

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

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

Standards for a better world



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

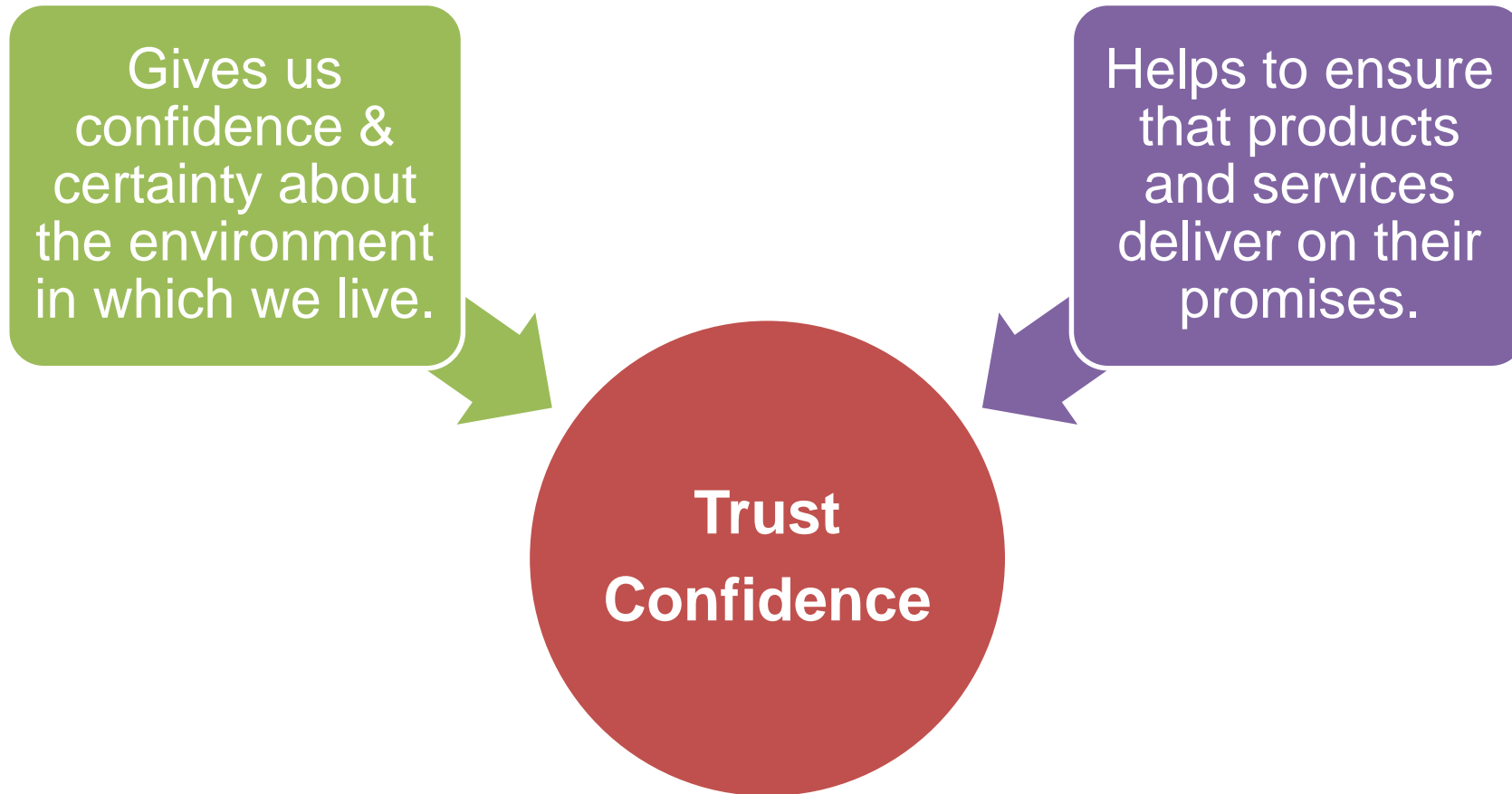
ISO Files - October 2016

ISO Files - October 2016

Designed by Alexane ROSE

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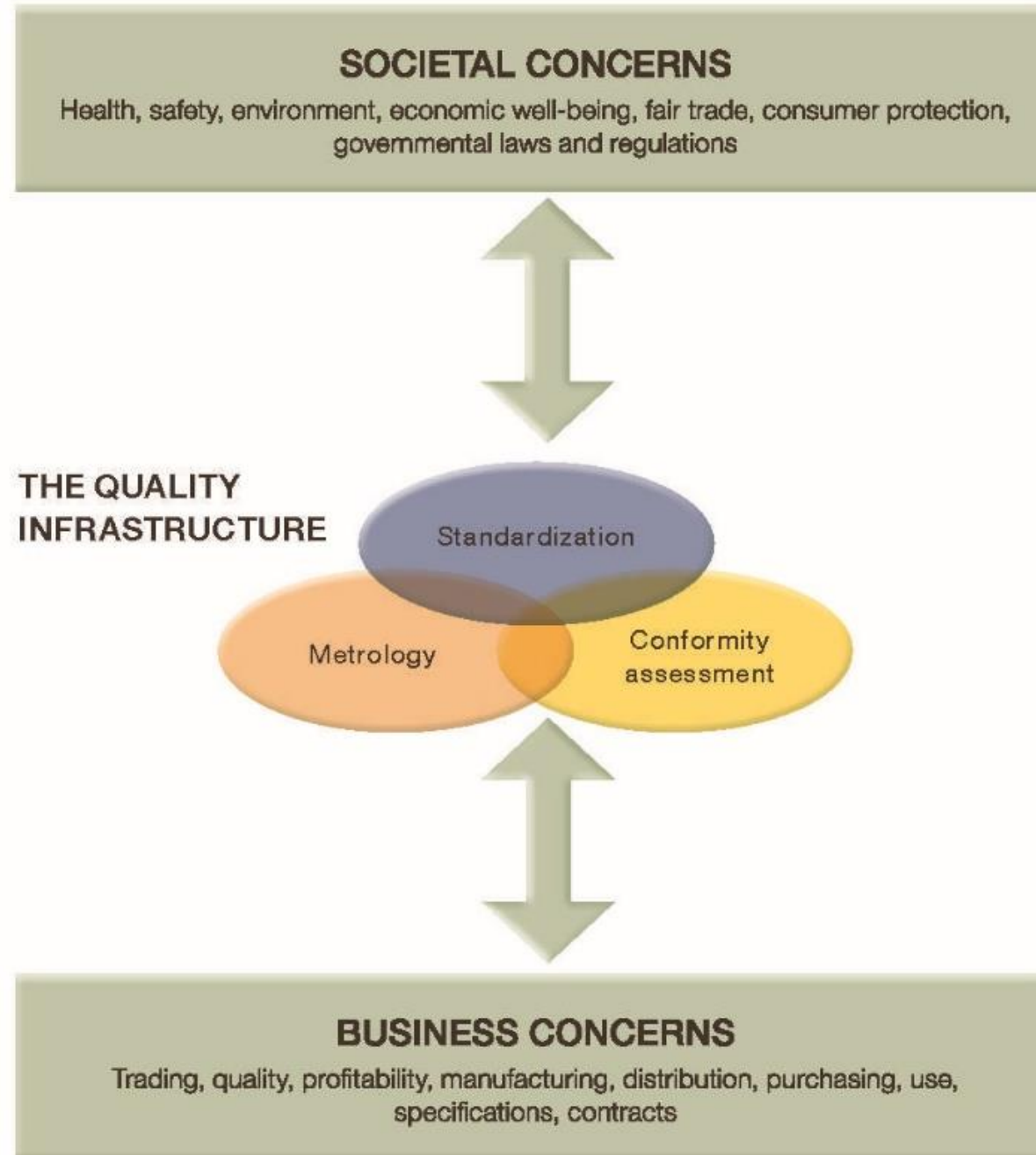
Conformity assessment



