

The Role of Conformity Assessment in Support of Trade and Investment

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Consultation on public policy, regulation and standardization

“Standards to support U.S. – Zambia Trade and Investment”

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Outline

Introduction

Conformity assessment concepts and methods

US principles and practices for conformity assessment

Ongoing efforts for improving quality infrastructure

- ISO, UNIDO, World Bank Group, Standards Alliance

Conclusions and recommendations

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Background

Deytec, Inc. is a consulting company member of ANSI
Nuclear engineering/nuclear safety

Development of US public policy and safety regulations

Fire safety of nuclear installations/fire safety engineering

Public safety risk assessment/engineering analytical
methods

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Expert in ISO Standardization System

Convenor in *TC 92 SC 4 - Fire safety engineering* (5 yrs.)

Focus on inclusion of conformity assessment

Member ANSI-ICAC (mirror committee to ISO CASCO)

ISO Convenors training and workshops – ISO mission

ISO, IEC, WTO conferences and training – Policy, TBT

Participation in DEVCO, ISO General Assembly

Focus on developing economies: trade and competitiveness

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Objectives

TBT recognized conformity assessment activities can expedite or seriously hinder free flow of goods

Most trade disputes are about conformity assessment

TBT requires conformity assessment procedures not create unnecessary obstacles to international trade

Use guides issued by international standardizing bodies

Meet TBT's code of good practice

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Standards for a better world



For more about ISO's work programmes as it affects consumers, see the ISO Directory for consumer internet participation: www.iso.org/COFOLCO interest
 * In collaboration with IEC



Conformity assessment

Gives us confidence & certainty about the environment in which we live.

Helps to ensure that products and services deliver on their promises.



