO 9001 and ISO 14001 will follow the new outline during their revision process.

Why?

ISO has over the years published many management system standards for topics ranging from quality and environment to information security, business continuity management and records management. The different shapes and structures result in some confusion and difficulties for users to understand and for users to answer any questions from standards writers, although users should initially ask their standards developers with the flexibility to integrate their specific technical topics and requirements. Box 1 includes the high level structure and examples of definitions and identical text.

New requirements

There are subtle language issues such as the change from document and records to documented information, to the use of IT and other tools to illustrate what is being done. The new text recognizes the use of the broad concept of risk and the need to understand risk in the context of the management system. It also encourages everyone to view preventive action as a broader concept than simply preventing an incident from re-occurring.

No challenge is too big

Any change represents challenges and opportunities. And this is no exception. Over the next few months, we will promote understanding of what this change means to the affected technical committees, as well as among the users of the standards.

Box 1: Examples from the new Annex SL

<table>
<thead>
<tr>
<th>High level structure</th>
<th>Box 2: Current status of the harmonization</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clause 1 – Scope</td>
<td>ISO 30301:2011, Information and documentation – Management systems for records – Requirements (Harmonized with Annex SL)</td>
</tr>
<tr>
<td>Clause 4 – Context of the organization</td>
<td>ISO 39001, Road-traffic safety (RTS) management systems – Requirements with guidance for use (Currently being prepared for FDIS ballot with publication scheduled for September 2012 and in line with Annex SL)</td>
</tr>
<tr>
<td>Clause 5 – Leadership</td>
<td>ISO/IEC 27001, Information technology – Security techniques – Information security management systems – Requirements (Revision is currently being prepared for DIS ballot with publication scheduled for 2013, and in line with Annex SL)</td>
</tr>
<tr>
<td>Example of identical definitions</td>
<td>ISO 55001, Asset management – Requirements (Currently on CD ballot with publication scheduled for 2014 and in line with Annex SL)</td>
</tr>
<tr>
<td>Organization, interested party, policy, objective, competence, conformity</td>
<td>ISO 16125, Fraud countermeasures and controls – Security management system – Requirements (Currently on CD ballot with publication scheduled for 2013, and in line with Annex SL)</td>
</tr>
<tr>
<td>Example of identical text: Top management shall ensure that the responsibilities and authorities for relevant roles are assigned and communicated within the organization.</td>
<td></td>
</tr>
</tbody>
</table>

What next?

It will take a few years before all existing management system standards have been fully harmonized. However, there were an impressive number of standards that used the new format as it was being developed.

Two of ISO’s flagship management system standards have launched their revision processes (ISO 9001 and ISO 14001) and both will use the new format for their revisions. Box 2 sets out the list of standards that have used the new approach.

The Joint Technical Coordination Group (JTCG) is responsible for the development of the document at the request of the ISO Technical Management Board (TMB). JTCG plans to collect information on the user experience in 2012. It is available to answer any questions from standards writers, although users should initially ask their standards developers with the flexibility to integrate their specific technical topics and requirements.

The following MSS were published before the TMB decision and no decision on revision has been taken

ISO 22000-2005, Food safety management systems – Requirements for any organization in the food chain
ISO 28000-2007, Specification for security management systems for the supply chain
ISO 30000-2009, Ships and marine technology – Ship recycling management systems – Specifications for management systems for safe and environmentally sound ship recycling facilities

About the authors

Dr. Anne-Marie Warris, with 12 years of experience in standardization, is the Chair of Joint Technical Coordination Group (JTCG), and Chair of ISO technical committee ISO/TC 207, Environmental management, subcommittee SC 1, Environmental management systems. Dr. Warris is responsible for ensuring that Lloyd’s Register Marine Division listens to, and supports, relevant stakeholders in the environmental arena. She is a chartered engineer and chartered environmentalist through The Energy Institute. Dr. Warris holds an MBA from London Business School, a PhD in Com­bustion from Imperial College, London.

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Management systems integration

Five lessons learnt by Saudi Arabian ICT company

by Hasam A. Alrashed and Osama Elmegly

Since its inception in 1998, Shabakah Net has pioneered the provision of Internet services in the Kingdom of Saudi Arabia, and has evolved into an integrated information and communications technology (ICT) service provider capable of delivering complete end-to-end technological and operational solutions to its customers across several industries – aided by ISO management system standards (MSS) integration.

