



বিশ্ব অ্যাক্রেডিটেশন দিবস

৯ জুন ২০১৯

Accreditation: Adding Value to Supply Chains



World Accreditation Day

9 June 2019



বাংলাদেশ অ্যাক্রেডিটেশন বোর্ড (বিএবি)

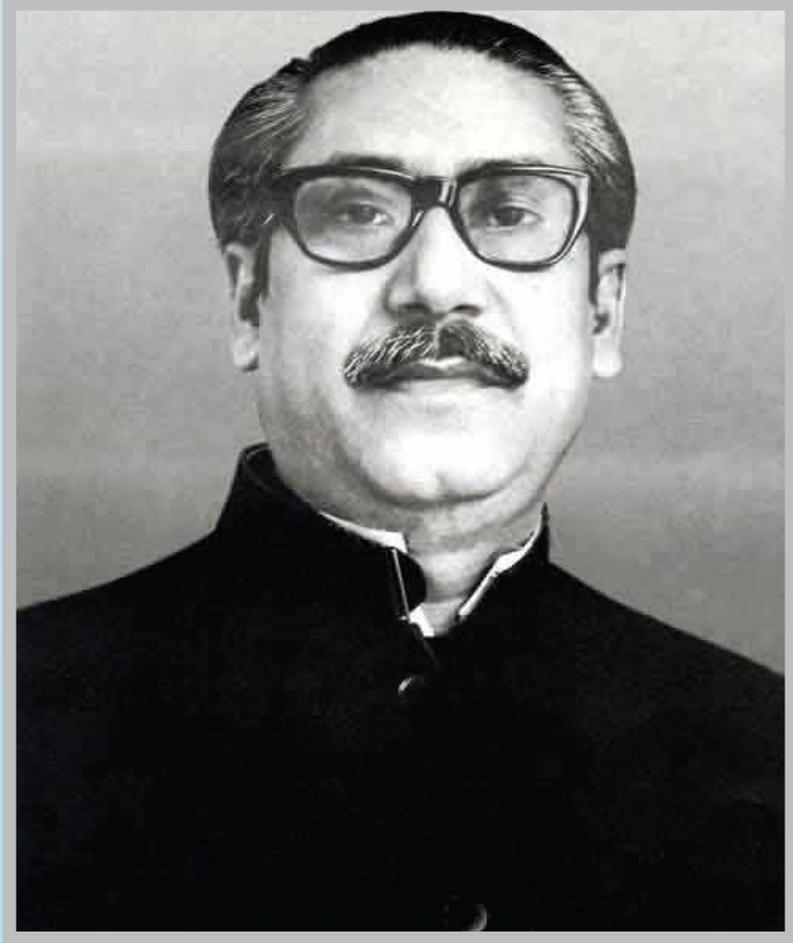
শিল্প মন্ত্রণালয়



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বিনম্র শ্রদ্ধা

যতকাল রবে পদ্মা, মেঘনা
গৌরী, যমুনা বহমান
ততকাল রবে কীর্তি তোমার
শেখ মুজিবুর রহমান।



জাতির পিতা বঙ্গবন্ধু শেখ মুজিবুর রহমান

World Accreditation Day Souvenir

Published By
Bangladesh Accreditation Board (BAB)

Published on
9 June 2019



Bangladesh Accreditation Board
Ministry of Industries

www.bab.org.bd

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بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ



President
People's Republic of Bangladesh
Bangabhaban, Dhaka

26 Jaishtha 1426
09 June 2019



Message

I am very glad to know that Bangladesh Accreditation Board (BAB) is going to celebrate 'World Accreditation Day 2019' in a befitting manner as elsewhere in the world.

Accreditation plays a pivotal role in ensuring supply chain for products and services especially in context of socio-economic development and globalization. It also confirms the quality of products, process and services for producers, exporters, importers, businessmen and customers. Effective selection of sustainable supplier makes business maximum benefit, not only in terms of financial stability but also Corporate Social Responsibility (CSR) and ethical practices. It also effects on profitability, brand reputation and customer loyalty. The theme of this year "Accreditation: Adding Value to Supply Chains" is very appropriate in this regard.

Accreditation, as an independent evaluation of conformity assessment body against recognized standards, ensure their impartiality, competence and consistency. As a result it establishes credibility and trustworthy information about goods and services among the consumers. The present government is implementing massive development porgrammes to turn Bangladesh into a developed country by the year 2041. To achieve the target, we have to put massive efforts in developing our living standard and make progress in the human development index. I hope Bangladesh Accreditation Board along with concerned government agencies and business communities will take joint venture to achieve confidence of everyone from producer to consumer level.

I wish 'World Accreditation Day 2019' a grand success.

Khoda Hafez, May Bangladesh Live Forever.

Md. Abdul Hamid

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ



রাষ্ট্রপতি
গণপ্রজাতন্ত্রী বাংলাদেশ
বঙ্গভবন, ঢাকা।

২৬ জ্যৈষ্ঠ ১৪২৬
০৯ জুন ২০১৯



বাণী

বাংলাদেশ এ্যাক্রেডিটেশন বোর্ড (বিএবি) বিশ্বের অন্যান্য দেশের ন্যায় বাংলাদেশও 'বিশ্ব এ্যাক্রেডিটেশন দিবস ২০১৯' উদযাপন করছে জেনে আমি আনন্দিত।

বিশ্বায়নের এ যুগে পণ্য ও সেবা সরবরাহ শৃঙ্খলে এ্যাক্রেডিটেশন গুরুত্বপূর্ণ ভূমিকা পালন করে থাকে। আমদানি-রপ্তানিকারক, ব্যবসায়ী ও ক্রেতাদের জন্য এ্যাক্রেডিটেশন পণ্য এবং সেবার মানের নিশ্চয়তা প্রদান করে থাকে। ব্যবসা বাণিজ্যে টেকসই যোগানদাতা নির্বাচিত হলে সামাজিক দায়বদ্ধতার পাশাপাশি নৈতিক অনুশীলন সুনিশ্চিত হয়। ফলে উৎপাদনকারী প্রতিষ্ঠান পণ্য ও সেবার মূল্য নির্ধারণে সর্বোচ্চ সুবিধা পেয়ে থাকে এবং পণ্য ও সেবার লভ্যাংশ, ব্র্যান্ডিং ইমেজ ও ক্রেতাদের মধ্যে বিশ্বস্ততা ক্রমান্বয়ে বৃদ্ধি পায়। বিশ্ব এ্যাক্রেডিটেশন দিবসে এ বছরের প্রতিপাদ্য "Accreditation: Adding Value to Supply Chains" এ প্রেক্ষাপটে অত্যন্ত যথার্থ ও সমন্বয়যোগী হয়েছে বলে আমি মনে করি।

স্বাধীন চিন্তাশীল কার্যাবলীর মাধ্যমে এ্যাক্রেডিটেশন সাদৃশ্য মূল্যায়নকারী প্রতিষ্ঠানের নিরপেক্ষতা, সাদৃশ্য সক্ষমতা ও সামঞ্জস্যতা নিশ্চিত করে। ফলে পণ্য ও সেবার ক্ষেত্রে ভোক্তার আস্থা অর্জিত হয়। বাংলাদেশকে ২০৪১ সালের মধ্যে উন্নত দেশে পরিণত করতে বর্তমান সরকার ব্যাপক উন্নয়ন কার্যক্রম বাস্তবায়ন করছে। উন্নত দেশের স্বীকৃতি পেতে আমাদের অর্থনৈতিক উন্নয়নের সাথে সাথে জীবনযাত্রার মানোন্নয়ন ও মানব উন্নয়ন সূচকে অগ্রগতি অর্জনে সচেষ্ট থাকতে হবে। উৎপাদক থেকে শুরু করে ভোক্তা পর্যায়ের সকলের আস্থা অর্জনে বাংলাদেশ এ্যাক্রেডিটেশন বোর্ড, বিভিন্ন সরকারি সংস্থা ও ব্যবসায়িক সম্প্রদায়সহ সংশ্লিষ্ট সকলে সমন্বিত উদ্যোগ গ্রহণ করবেন - এ প্রত্যাশা করি।

আমি 'বিশ্ব এ্যাক্রেডিটেশন দিবস ২০১৯' উপলক্ষে গৃহীত সকল কর্মসূচির সার্বিক সাফল্য কামনা করি।

খোদা হাফেজ, বাংলাদেশ চিরজীবী হোক।

মোঃ আবদুল হামিদ

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ



Prime Minister
Government of the People's
Republic of Bangladesh

26 Jaishtha 1426
09 June 2019



Message

I am happy to know that Bangladesh Accreditation Board (BAB) is going to observe World Accreditation Day on 9 June 2019. The main theme of the day this year- “Accreditation: Adding Value to Supply Chains” - is suitably connected to the context of recent industrial development of Bangladesh.

In free market economy, products and services reach to the buyers and consumers ends through the supply –chain system. An effective system ensures delivery of quality products and services to the end users at reasonable prices in time. The system is increasingly becoming multifaceted and complex owing to change of taste and demand of the buyers and consumers, regulatory guidelines and innovative goods and services. As a result, achieving confidence of the buyers and consumers through providing them with quality goods and services at a reasonable price in the growing global competitive market is becoming a major challenge for the entrepreneurs.

Providing quality goods and services at all levels of the supply chain is one of the prerequisites for achieving confidence of buyers and consumers. For this, an effective and trusted Quality Management System is essential. In this context, the accreditation system is being considered as an important tool throughout the world. This process is regarded as reliable and accepted method for evaluating the technical competency and impartiality of the management system.

To make Bangladesh an industrialized middle income country by the year 2021 and a developed one by the year 2041 is one of the main targets of our government. In order to achieve this goal, Bangladesh is moving faster towards quality industrialization. At present, the world’s most environment-friendly products are being produced in our local industry. These products are widely appreciated both at home and abroad. As a result, our export income is increasing and living standards of the people are improving gradually. I am confident that we would be able to reach the desired destination of industrialization within a short span of time.

I am optimistic that the Bangladesh Accreditation Board will make a positive contribution to strengthen Bangladesh’s position in the export market by setting standards on quality, developing national quality infrastructure and building sustainable supply chains in the upcoming days.

I wish all successes of the programs taken in connection with observance of the World Accreditation Day - 2019.

Joi Bangla, Joi Bangabandhu
May Bangladesh Live forever

Sheikh Hasina

بِسْمِ اللّٰهِ الرَّحْمٰنِ الرَّحِیْمِ



প্রধানমন্ত্রী
গণপ্রজাতন্ত্রী বাংলাদেশ সরকার

২৬ জ্যৈষ্ঠ ১৪২৬

০৯ জুন ২০১৯



বাণী

শিল্প মন্ত্রণালয়ের আওতাধীন বাংলাদেশ এ্যাক্রেডিটেশন বোর্ডের (বিএবি) উদ্যোগে ৯ জুন ২০১৯ 'বিশ্ব এ্যাক্রেডিটেশন দিবস' উদযাপন করা হচ্ছে জেনে আমি আনন্দিত। বাংলাদেশে শিল্পায়নের বর্তমান প্রেক্ষাপটে দিবসটির এ বছরের প্রতিপাদ্য "Accreditation: Adding Value to Supply Chains" অত্যন্ত সময়োপযোগী হয়েছে বলে আমি মনে করি।

মুক্তবাজার অর্থনীতিতে পণ্য ও সেবা একটি সাপ্লাই চেইনের মাধ্যমে ক্রেতা এবং ভোক্তার কাছে পৌঁছায়। যৌক্তিক মূল্যে গুণগত মানসম্পন্ন পণ্য ও সেবা ক্রেতা ও ভোক্তা সাধারণের কাছে সময়মত পৌঁছে দিতে সাপ্লাই চেইনের ভূমিকা অপরিসীম। ক্রেতা ও ভোক্তার রুচি ও চাহিদার পরিবর্তন, বিভিন্ন নিয়ন্ত্রণমূলক শর্তাবলী আরোপ এবং নতুন পণ্য ও সেবা উদ্ভাবনের ফলে সাপ্লাই চেইন ব্যবস্থাপনা ক্রমশই বহুমুখী এবং জটিল আকার ধারণ করছে। ফলে প্রতিযোগিতামূলক বাজারে গুণগতমান বজায় রেখে যৌক্তিক মূল্যে পণ্য ও সেবা সরবরাহ করে ক্রেতা ও ভোক্তাদের আস্থা অর্জন উদ্যোক্তাদের জন্য একটি চ্যালেঞ্জ হিসেবে দেখা দিয়েছে।

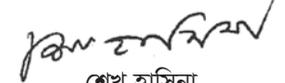
সাপ্লাই চেইনের প্রতিটি স্তরে পণ্য ও সেবার গুণগতমানের নিশ্চয়তা বিধান ক্রেতা ও ভোক্তা সাধারণের আস্থা অর্জনের অন্যতম পূর্বশর্ত। এর জন্য একটি কার্যকর এবং নির্ভরযোগ্য মান ব্যবস্থা গড়ে তোলা জরুরি। এক্ষেত্রে এ্যাক্রেডিটেশন পদ্ধতি বিশ্বব্যাপী একটি গুরুত্বপূর্ণ হাতিয়ার হিসেবে বিবেচিত হয়ে আসছে এবং মান ব্যবস্থাপনার কারিগরি সক্ষমতা এবং নিরপেক্ষতা মূল্যায়নে একটি নির্ভরযোগ্য ও স্বীকৃত পদ্ধতি হিসেবে অবদান রাখছে।

২০২১ সালের মধ্যে বাংলাদেশকে একটি শিল্পসমৃদ্ধ মধ্যম আয়ের দেশ এবং ২০৪১ সাল নাগাদ উন্নত ও সমৃদ্ধ রাষ্ট্রে পরিণত করাই আমাদের সরকারের অন্যতম লক্ষ্য। এ লক্ষ্য অর্জনে গুণগত শিল্পায়নের পথে বাংলাদেশ দ্রুত এগিয়ে চলছে। দেশীয় শিল্প কারখানায় এখন বিশ্বমানের পরিবেশবান্ধব শিল্পপণ্য উৎপাদিত হচ্ছে। এসব পণ্য দেশ-বিদেশে ব্যাপকহারে সমাদৃত হচ্ছে। এর ফলে আমাদের রপ্তানি আয় বাড়ছে এবং জনগণের জীবনমান উন্নত হচ্ছে। এ ধারা অব্যাহত রেখে আমরা অচিরেই শিল্পায়নের কাঙ্ক্ষিত গন্তব্যে পৌঁছে যেতে সক্ষম হব বলে আমি দৃঢ়ভাবে আশাবাদী।

আমার বিশ্বাস, বাংলাদেশ এ্যাক্রেডিটেশন বোর্ড (বিএবি) মান বিষয়ক নীতি নির্ধারণ, জাতীয় মান অবকাঠামোর উন্নয়ন এবং টেকসই সাপ্লাই চেইন গড়ে তোলার মাধ্যমে রপ্তানি বাণিজ্যে বাংলাদেশের অবস্থান সুসংহত করতে আগামী দিনেও ইতিবাচক অবদান রাখবে।

আমি বিশ্ব এ্যাক্রেডিটেশন দিবস ২০১৯ উপলক্ষে গৃহিত কর্মসূচির সাফল্য কামনা করছি।

জয় বাংলা, জয় বঙ্গবন্ধু
বাংলাদেশ চিরজীবী হোক।


শেখ হাসিনা



Minister
Ministry of Industries
Government of the People's
Republic of Bangladesh

26 Jaishtha 1426
09 June 2019

Message

I am very happy to know that the Bangladesh Accreditation Board (BAB) is going to celebrate World Accreditation Day 2019 on 9th June in a befitting manner. I express my sincere greetings to all the officials and employees of BAB for this noble venture.

Accreditation is an essential part of sustainable and quality industrialization. This globally recognized process has been playing a positive contribution in the expansion of global trade by eliminating the existing Technical Barriers to Trade (TBT) and accelerating the flow of import and export. The role of accreditation is very important in every tier of supply chain management starting from the collection of raw materials up to delivery of goods and services to the consumers.

Realizing this fact, the theme of the World Accreditation Day has been set in the current year, "Accreditation: Adding Value to Supply Chains". In the context of the ongoing endeavor of knowledge-based and quality industrialization in Bangladesh, I believe, the theme is very relevant and timely. Through this, I am confident that all the stakeholders related to the whole process of supply chains from production to distribution at the consumer level will be aware of the quality assurance.

Bangladesh is moving forward towards prosperity under the pragmatic leadership of the Prime Minister, Her Excellency Sheikh Hasina, the true torchbearer of the Father of the Nation, Bangabandhu Sheikh Mujibur Rahman. To strengthen Bangladesh's position in the global trade scenario, internationally acceptable standard infrastructure is being developed. As part of this effort, the institutional capacity of the Bangladesh Accreditation Board (BAB) has been increased.

BAB has already achieved international recognition and has been able to award accreditation certificates to various national and multinational testing, calibration, certification and inspection bodies. As a result, initiatives to add value to the supply chain have been strengthened. I am hopeful that by continuing this current trend of adding value to supply chains, we will become an industrially middle-income country by the year 2021 and a developed one long before 2041.

