


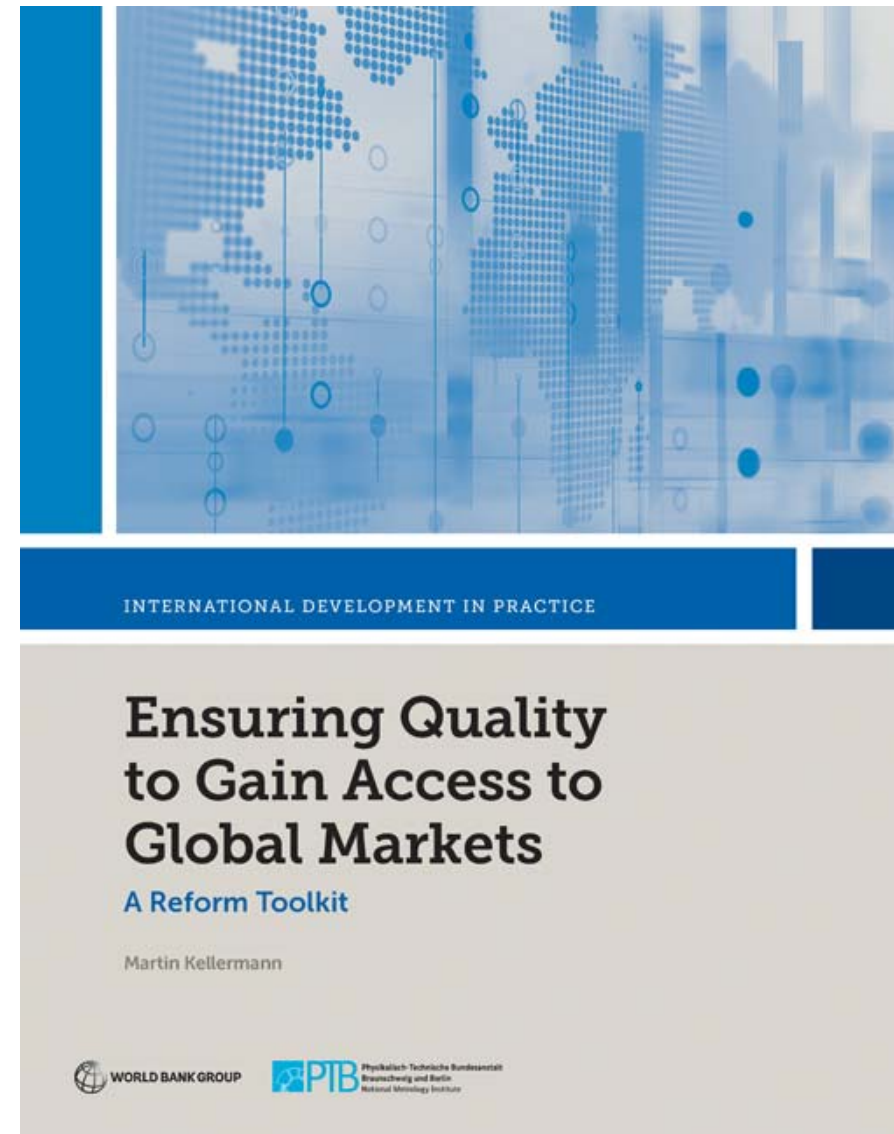
Ensuring Quality to Gain Access to Global Markets: A Reform Toolkit



**Susanne Wendt, PTB
Sèvres, France
October 18, 2019**

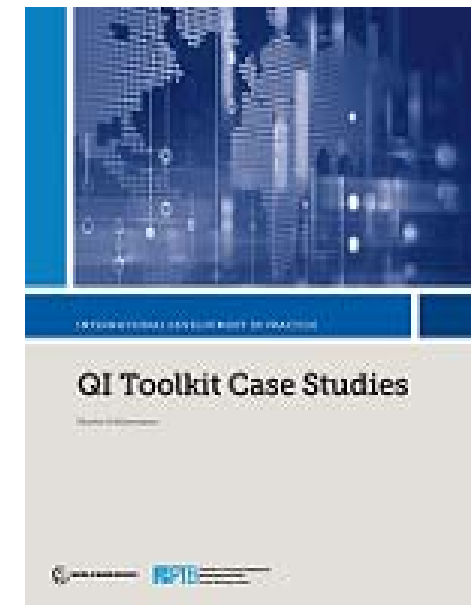
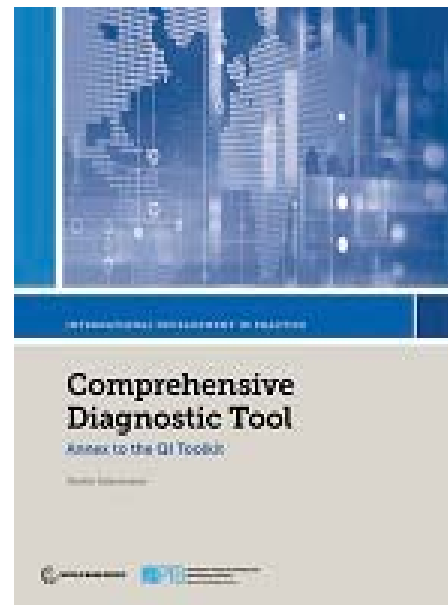
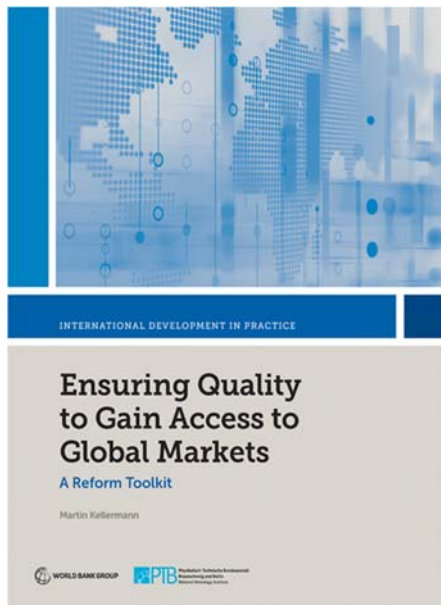
Introductory Remarks