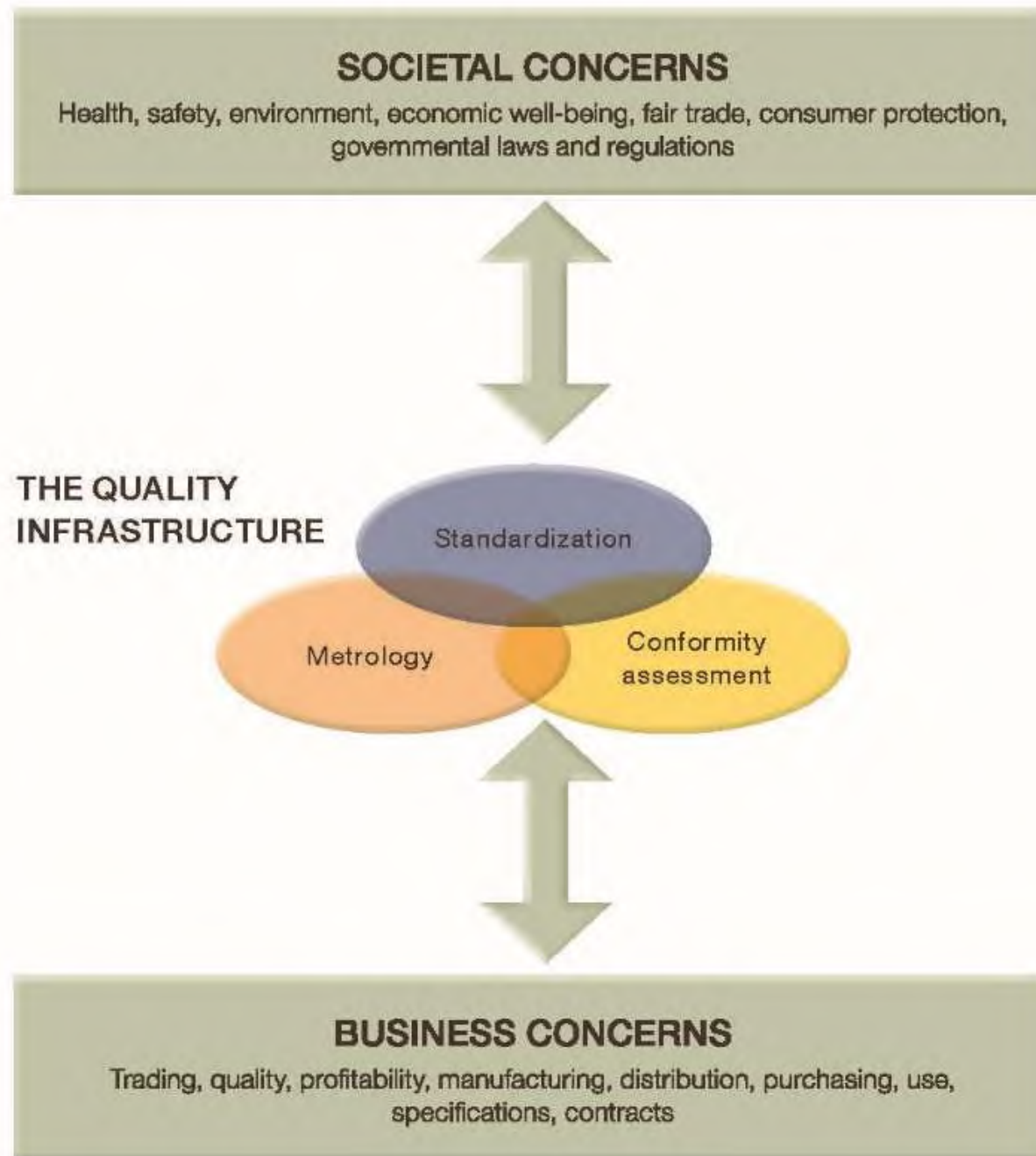
**Trust
Confidence**



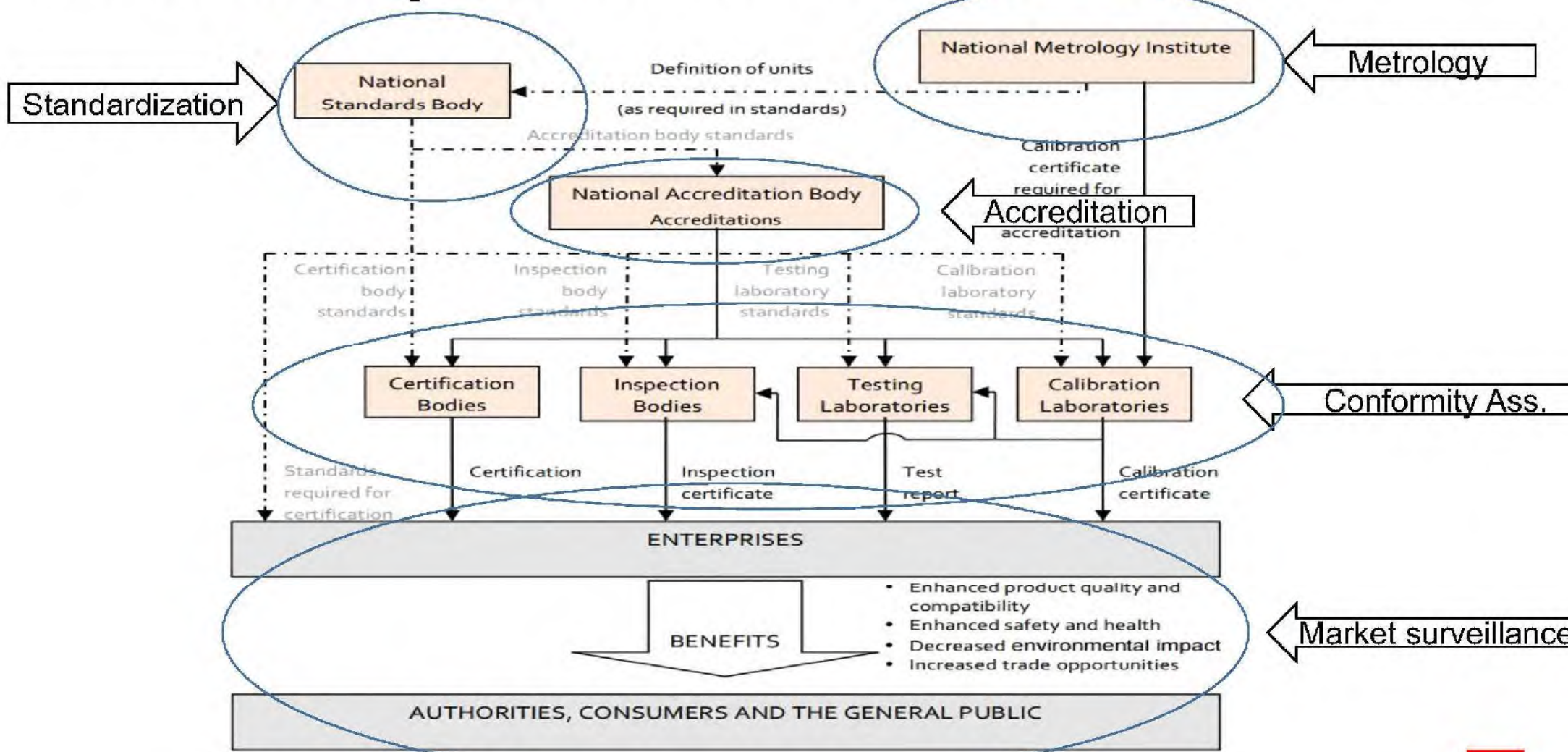
Conformity assessment

demonstration that specified requirements relating to a product, process, system, person or body are fulfilled.