I wish the celebration of the World Accreditation Day a grand success

(Nurul Majid Mahmud Humayun M.P)

মন্ত্রী
শিল্প মন্ত্রণালয়
গণপ্রজাতন্ত্রী বাংলাদেশ সরকার

২৬ জ্যৈষ্ঠ ১৪২৬
০৯ জুন ২০১৯



বাণী

বাংলাদেশ এ্যাক্রেডিটেশন বোর্ডের (বিএবি) উদ্যোগে ৯ জুন বিশ্ব এ্যাক্রেডিটেশন দিবস ২০১৯ উদযাপন করতে যাচ্ছে জেনে আমি অত্যন্ত আনন্দিত। এ মহৎ উদ্যোগের জন্য আমি বিএবি'র সকল কর্মকর্তা-কর্মচারীকে আন্তরিক শুভেচ্ছা জানাই।

টেকসই ও গুণগত শিল্পায়নে এ্যাক্রেডিটেশন একটি অত্যাবশ্যকীয় অনুষ্ণ। বিশ্বব্যাপী স্বীকৃত এ পদ্ধতি আমদানি-রপ্তানি বাণিজ্য গতিশীল করার পাশাপাশি আন্তর্জাতিক বাণিজ্যে বিদ্যমান কারিগরি প্রতিবন্ধকতা দূরীকরণের মাধ্যমে বাণিজ্য সম্প্রসারণে ইতিবাচক অবদান রাখছে। পণ্যের কাঁচামাল থেকে শুরু করে ভোক্তা পর্যায়ের সরবরাহ পর্যন্ত সার্বিক সাপ্লাই চেইনেও (Supply Chain) এ্যাক্রেডিটেশনের ভূমিকা অত্যন্ত গুরুত্বপূর্ণ। এটি উপলব্ধি করে চলতি বছর বিশ্ব এ্যাক্রেডিটেশন দিবসের প্রতিপাদ্য নির্ধারণ করা হয়েছে, “Accreditation: Adding Value to Supply Chains”। বাংলাদেশে জ্ঞানভিত্তিক ও গুণগত শিল্পায়নের চলমান অভিযাত্রার প্রেক্ষাপটে প্রতিপাদ্য বিষয়টি অত্যন্ত প্রাসঙ্গিক বলে আমি মনে করি। আমার বিশ্বাস, এর মাধ্যমে শিল্প-কারখানায় পণ্যের উৎপাদন থেকে ভোক্তা পর্যায়ের পণ্য পৌঁছানো পর্যন্ত পুরো প্রক্রিয়ার সাথে সংশ্লিষ্ট সবাই গুণগতমান নিশ্চিতকল্পে আরও সচেতন হবেন।

জাতির পিতা বঙ্গবন্ধুর সুযোগ্য উত্তরাধিকার, বিশ্ব বরণ্য নেতা, সফল রাষ্ট্র নায়ক, মাননীয় প্রধানমন্ত্রী জননেত্রী শেখ হাসিনার প্রাজ্ঞ নেতৃত্বে বাংলাদেশ উন্নয়নের মহাসড়ক ধরে দ্রুত এগিয়ে চলছে। বিশ্ববাণিজ্যে বাংলাদেশের অবস্থান শক্তিশালী করতে দেশেই আন্তর্জাতিকভাবে গ্রহণযোগ্য মান অবকাঠামো গড়ে তোলা হচ্ছে। এর অংশ হিসেবে বাংলাদেশ এ্যাক্রেডিটেশন বোর্ডের (বিএবি) সক্ষমতা বাড়ানো হয়েছে। বিএবি ইতোমধ্যে আন্তর্জাতিক স্বীকৃতি অর্জন করেছে এবং বিভিন্ন জাতীয় ও বহুজাতিক পরীক্ষণ, সনদ প্রদানকারী এবং পরিদর্শন সংস্থাকে এ্যাক্রেডিটেশন সনদ প্রদানে সক্ষম করেছে। এর ফলে সাপ্লাই চেইনে মূল্য সংযোজনের প্রয়াস জোরদার হয়েছে। এ ধারা অব্যাহত রেখে আমরা ২০২১ সালের মধ্যেই শিল্পসমৃদ্ধ মধ্যম আয়ের এবং ২০৪১ সালের অনেক আগেই উন্নত রাষ্ট্রে পরিণত হবো বলে আমি আশাবাদী।

আমি বিশ্ব এ্যাক্রেডিটেশন দিবস উপলক্ষে আয়োজিত অনুষ্ঠানের সাফল্য কামনা করছি।

(নূরুল মজিদ মাহমুদ হুমায়ূন এম.পি)



State Minister
Ministry of Industries
Government of the People's
Republic of Bangladesh

26 Jaishtha 1426
09 June 2019

Message

I am glad to know that like other countries of the world Bangladesh is going to celebrate 'World Accreditation Day 2019'. I welcome this initiative.

The theme of the day for this year is 'Accreditation: Adding value to supply Chains' is indeed very time befitting in the context of current industrialization scenario of Bangladesh.

Though the current economy of the world is called free market economy, products and services cannot move freely across the world. Rather these are facing different regulatory measures and customer requirements before reaching to the buyers and customers through supply chains. This process involves different organizations which are paying roles in different stages of the supply chain system. Efficient quality management, institutional capability and its proper evaluation of all organizations engaged in producing quality products and services are indispensable in this regard. Accreditation plays an important role in this regard.

Certificates or reports from accredited conformity assessment bodies are widely recognized and accepted all over the world following a mutual recognition arrangement in accreditation system. It helps developing the quality management system and demonstrating organizational competence in the organizations involved in different stages of supply chain which allowing cost reduction, productivity enhancement and quality of products and services. This results in the attainment of customer confidence, removing of technical barriers to trade (TBT) and expansion of cross boundary trade.

There should be an internationally recognized and competent national quality infrastructure to facilitate export of local products and services to a greater extent. The government under the visionay leadership of Prime Minister Sheikh Hasina has been trying ceaselessly with a view to developing such infrastructure. Bangladesh Accreditation Board (BAB) has achieved International reorganization for its accreditation services with the following support, heartiest patronization and visionary directions of the government. BAB is also being praised for its role in the accreditation arena at home and abroad.

I wish all the programs to be organized by BAB on the eve of 'World Accreditation Day 2019' a grand success.

Joi Bangla, Joi Bangabandhu
May Bangladesh live forever.

Kamal Ahmed Mojumder MP

প্রতিমন্ত্রী
শিল্প মন্ত্রণালয়
গণপ্রজাতন্ত্রী বাংলাদেশ সরকার



২৬ জ্যৈষ্ঠ ১৪২৬
০৯ জুন ২০১৯

বাণী

বিশ্বের অন্যান্য দেশের মত বাংলাদেশও ৯ জুন 'বিশ্ব এ্যাক্রেডিটেশন দিবস ২০১৯' পালন করা হচ্ছে জেনে আমি আনন্দিত। আমি এই উদ্যোগকে স্বাগত জানাই।

দিবসটির এবারের প্রতিপাদ্য 'Accreditation: Adding Value to Supply Chains' অর্থাৎ এ্যাক্রেডিটেশনের মাধ্যমে সাপ্লাই চেইনে মান সংযোজন অত্যন্ত সময়োপযোগী হয়েছে বলে আমি মনে করি।

বর্তমান বিশ্ব অর্থনীতিকে মুক্তবাজার অর্থনীতি বলা হলেও রপ্তানি বাণিজ্যের ক্ষেত্রে বিশ্বের সব অর্থনীতিতে বিনা বাধায় পণ্য ও সেবা অবাধ বিচরণ সম্ভব হচ্ছে না। বিভিন্ন নিয়ন্ত্রণমূলক শর্তাবলি এবং ক্রেতা ও ভোক্তার রুচি ও চাহিদা বিবেচনা করে উৎপাদিত পণ্য ও সেবা একটি সাপ্লাই চেইনের মাধ্যমে ক্রেতা বা ভোক্তার কাছে পৌঁছায়। এ প্রক্রিয়া একাধিক প্রতিষ্ঠানের মাধ্যমে সম্পন্ন হয়। গুণগত মানসম্পন্ন পণ্য ও সেবা উৎপাদনে নিয়োজিত সকল প্রতিষ্ঠানের দক্ষ মান ব্যবস্থাপনা, প্রাতিষ্ঠানিক সক্ষমতা এবং এর যথাযথ মূল্যায়ন একান্ত অপরিহার্য। বিশ্বব্যাপী মান ব্যবস্থাপনা ও প্রতিষ্ঠানিক সক্ষমতা মূল্যায়নে এ্যাক্রেডিটেশন গুরুত্বপূর্ণ ভূমিকা পালন করে।

আন্তর্জাতিক মান অনুসরণ করে এ্যাক্রেডিটেশন কার্যক্রম পারস্পরিক স্বীকৃতি ব্যবস্থার মাধ্যমে পরিচালিত হয় বলে এ্যাক্রেডিটেড সাযুজ্য নিরূপণকারী প্রতিষ্ঠান কর্তৃক ইস্যুকৃত রিপোর্ট বা সনদ বিশ্বের সর্বত্র স্বীকৃত ও গৃহীত হয়। সাপ্লাই চেইনের বিভিন্ন পর্যায়ে জড়িত প্রতিষ্ঠানের সক্ষমতা এবং মান ব্যবস্থাপনা উন্নয়নের মাধ্যমে পণ্য ও সেবার উৎপাদন ব্যয় হ্রাস, উৎপাদনশীলতা বৃদ্ধি এবং গুণগত মান বৃদ্ধি পায়। এভাবে এ্যাক্রেডিটেশন ভোক্তার আস্থা অর্জন, বাণিজ্যের কারিগরি প্রতিবন্ধকতা দূরীকরণ ও বাণিজ্য সম্প্রসারণে মাধ্যমে দেশের সার্বিক আর্থসামাজিক উন্নয়নে গুরুত্বপূর্ণ অবদান রাখছে।

দেশীয় পণ্য ও সেবার রপ্তানি বাড়াতে আন্তর্জাতিকভাবে স্বীকৃত এবং নির্ভরযোগ্য একটি জাতীয় মান অবকাঠামো থাকা অপরিহার্য। মাননীয় প্রধানমন্ত্রী শেখ হাসিনার নেতৃত্বাধীন বর্তমান সরকার রাষ্ট্র পরিচালনার দায়িত্ব গ্রহণের পর থেকে এ লক্ষ্য বাস্তবায়নে নিরলসভাবে কাজ করে যাচ্ছে। সরকারের আন্তরিক সমর্থন, পৃষ্ঠপোষকতা এবং দূরদর্শী ভূমিকার ফলে বাংলাদেশ এ্যাক্রেডিটেশন বোর্ডের এ্যাক্রেডিটেশন ব্যবস্থা আন্তর্জাতিক স্বীকৃতি অর্জন করেছে। এটির প্রাতিষ্ঠানিক সাফল্য দেশ ও দেশের বাইরে প্রশংসিত হচ্ছে।

আমি 'বিশ্ব এ্যাক্রেডিটেশন দিবস ২০১৯' উপলক্ষে বাংলাদেশ এ্যাক্রেডিটেশন বোর্ড আয়োজিত অনুষ্ঠানের সাফল্য কামনা করি।

জয় বাংলা, জয় বঙ্গবন্ধু
বাংলাদেশ চিরজীবী হোক।

কামাল আহমেদ মজুমদার এমপি



Secretary
Ministry of Industries
Government of the People's
Republic of Bangladesh

26 Jaishtha 1426
09 June 2019

Message

Bangladesh Accreditation Board (BAB) under the Ministry of Industries is celebrating “World Accreditation Day 2019” in a befitting manner like other countries around the globe on 9 June.

In current global market, influence of the free market economy facilitates the increase of industry and trade. Supply chain is considered as one of the important factors of such trade increase. It works as the network of all the processes, resources, activities and technology involved in the creation and sale of a product, from the delivery of source materials from the supplier to the manufacturer, through to its eventual delivery to the end user. So, having a standard and reliable supply chain management is inevitable. Only accredited testing, inspection and certification to the products and services can ensure the reliability of the supply chain. Hence, the theme of the day this year “Accreditation: Adding Value to Supply Chains” becomes very relevant and significant.

In the context of our country, to enhance internal and export trade and increase the consumer trust, it is necessary to establish a strong and sustainable supply chain management in addition to the production and sale of quality goods and services. This is possible through implementation of accredited conformity assessment system.

With this view, BAB started functioning through recruitment of its employees in 2010. All credit goes to the present government for introducing an effective and international standard accreditation system in the country. The government has been working relentlessly to make Bangladesh a middle-income country by 2021, to implement the Sustainable Development Goal (SDG) declared by the United Nations by 2030 and to build an industrially developed and prosperous country by 2041. BAB's accreditation is playing an active role in improving product transformation, diversification, marketing and supply chain to achieve these goals.

I believe that BAB will play a vital role in creating awareness amongst the relevant stakeholders and interested parties on the subject matter of the theme through the celebrating World Accreditation Day.

I wish all the success of World Accreditation Day 2019.

Md. Abdul Halim

সচিব
শিল্প মন্ত্রণালয়
গণপ্রজাতন্ত্রী বাংলাদেশ সরকার



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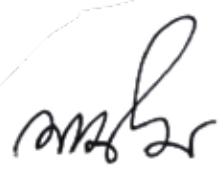
বিশ্বের অন্যান্য দেশের মত নানা কর্মসূচির মাধ্যমে ৯ জুন শিল্প মন্ত্রণালয়াধীন বাংলাদেশ এ্যাক্রেডিটেশন বোর্ড (বিএবি) “বিশ্ব এ্যাক্রেডিটেশন দিবস ২০১৯” উদযাপন করছে।

প্রতিযোগিতামূলক বর্তমান বিশ্বে মুক্তবাজার অর্থনীতির প্রভাবে শিল্প-বাণিজ্য ক্রমেই প্রসারিত হচ্ছে। প্রসারমান শিল্প-বাণিজ্যে Supply Chain বা সরবরাহ চেইন একটি বড় নিয়ামক। পণ্য, সেবা ও প্রযুক্তির উদ্ভাবন থেকে উৎপাদন, বিপণন এবং ক্রেতা ও ভোক্তার নিকট পৌঁছানোর ক্ষেত্রে সরবরাহ চেইন একটি নেটওয়ার্ক হিসেবে কাজ করে। এজন্য সরবরাহ চেইন ব্যবস্থা নির্ভরযোগ্য ও মানসম্পন্ন হওয়া অত্যন্ত জরুরি। সরবরাহ চেইনের নির্ভরযোগ্যতার জন্য প্রয়োজন পণ্য ও সেবার যথাযথ পরীক্ষণ, পরিদর্শন এবং সনদ ব্যবস্থার সক্ষমতা উন্নয়ন। বিশ্বব্যাপি এ্যাক্রেডিটেশনের মাধ্যমেই এ সক্ষমতার তৃতীয় পক্ষীয় মূল্যায়ন হয়ে থাকে। কাজেই এ বছর দিবসটির প্রতিপাদ্য “Accreditation: Adding Value to Supply Chains” অনেক তাৎপর্যপূর্ণ।

আমাদের দেশের প্রেক্ষাপটে অভ্যন্তরীণ ও রপ্তানি বাণিজ্য সুসংহত করা এবং ক্রেতা ও ভোক্তা সাধারণের আস্থা বৃদ্ধির জন্য গুণগত মানসম্পন্ন পণ্য ও সেবা উৎপাদন, বিপণন নিশ্চিতকরণে একটি শক্তিশালী ও টেকসই সরবরাহ চেইন ব্যবস্থা গড়ে তোলা প্রয়োজন। এ্যাক্রেডিটেড সাযুজ্য নিরূপণ পদ্ধতি ব্যবহারের মাধ্যমেই সেটি সম্ভব। এ লক্ষ্যে বিএবি প্রতিষ্ঠার শুরু থেকেই কাজ করে যাচ্ছে। ২০১০ সালে জনবল নিয়োগের মাধ্যমে বিএবির কার্যক্রম শুরু হয়। বর্তমান সরকার দেশে একটি কার্যকর এবং আন্তর্জাতিক মানের এ্যাক্রেডিটেশন ব্যবস্থা চালু করার কৃতিত্বের শতভাগ দাবিদার। সরকার ২০২১ সালের মধ্যে বাংলাদেশকে একটি মধ্যম আয়ের দেশ, ২০৩০ সালে জাতিসংঘ ঘোষিত ‘টেকসই উন্নয়ন অভীষ্ট’ বাস্তবায়ন এবং ২০৪১ সালের মধ্যে শিল্পোন্নত ও সমৃদ্ধ দেশে পরিণত করার লক্ষ্যে নিরলসভাবে কাজ করে যাচ্ছে। এ লক্ষ্যে পণ্য রূপান্তর, বহুমুখীকরণ, বাজারজাতকরণ ও সরবরাহ চেইন ব্যবস্থার মানোন্নয়নে বিএবির এ্যাক্রেডিটেশন কার্যকর ভূমিকা পালন করছে।

বিশ্ব এ্যাক্রেডিটেশন দিবস উদযাপনের মাধ্যমে প্রতিপাদ্য বিষয়ে সংশ্লিষ্টদের মাঝে সচেতনতা সৃষ্টিতে বিএবি জোরালো ভূমিকা রাখবে বলে আমি বিশ্বাস করি।

আমি বিশ্ব এ্যাক্রেডিটেশন দিবস ২০১৯ এর সাফল্য কামনা করছি।



মোঃ আবদুল হালিম



President
Dhaka Chamber of Commerce & Industry
(DCCI)

26 Jaishtha 1426
09 June 2019

Message

I am pleased to know that Bangladesh Accreditation Board (BAB) is going to celebrate "World Accreditation Day" this year on 9th June, 2019.

The theme of World Accreditation Day 2019 is "Accreditation: Adding Value to Supply Chains" which is a very timely and important selection I think. Accreditation plays an important role in reducing the costs of trade and doing business, enhancing technology transfer, and increasing investment. Businesses have been producing items with goods sourced from around the world for many years. The global nature of supply chains and retail markets means that businesses have to operate in multiple and often under differing regulatory environments. Determining the quality, authenticity and traceability of raw materials or components requires credible and trustworthy information. Procurement is often responsible for up to 70% of companies' expenditure and so any disruption could affect profitability, brand reputation and customers' loyalty. Accreditation provides a globally recognized tool to not only assess and control risks of the internal operation of businesses, but also the products and services that are placed in the market.

I would like to thank and express my sincere gratitude to BAB for partnering with Dhaka Chamber of Commerce & Industry (DCCI) in celebrating World Accreditation Day 2019 jointly this year. I therefore wish every success of celebration of World Accreditation Day 2019.