- joint publication by PTB International Cooperation Department and World Bank Global Quality Infrastructure Unit
- published in April 2019
- Set of publications and instruments aimed at assessing and reforming QI systems in a holistic manner
- Target group: development cooperation and QI professionals



Set of products

- QI Reform Toolkit
- Comprehensive Diagnostic Tool
- Rapid Diagnostic Tool (Excel Template)
- 8 Case Studies

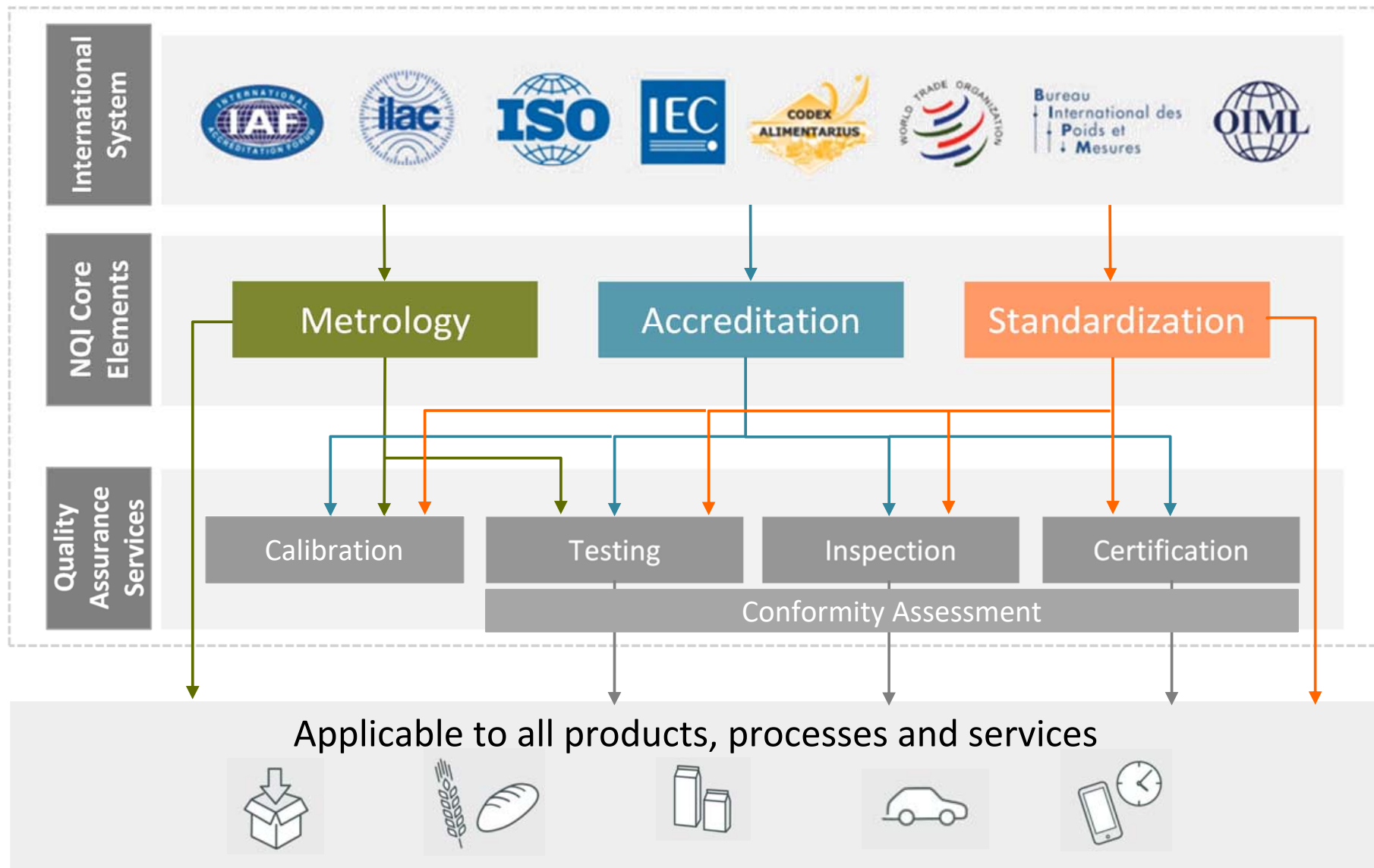


Enabling Quality Infrastructure for Competitiveness

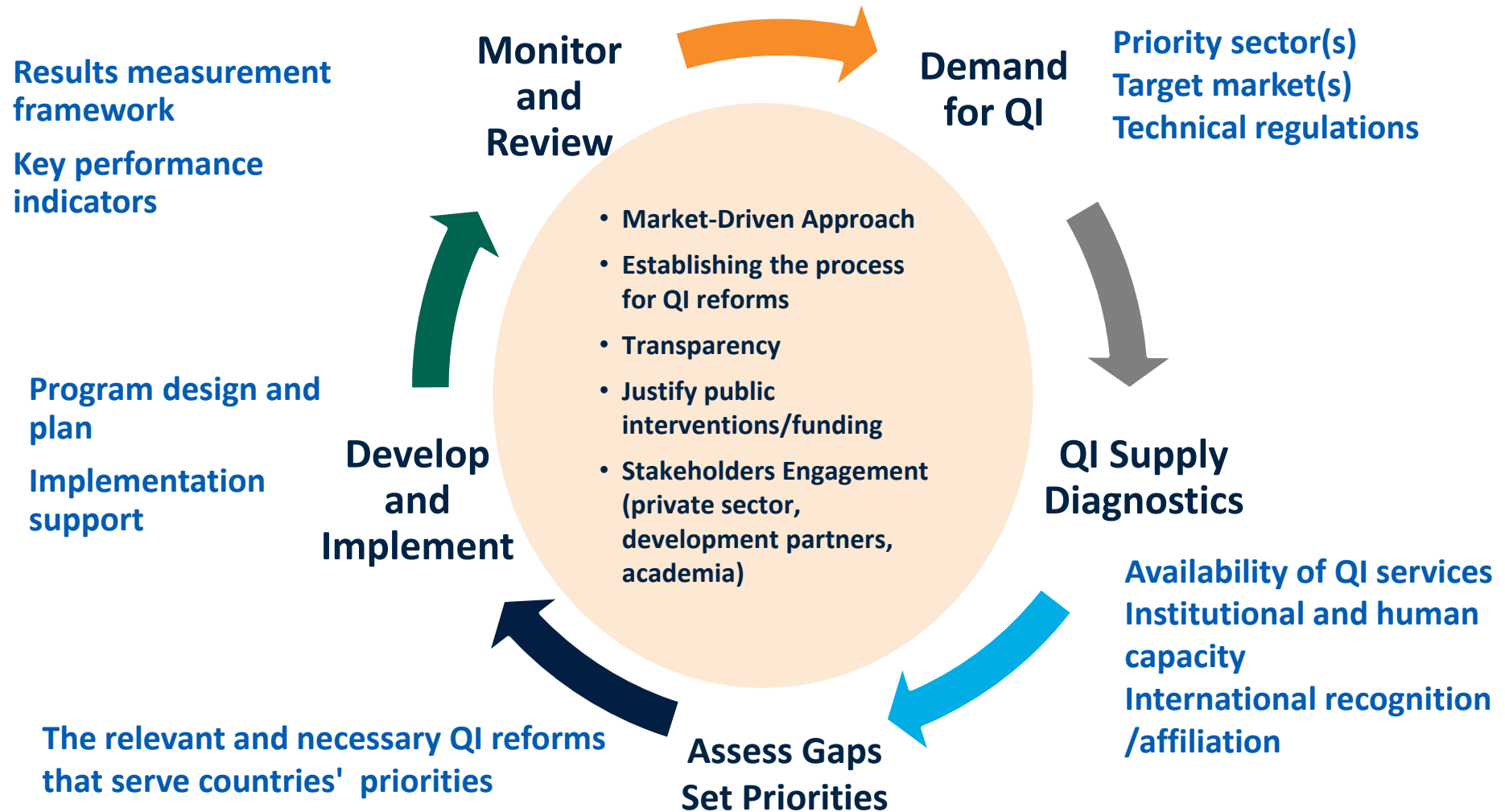
The Quality Infrastructure (QI) system can be understood as **the system comprising the organizations (public and private) together with the policies, relevant legal and regulatory framework, and practices needed to support and enhance the quality, safety and environmental soundness of goods, services, and processes.**

The Quality Infrastructure system is required for the effective operation of domestic markets, and its international recognition is important to enable access to foreign markets. It is a critical element in promoting and sustaining economic development, as well as environmental and social wellbeing. **It relies on: metrology, standardization, accreditation and conformity assessment.**

Quality Infrastructure System



PTB and WB Approach to QI Reforms



Toolkit Table of Contents

1	• Executive Summary
2	• Importance of QI Reforms and Demand Assessment
3	• Standards
4	• Metrology
5	• Accreditation
6	• Conformity Assessment
7	• Technical Regulation
8	• The QI as a flexible PPP System
9	• Diagnostic Tools
10	• How to Reform: Interventions and Approaches
11	• Challenges of QI Reform
12	• Monitoring and Evaluation

Module 1: Executive Summary

Toolkit introduction

E.g. structure, objectives, target group, etc.

How to use the toolkit

To guide users to the right module(s) in terms of their situation (e.g. users' level of QI knowledge and experiences, QI reform priority, etc.)