(ISO/IEC 17000, Clause 2.1)



An example of a National QI



Source: World Bank 2007.



Conformity assessment techniques



Testing

determination of one or more characteristics of an object of conformity assessment, according to a procedure.



Evaluation

the process of **gathering evidence** about whether a product, process or service meets specified requirements. It is also sometimes used in the context of person certification.



Inspection

can include a visual examination, measurement or testing of physical items based on the **professional judgment** of the inspection bodies' personnel.



Examination

often used interchangeably to cover a number of techniques, but is used in a more specific way for certifying the **competence of a persons**.



Auditing

an audit is a systematic, independent and documented process for obtaining audit evidence and evaluating it objectively to determine the extent to which the audit criteria are fulfilled.



Assessment

process of determining whether an organization fulfils requirements related to its **technical competence**. Assessments are carried out during accreditation and peer assessment.

TOOLBOX

Terms and definitions ISO/IEC 17000

Requirements for accreditation bodies – ISO/IEC 17011

Requirements for
Testing/
calibration

Testing and
calibration
laboratories
ISO/IEC 17025

Proficiency
testing
ISO/IEC 17043

Requirements for
inspection
bodies

ISO/IEC 17020

Requirements for
certification bodies

Management
systems

ISO/IEC 17021
and related parts
ISO/IEC 17023

Persons

ISO/IEC 17024
ISO/IEC TS 17027

Products

ISO/IEC 17065
ISO/IEC 17067
ISO/IEC TR 17026

Conformity
assessments
of suppliers

ISO/IEC 17050-1
ISO/IEC 17050-2

Peer assessment ISO/IEC 17040

Mutual recognition
ISO/IEC Guide 68

US Strategy and Principles

- United States standards strategy – ANSI publication
- US conformity assessment principles – ANSI publication
 - supplement language of TBT to clarify and focus of conformity assessment for US
 - foster increased acceptance of U.S. products in international markets through use of international standards as feasible
- NIST Special Publication 2000-01 ABC's of Conformity Assessment – Draft

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Conformity Assessment Standards

(from NIST 2000-01 Draft)

	SDoC	Testing	Inspection	Certification	Management System Certification
Agreements	N/A	Mutual Recognition Arrangement	Mutual Recognition Arrangement	Multilateral Recognition Arrangement	Multilateral Recognition Arrangement
Accreditation	N/A	Accreditation Bodies (ISO/IEC 17011)	Accreditation Bodies (ISO/IEC 17011)	Accreditation Bodies (ISO/IEC 17011)	Accreditation Bodies (ISO/IEC 17011)
Standard	ISO/IEC 17050 – Part 1 ISO/IEC 17050 – Part 2	Testing & Calibration Labs (ISO/IEC 17025)	Inspection Bodies (ISO/IEC 17020)	Certification Bodies (ISO/IEC 17065)	Registrars (ISO/IEC 17021)

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ANSI Accreditation Services

Product certification programs - ISO/IEC 17065

ANSI-ASQ ANAB joint accreditation program for laboratory and inspection bodies - ISO/IEC 17065, 17025, 17020

Credentialing programs – Certification ISO/IEC 17024, certificate ANSI/ASTM E2659

Greenhouse gas validation/verification bodies - ISO 14065

Accreditation for food safety – ISO/IEC 17065

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Quality infrastructure definition

The organizations public and private that establishes and implement standardization, metrology, accreditation, conformity assessment and market surveillance

The definition has been agreed by the BIPM, IAF, ILAC, ISO, IEC, ITU, ITC, OIML, UNIDO and UN/ECE

Required for effective operation of domestic markets, and international recognition to foreign markets

Critical element in sustaining economic development and environmental and social wellbeing