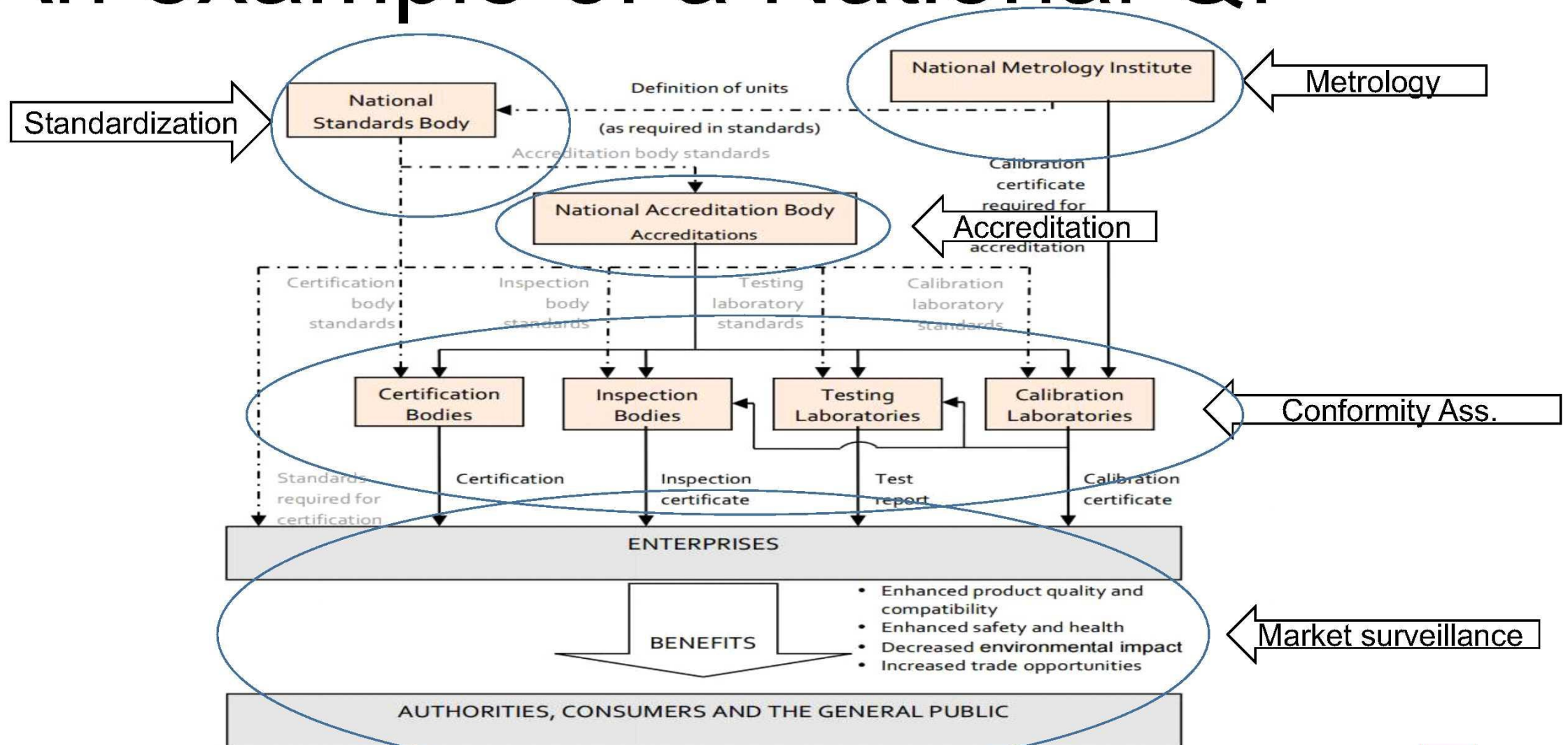
Conformity assessment

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
Arrangements	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