Context and rationale

- ✓ QI elements (standardization, metrology, accreditation, conformity assessment and technical regulation)
- ✓ Global trade systems, WTO TBT, SPS Agreements
- ✓ QI's role in trade, innovation, competitiveness

Module 2: Importance of QI and Demand Assessment

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

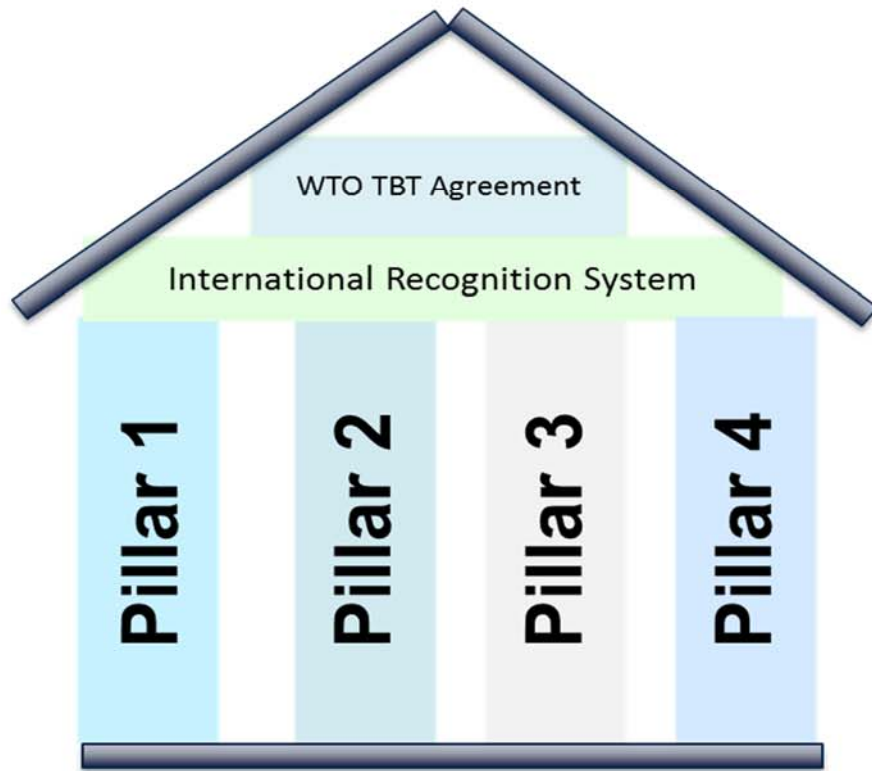
- 44% of firms had to conduct significant duplication of testing procedures to meet foreign requirements after domestic requirements have been met;
- 30% of firms had to conduct complete duplication of testing procedures;
- 68% of firms cited testing and certification costs as an important reason for not exporting.

- Investment Climate firm-level surveys in developing economies found that ISO 9000 certification achieved average productivity gains between 2.4% and 17.6% for three Central American economies, 1% for four Southeast Asian Economies, and 4.5% in China;
- Standards reform contributed to 13% of growth in labor productivity in the UK.

Module 3-7: Detailed Description of Good QI Practices



Module 9: Rapid & Comprehensive Diagnostic



QI Elements:

Fundamentals:

- Standards
- Metrology
- Accreditation

Conformity assessment:

- Inspection
- Testing
- Certification

Technical regulation

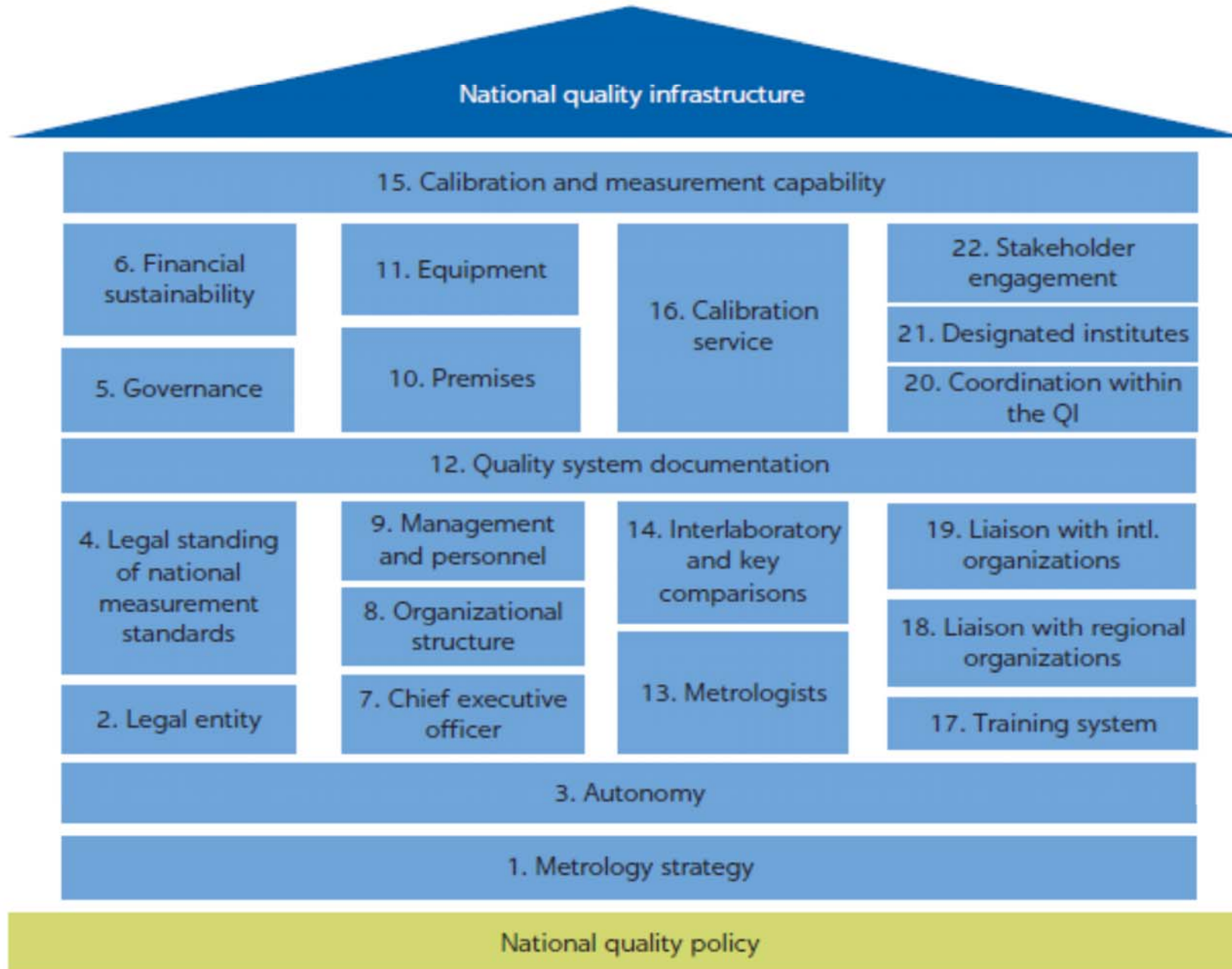
- **Pillar 1:** Service Delivery and Technical Competency
- **Pillar 2:** Administration
- **Pillar 3:** Institutional Setup
- **Pillar 4:** External Relations and Recognition