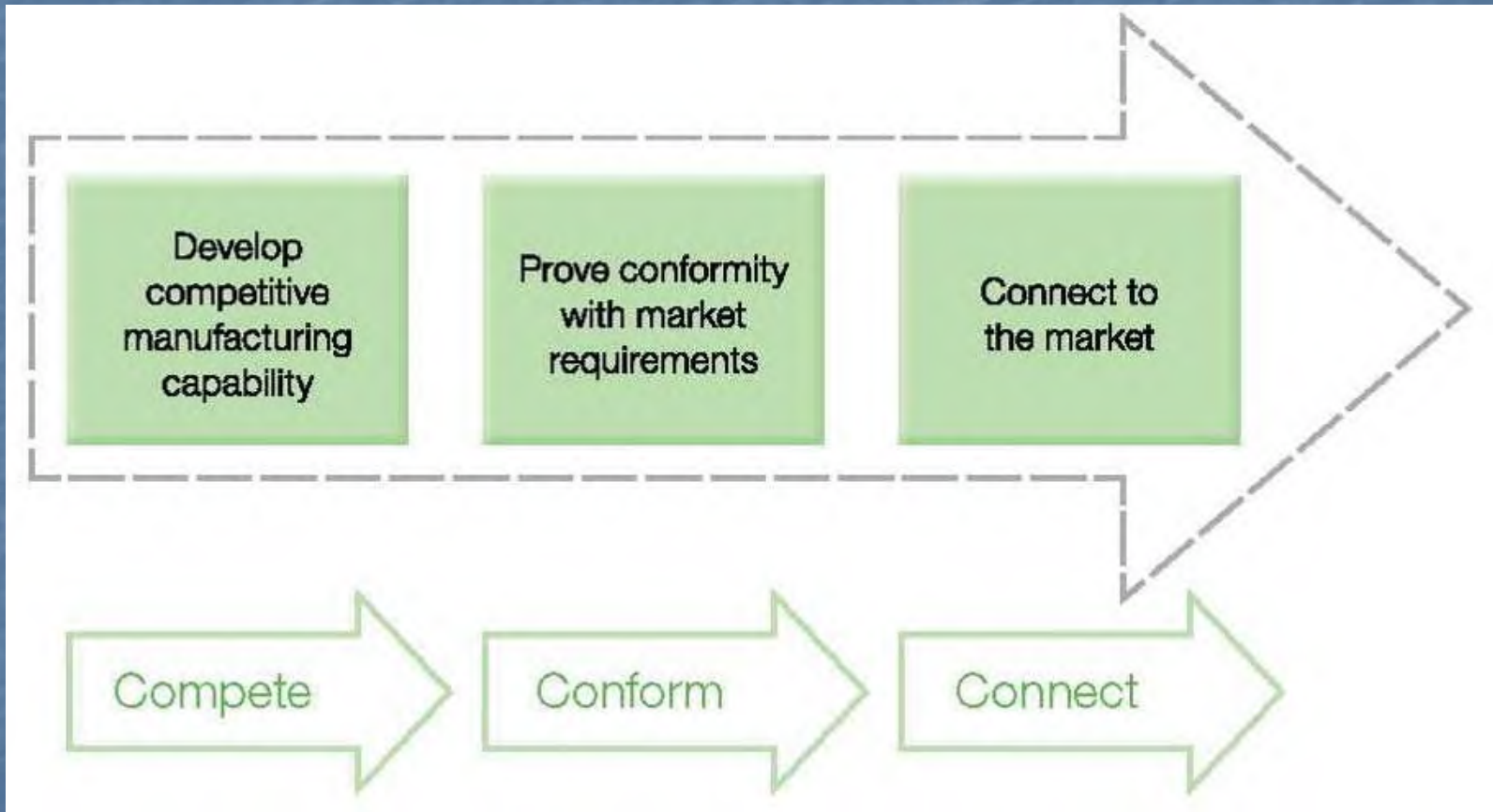
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ISO – UNIDO Partnership



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Trade Competitiveness (UNIDO)



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UNIDO Programs

Tools, data for:

- trade and industry competitiveness analysis
- data on quality infrastructure constraints
- product refusals/notifications tool

Projects:

- building the components of a quality infrastructure (UEMOA)
- building an integrated quality infrastructure (UEMOA)
- Southern Africa Development Community (SADC)

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World Bank Group-PTB Project

QI determines quality and affects trade, innovation, productivity, jobs, safety, and competitiveness

44% of firms had to conduct significant duplication of testing procedures to meet foreign requirements

30% of firms had to conduct complete duplication of testing procedures

68% of firms cited testing and certification costs as an important reason for not exporting

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Trade & Competitiveness Global Practice



TRADE

Trade Policy and Integration
Trade Facilitation and Logistics
Markets and Competition Policies



INVESTMENT CLIMATE

Business Environment | Investment Policy and Promotion
Linkages to GVC and FDI | Quality Infrastructure



COMPETITIVE SECTORS

Market Opportunities in Agribusiness, Manufacturing, and Tourism
Skills for Competitiveness
Spatial Solutions