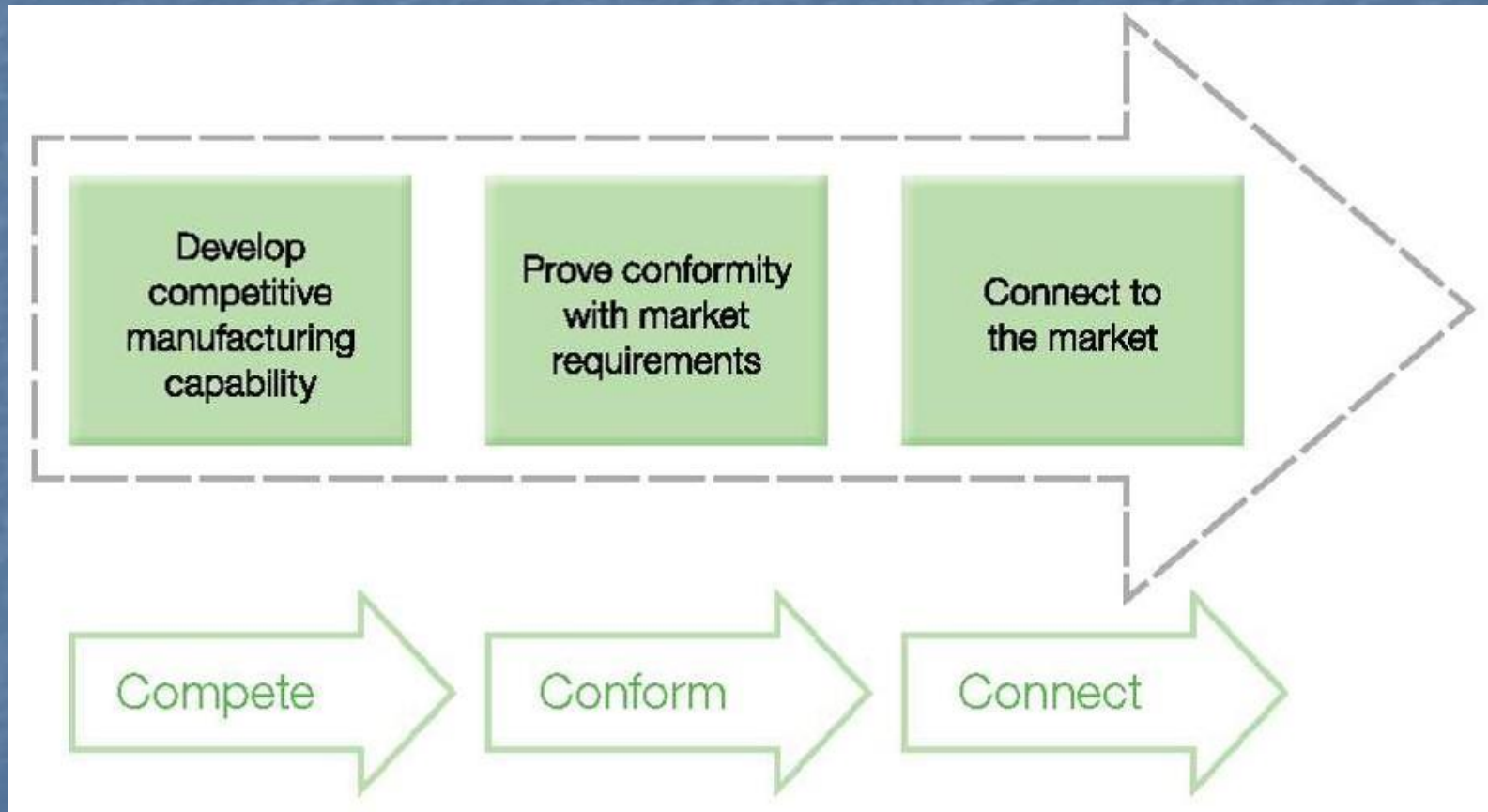
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ISO – UNIDO Partnership



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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



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</p> <p>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</p> <p>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

Conclusions and Recommendations

- Most trade issues are conformity assessment related
- Utilize ISO resources and CASCOT 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

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Thank you!

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