Osama Tasir

সভাপতি
ঢাকা চেম্বার অব কমার্স অ্যান্ড ইন্ডাস্ট্রি
(ডিসিসিআই)

২৬ জ্যৈষ্ঠ ১৪২৬
০৯ জুন ২০১৯



বাণী

বাংলাদেশ এ্যাক্রেডিটেশন বোর্ড (বিএবি) ০৯ জুন, ২০১৯ তারিখ বিশ্ব এ্যাক্রেডিটেশন দিবস উদ্বাপন করতে যাচ্ছে জেনে আমি অত্যন্ত আনন্দিত।

এবারের বিশ্ব এ্যাক্রেডিটেশন দিবস ২০১৯ এর মূল প্রতিপাদ্য বিষয় হচ্ছেঃ “Accreditation: Adding Value to Supply Chains”. এবারের প্রতিপাদ্য বিষয়টি অত্যন্ত সময়োপযোগী ও গুরুত্বপূর্ণ বলে আমি মনে করি। এ্যাক্রেডিটেশন যে শুধুমাত্র ব্যবসায় আভ্যন্তরীণ কর্মপন্থা মূল্যায়ন ও নিয়ন্ত্রণে বিশ্বব্যাপি স্বীকৃত একটি পদ্ধতি তাই নয় বরং এ্যাক্রেডিটেশন পণ্য ও সেবার মান নিয়ন্ত্রণে ভূমিকা রেখে থাকে। এ্যাক্রেডিটেশন বাজার পৃথকীকরণে সহায়তা করে থাকে এবং পণ্যের নিরাপত্তা প্রদানে সহায়তা প্রদান করে। ব্যবসার প্রয়োজনে সারা বিশ্ব থেকে সংগ্রহ করা বিভিন্ন পণ্যসামগ্রী দ্বারা মালামাল উৎপাদন করা হয়। সংগৃহীত এ পণ্যসমূহের গুণগতমান, সত্যতা এবং কাঁচামালের উৎসের বিশ্বাসযোগ্য তথ্যের প্রয়োজন। পণ্যের সরবরাহ চেইন ক্রমাগতভাবে বৈশ্বিকীকরণ এবং জটিল হচ্ছে কারণ কোম্পানিসমূহ তাদের ব্যয়কে যৌক্তিক করে তুলতে চায়। সরবরাহ চেইন ও খুচরা বাজারের আন্তর্জাতিক গতিপ্রকৃতি বলতে বোঝায় যে ব্যবসায়কে বিভিন্ন নীতি পরিবেশের মধ্য দিয়ে চালিত হতে হয়। পণ্য আহরণের জন্য কখনও কখনও কোম্পানির ৭০% ব্যয় হয়ে থাকে অতএব এখানে কোন রকম ব্যতিক্রম লভ্যাংশ, ব্যান্ড খ্যাতি এবং ক্রেতার বিশ্বস্ততার উপর প্রভাব পড়তে পারে।

প্রতিবছরে নয়া এবছরও ঢাকা চেম্বার অব কমার্স অ্যান্ড ইন্ডাস্ট্রি (ডিসিসিআই) এর সাথে যৌথভাবে বিশ্ব এ্যাক্রেডিটেশন দিবস ২০১৯ উদ্বাপনের সিদ্ধান্ত গ্রহণের জন্য বাংলাদেশ এ্যাক্রেডিটেশন বোর্ডকে আন্তরিক ধন্যবাদ জানাচ্ছি এবং দিবসটির সাফল্য কামনা করছি।

ওসামা তাসীর



মহাপরিচালক
(অতিরিক্ত সচিব)
বাংলাদেশ এ্যাক্রেডিটেশন বোর্ড (বিএবি)

২৬ জ্যৈষ্ঠ ১৪২৬
০৯ জুন ২০১৯

উন্নয়নের অগ্রযাত্রায় বিএবি

বিশ্বে এখন অন্যতম আলোচিত বিষয় হ'ল গুণগতমান বা কোয়ালিটি। গুণগত মানসম্পন্ন পণ্য ও সেবাকে অভ্যন্তরীণ এবং আন্তর্জাতিক বাজারে সরবরাহের জন্য দরকার একটি নির্ভরযোগ্য, কার্যকর এবং সমন্বিত জাতীয় মান ব্যবস্থাপনা ও সাযুজ্য নিরূপণ পদ্ধতি।

মুক্ত বাজার অর্থনীতির প্রভাবে বিশ্ব বাজারে বাণিজ্য যেমন বহুমুখীতা পাচ্ছে তেমনি প্রতিযোগিতাও ক্রমশঃ জোরদার হচ্ছে। ক্রেতা ও ভোক্তা সাধারণ চাচ্ছে সশ্রয়ী মূল্যে মানসম্পন্ন পণ্য ও সেবা। এ জন্য পণ্য ও সেবা উৎপাদনের শুরু থেকে বিপণন এবং ভোক্তার নিকট পৌঁছানোর প্রতিটি পর্যায়ে মান নিয়ন্ত্রণ ও মূল্যে সঠিক না থাকলে প্রতিযোগিতামূলক বাজারে টিকে থাকতে পারবে না। এ সকল পর্যায়ের সাথে সংশ্লিষ্ট বিভিন্ন ব্যক্তি, সম্পদ ও প্রযুক্তি সমন্বয়ে গঠিত নেটওয়ার্কের নাম সাপ্লাই চেইন (Supply Chain)। গুণগত মান সম্পন্ন পণ্য ও সেবার উন্মেষ ঘটাতে প্রয়োজন সাপ্লাই চেইনে যথাযথ মানব্যবস্থাপনা প্রতিষ্ঠা। এ বছরের বিশ্ব এ্যাক্রেডিটেশন দিবসের প্রতিপাদ্যে এ্যাক্রেডিটেশন কিভাবে সাপ্লাই চেইনকে আরো সমৃদ্ধ করতে পারে তার উপর গুরুত্বারোপ করা হয়েছে। প্রতিপাদ্য নিরূপণ করা হয়েছে- “Accreditation: Adding Value to Supply Chains” যা বর্তমান অবস্থার প্রেক্ষিতে যথার্থ ও সময়োপযোগী হয়েছে বলে আমি মনে করি। Supply Chain-এর বিভিন্ন পর্যায়ে পণ্য ও সেবার গুণগত মান সম্পর্কে নিশ্চয়তা প্রদানের মাধ্যমে সংশ্লিষ্ট ক্রেতা বা ভোক্তা সাধারণের মাঝে এ্যাক্রেডিটেশন আস্থার স্থান তৈরিতে সক্ষম।

দেশের মান অবকাঠামো ও সাযুজ্য নিরূপণ ব্যবস্থা উন্নয়নের লক্ষ্যে ২০০৬ সালের ২৯ নং আইনের মাধ্যমে বাংলাদেশ এ্যাক্রেডিটেশন বোর্ড (বিএবি) প্রতিষ্ঠিত হয়। তবে, এ্যাক্রেডিটেশনের ধারণা ও এর প্রভাব দেশে এখনো ততটা বিস্তৃত নয়। শিল্প মন্ত্রণালয়ের আওতাধীন এ প্রতিষ্ঠান ২০১০ সালে স্থায়ী জনবল নিয়োগের মাধ্যমে পুরোদমে কার্যক্রম শুরু করতে সক্ষম হয়। যা বর্তমান সরকারের সদিচ্ছার একটি অন্যতম উদাহরণ।

শিল্প মন্ত্রণালয়ে সার্বিক সহায়তা ও সচিবের গঠনমূলক দিকনির্দেশনায় ধীরে ধীরে বিএবি এগিয়ে যাচ্ছে। স্বল্প সময়ে আন্তর্জাতিক স্বীকৃতি অর্জনে সক্ষম হয়েছে; সমাদৃত হয়েছে বিশ্বব্যাপি। এশিয়া প্যাসিফিক এ্যাক্রেডিটেশন কো-অপারেশন (APAC) এর পূর্ণ সদস্যপদ অর্জন সহ এর পারস্পরিক স্বীকৃতি ব্যবস্থা (MRA) স্বাক্ষর করেছে। বর্তমানে, বিএবি মেডিকেল ও পরিদর্শন সংস্থা এ্যাক্রেডিটেশন স্কীমের জন্য MRA অর্জনের প্রয়োজনীয় উদ্যোগ গ্রহণ করেছে। ইতোমধ্যে APAC কর্তৃক বিএবি'র মান ব্যবস্থাপনার মূল্যায়ন সম্পন্ন হয়েছে। এতে দেশে পরীক্ষণ, ক্যালিব্রেশন, মেডিকেল পরীক্ষণ, পরিদর্শন ইত্যাদি ক্ষেত্রে মান ব্যবস্থাপনা নিশ্চিতকরণে নতুন দ্বার উন্মোচিত হ'ল। যা সরকারের একটি উল্লেখযোগ্য অর্জন। APAC/ILAC এর পাশাপাশি আন্তর্জাতিক এ্যাক্রেডিটেশন ফোরাম (IAF) এর সদস্যপদ অর্জনের লক্ষ্যে বিএবি কার্যকর পদক্ষেপ গ্রহণ করেছে। দেশে হালাল কনফারমিটি অ্যাসেসমেন্ট কার্যক্রমে আন্তর্জাতিক গ্রহণযোগ্যতার জন্য হালাল এ্যাক্রেডিটেশন স্কীম চালু ও MRA অর্জনের লক্ষ্যে অর্গানাইজেশন অব ইসলামিক কো-অপারেশন (OIC) এর সহযোগী সংস্থা দি স্ট্যান্ডার্ড এন্ড মেট্রোলজি ইনস্টিটিউট ফর ইসলামিক স্মিটিং (SMIC) এবং আন্তর্জাতিক হালাল এ্যাক্রেডিটেশন ফোরাম (IHAF) এর সদস্যপদ গ্রহণের কার্যকর উদ্যোগ নিয়েছে।

সাম্প্রতিক সময়ে বিএবি'র কলেবর বৃদ্ধির জন্য শুন্যপদে নতুন জনবল নিয়োগ কার্যক্রম চলমান রয়েছে। সময়ের পরিক্রমায় বর্তমান ও ভবিষ্যৎ চাহিদার নিরিখে বিএবি'র বিদ্যমান আইনের পরিবর্তন-পরিমার্জন এবং প্রয়োজনীয় সংখ্যক জনবল বৃদ্ধির কাজ বিএবি গুরুত্বের সাথে করে যাচ্ছে।

এ্যাক্রেডিটেশন প্রদান ও অংশীজনদের জন্য প্রশিক্ষণ আয়োজনের পাশাপাশি বিএবি সরকারের নির্বাচনী ইশতেহার ২০১৮, ৭ম পঞ্চবার্ষিক পরিকল্পনা ও জাতিসংঘ ঘোষিত টেকসই উন্নয়ন অজীষ্ট (SDG) বাস্তবায়নে নিরলসভাবে কাজ করে যাচ্ছে। দেশে নিরাপদ খাদ্য, পানি, স্বাস্থ্য ব্যবস্থার মানোন্নয়নের পাশাপাশি সরকারের বিভিন্ন বৃহৎ ও মেগা প্রকল্পে গুণমান নিশ্চিতকরণে বিএবি অগ্রণী ভূমিকা পালন করে আসছে।

আশাকরি এ ধারা অব্যাহত থাকলে বিএবি'র ভূমিকা বাংলাদেশকে ২০২১ সালের মধ্যে শিল্পসমৃদ্ধ মধ্যম আয়ের দেশে এবং ২০৪১ সাল নাগাদ উন্নত দেশে পরিণত করতে উল্লেখযোগ্য অবদান রাখবে।



মোঃ মনোয়ারুল ইসলাম



প্রকাশকাল
২৬ জ্যৈষ্ঠ ১৪২৬
০৯ জুন ২০১৯

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মহাপরিচালক (অতিরিক্ত সচিব)
বাংলাদেশ এ্যাক্রেডিটেশন বোর্ড (বিএবি)

সম্পাদনা পরিষদ

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জনাব মোঃ নাসিরুল ইসলাম, উপ পরিচালক	-সদস্য
জনাব মোহাম্মদ আব্বাছ আলম, সহকারী পরিচালক	-সদস্য
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Joint Statement



by Xiao Jianhua, Chair IAF, and ETTY Feller, Chair ILAC



Xiao Jianhua

World Accreditation Day 2019 (#WAD2019) Accreditation: Adding Value to Supply Chains



ETTY Feller

World Accreditation Day 2019 highlights the role of accreditation in adding value to supply chains.

Supply chains provide a vital role in delivering products and services for consumers, business and the public sector in a timely, cost-efficient and quality manner. Supply chains are constantly evolving from complex systems crossing multiple borders to new and diverse supply chains aimed at ensuring all stakeholders' requirements are met, including the need for ensuring sustainability and responsible supply.

Accreditation and, with it, other quality infrastructure tools such as standards, metrology and conformity assessment, provide widely accepted tools that help deliver value to the supply chain. These tools help with trust and assurance, enabling confidence in both final products and services and the manner in which they are placed on the market and used.

From the accreditation of laboratories which test safety of toys, the inspection of manufacturing processes, to the accredited certification of food manufacturers to food safety standards, accreditation adds value to supply chains by supporting the wide spectrum of needs of interested parties.

Global supply chains which cross international borders are significant beneficiaries of the global nature of accreditation. The International Accreditation Forum (IAF) and the International Laboratory Accreditation Cooperation (ILAC) both manage accreditation based on internationally developed and accepted standards. As such, laboratories, inspection bodies and certification bodies are accredited against international standards. Conformity assessment bodies in turn use global standards to evaluate samples, products, services, management systems and persons. By having this global accreditation system in place, confidence is provided for each leg of supply chains, helping businesses deliver products and services which, most importantly, consumers can trust.





The system of accreditation has been estimated to cover economies that represent 96% of global GDP (Source: World Economic Forum); IAF members accredit certification bodies and verification/validation bodies and ILAC members accredit laboratory and inspection bodies. This system helps to ensure the work of accreditation bodies across the globe is consistent, maintaining international standards from one accreditation body to another.

The mainstream acceptance of accreditation by both pan-regional bodies and domestic regulators within individual governments also helps WTO member governments to meet their responsibilities under the Technical Barriers to Trade Agreement. This example demonstrates one of the key goals of accreditation to support trade.

World Accreditation Day 2019 aims to highlight and celebrate the way accreditation adds value to supply chains. Its objective enable a wide audience of businesses, government, regulators and consumers to understand better the role of accreditation in adding value to supply chains.

Resources such as www.business-benefits.org and www.publicsectorassurance.org will support events, press and television coverage, and workshops and seminars will take place in conjunction with the celebration of World Accreditation Day in over 100 economies to raise awareness of the value that accreditation plays supporting supply chains.

For further details, contact your local accreditation body.
http://www.iaf.nu//articles/IAF_MEMBERS_SIGNATORIES/4 and
<https://ilac.org/ilac-membership/>

Further case studies, research and support material is available at
<http://www.publicsectorassurance.org/topic-areas/health-safety/>



Accreditation: Adding Value to Supply Chains

What are the Issues?

- Although businesses have been producing items with goods sourced from around the world for many years, supply chains are now significantly more complex in terms of the speed, scale, depth, and breadth of global interactions.
- The global nature of supply chains and retail markets means that businesses have to operate in multiple and often differing regulatory environments.
- Determining the quality, authenticity and traceability of raw materials or components requires credible and trustworthy information.
- As innovation accelerates and the lifecycle of products shortens, markets become more unpredictable and exert increased pressure on supply chains.
- Businesses need to manage their exposure to risk or disruption from data security breaches or system failures.
- Effective selection of sustainable suppliers not just in terms of financial stability, but also Corporate Social Responsibility (CSR) performance and ethical practices.

Product supply chains are increasingly globalised and complex as companies seek to optimize costs while retaining flexibility. Supply chains that stretch across multiple countries and sites pose major challenges in terms of quality, compliance with regulations and standards relating to safety, as well as environmental and social responsibility.

Procurement is often responsible for up to 70% of companies' expenditure (Source: The Chartered Institute of Procurement and Supply), and so any disruption could affect profitability, brand reputation and customer loyalty.

The Role of Accreditation?

Accreditation determines the technical competence, integrity and impartiality of organisations providing conformity assessment services such as testing, calibration, certification, and inspection.

Accreditation, underpinned by internationally agreed standards, adds value to supply chains as businesses seek to maximise value and satisfy contractual terms, while maintaining a level of confidence that products meet technical specifications and are safe to use.

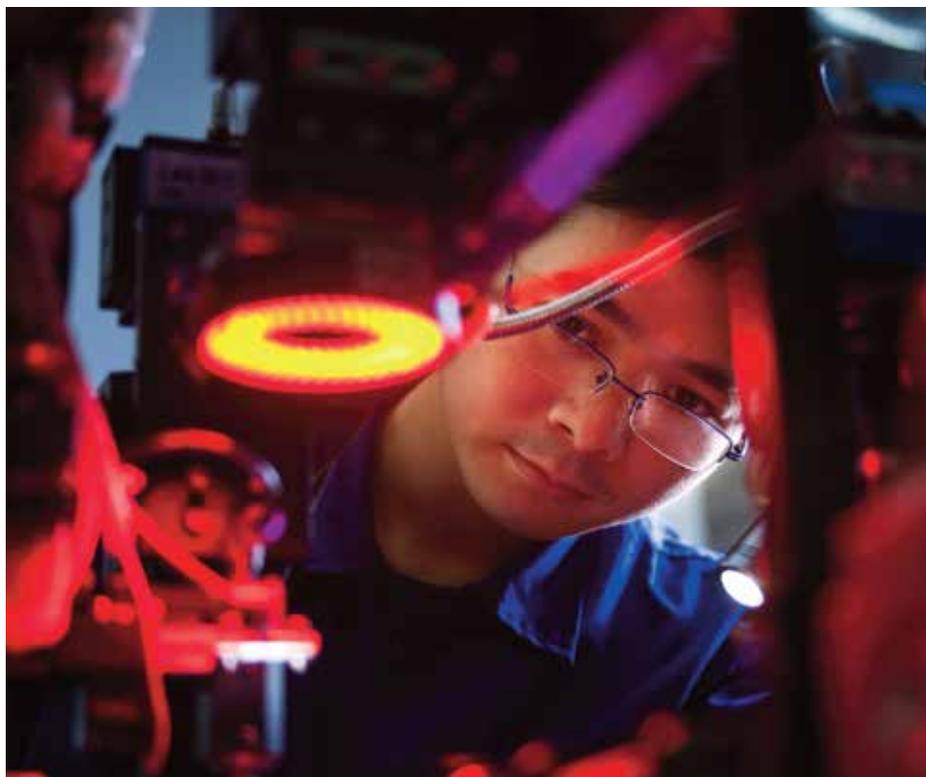
80% of trade involves elements of testing, calibration, inspection and certification activities, collectively known as conformity assessment (Source: OECD). Accreditation is the independent evaluation of these conformity assessment bodies against recognised standards to ensure their impartiality, competence and consistency.

Accreditation, therefore, plays an important role in reducing the costs of trade and doing business, enhancing technology transfer, and increasing investment. It also enables businesses

to integrate into global supply chains, as they can demonstrate product quality through a common "technical language" needed to establish trust between business partners. (Source: The World Bank). A report, produced by the World Trade Organization Economic Research and Statistics Division, stated that the inappropriate use of conformity assessment accounts for 10% of Specific Trade Concerns (STCs). Accreditation provides an opportunity to address this issue.

CASE STUDY

UK Local Government
UK local councils use accredited surveyors to carry out asbestos surveys on their estates. Accreditation to ISO/IEC 17020 ensures that surveyors are competent, independent and impartial. This supports councils in their due diligence and selection of suppliers to ensure they receive reliable reports without the need for reworking.



Delivering confidence in the Supply Chain

Given the complexity of today's supply chains, reassurance in the measurements, tests, inspections, and certifications that are performed in another jurisdiction or market sector is essential. Without a level of confidence, the free exchange of goods and services risks being hampered by technical barriers or varying levels of quality, thereby increasing costs for importers and consumers.

Such complexity also makes it cost-prohibitive for governments or regulators to carry out all the laboratory testing, inspection, and certification necessary to protect public health and safety. A solution that is increasingly being adopted is for governments to establish regulations which specify requirements to be met and procedures to be employed for demonstrating compliance, with the option for private sector providers to earn recognition to carry out the verification of compliance processes.

Conformity assessment, including activities such as testing, certification, and inspection, is used to verify that products and services meet standards or technical specifications. In the regulated sector, conformity assessment demonstrates compliance with legislative requirements and, in the voluntary sector, provides assurance to consumers and importers that the products and services they procure meet specification.

As conformity assessment bodies are mostly commercial organisations, accreditation assesses and declares the technical competence of these organisations in order to provide confidence in their results or test data.



