

announcer

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Deputy Minister for Industries, Trade and Investment Eng. Stella Manyanya (left) receives explanations concerning testing of construction materials and equipment from the Head of Construction laboratory Mr. Stephen Minja (right) during her recent familiarization tour to TBS headquarters in Dar es Salaam. Right from the Deputy Minister is the TBS Director General Prof. Egid Mubofu and other members of staff.



VISION

A proficient institution in standardization, quality assurance and metrology services.

MISSION

To promote standardization and quality assurance in industry and commerce through standards development, certification, inspection, testing and metrology services for sustainable socio-economic development.

QUALITY POLICY

- Tanzania Bureau of Standards (TBS) endeavoursW, as mandated, to
- deliver quality products that include standards and quality assurance
- services by meeting and even exceeding customers' requirements so as
- to retain their loyalty. TBS provides resources and continually improves
- her processes to ensure that employees are capable of consistently
- producing quality products at the right time.

CORE VALUES

a) Professionalism

TBS shall uphold the highest professional standards in service delivery to its customers by ensuring that services are delivered in the right quality and at the right time.

b) Quality culture

TBS shall ensure that quality culture is sustained and all stakeholders are involved in standardization and quality assurance activities.

c) Accountability

Every TBS employee shall be personally responsible for the final quality of his/her job, exercise diligence to duty and efficient utilization of resources.

d) Internationalization

TBS shall participate in regional and international standardization work.

e) Team work

TBS employees shall demonstrate highest level of commitment, by working together, collaborating and coordinating in discharging their duties.

f) Transparency

TBS employees shall exercise openness, impartiality, accurately and promptly share information with all stakeholders.

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EDITORIAL

EDITORIAL

PUSH IS ON STANDARDS MAKING CITIES SMARTER

"Standards Make Cities Smarter." That was the theme of the 2017 World Standards Day (WSD), which reflected society's vigorous pursuit of modern cities with efficiency, safety, higher quality and sustainable development.

Experts in the standardization profession say a 'smart city' might be described as one that dramatically increases the pace at which it improves its sustainability and resilience by fundamentally improving how it engages society, how it applies collaborative leadership methods, how it works across disciplines and city systems, and how it uses data and integrated technologies to transform services and quality of life to those in and involved with the city including residents, businesses and visitors.

There are misconceptions on what standards are for and the case for use of standards has not been made. Cities act independently, and a generic approach (as opposed to an individual city approach) is needed to develop a more functional market.

The pace of technological advancement is putting intense pressure on cities and on Standards Development Organizations (SDOs) to provide guidance for them.

Society is not sufficiently engaged in city operations and specific leadership has not yet been identified.

The ISO Standards Advisory Group (SAG) suggests that in order to build smart cities, engagement between SDOs and the broader market should be improved.

Strategic dialogue and bilateral agreements should be set up with key stakeholder groups to increase relevance in the market. In order to develop a coherent portfolio of guidance material on smart cities, a leadership role within the SDO community should be taken.

Coordination within the ISO on the smart cities agenda should be improved to reap greater levels of internal efficiency and market effectiveness.

Sufficient fresh water; universal access to cleaner energy; ability to travel efficiently from one point to another; a sense of safety and security: these are the kinds of promises of modern cities must fulfill if they are to stay competitive and provide a decent life to their citizens.

Building a smart city is highly complex. Every city faces its own challenges and requires its own blend of solutions. However, there is one common denominator that greatly simplifies this task.

International Standards support the development of tailor-made solutions that can be adapted to particular circumstances of a given city.

They contain expert knowledge and best practices, and are essential enablers in ensuring quality and performance of products and services. In addition, they drive compatibility between technologies and help users to compare and choose the best solution available.

Standards also open the door to a wider choice of products and services. They help increase competition and foster innovation. In a systems approach they enable the integration of structures or solutions from different suppliers.

International Standards make things work safely and smoothly together at every level in cities. They provide the foundation for electricity access and all the many devices and systems that use electricity and contain electronics.

They support the information and communication technologies that enable data collection, exchange and analysis, and information security. Last but not least they provide important guidance for all aspects of city life including energy-efficient buildings, intelligent transportation, improve waste management, building sustainable communities and much, much more.

With Standards, we can make our cities smarter, step by step. Individual islands of smartness can grow together and interconnect. It is comforting to know that International Standards will support smooth and integrated Smart City development.



Without standards the everyday life we know just would not work. From technological gadgets to office and household items to services that fuel the global economy, standards are necessary to ensure safety, dependability and interoperability.

Trusted standards encourage industrial progress, spur global commerce, and improve health, safety and the environment. Government use standards as trusted solutions to complement regulation, and they give peace of mind to consumers.

For the first time in history, the majority of the world's population lives in cities and the proportion of urban dwellers will rise inexorably.

The city has become the defining unit of human habitation. How smartly we build, manage, and operate cities will be the single biggest determinant of humanity's future.

The age of the "smart city" has come. A smart city is one in which city leaders rely on the use of new strategies that integrate digital technologies (banking on the rise of inexpensive storage, computing, bandwidth, video and sensors – known collectively as the "Internet of Things" or IoT) with business models, and big data (the collection and analysis of the vast amounts of data generated by the Internet of Things) to citizens.

PUSH IS ON STANDARDS MAKING CITIES SMARTER (.....CONTINUED)

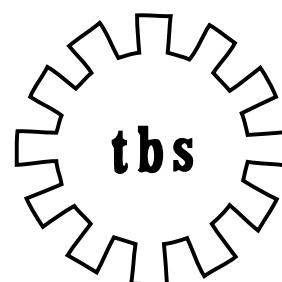
Smart city leaders, like their counterparts in private industry, must benchmark their cities against the very best – particularly in the application of digital technologies to city operations and urban services delivery.

Smart cities must establish radical new standards to ensure the effective use of technology for delivering services and managing complex civic problems.

Similarly, a city may choose to establish open data standards for various urban departments to enable an innovation economy focused on urban service apps, ensuring that entrepreneurs have access to data on public transportation, energy use, traffic, crime, and so on, from which to create valuable data-driven apps for citizen use.

The final pillar supporting smart city success is the encouragement of a local innovation economy. In a technology-intensive future, jobs and Gross Domestic Product growth will be dependent on the steady incubation of new, innovative companies that scale and go global.

Cities can encourage local innovation by investing in technology education, establishing start-up incubators in partnership with the private sector, and by helping start-ups access financing.



NEWS STORIES

TBS STRENGTHENS VERIFICATION OF SOLAR GADGETS



**NEEMA
MTEMVU**

By Neema Mtemvu

Tanzania Bureau of Standards (TBS) has urged importers of solar panels to make sure that they import solar panels that comply with the requirements of the respective standard.

Speaking at a recent opening of the Lighting Global Quality Assurance Training Workshop at the TBS Headquarters, TBS Director of Standards Development Mrs. Edna Ndumbaro said “the workshops initiated by the IFC will help participants to understand and apply the knowledge to continue supporting the initiatives of fighting against substandard products in the market”. She was speaking on behalf of the TBS Director General Prof. Egid Mubofu.

She added that ‘the Lighting Tanzania’ program came at the right time where TBS is now able to verify the quality of solar products manufactured or imported into Tanzania market.

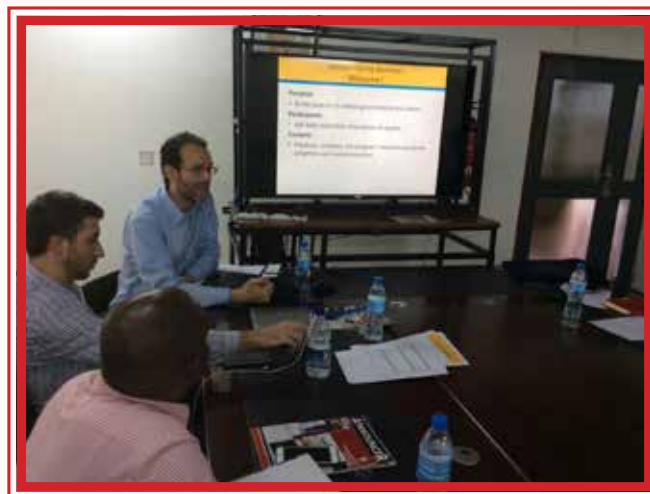
“This training will add value in the Quality Framework for the same. We will use the results of this project to address similar challenges in other products especially in the Electro Technical sub-sector,” She explained.

TBS hosted the lighting global quality assurance workshop as well as being a key stakeholder of the workshop. Currently TBS is supporting all initiatives of the IFC-World Bank to increase access to

affordable, off-grid renewable energy to households and businesses in Tanzania by strengthening Quality Assurance of Solar Lighting Products imported in Tanzania. IFC-World Bank support and collaboration with TBS is highly appreciated as part of this effort to increase access to energy across the country.

TBS acknowledged and appreciated the cooperation and collaboration shown by IFC on the adoption of Pico PV lighting Global Standards/IEC Standards as National Standards, and the establishment of a Pico Solar Laboratory for market surveillance testing of solar lighting products in Tanzania Market. Mrs. Ndumbaro said “We appreciate and acknowledge the cooperation and collaboration shown by IFC”.

The workshop comprised of members from the Bank, IFC, CLASP, GOGLA, TAREA and GIZ/EnDev. The knowledge gained will help in market surveillance and the enforcement of the Standards for Solar lighting Products since it intended to prepare participants to engage with stakeholders of all kinds about Lighting Global Quality Assurance (QA), intervene early, and explain to those stakeholders how and why they should use the QA framework. The 2nd session of the training was mainly focusing on the enforcement strategies of the National Standards for Solar Lighting Standards.



Facilitators of the Lighting Global Quality Assurance on training session during the workshop held at TBS head office in Dar es Salaam.

IMPORTERS, PRODUCERS URGED TO OBSERVE LAW

By Neema Mtemvu

The Business Community has been urged to observe the law when producing or importing goods to the country.

TBS Director General Prof. Egid Mubofu made the remark at a meeting organized by TBS mainly to educate and get feedback from business stakeholders.

"The loss that arises for breaching import regulations is primarily born by the importer and no one else, we do not want this to happen on explanations that the importer was unaware of the requirements of the law, 'ignorance of the law is no a defense before the law,'" He explained.

TBS organized the seminar as a way to get close to stakeholders by educating them on laws and regulations but also to receive their complaints and suggestions regarding various services offered by the Bureau.

Prof. Mubofu said that during the one-day seminar TBS officials responded to complaints and views aired by participants with the view of improving

the business environment for the betterment of the business community and consumers of goods and services in the country.

TBS officials who attended the seminar said that they were optimistic on the results of friendly engagement because the ultimate goal is to ensure that traders benefit from their work, consumers get quality goods and services that worth their money and imported products in the local market meet the requirements of International Standards.

On her part Trans Africa Water system representative Ms. Imelda Kimambo said that it was her hopes that participants will cooperate with TBS on issues relating to standards. But mostly, 'I have had an opportunity to learn many things relating to demands of the law but also I have exchanged ideas with fellow traders,' She said.

TBS has been organizing such meetings to educate stakeholders and get feedback from them with the aim to improve its services.



TBS Director General Prof. Egid Mubofu addresses importers and producers at a meeting organized by the Bureau to educate and get feedback from business stakeholders in the country. Seated left is the Head of Inspection Section Mr. Ridhiwan Ramadhan.

NEWS STORIES

PS : EXTEND QUALITY EDUCATION TO RURAL

By Neema Mtemvu

Tanzania Bureau of Standards has been urged to extend public education on issues of standardization and quality assurance to the rural areas for rural citizens to be able to identify substandard products in markets.

Speaking during the inaugurations of an exhibition organized by the Small Industries Development Organization (SIDO) at Hindu Mandal grounds in Moshi recently, Permanent Secretary Ministry of Industry, Trade and Investment Prof. Elisante Ole Gabriel said that there is a need to educate the public but also to strengthen education to entrepreneurs on quality issues as quality is the basis for sustainable business and industrialization.

He insisted that efforts to impart knowledge need to be intensified as the majority of people in rural areas consume products without the knowledge of checking the quality of the respective product.

He added that more improvement on local goods should be done to enable penetration to regional and international markets.

“Manufacturers have a great role to play in the improvement of their goods in order to enable our country export more products outside the region,” He insisted.

Speaking at the event, TBS Standards Officer Mr. Ramadhani Yange said that TBS participated in the exhibition with the aim of bringing the bureau’s services closer to Small and Medium entrepreneurs (SME’S) and create awareness regarding various activities carried out by the country’s standards body to the people of Moshi and the Northern Zone at large.

He asserted that TBS has set a procedure in which if an SME passes through SIDO and meet the requirements, the SME will enjoy TBS Certification services for free. He encouraged the general public to develop a culture of buying and consume only the TBS certified products.

TBS has been participating in SIDO Exhibitions where by TBS use the platforms to educate entrepreneurs and the public at large on the importance of certifying products and consuming quality products.



TBS Standards Officer Mr. Ramadhani Yange (right) explains something to one of the guests who visited the TBS booth during the recent exhibition organized by the Small Industries Development Organization (SIDO) at Hindu Mandal grounds in Kilimanjaro region.

IMPROVE QUALITY OF YOUR PRODUCTS, SMES URGED

By Gladness Kaseka

Small and medium entrepreneurs (SMEs) have been urged to utilize the education acquired from various institutions including Tanzania Bureau of Standards (TBS) on improving their production so as to produce quality products.

The call was issued by the Permanent Secretary (Industry), of the Ministry of Industry, Trade and Investment, Dr. Adelhelm James Meru on 4th September, 2017, during the opening of the five-day exhibitions organized by the Small Industries Development Organization (SIDO) held at Umoja Grounds in Kasulu, Kigoma.

Speaking on behalf of the Minister of Industry, Trade and Investment Hon. Charles Mwijage, Dr. Meru said TBS, the Tanzania Food and Drugs Authority (TFDA), the Weights and Measures Agency (WMA) and various banks have been giving education to SMEs on various occasions and that the entrepreneurs should use that education to improve their businesses.

During the exhibition, TBS had an opportunity to conduct a seminar on the procedure to acquire TBS mark licence to SMEs and a total of 81 participants benefited from this seminar. The majority of the participants were producers of soap, detergents, honey, salt, food, textile and handcraft.

Also, the issue of exemption of SMEs from paying fees related to certification was amplified during the seminar and via various media during the exhibition. Speaking during the exhibition, one of the visitors, Mr. Ibrahim Fuko, expressed his appreciation at the presence of TBS in Kigoma, particularly in Kasulu as it was his first time to meet with TBS officials and learn about TBS activities.

However, he called upon TBS to conduct frequent market surveillance in the region to reduce the problem of substandard goods like roofing sheet and batteries. The Kasulu exhibitions attracted over 262 SMEs from different regions including Shinyanga, Mwanza, Kigoma, Tabora, Geita, Dodoma, Singida and some from Kenya.

The theme of the exhibitions was

“Construction of industrial economy depends on small industries.”

Speaking at the closing of the exhibitions on 5th September, 2017, the Kigoma Regional Commissioner, Brig. Gen. (retired) Emmanuel Maganga commended TBS, TFDA, SIDO and the Tanzania Trade Development Authority (TanTrade) for their efforts to assist the growth of SMEs. He was accompanied by the Kasulu District Commissioner, Col. Marco E. Gaguti, Kigoma District Commissioner Mr. Samson Anga and Uvinza District Commissioner, Ms. Mwanamvua Mrindoko.

5,754 EDUCATED ON STANDARDS IN NORTHERN ZONE

By Neema Mtemvu

Small and Medium Scale Entrepreneurs (SMEs) have been challenged to take advantage of the support provided by the Government to certify their products.

The challenge was thrown by TBS Senior Marketing Officer Ms. Gladness Kaseka during the awareness campaign on certified products and procedures to get the TBS Mark of Quality in Hai, Arumeru and Babati Districts in the Northern Zone.

During the campaign, a total of 5,754 people of which 862 out of the participants were Primary school students were educated on various issues concerning standards, certification of products and quality issues.

Ms. Kaseka stressed that in every financial year the Government sets aside substantial amount of money with the aim to support SMEs intending to get the quality mark for free.