INNOVATION AND ENTREPRENEURSHIP

Entrepreneurship Development
Innovation Policy
Women Entrepreneurs



INTEGRATED SOLUTIONS TOPICS

Global Value Chains | Productivity | Connecting to Markets and Opportunities
Economic Diversification | Green Competitiveness | Digital Economy
Trade and Competitiveness in Fragile and Conflict Situations

Quality Infrastructure is Critical for Trade, Innovation and Competitiveness



Increase Market Access

- Increase exports
- Increase product diversification
- Improve investment opportunities
- Benefit from trade agreements

Improve Firm's Productivity

- Reduce cost of trade and cost of doing business
- Benefit from economies of scale due to improved working methods and standardization
- Enhance innovation and technology transfer

Protect Public Good

- Public health and safety
- Consumer protection
- Social protections and labor conditions
- Environmental protection

Our QI Reform Approach

Identify

- Priority sector(s)
- Target market(s)
- Technical regulations

Diagnose

- Demand for QI service
- Supply of QI services
- QI service capacity

Prioritize

The relevant and necessary QI reforms to serve countries' priorities

Develop

The QI reform program and plans

Implement and Review

The QI reform project(s)

Key Principles

- Market-Drive Approach
- Establishing the Process for QI reforms, *we are not scientists!*
- Ensure transparency and availability of services
- Identify market failure that may justify public intervention/funding
- Engage with all the stakeholders (private sector, development partners, academia)

QI Diagnostics and Reform Toolkit Outline

- 1 • Overview and Quick Start Guide
- 2 • Importance of QI
- 3 • Demand Assessment
- 4 • QI Guides: elements and diagnostic tools
- 5 • How to Reform: Interventions and Approaches
- 6 • Challenges of QI Reform
- 7 • Monitoring and Evaluation of QI Reforms
- 8 • Case Studies

QI Reforms Work Streams (1/3)

<p>WS1 Diagnostic</p>	<ul style="list-style-type: none"> a) Identify Priority Sectors b) Assess Demand for Quality Assurance Services c) Assess QI Related Constraints d) Perform a QI Gap Analysis 	<p>Ethiopia: identified three priority sectors for the export growth, i.e., (i) leather and leather products; (ii) textile and garments; and (iii) agro processed products, particularly fruits and vegetables.</p>
<p>WS2 Reforming QI legal and institutional framework</p>	<ul style="list-style-type: none"> a) Conduct institutional mapping b) Assign clear responsibilities c) Update regulations d) Streamline the institutional structure e) Build capacity to participate in setting standards f) Support private sector engagement and consultation 	<p>Germany: the accreditation system prior to 2009 was fragmented and costly as it consisted of 20 accreditation bodies in both the public and private sectors. The new accreditation organization, DAkkS, was established in 2009 with the Federal Government as the sole shareholder.</p>

Ethiopia World Bank NQI Project

Financed by World Bank Group for implementing National Quality Infrastructure Development Project (NQIDP)

Objective is to improve delivery of quality assurance services to enterprises in targeted sectors

- (i) leather and leather products; (ii) textile and garments; and (iii) agro-processed products

Strengthen Ethiopian Standards Agency (ESA), Ethiopian National Accreditation Office (ENAO), and Ethiopian Conformity Assessment Enterprise (ECAE)

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ANSI-USAID Standards Alliance

Capacity building for implementation of TBT agreement

Establish opportunities for bilateral trade

Identify priority sectors, target markets & regulations

Diagnose need & availability for QI service & capacity

Prioritize, develop and implement reforms

Role of ASTM and UL standards in bilateral trade

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Opportunities for Bilateral Trade

- Topics-priority sectors of workshop
 - Transportation infrastructure
 - Energy safety
 - Sustainable agriculture
 - Food products

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Implementing Bilateral Trade

Specific products and services for bilateral trade

- Export
- Import
- Foreign direct investment (FDI)

Diagnose need & availability for QI service & capacity

Prioritize, develop and implement reforms

Monitoring and evaluation

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Conclusions and Recommendations

- Most trade issues are conformity assessment related
- Utilize ISO resources and CASCO toolbox
- Twinning arrangements in ISO
- Education and development of young professionals
- Development of national standard strategy, national quality policy, and national quality infrastructure
- Regional/Sub-regional involvement important

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Recommendations – Cont'd

Support for capacity building: ISO, UNIDO, ANSI-USAID
Standards Alliance, UNECE

Participation in World Bank Group (WBG) –
Trade and Competitiveness financed project

- Toolkit provides methodic process of developing NQI
- Donor programs or loans available
- Investment will pay off and benefit future generations

Standards Alliance activities to support bilateral trade

Thank you!

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