Supporting supply chains through international recognition

Accreditation bodies are established to ensure that laboratories, inspection bodies and certification bodies are subject to oversight by a competent body. Internationally recognised accreditation bodies, which have been valued by peers as competent, sign international arrangements that facilitate the acceptance of products and services across borders, thereby creating a global infrastructure to support trade, regulatory approval processes, and confidence in the supply chain.

These arrangements, which cover economies that represent 96% of global GDP (Source: World Economic Forum) are managed by IAF, in the fields covering accreditation of certification bodies, and ILAC, in the areas of laboratory and inspection body accreditation. This system helps to ensure work carried out by accreditation bodies is consistent across the globe and maintains international standards from one accreditation body to others. As a result, products and services tested, inspected, or certified once under the IAF and ILAC umbrella can be accepted everywhere with equal confidence. Accreditation therefore reduces information asymmetries or differences between operators in global value chains and serves as a

means of global communication between international trade partners.

Research conducted by the Centre for Economics and Business Research (CEBR) in the UK stated that £6.1 billion of additional UK exports per year can be attributed to standards and accredited conformity assessment each year. It reports that procurers have confidence that products will be safe and fit for purpose, so they are more widely accepted. The system removes arbitrary national technical barriers to trade, improves confidence and transparency throughout complex and multinational supply chains.

CASE STUDY

Supply Chain Security Management Systems Certification (SCSMS)
Accreditation bodies assess certification bodies' competence to deliver certification of Supply Chain Security Management Systems (ISO 28000).
The standard requires organisations to establish, implement and continually improve a security management system, including aspects critical to security assurance of the supply chain. These aspects include risks such as threats from terrorism, fraud and piracy that have serious implications to businesses.



Increasing recognition

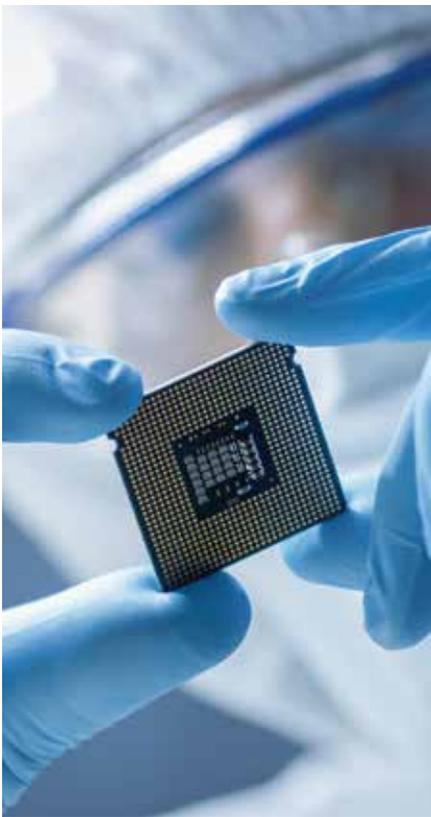
In recent years, there has been a growing trend towards greater recognition of accreditation and the acceptance of the arrangements by governments and regulators. For example, recent European Union (EU) trade agreements signed with Japan, Canada, Switzerland, and Tunisia cite the use of accredited conformity assessment to ensure harmonised free trade. The Gulf Cooperation Council (GCC) operates a single Market Regulatory System referencing accreditation as an essential tool for the implementation of the regulatory system and is used in all regulations to assure the competence of notified bodies. APEC (Asia-Pacific Economic Cooperation) endorses accreditation to underpin the conformity assessment component of the APEC agreements. ASEAN (Association of Southeast Asian Nations) has included accreditation in the ASEAN sectoral MRA for

electrical and electronic equipment as a means of demonstrating that the specified requirements are met. The mainstream acceptance of accreditation by both pan-regional bodies and domestic regulators within individual governments also helps WTO member governments to meet their responsibilities under the Technical Barriers to Trade Agreement and the Sanitary and Phyto-sanitary Measures Agreement.

The use of accreditation is also recognised in other quarters. In the UK, the Institute of Directors recognises accredited certification to ISO 9001 as a measure in their annual Good Governance report, as does the Global Innovation Index, which rates economies on their performance. A recent report published by AIRMIC, the Association of Risk Managers, recognised the value of accreditation as a tool to price risk.

Accreditation Services: Adding Value to Supply Chains

Accreditation operates across all sector supply chains ranging from healthcare and medical devices, construction, energy, clothing and textiles, toys and electronics, IT and communications, to food safety and water supply. Accreditation offers a range of services that can add value and manage the potential risks in supply chains through the assessment of certification, inspection, testing, and calibration services. By demonstrating the competence, impartiality, and capability of these organisations, it underpins the credibility of goods and services, allowing procurement and supply chain managers to better manage their risks.



Increasing recognition

Quality and traceability of Inter-marchés supply chain French supermarket chain, Inter-marché, uses a platform that enables it to identify, analyze, and monitor all suppliers, components, and production sites in its supply chains, which involves over 4,200 suppliers located in 41 countries at all levels and collected their environmental quality certificates.

They are able to map of all the different entities involved a supply chain, collect and verify suppliers' certifications, and make targeted recommendations based on each supplier's control of the process. This enables the company, both as a producer and retailer, to identify product origins and reduce risks.





Find a supplier

IAF “CertSearch”, which will be launched in the run-up to World Accreditation Day, is a tool that supports procurement officials. The platform, currently contains 700,000 management system certificates from accredited suppliers will allow purchasers to check if their potential suppliers hold such certificates. It will also help to distinguish between certificates issued by accredited conformity assessment bodies (CABs) from the certificates issued by non-accredited CABs, and to check the authenticity of a certificate.

www.iaf.certsearch.org

CASE STUDY

Safety Schemes In Procurement (SSIP) is a forum that aims to support small businesses by streamlining prequalification and reducing health and safety assessment costs and bureaucracy in the supply chain.

SSIP Registered Membership is open to third-party Health & Safety assessment schemes, including Health & Safety assessment schemes such as those run by major contractors or Trade Associations. Registered Member schemes benefit from a two-way mutual recognition with other registered member schemes and also Certification Assessment Bodies via the existing UKAS SSIP Sector Scheme.

Evidence taken from the SSIP Portal validate savings to industry since 2016 at over £124 million following the mutual recognition agreement in place with all forum members.

The SSIP scheme provides procurement managers with access to over 71,000 organisations that have been verified by the Health and Safety Assessment process. Accreditation verifies compliance with legislation and supports consistency between member schemes.



Further information

Accreditation provides a globally-recognised tool to not only assess and control risks of the internal operation of businesses, but also the products and services that they place on the market. In this way, Regulators, purchasers and employees can demonstrate confidence that accreditation delivers a safer world.

Visit <http://www.publicsectorassurance.org> to access research, case studies and supporting information relating to the positive benefits of accreditation in the delivery of health and safety policy.

Visit www.businessbenefits.org for further examples of how businesses can benefit from standards and accreditation.



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Accreditation: Adding Value to Supply Chains



Md. Akram Hossain, Ph.D

Supply chain management is the handling of the entire production flow of a good or service — starting from the raw components all the way to delivering the final product to the consumer. To accomplish this task, a company will create a network of suppliers (the “links” in the chain) that move the product along from the suppliers of raw materials to the organizations who deal directly with users.

There are six components of traditional supply chain management:

- Planning – Plan and manage all resources required to meet customer demand for a company’s product or service. When the supply chain is established, determine metrics to measure whether the supply chain is efficient, effective, delivers value to customers and meets company goals
- Sourcing – Choose suppliers to provide the goods and services needed to create the product. Then, establish processes to monitor and manage supplier relationships. Key processes include ordering, receiving, managing inventory and authorizing supplier payments.
- Making – Organize the activities required to accept raw materials, manufacture the product, test for quality, package for shipping and schedule for delivery.
- Delivering (or logistics) – Coordinating customer orders, scheduling delivery, dispatching loads, invoicing customers and receiving payments.
- Returning – Create a network or process to take back defective, excess or unwanted products.
- Enabling – Establish support processes to monitor information throughout the supply chain and assure compliance with all regulations. Enabling processes include: finance, human resources, IT, facilities management, portfolio management, product design, sales and quality assurance.

Effective supply chain management minimizes cost, waste and time in the production cycle. The industry standard has become a just-in-time supply chain where retail sales automatically signal replenishment orders to manufacturers. Retail shelves can then be restocked almost as quickly as product is sold. One way to further improve on this process is to analyze the data from supply chain partners to see where further improvements can be made. The supply chain is the most obvious "face" of the business for customers and consumers. The better and more effective a company’s supply chain management is, the better it protects its business reputation and long-term sustainability. products, services, personnel and other similar programs of conformity assessment. In the field of laboratory and inspection accreditation, International Laboratory Accreditation Cooperation (ILAC) manages accreditation. There are also regional accreditation regulating bodies, such as Asia Pacific Accreditation Cooperation (APAC).

Accreditation is a process of providing attestation of expertise, authority, neutrality, and reliability to organizations providing conformity assessment services such as testing, calibration, certification, and inspection. It is a third-party attestation related to a conformity assessment body conveying formal demonstration of its competence to carry out the tasks of conformity assessment.

Organizations responsible for public safety and welfare such as building departments, hospitals, schools, and police and fire departments also seek accreditation to demonstrate their competence and reliability. Accreditation has been used for over 50 years as the definitive means of evaluating organizations and is now utilized by all the world’s major economies and many developing economies.



The International Standards against which accreditation is awarded are usually developed and published by ISO (International Organization for Standardization). Accreditation bodies are acknowledged in many countries with the primary purpose of guaranteeing that conformity assessment bodies are subject to supervision by an authoritative body.

Accreditation bodies, which have been gauged by peers as skilled, sign arrangements that enhance the acceptance of products and services across national borders, thereby creating a framework to support international trade through the removal of technical barriers.

International Accreditation Forum (IAF) manages the arrangements in the field of certification and other similar programs of conformity assessment. In the field of laboratory and inspection accreditation, International Laboratory Accreditation Cooperation (ILAC) is the highest organization that manages and promotes accreditation. There are also regional bodies such as Asia Pacific Accreditation Cooperation (APAC), European Cooperation for Accreditation (EA) etc.

World Accreditation Day

World Accreditation Day is marked in 9th June every year. It is marked as a global initiative, jointly established by the International Accreditation Forum (IAF) and the International Laboratory Accreditation Cooperation (ILAC), to raise awareness of the importance of accreditation.

This year's theme concentrates about value addition to supply chains by accreditation.

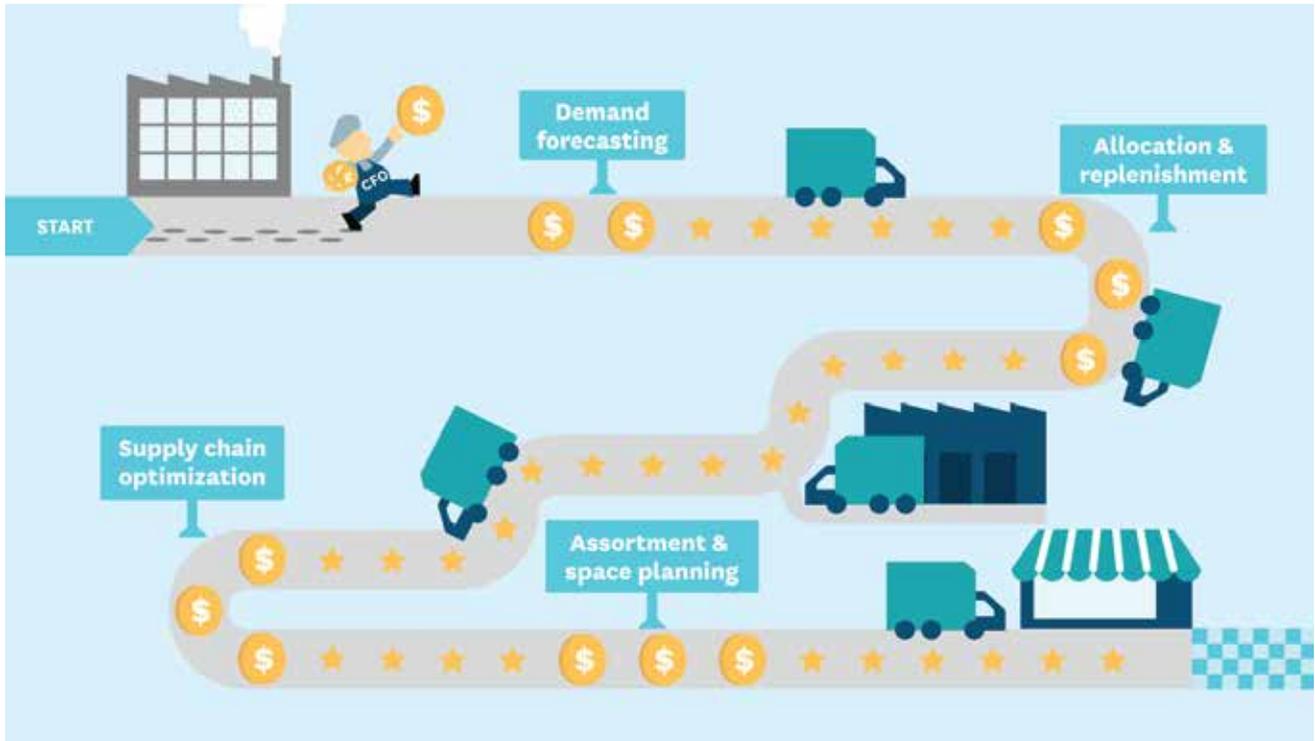
Just like previous years, major national events, seminars, and press and media coverage will be hosted to commemorate World Accreditation Day. These will be done to provide the opportunity to explore how accreditation can help deliver a safer world and to support businesses, government and regulators to find standards, conformity assessment and accreditation tools to support them in this goal.

Accreditation in Global Supply Chain

Due to increased globalization, there has been a tremendous increase in trading within countries. This has led to a complicated supply chain situation. The complexity of supply chains is in terms of velocity, amount, depth, and breadth of global interactivity. Given the complexity of today's supply chains, confidence in the measurements, tests, inspections, and certifications that are performed in another authority or market sector is highly required. In absence of confidence level, the free exchange of goods and services are hampered by technical obstruction or varying level of quality. This leads to increase in costs for importers and consumers. This complexity is a problem for government and regulators, as it is costly to carry out all the laboratory testing, inspection, and certification necessary to protect public health and safety. Government can establish regulations which define requirements to be met and policies to be employed for demonstrating compliance, with the option for private sector contributor to earn recognition to carry out the confirmation of compliance processes.



Globalization of Supply chains and retail markets lead to businesses to operate on diverse and diverging legal environments. Each of the economies have different legal systems regarding production and retail businesses. Accreditations are supported by internationally recognized accreditation bodies. The accreditations are accepted in all countries. As a result, supply chains are recognized internationally if they are accredited by an accreditation body signatory to the ILAC MRA (Mutual recognition Arrangement). More and more countries are relying on accredited bodies. In recent years, there has been a growing trend towards greater recognition of accreditation and the acceptance of the arrangements by governments and regulators.



Conformity assessment is used to make sure that the products and services fulfill the quality or technical standards. Most of these bodies are commercial organizations. Accreditation evaluates and publish the technical proficiency of these organizations so that reliability can be provided in their activities.

More and more of the governments and regulatory bodies are now recognizing accreditation and acceptance of the arrangements. For example, EU has signed trade agreements with Japan, Tunisia, Canada, Switzerland, to use the accredited conformity assessment to secure coordinated free trade. ASEAN has incorporated accreditation in the ASEAN sector MRA for electrical and electronic hardware to illustrate that the specified prerequisites are met.

Accreditation operates across supply chains of almost every sector, including medical devices, healthcare, electronics, IT, communications, energy, toys, textiles, food safety, water supply and others. Accreditation helps to improve value and manage threats in supply chains by offering a range of services, such as assessment of certification, inspection, testing, and calibration services. Through accreditation, the competence, neutrality, and skill of these organizations are exhibited. This also supports the reliability of goods and services, which allows procurement and supply chains managers to manage their risks in a better way.



Accreditation in Bangladesh

Bangladesh Accreditation Board (BAB) is the only statutory body responsible for accreditation in Bangladesh. It provides accreditation to different types of conformity assessment bodies, including laboratories, certification bodies and inspection bodies.

The accreditation is conformed with the relevant International Organization for Standardization (ISO), International Electro technical Commission (IEC), and other regulatory standards and national standards.

BAB is a legal, autonomous, body, established in 2006, with the goal for enhancing the quality assurance infrastructure and conformity assessment activities in Bangladesh. It also targets to improve the recognition and approval of products and services in international, regional, and domestic arena.

The functionalities of BAB are:

- Accreditation of Testing & Calibration and Medical Laboratories accrediting to ISO/IEC 17025 & ISO 15189
- Accreditation of Certification Bodies ISO/IEC 17021, ISO/IEC 17024, ISO/IEC 17065
- Accreditation of Inspection Bodies ISO/IEC 17020

BAB achieved the full membership and MRA signatory status to the International Laboratory Accreditation Cooperation (ILAC) for testing & calibration laboratories. ILAC helps to improve international trade by encouraging international reliance and approval of accredited laboratory data.

With more and more organizations are evaluated by accreditation bodies, then products and services produced in Bangladesh will be perceived as reliable and competent, and the global market will be more confident in buying Bangladeshi products, which will reduce international trade barriers, and will enhance trade relationships with other countries.

Products and services that are certified/tested by accredited bodies are accepted as safe, hence more confident on using the product.

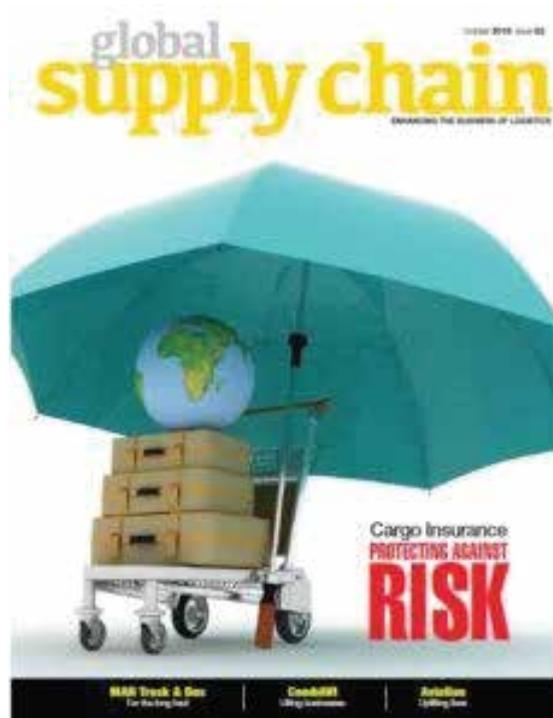
Previously, companies had to go for foreign accreditation bodies, which were costly and time-consuming. Now companies can receive accreditation from BAB, which saves costs and time.