“SMEs are exempted from paying fees related to certification because of their low financial base hence it is the intention of the government to see that small producers are enabled to penetrate both local and the international market by making sure that the small producers’ products and services are certified by TBS,” She elaborated.

She added that the campaign aimed at educating the public on the importance of using TBS certified products or services and the roles of the sole standards body to the public.

Awareness campaigns play a crucial role to create awareness to the public particularly manufacturers as it has been learnt that most of them do not understand procedures to be followed in order to be granted a certificate to use the TBS Mark of Quality,” She explained.

NEWS STORIES

Moreover, Ms. Kaseka asserted that the Standards watchdog will continue educating SMEs and the public on the importance of the TBS Mark of Quality and ways to get it for the purpose of easing market penetration and manage competition in the local and the international markets.



Msamadi Primary School pupil in Hai District speaks to the media on behalf of other pupils soon after being educated on standardization and quality issues during the awareness campaign in the Northern Zone.



SMES URGED TO BUILD SUSTAINABLE INDUSTRIES

By Rhoda Mayugu

Small and Medium Entrepreneurs (SMEs) have been advised to build sustainable industries and invest on the production of quality products so that they can compete in the local and international markets.

Speaking at the launch of Second Industrialization Exhibition held at the Mwalimu Julius.K. Nyerere Grounds in Dar es Salaam, Minister for Industry Trade and Investment, Hon. Charles Mwijage said that there is a need for Tanzanian SMEs to build sustainable industries because the Government is ready to support them.

The exhibition was themed

“*Industrialized Tanzania is Achievable*”.

“You should make full use of the opportunities provided by the Government, we are eager to support and empower SMEs who invest on sustainable industries,” He insisted.

He used the platform to urge TBS to continue supporting SMEs by making sure that the small scale producers do not compromise with the requirements of standards.

During the exhibition, TBS officials served many visitors including Regional Commissioners, Regional Administrative Secretaries, District Commissioners, District Administrative Secretaries and District Executive Directors. Those public leaders were used as channels to pass the standardization and quality education to the people in their respective areas of leadership.

Speaking during the event, Bunda District Commissioner, Hon Lydia Bupilipili said most of SMEs are not aware of procedures to certify their products and services.

She called on TBS to continue educating SMEs in the country so that they understand all the procedures before engaging in any kind of activity. She noted that by doing so it will help SMEs to build sustainable industries for Tanzania to become a semi-industrialized country by 2025.

TBS participated in the Second Industrialization Exhibition and used the opportunity to educate manufacturers and public on the TBS activities and procedures to be followed to obtain the TBS Mark of Quality.



TBS Standards Officer (left) Mr. Joseph Ismail speaks to guests who visited the Bureau's pavilion at the recent industrialization exhibition at the Mwalimu Julius Nyerere Grounds in Dar es Salaam

PUBLIC AWARENESS CAMPAIGN ENHANCED IN CENTRAL ZONE

By Rhoda Mayugu

A total of 6,250 citizens have been educated about TBS functions, activities and procedures to acquire TBS Mark OF Quality during a community awareness campaign conducted by the Bureau at district level in the Central Zone.

The districts covered were Bahi, Manyoni, Nzega and Kibondo. Three different groups of people were reached of which 4,400 were normal citizens, 1,717 were students and 133 were SMEs.

During the campaign, the general public was informed on the importance of standards whenever they intend to make any purchase and ways to identify the TBS Mark of Quality on a product.

The awareness education on functions and activities

of TBS was also given to students to enable them to understand the importance of standards so as to become good ambassadors to preach standards to the general public.

The SMEs were informed on the government support to SMEs, whereby, TBS under the sponsorship of the Government provides certification services to small scale producers free of charge for three consecutive years. The SMEs were also educated about procedures to acquire the TBS Mark of Quality.

TBS has been conducting community awareness campaign since 2016/2017 whereby last year the awareness campaign was conducted at universities and for the year 2017/2018 the awareness has been conducted at district levels.



TBS Standards Officer Mr. Gibron Charles speaks to students about TBS activities and quality issues during the recent awareness campaign in the Central Zone.

MINISTER URGES TBS TO SPEED UP ISSUANCE OF TEST RESULTS

By Roida Andusamile



Deputy Minister for Industries, Trade and Investment Eng. Stella Manyanya (left) receives explanations concerning testing of construction materials and equipment from the Head of Construction laboratory Mr. Stephen Minja (right) during her recent familiarization tour to TBS headquarters in Dar es Salaam. Right from the Deputy Minister is the TBS Director General Prof. Egid Mubofu and other members of staff.

Deputy Minister for Industries, Trade and Investment Eng. Stella Manyanya has urged TBS to speed up the issuance of results of tested samples for customers to have enough time to complete other procedures of the Government for their investments to take off.

The Deputy Minister gave the directive while speaking to members of TBS Staff at her recent familiarization tour to the Bureau.

Apart from the directive, the Eng. Manyanya thumbed up to TBS saying that the Government was satisfied with the Bureau's performance but directed that there is a need to fast track issuance of results for tested samples in laboratories.

"I have been impressed by the readiness of members of TBS staff in executing their duties. I want you to make sure that results of samples being sent to you for quality testing are released with a short time but without compromising to standards," She said.

According to her, the Government understands that there were some challenges facing the standards watchdog including shortage of staff and insufficient laboratories but urged the Management to use the available resources wisely as the Government was striving to address those challenges.

She said that the increase of entrepreneurs in the industrial sector comes with the challenge related to production of sub-standard products thus she challenged the Bureau to continue expanding its

span to make sure that all entrepreneurs all over the country are reached by TBS.

"I urge all business persons to have confidence with TBS and ask for support whenever needed to...but TBS must also play its role by giving timely information as well as having in place competent staff and modern equipment," She said.

Earlier on, TBS Board Chairman Prof. Makenya Maboko appreciated Eng. Manyanya for the priority She gave TBS by making it one of the first institutions to visit shortly after her appointment.

"This visit is an honour to us, we promise to continue with our role of setting standards without any compromise because that is the only way to make sure that consumers' safety is protected as we move towards industrialization," He said adding,

"We are strict on imported goods as we don't want to be a dumpsite, we are also strict on locally produced goods because we don't want to be rejected in the international market," added Prof. Maboko.

For his part the TBS Director General Prof. Egid Mubofu said that the agency is well prepared to set up offices all over the country insisting that the role of TBS is to ensure adherence to standards for the safety of consumers.

CERTIFY PRODUCTS TO REACH FOREIGN MARKETS, SMES COUNSELLED

By Roida Andusamile

Local manufacturers have been urged to use the available opportunity to certify their products in order to enable them access market within and outside the country.

Speaking at the SMEs trade exhibition held in Lindi region TBS Inspector Juma Haji pledged support to SMEs who intend to get quality mark for free.

"I urge entrepreneurs to use the available opportunity and make sure that their products are certified so that they can access market anywhere," He said.

According to him, all SMEs who want to get support from TBS have to route their applications through the Small Industries Development Organization (SIDO).

"SIDO knows SMEs better and they usually provide entrepreneurship trainings prior to applying for the certification from TBS, it is better and helpful for them to go there first," He noted.

SMEs are exempted from paying fees related to certification because of their low financial base; hence it is the intention of the Government to see small producers are empowered to access markets anywhere in the world.

Speaking on behalf of other SMEs, an entrepreneur Said Ngajulage urged the Government's agents responsible for certification to jointly conduct inspection of substandard goods which have flooded the local market.

“ There are still substandard goods like roofing sheets which are imported from nearby countries through porous borders, we urge institutions such as TBS in collaboration with other institutions to conduct joint inspection to arrest the culprits. ”
He said

NEWS STORIES

S MARKS WORLD STANDARDS DAY IN STYLE, PROMOTES ESSAY WRITING

By Roida Andusamile

Tanzania Bureau of Standards (TBS) has marked the World Standards Day by awarding certificates to students who won essay writing competition as a move towards promoting standards in the country.

Speaking to journalists shortly after officiating a function to mark the day, TBS Director General Prof. Egid Mubofu said the day was taken seriously by his institution through creating awareness among students on matters related to adherence to standards.

"We are marking the World Standards day by organizing various activities including essay writing competition among secondary students as a way of creating awareness on the importance of standards to the young generation," Prof. Mubofu explained.

He said the major aim of marking the day was to educate people on the importance of standards in improving their lives through the quality of their assets, health and safety among others.

Prof. Mubofu said, every year the international organization for standardization (ISO) has a theme on the marking of the day in question and this year's theme was 'Standards Make Cities Smarter' which emphasizes the importance of standards in improving the livelihood of urban dwellers.

"The Bureau has been organizing essay competition in secondary schools using the theme of the specific year with the aim of measuring the understanding of students on issues related to standards and quality," said Prof. Mubofu.

He added that the competition helps TBS measure the extent at which citizens understand the importance of standards and what should be done in capacity building, especially for students to understand the importance of standards in their lives.

Prof. Mubofu said the awards and certificates given to the winners of the competition are taken as a motivation to them and to other students to participate in future competitions but also enhance their capacity and knowledge on various matters.

"TBS is determined to improve people's lives and ensure that standards are adhered especially in the areas of production, construction and health. The Government's objective of becoming an industrialized economy will be possible with strictness in adherence to standards," He stressed.

Earlier on, the TBS Director of Standards Development Ms. Edna Ndumbaro seconded that the objective of TBS through essay competition was to create awareness on standard matters to the current and future generations.

A total of ten students from Kibaha, Feza, Ilboru and Loyola Secondary Schools won prizes and certificates. The best winner was Barnabas Michael from Kibaha Secondary School.

The winner commended TBS for coming up with the idea which according to him it promotes and increases understanding of matters related to standards and quality issues.

"I take this opportunity to encourage my fellow students to take part in these competitions since they are useful for the expansion of our knowledge about standards, He said."

World Standards Day is celebrated internationally each year as a means to honour the efforts of thousands of experts who develop voluntary standards within standards development organizations.

GOVT TO ESTABLISH NEW STANDARD ON FIREFIGHTING EQUIPMENT

By Roida Andusamile

The government will soon introduce new standard on gas plant firefighting equipment in a move to ensure that the coming industries perform their duties in a safe environment.

Speaking recently during an event to educate the public on firefighting equipment, TBS standards officer, Mr. Mohammed Kaila said preparations for the said standard have already started.

The two-day event organized by the Fire and Rescue Force of the Dar es Salaam Special Police Zone attracted hundreds of participants.

Kaila said that a draft for the expected standard had already been prepared and the first Technical Committee under Tanzania Bureau of Standards (TBS) had discussed it.

He said if all plans go smoothly the new standard will become operational within one year. He said that the standard was developed purposely to enable investors in gas and oil industry to have firefighting equipment which would help in case of emergencies.

Whenever standard covers a product that can affect health, safety, environment or with significant impact to the national economy, such a standard is published as a compulsory standard. All other standards are voluntary.

According to TBS, Currently there are eight Supervisory Committee commonly known as Divisional Standards Committees.

The Supervisory Committees comprise of at least 12 members each. Member are drawn from a cross-section of stakeholders that include the government academia and research, manufacturers, distributors and consumers.

Earlier, Fire and Rescue Force Commissioner General Inspector Thobias Andengenyne urged Tanzanians to continue using the force in case of disaster or fire accidents.

He asked the Government to support the force in order to enable it to meet its objective of serving people during fire accidents and disasters and reduce complaints from the public.





TANZANIANS URGED TO BE CUSTODIANS OF PRODUCTS QUALITY

By Neema Mtemvu

Tanzania Bureau of Standards (TBS) Director General Prof. Egid Mubofu has called on Tanzanians to be custodians of the quality of goods as a prerequisite towards enabling local products to win regional and international markets.

Prof. Mubofu made the call recently during a ceremony to grant licences and certificates to manufacturers whose products have been tested and verified, which was held at TBS headquarters in Dar es Salaam.

“Let us be good custodians of quality goods to ensure all locally made goods and exported products are of required quality,” the TBS boss said, after presenting standards mark licences and tested product certificates to over 60 producers in Dar as Salaam.

He said the Bureau would continue with its strictness to standards and ensure issues related to standards are not compromised.

“We are trying to reach everywhere and do whatever we can to get rid of inferior goods, you (the producers) must help us but also the consumers should stop buying goods that do not have our quality mark. We are not ready to see substandard goods being exported. International markets need quality goods,” he insisted.

Prof. Mubofu also explained why TBS has been spending much time in laboratories before confirming goods, saying that the matter of testing requires enough time to get desirable results and ensure that consumers are protected.

“We would have wanted to issue test results more quickly, but we have no choice because these are scientific reports,” explained Prof. Mubofu, adding that as the country embraces industrialization, TBS is the engine for industrial growth.

He pointed out that standards set by TBS were for the public since the standards formulation process engages all stakeholders from manufacturers, academicians, consumers and many others, adding that TBS was dedicated in ensuring that it is fulfilling its duty.

Earlier, the Bureau’s Head of Product Certification, Ms. Ashura Kilewela reminded manufacturers to differentiate between the TBS logo and the TBS quality mark, adding that all goods must have TBS quality mark.

“I have seen some of you putting the TBS logo and not the quality mark on your products. This is not right,” she said and highlighted the differences between the logo and the mark for easier differentiation and identification by manufacturers and consumers



TANZANIA BUREAU OF STANDARDS (TBS)



TBS does not just offer various standards on building and construction, but also provides testing of various building and construction materials through its material testing laboratory (MTL) which has three sections:

- Building and Construction
- Mechanical Engineering
- Electrical Engineering

The Home of Standards

TRANSPORT STAKEHOLDERS ENCOURAGED TO USE TANZANIA STANDARDS

By Neema Mtemvu

Transport stakeholders have been reminded make use of available Tanzania Standards in their daily operations.

TBS Standard officer, Mr. Anold Mato made the remark at the recently road safety week exhibition held at Mashujaa grounds in Kilimanjaro region.

Mr. Mato said most transport stakeholders in Tanzania prefer to use foreign standards which are more expensive compared to Tanzania Standards though they of the same requirements.

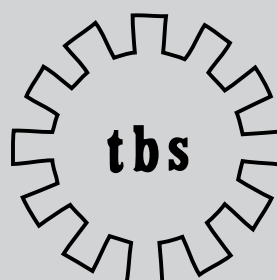
“We need to make use of our local standards for example in transport sector we have various standards like in road humps, road construction materials, bus bodies, motorcycles, helmets among others.

“ ***Our major role is to develop standards that provide confidence in safety, trade, health as well as protecting the environment, He added.*** ”

TBS attended the exhibition so as to educate and bring awareness to stakeholders on standards issues and other activities of TBS.



Mr. Anold Mato (right) TBS Standards Officer listens from visitors who toured the TBS pavilion at a recent Road Safety Week held at Mashujaa Grounds in Moshi Kilimanjaro region.



NEWS STORIES

STAKEHOLDERS CHALLENGED TO ADOPT NEW COLOUR CODE FOR CABLES

By Neema Mtemvu

Stakeholders in construction industry have been challenged to adopt and implement the new colour code for electric cables as a move towards aligning with International Standards and improve safety.

The challenge was posed by the Director of Standards Development Ms Edna Ndumbaro, during a one-day workshop on implementation on new colour codes for cables, which attracted participants from various stakeholders including cable manufacturers, suppliers, distributors, importers and contractors.

“Our major role is to develop standards that provide confidence in safety, trade, health as well as protecting environment,” Ms Ndumbaro explained, adding that engagement of stakeholders was part of implementation of the pillars of standardization which are the transparency, consensus and openness during development of standards.

She said national standards are basically developed by stakeholders in technical committees comprising experts from the industries, manufacturers, regulators, higher learning institutions and others, while TBS stands as a facilitator.

According to the Director, the workshop was organized to enable stakeholders to discuss the way forward on the implementation of the new colour code

contained in the Tanzania Standard (TZS) 1518 (8), Polyvinyl chloride insulated cables of rated voltages up to and including 450/750 V — Part 8: Single core, flat twin and 3-core sheathed cables for fixed wiring which was declared compulsory in 2016.

Presenting a paper during the event, TBS Standards Officer Mr. Henry Massawe said the new colour codes will help reduce electrical hazards of imported electrical products. “Let us not compromise with sensitive issues when it comes to standards,” Mr. Massawe said, noting that the change of colour meant a lot in aligning to International Standards.

