

Commonwealth Partnership For Technology Management

Smart Partners' Quality & Standards
Inclusion Initiative

Message on

Shaping & Carrying Forward National Visions: The New Strategic Value of NSBs in the Digital Age

CPTM Smart Partners' Hub
63 Catherine Place
London, SW1E 6DY

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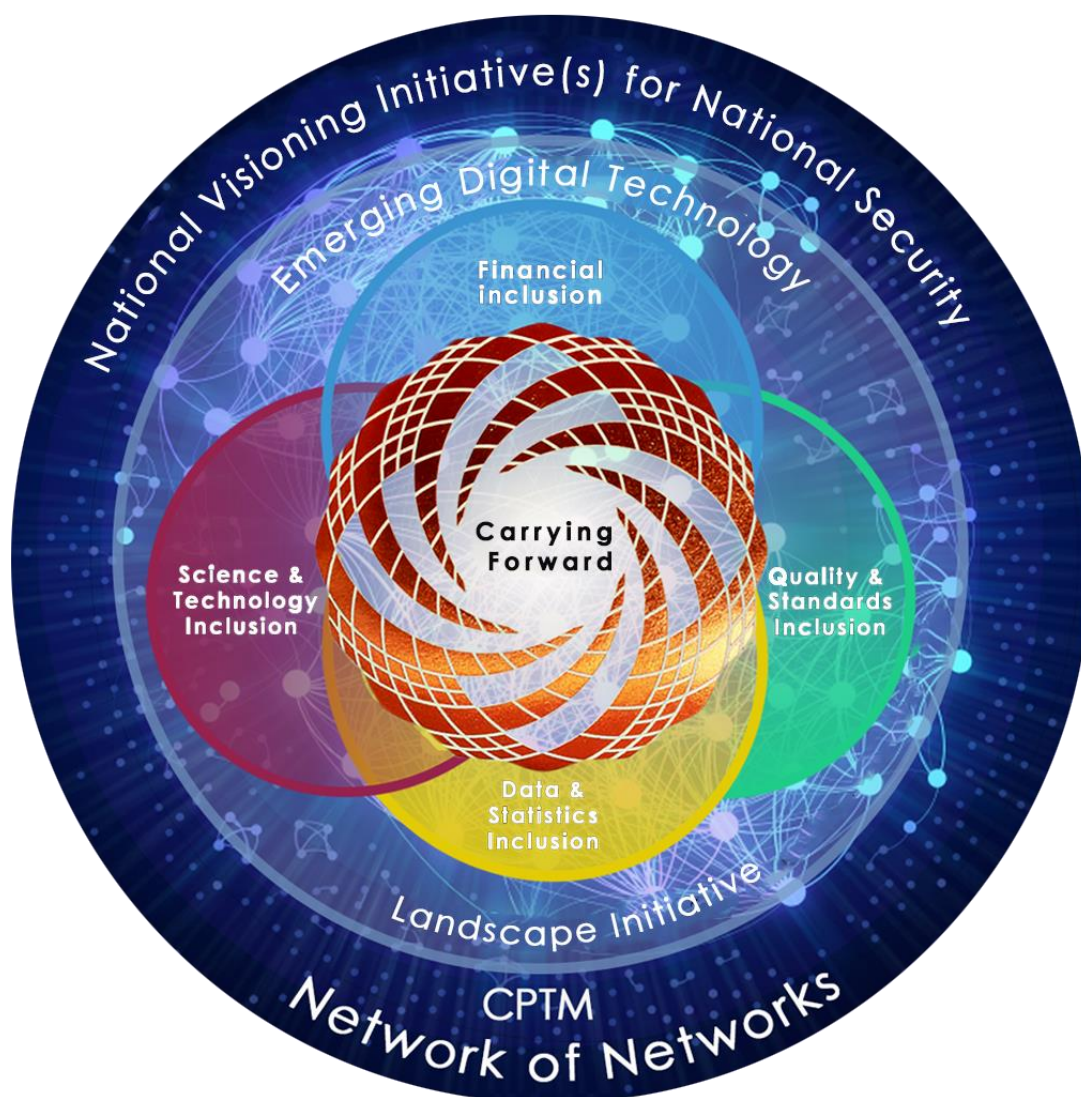
ISO week in China