BAB is now accrediting testing and calibrating laboratories, medical laboratories, certification bodies and inspection bodies. I hope it will expand its services to proficiency testing providers and certified reference materials producers.

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Create a better world through supply chain



An ISO certification may become a part of the company culture, not just a fancy plaque that hangs in the front window of organizations. ISO adoption is as much about innovation and change as it is about standards and compliance. A Supplier Relationship Management functioning out of organization intends to challenge traditional business practices with innovative thinking and creation. Supply chain professionals can make a difference together with partners and customers.

Integrated Management System of ISO 9001, ISO 14001, ISO 28000 and ISO 45001 standards also cater the requirements of BSCI (Business Social Compliance Initiatives) and ethical practices.. There must be a commitment to global supply chain excellence, innovation and resilience. At a time of great change and great potential, Supply Chain Managers must start strategic initiatives to address pressing global challenges and achieve the brightest future for Supply Chain Organizations.

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Accreditation adds value to supply chains in health care



Md. Mahbubur Rahman

Products and services always reach to the buyers and customers through a process with interrelated and coordinated activities, known as supply chains. In a broad sense, Supply Chain Management is the process of planning, implementing, and controlling the operations of the supply chain with the purpose to satisfy customer requirements as efficiently as possible. It encompasses a set of players, processes, information, and resources which transfers raw materials, and components to finished products or services and delivers them to the customers. It includes suppliers, intermediaries, third-party service providers and customers. It also includes all of the logistics activities, manufacturing operations and activities with and across marketing, sales, product design, and finance and information technology. The ultimate goal is to ensure the uninterrupted availability of quality product and services from manufacturer to service-delivery levels. This requires a system to achieve the six rights of supply-chain management: right product, right quantity, right condition, right place, right time and right cost to be consistent with health system's objectives and also it should make benefits for its stockholders.

In the world of medical supplies and pharmaceuticals, it is near to impossible that a product makes a direct, nonstop passage from manufacturer to health care organization. Usually product goes through networks of intermediary stopping points in the way its travels from manufacturer to health care organization. Supply chains are those networks of companies that work together and coordinate their activities to get the product to the consumer.

In the present context of a health-conscious society supply chain for medical supplies and pharmaceuticals has become more complex because it involves the life-saving interest of human being and requires the participation of different stakeholders.

The global nature of supply chains and retail markets is that businesses have to operate in multiple and often differing regulatory environments. The chain increases in length and complexity when different countries are involved in cross boundary trade and supply chains. In a trans-country supply chains for a medical supply or pharmaceutical product involve eight or more intermediaries along the way. This typical pathway begins at the manufacturer, and then passes through packaging facility, intermediate storage facility, acquisition of country license for shipping, shipping to the country of destination (or to a port in one country to be sent to the final country), receipt by customs, review and evaluation by the Ministry of Health, involvement of local distributors or local agents to facilitate passage of the product to the final destination within the country, to shipping/travel of the product to its final destination. Supply chains are now significantly more complex in terms of the speed, scale, depth, and breadth of global interactions.

There are some more reasons behind this complexity. Companies seek to optimize costs while retaining flexibility which is another reason for getting product supply chains increasingly globalised and complex.

Global economic growth is creating an increasing demand for health care products which are effective and affordable. Quality and patient safety issues are becoming more apparent as more is known about the world of illicit supply chains. Counterfeit, contaminated, adulterated, diverted, quality-compromised, and/or illegally obtained medical devices and supplies are increasing with the days. This reality poses a significant risk to patient safety and health care organization integrity. Its economic effect is also significant in term of monetary and quality of life as well. It is very sorry to say that sometimes even health care organizations are not aware of the fact.



There are some more reasons behind this complexity. Companies seek to optimize costs while retaining flexibility is another reason for getting product supply chains increasingly globalised and complex.

According to the WHO report, published in 2009, the real extent of counterfeit medical devices is not fully known, but documented cases indicates demonstrated direct harm or a lost opportunity to be diagnosed and treated properly as a result of such devices. Taking this in serious consideration, International Medical Products Anti-Counterfeiting Taskforce of the World Health Organization (WHO) made a recommendation to involve experts from the medical devices area in all the taskforce's working groups. Mori et al note that while case studies and lay press articles have documented that the use of medical devices and in vitro diagnostics tests obtained through illicit channels are quite frequent in resource-poor settings, there are relatively few reports in the scientific literature. Often, patients in resource-limited settings are potentially exposed to the risk of poor quality medical devices and in vitro diagnostic tests.⁸ When such products are diverted from legitimate supply chains to illegitimate supply chains, the products' handling or storage conditions are often unknown and can be suboptimal, affecting the quality of the product.

The supply chain also experiences a growing issue of diversion or parallel trade internationally. The types of diversion can include, but are not limited to, the products smuggled from other countries, outside regulatory channels, often from expedited mailing services and are not labeled as medical supplies, thereby escaping any scrutiny measures that may be in place, products stolen from a hospital in one country found in another country, products from websites, many of which are US based.

In reality the more complexity and length of supply chain increase, the more it gets critical to ensure quality and integrity of health care products. Even if the products are initially of good quality, many medical device and supply products require certain transport and storage conditions, and when medical devices are purchased from unauthorized sources, these conditions may not be maintained, resulting in product failure and potentially patient harm. Supply chains stretching across multiple countries and sites pose major challenges in terms of quality, compliance with regulations and standards relating to safety, as well as environmental and social responsibility.

Ideally there should be appropriate measure in place to provide quality assurance of goods and services at all levels of the supply chain for achieving confidence of buyers and customers. As being a complex system a single approach may not sufficiently enough to control product quality meeting the diverse customer and regulatory requirements. Approach should be comprehensive, collective and coordinated to overcome this problem. As we cited earlier many health care organizer are not aware of this fact. To make them aware of effective selection of sustainable supplier a credible and trustworthy information system is required to determine the quality, authenticity and traceability of raw materials or components of the pharmaceutical and medicinal products. This selection required to be done not just in terms of financial stability, but also Corporate Social Responsibility (CSR) performance and ethical practices.

Supply chains are complex systems for which management requires significant technical and managerial capacity. Its functions need to be defined and translated into a set of competencies (e.g.,stock management, quantification); competencies, in turn, are placed into a framework of performance-based measures. The framework should systematically describe the minimum aptitude standard for logistics staff.



It goes without saying that effectiveness of this system is the outcomes of the total compliances of both technical and managerial competence requirements of the organizations in line with standards and/or regulations or norms. 80% of trade involves elements of testing, calibration, inspection and certification activities, collectively known as conformity assessment (Source: OECD). A report, produced by the World Trade Organization Economic Research and Statistics Division, stated that the inappropriate use of conformity assessment accounts for 10% of Specific Trade Concerns (STCs). It is required to use conformity assessment activities (such as testing, calibration, certification, and inspection), subject to the nature and complexity of the jobs in the chain, as a tool to evaluate proper implementation of the quality management system aiming at specific and/or integrated conformity assessment activities. Accreditation provides an opportunity to address this issue.

Accreditation is the independent evaluation of these conformity assessment bodies against recognized standards to ensure their impartiality, competence and consistency. Accreditation, underpinned by internationally agreed standards, adds value to supply chains as businesses seek to maximize value and satisfy contractual terms, while maintaining a level of confidence that products meet technical specifications and are safe to use.

Accreditation, therefore, plays an important role in reducing the costs of trade and doing business, enhancing technology transfer, and increasing investment. It also enables businesses to integrate into global supply chains, as they can demonstrate product quality through a common “technical language” needed to establish trust between business partners. (Source: The World Bank).

Providing quality assurance of goods and services at all levels of the supply chain is one of the prerequisites for achieving confidence of buyers and customers. For this, an effective and trusted Quality Management System is essential. In this context, the accreditation system is being considered as an important tool throughout the world. This process is contributing as a reliable and accepted method of evaluating the technical competence and impartiality of the quality management system. This ultimately results in delivering confidence in health care.

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Challenges of Certification Services in Bangladesh



Md. Nasirul Islam

In today's global competitive business market and environment, efficient and effective management systems with sustainable quality are indispensable to flourish marketplace. Companies desire to be confident that they are doing business with quality goods and services which meet customer satisfaction. For being such type of recognition such companies required certification from third party that ensures impartiality, competence and consistency.

Management system standards provide a model for business to follow compliance with regulations and standards relating safety, as well as environmental and social responsibility. The standards provide frameworks for an organization to follow in managing its process, so its products or services meet the objectives that have been set up. As a result, the importance and demand of Certification Services are growing up day by day. The certification system helps the organisation for boosting up profitability, brand image and customer loyalty.

ISO certification helps to brand reputation, tender eligibility, to increase revenue, to improve efficiency, better quality as well as go global of your products and services.

The 2015 results of the ISO Survey showed that the number of certifications to ISO management system standards continues to rise worldwide.

According to the results of the survey, a total of 1 519 952 valid certificates were reported worldwide in 2015 across nine management system standards, compared to 1 476 504 the previous year – an increase of 3 %.

ISO's most widely used management system standards, ISO 9001 for quality management and ISO 14001 for environmental management, remain popular with 1 033 936 and 319 324 certificates respectively.

The ISO Survey of Certifications is an annual survey of the number of valid certificates to ISO management system standards worldwide. In order to compile the information in 2017 survey, ISO contacted accredited certification bodies and requested information about the number of valid certificates they have as at 31 December 2017. (ISO itself does not perform certification and therefore does not issue certificates). This results in the most comprehensive overview of certifications to these standards currently available, despite the fluctuations in the number of certificates from year to year due to differences in the number of participating certification bodies and the number of certificates they report.

The detailed results for each standard are available on ISO website. The decrease of ISO 9001 total and country variations are explained after the table:



	Number of certificates in 2016	Number of certificates in 2017	Change	Change in %
ISO 9001	1 105 937	1 058 504	-47 433	-4
ISO 14001	346 147	362 610	16 463	5
ISO 50001	20 216	21 501	1285	6
ISO 27001	33 290	39 501	6 211	19
ISO 22000	32 139	32 722	583	2
ISO 13485	29 585	31 520	1 935	7
ISO 22301	3 853	4 281	428	11
ISO 20000-1	4 537	5 005	468	10
ISO 28000	356	494	138	39
ISO 39001	478	620	142	30
TOTAL	1 576 538	1 556 758	-19 780	-1

The number of certification bodies participating was very similar as that for the 2016 edition, including all the large international ones, as for previous years. For all countries, the majority of the data comes from the same certification bodies as last year. There were a small number of bodies that failed to participate, having a slight impact on the total, however these were only those that provide relatively small amounts of data.

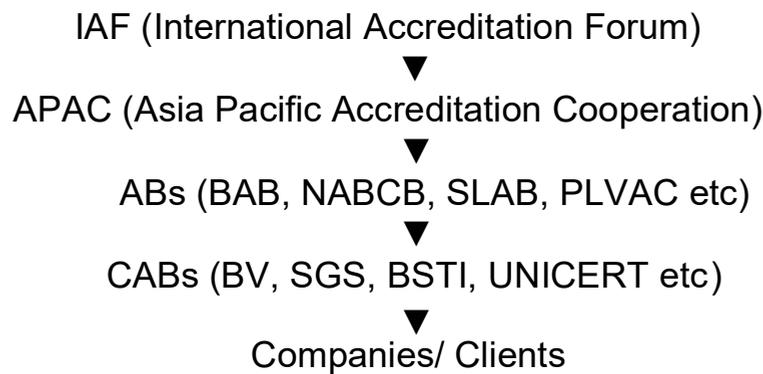
Variation in the data provided each year, it is the large international certification bodies that report a high proportion of the number of certificates issued, however, for a few of them, their data fluctuates from one year to another to a relatively large extent. Before publishing the results, ISO asks them to explain those fluctuations and, while some are real changes coming from the market, others are due to changes in the way the data was reported. This year, the majority of those fluctuations originate from changes in the reporting and have had a significant impact on the overall results, in particular for ISO 9001.

V

The above explains the substantial decrease in the number of certificates for ISO 9001 compared to 2016 for Italy and, to a lesser extent, for Germany, Brazil, India, Japan, Poland, Slovakia, Switzerland, Taipei, Thailand and Turkey. For all of them, the variation in the data provided explains for a large part of the decrease but not for all of it. For other countries experiencing a decrease, a substantial part of it is explained by certification bodies not participating in the survey (but participated in 2016). Those are the United States, Japan, Vietnam, Spain, Serbia, Taipei, Russia and Poland.

But the question is the organization taking the Certificate ways and from a reliable provider. A lot of queries here, not only in our country but also all over the world, fraudulent or Counterfeit Certificates are provided by some organizations. Before getting the exact one, the client should ensure that the provider is competent and doing business at par international norms. Actually the total matter depends on reliability. Usually it has a unique unbroken chain of traceability in every step. One has to check its upper peers to ensure credibility. In the certification system the unbroken chain is like as follows:





- IAF: is the Global Umbrella. Every Regional organization, National Accreditation Body is the member of IAF through Regional Cooperation. It has Working Group (WG) Technical Committee (TC) to ratify activities.
- Conformity Assessment Body (APAC): is working in the Pacific Region. In the other region also have bodies like IAAC, SADCA, AFRAC, EA etc. Every national Accreditation Body will be member of Regional Body. Through regional bodies AB goes to International Umbrella.
- Accreditation (AB): National AB is responsible to maintain the international standard and guidelines to run the organization. It has to look after its CAB complies all the requirements properly to issue Certificate.
- CAB: provides Certificates to its clients complying all requirements of Standards and regulations. It regularly audits and issue certificate.

Common Certificates in our Country:

- i. ISO 9001: 2015- Quality management systems—Requirements
- ii. ISO 14001:2015- Environmental Management systems—Requirements with guidelines for use
- iii. ISO 45001:2018- Occupational health and safety management systems(Popularly known as OHSAS)
- iv. ISO 22000:2005- Food safety management systems—Requirements for any organization in the food chain (popularly known as HACCP)
- v. ISO 27001:2013- Information technology—Security techniques-Information security management systems—Requirements
- vi. ISO 30000:2009-Ships and marine technology—ship recycling management systems—specifications for management systems for safe and environmentally sound ship recycling facilities
- vii. ISO 50001:2011-Energy management systems—Requirements with guidance for use
- viii. SA 8000- International Standard for Social Accountability

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তৈরি পোশাক রপ্তানিতে এ্যাক্রেডিটেশনের গুরুত্ব



মোহাম্মদ আব্বাহ আলম

স্ট্যান্ডার্ড, স্ট্যান্ডার্ডাইজেশন এবং এ্যাক্রেডিটেশন শব্দগুলোর গুরুত্ব যত দিন যাচ্ছে ততই বেড়ে চলেছে। আঠার শতকের দিকে এই উপমহাদেশে শব্দগুলোর পরিচিতি ছিলনা বললেই চলে। কিন্তু বর্তমানে স্ট্যান্ডার্ড এবং এ্যাক্রেডিটেশন ছাড়া যেন বিশ্বে আমদানী-রপ্তানি বাণিজ্য অচল। কোন পণ্যের কাঁচামাল আমদানি করতে হলে, যেমন প্রয়োজন তার মান যাচাইকরণ তেমনি রপ্তানি ক্ষেত্রেও প্রয়োজন ঐ পণ্যের উৎপাদনের মান নিয়ন্ত্রণ, মান নিশ্চিতকরণ এবং সর্বোপরি এ্যাক্রেডিটেশন সনদ।

বাংলাদেশ উন্নয়নশীল দেশ। এদেশের বেশীরভাগ বৈদেশিক মুদ্রা আসে তৈরি পোশাক, পাট ও পাটজাত তৈরী পণ্য, চামড়া ও চামড়াজাত তৈরি পণ্য এবং হিমায়িত চিংড়ি রপ্তানির মাধ্যমে। তৈরি পোশাক রপ্তানিতে বাংলাদেশ বর্তমানে চীন ও ভারতের পরে স্থান করে নিয়েছে। বাংলাদেশের বিভিন্ন কলকারখানায় উৎপাদিত পণ্য এবং পণ্যের মান নিয়ন্ত্রণ বিশ্বের অন্যান্য দেশের চেয়ে কোন অংশে কম নয়। তবুও আমাদের বিশ্ববাজারে পণ্য রপ্তানির ক্ষেত্রে প্রতিদ্বন্দ্বিতাই প্রবলের সম্মুখীন হতে হচ্ছে, কারণ বিশ্বব্যাপি পণ্যের মান এবং মান নিয়ন্ত্রণের গ্রহণযোগ্যতার সনদের অভাবে অর্থাৎ এ্যাক্রেডিটেশন সনদের অভাবে।

বিশ্বব্যাপী পণ্যের মান এবং মান নিয়ন্ত্রণের গ্রহণযোগ্যতা অর্জনের জন্য আন্ডর্জাতিক ল্যাবরেটরি এ্যাক্রেডিটেশন কো-অপারেশন (আইল্যাক) নামে যে প্রতিষ্ঠান রয়েছে সেই প্রতিষ্ঠানের পারস্পরিক স্বীকৃতি অর্জনের মধ্য দিয়ে বিশ্বব্যাপি পণ্যের মান নিয়ন্ত্রণের গ্রহণযোগ্যতা পায়। অর্থাৎ এই এ্যাক্রেডিটেশন সনদ অর্জনের মধ্য দিয়ে বিশ্বব্যাপি একদেশ কর্তৃক উৎপন্ন পণ্য সহজে অন্যদেশে স্বীকৃতি পায়। আর সেজন্য প্রয়োজন হয় প্রচলিত নিয়ম অনুসারে সক্ষমতা নিরূপন পদ্ধতি। অর্থাৎ তৃতীয় পক্ষ কর্তৃক আন্ডর্জাতিক এবং জাতীয় মান অনুসরণ করে কোন পরীক্ষাগার, সনদ প্রদানকারী প্রতিষ্ঠান, পরিদর্শন সংস্থা, প্রশিক্ষণ প্রতিষ্ঠান এবং ব্যক্তির কাজের সক্ষমতা প্রত্যয়ন করাকে বলা হয় এ্যাক্রেডিটেশন।

এ্যাক্রেডিটেশন সংস্থা সাধারণত সরকার কর্তৃক আইনের মাধ্যমে প্রণীত প্রতিষ্ঠান, যারা নিরপেক্ষভাবে আন্ডর্জাতিক মানদণ্ড অনুসরণ করে সক্ষমতা যাচাইয়ের মধ্য দিয়ে তাদের কাজ সম্পন্ন করে থাকে। যেমন যে পণ্য উৎপন্ন করে অর্থাৎ উৎপাদনকারী হলো প্রথম পক্ষ, যে পণ্য ক্রয় করে অর্থাৎ ভোক্তা সে হল দ্বিতীয় পক্ষ এবং দুই পক্ষ ব্যতীত স্বাধীন ও নিরপেক্ষভাবে যে পণ্যের গুণগত মানের প্রত্যয়ন করে সে হল তৃতীয় পক্ষ। আর এ্যাক্রেডিটেশন সংস্থা হলো সেরকমই একটি প্রতিষ্ঠান।