6

Module 9: Example Metrology

FIGURE 4.1

House of metrology for a national quality infrastructure

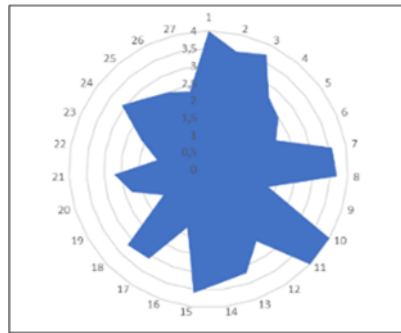


Module 9: RDT Metrology

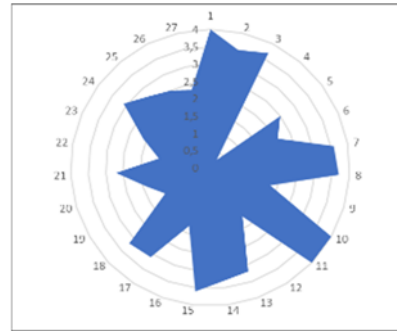
Element	Information sources	Benchmark and questions	Scoring	Score	
Pillar 1: Legal and institutional framework					
1) Metrology strategy	<ul style="list-style-type: none"> NMI board or council papers NMI website Relevant ministry (e.g., Trade and Industry) website Annual report of the NMI 	A metrology strategy giving effect to the implementation of the quality policy regarding scientific, legal, and industrial metrology is in place. It covers the establishment of national measurement standards, the national metrology infrastructure, international recognition, and the capacity of the NMI and the private sector to implement the strategy.			
		a. Is a metrology strategy in place?	Yes=4 Developed, but not approved=2 Being developed=1 No=0	1,0	
		b. Does the metrology strategy include all the necessary elements as required by the demand, namely	o Priorities for the establishment and maintenance of national measurement standards	Yes=1	1,0
			o Accuracy classes of national measurement standards, i.e., primary or secondary level	Yes=1	0,0
			o International and regional liaison to gain international recognition	Yes=1	
			o Moving of calibration services from the government sector to the private sector	Yes=1	
		c. Is an implementation plan for the metrology strategy in place and being followed?	Yes=4 Developed, but not yet followed=2 Under development=1 No=0		
Aggregate score: Metrology strategy $(a+b+c)/3$				0,7	

Module 9: Outcome

QI implementation status dashboard illustration (conceptual)