39th ISO General Assembly

10-14 September 2016, Beijing, China



The CPTM Smart Partnership Strategic Framework for Inclusion



Message from the CPTM Q&S Inclusion Network to ISO NSBs

NSBs in the Commonwealth & Beyond

1. This, the 2016 CPTM Q&S Inclusion Initiative message to the 39th ISO-DEVCO General Assembly, focusses, as agreed, on **‘Shaping and Carrying Forward National Visions: The New Strategic Value of NSBs in the Digital Age’** beyond their conventional role, and is being shared with you and all those part of the CPTM Quality and Standards Initiative Network prior to the commencement of the ISO-DEVCO GA in Beijing. In addition, as per established tradition, this message is being circulated by CPTM to the core group of NSB Members of the CPTM Q&S Inclusion Network, as well as to Smart Partners involved in all other CPTM Inclusion Initiatives.
2. In 2010, CPTM initiated a Quality & Standards Inclusion Initiative, and has since introduced and co-opted many NSBs to its think tanking, dialoguing and networking ventures. ISO and ITU are associated and supportive and they have contributed to raising awareness on the strategic importance of NSBs (see Annex 1 for some brief background information on the CPTM Q&S Inclusion Network). Leveraging the CPTM Q&S Inclusion Initiative Network, with reference to the strategic value of NSBs, could be achieved through the adoption of the CPTM Strategic Framework.
3. In this context, during 2015 the CPTM Q&S Network, based on their involvement in the Initiative, produced:
 - A first-of-a-kind Executive Brief to each and every Commonwealth Head of Government/State ahead of the 2015 CHOGM in Malta ([click here](#)), as well as an Executive Brief to the 2015 CARICOM Summit.
 - A Brief to the 38th ISO General Assembly in South Korea ([click here](#)).
4. During 2016, the CPTM Q&S Inclusion Network became even more strategically engaged in various National Vision processes, such as Cameroon Vision 2035, for which standards have an important part to play in achieving inclusive security. Elsewhere, the CPTM Q&S Network gave greater focus to the need for NSBs to work closely with Central Banks to adapt to challenges of the digital age, particularly in the areas of statistics, data, and blockchain technology. Such issues were the focus of interactions at the 5th annual CPTM Central Bank Governors’ Think Tanking meeting in London in June this year, the outcomes of which have formed the basis of this year’s CPTM submission to the Commonwealth Finance Ministers’ Meeting next month.

5. Based on the aforementioned shared experiences, **this Message will make the case for the strategic value of NSBs**, particularly in the context of the evolving areas beyond the conventional role of NSBs, to be recognized at national, regional, and international levels.

The New Strategic Value of NSBs in the Digital Age

6. National Standards Bodies (NSBs) are the gateway to accessing, influencing and implementing international and regional standards, such as those produced by the three apex organizations IEC, ISO and ITU. These standards are based on the consensus between stakeholders. They cover a wide array of technical, managerial and organizational issues. They offer solutions to address many of the topics of interest for economic and social transformation. They constitute, therefore, tools to be considered to shape and implement national visions and strategies, all the more as NSBs reach out to the public and private sectors, and continue to be an example of public-private partnership.
7. Among the conventional roles and issues already covered by NSBs are:
- **Trade and quality** (for the CPTM Executive Brief to Heads of Government/State at CHOGM 2015, [click here](#));
 - **Transfer of technology**, through interoperability, guidelines and design indications;
 - **Competitiveness and access to regional and world markets**, through product, equipment, process and packaging requirements, test methods and quality management (e.g. the ISO 9000 series);
 - **Environmental protection and climate change**, through standards covering the design and operation of energy efficient equipment and buildings, the management of energy within organizations (e.g. the ISO 45000 series), the technologies for the use of renewable energies or the measurement and management of impacts of activities on the environment (e.g. the ISO 14000 series; including greenhouse gases emissions accountability and verification standards) or the efficient distribution and use of water;
 - **The development of agro-food industries** from irrigation technologies and operation to the control and management of food safety;
 - **Extractive industries**, with basic standards relating to mining, oil and gas exploitation, equipment and products;
 - **Education**, for which standards may constitute pedagogical tools, as they imbed best practices and cover all technologies, and should clearly be included in scientific, marketing and management curricula;