বর্তমান প্রতিযোগিতামূলক বিশ্ব বাণিজ্যের ক্ষেত্রে এ্যাক্রেডিটেশন অতীব গুরুত্বপূর্ণ বিষয়। বাংলাদেশের প্রেক্ষাপটে যদিও এ্যাক্রেডিটেশন শব্দটি খুব একটা পরিচিত নয় তবে সময় এসেছে এর তাৎপর্য অনুধাবন করার। কারণ আপনি পণ্য উৎপাদন করলেন সে পণ্য যে সঠিক মান অনুসরণ করে উৎপাদন করলেন তার নিশ্চয়তা কি? উদাহরণস্বরূপ বলা যায় আপনি তৈরি পোশাক উৎপাদন করলেন। এই তৈরি পোশাক উৎপাদন করে আপনি যদি ইউরোপীয় ইউনিয়ন বা ল্যাটিন আমেরিকার কোন দেশে রপ্তানি করতে চান তাহলে কনজুমার প্রোডাক্টস সার্ফটি এ্যাক্ট এবং আমেরিকান স্ট্যান্ডার্ড টেস্টিং পদ্ধতি অনুসরণ পূর্বক সেই দেশের নীতিমালা অনুসারে বিভিন্ন ধরনের টেস্ট যেমন-অ্যাজোডাইটেস্ট, অ্যালারজেনিক এবং কারসিনোজেনিক ডাই টেস্ট, থ্যালাটে টেস্ট, ফরমালডিহাইড টেস্ট, অ্যালকাইল ফিনাইল ইথোক্সিলাইট (এপিইও), পলি ভিনাইল ক্লোরাইড (পিভিসি) টেস্ট করতে হবে। এছাড়াও হেভি মেটাল বা ভারী ধাতু যেমন- লেড, আর্সেনিক, ক্যাডমিয়াম, ক্রোমিয়াম, নিকেলসহ অন্যান্য টেস্ট করতে হয়। এসব উপাদান স্বাস্থ্যের জন্য খুবই ক্ষতিকর। এ সকল টেস্ট ক্রেতার চাহিদামত মাত্রা অনুসারে পরীক্ষায় উত্তীর্ণ হতে হয়। ধরুন আপনার জন্য আপনি এ সকল জিনিসগুলো নির্দিষ্ট পরিমাণ মতোই ব্যবহার করলেন এবং প্রমাণ পরীক্ষায় উত্তীর্ণ হলেও এর সত্যতা কি? এ সত্যতার জন্য বিভিন্ন দেশ কর্তৃক আপনি এ পরীক্ষাগুলো যে ল্যাবরেটরিতে করেছেন সেই ল্যাবরেটরির সক্ষমতা তৃতীয়পক্ষ কর্তৃক প্রত্যয়ন করা হয়েছে কিনা অর্থাৎ ঐ ল্যাবের সক্ষমতা যাচাইকৃত এ্যাক্রেডিটেশন সনদ আছে কিনা তা প্রমাণ করতে হবে।





আর এই পরীক্ষাগুলো করতে হয় সাধারণত বায়ারের (ক্রেতার) চাহিদা অনুসারে মনোনীত ল্যাবরেটরি থেকে অর্থাৎ বায়াররাই ঠিক করে দেবে কোন ল্যাবরেটরি থেকে কোন টেস্ট করতে হবে। আর আপনি এই টেস্টগুলো অন্য ল্যাবরেটরি থেকে করলে সেটা যদি বায়ার গ্রহণ না করে তাহলে পণ্য শিপমেন্ট করতে পারবেন না এবং শিপমেন্ট বাতিলও হতে পারে। এতে আপনার সময় এবং অর্থ দুই-ই অপচয় হয়। আপনি কোন মতেই এটি বাদ দিতে পারবেন না।

বাংলাদেশে ক্রমবিকাশমান পোশাক শিল্পের ভবিষ্যতের উত্তরোত্তর সমৃদ্ধির কথা চিন্তা করে যদি বায়ারদের চাহিদা মত পরীক্ষা করতে সক্ষম অত্যাধুনিক মেশিনারিজ, দক্ষ জনশক্তি সম্বলিত দেশীয় ল্যাবরেটরি প্রতিষ্ঠা পূর্বক জাতীয় এবং আন্তর্জাতিক মান অনুসরণ করে পারস্পরিক স্বীকৃতি চুক্তির এ্যাক্রেডিটেশন সনদ অর্জন করা যায় তাহলে পোশাক শিল্প রপ্তানিতে কারিগরি প্রযুক্তিগত বাধা অনেকাংশে দূর করা সম্ভব হবে। এতে ল্যাবরেটরি প্রতিষ্ঠাকারী যেমন আর্থিকভাবে লাভবান হবেন তেমনি দেশের পোশাক শিল্প রপ্তানিতে সহায়তা পূর্বক দেশের অর্থ দেশে রেখে অর্থনৈতিক প্রবৃদ্ধিতে সহায়তা করা হবে।

তাই অর্থ, সময় এবং বাণিজ্যিক বাধা দূরীকরণে উন্নয়নশীল দেশগুলোর জন্য বিশেষ করে বাংলাদেশের জন্য আজ সময় হয়েছে এ্যাক্রেডিটেশনের গুরুত্ব অনুধাবন করার।

‘বাংলাদেশ এ্যাক্রেডিটেশন আইন ২০০৬ অনুসারে প্রতিষ্ঠিত শিল্প মন্ত্রণালয়ের আওতাধীন একটি স্বতন্ত্র প্রতিষ্ঠান হিসেবে বাংলাদেশ এ্যাক্রেডিটেশন বোর্ড (বিএবি) দেশের অর্থনৈতিক উন্নয়ন ও আমদানী রপ্তানি বাণিজ্যে কারিগরি বাধা দূরীকরণের জন্য নিরলসভাবে কাজ করে যাচ্ছে। আসুন আপনিও এ্যাক্রেডিটেশন সেবা নিন এবং আপনার পণ্য বিশ্ববাজারে গ্রহণযোগ্য করে তুলুন।

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Accredited supply chain for Halal food service



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The halal concept has obtained increasing attention due to the fact that the demand for halal food consumption is increasing annually as a result of the rising number of Muslim population globally. Approximately 2 billion Muslim are living on this earth where this number is also increasing every year.

Halal is used to describe anything permissible under Islamic law, in contrast to haram that means forbidden. Though this covers many aspects of Islamic life including behavior, speech, dress, conduct, manner, majority of the Muslim world are confined in and focus on halal food and dietary products. Nowadays the market of halal products is widely distributed throughout the world because of an increasing demand for halal products not only by Islamic countries but also by non-Islamic countries.

Hence, as halal is applicable not only to the Muslim people but also to the others, this causes the products to become well known globally as well as emphasizes the need for a halal supply chain. In view of that, a halal supply chain is vital in ensuring that the concept of halal is not only applicable for the food itself but also for the entire supply chain starting from the farm to the customer. Furthermore, this concept encompasses wholesome safety, quality and cleanliness of foods, and its logistics process.

The production and consumption of Halal food has been traditionally the main focus of the Halal industry. However, the concept of Halal is not confined to food itself. Halal products and services include cosmetics, pharmaceutical, clothing, financial services and logistics. Halal is extending both upstream (like animal feed) and downstream (like food services) of the value chain.

Why need Halal Supply Chain?

A supply chain is a network between a company and its suppliers to produce and distribute a specific product to the final buyer. This network includes different activities, people, entities, information, and resources. The supply chain also represents the steps it takes to get the product or service from its original state to the customer. Supply chains are developed by companies so they can reduce their costs and remain competitive in the business landscape.



The supply chain involves a series of steps involved to get a product or service to the customer. The steps include moving and transforming raw materials into finished products, transporting those products, and distributing them to the end user. The entities involved in the supply chain include producers, vendors, warehouses, transportation companies, distribution centers, and retailers.



The elements of a supply chain include all the functions that start with receiving an order to meeting the customer's request. These functions include product development, marketing, operations, distribution, finance, and customer service.

To give confidence to those selective large amount of consumers around the world regardless of Muslims and non-Muslims who are seeking Halal food, it is obvious to ensure the Halal system in every processes starting from development and collection of food raw materials up to the delivery of the finished food products to the consumers. This is considered the most stringent conditions to maintain Halal requirements perfectly in all the links and processes. If one link breaks down i.e. fails to meet the Halal criteria, no matter how good is the final food product, the food is not Halal anymore. In result, this affects the trust of consumers and big business factor for the companies.

This is why, a perfect halal supply chain is a very important part of any business process including Halal food services.

Why need Accreditation in Halal supply chain?

Since, there are many different links in this Halal supply chain that may involve testing, inspection and certification to get the final end products. To lower a company's overall costs and boost profitability, an effective supply chain management is a must. And it is also must to have necessary skill and expertise in all conformity assessment activities involving entire process. For instance, a Halal meat product is going to be marketed. For ensuring this, firstly we need a Halal certified farm where Cattle are raised (including feeding requirement) for meat production. Then, Shariah approved slaughtering process i.e. who, where, how and when-(age & health of cattle) involves certified slaughterer and requires proper inspection. Meat processing, meat product production and packaging industries need relevant testing and certifications. Finally, meat product marketing involves necessary certification and inspection whether the requirements are met during selling in the shop.

In order to demonstrate the necessary competence, skill and expertise in every links of supply chain for maintaining Halal requirements and to gain the trust of consumers, every above mentioned process (testing, certification, inspection etc.) requires accreditation.



Accreditation offers a range of services that can add value and manage the potential risks in supply chains through the assessment of certification, inspection, testing, and calibration services. By demonstrating the competence, impartiality, and capability of these organizations, it underpins the credibility of goods and services, allowing procurement and supply chain managers to better manage their risks.

In the context of Bangladesh, being a Muslim majority country, most of food and food products are produced in Halal processes. But there is a lack of demonstrated competence in the supply chains of production, processing and marketing of Halal food and food products. This has been due to shortage of mass awareness among the business community and consumers. In a result, Bangladesh is losing approximately 50 billion U.S. dollars global halal market that is increasing every year. With the increase of the country's export basket for RMG, food wear and fisheries, Bangladesh should put much attention to this thriving sector in order to make the country industrially developed one even before 2041.

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Benefits of using accredited conformity assessment activities in supply chain management



Md. Towhidur Rahman

Recent business trends have forced companies to expand their activities into new regions where they can find qualified manpower, lower production costs, high availability of raw materials. This gives rise to wider and more complex supply chains and brings in new opportunities to leverage their competitive advantages. In order to produce value and optimize profitability, it is fundamental to establish successful partnerships with the supply chain organizations. Supply chain management is an approach that integrates suppliers, manufacturers, distributors and retailers in such a way that products are produced and distributed at the right quantities, to the right location, at the right time. Common goals at all the stages of a supply chain are minimizing system wide costs and consequently provide a service of excellence to satisfy customers. In order to compete in this complex environment it is necessary to integrate their goals effectively and focus on the final consumers as the driver for improvements. Supply chain management directly impacts product quality and the overall profitability of a company. For this reason, ensuring quality in the supply chain is critical for maintaining a competitive edge in the marketplace, minimizing associated risks and reducing operating costs. Accreditation can play a vital role in this process.

Accreditation is the formal recognition of an organization's competence to conduct a specific conformity assessment activity such as testing, calibration, inspection or certification. This recognition is based on compliance with relevant international standards. Compliance with standards basically requires organizations to demonstrate competence, impartiality and integrity in these activities. Globally, it provides a mean to identify a proven and competent laboratory, inspection or certification body so that they could be selected as per choice by the party concerned. This system works under mutual recognition arrangements (MRA) and for this reason reports/certificates issued by an accredited conformity assessment body is accepted worldwide.

All the sectors in supply chains including healthcare and medical devices, construction, energy, clothing and textiles, toys and electronics, IT and communications, food safety and water supply can be benefitted from accreditation service. It offers a range of services that can add value and manage the potential risks in supply chains through the assessment of certification, inspection, testing, and calibration services by ensuring the credibility of goods and services which allows procurement and supply chain managers to better manage their risks.

The entire production lines of an industry are directly dependent on the quality of raw materials. It can make entire production lines inefficient and increase defect rates in finished goods inventory. Inferior materials may require extra machining or refining, which adds to employees' workloads and total manufacturing costs. Reports from accredited laboratory and/or supplier certifications from an accredited certification body depending on its type, such as ISO 9001, 14001, 50001, FSMS 22000 etc. will assist companies to obtain quality items at the source and maintaining environmental sustainability at the same time. It will also reduce inspection time for raw materials, in-process inventory, and finished goods which in turn will reduce cycle and transportation times and eventually consumer satisfaction.



Using third party inspection organizations is not necessarily a new concept in the industries. General motors, for instance, has utilized accredited independent third-party inspection and containment activities at their tiered suppliers. The purpose is to provide a filter at the supplier's location to detect and prevent nonconforming product from reaching the assembly lines. This has been in place for more than a decade. Similar approach can be used by the suppliers themselves. Another example where accredited inspection provides value addition is when the suppliers utilize this service for their internal verification. This will also help the suppliers solving and preventing recurrence of non-conformances. From the financial point of view, this is an on-demand service, the structural costs of maintaining full-time inspectors are eliminated. The customer pays only for the services rendered when they are required, without having to develop an infrastructure of its own. Aside from that, there are no costs for health care, pensions, or other structural expenses to accrue, as when using internal manpower to reach the same results.

There are some obvious cost benefits to utilize accredited conformity assessment services in different stages of the supply chain. For example, in the case of a company with a Chinese supplier, an expert under personnel certification from accredited body in China would eliminate the extraordinary travel expense of sending a company representative from Bangladesh. A certified engineer could be deployed to the supplier location from a Chinese office, thereby avoiding the regulatory requirements of work visas or permits, and the lengthy processing of paperwork. Using a Chinese national as a third-party quality auditor eliminates the issues of language and cultural differences. In addition, a local engineer can deal effectively with top management and others throughout the organization.

If organizations engaged in supply chains don't have any quality assurance program, products being not tested in an accredited laboratory, the probability of not meeting customer requirements and other applicable regulatory requirements are high depending on the nature of the business. This will definitely pose threat to the company's reputation.

Hazardous materials are used throughout the world for various purposes in manufacturing industries. Accredited conformity assessment activities will help protecting employees and other stakeholders from being exposed to the harmful side-effects of toxic materials and maintaining environmental sustainability.



Accreditation is proven to be a globally-recognized tool to assess and control the risks of the internal operation of businesses. It also provides confidence on the products and services that they place on the market and that purchasers and employees can rely on this service.

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Background of Measurement Uncertainty



Ruhul Boyati

In 1977, recognizing the lack of international consensus on the expression of uncertainty in measurement, the world's highest authority in metrology, the International Committee of Weights and Measures (CIPM), requested the International Bureau of Weights and Measures (BIPM) to address the problem in conjunction with the national standards laboratories and to make a recommendation.

To develop a guidance document based upon the recommendation of the BIPM Working Group on the Statement of Uncertainties which provides rules on the expression of measurement uncertainty for use within standardization, calibration, laboratory accreditation, and metrology services;

The purpose of such guidance is

- To promote full information on how uncertainty statements are arrived at;
- To provide a basis for the international comparison of measurement results.

When reporting the result of a measurement of a physical quantity, it is obligatory that some quantitative indication of the quality of the result be given so that those who use it can assess its reliability. Without such an indication, measurement results cannot be compared, either among themselves or with reference values given in a specification or standard. It is therefore necessary that there be a readily implemented, easily understood, and generally accepted procedure for characterizing the quality of a result of a measurement, that is, for evaluating and expressing its uncertainty.

The concept of uncertainty as a quantifiable attribute is relatively new in the history of measurement, although error and error analysis have long been a part of the practice of measurement science or metrology. It is now widely recognized that, when all of the known or suspected components of error have been evaluated and the appropriate corrections have been applied, there still remains an uncertainty about the correctness of the stated result, that is, a doubt about how well the result of the measurement represents the value of the quantity being measured.

What is Uncertainty?

The word “uncertainty” means doubt, and thus in its broadest sense “uncertainty of measurement” means doubt about the validity of the result of a measurement. However, when used in a technical sense it carries a specific meaning. It is a parameter, associated with the result of a measurement (e.g. a calibration or test) that defines the range of the values that could reasonably be attributed to the measured quantity. When uncertainty is evaluated and reported in a specified way, it indicates the level of confidence that the value lies within the range defined by the uncertainty interval.

How does it arise?

Any measurement is subject to imperfections; some of these are due to external influences, such as short-term fluctuations in temperature, humidity and air-pressure, or variability in the performance of the measurer. Repeated measurements will show variation because of these factors. Other imperfections arise from the practical limitations of how correction can be made for systematic effects, such as offset of a measuring instrument, drift in its characteristics between calibrations, personal bias in reading an analogue scale, or the uncertainty of the value of a reference standard.



Why is it important?

Uncertainty is a quantitative indication of the quality of the result. Quantitative measurements are performed each day. The accuracy of these measurements is determinate upon an established set of requirements. One organization may require low accuracy measurements while another may require high accuracy. Despite the established requirements, no measurement is exact. No matter how careful or accurate, every measurement result contains an independent amount of uncertainty. Therefore, if measurement is important, then measurement uncertainty is equally important. According to the

National Institute of Standards and Technology, no measurement is complete without an accompanied statement of the associated amount of uncertainty. Creating awareness for the importance of measurement uncertainty is the key to ensuring that industries worldwide focus on the importance of measurement quality and the consequences resultant from the exclusion of measurement uncertainty.

Measurement uncertainty is critical to risk assessment and decision making. Organizations make decisions every day based on reports containing quantitative measurement data. If measurement results are not accurate, then decision risks increase. Selecting the wrong suppliers, could result in poor product quality. Selecting the wrong laboratory, could result in medical misdiagnosis. Selecting the wrong investments, could impact financial goals. All of these cases are examples of how measurement results impact decisions. If the ability to assess the quality of the measurement results were present, organizations and individuals could make decisions more confidently.

Improving quality is the key to mitigating risks and reducing costs. However, measurement uncertainty is a parameter that is often overlooked. It is an important aspect of measurement that affects quality, costs, decisions, and risks. The need for increased accuracy is not as important as the need to measure quality. Accuracy should only be adequate enough to effectively satisfy each organizations established requirements. Measurement uncertainty should be included and acknowledged to assess the quality of the results stated to meet the established accuracy requirements. Through awareness and education, organizations and consumers can experience better quality while reducing cost and risk

What is done about it?

The standard ISO/IEC 17025 specifies requirements for reporting and evaluating uncertainty of measurement. The problems presented by these requirements vary in nature and severity depending on the technical field and whether the measurement is a calibration or test.