From early 2011, Shabakah Net has based its business processes on the ITIL (Information Technology Infrastructure Library), eTOM (enhanced Telecoms Operations Map), and Six Sigma business management frameworks. Shabakah was also the first Saudi ICT company to be awarded ISO 9001:2008 (quality), ISO/IEC 27001 (information security) and ISO/IEC 20000-1:2011 (information technology service management) certifications in recognition of its management practices and customer-focused processes.

This integrated ISO management standards-based system has elevated our products and services to a higher level of competitiveness and sustainability.

In this article, we review the experiences of Shabakah Net in implementing the ISO MSS in an effective and efficient manner, and highlight the five key lessons learnt from the process.

Lesson 1: organizational culture

Implementing an integrated management systems model that conforms to ISO MSS has liberated us from old constraints by helping the organization to evolve new concepts and aspects in the information technology (IT) environment. This has enabled Shabakah Net to enhance its managed services, service quality and security level, and control its key performance indicators (KPIs) to meet business needs more effectively. The end result is that we enhance customer satisfaction by fulfilling their requirements more closely.

Lesson 2: going beyond conformity to excellence

We learned from implementing an integrated management system that performance and process improvements have no limitations, so we saw it as a platform towards excellence in performance and a means to continually improve our processes. Our approach is to measure every activity or process by using KPIs to judge our performance.

We have established two important values for each KPI – the hard (HT) and soft (ST) thresholds. The HT is the maximum value of the KPI, and represents a barrier that must not be breached if we are to achieve acceptable performance for the process.

Then each time we enhance a process, we set the ST, a new maximum value for the KPI that establishes a new maximum acceptable performance level for the process, below HT – the area between HT and ST is the degree of freedom. To achieve excellence in performance, we enlarge the degree of freedom by continually enhancing the process and reducing the ST value, so whenever we face any variation or anomaly in process performance, we never breach the HT. We apply this approach to all our processes to reach excellence in performance.

Lesson 3: integrating security via ISO/IEC 27001

Understanding and conforming to ISO/IEC 27001 elevates the security standard bar and leads us to innovate two important policies, first is “QITMAN” (Arabic for prevention), our security policy. QITMAN is an Arabic word meaning secrecy and confidentiality.

The second policy is “DARAA” (Arabic for prevention), our risk management approach, based on the Arabic for prevention, and for avoiding and mitigating the impact of a potential risk. We talk of “integrating security” rather than “implementing a security standard”, because we feel that information security must be an integral part of our decisions, policies, practices, services and relationships, and part of our total responsibility. In our company security is visible, audible and practiced via a thorough understanding of ISO/IEC 27001.

Lesson 4: enhancing customer satisfaction

Previously we used a customer survey model to measure customer satisfaction, and by analyzing the survey input, we took immediate action to resolve any issues of dissatisfied customers, converting them into satisfied customers. However, using this model meant we solved problems reactively, which cost us financially and in other ways.

Shabakah Net’s integrated ISO MSS changed our way of thinking about customer satisfaction, so we decided to shift to a proactive model by continually improving our processes and policies to maintain the customer satisfaction indicator within the predefined target.

The proactive model enables us to regularly identify and monitor any single issue causing customer dissatisfaction, and ensure we take the appropriate action in time to avoid cost to our organization.

Figure 1 illustrates Shabakah Net’s customer satisfaction life cycle, starting from the enumeration of KPIs through the continual process of enhancing customer satisfaction. Its objective is to proactively avoid any issues that may affect customer satisfaction, and dramatically enhance customer satisfaction KPIs to ensure that we provide the best possible service.

Lesson 5: enhanced decision-making process

Factual decision making is one of the eight Quality Management Principles in ISO 9000. Guided by those principles, we have improved our decision-making process in three ways:

1. Shabakah Net’s integrated management system enhanced how we gather and analyze data by dealing with the root cause instead of symptoms. We have established an internal policy for keeping and controlling records – the main source of our organizational data. This policy affects the quality of our decision making, and promotes complete, accurate, and timely records.