- **Social responsibility**, for which the ISO 26000 standard, published in 2010 and now adopted as a national standard by over 60 countries, provides a framework for an organization to implement the principles of SR, enabling it to assess, improve and communicate its contribution to overall sustainable development. Relevant to this topic are also the many standards covering health issues and equipment, and such diverse issues as counterfeited goods, anti-bribery or quality management in local government;
8. Nevertheless, due to the emerging digital technology landscape and the need for the adoption of new adaptive flexibility approaches, NSBs are being called upon to engage in new strategic areas, such as:
- **Financial services**, where standards provide not only the basic tools for the safe exchange of data and secure transactions (ex. PIN code), but are also key for the dissemination of digital financial services. In response to the initiative taken by Standards Australia, the issue of blockchain technology is already being addressed by ISO, and the CPTM Q&S has been invited by Standards Australia to participate in these efforts.
 - **Security and safety**, for which standards cover technical requirements and risk management in areas as diverse as emergency preparedness and business continuity management, information security, consumer safety, safety at work or road safety
 - **The new landscape of digital technologies**, where interoperability, security and user-friendliness benefit greatly from standards and enable the operation of the World Wide Web and the internet; the collection and treatment of large volumes of data benefit from standards covering all aspects of data codification and statistics, and are beginning to emerge specifically to cover the growing area of “big data” availability and exploitation;

Adaptive Flexibility Approaches for NSBs

9. The CPTM Smart Partnership Inclusion Initiatives are predicated on the growing need for the adoption of complex adaptive approaches to national visioning and national security, particularly in light of the interdependencies and interoperability issues inherent to evolving disruptive technologies. That is to say, complex problems cannot be understood, and effective policy cannot be formulated, if the various parts of a country’s institutional framework continue to approach these problems in isolation from one another. Instead, there is a need for a coordinated, integrated and highly strategic approach to such interdependent problems, with the various government departments, national institutions and directorates, the private sector,

and academia recognizing these interdependencies (for CPTM's Brief, 'National Visioning and Foresight: Sharing Experiences with Professor Sheila Ronis', [click here](#)).¹

10. In the case of quality and standards, an issue of strategic importance to a country's socio-economic development, it is vital that governments understand that the work of NSBs can be enhanced with greater cooperation amongst themselves and the wider institutional framework of which they are part. If the strategic value of standards is to be leveraged, NSBs must be given greater ability to work horizontally with central banks, ministries of finance, of science and technology, and of trade, with national statistics organisations, as well as with academia and the private sector, in order to produce standards that will improve products, increase trade, and ultimately benefit the country's citizens.
11. CPTM's promotion of such a strategic approach was in evidence in May this year when, at the request of the Government of Cameroon, CPTM undertook a Technical Assistance Mission to the country, and facilitated a dialogue amongst various different ministries and agencies, including **ANOR**, Cameroon's NSB. In this specific discussions took place about what role ANOR can play in enhancing the existing national standards framework, and the need to promote the value of increased consultation of ANOR by various government ministries, working together towards the common goal of **Cameroon National Vision 2035** (for the report, 'CPTM Technical Assistance Mission to Cameroon', [click here](#)).
12. The interactions that took place were designed to encourage strategic cooperation amongst government ministries and national institutions. At the request of CPTM, the National Standards Bureau was invited to present to as many as ten government ministries about the strategic value of standards to socio-economic development.
13. At the **5th CPTM Central Bank Governors' Think Tanking** which took place in June this year (for the report, [click here](#)), and which has formed the basis of the CPTM submission to both the Commonwealth Finance Ministers' Meeting and the Commonwealth Central Bank