Earlier, a representative of NAMIS Corporate Limited, Mr. Bright Naimani showered praises on the TBS organized workshop for stakeholders saying such platforms help to increase understanding and to bring stakeholders on the same page with the standards body.

“We as key stakeholders need to be conversant when dealing with cables,” Mr Naimani stressed. The seminar was organized by TBS so as to educate and bring awareness to the stakeholders on compliance with new colour code for cables.

ACTIVITIES REPORT

FINALIZED TANZANIA STANDARDS

During the period July – December, 2017 the following 119 draft standards were finalized;

MECHANICAL ENGINEERING STANDARDS

1. **FTZS 353:2017 Galvanized plain and corrugated steel sheets – Specification**
2. **FTZS 948:2017 Metal roofing tiles – Specification.**
3. **FTZS 1475:2017 Sheet roof and wall covering – Aluminium alloy corrugated and troughed sheet.**
4. **FTZS 1476:2017 Hot – Dip aluminium – Zinc coated plain, corrugated and troughed steel sheets – Specification.**
5. **FTZS 1477:2017 Specification for steel sheet, metallic coated by the hot-dip process and pre-painted by the coil-coating process for exterior exposed building products**
6. **FTZS 2084:2017 Modified safari vehicles - Code of practice for safari vehicles modification**
7. **FTZS 2085:2017 Modified road vehicle passenger transportation – Code of practice for body modification**

BUILDING AND CONSTRUCTION STANDARDS

8. **FTZS 653:2017 Standard Title: Soil test methods – Terms and definitions**
9. **FTZS 2098-2:2017 /ISO 22476-2:2005 Geotechnical investigation-field testing—Part 2: Dynamic probing**
10. **FTZS 2097-1:2017 /ISO 22476-1:2012 Standard Title: Geotechnical investigation and testing — Field testing —Part 1: Electrical cone and piezocone penetration test.**

11. **FTZS 2096-2:2017/ ISO 17892-2:2014 Standard Title: Laboratory testing of Soil—Determination of bulk density**
12. **FTZS 2099-3:2017 /ISO 22476-3:2005 Standard Title: Geotechnical investigation and testing –Field testing, Part 3: Standard penetration test.**
13. **FTZS 2100-7:2017 /ISO 22476-7:2012 Standard Title: Geotechnical investigation and testing —Field testing —Part 7: Borehole jack test**
14. **FTZS 2094 -1:2017/ISO 1720-1: 2004 Testing of concrete – Part 1: Sampling of fresh concrete**
15. **FTZS 2094-2:2017/ISO 1720-2: 2016 Testing of concrete – Part 2: Properties of fresh concrete**
16. **FTZS 2094-3:2017/ISO 1720-3: 2004 Testing of concrete – Part 3: Marking and curing test specimens**
17. **FTZS 2094-4:2017/ISO 1720-4: Testing of concrete – Part 4: Strength of hardened concrete**
18. **FTZS 2094-5:2017/ISO 1720-5: 2004 Testing of concrete—Part 5: Properties of hardened concrete other than strength**
19. **FTZS 2094-6:2017/ISO 1720-6: 2004 Testing of concrete – Part 6: Sampling, preparing and testing of concrete cores**
20. **FTZS 2094-7:2017/ISO 1720-7: 2004 Testing of concrete – Part 7: Non - destructive tests on hardened concrete**
21. **FTZS 1471:2017 Burnt building bricks – Specification**

ACTIVITIES REPORT



22. **FTZS 2095:2017 Masonry Vocabulary**
23. **FTZS256-1:2017 Timber** – Dimensions for coniferous sawn timber (Cypress and Pine)
24. **FTZS 333: 2017 Timber** – Determination of average moisture content of a lot.
25. **FTZS2043-2: 2017/ ISO13061-2:2014 Physical and Mechanical Properties of Wood** — Test Methods for Small Clear Wood Specimens — Part 2: Determination of density for physical and mechanical tests
26. **FTZS2043-1: 2017 /ISO 13061-1:2014 Physical and mechanical properties of wood** – Test methods for small clear wood specimens – Part 1: Determination of moisture content for physical and mechanical tests
27. **FTZS2043-7: 2017/ ISO 13061-7 2014 Physical and mechanical properties of wood** — Test methods for small clear wood specimens — Part 7: Determination of ultimate tensile stress perpendicular to grain
28. **FTZS2043-6: 2017/ISO 13061-6: 2014 Physical and mechanical properties of wood** — Test methods for small clear wood specimens —Part 6: Determination of ultimate tensile stress parallel to grain
29. **FTZS1093-8: 2017/ISO 10545-8:2014 Ceramic tiles** – Part 8: Determination of linear thermal expansion
30. **FTZS1093-9: 2017/ISO 10545-9:2013 Ceramic tiles**—Part9:Determination of resistance to thermal shock
31. **FTZS1093-10: 2017/ISO10545-10:1995 Ceramic tiles**—Part 10:Determination of moisture expansion
32. **FTZS1093-11: 2017/ISO 10545-11:1994 Ceramic tiles** – Part 11: Determination of crazing resistance for glazed tiles
33. **FTZS 1093-12: 2017/ISO 10545-12:1995 Ceramic Tiles**— part 12: Determination of frost resistance
34. **FTZS 1093-13: 2017/ISO 10545-13:1995 Ceramic Tiles**— part 13: Determination of chemical resistance (Ed 2)
35. **FTZS 1093-14: 2017/ISO 10545-14:2015 Ceramic Tiles**— part 14: Determination of resistance to stains
36. **FTZS 1437:2017 Timber structures** – Joints made with mechanical fasteners – General principles for the determination of strength and deformation characteristics
37. **FTZS1439-2: 2017/ISO 10984-2:2009 Timber structures** – Dowel-type fasteners – Part 2: Determination of embedding strength
38. **FTZS1440-1: 2017/ISO 22389-1 2010 Timber structures** – Bending strength of I-beams –Part 1: Testing, evaluation and characterization
39. **FTZS1441:2017/ ISO 8970 2010 Testing of joints made with mechanical fasteners** – Requirements for wood density
40. **FTZS 1439-1:2017/ ISO 10984-1:2009 Timber structures** – Dowel-type fasteners – Part 1: Determination of yield moment
41. **FTZS1573:2017/ ISO 9087:1998 Wood** – Determination of nail and screw holding power under axial load application

FOOD AND AGRICULTURE STANDARDS

42. **FTZS 1627:2017/ EAS 891:2017, Carrots** Specification
43. **FTZS 1086:2017/ EAS 892:2017, Banana** Specification
44. **FTZS 1704/EAS 16:2017 Fresh Avocado** Specification
45. **FTZS 1000: 2017/EAS 83:2017, Tomatoes** Specification
46. **FTZS 2101: 2017/EAS 91:2017 Passion Fruits** Specification

47. **FTZS 1001: 2017/EAS 329:2017, Fresh Mangoes Specification**
48. **FTZS 2058:2017/EAS 894:2017, Onions Specification**
49. **FTZS 999: 2017/EAS 6:2017, Fresh Pineapples Specification**
50. **FTZS 1278: 2017/EAS 748:2017 Warehouse Potato Specification**
51. **FTZS 1003: 2017/ISO 7558: 1988) Guide to the prepacking of fruits and vegetables**
52. **FTZS 2057:2017 Fresh watermelons Specification**
53. **FTZS 161: 2017/EAS 893:2017, Chilli Sauce Specification**
54. **FTZS 160: 2017/EAS 66-1:2017, Tomato products — Specification — Part 2: Tomato sauce and ketchup**
55. **FTZS 2059:2017/EAS 66-1:2017, Tomato products — Specification — Part 1: Canned (preserved) tomato**
56. **FTZS 2060:2017/EAS 66-3:2016, Tomato products — Specification — Part 3: Tomato juice**
57. **FTZS 87: 2017/EAS 66-4:2017, Tomato products — Specification — Part 4: Canned tomato concentrate (puree and paste)**
58. **FTZS 2063: 2017 Dried tropical fruits - Specification**
59. **FTZS 1192: 2017 Roselle Non-Alcoholic drink- Specification**
60. **FTZS 303: 2017 (Rev TZS 303:2012) Mango Juice Specification**
61. **FTZS 304: 2017 (Rev TZS 304:2012) Pineapple Juice Specification**
62. **FTZS 388: 2017 (Rev TZS 305:2012) Passion Juice Specification**
63. **FTZS 247: 2017 (Rev TZS 247:2012) orange juice Specification**
64. **FTZS 245: 2017 (Rev TZS 245:2012) Lemon juice Specification**
65. **FTZS 2021:2017 (EAS 870:2017) Crackers from marine and freshwater fish, crustacean and molluscan shellfish — Specification**
66. **FTZS 2022:2017 (EAS 871:2017) Fish Sausages — Specification**
67. **FTZS 2023:2017 (EAS 872:2017) Frozen Octopus — Specification**
68. **FTZS 2024:2017 (EAS 873:2017) Frozen Tuna Loins — Specification**
69. **FTZS 2025:2017 (EAS 874:2017) Processing and handling of prawns or shrimps — Code of practice**
70. **FTZS 2026:2017 (EAS 875:2017) quick frozen prawns or shrimps Specification**
71. **FTZS 2027:2017 (EAS 876:2017) Smoked fish, smoke-flavoured and smoke-dried fish — Specification**
72. **FTZS 2028:2017 (EAS 895:2017) Fish protein concentrate — Specification**
73. **FTZS 2029:2017 (EAS 896:2017) Fried Fish — Specification**
74. **FTZS 2030:2017 (EAS 897:2017) Frozen Lobster Tails — Specification**
75. **FTZS 2031:2017 (EAS 898:2017) Processing and handling of smoked fish, smoke-flavoured fish, smoke-dried fish and smoked fish products — Code of practice**
76. **FTZS 2032:2017 (EAS 899:2017) Tuna Canned in Oil — Specification**
77. **FTZS 2033:2017 (EAS 62-1:2017) Fish handling and processing — code of practice — part 1: Fresh fish**
78. **FTZS 330:2017 (EAS 900:2017) Cereals and pulses – Sampling**

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79. **FTZS 331:2017 (EAS 901:2017) Cereals and pulses – Test methods**
80. **FTZS 437:2017 (EAS 51:2017) Wheat grains – Specification**
81. **FTZS 765:2017 (EAS 95:2017) Sorghum flour – Specification**
82. **FTZS 688:2017 (EAS 89:2017) Millet flour – Specification**
83. **FTZS 592:2017 (EAS 128:2017) Milled rice – Specification**
84. **FTZS 438:2017 (EAS 2:2017) Maize grains – Specification**
85. **FTZS 875:2017 (EAS 46:2017) Dry beans – Specification**
86. **FTZS 1083:2017 (EAS 762:2017) Dry soy beans – Specification**
87. **FTZS 328-1:2017 (EAS 44:2017) Milled maize products – Specification**
88. **FTZS 328-2:2017 (EAS 768:2013) Fortified Milled maize products – Specification**
89. **FTZS 439 -1:2017 (EAS 1:2017) Wheat flour – Specification**
90. **FTZS 439-2:2017 (EAS 767:2013) Fortified Wheat flour – Specification**
91. **FTZS 221:2018 Soap carbolic -Specification (Revision of TZS 221:1984)**
92. **FTZS 222:2018 Soft Soap –Specification (Revision of TZS 222:1984)**
93. **FTZS 224-1:2018 Surface active agents – Methods for performance tests - Part 1: Relative dispersing power (Revision of TZS 224-1: 1984)**
94. **FTZS 224-2:2018 Surface active agents – Methods for performance tests - Part 2: Relative emulsifying power (Revision of TZS 224-2: 1984)**
95. **FTZS 224-3:2018 Surface active agents – Methods for performance tests - Part 3: Foaming power (Revision of TZS 224-3: 1984)**
96. **FTZS 224-4:2018 Surface active agents - Methods for performance tests – Part 4: Relative detergency (Revision of TZS 224-4: 1984)**
97. **FTZS 2102:2018/EAS 974:2013 Determination of the microbial inhibition of cosmetic soap bars and liquid hand and body washes — Test method**
98. **FTZS 378:2018 Sodium hydroxide - Specification (Revision of TZS 378:1989)**
99. **FTZS 379:2018 Code of safety for sodium hydroxide (caustic soda) (Rev TZS 379:1989)**
100. **FTZS 383:2018 Determination of copper content in Sodium hydroxide(Revision of TZS 383:1999)**
101. **FTZS 384:2018 Determination of calcium and magnesium content in sodium hydroxide (for industrial use) (Rev TZS 384:1999)**
102. **FTZS 77:2018/ISO 760:2016 Determination of water - Karl Fischer method (General method) (Revision of TZS 77:2010)**
103. **FTZS 381:2018 Determination of iron content – 1,10-phenanthroline photometric method – in Sodium hydroxide (Revision of TZS 381:1999)**
104. **FTZS 494:2018/ISO 3196:2011 Sodium hydroxide for industrial use - Determination of Carbonates content - Titrimetric method (Revision of TZS 494:2010)**
105. **FTZS 495:2018/ISO 981:2011 Sodium hydroxide for industrial use - Determination of Chloride content - Mercurimetric method(Revision of TZS 495:2010)**
106. **FTZS498:2018/ISO 5993:2011 Sodium hydroxide for industrial use - Determination of Mercury content - Flameless atomic absorption spectrometric method (Revision of TZS 498:2010)**
107. **FTZS 993-1 :2017/ ISO 7886-1:2017(Rev.TZS 993-1:2008/ISO 7886-1:1993), Sterile hypodermic syringes for single use —Part 1: Syringes for manual use**

108. **FTZS 1052 :2017/ ISO 6009:2016(Rev.TZS 1052:2008/ISO 6009:1992), Hypodermic needles for single use** — Colour coding for identification
109. **FTZS 1053:2017/ ISO 7864:2016(Rev.TZS 1053:2008/ISO 7864:1993), Sterile hypodermic needles for single use** — Requirements and test method

BUILDING AND CONSTRUCTION STANDARDS

110. **FTZS 727-1:2018-EAS 18-1:2017 Cement** — Part 1: Composition, specification and conformity Criteria for common cement
111. **FTZS 727-2:2018-EAS 18-2:2017 Cement** — Part 2: Conformity evaluation
112. **FTZS 760-1:2018-EAS 148-1:2017 Cement** — Test methods — Part 1: Determination of strength
113. **FTZS 760-2:2018-EAS 148-2:2017 Cement** — Test methods — Part 2: Chemical analysis
114. **FTZS 760-3:2018-EAS 148-3:2017 Cement** — Test methods — Part 3: Determination of setting times and soundness
115. **FTZS 760-4:2018-EAS 148-4:2017 Cement** — Test Methods — Part 4: Quantitative determination of constituents
116. **FTZS 760-5:2018-EAS 148-5:2017 Cement** — Test methods — Part 5: Pozzolanicity test for pozzolanic cements
117. **FTZS 760-6:2018-EAS 148-6:2017 Test methods** — Part 6: Determination of fineness
118. **FTZS 760-7:2018-EAS 148-7:2017 Cement** — Test methods — Part 7: Methods of taking and preparing samples
119. **FTZS 760-8:2018-EAS 148-8:2017 Cement** — Test methods — Part 8: Heat of hydration – Solution method

STANDARDS CIRCULATED FOR PUBLIC COMMENTS

During the period of July – December 2017, the following 54 draft Tanzania Standards were circulated to stakeholders for comments.

MINING AND MINERALS STANDARDS

1. **MMDC 3 (4764) P3/ISO 5068-1:2007 Brown coals and lignites** — Determination of moisture content - Part 1: Indirect gravimetric method for total moisture
2. **MMDC 3 (4765) P3/ISO 5068-2:2007 Brown coals and lignites** — Determination of moisture content — Part 2: Indirect gravimetric method for moisture in the analysis sample.
3. **MMDC 3 (4766) P3/ISO 687:2010 Solid mineral fuels** — Coke — Determination of moisture in the general analysis test sample.
4. **MMDC 3 (4768) P3/ISO 925:1997 Solid mineral fuels** — Determination of carbonate carbon content - Gravimetric method.
5. **MMDC 3 (4769) P3/ISO 29541:2010 Solid mineral fuels** — Determination of total carbon, hydrogen and nitrogen content — Instrumental method.
6. **MMDC 3 (4744) P3 / ISO 5072:2013(E) Brown coals and lignites** — Determination of true relative density and apparent relative density.
7. **MMDC 3 (4745) P3/ ISO 5074:1994(E) Hard coal** - Determination of Hardgrove grindability index.
8. **MMDC 3 (4813) P3 / ISO 501:2012(E) Hard coal** — Determination of the crucible swelling number.
9. **MMDC 3 (4814) P3 / ISO 7936:1992(E) Hard coal** - Determination and presentation of float and sink characteristics – General directions for apparatus and procedures.