2. We have restructured our organizational chart based on the integrated model and have changed the decision-making tree by involving interested parties responsible for each process (governance). The involvement of multiple parties enables us to make our decisions more reliably and accurately, and makes those parties more responsible and accountable.

3. We have become a responsible data-driven, decision-making organization. As a result, we have raised the quality of our decisions by basing them on complete, accurate, and timely data.

Greater customer satisfaction, higher revenues

Implementing Shabakah Net’s rigorous and robust processes in conformity with integrated ISO 9001:2008, ISO/IEC 27001 and ISO/IEC 20000 management standards has elevated its products and services to a higher level of competitiveness and sustainability.

As a result, we have not only enhanced customer satisfaction, we also increased company revenue in 2011 by 57% in a very competitive ICT market.

About the authors

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Chris Hillis, Managing Director of DHL Express Switzerland, and Roman Bisig, Managing Director of DHL Freight Switzerland, sit down with ISO Focus+ to discuss the role of International Standards and how the company benefits.

**ISO Focus+: For DHL, the company’s greatest growth came in the 1980s when it expanded into countries that could not be served by any other delivery service. In the context of trade globalization, what is the strategic importance of International Standards for a global company such as DHL?**

**International Standards are of highest importance to us.**

Chris Hillis: The challenges around the globe and in emerging DHL branches, are to always focus on a common language (together with tremendous growth) and to prevent too much national diversification (together with tremendous growth) and to prevent too much national diversification and local knowledge to satisfy their supply chain requirements. DHL accepts its social responsibility by supporting climate protection, disaster management and education.

Roman Bisig: As with DHL Express Switzerland, DHL Freight Switzerland implemented and obtained official certification to ISO 9001 in 1995 followed by certification to ISO 14001 in 2005. The benefits of these two management system standards are numerous, but the most important is the process itself. This process-driven approach helps us to better describe, analyze and improve the existing way of doing business.

ISO Focus+: It was recently announced that DHL would become the official partner of Denmark’s European Union presidency supplying all ministers with GOGREEN services and sustainable products. Can you briefly describe this project? How do ISO standards for environmental management (ISO 14001), energy management (ISO 50001) and social responsibility (ISO 26000) align with your GOGREEN initiative?

Chris Hillis: GOGREEN means accepting responsibility for the environment and the world we live and do business in. It is a programme aimed at significantly improving our CO₂ efficiency. Within GOGREEN, we are committed to minimizing environmental impacts with specific measurable initiatives. In addition, we offer the GOGREEN service which secures the offsetting of CO₂ emissions due to door-to-door shipments. The offsetting is done via selected carbon offsetting projects which are financed through the company’s carbon fund. To date, ISO 50001 and ISO 26000 are being applied.

The benefits of these two management system standards are numerous.

Roman Bisig: DHL Freight improves CO₂ efficiency in areas such as building infrastructure, network design, fleet management and employee engagement. Let me give you a few relevant examples in each area. We try, as often as possible, to use district heating systems for our buildings, reduce unnecessary kilometers, drive more efficient vehicles, use rail and intermodal transport, and support DHL staff in their use of public transportation.

ISO 14001 supports GOGREEN for the setting of environmental targets. ISO 14001 also helps set, execute and control the processes in order to meet legal regulations and other requirements with respect to our environmental targets.

ISO Focus+: E-commerce has revolutionized delivery services contributing to faster and easier delivery. How are International Standards facilitating this evolution? Can you please comment on how ISO standards for bar code technology and RFID provided added value and improved your business processes?

**DHL**

**How ISO standards deliver**

**DHL Airbus A300-84-200 freight aircraft at DHL Express hub in Leipzig, Germany.**

**DHL**

**Chris Hillis:** DHL Express Switzerland has been working with quality standards for more than 30 years. In 1995, DHL was officially certified to ISO 9001. Since then, DHL in Switzerland continually improves its management system along with the International Standards developed by ISO.

In 1995, DHL Express Switzerland successfully passed the ISO 14001 certification. Both sets of standards play an important role in our daily business practice, and strongly support the continual improvement of our quality and environmental management systems.

Communication in a multinational company requires a common language. International Standards offer this common language and help to secure a valid and proven understanding of procedures and business principles. DHL recognizes the importance of standards which enable proper controls, together with the flexibility to grow an efficient and reliable international network.