¹ Such thoughts are echoed by Dr Sheila Ronis, Chair of the Center for Complex and Strategic Studies at Walsh College, U.S., who recently visited the CPTM Hub to talk about the importance of complex adaptive approaches in national foresight and national visioning: *"Policy makers often struggle to understand complexity. We, as scientists, need to explain and communicate the importance of complexity in a clearer fashion to laymen. In order to deal with a complex system, you need to understand it thoroughly. It is often extremely difficult to get people in general (and politicians in particular) to recognise that they are dealing with complex systems. One challenge is that complex systems can be influenced, but not necessarily controlled. There are few solution-sets for complex system problems. Things can be made better but not fully solved. Using foresight tools is crucial for this process."* S. Ronis, webcast recorded at CPTM Smart Partners' Hub, 8 August 2016. Webcast retrievable at: www.cptm.org

Governors' Meeting next month (for the CPTM submission, [click here](#)), NSBs played a key role in the drawing up of a series of recommendations, extracts of which are below:

- The connection and interaction between the CPTM Financial Inclusion Initiative and the CPTM Quality & Standards Inclusion Initiative should be strengthened on the issues of Digital Financial Services and the emerging Standards surrounding Digital Technology, Digital Financial Services, Blockchain and DLT:
 - National Standards Bodies (NSB's), as members of ISO's Developing Countries (DEVCO) group, should consider working closely with ISO on the development of the proposed new Standards for Blockchain, thus monitoring developments for Central Bank Governors.
- Further new interactions between the CPTM Financial Inclusion Initiative and the new CPTM Smart Partners' Inclusion Initiative on Data and Statistics, should enhance the role of National Statistics Offices (NSO's) for the best interests of the people.
 - There is a need for closer working relationships to be forged between Central Banks and NSO's especially considering the rapid penetration of society by digital technology.
 - Central Banks could reflect on the impact of new economic activities on traditional statistics, with the potential to employ enhanced Data Science methodologies to assist this process through the work of Data Centres.
 - Data Visualisation can be used for increased statistical literacy and to provide a better understanding of FinTech processes

14. CPTM has finalised and forwarded Briefs on 'Adaptive Flexibility Approaches to Financial Inclusion in a Digital Age' for the Commonwealth Finance Ministers Meeting (CFMM) on 6th October and for the Commonwealth Central Banks Governors Meeting (CCBGM) on 5th October in Washington, prior to IMF/World Bank Meetings. Through these Briefs, CPTM will therefore continue to make the case for the strategic engagement of NSBs in relation to the National Financial Inclusion activities.

NSBs: Taking Things Forward

15. In order for national standards frameworks to adapt to the challenges and opportunities of the digital age, above all else there needs to be widespread recognition, both in government and in the wider institutional framework, of the strategic value of NSBs.
16. However, persuading governments and national institutions to acknowledge the strategic value of NSBs remains only one part of the problem. Should governments wish to heed such advice, the next challenge is how such plans might be implemented – more specifically, how they are to be funded and budgeted for. The proposed increase in interactions between NSBs, government departments and national institutions would occur, by definition, at a *supra* level.
17. Under current institutional practices, budgets are produced in accordance with the allocation of money to be spent by the government department on matters concerning mostly only the planned output of said department. Traditional budgeting methodologies within government departments and national institutions must therefore be altered in such a way as to allow for budgeting of cross-departmental and multi-body cooperative projects.
18. In addition to recognition of their wider strategic value, NSBs must also be recognized more specifically for their capacity in science, technology and engineering. This capacity, particularly as pertains emerging digital technologies and data science, needs to be more fully augmented.
19. CPTM wishes thank the Directors of all NSBs within the CPTM Q&S Initiative, including from Eastern and Southern Africa, the Caribbean, and Southeast Asia. Special thanks are owed to BSI, Standards Australia, the ISO Secretariat, and the ITU. We would like to extend our gratitude to Alan Bryden, former ISO Secretary-General and CPTM Companion, who has been an integral member of the CPTM Quality and Standards Inclusion Initiative since 2010. Special thanks are also due to Dr Eve Gadzikwa, President of ARSO and Director-General of the Standards Association of Zimbabwe, and long-time Smart Partner.
20. CPTM, on behalf of the Q&S Inclusion Initiative Members from the Commonwealth and beyond, will accelerate its support of NSBs in their efforts to enhance their strategic value in the context of shaping and carrying forward national visions in the digital age. CPTM will work alongside ISO and all its Member NSBs to ensure that this objective is achieved.