ACTIVITIES REPORT

MECHANICAL ENGINEERING STANDARDS

10. **MEDC2(5001) P3** - Industrial wire cloth for general engineering purposes
11. **MEDC11(5101) P3 /ISO 4064-2:2014-** Water meters for cold portable water and hot water – Part 2: Test Method
12. **MEDC11(5100) P3 /ISO 4064-3:2014-** Water meters for cold portable water and hot water – Part 3: Test Report
13. **MEDC11(5102) P3 /ISO 12242:2014-** Measurement of fluid flow in closed conduit- ultrasonic transit – time meters for liquid
14. **MEDC13 (3164) P3 /ISO 9151:1995** - Protective clothing against heat and flame-determination of heat transmission of exposure to flame.
15. **MEDC2(5000) P3** - Steel wool – Specifications
16. **MEDC9(5277) P3-** Pneumatic tyres for passenger cars – Specification (Rev TZS 618: 1999)
17. **MEDC9(5278) P3-** Air cleaning equipment for internal combustion engines and compressors (Rev TZS 1959:2017)
18. **MEDC 2(5002) P3 /ISO 11625:2007 - Gas cylinders –** Safe handling.
19. **MEDC13 (4938) P3** - Specification for first Aid hose-reel for fire fighting
20. **MEDC13 (5513) P3/ ISO 7240-1:2014** - Fire detection and alarm systems – Part 1: General and definitions.
21. **MEDC13(5514) P3/ ISO 6182-1:2014** - Fire protection –Automatic sprinkler systems -Part 1: Requirements and test methods for sprinklers
22. **MEDC13 (5515) P3/ ISO 6182-3:2012** - Fire protection – Automatic sprinkler systems - Part 3: Requirements and test methods for dry pipe valves.

23. **MEDC13 (5516) P3/ ISO 6182-5:2012** - Fire protection – Automatic sprinkler systems -- Part 5: Requirements and test methods for deluge valves.
24. **MEDC13(5659) P3/ ISO 6182-6:2006** - Fire protection – Automatic sprinkler systems – Part 6: Requirements and test methods for check valves
25. **MEDC13(5660) P3/ ISO 6182-8:2006** - Fire protection – Automatic sprinkler systems – Part 8: Requirements and test methods for pre-action dry alarm)

CHEMICAL STANDARDS

26. **CDC 2(4969) P3 Soap soft** - Specification (Revision of TZS 222: 1984)
27. **CDC 2(4970) P3 Soap carbolic** - Specification (Revision of TZS 221: 1984)
28. **CDC 2(5220) P3 Surface active agents** – Methods for performance tests – Part 1: Relative dispersing power (Revision of TZS 224-1: 2009)
29. **CDC 2(5220) P3 Surface active agents** – Methods for performance tests – Part 2: Relative emulsifying power (Revision of TZS 224-2: 2009)
30. **CDC 2(5220) P3 Surface active agents** – Methods for performance tests – Part 3: Foaming power (Revision of TZS 224-3: 2009)
31. **CDC 2(5220) P3 Surface active agents** – Methods for performance tests – Part 4: Relative Detergency (Revision of TZS 224-4: 2009)
32. **CDC7(2901) P3 Specification for Sodium hydroxide (pure, technical and analytical) (Revision of TZS 378: 1989);**
33. **CDC7(5160) P3 Code of safety for sodium hydroxide (caustic soda) (Revision of TZS 379: 1989)**
34. **CDC7(5161) P3 Determination of copper content in sodium hydroxide (Revision of TZS 383: 1999)**

35. CDC 7(5162) P3 Determination of calcium and magnesium content in sodium hydroxide (Rev. TZS 384: 1999)

36. CDC7 (5228) P3 Determination of iron content – 1, 10-phenanthroline photometric method – in sodium hydroxide (Revision of TZS 381:1999)

37. CDC7 (5227) P3/ISO ISO 760: 2016 Determination of water – Karl Fischer method (General method) (Revision of TZS 77:2010)

38. CDC7 (5229) P3/ISO ISO 3196: 2011 Sodium hydroxide for industrial use – Determination of carbonates content – Titrimetric method (Revision of TZS 494: 2010)

39. CDC7 (5230) P3/ISO ISO 981: 2011 Sodium hydroxide for industrial use – Determination of chloride content – Mercurimetric method (Revision of TZS 495:2010)

40. CDC7 (5231) P3/ISO ISO 5993: 2011 Sodium hydroxide for industrial use – Determination of mercury content - Flameless atomic absorption spectrometric method (Revision of TZS 498:2010)

41. CDC 21 (5273 P3)/ISO 6009:2016 -Hypodermic needles for single use-Colour coding for identification. (Rev.TZS 1052:2008/ISO 6009:1992)

42. CDC 21 (5274) P3/ISO 7864:2016 -Sterile hypodermic needles for single use-Requirements and test method. (Rev.TZS 1053:2008/ISO 7864:1993)

43. CDC 21 (5275) P3/ISO 7886-1:2017 - Sterile hypodermic syringes for single use-Part 1: Syringes for manual use. (Rev.TZS 993-1:2008/ISO 7886-1:1993)

TEXTILE STANDARD

44. The draft standard TDC 1 (5613) P3 National Flags
- Specification was circulated for stakeholders comments starting on 21st November 2017 for two months.

ENVIRONMENTAL STANDARDS

45. EMDC 5(5541)P3 Tolerance limits for environmental vibration

46. EMDC 5(5544)P3 TZS 1399:2011 (ISO 5349-1:2001) Mechanical Vibration-Measurement and Evaluation of human exposure to hand-transmitted vibration – General requirements

47. EMDC 5(5545) P3TZS 1400:2011 (ISO 5349-2:2001) Mechanical vibration- Measurement and evaluation of human exposure to hand transmitted vibration – Practical guidance for measurement at work place

48. EMDC 5(5543) P3TZS 1398:2011 (ISO 2631-1:1997) Mechanical vibration and shock evaluation of human exposure to whole body vibration- General requirements

49. EMDC 5(5684)P3 ISO 2631-2:2003: Mechanical vibration and shock Evaluation of human exposure to wholebody vibration —Part 2: Vibration in buildings (1 Hz to 80 Hz)

50. EMDC 5(5546)P3 TZS 1401:2011 (ISO 2041:2009) Mechanical vibration, shock and conditional monitoring – Vocabulary

51. EMDC 5(5547) P3 TZS 1402: 2011 (ISO 8041:2017) Human response to vibration. Measuring instrumentation- General purpose vibration meters

52. EMDC 4 (5530) P3/ ISO14040 Environmental management – life cycle assessment – Principles and framework

53. EMDC4 (5531) P3/ISO14044 Environmental management – Life cycle assessment – Requirements and guidance

54. EMDC 4 (5532) P3/ISO 14045 Environmental management - eco-efficiency assessment of product systems - Principles, requirements and guidance

ACTIVITIES REPORT



MEETINGS HELD

During the period of July – December 2017, the following standardization meetings were held:

MEETING	DATE
The Automotive components technical committee (MEDC 9)	2017-08-01
The Electrical Equipment Technical Committee (EDC 3)	2017-08-23
The Renewable Energy Technical Committee (EDC 5)	2017-08-25
Quality management and quality assurance Technical committee(GTDC)	2017-07-21
The General Techniques National Consultative Meeting	2017-07-21
Mining Technical Committee (MMDC2)	2017-07-02,
Chemical Divisional Standards Committee	26 to 27 -09- 2017.
Fresh fruits and vegetables technical committee(AFDC 26)	2017-08-28
Processed fruits and vegetables technical committee (AFDC 12)	2017-08-30
Spices and condiments technical committee (AFDC 07)	2017-08-31
Fertilizers and Soil Conditioners Technical Committee (AFDC 10)	2017-08-31
Alcoholic and Non Alcoholic Technical Committee (AFDC 13)	05 to 06 - 09- 2017
Solid Waste Technical committee (EMDC 8)	29 - 09- 2017
Flag Technical Committee (TDC1)	2017-09-28
Wastewater Technical Committee (EMDC 1)	2017-08-03
Electrotechnical Divisional Standards Committee(EDC)	2017-11-02
Mechanical Engineering Divisional Committee(MEDC)	2017-10-04 to 2017-10-05
Mining and Minerals Standards Divisional Committee (MMDC)	2017- 10 - 26 to 2017- 10 - 27
General Techniques Divisional committee (GTDC)	2017-12-08
Mechanical Engineering Standards Divisional(MEDC)	2017-12-15 to 2017-12-16
Automotive components Technical Committee (MEDC9)	2017-11-22
Foundation and Soil Technical Committee (BCDC13)	2017-10-20
Farm Implements and Agricultural Equipment Technical Committee(MEDC 10)	2017-10-03

Fire and firefighting Technical Committee(MEDC 13)	2017-10-12
Mining Technical Committee(MMDC2)	2017 - 10 - 04
Packaging Technical Committee (GTDC 4)	2017-10-18
Foundation and soil for civil engineering (BCDC13)	2017-12-28
Aggregate, sand and concrete technical committee (BCDC1)	2017-12-14 to 2017-12-15
Roofing and finishes technical committee (BCDC9)	2017-12-19
Electrical Equipment (EDC 1)	2017-12-12
Pipe and Pipes Technical Committee (MEDC4)	2017-12-14
Minerals processing technical committee (MMDC3)	2017-12-19
Chemical Divisional Committee (CDC) held a meeting	2017-12-13
Environmental Management Divisional Standards Committee (EMDC)	2017-11-16
Textiles Divisional Standards Committee (TDC)	16 - 11- 2017
National Consultative Meeting on Soaps and Detergents	2017-11-23
Chemicals Divisional Standards Committee	2017-10-09.
Soap and Detergent Technical Committee(CDC2)	2017-12-18
Solid Waste Technical committee (EMDC 8)	2017-11-17
Textile Apparels Technical Committee (TDC 2)	2017-11-14
Leather Products Technical committee (TDC11)	2017-11-27
Industrial and Laboratory Chemicals Technical Committee (CDC7)	2017-10-24
Gas Products Technical Committee (CDC 9)	2017-10-25
Stationary and Paper Products technical Committee (CDC 10)	2017 – 10 -13
Environmental Management Technical Committee (EMDC 4)	2017-10-24
Noise and Vibration Technical committee (EMDC 5)	2017-10-26
Sampling Procedures and Test Method Technical Committee (TDC 5)	2017-10-19
Microbiology Technical Committee (AFDC 8)	2017-10-26 & 27
Technical Committee meeting for Fish and Fishery Products (AFDC 23)	2017-10-26
Cereal, Pulses,Legumes and Related Products Technical Committee (AFDC 16)	2017-10-27

STAFF MATTERS

STAFF MATTERS

During the period of July to December 2017, sixty nine (69) new members of staff were recruited and three members from other public institutions joined the Bureau, one member of the staff was re-categorized, seven members were transferred to other government institutions, two members were terminated from work due to various reasons while one member of staff was reinstated to work.

OBITUARY

Mwakatimbo is no more



Tanzania Bureau of Standards (TBS) regrets to announce the death of Senior Driver Mr. John Issack Mwakatimbo.

Mwakatimbo (56), died on September 14, 2017 at Ocean Road Hospital in Dar es Salaam where he was attending medical treatment.

Born on March 14, 1961 in Amani village, Muheza rural district the deceased was laid to rest at his home village of Amani in Tanga region.

John Issack Mwakatimbo joined TBS as Driver III on 11 March 1998. Due to his good performance at work, he was promoted to Senior Driver. He spent nineteen years (19) of his life serving for TBS till his death.

TRAININGS

As efforts to empower its members of staff to go with the pace of the changes related to the advancement of science and technology in the world, in July to December 2017 the Bureau organized and allowed its employees to attend various long and short term training courses in and out of the country.

During the period under review, a total of 20 members of staff attended different long term courses in various higher learning institutions within and outside the country.

The courses which are being attended by the members of staff include PhD in Material Science and Engineering, PhD Programme in Molecular Epidemiology of Microorganism of Public Health, Master of Science in Environmental Technology and Management, Master of Science in Chemistry, Master of Science in Oil and Gas Engineering and Master of Science in Food Quality and Safety Assurance Science.

Master in Engineering Management, Bachelor of Engineering in Electrical Engineering, Master of Science in Information System Management, Master of Science in Food Quality and Safety Assurance Science, Master of Science in Applied Geology and Master Degree in Laser Measuring Technology.

Others are Master of Science in Civil Engineering, Master Degree in Petroleum Engineering, Master in Life Sciences (Sustainable Agriculture), Bachelor of Science in Petroleum Chemistry, Master of Science in Physics and Master of Science in Environment Technology Management.

A total of 598 members of staff attended short course trainings under the sponsorship of the Bureau and development sponsors in and out of the country during the period under review were.

Some of the short courses are as Training on Certificate of Proficiency in English & Business Communication at the Aptech, New Delh India, ITP

in Human Resource Planning and Development, Workshop on Proficiency Testing-to evaluate the Aflatoxin results, and Oil, Water and Gas Flow Measurement and Control Techniques & Standards at the Fluid Control Research Institute, Kerala.

Advance Certificate Course in Foreign Trade and International Business at the Shriram Institute of Business and Information Technology, Advanced Certificate Course in Tea Tasting and Quality Assurance at Kothari Agricultural Management Centre, Coimbatore, International Programme on Management System at the National Institute of Training for Standardization (BIS) NOIDA.

Training on Management Development Program on Operation, Maintenance and Calibration of Bio-Medical Equipment at the Central Scientific Instruments Organization.

Others were Training on VIP Driving course, Training on Organizational ICT Security, Training on PICO Solar Technology, Training national conference and Annual General Meeting, Training on ICT services and Workshop on the Workers Compensation Fund's 1st Annual Stakeholders Meeting.

PRODUCT SAMPLES TESTED AND CALIBRATIONS MADE

During the period of July to December 2017, the Bureau continued to offer testing, calibration and packaging services as summarized in the following tables:

Samples tested and calibration made for July – September, 2017

S/N	Laboratory	Expected Output	Actual
1	Building & Construction	275	349
2	Electrical	425	1156
3	Mechanical	600	1161
4	Chemistry	550	978
5	Food	675	1088
6	Textile	400	1427
7	Packaging	150	191
8	Metrology	2000	2041
Total		5075	8391

Samples tested and calibration made for October – December, 2017

S/N	Laboratory	Expected Output	Actual
1	Building & Construction	276	272
2	Electrical	426	816
3	Mechanical	600	897
4	Chemistry	549	733
5	Food	675	974
6	Textile	399	1113
7	Packaging	150	146
8	Metrology	2001	1186
Total		5076	6137

STAFF MATTERS

NEW ARRIVALS

During the period July to December 2017, the TBS Information Centre received several International Standards to add to its current stock. Among others, the following standards are of special interest:

AGRICULTURE AND FOOD STANDARDS

1. **ISO 4254-7:2017 Agricultural machinery** – Safety – Part 7: Combine harvesters, forage harvester, cotton harvesters and sugar cane harvesters.
2. **ISO 4254-12:2017 Agricultural machinery** – Safety – Part 12: Rotary disc and drum mowers and flail mowers.
3. **ISO 5395-3:2017 Garden equipment** - Safety requirements for combustion-engine-powered lawnmowers - Part 3: Ride-on lawnmowers with seated operator
4. **ISO 16119-2:2017 Agricultural and forestry machinery** - Environmental requirements for sprayers - Part 2: Horizontal boom sprayers.
5. **ISO 19670:2017 Fertilizers and soil conditioners** - Solid urea aldehyde slow release fertilizer - General requirements.
6. **ISO 20311:2017 Traditional Chinese medicine** - Salvia miltiorrhiza seeds and seedlings

BUILDING AND CONSTRUCTION STANDARDS

1. **ISO 2074: 2017 Plywood** – Vocabulary.
2. **ISO 4708: 2017 Composition cork** - Gasket material – Test methods.
3. **ISO 6707-1: 2017 Building and civil engineering works** – Vocabulary- Part 1: General terms.
4. **ISO 6707-2: 2017 Building and civil engineering works** – Vocabulary- Part 2: Contract and communication terms.
5. **ISO 8394-2: 2017 Building and civil engineering works** – Determination of extrudability for sealant – Part 2: Using standardized apparatus.
6. **ISO 9836: 2017 Performance standards in building** – Definition and calculation of area and space indicators.
7. **ISO 10639:2017 Plastics piping systems for pressure and non-pressure water supply** – Glass-reinforced thermosetting plastics (GRP) systems based on unsaturated polyester (UP) resin.
8. **ISO 10848-1: 2017 Acoustics** – Laboratory and field measurement of flanking transmission for airborne, impact and building service equipment sound between adjoining rooms – Part 1: Frame document.
9. **ISO 10848-2: 2017 Acoustics** – Laboratory and field measurement of flanking transmission for airborne, impact and building service equipment sound between adjoining rooms – Part 2: Application to type B elements when the junction has a small influence.
10. **ISO 10848-3: 2017 Acoustics** – Laboratory and field measurement of flanking transmission for airborne, impact and building service equipment sound between adjoining rooms – Part 3: Application to type B elements when the junction has a substantial influence.
11. **ISO 10848-4: 2017 Acoustics** – Laboratory and field measurement of flanking transmission for airborne, impact and building service equipment sound between adjoining rooms – Part 4: Application to junction with at least one type A element.
12. **ISO 16817: 2017 Building environment design** – Indoor environment – Design process for the visual environment.