**Roman Bisig:** International Standards are of the highest importance to us, both internally and externally. We continuously improve our internal procedures by implementing clearly structured processes and, by so doing, help to minimize errors. This leads to increased profits, satisfied customers and legal requirements being met (e.g. list of applicable laws). At the end of the day, we have a competitive advantage by meeting customers’ requirements.

ISO Focus+: Can you describe the use made by DHL of ISO 9001 and how has this evolved over the years? What concrete benefits has ISO 9001 brought to the company?

Over the years, DHL staff has increased their awareness of quality and the environment and the value of standards. An added benefit for DHL is the awareness by its customers and other stakeholders that the company is a reliable partner, working with known and proven standards.

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ISO Focus+: E-commerce has revolutionized delivery services contributing to faster and easier delivery. How are International Standards facilitating this evolution? Can you please comment on how ISO standards for bar code technology and RFID provided added value and improved your business processes?
Chris Hillis: In e-commerce, we benchmark our solutions against best practice and strive to maintain our first-place position—according to our annual customer surveys—in the logistics industry. For us, applying standards is complementary to the benchmarking approach we drive.

Roman Bisig: We are working with a tracking system (EAN 128) to better serve our customers’ needs. It enables us to ensure deliveries to our customers at any time, and indicates the status of their consignments during the shipment. This, in turn, allows us to optimize our processes and reduce the number of requests and consignment searches. We can control the consignment from its entry into our warehouse to the delivery to the customer. The evaluation of key performance indicators (e.g., exception management) brings an important added value and improves our business processes. RFID is not yet used within DHL Freight Switzerland.

Even the best organization can’t expect all its customers to be satisfied all the time. And complaints can provide benefits. Complaints can give an organization valuable information about how its products and services are performing. Positive treatment of unhappy customers can increase their loyalty.

Three ISO standards offer a comprehensive framework for complaints management—from prevention, through handling to dispute resolution.

ISO 14001 supports GOGREEN for the setting of environmental targets.

ISO 10001:2007, Quality management—Customer satisfaction—Guidelines for codes of conduct for organizations

ISO 10002:2004, Quality management—Customer satisfaction—Guidelines for complaints handling in organizations

ISO 10003:2007, Quality management—Customer satisfaction—Guidelines for dispute resolution external to organizations

Fortunately, ISO has a system for complaints handling.
Counterfeiting and fraud

How do consumers know what they are getting?

by Maria Lazarte

From medicines to airplane parts, trade in counterfeit products amounts to over USD 500 billion annually – about 5% to 7% of world trade – and the numbers are growing every year. The results are dangerous goods, premature failures, more expensive legitimate products and a loss of confidence. So how can consumers trust claims and labeling, acting on recalls, informing manufacturers about failures and buying from reputable sources.

A bigger issue

Consumers around the world, but particularly in poor and remote areas, have been victims of double labeling, imitation, incomplete information, deceptive packaging, false claims, and misleading or inadequate measurements. “The Pacific region has been an easy target for traders exporting low cost, sub-standard, and counterfeit products,” said Attorney General and Minister for Industry and Trade Aiyaz Sayed-Khaiyum in his opening address. “I urge you to consider… why these goods are so easily peddled,” he added. “It is not just an issue of unscrupulous companies and marketing tactics, but it is also one of enforcement, adequate resources and, of course, poverty… Demand creates supply.” For example, fines that are disproportionately high will open the door to bribery and corruption. Similarly, an impoverished population will take the risks associated with fake goods if legitimate ones are unaffordable. Solutions must address specific local challenges, and education is crucial for both consumers and business.

Participants concluded that counterfeiting and fraud were fuelled by:

• Rising volume of global trade and e-commerce
• Lack of consumer awareness and information
• Involvement of organized crime
• Minimal and inconsistent enforcement and penalties
• Consumer demand and economic pressures driven by high prices and poverty.

We are part of the problem

Yet consumers must also make informed and responsible purchasing decisions, urged Ms. McCormick. “We must recognize that we, as consumers, are part of the problem. Therefore, it is important that we become part of the solution.”