Annex

About the CPTM Quality & Standards Inclusion Initiative

CPTM has evolved from a network of civil servants in several agencies connected to the Commonwealth Science Council in the Commonwealth Secretariat in the 1980's, who were concerned with the use of science and technology for development in emerging economies. It was believed that cooperation between the Commonwealth countries with their shared systems and values offered a unique opportunity to accelerate progress, development, and transformation. The approaches that were used in this informal professional network were **the free sharing of ideas and resources, the use of 'open dialogue' to address issues of common concern** and the concept that creating 'public-private partnerships' was the best approach to mutually beneficial development. The novel ways that were adopted in those early days became **the founding principles of CPTM and Smart Partnership Practice for Limitless Opportunities**.

CPTM has a clearly defined mandate to provide advisory services to Governments on matters related to science & technology, to economic development and wealth creation through sound management of technology, using Public/Private Sector Partnerships. This is achieved primarily in two ways: through International Smart Partnership Dialogues and other co-operative interactions and through Networking and Partnership Development.

The **inclusive nature of the CPTM Smart Partnership Quality & Standards Inclusion Initiative** is reflected in the broad spectrum of participants and invitees to recent interactions. They included **representatives from the various Smart Partners' Networking Webs/ Hubs**:

- **Southern, East & West Africa**, including the Botswana Bureau of Standards, the Standards and Quality Assurance Department of Lesotho, the Namibian Standards Institution, the Swaziland Standards Authority, the Standards Association of Zimbabwe, the Kenya Bureau of Standards, the Uganda National Bureau of Standards, the South African Bureau of Standards, the Rwanda Standards Board and TradeMark East Africa
- **Caribbean & North America**, CARICOM Regional Organisation for Standards and Quality (CROSQ) and its members from Antigua & Barbuda, Belize, Commonwealth of Dominica, Grenada, Republic of Haiti, Montserrat, Federation of St. Kitts & Nevis, St. Lucia, St. Vincent & the Grenadines, Commonwealth of the Bahamas, Barbados, Co-operative Republic of Guyana, Jamaica, Republic of Suriname, Republic of Trinidad & Tobago
- **South East Asia/Pacific**, including Department of Standards Malaysia (Ministry of Science, Technology & Innovation) and SPRING Singapore
- **West Asia/Mediterranean & Europe**, including BSI, Cyprus Organisation for Standardisation, Malta Competition and Consumer Affairs Authority, Smart Partnership Hub in Brussels, African, Caribbean, and Pacific Group of States (ACP)

Secretariat in Brussels and leading members of the CPTM Smart Partnership Quality & Standards Inclusion Initiative.

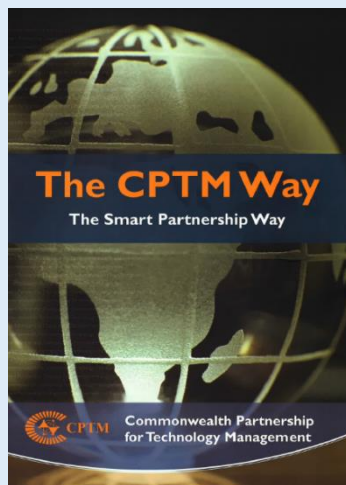
- **International Organisations** such as **ISO, WTO and ITU**, among others...