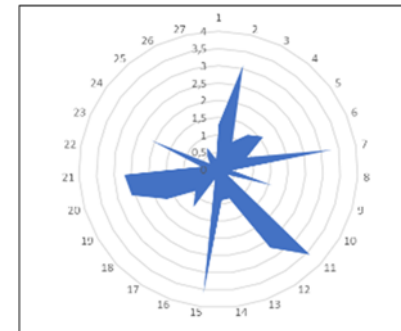


Standards

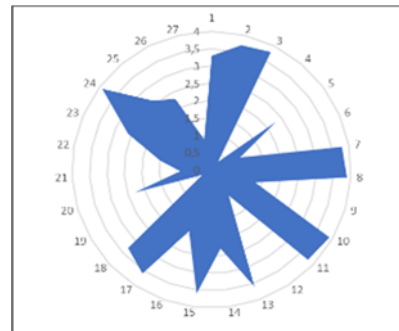


Metrology

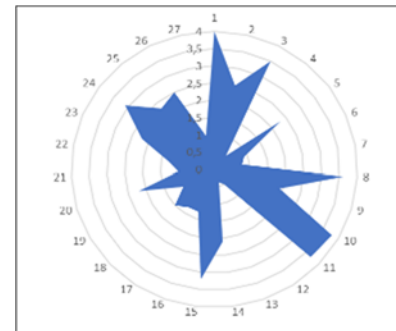
QI



Accreditation



Conformity
assessment

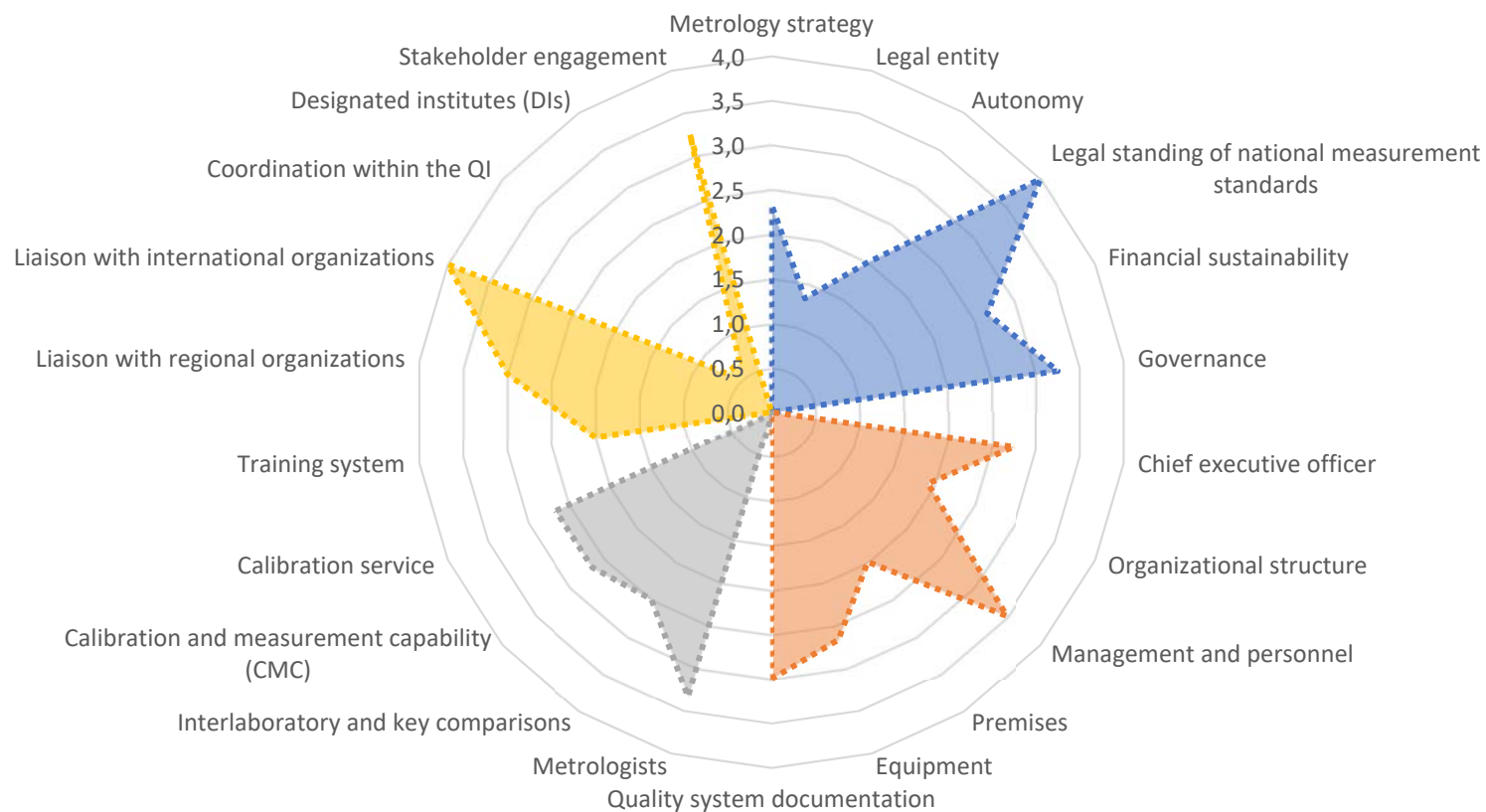


Technical
regulation