Participants emphasized over and over again that consumers have a responsibility to be informed and vigilant. Counterfeiting and fraud endanger our safety and that of our families. So what can we do? Take photographs. Recognize quality marks. And if something does not add up, ask, advised Rae Dulmage, Director Standards Department at Underwriters Laboratories Canada – an organization whose aggressive stance against counterfeiting, involves education, enforcement and partnerships.

Trade in counterfeit products amounts to over USD 500 billion annually.

But he emphasized that responsibility for fighting counterfeiting starts with manufacturers and distributors. “If you have a global brand, chances are there is a knock-off somewhere in the world,” warned Mr. Geralde, recommending that they facilitate the traceability of goods throughout the supply chain, design with safety first, monitor the market and promote market surveillance.

Nothing to declare

“Customs is at the very center of the battle against counterfeiting and fraud,” said Mr. Watsisoni Kaucava, National Manager, Border Control, Fiji Revenue and Customs Authority. However, officers do not always have sufficient experience and knowledge. Close collaboration between government agencies and the private sector is essential to share information and best practice in order to detect and capture counterfeit goods at the border. As the World Customs Organization Secretary General said in a congress on the subject, “Each of us has a part to play, but we must play our part together”.

Solutions ahead

Partnership and cooperation are at the very heart of the ISO system, which brings all stakeholders together to develop practical global solutions. Two ISO committees are particularly relevant:

• ISO/PC 246, Anti-counterfeiting tools
• ISO/TC 247, Fraud countermeasures and controls

The standards being developed by these committees will help prevent, detect and control identity, financial, product and other forms of social and economic fraud. By promoting strong authentication and security, these standards will bring confidence to consumers, government and industry.

ISO 12931:2012, Performance criteria for authentication solutions used to combat counterfeiting of material goods, developed...
by ISO/PC 246 has already been published. The standard will help organizations of all types and sizes to validate the authenticity of material goods. ISO/TC 247 is currently working on two standards:

- A security management system for fraud countermeasures and controls
- An anti-counterfeiting track and trace method using unique identifier numbering

Emphasizing the importance of consumers to the economy and the need to ensure their safety and well-being, the Prime Minister of Fiji, Mr. Josaia Voreqe Bainimarama, officially opened the 34th plenary of the ISO Committee on consumer policy (ISO/COPOLCO). Some 94 participants from 23 countries attended the event which took place in May, in Nadi, Fiji, hosted by the Ministry of Industry and Trade.

* "Our hosting of the ISO/COPOLCO meeting is another commitment of my Government’s will to enhance consumer protection and enforce standards nationally, and to collaborate internationally," said Prime Minister Bainimarama.

* "I must congratulate ISO/COPOLCO for its unwavering commitment to promoting consumer interests and ensuring they are addressed at a global level. For the past 33 years, ISO/COPOLCO has made a tremendous contribution towards policies that strengthen consumer safety through standards development and the promotion of fair trade and environmentally safe products."

He added that consumers were among the first to call for the development of standards for environmental management, resulting in the ISO 14000 series. Consumers were also at the forefront of ISO’s decision to develop an International Standard on social responsibility (ISO 26000). Consumers were also at the forefront of ISO’s decision to develop an International Standard on social responsibility (ISO 26000).

Addressing the needs of all stakeholders – including consumers – is key when developing policies and standards to ensure multi-level engagement, credibility and tangible outcomes, explained the Prime Minister. Not only does this ensure market-relevance, but enhances consumer confidence, while enabling goods and services to circulate freely within and across borders.

But the Prime Minister warned, "This requires all countries to commit and adhere to internationally accepted standards and practices." He emphasized that in today’s globalized trade and commerce practices, there must be international collaboration, “including consumers. "What makes ISO so effective is that it provides a non-political, non-partisan platform. Standards are developed through open, transparent processes by representatives of the people that need them, implement them, are affected by them – and who can review and continually improve the results of their implementation," he said.

Drawing attention to the valuable role of ISO/COPOLCO, Mr. Takeda concluded, "Consumers are both a compass and a driving force for standards development, your discussions and recommendations during this plenary will help strengthen ISO's efforts."
ISO has just published a new standard to support the organizers of events of all types – sporting, business, cultural, political – in integrating sustainability with their activities.