13. ISO 22476-10:2017 Geotechnical investigation and testing – Field testing – Part 10: Weight sounding test.

14. ISO 26602: 2017 Fine ceramics (advanced ceramics, advanced technical ceramics) – Silicon nitride materials for rolling bearing balls and rollers.

15. ISO 8336:2017 Fibre-cement flat sheets - Product specification and test methods

16. ISO 10545-13:2016 Ceramic tiles - Part 13: Determination of chemical resistance.

17. ISO 12540:2017 Glass in building - Tempered soda lime silicate safety glass.

18. ISO 16170:2017 In situ test methods for high efficiency filter systems in industrial facilities.

19. ISO 17738-3:2017 Thermal insulation products - Exterior insulation and finish systems - Part 1: Materials and systems.

20. ISO 18154:2017 Ships and marine technology - Safety valve for cargo tanks of LNG carriers - Design and testing requirements

21. ISO 19810:2017 Fine ceramics (advanced ceramics, advanced technical ceramics) - Test method for self-cleaning performance of semiconducting photocatalytic materials under indoor lighting environment - Measurement of water contact angle.

22. ISO/TR 21136:2017 Timber structures - Vibration performance criteria for timber floors.

ELECTRICAL STANDARDS

1. ISO 12813:2017 Electronic fee collection - Compliance check communication for autonomous systems.

2. ISO 20339:2017 Non-destructive testing - Equipment for eddy current examination - Array probe characteristics and verification.

CHEMICAL STANDARDS

1. ISO 37: 2017 Rubber vulcanized or thermoplastic – Determination of tensile stress-strain properties.

2. ISO 91:2017 Petroleum and related products – Temperature and pressure volume correction factors (petroleum measurement tables) and standard reference conditions.

3. ISO 132: 2017 Rubber vulcanized or thermoplastic – Determination of flex cracking and crack growth (De Mattia)

4. ISO 287: 2017 Paper and board – Determination of moisture of a lot – Oven-drying method.

5. ISO/TS 289-4: 2017 Rubber unvulcanised – Determinations using a shearing- disc viscometer – Part 4: Determination of the Mooney stress-relaxation rate.

6. ISO 294-1: 2017 Plastics – Injection moulding of test specimens of thermoplastics materials – Part 1: General principles, and moulding of multipurpose and bar test specimens.

7. ISO 294-5: 2017 Plastics – Injection moulding of test specimens of thermoplastics materials – Part 5: Preparation of standard specimens for investigating anisotropy.

8. ISO 812: 2017 Rubber vulcanized or thermoplastic – Determination of low-temperature brittleness.

9. ISO 814: 2017 Rubber vulcanized or thermoplastic – Determination of adhesion to metal – Two-plate method.

10. ISO 817:2017 Refrigerants – Designation and safety classification.

11. ISO 899-1: Plastics – Determination of creep behaviour – Part 1: Tensile Creep

12. ISO 2321:2017 Rubber threads – Methods of test.

13. ISO 2715: 2017 Liquid hydrocarbons – Volumetric measurement by turbine flowmeter.

STAFF MATTERS

14. **ISO 2812-1: 2017 Paints and Varnishes** – Determination of resistance to liquids – Part 1: Immersion in liquids other than water.
15. **ISO 2812-4: 2017 Paints and Varnishes** – Determination of resistance to liquids – Part 4: Spotting methods..
16. **ISO 2930: 2017 Rubber, raw natural** – Determination of plasticity retention index (PRI)
17. **ISO 4259-1:2017 Petroleum and related products** – Precision of measurement methods and results – Part 1: Determination of precision data in relation to methods of test.
18. **ISO 4259-2:2017 Petroleum and related products** – Precision of measurement methods and results – Part 2: Interpretation and application of precision data in relation to methods of test.
19. **ISO 4387:2017 Cigarettes** – Determination of total and nicotine-free dry particulate matter using a routine analytical smoking machine.
20. **ISO 4649: 2017 Rubber, vulcanized or thermoplastic** – Determination of abrasion resistance using a rotating cylindrical drum device.
21. **ISO 4582: 2017 Plastics** – Determination of changes in colour and variations in properties after exposure to glass-filtered solar radiation, natural weathering or laboratory radiation sources.
22. **ISO 5390:2017 Compressors** – Classification.
23. **ISO 5603: 2017 Rubber vulcanized** – Determination of adhesion to wire cord.
24. **ISO 5782-1:2017 Pneumatic fluid power** – Compressed air filters – Part 1: Main characteristics to be included in suppliers literature and product-marking requirements.
25. **ISO 6179: 2017 Rubber, vulcanized or thermoplastics** – Rubber sheets and rubber – coated fabrics – Determination of transmission rate of volatile liquids (gravimetric technique).
26. **ISO 6301-1:2017 Pneumatic fluid power** – Compressed air lubricators – Part 1: Main characteristics to be included in suppliers literature and product-marking requirements.
27. **ISO 7267-1:2017 Rubber-covered rollers** – Determination of apparent hardness – Part 1: IRHD method.
28. **ISO 7267-3:2017 Rubber-covered rollers** – Determination of apparent hardness – Part 3: Pusey and Jones method.
29. **ISO 7743: 2017 Rubber vulcanized or thermoplastic** – Determination of compression stress-strain properties.
30. **ISO 7781: 2017 Styrene- butadiene rubber, raw** - Determination of soap and organic-acid content.
31. **ISO 8791-3: 2017 Paper and board** – Determination of roughness/smoothness (air leak methods) – Part 3: Sheffield method.
32. **ISO 10350-1: 2017 Plastics** – Acquisition and presentation of comparable single- point data – Part 1: Moulding materials.
33. **ISO 11237: 2017 Rubber hoses and hose assemblies** – Compact wire-braid-reinforced hydraulic types for oil-based or water-based fluids – Specification.
34. **ISO 11726: 2017 Solid mineral fuels** – Guidelines for the validation of alternative methods of analysis.
35. **ISO 12634: 2017 Graphic technology** – Determination of track of paste inks and vehicles by a rotary tackmeter.
36. **ISO 12669: 2017 Hydraulic fluid power** – Method for determining the required cleanliness level (RCL) of a system.
37. **ISO 13276: 2017 Tobacco and tobacco products** – **Determination of nicotine purity** – Gravimetric method using tungstosilicic acid.
38. **ISO 13357-1: 2017 Petroleum products** – Determination of the filterability of lubricating oils – Part 1: Procedure for oils in the presence of water.

39. **ISO 13357-2: 2017 Petroleum products** – Determination of the filterability of lubricating oils – Part 1: Procedure for dry oils.
40. **ISO 13623: 2017 Petroleum and natural gas industries** – Pipeline transportation systems.
41. **ISO 16128-2: 2017 Cosmetics** – Guidelines on technical definitions and criteria for natural and organic cosmetic ingredients – Part 2: Criteria for ingredients and products.
42. **ISO 18647:2017 Petroleum: and natural gas industries** – Modular drilling rigs for offshore fixed platforms.
43. **ISO 19846: 2017 Reclaimed rubber** – Coding and classification system.
44. **ISO 19905-3:2017 Petroleum: and natural gas industries** – Site-specific assessment of mobile offshore units – Part 3: Floating unit.
45. **ISO 20336: 2017 Solid mineral fuels** – Determination of total sulfur by Coulomb titration method.
46. **ISO 20568-1: 2017 Plastics** – Fluoropolymer dispersions and moulding and extrusion materials – Part 1: Designation system and basis for specifications.
47. **ISO 20568-2: 2017 Plastics** – Fluoropolymer dispersions and moulding and extrusion materials – Part 2: Preparation of test specimens and determination of properties.
48. **ISO 19905-3:2017 Petroleum: and natural gas industries** – Arctic operations – Working environment.
49. **ISO 6246:2017 Petroleum products - Gum content of fuels** - Jet evaporation method.
50. **ISO 8216-1:2017 Petroleum products** - Fuels (class F) classification - Part 1: Categories of marine fuels.
51. **ISO 8217:2017 Petroleum products** - Fuels (class F) - Specifications of marine fuels.
52. **ISO 9227:2017 Corrosion tests in artificial atmospheres** - Salt spray tests.
53. **ISO 9298:2017 Rubber compounding ingredients** - Zinc oxide - Test methods.
54. **ISO 11093-8:2017 Paper and board** - Testing of cores - Part 8: Determination of natural frequency and flexural modulus by experimental modal analysis.
55. **ISO 12209: Gas cylinder** - Outlet connections for gas cylinder valves for compressed breathable air.
56. **ISO 12917-1: 2017 Petroleum and liquid petroleum products** - Calibration of horizontal cylindrical tanks - Part 1: Manual methods.
57. **ISO 15741:2016 Paints and varnishes** - Friction-reduction coatings for the interior of on- and offshore steel pipelines for non-corrosive gases.
58. **ISO 19496-1:2017 Vitreous and porcelain enamels** - Terminology - Part 1: Terms and definitions.
59. **ISO 19496-2:2017 Vitreous and porcelain enamels** - Terminology - Part 2: Visual representations and descriptions.
60. **ISO 19883:2017 Safety of pressure swing adsorption systems for hydrogen separation and purification.**
61. **ISO 20028-1:2017 Plastics** - Thermoplastics polyester (TP) moulding and extrusion materials - Part 1: Designation system and basis for specifications.
62. **ISO 20028-2:2017 Plastics** - Thermoplastics polyester (TP) moulding and extrusion materials - Part 2: Preparation of test specimens and determination of properties.
63. **ISO 23233:2017 Rubber, vulcanized or thermoplastics** - Determination of resistance to abrasion using a driven vertical abrasive disc.
64. **ISO 25947-1:2017 Fireworks** - Categories 1,2 and 3 - Part 1: Terminology.
65. **ISO 25947-2:2017 Fireworks** - Categories 1,2 and 3 - Part 2: Categories and types.
66. **ISO 25947-3:2017 Fireworks** - Categories 1,2 and 3 - Part 3: Minimum labelling requirements.

STAFF MATTERS

67. **ISO 25947-4:2017 Fireworks** - Categories 1,2 and 3 - Part 4: Test methods.
68. **ISO 25947-5:2017 Fireworks** - Categories 1,2 and 3 - Part 5: Requirements for construction and performance.

ENVIRONMENTAL STANDARDS

1. **ISO 6183:2017 Fire protection equipment** – Carbon dioxide extinguishing systems for use on premises – Design and installation
2. **ISO 7240-18: 2017 Fire detection and alarm systems** - Part 18: Input/output devices.
3. **ISO 7240-22: 2017 Fire detection and alarm systems** - Part 22: Smoke-detection equipment for ducts.
4. **ISO 7243: 2017 Ergonomics of the thermal environment** – Assessment of heat stress using the WBGT (wet bulb globe temperature) index.
5. **ISO 9096: 2017 Stationery source emission** – manual determination of mass concentration of particular matter.
6. **ISO 9241-940: 2017 Ergonomics of human system interaction** – Part 940: Evaluation of tactile and haptic interactions.
7. **ISO 9241-960: 2017 Ergonomics of human system interaction** – Part 960: Framework and guidance for gesture interactions.
8. **ISO 9696: 2017 Water quality** – Gross alpha activity – Test method using thick source.
9. **ISO 10075-1: 2017 Ergonomic principles related to mental workload** – Part 1: General issues and concepts, terms and definitions.
10. **ISO 13854: 2017 Safety of machinery** – Minimum gaps to avoid crushing of parts of the human body.
11. **ISO 14055-1: 2017 Environmental management** – Guideline for establishing good practices for combatting land degradation and desertification – Part 1: Good practices framework.
12. **ISO /TS 15923-2: 2017 Water quality** – Determination of selected parameters by discrete analysis systems- Part 2: Chromium (VI), fluoride, total alkalinity, total hardness, calcium, magnesium, iron, iron (II), manganese and aluminium with photometric detection.
13. **ISO 16975-3: 2017 Respiratory protective devices** – Selection, use and maintenance – Part 3: Fit-testing procedures.
14. **ISO 20053: 2017 Ships and marine technology** – Marine environment protection – Specification on design and selection of sorbents.
15. **ISO 24516-3: 2017 Guidelines for the management of assets of water supply and wastewater systems-** Part 3: Wastewater collection networks.
16. **ISO 24679-4: 2017 Fire safety engineering** – Performance of structures in fire – Part 4: Example of a fifteen- storey steel- framed office building.
17. **ISO 27065: 2017 Protective clothing** – Performance requirements for protective clothing worn by operators applying pesticides and for re-entry workers.
18. **ISO 27914: 2017 Carbon dioxide transportation and geological storage** – Geological storage.
19. **ISO 37154: 2017 Smart community infrastructures** – Best practice guidelines for transportation.
20. **ISO 4589-1:2017 Plastics** - Determination of burning behaviour by oxygen index - Part 1: General requirements.
21. **ISO 4589-2:2017 Plastics** - Determination of burning behaviour by oxygen index - Part 2: A ambient - temperature test.
22. **ISO 4589-3:2017 Plastics** - Determination of burning behaviour by oxygen index - Part 3: Elevated - temperature test.
23. **ISO 5667-16:2017 Water quality** - Sampling - Part 16: Guidance on biotesting of samples.
24. **ISO 11272:2017 Soil quality** - Determination of dry bulk density.

25. ISO 16312-1:2016 Guidance for assessing the validity of physical fire models for obtaining fire effluent toxicity data for fire hazard and risk assessment.

26. ISO 18417:2017 Iodine charcoal sorbents for nuclear facilities - Method for defining sorption capacity index.

27. ISO 20227:2017 Water quality - Determination of the growth inhibition effects of waste waters, natural waters and chemicals on the duckweed *Spirodela polyrhiza* - Method using a stock culture independent microbiotest.

28. ISO /TS 20593 Ambient air - Determination of the mass concentration of tire and road wear particles (TRWP) - Pyrolysis-GC-MS method.

FOOD STANDARDS

1. ISO 2256:2017 Dried mint (spearmint) (*Mentha Spicata* Linnaeus syn. *Mentha viridis* Linnaeus) Specification.

2. ISO 2292: 2017 Cocoa beans – Sampling.

3. ISO 2451:2017 Cocoa beans – Specification and quality requirement.

4. ISO 6571:2017 Spices, condiments and herbs – Determination of volatile oil content (Hydrodistillation method).

5. ISO 11731:2017 Water quality – Enumeration of *Legionella*.

6. ISO 6887-1:2017 Microbiology of the food chain - Preparation of test samples, initial suspension and decimal dilutions for microbiological examination

Part 1: General rules for the preparation of the initial suspension and decimal dilutions.