The Commonwealth Partnership for Technology Management (CPTM), is a unique International cooperative organisation among Commonwealth Governments, the Private Sector and Professionals, Labour, Media and Academia dedicated to promoting Technology Management as part of the overall process of Economic Development and Wealth Creation. It was initiated by Commonwealth Heads of Government (CHOGM) in 1995, as the successor to the Commonwealth Consultative Group on Technology Management/Private Sector Partnership (CCGTM/PSP) established in 1989 at CHOGM in Malaysia.

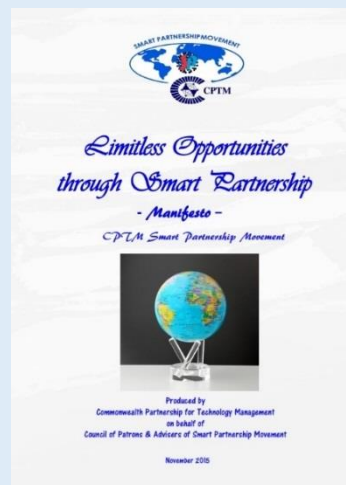
CPTM has shaped a unique approach to contribute to the development and transformation of emerging economies. The Smart Partnership approach is based on the sharing of knowledge and ideas, 'open dialogue' and on-going think tanking with all participants - creating partnerships with win-win outcomes. Representing over fifty countries in the Commonwealth and beyond, and hailing from all walks of life – Heads of State and of Government, ministers, civil servants, business and labour leaders, academics, artists, youth (Smart 29ers) and media – CPTM Members share the same vision, values and approaches to practical problems and the same code of ethics. CPTM Members together create a powerful global network for communication, information exchange and implementation.

The strength of this networking organisation is that the members communicate as 'global citizens' willing to share their experience without charge or constraints. CPTM, which initiated the Smart Partnership Movement, has, in recent years, developed six Inclusion Initiatives which, working in synergy, contribute to the economic and social transformation of Nations, through the framework of National Visions and of regional cooperation. These are:

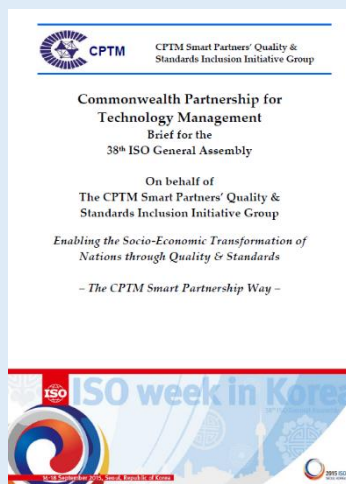
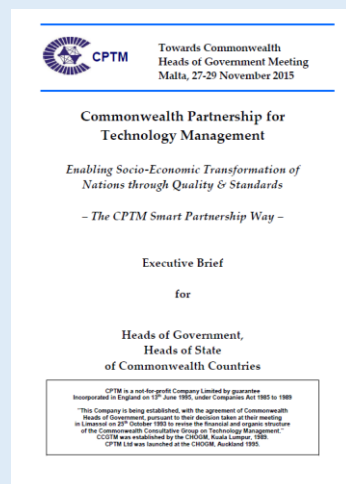
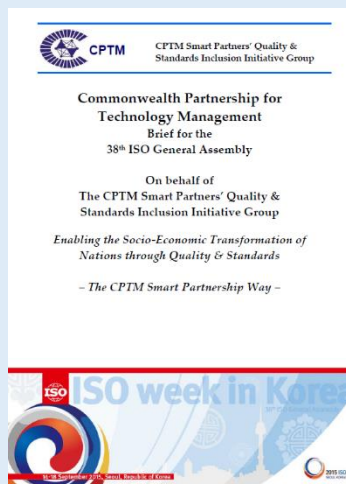
- Quality & Standards Inclusion
 - Financial Inclusion
 - Science & Technology Inclusion
 - Data & Statistics Inclusion
 - The Emerging Digital Landscape
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-



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The New Strategic Value of NSBs in the Digital Age**

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