Calibration is characterized as follows;

1. **Repeated measurements can be made**
2. **Uncertainty of reference instruments is provided at each stage down the calibration chain, starting with the national standard, and**
3. **Customers are aware of the need for a statement of uncertainty in order to ensure that the instrument meets their requirements.**

Consequently, calibration laboratories are used to evaluate and report uncertainty. In accredited laboratories the uncertainty evaluation is subject to assessment by the accreditation body and is quoted on calibration certificates issued by the laboratory.

The situation in testing is not as well-developed and particular difficulties may be encountered. For example, in destructive tests the opportunity to repeat the test is limited to another sample, often at significant extra cost and with the additional uncertainty due to sample variation. Even when repeat tests are technically feasible, such an approach may be uneconomic. In some cases, a test may not be defined well enough by the standard, leading to potentially inconsistent application and thus another source of uncertainty. In many tests there will be uncertainty components that need to be evaluated on the basis of previous data and experience, in addition to those evaluated from calibration certificates and manufacturers specifications.



International and accreditation aspects

Accreditation bodies are responsible for ensuring that accredited laboratories meet the requirements of ISO/IEC 17025. The standard requires appropriate methods of analysis to be used for estimating uncertainty of measurement. These methods are based on the *Guide to the expression of uncertainty of measurement*, published by ISO and endorsed by the major international professional bodies. It is a weighty document and the international accreditation community has taken up its principles and, along with other bodies such as EURACHEM/CITAC, has produced simplified or more specific guidance based on them.

Accreditation bodies are harmonizing their implementation of the requirements for expressing uncertainty of measurement through organizations such as the [European co-operation for Accreditation](#) (EA) and the [International Laboratory Accreditation Co-operation](#) (ILAC).

How is uncertainty evaluated?

Uncertainty is a consequence of the unknown variables and limits to corrections for systematic effects, and is therefore expressed as a quantity, i.e. an interval about the result. It is evaluated by combining a number of uncertainty components. The components are quantified either by evaluation of the results of several repeated measurements, or by estimation based on data from records, previous measurements, knowledge of the equipment and experience of the measurement.

In most cases, repeated measurement results are distributed around the average in the familiar bell-shaped curve or normal distribution, in which there is a greater probability that the value lies closer to the mean than to the extremes. The evaluation of repeated measurements is done by applying a relatively simple mathematical formula. This is derived from statistical theory and the parameter that is determined is the standard deviation.

Uncertainty components quantified by means other than repeated measurements are also expressed as standard deviations, although they may not always be characterized by the normal distribution. For example, it may only be possible to estimate that the value of a quantity that lies within bounds (upper and lower limits) with an equal probability of it lying anywhere within those bounds. This is known as a rectangular distribution. There are simple mathematical expressions to evaluate the standard deviation for this, and a number of other distributions encountered in measurement. An interesting one that is sometimes encountered, e.g. in EMC measurements, is the U-shaped distribution.

The method of combining the uncertainty components is aimed at producing a realistic rather than pessimistic combined uncertainty. This usually means working out the square root of the sum of the squares of the separate components (the root sum square method). The combined standard uncertainty may be reported as it stands (the one standard deviation level), or, usually, an expanded uncertainty is reported. This is the combined standard uncertainty multiplied by what is known as a coverage factor. The greater this factor, the larger the uncertainty interval and, correspondingly, the higher the level of confidence that the value lies within that interval. For a level of confidence of approximately 95%, a coverage factor of 2 is used. When reporting uncertainty, it is important to indicate the coverage factor, state the level of confidence, or both.

What is best practice?

Sector-specific guidance is still needed in several fields in order to enable laboratories to evaluate uncertainty consistently. Laboratories are being encouraged to evaluate uncertainty, even when reporting is not required; which will then mean they will be able to assess the quality of their own results and will be aware whether the result is close to any specified limit. The process of evaluation highlights those aspects of a test or calibration that produce the greatest uncertainty components, thus indicating where improvements could be beneficial. Conversely, it can show whether larger uncertainty contributions could be accepted from some sources without significantly increasing the overall interval. This could give the opportunity to use cheaper, less sensitive equipment or provide justification for extending calibration intervals.



Uncertainty evaluation is best done by personnel who are thoroughly familiar with the test or calibration and understand the limitations of the measuring equipment and the influences of external factors, e.g. environment. Records should be kept that show the assumptions that were made, e.g. concerning the distribution functions referred to above, and the sources of information for the estimation of component uncertainty values, e.g. calibration certificates, previous data, experience of the behavior of relevant materials.

Change of terminology BMC to CMC:

Metrological traceability is disseminated to the market by accredited calibration laboratories via the International Laboratory Accreditation Cooperation (ILAC) Mutual Recognition Arrangement (MRA) and by National Metrology Institutes (NMIs) under the International Committee of Weights and Measures (CIPM) MRA. This traceability provides reliability in measurements around the world.

The services provided by many accredited calibration laboratories are described using the term “Best Measurement Capability” (BMC).

NMIs have a similar description of the services provided to their customers; but use the term “Calibration and Measurement Capability” (CMC).

In order to address this inconsistency in terminology the International Bureau of Weights and Measures (BIPM) and the Regional Metrology Organizations (RMOs) have, in cooperation with ILAC and the Regional (Accreditation) Cooperation Bodies, arrived at the following conclusion:

In the context of the CIPM MRA and ILAC Arrangement, and in relation to the CIPM-ILAC Common Statement:

CMC is a calibration and measurement capability

(See ILAC 2009-08-20 BMC to CMC Circular).

Conclusion

Uncertainty is an unavoidable part of any measurement and it begins to matter when results are close to a specified limit. A proper evaluation of uncertainty is good professional practice and can provide laboratories and customers with valuable information about the quality and reliability of the result. Although common practice in calibration, there is some way to go with expression of uncertainty in testing; however, there is growing activity in the area and, in time, uncertainty statements will be the norm.

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A Risk based Approach to Laboratory Quality Management System



Kamal M Ali

Introduction

Risk is inherent in all aspects of a quality management system. The concept of “risk” in the context of ISO 9001(Quality Management System) relates to the uncertainty of achieving the objectives of the system. Risk-based thinking and dealing with risks and opportunities in the laboratory is not a novelty. It is an ongoing process and organization is required to address this to mitigate or eliminate the potential and identified risks for the effectiveness of the system. Practically Preventive action is built-in when a management system is risk-based.

The risk based approach and the awareness of risks is accentuated in the new version of ISO/IEC 17025:2017 and a risk-based thinking approach and process design in the laboratory is promoted. The previous version of ISO/IEC 17025 already used the term risk, particularly in the context of corrective and preventive actions but also associated with validation of methods and the introduction of the concept of uncertainty of measurement. The standard does not stipulate a complete risk management system (RMS), for example conforming to the requirements of ISO 31000.

The requirements of ISO/IEC 17025:2017

The international standard ISO/IEC 17025:2017 requires the laboratory to plan and implement actions to address risks and opportunities. Addressing both risks and opportunities establishes a basis for increasing the effectiveness of the management system, achieving improved results and preventing negative effects. The laboratory is responsible for deciding which risks and opportunities need to be addressed. The standard explicitly refers to the term risk in:

- Foreword,
- Introduction,
- Clause 4.1.4 and 4.1.5 on impartiality,
- Clause 7.8.6.1 considering the risk in terms of decision rules used in reports,
- Clause 7.10.1 related to management of nonconforming work,
- Clause 8.5 on actions to be implemented to address risks and opportunities,
- Clause 8.6 on improvement
- Clause 8.7 on corrective action
- Clause 8.9 on management reviews

Clause 8.5 “Actions to address risks and opportunities” sets minimum requirements for laboratories which shall be considered. The exploitation of improvement potentials according to improvement should always be aligned with the aim and purpose of laboratory activities.

Clause 8.5.2 specifies that the organization plans actions to address risks; there is no requirement for formal methods for risk management or a documented risk management process. Laboratories can decide whether or not to develop a more extensive risk management methodology than is required by this document, e.g. through the application of other guidance or standards.”Conversely, a minimum of formalism allows the laboratory to capitalize on the approach and motivate more effectively the deployment of provisions, sometimes perceived only as constraints

Some words may encourage the consideration of related risks to help the implementation of requirements. Examples: sufficient(clauses 7.2.1.2, 7.5.1), suitable(clauses 6.3.1, 8.3.2), prevent(clauses 5.6.c, 6.3.4, 6.4.3,6.4.9,6.4.12,7.7.3, 8.3.2, 8.5.1.c), ensure (clauses 5.5.c), critical (clauses 7.6.3, 7.8.2.1).



How to assess risks in a laboratory?

To identify risks, it is useful to consider both the internal context of the organization and its external context (risks related to the customer, the supplier, but also to the customer of the client and other stakeholders). Risk identification methods range from common sense and brain storming, the use of pre-established lists for a professional sector, to the use of standards setting good practices.

Then the question is as to how a laboratory can address risk- based thinking in the quality management system. The way organizations manage risk varies depending on their business context. This may be done in differential sequential steps.

- First step- the laboratory needs to start a risk-driven approach in their processes.
- Second step- identifying the risks and opportunities on the context of the laboratory.
- Third step- analyzing and prioritization risks and opportunities.
- Fourth step- action plan to address the risks.
- Fifth step- implementing the plan and necessary actions in the elimination or mitigation of risk.
- Sixth step- checking the effectiveness of the actions through appropriate methodologies (e.g. audit approach).

It is helpful to share a scale of value within the organization, whatever is the representation: quantitative or qualitative, represented in tables, in graphs etc.

The Risk Impact/Probability Chart is based on the principle that a risk has two primary dimensions:

1. Probability – A risk is an event that "may" occur. The probability of it occurring can range anywhere from just above 0% to just below 100%. (Note: It can't be exactly 100%, because then it would be a certainty, not a risk. And it can't be exactly 0%, or it wouldn't be a risk.)

2. Impact – A risk, by its very nature, always has a negative impact. However, the size of the impact varies in terms of cost and impact on health, human life, or some other critical factor.

The Risk Impact/Probability Chart

	3			
Impact	2			
	1			
		1	2	3
		probability		

A risk assessment can be conducted for example by a three-stage quotation system: Impact:

- low (1) -easy to correct -low impact
- moderate (2) -errors occurring again but already clear (e.g. credibility loss)
- high (3) -serious errors with possibly irreparable consequences (up to danger for life and health)

Probability of entry: very rare (1), rare (2) or frequently (3)

The three-stage system results in a 5-step risk assessment.

The lowest risk (1/1 -green) can be classified as an acceptable risk, whereas the highest risk (3/3 -red) usually requires immediate measures. In the case of a small risk (yellow), it is necessary to decide whether it is still acceptable or if measures need to be taken.

If a laboratory knows its risks, it has the capability to assess/prioritize them and is also informed about the consequences. It will be easier to make plans how to come up risks and their effects. Recognizing mistakes or nonconformities at an earlier stage gives the laboratory the opportunity to react early. Financial penalties or other heavy losses might be averted. Main goal of this is not minimizing any risks, but in fact optimizing the laboratories profile of risks and opportunities determined by the laboratories strategy.

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How does a buyer evaluate the validity of the certificate?

Accredited CABs will comply with ISO CASCO standards such as ISO 17021-1:2015, which specifies conformity assessment requirements, including what is required on the certificate such as the

- Company's name and location
- Management system standard used
- Scope and/or boundary of the certification
- Date the certification was issued, along with the expiration date or recertification date
- Name, address, and certification mark of the CAB

Sometimes accredited CABs will include not only their certification mark, but the symbol for the AB; however, this isn't mandatory. See figure 1.



Figure 1: What to look for on an accredited management system standard certificate

CABs are not required to be accredited by AB members of the IAF. To more directly control the process of qualification of their suppliers, some industries established their own certification schemes. A certification scheme defines specific requirements for management systems, products, or personnel and specifies conformity assessment rules. Both the aerospace and telecommunications industries have certification schemes that allow only accredited CABs to issue valid certificates to their standards.

If a CAB is accredited by an AB member of the IAF, then information can be provided, upon request, to verify the validity of certificates issued by the CAB. However, supply chain decisions are sometimes made very quickly and the time to submit a request and respond regarding certificate validity could result in a loss of business or contract. In most cases, this isn't compatible with the actual speed of information exchange for most companies and industries.

Some CABs maintain public databases and provide an alternate method to quickly evaluate the certification status of a company. However, some ABs, such as Accredia of Italy, CNAS of China, and JAS-ANZ of Australia; maintain publicly accessible databases in which checking the existence and validity of management system certifications is easier and more efficient—particularly when the company may be certified, but the CAB issuing the certificate is unknown. Databases of ABs are particularly useful because they provide information about all certifications issued by CABs covered by the accreditation.

Accredia estimates that each certificate on their website is checked twice per month. JAS-ANZ reports that approximately 60 percent of the total hits to its website are due to certificate searches, which results in about one search per certificate per month.

Changes are underway

The IAF is making it easier to verify certificate validity, which should aid buyers. At its 30th Annual Meeting, the IAF issued resolution 2016-17, which stipulates that by November 2019, certificates issued by accredited CABs must display the accreditation symbol, and/or reference the accreditation status of the CAB, including the identification of the AB. Furthermore, IAF resolution 2015-14 prevents CABs from issuing non-accredited management systems certificates in scopes for which they are accredited by November 2017.



Additionally, the IAF is investigating the development of an IAF database of accredited management system certificates. Principles to be achieved with the database have been agreed and the IAF's ABs will be required to identify accredited CABs under the IAF umbrella. However, participation is expected to be voluntary for accredited CABs and their clients. The expectation is that companies will want to promote their accredited certification status and the ease in verifying certificate validity will aid in supply chain decisions as the database will serve as a global "single source of truth" for accredited certification validation.

According to project chair Randy Dougherty, who is also chair emeritus for the IAF, "The database presents a very significant opportunity for accreditation and accredited management system certification to really stand out as a global tool for business and governments to use. I am pleased with the progress with the work which will demonstrate to the IAF membership that this will be a major asset for IAF, its members, and most importantly the users of accredited certification."

The IAF expects to vote on a formal proposal to establish the IAF database at its October 2017 meeting.

So what should you do?

Buyers should consider the language used in supplier qualification documents and in calls for tender or in requests for quotation. Do you require ISO 9001-accredited certification, ISO 9001 certification, or compliance with requirements of ISO 9001?

Request and review certification documents noting the CAB name and also the scope of the certification to assure that it matches the product or service that you are purchasing. Checking that the CAB is accredited may require contacting the CAB, the AB, or the IAF. Last year alone, ISO CASCO reported that 93 percent of the complaints it received were related to whether a CAB maintained accredited certification. In addition, the IAF secretariat reports that the majority of the inquiries and complaints that are received at the IAF are due to questions investigating the validity of accredited certification.

Always check the expiration date or recertification date. With the deadline for transition from ISO 9001:2008 to ISO 9001:2015 nearing, this will become more and more important as accredited ISO 9001:2008 certifications will not be valid after September 2018.

Changes happen and sometimes a certification scope is changed or certification is suspended or revoked. In the future, a quick review of the certificate will provide not only the CAB name and mark, but also the accreditation status of the CAB including the identification of the AB and perhaps the accreditation symbol.

If agreed at the October 2017 meeting, the IAF database of accredited certification is intended to provide a central global location for verification of certification validity, helping buyers to identify potential suppliers and potentially increasing market exposure for certified companies.

You can provide your ideas and suggestions to help shape the IAF database by contacting the IAF secretariat.

Why accredited certification matters

Accredited certification reduces the risk to buyers by assuring that accredited certification bodies are competent to impartially and independently perform the conformity assessment activities they undertake in certifying that companies meet the requirements of ISO 9001 and other management system standards.

Many government officials rely upon accredited certification. Graziella Siciliano, the coordinator of the Energy Management Working Group of the Clean Energy Ministerial with the U.S. Department of Energy, has expressed support of the IAF database in helping gather supplier "data on accredited management system certification in their countries and globally as a key input."

Industry organizations like the Dental Trade Alliance, which has more than 200 members representing companies from North America and QuEST Forum, a global association of approximately 200 companies dedicated to improving the quality and sustainability of products and services in the telecom and information and communications technology industry, both "rely significantly on quality management system certifications within the supply chain."



According to the IAQG, an association of every major aerospace, space, and defense company throughout the world, “As supply chains grow increasingly global and complex, the need for accurate and current data is more important than ever and the IAF community is uniquely positioned for collecting and sharing data on accredited certification.”

The website www.publicsectorassurance.com is a collection of case studies demonstrating how accredited conformity assessment helps industry, government officials, and regulators.

If you have an example of how accredited conformity assessment has supported you or your supply chain in the public sector, share your story and help educate others. And of course, if you have complaints regarding accredited certification, you can always contact your accredited CAB, its AB, and even the IAF.

A website, www.business-benefits.org, is being developed to demonstrate the value that individual businesses derive from the use of standards and accredited services. Additional examples will be added to the site in the coming months.

Closing thoughts

Remember, the focus is upon confidence—reducing risks and increasing the confidence to ensure that health, safety, and environmental conditions are satisfied and that quality requirements are systematically and consistently met.

Conformity assessment demonstrates that products, services, processes, systems, and persons meet the requirements of a standard. Conformity assessment ranges from self-declaration to accredited certification by an independent accredited conformity assessment body covered by IAF MLA with vision “certified once – accepted everywhere.”

All may have an appropriate place and value within your supply chain. With knowledge, you can decide the best fit.

About the authors

Sheronda Jeffries is a program manager for Cisco Systems, where she is responsible for providing internal consulting support and training. She has more than 20 years’ experience as a third-party quality auditor and as a consultant to Fortune 500 companies, specializing in quality management systems implementation and auditing. Her experience spans many industries, including information and communication technologies and testing laboratories, in addition to electrical, mechanical, paper, and plastic manufacturing.

Carmine Reda is a licensed professional engineer who was honored in 2016 as Maestro del Lavoro (Star of Merit) for Labor by the Italian Republic. He represents Enel (an Italian multinational involved in the generation of electricity and distribution of electricity and gas) on Accredia, ICMQ, and the Conformity Assessment Committee of UNI and CEI, among others. He’s also been a designated expert in several UNI and ISO working groups.

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How Accreditation delivers confidence in Supply Chains:

The production and distribution of goods and services involves complex supply chains and processes. Conformity assessment therefore provides a means for preventing unsafe, unintended and/or environmentally harmful products from entering the market place. Supermarket chains and retailers should demand that their suppliers demonstrate that their products meet relevant standards by requiring accredited test reports, inspection reports and certifications. Conformity assessment, including activities such as testing, certification, and inspection, is used to verify that products and services meet standards or technical specifications. In the regulated sector, conformity assessment demonstrates compliance with legislative requirements and, in the voluntary sector, provides assurance to consumers and importers that the products and services they procure meet specification.