7. ISO 6887-2:2017 Microbiology of the food chain - Preparation of test samples, initial suspension and decimal dilutions for microbiological examination

Part 2: Specific rules for the preparation of meat and meat products.

8. ISO 6887-3:2017 Microbiology of the food chain - Preparation of test samples, initial suspension and decimal dilutions for microbiological examination - Part 3: Specific rules for the preparation of fish and fishery products.

9. ISO 6887-4:2017 Microbiology of the food chain - Preparation of test samples, initial suspension and decimal dilutions for microbiological examination - Part 3: Specific rules for the preparation of miscellaneous products.

10. ISO 15216-1:2017 Microbiology of the food chain - Horizontal method for determination of hepatitis A virus and norovirus using real-time RT-PCR - Part 1: Method for quantification.

11. ISO 16212: 2017 Cosmetics - Microbiology - Enumeration of yeast and mould.

12. ISO 21528-1:2017 Microbiology of the food chain – Horizontal method for the detection and enumeration of Enterobacteriaceae - Part 1: Detection of Enterobacteriaceae.

13. ISO 21528-2:2017 Microbiology of the food chain – Horizontal method for the detection and enumeration of Enterobacteriaceae - Part 2: Colony-count technique.

14. ISO 29621: 2017 Cosmetics - Microbiology - Guidelines for the risk assessment and identification of microbiologically low-risk products.

MECHANICAL STANDARDS

1. ISO 15:2017 Rolling bearings – Radial bearings – Boundary dimensions, general plan.

2. ISO 76:2017 Rolling bearings – Static load ratings.

3. ISO 683-5: 2017 Heat treatable steels, alloy steels and free-cutting steels – Part 5: Nitriding steels.

STAFF MATTERS

4. **ISO 2063-2: 2017 Thermal spraying** – Zinc, aluminium and their alloys – Part 2: Execution of corrosion protection systems.
5. **ISO 2135: 2017 Anodizing of aluminium and its alloys** – Accelerated test of light fastness of coloured anodic oxidation coatings using artificial light.
6. **ISO 2143: 2017 Anodizing of aluminium and its alloys** – Estimation of loss of absorptive power of anodic oxidation coatings after sealing – Dye-spot test with prior acid treatment.
7. **ISO 2528: 2017 Sheets materials** – Determination of water vapour transmission rate (WVTR) – Gravimetric (dish) method.
8. **ISO 3108: 2017 Steel wire ropes** – Test method – Determination of measured breaking force.
9. **ISO 3651-3: 2017 Determination of resistance to intergranular corrosion of stainless steels** – Part 3: Corrosion test for low-Cr ferritic stainless steels.
10. **ISO 3887: 2017 Steels** – Determination of the depth of decarburization.
11. **ISO 4492: 2017 Metallic powders, excluding powders for hard metals** – Determination of dimensional changes associated with compacting and sintering.
12. **ISO 4709: 2017 Composition cork** – Gasket material – Classification system, requirements, sampling, packaging and marking.
13. **ISO 5175-1: 2017 Gas welding equipment** – Safety devices – Part 1: Devices incorporating a flame (flashback) arrestor.
14. **ISO 5175-2: 2017 Gas welding equipment** – Safety devices – Part 2: Devices not incorporating a flame (flashback) arrestor.
15. **ISO 5754: 2017 Sintered metal materials, excluding hardmetals** – Unnotched impact test piece.
16. **ISO 5801: 2017 Fans Performance testing using standardized airways.**
17. **ISO 6372: 2017 Nickel and nickel alloys** – Terms and definitions.
18. **ISO 6506-2: 2017 Metallic materials** – Brinell hardness test – Part 2: Verification and calibration of testing machines.
19. **ISO 6526: 2017 Plain bearing** – Pressed bimetallic half thrust washers – Features and tolerances.
20. **ISO 7529: 2017 Nickel alloys** – Determination of chromium content – Potentiometric titration method with ammonium iron (II) sulfate.
21. **ISO 9717: 2017 Metallic and other inorganic coatings** – Phosphate conversion coating of metals.
22. **ISO 10216: 2017 Anodizing of aluminium and its alloys** – Instrumental determination of image clarity of anodic oxidation coatings – Instrumental method.
23. **ISO 11126-10: 2017 Preparation of steel substrates before application of paints and related products** – Specifications for non-metallic blast-cleaning abrasives – Part 10: Almandite garnet.
24. **ISO 12251: 2017 Diesel engines** – Clamp mounted CR fuel injectors mounting dimensions.
25. **ISO 22239-3: 2017 Road vehicles** – Child seat presence and orientation detection system (CPOD) – Part 3: Labelling.
26. **ISO 377: 2017 Steel and steel products** – Location and preparation of samples and test pieces for mechanical testing.
27. **ISO 2408: 2017 Steel wire ropes** – Requirements.
28. **ISO 2878: 2017 Rubber, vulcanized or thermoplastics** – Antistatic and conductive products – Determination of electrical resistance.
29. **ISO 4662: 2017 Rubber, vulcanized or thermoplastics** – Determination of rebound resilience.
30. **ISO 6279: 2017 Plain bearings** – Aluminium alloys for solid bearings.
31. **ISO 8820-4: 2017 Road vehicles** – Fuse-links – Part 4: Fuse-link with female contacts (type A) and bolt-in contacts (type B) and their test fixtures.
32. **ISO 9349: 2017 Ductile iron pipes, fittings, accessories and their joints** – Thermal preinsulated products.

33. **ISO 10129:2017 Plain bearings** - Testing of bearing metals - Resistance to corrosion by lubricants under static conditions.
34. **ISO 10297:2017 Gas cylinders** - Cylinder valves - Specification and type testing.
35. **ISO 10719:2017 Cast irons** - Determination of non-combined carbon content - Infrared absorption method after combustion in an induction furnace.
36. **ISO 12106:2017 Metallic materials** - Fatigue testing - Axial-strain-controlled method.
37. **ISO 12132:2017 Plain bearings** - Quality assurance of thin-walled half bearings - Design FMEA.
38. **ISO 12302:2017 Plain bearings** - Quality characteristics - Statistical process control (SPC)
39. **ISO 15023-1:2017 Plastics** - Poly(vinyl alcohol) (PVAL) materials - Part 1: Designation system and basis for specifications.
40. **ISO 15236-3:2017 Steel cord conveyor belts** - Part 3: Special safety requirement for the belts for use in underground installations.
41. **ISO 15243:2017 Rolling bearings** - Damage and failures - Terms, characteristics and causes.
42. **ISO 15825:2017 Rubber compounding ingredients - Carbon black** - Determination of aggregate size distribution by disc centrifuge photosedimentometry.
43. **ISO 16093: 2017 Machine tools** - Safety - Sawing machines for cold metal.
44. **ISO 16396-2:2017 Plastics** - Polyamide (PA) moulding and extrusion materials - Part 2: Preparation of test specimens and determination of properties.
45. **ISO 18276: 2017 Welding consumables** - Tubular cored electrodes for gas-shielded and non-gas-shielded metal arc welding of high strength steels - Classification.
46. **ISO 18468:2017 Ductile iron fittings, accessories and their joints and valves** - Epoxy coating.

47. **ISO 18608:2017 Fine ceramics (advanced ceramics, advanced technical ceramics)** - Mechanical properties of ceramics composites at ambient temperature in air atmospheric pressure - Determination of the resistance to crack propagation by notch sensitivity testing.
48. **ISO 19923: 2017 Space environment (natural and artificial)** - Plasma environments for generation of worst case electrical potential differences for spacecraft.
49. **ISO 19929:2017 Plastics** - Determination of average molecular mass and mixture ratio of poly(ethylene glycol) and its derivatives by MALDI-TOF-MS.
50. **ISO 20656-1:2017 Plastics piping systems** - General rules for structural design of glass-reinforced thermosetting plastics (GRP) pipes - Part 1:Buried pipes.
51. **ISO 20669:2017 Non-destructive testing** - Pulsed eddy current testing of ferromagnetic metallic components.
52. **ISO 26910-1:2017 Springs** - Shot peening - Part 1: General procedures.

MINING AND MINERAL STANDARDS

1. **ISO 13312:2017 Iron ores** - Determination of potassium - Flame atomic absorption spectrometric method.
2. **ISO 13313:2017 Iron ores** - Determination of sodium - Flame atomic absorption spectrometric method.
3. **ISO 14180:2017 Sodium minerals fuels** - Guidance on the sampling of coal seams.

METROLOGY STANDARDS

1. **Hygrometry** – Measurement of discharge by the ultrasonic transit time (time of flight) method.
2. **Mechanical vibration-** Evaluation of machine vibration by measurements on rotating shafts- Part 3: Coupled industrial machines.

STAFF MATTERS

3. **ISO 8062-4:2017 Geometrical product specifications (GPS)** – Dimensional and geometrical tolerances for moulded parts – Part 4: General tolerances for castings using profile tolerancing in a general datum system.
4. **ISO 9123: 2017 Hydrometry** – Stage-fall- discharge relationship.
5. **ISO 9296: 2017 Acoustics** – Declared noise emission values of information technology and telecommunication equipment.
6. **ISO 11843-5:2017 Capability of detection** – Part5: Methodology in the linear and non- linear calibration cases.
7. **ISO 13373-9:2017 Condition and monitoring and diagnostics of machines** – Vibration condition monitoring – Part 9: Diagnosis techniques for electric motors.
8. **ISO 19581:2017 Measurement of radioactivity** – Gamma emitting radionuclides – Rapid screening method using scintillation detector gamma-ray spectrometry.
9. **ISO 20456: 2017 Measurement of fluid flow in closed conduits** – Guidance for the use of electromagnetic flowmeters for conductive liquids.
10. **ISO 25178-72:2017 Geometrical product specifications (GPS)** – Surface texture: Areal – Part 72: XML file format x3p.
11. **ISO/ASTM 51538: 2017 Practice for use of the ethanol-chlorobenzene dosimetry system.**
12. **ISO 532-1:2017 Acoustics** - Methods for calculating loudness - Part 1: Zwicker method.
13. **ISO 4359: 2013 Flow measurements structures** - Rectangular, trapezoidal and U-shaped flumes.
3. **ISO 28219:2017 Packaging** – Labelling and direct product marking with linear bar code and two-dimensional symbols.
4. **ISO 19709-1:2016 Transport packaging** – Small load container systems – Part 1: Common requirements and test methods.

PETROLEUM AND NATURAL GAS STANDARDS

1. **ISO 9806:2017 Solar energy** – Solar thermal collectors – Test methods.
2. **ISO 22829:2017 Resistance welding equipment** – Transformers – Integrated transformer-rectifies units for welding guns operating at 1000 Hz.

TEXTILE STANDARDS

1. **ISO 105-B03:2017 Textiles** – Tests for colour fastness – Part B03: Colour fastness to weathering: Outdoor exposure.
2. **ISO 1833-7:2017 Textiles – Quantitative chemical analysis** – Part 7: Mixtures of polyamide with certain other fibres (methods using formic acid)
3. **ISO 1833-11:2017 Textiles – Quantitative chemical analysis** – Part 11: Mixtures of cellulose fibres with certain other fibres (methods using sulfuric acid).
4. **ISO 2411:2017 Rubber- or plastics- coated fabrics** – Determination of coating adhesion.
5. **ISO 3616:2017 Textile glass** – Chopped-strand and continuous- filament mats – Determination of average thickness, thickness under load and recovery after compression.
6. **ISO 17231 IULTCS/IUP37: 2017 Leather- Physical and mechanical tests** – Determination of water repellency of garment leather.
7. **ISO 20536:2017 Footwear Critical substances potentially present in footwear and footwear components** – Determination of phenol in footwear materials.

PACKAGING STANDARDS

1. **ISO 3874:2017 Series 1 Freight containers** – Handling and securing.
2. **ISO 15394:2017 Packaging** – Bar code and two-dimensional symbols for shipping, transport and receiving labels.

ISO NEWS

THE TROUBLING TALK OF TOILETS

By Elizabeth Gasiorowski-Denis

When we think about the most dire threats to our planet, poor sanitation rarely tops the list. Yet it's a significant (and in some cases immediate) contributor to sickness and pollution in both rural and urban areas. So how can ISO help deliver sustainable sanitation to the 2.3 billion people who lack access to basic services?

Going to the toilet is something we tend to take for granted. And yet for approximately 2.3 billion people around the world who lack any sanitation whatsoever, the only option is "open defecation". More than two hundred million tonnes of human waste go untreated every year. In the developing world, 90 % of sewage is discharged directly into lakes, rivers and oceans. All this untreated sewage is estimated to cause more than 500 000 diarrhoeal deaths each year.



The United Nations (UN) has called on countries to "radically" increase investments in water and sanitation infrastructure, not only to protect their populations from deadly diseases but also to ensure that they are able to achieve the Sustainable Development Goals (SDGs). Goal 6 of the SDGs aims to "ensure availability and sustainable management of water and sanitation for all". It is a comprehensive goal that addresses the entire water cycle, from access to use and efficiency, to the integrated management of water resources and water-related ecosystems.

ISO focus asked industry experts for their perspective on these issues and what needs to be done to

tackle the toilet problem and ensure that going to the toilet is safe and sanitary – with help from the future ISO 30500.

A HUGE CHALLENGE

Eawag is the Swiss Federal Institute of Aquatic Science and Technology and serves as a bridge between the scientific world and the "real world". Eawag is concerned with concepts and technologies for dealing sustainably with water bodies and with water as a resource. In

collaboration with universities, other research institutions, public bodies, industry and non-governmental organizations, Eawag works to harmonize ecological, economic and social interests in respect of water usage. The aim, says Eawag's Kai Udert, "is to support the development

of facilities that can treat the excreta directly on site without the need for a centralized treatment facility".

He asserts that the choice of sanitation options is still very limited and the high costs of large sewer-based sanitation systems are often prohibitive for a fast implementation. With the current centralized waterborne sanitation systems, "we will not be able to provide public health and environmental protection at many locations in the world, especially in the fast-growing megacities".

ISO NEWS

With countries coming under increasing pressure to maintain sanitation systems, it is encouraging to note that new “toilet systems” could help to solve the hygiene problems in a large part of the world and the global problem of nutrient management, Udert says. Furthermore, he adds, new technologies could change the entire sanitation landscape. “The whole sanitation business would become much more flexible and cities would be able to react much faster to new challenges, such as large changes in the population, water scarcity, etc. The new systems would not require any or much flushing water, which would help save water.”

THE SANITATION ECONOMY

One challenge is the market, says Prof. Chris Buckley from the University of KwaZulu-Natal in South Africa, Pollution Research Group – a market “full of similar seeming products, especially in new, novel or revolutionary items (such as non-sewered sanitation systems)”. Prof. Buckley recognizes that this can cause confusion in the mind of the purchaser and “lead to situations such as analysis paralysis, such that no decision is made”. He acknowledges that in the case of items which can have public health implications, very few bodies in the countries most needing the technology are sufficiently resourced to make value judgements. “So there is no technological advance.”

According to Prof. Buckley, the lack of an International Standard precludes companies from major investments in new and revolutionary products. A number of reasons are responsible for this, including “protecting their product from cheap substandard imitations, the lack of a sufficiently large market to justify investment, and enabling regulatory bodies to set product performance requirements without favouring any specific product or manufacturer,” he says.

The Toilet Board Coalition (TBC), based in Geneva, Switzerland, is catalysing on the new vision of “the sanitation economy” – a new business-led approach that creates an ecosystem of business activity around

sanitation. This includes providing toilets, digitizing sanitation as part of smart cities, and creating a circular economy where human waste becomes valued “toilet resources”.

Alexandra Knezovich and Cheryl Hicks from TBC believe sanitation is proving to be one of the most elusive SDGs, with developing countries still lagging behind. “Huge efforts have hardly reduced the 2.3 billion people without sanitation.” But there’s good news, they say. “The sanitation economy is a new model, which can more readily be scaled up, so the standards enabling this, enable a renewed momentum.”

However, the sanitation economy has its share of challenges. According to Knezovich and Hicks, the sanitation economy doesn’t fit in with our preconceived ideas of traditional sewerage sanitation. “There are understandable concerns about an alternative system creating infection, odour and pollution,” they explain. “To overcome this, we must achieve consistently high and verifiable standards of design and operation for these new technologies.”