Example: RDT Metrology

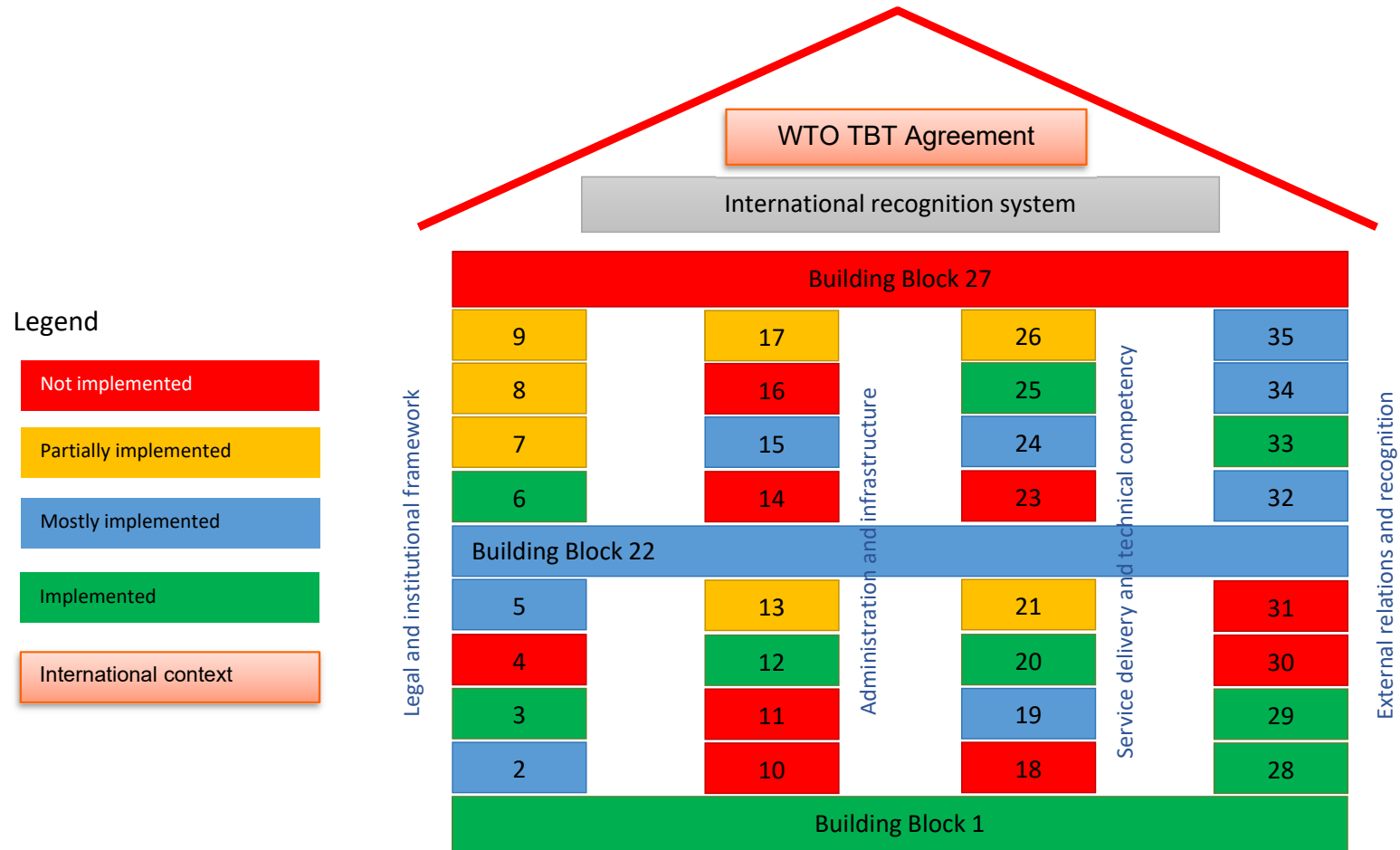
METROLOGY

- Pillar 1: Legal and institutional framework
- Pillar 2: Administration and infrastructure
- Pillar 3: Service delivery and technical competency
- Pillar 4: External relations and recognition