Supporting supply chains through international recognition:

BAB is established to ensure that laboratories, inspection bodies and certification bodies working in the country are subject to oversight by itself. BAB is internationally recognized by its regional and international associations such as Asia Pacific Accreditation Cooperation (APAC) (formerly APLAC) and International Laboratory Accreditation Cooperation (ILAC) since 2015, which has been evaluated by peers as competent, sign international arrangements that facilitate the acceptance of products and services across borders, thereby creating a global infrastructure to support trade, regulatory approval processes, and confidence in the supply chain. The system removes arbitrary national technical barriers to trade, improves confidence and transparency throughout complex and multinational supply chains.

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List of BAB Accredited CABs

Sl. no.	Name of the CAB	Field/status
Testing Laboratory (ISO/IEC 17025:2005)		
1.	Institute of National Analytical Research Services (INARS), BCSIR , Dhaka	Chemical Testing
2.	SGS Bangladesh Limited, Dhaka	Textile Testing
3.	ASM Testing Laboratory, Gazipur	Chemical Testing
4.	Interstoff Apparels Ltd. Laboratory (IALL), Gazipur	Textile Testing
5.	Quality Control Laboratory, FIQC, Dhaka	Food Testing
6.	Textile Testing Services Ltd., Gazipur	Textile Testing
7.	Testing Laboratory, Dysin International Ltd., Dhaka	Textile Testing
8.	ITS Labtest Bangladesh Ltd., Tejgaon I/A, Dhaka	Textile Testing
9.	Concrete Innovation and Application Centre (CIAC), Holcim Cement (Bangladesh) Ltd., Dhaka	Mech. test of Aggregate and Concrete (Voluntary Suspension)
10.	Lub-rref (Bangladesh) Ltd. Chattogram	Petroleum Product Testing
11.	Bureau Veritas Consumer Products Services (Bangladesh) Ltd., Savar, Dhaka	Textile Testing
12.	Nestle Sreepur QA Laboratory, Gazipur	Food Testing
13.	Quality Control Laboratory, FIQC, Chattogram	Food Testing
14.	Quality Control Laboratory, FIQC, Khulna	Food Testing
15.	Modern Testing Services (Bangladesh) Ltd., Savar, Dhaka	Textile Testing
16.	Bureau Veritas Consumer Products Services (Chattogram) Ltd.	Textile Testing (Voluntary Suspension)
17.	ITS Labtest Bangladesh Ltd., Chattogram	Textile Testing
18.	Analytical Chemistry Laboratory, Atomic Energy Centre, Dhaka	Chemical Testing
19.	Central laboratory, Divine Fabrics Ltd., Gazipur	Textile Testing
20.	Petromax Refinery Ltd. Khulna	Petroleum Product Testing
21.	Central Laboratory, Samuda Chemical Complex Limited, Munshiganj	Chemical Testing
22.	TÜV SÜD Bangladesh (Pvt.) Ltd., Dhaka	Textile Testing
23.	Bangladesh Material Testing Laboratory Ltd., Dhaka	Construction material testing
24.	NUSDAT-UTS, Walton Hi-Tech Industries Ltd., Gazipur	Electrical Testing
25.	PRAN Beverage Laboratory, PRAN Dairy Limited, Narshingdi	Food Testing
26.	Fakir Testing Services Ltd., Fatulla, Narayanganj	Textile Testing
27.	TAHA GIYIM Lab Bangladesh, Gulshan, Dhaka	Textile Testing
28.	SGS Food & Agricultural Testing Laboratory, Dhaka	Food Testing
29.	UL VS Bangladesh Ltd., Uttara, Dhaka	Textile Testing
30.	Plasma Plus Application and Research Laboratory, Uttara, Dhaka	Textile, Food, Pharmaceuticals and Environmental testing
31.	Brachi Testing Service (BD) Ltd., Kawan Bazar, Dhaka	Textile Testing (Voluntary Suspension)



32.	Amber Textile Services Ltd., Gazipur	Textile Testing
33.	SGS Bangladesh Limited, Chattogram	Textile Testing
34.	TÜV Rheinland Bangladesh Pvt. Ltd., Gulshan, Dhaka	Textile testing
35.	Quality Control Laboratory (Central Laboratory), Renata Limited, Mirpur, Dhaka	Pharmaceutical testing
36.	Quality Control Laboratory (Potent Product Facility), Renata Limited, Mirpur, Dhaka	Pharmaceutical testing
37.	Pesticide Analytical Laboratory (PAL), BARI, Gazipur	Voluntary suspension
38.	GMS Testing Laboratory, Gazipur	Textile testing
39.	Testing Laboratory, Impess-Newtex Composite Textiles Limited, Tangail	Textile testing
40.	Testing Laboratory, Qtex Solutions Limited, Uttara, Dhaka	Chemical Testing (Voluntary Suspension)
41.	Premier Testing Laboratory, Chattogram	Textile testing
42.	Comfit Lab Services Limited, Tangail	Textile testing
43.	Testing Laboratory, BSTI, Dhaka.	Biological, Chemical & Mechanical testing
44.	ACI Sourcing (BD) Pte. Ltd, Dhaka	Textile testing
45.	National Control Laboratory (NCL), Dhaka	Pharmaceutical testing
46.	Urmi testing laboratory, Fakhruddin textile mills ltd, Gazipur	Textile
47.	24 engr. Contr. Bde testing laboratory, Dhaka	Construction material testing
48.	Norwest testing laboratory, Dhaka	Textile
49.	Bangladesh research and testing laboratory, Dhaka	Material Testing
50.	Hohenstein laboratories bangladesh limited, Dhaka	Textile
51.	National food safety laboratory, Dhaka	Food
52.	Consumer testing laboratories ltd, Dhaka	Textile
53.	Waffen research laboratory, Dhaka	Microbiological
Calibration Laboratory (ISO/IEC 17025:2005)		
54.	National Metrology Laboratory (NML-BSTI), Dhaka	Calibration (Length, Temperature, Mass, Volume, Pressure, Time and Frequency)
55.	Training Institute for Chemical Industries (TICI), Narshindi	Mechanical
56.	Calibration Laboratory, Dysin International Ltd., Dhaka	Voluntary suspension
57.	OTS (Pvt.) Ltd., Dhaka	Mechanical
58.	Instrumentation Engineering Services Ltd., Dhaka	Mechanical
59.	Resource Instrument & Measurement Enterprise (RIME), Dhaka	Thermal & Mechanical
60.	SGS Bangladesh Limited, Calibration Lab, Dhaka	MECHANICAL
61.	Quality Calibration Solutions (QCS) Private Limited, Dhaka	MECHANICAL
62.	Standard Calibration Services (SCS) Private Limited, Mirpur, Dhaka	MECHANICAL & ELECTROTECHNICAL
63.	Calibration Laboratory, Biman Bangladesh Airlines Ltd, Dhaka	MECHANICAL & ELECTROTECHNICAL
Medical Testing Laboratory (ISO 15189:2012)		
64.	Pathology Laboratory, United Hospital, Gulshan, Dhaka	Pathological Testing
65.	Pathological Laboratory, Labaid Limited, Dhanmondi, Dhaka	Pathological Testing
Certification Body (ISO/IEC 17021:2011)		
66.	BSTI, Management System Certification Wing, Dhaka	Management System Certification
67.	United Certification Services Limited, Dhaka	Management System Certification
Inspection Body (ISO/IEC 17020:2012)		
68.	Qtex Solutions Limited, Dhaka	Workplace Environment
69.	Envirotech International Ltd., Uttara, Dhaka	Workplace Environment
70.	GREENBUD Testing and Inspection Services	Environmental
71.	ITS Labtest Bangladesh Ltd. (Inspection Division), Dhaka	Textile & Textile Products
72.	Bureau Veritas Consumer Products Services (BVCPs) Bangladesh Ltd., Dhaka	Textile & Textile Products



World Standards Day

Each year on 14 October, the members of IEC, ISO and ITU celebrate World Standards Day, which is a means of paying tribute to the collaborative efforts of the thousands of experts worldwide who develop the voluntary technical agreements that are published as International Standards.

14 October 2019

Video standards create a global stage



James M. Shannon
IEC President



John Walter
ISO President



Houlin Zhao
ITU Secretary-General

Video is the modern medium of expression. Advances in the technology have changed our world, revolutionizing entertainment, connecting friends and families across the globe, enriching our communications experiences and enabling major improvements in medical care and education.

The innovation of recent decades has driven a huge leap forward in video quality. And video has also become more accessible, helping people worldwide to share their stories in vivid, moving pictures. These gains in both the sophistication and accessibility of video are built on International Standards.

The video compression algorithms standardized in collaboration by IEC, ISO and ITU have been honoured with two Primetime Emmy Awards, recognizing that these standards are central to industry's ability to meet rising demand for video, one of the most bandwidth-intensive applications running over global networks.

International Standards meet industry demand for powerful compression capabilities. They also enable smooth transitions to the next generation of video compression technology, helping industry to maximize return on each wave of investment.

Having standards recognized and respected all over the world means that video encoded on one device can be decoded by another, regardless of the device being used. This introduces economies of scale that help to grow the market, giving innovators the confidence to invest in new video applications and services.



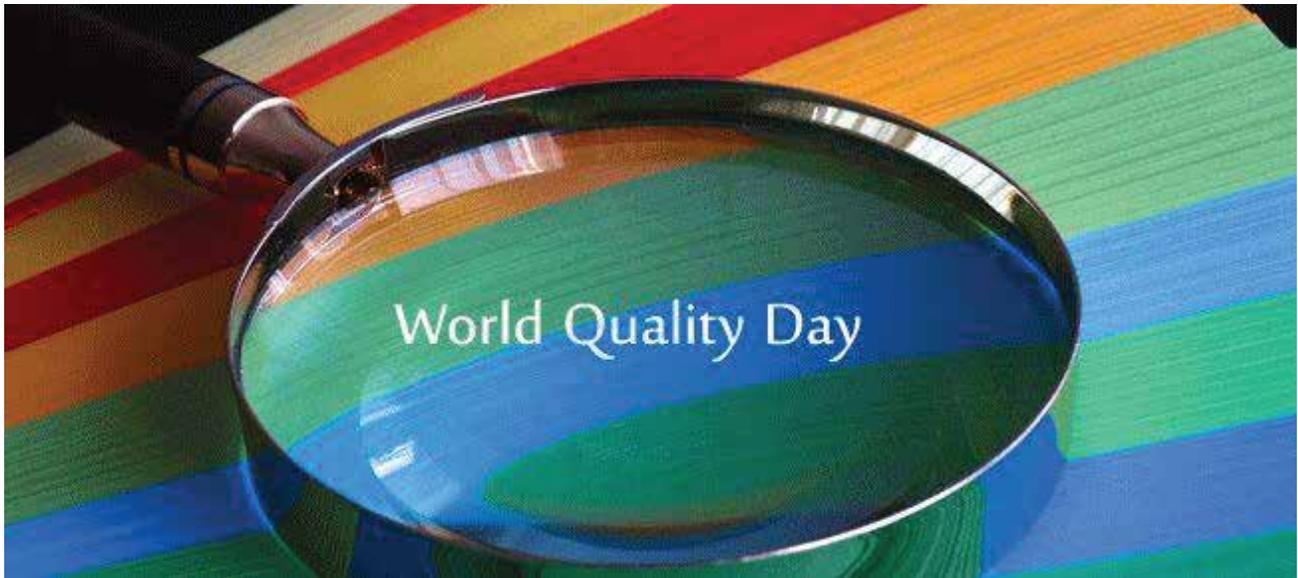
World Quality Day

14 October 2019

Theme : 100 years of quality

Many individuals and organisations use World Quality Day as an opportunity to act as quality advocates. In 2018, thousands of individuals and organisations across the globe hosted activities around the theme of 'Quality: A question of trust'.

World Quality Day is celebrated annually on the **second Thursday in November**.



World Quality Day (#WQD19) is designed to recognise the contributions of quality professionals across the globe. It is your opportunity to celebrate the achievements of your team and organisation.

This year marks an exciting milestone – the CQI's centenary. We are proud to celebrate our compelling story and the lasting impact of the quality management discipline on advancing society in the last 100 years.

Fuelled by the desire to improve the production of unreliable munitions after the First World War, our original members established the Technical Inspection Association in 1919. One hundred years later, their passion for providing trusted products and services endures because of the outstanding work of quality professionals every day.

The quality profession has empowered organisations to succeed, regardless of their sector and across all geographies. Quality has made significant contributions to advancements in healthcare, manufacturing, construction, energy, defence and transportation.





Accredited Verification of the Gross Weight of Shipping Containers in the ports of Guatemala

In order to fulfil the amendments of the International Convention for the "Safety of Life at Sea" -SOLAS-, the shipping company must verify the gross weight of the filled containers before it can be loaded on to a vessel according the provisions stated at the Ministerial Agreement 787-2016 "Regulation for the verification of the gross weight of loaded containers" issued by the Ministry of Communications, Infrastructure and Housing of Guatemala.

The Oficina Guatemalteca de Acreditación -OGA- supports the National Port Authority through the assessment and accreditation of laboratories to ISO/IEC 17025 to calibrate the measuring instruments used for the verification of gross weight. Annually, around 250 000 containers are verified before being stowed on-board, containing products that are sent to the country's main trading partners around the world.

Further information is available here on the National Port Authority website.



The EU proposes that accredited conformity assessment underpins type-approval of automotive products

The legal framework for the type-approval of automotive products covers three categories of vehicles: motor vehicles and their trailers, motorcycles, and tractors. The objective of this framework is to facilitate the free movement of motor vehicles and trailers in the internal market by laying down harmonised requirements designed to achieve common environmental and safety objectives.

Following the emissions scandal involving a German car manufacturers, the Commission announced that it would reinforce the type-approval system, in particular by ensuring adequate supervisory mechanisms to ensure a correct and harmonised application of the type-approval procedures. It is proposed that this is achieved through the use of appropriate accredited conformity assessment.

Further information is available on the Commission website.



Defence Electronics & Components Agency

Accreditation provides cost effective support for Typhoon

The Defence Electronics and Components Agency (DECA) provides support solutions for Typhoon by providing innovative repair-not-replace solutions. DECA is an MOD and industry partner that aims to provide benchmark support services as the principal in-house government organisation dedicated to maintenance, repair, overhaul, upgrade and procurement in the defence avionics, electronics and components field.

DECA inspects composite cylinders in support of Typhoon. These specialist cylinders, which carry nitrogen and air, are smaller and lighter than the steel cylinders traditionally used and require specialist support capabilities. The cylinders are inspected, examined, and hydrostatic tested to BSEN 11623:2002 and BSEN 1802:2002 standards and pressure tested up to 6526 psi before being prepared for dispatch to front line Typhoon units.

To ensure that this work is carried out effectively, this facility is UKAS accredited and is able to perform hydrostatic testing up to 10,000psi. Further information is available on the DECA website.





Accreditation underpins KENYA'S Imports

The Government through the Kenya Bureau of Standards (KEBS), the National Standards Body (NSB) requires that all goods to be imported into the country must first be inspected, tested and or certified by accredited Inspection Bodies, Test laboratories or certification bodies.

KEBS has contracted partners under the Pre-Export Verification of Conformity (PVoC) for exports to Kenya. These partners use their accredited facilities to inspect, test and certify products including motor vehicles against relevant Kenya standards or approved standards.

Such goods once inspected and tested are issued with certificates of conformity (CoC) at the country of origin and consequently KEBS import standardization mark.

The Government and the Kenyan business community benefit from goods being cleared quickly and at minimal cost. The need to re-inspect, re-test and re-certify goods is eliminated. Additionally, time taken to deliver goods from Kenya's ports of entry to the neighbouring countries that use Kenya's ports of entry is significantly shortened.

Overall, this programme that is anchored on accreditation has supported the work of regulators such as KEBS, Ministry of Health, Radiation Protection Board, and KEPHIS among others.

Further information is available on the KEBS website.



Calibration labs support the Japanese telecommunications sector

Japan Calibration Service System (JCSS) of IAJapan is one of several ways to satisfy requirements by Telecommunications Business Act and Radio Act with references to Measurement Act Article 135 and 144.

Enforced from January 26 2004, measuring instruments used for the examination or inspection calibrated by accredited laboratories by Japan Calibration Service System (JCSS) of IAJapan is one of several ways to satisfy requirements by Telecommunications Business Act Article 87 and Radio Act Article 24-2 which refers to Measurement Act Article 135 and 144.

Telecommunications Business Act, Article 87 (pages 48 to 49) (Act No. 86 of December 25, 1984)

Radio Act, Article 24-2 (page 14) (Act No. 131 of May 02, 1950)

Measurement Act, Article 135, Article 144 (Act No. 51 of May 20, 1992)

*On English translation of Telecommunications Business Act and Radio Act, Ministry of Internal Affairs and Communications (MIC) has not translated in compliance with the terms translated by Ministry of Justice (MOJ).

Please note that "correction" translated by MIC, written as the term referred to Measurement Act, is translated by MOJ as "calibration."





Accredited inspection supports car safety in Sweden

The Swedish authority Transportstyrelsen – the Swedish Transport Agency uses accredited inspection bodies according ISO/IEC 17020 for the periodic inspection of vehicles, according Swedish law SFS 2002:574 and SFS 2009:211.

Further information is available from the Swedish Transport Agency – Transportstyrelsen or from Swedac.



ILAC MRA underpins the testing of lifesaving and fire safety equipment and materials

Testing of equipment and devices used on Coast Guard vessels need to be tested in accordance with Coast Guard specifications by a laboratory accredited by an ILAC MRA signatory accreditation body. This policy decision cited scheduling delays and increased expenses as a reason for using laboratories accredited by an ILAC Signatory rather than the use of Coast Guard-employed inspectors. Additionally, the USCG called out the modern trading system where many manufacturers produce lifesaving equipment for multiple-flag vessels, and must have their equipment approved by each nation. Using third-party accredited testing laboratories would allow manufacturers to satisfy requirements from multiple nations, which avoids the need for duplicative tests. For further details, click here.



Laboratory accreditation helps Chinese traditional medicine exports

In 2004, the Singapore Government introduced the requirement that the testing of Chinese traditional medicines must be carried out by an accredited laboratory before products can be placed on the market or exported.

Before the introduction of this testing regime, the annual sales of Chinese traditional patent medicine in Singapore was about SGD 200 million, with Chinese Mainland products accounting for 67% of the market.

By 2011, the export value of Chinese traditional patent medicine in ASEAN region, represented by Singapore, reached USD 36,870,000, with a year-on-year growth of 17.3%.



বিএবি'র এ্যাক্রেডিটেশন সেবাসমূহ



টেস্টিং এবং ক্যালিব্রেশন ল্যাবরেটরি
ISO/IEC 17025



পরিদর্শন সংস্থা
ISO/IEC 17020



মেডিকেল ল্যাবরেটরি
ISO 15189



সনদ প্রদানকারী সংস্থা
ISO/IEC 17021, 17024, 17065



বিএবি'র এ্যাক্রেডিটেশনের প্রধান ধাপসমূহ