TOILET TECHNOLOGY

For the past few years, ISO has worked with partners to develop new sanitation technologies. One of the most promising is a “reinvented toilet” that essentially functions as its own treatment plant. The concept is part of a broader initiative called the “Reinvent the Toilet Challenge” launched by the Bill & Melinda Gates Foundation that aims to deliver sustainable sanitation to the 2.3 billion people who lack access.

Unlike traditional sewer systems, the reinvented toilet (or non-sewered sanitation system) helps remove pathogens and does not require traditional infrastructure such as sewers, water connection or electricity. The reinvented toilet would harvest energy from actual human waste to kill germs in the water itself. The result is sterile water that’s safe enough to wash with, as well as human waste that can be repurposed for healthy, odourless fertilizer.



An active group that supports this effort is ISO project committee ISO/PC 305 on non-sewered sanitation. ISO/PC 305 is currently at work developing an International Standard for non-sewered sanitation systems, sometimes known as “reinvented toilet technology”. It is expected to help reverse the global sanitation crisis by removing pathogens without requiring traditional infrastructure, providing for cleaner and safer toilets on a global level.

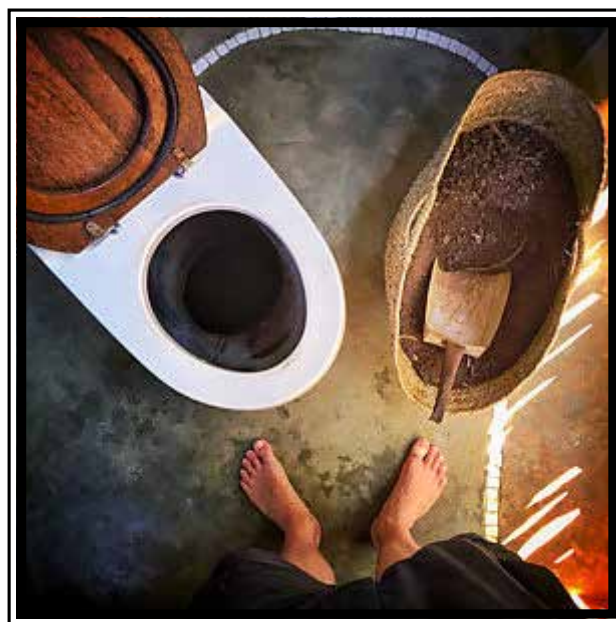
In an effort toward that goal, an International Workshop Agreement – IWA 24, *Non-sewered sanitation systems – General safety and performance requirements for design and testing* – was published in September 2016, serving as the basis for the development of the new International Standard. Interestingly enough, both IWA 24 and the future ISO 30500 have received overwhelming support from the Bill & Melinda Gates Foundation (see our article on p. 28).

The future ISO 30500 will apply to individual and small-scale sanitation systems that serve to safely process human waste and recover valuable resources such as water, energy and/or nutrients in an off-grid and non-sewered environment. The standard will be applicable to individual and community sanitation systems that are self-contained, meet defined discharge requirements and aim for sustainability.

TIME FOR CHANGE

The future ISO 30500 that will focus on different aspects of sanitation is clearly an effective tool in tackling a very complex subject. Rémy François, Research and Technologies Director at BFG Environmental Technologies, a start-up in the field

of environmental technologies, has been involved with the development of IWA 24 and has contributed as an expert and national delegation leader to the development of ISO 30500. For him, it all comes down to giving access to a basic sanitation service. “Still today, too many children, women and men are facing risks for their health and well-being due to the lack of sanitation solutions, basic water and hygiene,” he says.



François believes the committee’s work is unlike any other, where urgency and collaboration among the various stakeholders are needed most. He says that water quality experts, sanitation experts, developing country representatives, manufacturers and national test laboratories developing the standard had one goal in mind: to describe precisely what shall be done in order to eradicate diseases linked to the lack of sanitation. “I was surprised by the incredible flexibility of these actors to find quickly the best compromise in order that the impacted populations can finally have access to sanitation systems.”

The future standard brings the conceptual toilet to reality through the standardization of its design, installation and use. For example, a poverty-stricken community might not have access to reliable running water, so installing toilets that operate “off the grid” can be a key factor in establishing their ability to function. And these fixtures cost less than five cents per user, providing an opportunity for developing countries to utilize safer, cleaner, cost-efficient toilet alternatives.

A CLEAN FUTURE

So will the future be any better for the billions of people lacking basic sanitation? Organizations across the world are making serious efforts to improve and provide acceptable toilet solutions globally, and there is a bigger push to achieve SDG 6 than ever before. All of these, plus the “Reinvent the Toilet Challenge” initiated by the Bill & Melinda Gates Foundation and the future ISO 30500, will create the conditions to make this possible.

Bringing toilets to the people still lacking access to safe and affordable sanitation is going to be a huge challenge. However, François believes the future ISO 30500 will be the game changer that will help make it happen.

“ISO 30500 will be the reference document for the future exchanges between users, prescribers, manufacturers and laboratories to guarantee that the proposed solutions address this urgent world health problematic,” he says. “It will permit the creation of a new market with a lot of innovative non-sewered sanitation systems and will reduce drastically the diseases linked with lack of sanitation. ISO 30500 is the first step for the development of a local circular economy with the transformation of human wastes into valuable resources.”



WHAT MAKES A FOOD INGREDIENT “NATURAL”?

By Sandrine Tranchard

When is a food ingredient considered as “natural”? Until now, there was no internationally agreed definition of a “natural” food ingredient, but a new ISO technical specification will help the food and beverage industry players speak the same language.

Despite enormous consumer interest for all things “natural”, what actually constitutes a “natural” food ingredient has long been up for debate. Except for a few attempts by the Codex Alimentarius Commission in the late 1990s, there have been no internationally agreed requirements in terms of natural food ingredients and food processes – that is, until the advent of technical specification ISO/TS 19657:2017, *Definitions and technical criteria for food ingredients to be considered as natural*.

The purpose of this document is to provide the necessary criteria for food ingredients to be considered as “natural”, which the food and beverage industry and public authorities can universally refer to at a time when goods are traded freely around the world.

In some regions of the globe, the absence of such criteria has even led to lawsuits. The new ISO/TS 19657 therefore proposes criteria for business-to-business communications on food ingredients that are considered as “natural”, helping to level the playing field and secure fair business practices within the food and beverage industry. The document doesn’t apply to product communication to consumers, such as package labellings.

Dominique Taeymans, Convenor of the working group that developed the technical specification, explains: “This technical specification contains the basic guidelines that will allow food and beverage industry professionals to speak the same language. This is not a straightforward subject, so giving professionals a common basis to fall back on is already a big step forward.”

ISO/TS 19657 addresses the needs of all food and beverage companies and food ingredients manufacturers, regardless of their size and complexity.

This document will help to ensure fair practices in all business relationships.

ISO/TS 19657:2017 was developed by ISO/TC 34, Food products, under its working group 18, *Natural food ingredients*. It can be purchased from your national ISO member or through the ISO Store.

THE SECOND-HAND MARKET GETS A NEW ISO STANDARD TO PROTECT CONSUMERS

By Elizabeth Gasiorowski-Denis

The second-hand economy is booming with more and more consumers buying used goods. How can we be sure that the second-hand baby crib we buy won't cause injury or harm? Purchasing used products can bring its share of bad surprises, but a new International Standard helps make sure those hand-me-down treasures are not putting your family in danger.

They say forewarned is forearmed. This is particularly true of the second-hand goods market where an informed consumer will make safer purchases. It is important to be aware of the potential risk of buying used items, and simple precautions apply to ensure you don't get caught out.

Rae Dulmage, Chair of ISO project committee ISO/PC 245, Cross-border trade of second-hand goods, explains that a few smart questions can help you decide whether a product is worth buying. "What am I going to use it for? How long do I expect it to last? Don't just take someone's word for it," he says, "check under the hood. Most importantly, buy from a reputable dealer who knows what he is selling. And apply the principles of ISO 20245."

The newly published ISO 20245:2017, Cross-border trade of second-hand goods, provides a valuable point of reference for governments as they intensify their efforts to establish minimum screening criteria for the trade of second-hand goods across borders. It is the world's first International Standard on goods that are traded, sold, donated or exchanged between countries. This is important as it helps regulate an unruly market and diverts thousands of tonnes of unwanted materials away from our landfills.

In Canada, the market for used and second-hand goods grew last year to an estimated 29 billion Canadian dollars (CND), up from CND 1 billion the previous year, according to a 2017 report on the second-hand economy released by online classified ad Website Kijiji. And Canada is not alone.

Trade in second-hand goods continues to grow every year, particularly in developing countries and countries with transitional economies. End users purchasing these products expect them to be safe, free from defects, and to last for a reasonable amount of time, even in their second-hand state.

Just like any factory-bought product, used goods should meet the expectations of a reasonable consumer, who has full knowledge of their second-hand status. This means they must fulfil acceptance criteria in terms of quality, product information and usage requirements, with additional details about their condition.

The new ISO 20245 specifies how to evaluate and classify products on a ranking based on their condition: A (very good), B (good), C (fair), and D (poor). These measurable criteria are destined to be used by importing or exporting parties or governments for in-transit and port-of-entry screening of second-hand goods, and will ensure that both consumers and the environment are protected.

Rae Dulmage hopes that second-hand goods practices contained in ISO 20245 will become universally applicable and available. "If countries enforce ISO 20245 requirements as part of their import regulations, organizations integrate them in their purchasing and processing practices, and charities make them a common feature of their operations, unsafe and unreliable products will gradually be eliminated from the market and disposed of in the proper way."

And as for consumers, he says, ISO 20245 will help ensure they get safe and serviceable second-hand goods that provide value for money.

ISO 20245:2017 was developed by ISO project committee ISO/PC 245, Cross-border trade of second-hand goods. The Chair is currently held by SCC, ISO member for Canada, under a twinning arrangement with SAC, ISO member for China, which holds the secretariat.

CERTIFICATION DATA

CERTIFICATION DATA

During the period of July to December 2017, the Bureau continued to offer certification services under its Standards Mark, Tested Products and Batch Certification Schemes including the Pre-Shipment Verification of Conformity to Standards (PVoC) and Destination Inspection as follows.

1. LIST OF LICENCE FOR TBS QUALITY MARK

S/No	CLIENT	PRODUCT	L/No.	STATUS
1	21ST CENTURY FOOD&PACKAGING LTD -KURASINI PLANT	WHEAT BRAN FOR LIVESTOCK FEEDS-SPECIFICATION	1992	NORMAL
2	A TO Z TEXTILE MILLS LTD	SPUN POLYESTER SEWING THREADS	2013	NORMAL
3	AFRICAN DRAGON ENTER	PRE-PAINTED STEEL SHEET	1959	NORMAL
4	AFRILIFE PRODUCTS LTD.	NATURAL HONEY	1967	NORMAL
5	ALAF LIMITED -ARUSHA BRANCH	PRE PAINTED ROOFING SHEETS	1940	NORMAL
6	ALAF LTD - DODOMA PLANT	PRE-PAINTED ROOFING SHEETS	1974	NORMAL
7	ALKO VINTAGES COMPANY LTD	FORTIFIED SWEET WINE	1973	NORMAL
8	ARETRA MINISTRIES TRUST	HERBAL SOAP	1976	SME
9	ARWA INVESTMENT	CHALKS	1955	SME
10	AVANTI INDUSTRIES LTD	PLASTIC CHAIRS	2019	NORMAL
11	AVANTI INDUSTRIES LTD	PLASTIC BUCKETS AND BASINS	2020	NORMAL
12	BLUENILE DISTILLERIES	GIN	1994	NORMAL
13	BREO INVESTMENT AND GENERAL SUPPLY	PICKLE SPECIFICATION	1946	SME
14	BULK DISTRIBUTORS LTD.	PRE-PAINTED STEEL SHEETS	1968	NORMAL
15	C & S AGRIBUSINESS	SUNFLOWER OIL	1977	SME
16	CANDYMAN LTD	PEANUT KRUNCH (SPECIAL AND PREMIUM QUALITY)	2017	NORMAL
17	CANON GENERAL SUPPLIES LTD	PORTABLE SPIRIT	2037	NORMAL
18	CHEMI & COTEX INDUSTRIES LTD	HAIR OIL	2008	NORMAL
19	CHEMI & COTEX INDUSTRIES LTD	SHAMPOO	2010	NORMAL
20	CHOICE COFFEE COMPANY LTD	CLOVES SPECIFICATION	1949	SME
21	CMG INVESTMENT LTD	PRE-PAINTED CORRUGATED AND IT4 ROOFING SHEET	2024	NORMAL
22	COSIRA COMPANY LTD	LAUNDRY SOAP	2039	SME
23	COTEX INDUSTRIES LTD	WELDED FABRIC	1989	NORMAL
24	COTEX INDUSTRIES LTD	POLYTHYLENE TANKS FOR PORTABLE WATER STORAGE	1937	NORMAL
25	COTEX INDUSTRIES LTD	HIGH DENSITY POLY ETHYLENE PIPES (HDPE)	1938	NORMAL

1. LIST OF LICENCE FOR TBS QUALITY MARK (---CONTINUED)

S/No	CLIENT	PRODUCT	L/No.	STATUS
26	COTEX INDUSTRIES LTD	ROUND PLAIN HEAD NAILS	1954	NORMAL
27	DANE HOLDINGS LTD	DRY RED WINE	2033	SME
28	DANE HOLDINGS LTD	FORTIFIED WINE	2034	SME
29	DANGOTE CEMENT LTD	COMMON CEMENT	1997	NORMAL
30	DHARIWAL TRADING CO. LTD	MAIZE FLOUR - SPECIFICATION	1948	NORMAL
31	DOUBLE DIAMOND HOLDINGS LTD	GIN	1934	NORMAL
32	EFA PRODUCT SLUTION	HAND AND BODY CREAM	2012	SME
33	EUROMAX	GIN	1947	SME
34	EUROPE INC. INDUSTRIES LTD	PVC INSULATED CABLES OF RATED VOLTAGE	1962	NORMAL
35	EUROPE INC. INDUSTRIES LTD	PVC INSULATED CABLES OF RATED VOLTAGE	1963	NORMAL
36	EUROPE INC. INDUSTRIES LTD	ALUMINIUM CONDUCTORS GALVA-NIZED STEEL REINFORCED(ACSR)	1964	NORMAL
37	EVERWELL CABLE & ENGINEERING CO. LTD	PVC INSULATED SHEATHED FLAT TWIN CABLE	2029	NORMAL
38	EVERWELL CABLES AND ENGINEERING CO. LTD	XLPE INSULATED STEEL WIRE ARMoured CABLE	1998	NORMAL
39	FALAHU INDUSTRIES	BISCUITS	1942	NORMAL
40	FIDE INVESTMENT COMPANY LTD	BOTTLED DRINKING WATER	1972	SME
41	FUDA COMPANY LTD.	VACCUM FLASKS	1965	NORMAL
42	GLOBAL BEVERAGE (T) LTD	WHISKY	2021	NORMAL
43	GLOBAL BEVERAGE (T) LTD	BRANDY	2022	NORMAL
44	GLOBAL BEVERAGE (T) LTD	GIN	2023	NORMAL
45	HAKIKA BREWERIES LIMITED - KEREGE MATUMBI BAGAMOYO PWANI	NON - CEREAL BASED ALCOHOL BEVERAGE	1971	NORMAL
46	HANS PAUL AUTOMECHS	MOTOR VEHICLE FRONTAL PROTECTION SYSTEM	1986	NORMAL
47	HANS PAUL AUTOMECHS	MODIFIED SAFARI VEHICLES	1975	NORMAL
48	HENG DAR DEVT. (T) Co. LTD	BASIN	2014	NORMAL
49	HIGHLAND ESTATE LIMITED	WHITE BREAD	1993	NORMAL
50	ISACK & SONS CO. LTD	SUNFLOWER SEED OIL	1970	SME
51	JOHN BEVERAGE	BOTTLED DRINKING WATER	2026	NORMAL
52	KAHAMA OIL MILLS LTD	PVC U PIPES	1966	NORMAL
53	KAMBIZ ENTERPRISES LTD -SHINYANGA PLANT	STEEL SHEETS	1935	NORMAL
54	KANSAI PLASCON TANZANIA LIMITED	MAT EMULSION PAINT	1990	NORMAL