ISO 20121:2012, Event sustainability management systems – Requirements with guidance for use, is suitable for ensuring that events, ranging from local celebrations to “mega events” such as the Olympic Games and Paralympic Games, leave behind a positive legacy. The standard is relevant to all events, ranging from local celebrations to international events, including organizers, event managers, stand operators, and the public. ISO 20121 has been created by the event industry for the event industry. More than 30 countries and liaison bodies participated in the work.

Fiona Pelham, Chair of the ISO team of experts who developed ISO 20121, comments: “The development process has been led by members of the event industry from around the world who have experience of event management and sustainability leadership initiatives. Among its key benefits are:

• Best business practice
  It makes sense to take an organized, processed approach to managing economic, environmental and social impacts. In addition, what gets monitored and measured gets reduced, so there are likely to be lower overheads.

• Reputational advantage
  Using a recognized international framework will enable leaders in sustainability to demonstrate their actions in a credible and transparent way.”

ISO 20121:2012 was developed by ISO project committee, ISO/PC 250, Sustainability in event management. It is available from ISO national member institutes (www.iso.org). It may also be obtained directly from the ISO Central Secretariat through the ISO Store or by contacting the Marketing, Communication & Information department (sales@iso.org).

Roger Frost is Head of Communication Services, ISO Central Secretariat.

Efficiency

Efficiency has come to the forefront as global challenges like sustainability and financial uncertainty require that organizations get better results with less waste. Efficiency refers to the ability of an organization to achieve objectives with optimal quality and minimal waste, expense, or unnecessary effort. It helps organizations maximize profits and meet their goals, and is key to success in today’s challenging and competitive economic environment.

International Standards are crucial for promoting efficiency, which is why the theme of this year’s World Standards Day (WSD) is “Less waste, better results – Standards increase efficiency”. This is also the subject of the special report of the September 2012 ISO Focus+.

WSD is organized annually on the 14 October, by the three sister organizations making up the World Standards Cooperation – the International Electrotechnical Commission (IEC), ISO and the International Telecommunication Union (ITU).

“In today’s highly competitive and complex world, the issue of sustainability, viewed from an economic, environmental and societal perspective, means that businesses must be more efficient across a wide range of measures and issues,” say the IEC, ISO and ITU leaders in their WSD 2012 message. “International Standards are powerful tools for helping organizations capitalize on their potential in the global marketplace. Developed by experts from around the world, they contain internationally harmonized best practice which can be used to measure, compare and increase efficiency and reduce waste.

“For example, by providing common specifications, International Standards enable products, services and technology from different vendors to fit together like pieces in a puzzle. They support interoperability and compatibility, providing a solid base for developing innovations and facilitating market access to new products. They ensure that countries, organizations, regulators and researchers do not have to reinvent the wheel, and can invest in other priorities.”

The September 2012 issue of ISO Focus+ will showcase a number of examples of standards that are making a difference, such as innovative additive manufacturing, environmental efficiency, credit card transactions and project management. Find out how International Standards not only make good business sense, but contribute to a more efficient and sustainable world in the September issue!”


ISO Update The ISO Update, a monthly supplement to ISO Focus+ is available electronically (PDF) in both English www.iso.org/isoupdate and French www.iso.org/fr/isoupdate.

The ISO Update informs readers about the latest developments in the ISO world, including ISO member bodies’ CEO and address changes, draft standards under circulation, as well as newly published, confirmed or withdrawn standards. It also includes a list of upcoming technical committee plenary meetings.
ISO 50001 for energy management.

The kangaroo is very energy efficient. It can reach speeds of more than 50 km/h while using less energy than any other mammal. So mother kangaroos have more energy for looking after junior! Translate that into business terms. If your organization can reduce the energy it needs to operate, it can devote more resources to value-adding processes.

ISO 50001 users are reporting that the standard helps them to increase energy efficiency and cut costs. Improve your organization’s energy management and you can concentrate more on ensuring the satisfaction of your customers. Who’d have thought that the kangaroo had something to teach CEOs?

ISO 50001:2011, Energy management systems, is available from ISO national member institutes (listed with contact details on the ISO Website at www.iso.org) and ISO Central Secretariat Web store at www.iso.org or e-mail to sales@iso.org.