CERTIFICATION DATA



1. LIST OF LICENCE FOR TBS QUALITY MARK (---CONTINUED)

S/No	CLIENT	PRODUCT	L/No.	STATUS
55	KANSAI PLASCON TANZANIA LIMITED	VINYL SILK EMULSION PAINT	1991	NORMAL
56	KEDS TANZANIA Co. LTD	ROUND PLAIN HEAD NAILS	2016	NORMAL
57	KEDS TANZANIA Co. LTD	SYNTHETIC DETERGENT POWDER	2038	NORMAL
58	KILIMANJARO BIOCHEM LTD	EXTRA NEUTRAL SPIRIT	1995	NORMAL
59	KILIMANJARO CABLES (T) LTD	TRANSFORMER	2002	NORMAL
60	KINGSLEY BEVERAGE PTY LTD	CARBONATED SOFT DRINK	2005	NORMAL
61	KINGSLEY BEVERAGE (PTY)	ENERGY DRINK	2004	NORMAL
62	LAST BORN EMPIRE ENTERPRISES LTD	BOTTLED DRINKING WATER	1933	SME
63	LODHIA PLASTIC INDUSTRIES LTD	POLYETHYLENE TANK	2007	NORMAL
64	LODHIA PLASTIC INDUSTRIES LTD	HDPE PIPES	2030	NORMAL
65	MABATI EMPIRE TRADERS	PRE PAINTED STEEL SHEETS	1978	NORMAL
66	MAI-MEALS LTD	PACKAGED DRINKING WATER	1941	NORMAL
67	MANSOOR INDUSTRIES LTD	CIGARETTES	1982	NORMAL
68	MANYARA SUGAR COMPANY LTD	BROWN SUGAR	2006	NORMAL
69	MEK ONE INVESTMENT CO. LTD - KIBAHA PLANT	FORTIFIED FOOD GRADE SALT	1957	NORMAL
70	METALCOM LTD	PRE-PAINTED CORRUGATED AND IT4 ROOFING SHEET	2025	NORMAL
71	METSEC (T) LTD	INSULATED ARMOURED CABLE	2032	NORMAL
72	MILCOM DAIRIES	UHT MILK	1988	NORMAL
73	MILKCOM DAIRIES LTD	CULTURED MILK	1985	NORMAL
74	MUMBO INVESTMENT	BANANA ALCOHOLIC DRINK	2018	SME
75	MWENGE II WINE PROCESSORS INVESTMENT	FRUIT WINE	1996	NORMAL
76	NYATI SPIRITZ LTD	VODKA	1999	NORMAL
77	NYATI SPIRITZ LTD	GIN	2000	NORMAL
78	NYATI SPIRITZ LTD	WHISKY	2001	NORMAL
79	NYATI SPIRITZ LTD	LIQUEUR	2003	NORMAL
80	ORYX SERVICES & SPECIALITIES LTD	ENGINE OIL	1960	NORMAL
81	OSA COMPANY LIMITED	TOMATO SAUCE AND KETCHEN	1945	SME
82	PAMA GROUP CO. LTD	GIN	1950	NORMAL
83	QUALITY SYSTEMS (T) LIMITED	ROUND PLAIN HEAD NAILS	2009	SME

1. LIST OF LICENCE FOR TBS QUALITY MARK (---CONTINUED)

S/No	CLIENT	PRODUCT	L/No.	STATUS
84	QWIHAY GENERAL ENTERPRISES LTD	WOOD POLES AND BLOCKS FOR POER AND TELECOMMUNICATION LINE	1987	NORMAL
85	RSA LTD.	MODIFIED SAFARI VEHICLES	1969	NORMAL
86	S.H AFRIQ TANZANIA LTD	TEXTILE HAIR EXTENSION	1952	NORMAL
87	S.S BAKHRESA & CO. LTD	WHEAT FLOUR - SPECIFICATION	1943	NORMAL
88	S.S BAKHRESA & CO. LTD	WHEAT BRAN FOR LIVESTOCK FEEDS-SPECIFICATION	1944	NORMAL
89	S.S BAKHRESA & CO. LTD	WHEAT FLOUR - SPECIFICATION	1953	NORMAL
90	SALIBABA PELLET Co. LTD	POULTRY FEED	2041	NORMAL
91	SAYONA DRINKS LTD-MWANZA PLANT	CARBONATED SOFT DRINKS	1931	NORMAL
92	SAYONA DRINKS LTD-MWANZA PLANT	BOTTLED DRINKING WATER	1936	NORMAL
93	SEEN-HM COMPANY LTD	WHITE AND BROWN BREAD	2028	SME
94	SHANGAZI LAUNDRY SOAP	LAUNDRY SOAP	1956	NORMAL
95	SILKCOAT PAINT CO. LTD	MATT EMULSION PAINT FOR INTERIOR AND EXTERIAL USE	1951	NORMAL
96	SOUL MOUNTAIN LTD	MAIZE FLOUR	2027	SME
97	SUNSHINE PLASTIC CO LTD	GYPSSUM	1979	NORMAL
98	TANGA PHARMACEUTICAL & PLASTICS LTD	HAIR OIL	1961	NORMAL
99	TANZA FOOD AND BEVERAGE PROCESSING Co. LTD	BOTTLED DRINKING WATER	2031	NORMAL
100	THREE STAR TANZANIA LTD	BINDING WIRE	2015	NORMAL
101	TOL GASES LTD	CARBONDIOXIDE GAS	1984	NORMAL
102	TWYFORD (TANZANIA) CERAMIC COMPANY LTD	CERAMIC FLOOR TILES	2036	NORMAL
103	UR HOME COMPANY LTD	ROUND PLAIN HEAD NAILS	2040	NORMAL
104	VEGETA PODRAVIKA LTD	FOOD SEASONING MIXTURE	1939	NORMAL
105	VICTORIA POLYBAGS LTD - MWANZA PLANT	POLYPROPYLENE WOVEN SACKS	1958	NORMAL
106	WAZAWA BAKERY	WHITE BREAD	1983	NORMAL
107	ZEBRA PROMOTIONS	GLYCERINE	2035	SME
108	ZENG CHENG BENMA IND. CO. LTD	THREE WHEELED MOTORCYCLE)	1932	NORMAL

CERTIFICATION DATA

**2. LIST OF LICENCES ISSUED FROM JULY TO DECEMBER, 2017**

S/No	CLIENT	PRODUCT	C/No.	STATUS
1	A TO Z TEXTILE MILLS LTD	LENO BAGS, TEA HARVESTING BAGS	305	NORMAL
2	EAST AFRICA INFRASTRUCTURE ENGINEERING LTD	PRE-STRESSED CONCRETE POLES	320	NORMAL
3	EVERGREEN WOOD CO. LTD	PLY WOODS	309	NORMAL
4	EVERWELL CABLE AND ENGINEERING CO. LTD	XLPE INSULATED STEEL WIRE AND ARMoured LOW SMOKE ZERO HALOGEN	315	NORMAL
5	HANSPaul INDUSTRIES LTD	CORRUGATED FIBERBOARD BOXES FOR PACKAGING AND TRANSPORTATION	323	NORMAL
6	HONGWEI INTERNATIONAL COMPANY LIMITED	PLY WOODS	312	NORMAL
7	METAL CROWNS (T) LTD	PLASTIC CLOSURE	314	NORMAL
8	MM INDUSTRIES	PLASTIC CONTAINER	303	NORMAL
9	RAIPLY (EPZ) LIMITED	MEDIUM DENSITY FIBREBOARD	311	NORMAL
10	ROYAL SOAP AND DETERGENT INDUSTRIES LIMITED	HANDWASHING DETERGENT	308	NORMAL
11	S & y WOOD PRODUCTS Co. LTD	MARINE BOARD	322	NORMAL
12	SALEBHAI GLASS INDUSTRIES LTD	TEMPERED SAFETY GLASS	307	NORMAL
13	STEEL MASTERS LTD	STEEL ANGLE SECTION	304	NORMAL
14	THREE STAR TANZANIA LTD	BARBED WIRE	319	NORMAL
15	TP LABEL LIMITED	NECK PRINTED LABELS	316	NORMAL
16	TP LABEL LIMITED	BACK PRINTED LABELS	317	NORMAL
17	TP LABEL LIMITED	BODY PRINTED LABELS	318	NORMAL
18	TRI-CLOVER INDUSTRIES	BAKING POWDER	310	NORMAL
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FEATURE ARTICLES



QUALITY INFRASTRUCTURE CRUCIAL FOR SUSTAINABLE INDUSTRIALIZATION

By: Nickonia Mwabuka

The term Quality Infrastructure is a new term in the discipline of Standardization. The Term Quality Infrastructure (QI), among professional definitions, it explain a system and institutions contributing to governmental policy objectives in achieving sustainable industrial development, resulting into trade competitiveness in global markets, efficient use of scarcity resources; achieving food safety, health, the environment and climate change control. The Quality Infrastructure System covers essential aspects of national policy, national institutions for standardization, conformity assessment, metrology (the three pillars) and accreditation. Depending on the country policy and the level of national development, the systems and institutions may either be separated as the case of developed countries or build in one umbrella as the case of most developing countries. An accreditation is an exceptional, which oversee all elements of quality infrastructures on performance compliance.

Setting up a sustainable Quality Infrastructure System and institutions is a practical step towards achieving national sustainable and industrialization. It is a path toward development by thriving economy as a basis for prosperity, health and well-being.

Every country, being developed or developing one, needs a sound Quality Infrastructure to achieve its societal goals through delivering quality goods and services.

Sustainable national Quality infrastructure facilitates producers in industries to improve their products and services exporters on meeting exporting requirements, resulting to meet increasingly demanding of customer expectations national, regional and international. It also enhances opportunities for trade expansion into new exporting markets through conformity to standards and compliance to national regulatory requirements.

Increasingly, participation in a regional and international trade, requires manufacturers and suppliers to conform to standards in the exporting countries; implying quality products which have undergone conformity assessment by the accredited conformity assessment bodies.

Quality Infrastructures is achieved into three pillars of sustainable development, namely: metrology (the science of measurements), Standardization (standards formulation and implementation), Conformity assessment (Inspection, testing, certification, sampling); and accreditation. Accreditation provides competence to the three pillars.

METROLOGY;

Is the science of measurement which is subdivided into three categories to meet the business requirements, includes the Scientific metrology is the development and organization of the highest level of measurement standards, this involves with research in the field of metrology. The Legal metrology, involves the assurance of correctness of measurements of equipment, apparatus and machine where these have influence on the transparency of trade, law and regulation enforcement, health, and safety. The Industrial metrology involves the satisfactory functioning of measurement instruments used in industry, production, and testing.

These categories of metrology are important and too for smooth trade facilitation. Accurate measurements are crucial to achieve the required measurements. Consider if the accuracy of measurement in the health sector is not correct, and assume prescriptions with wrong measurements, what will be the consequence to patient?. Consider the same is happening in industrial production with wrong ratios of measurements. The quality of metrology system and institution is among pre-requisite for industries to produce quality goods.

Standardization, enhance market competitiveness through offering proof that products and services adhere to requirements. This facilitate acceptance to the exporting countries and placing into the marketplace. When used effectively, formulated Standards facilitate national, regional and international trade, contribute to technology upgrading and absorption, resulting into overall industrialization. Standards, which are required to be used in technical regulations play a vital role in sustainable development through industrialization, trade facilitation in promoting safety, quality and compatibility of products.

Standardization contributes to the basic quality infrastructure that underpins society in general on quality, health, trade and environment, while promoting sustainability and good regulatory practice in a country adopted a good practice of quality infrastructure. Standards, help domestic markets to operate effectively, increase competitiveness and provide an excellent source of technology transfer. It play an integral role in the protection of consumers and the environment.

Conformity assessment activities, which comprises testing, inspection, and certifications of products or services. Conformity assessment plays a critical role in building confidence for sustainable development and trade facilitation among the countries.

With the increasing globalization of markets, harmonization of standards, conformity assessment activities have become critical to the trading process, in ensuring a level playing field for exports and imports through meeting internationally recognized levels of performance and safety.



UNDERSTANDING THE IMPLEMENTATION OF ISO 9001 QMS

By Amina Yasini

QUALITY ASSURANCE OFFICER

Quality is something every company or organization strives for and it is often very difficult to achieve. Complications concerning efficiency and quality present themselves everyday in business, whether an important document cannot be found or a consumer finds a product not up to their expectations.

Accreditation, the process by which an authoritative body gives formal recognition that a body or person is competent to carry out specific tasks, plays a critical role that Quality Infrastructure is achieved. Within a well-defined Quality Infrastructure systems and institutions, the body made responsible for accreditation will evaluate the competence of product, management system and personnel certification bodies, testing laboratories and inspection bodies. Its official approval – known as “accreditation” - will indicate to customers and users of the services of these organizations that they can have confidence in their work. This results into international recognitions.

It is important for sustainable development and trade to ensure that societies and industries have access to Quality Infrastructures for sustainable industrialization and development.

Quality of products and services; and standards are inherently linked. Quality is the degree to which the innate characteristics of a product, process, or person fulfill stated and unstated customer requirements and expectations; comply with stated norms, regulations, and laws; or both. Standards are often used to codify technological requirements expected by customers or governments, making them an essential element in the effort to upgrade quality in a country.

Metrology, Standardization (Standards) Conformity assessment and Accreditation, termed as Quality Infrastructures, are crucial to the business and government to optimize production, health, consumer protection, environment, security and quality. The effective implementation of these tools supports sustainable industrialization and development of a national through facilitating social welfare and national, regional and international trade.

ISO 9000 gives an answer on how a company or organization can increase the quality of its service and products. Also it is a quality management standard that presents guidelines intended to increase business efficiency and customer satisfaction. The goal of ISO 9000 is to embed a quality management system within an organization, increasing productivity, reducing unnecessary costs, and ensuring quality of processes and products.

One important aspect of ISO 9000 is its process-oriented approach. Instead of looking at a company's departments and individual processes, it requires that a company look at "the big picture", on the process interaction and how integrated with one another as well as the important aspects of products and services. ISO 9000:2015 and ISO 9001:2015 standards are based on the following seven principles:-



The ISO 9001 quality system is a structured way of delivering a better service or product and supported by detailed procedures such as work instructions, quality manuals, written quality policies and more. The key is to provide all those who must execute the quality system with detailed, understandable and workable instructions which define both expectations and actions to achieve the stated quality goals.

Changes introduced in the 2015 edition are intended to ensure that ISO 9001 continues to adapt to the changing environments in which organizations operate. Some of the key updates in ISO 9001:2015 include the introduction of new terminology, restructuring some of the information, an emphasis on risk-based thinking to enhance the application of the process approach, improved applicability for services, and increased leadership requirements.

It is important to note that ISO 9001:2015 *does not prohibit* the use of a quality manual; it is merely silent

on the subject. ISO 9001:2015 no longer has any specific requirements for documented procedures. As a matter of fact, the word "procedure" only appears in the foreword and the annexes of the standard.

The term "preventive action" has been deleted from ISO 9001. It has been replaced by the concept of "risk-based thinking". By contrast, risk-based thinking makes a meaningful addition to an organization's

system. The ISO users should have a clear definition of risk in mind and develop a framework to identify and manage risks.

It has been observed among many organizations that once certification is achieved, there is an attitude that no more effort is needed to improve the QMS. If management desires to implement ISO 9001 solely for marketing reasons or due to customer demands, the resulting system will often lack all important internal improvement components. It is possible to pretend that you have an effective ISO 9001 quality management system in place, but

its cost due to bureaucracy and inefficiency could be huge.

Executive managements of some companies consider the ISO 9001 quality management system to be a documentation task rather than the implementation of an improved and systematic management style. A consequence of this misconception is the appointment of a system Management Representative with no ability and power to make real changes. The Management Representative needs to be well trained, top management needs to learn about the concept of ISO 9001 and its benefits, ISO 9001 procedures and other ISO 9001 documentation need to be written, work processes throughout the company need to be analyzed and streamlined as well as employees need to be trained well on how to implement the system.

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