Module 9: Outcome

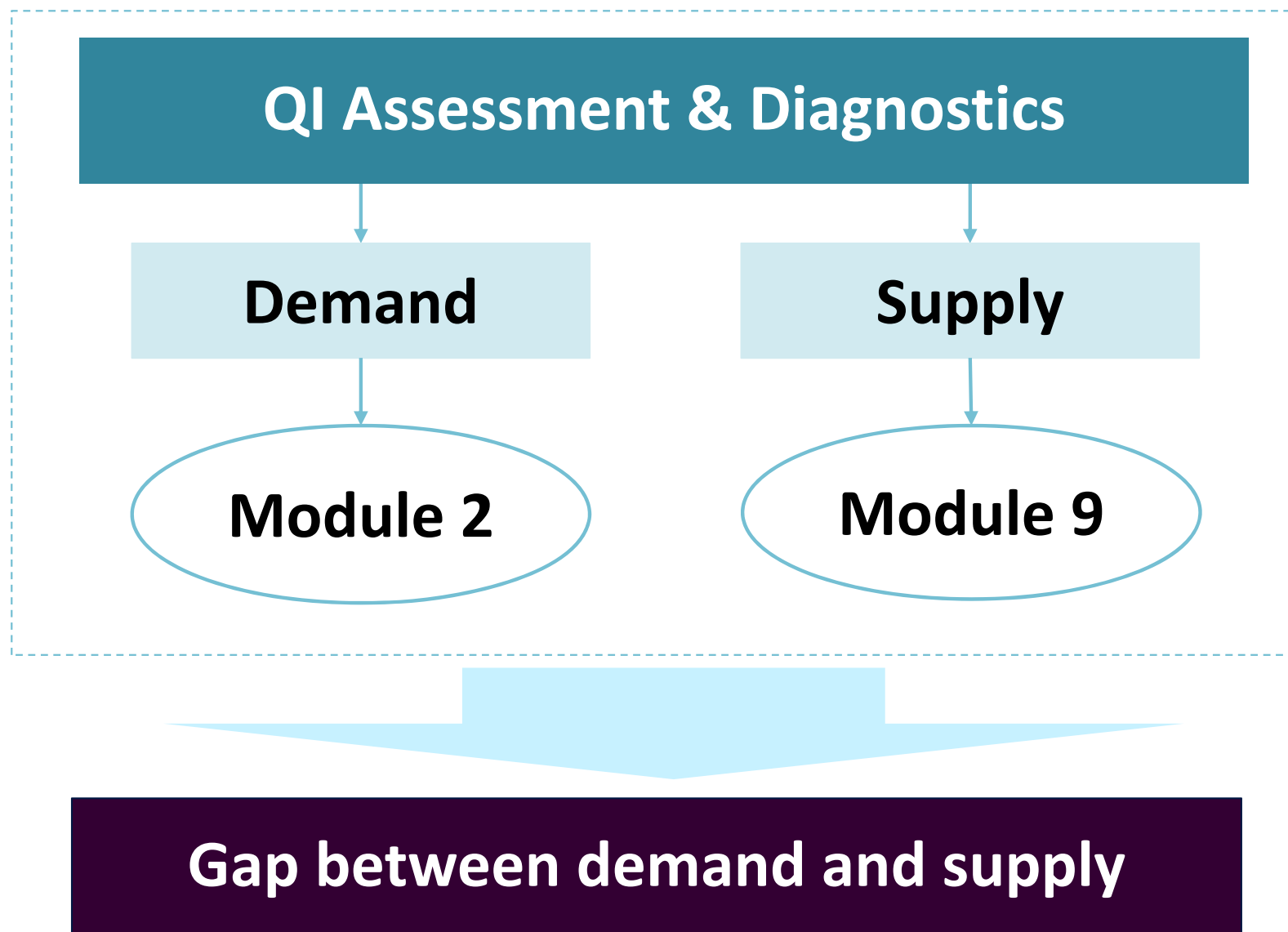
Figure 5.2: QI Entity Building Block implementation status (conceptual)



This image is a “dashboard” type illustration that tells the viewer at a glance what the implementation status is without having to read through lengthy reports. Once all building blocks are green, then implementation is complete.

Source: Adapted from PTB (2007)

Module 2 & 9: Demand Assessment and Supply Diagnostics



Module 10: How to Reform: Interventions and Approaches

Reform Areas

Developing quality policy and strategy

Developing standardization for competitiveness

Role of standards compliance in GVC and FDI

Reforming the QI legal and institutional framework

Strengthening metrology and accreditation

Enabling domestic products to meet (quality) standards

Building and developing awareness, information and training campaign

Special considerations for QI development projects

Applying standards for innovation and technology transfer

Solving conflicts of interest

Harmonizing technical regulation

Module 11: Challenges of QI Reform

- **To discuss the various challenges, dos and don'ts, and lessons learned associated with QI reforms.**
- **To ensure an efficient reform process, proper project preparation and planning, building realistic timelines, providing sufficient resources and maintaining and sustaining reforms.**

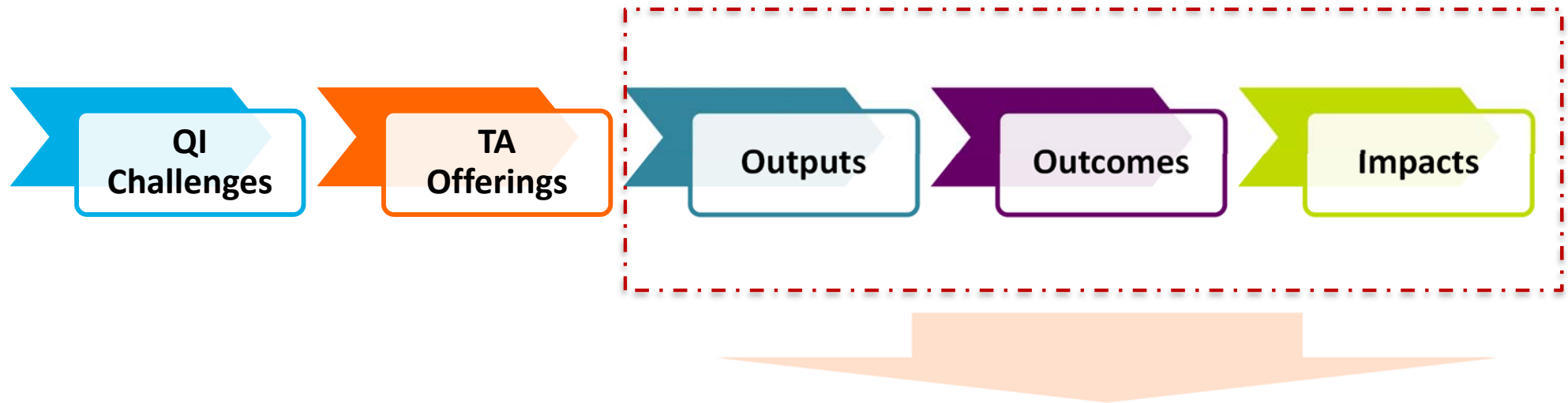
Project preparation and management

Main challenges of QI institutions

Strategic approaches to support QI development

Support to QI institutions

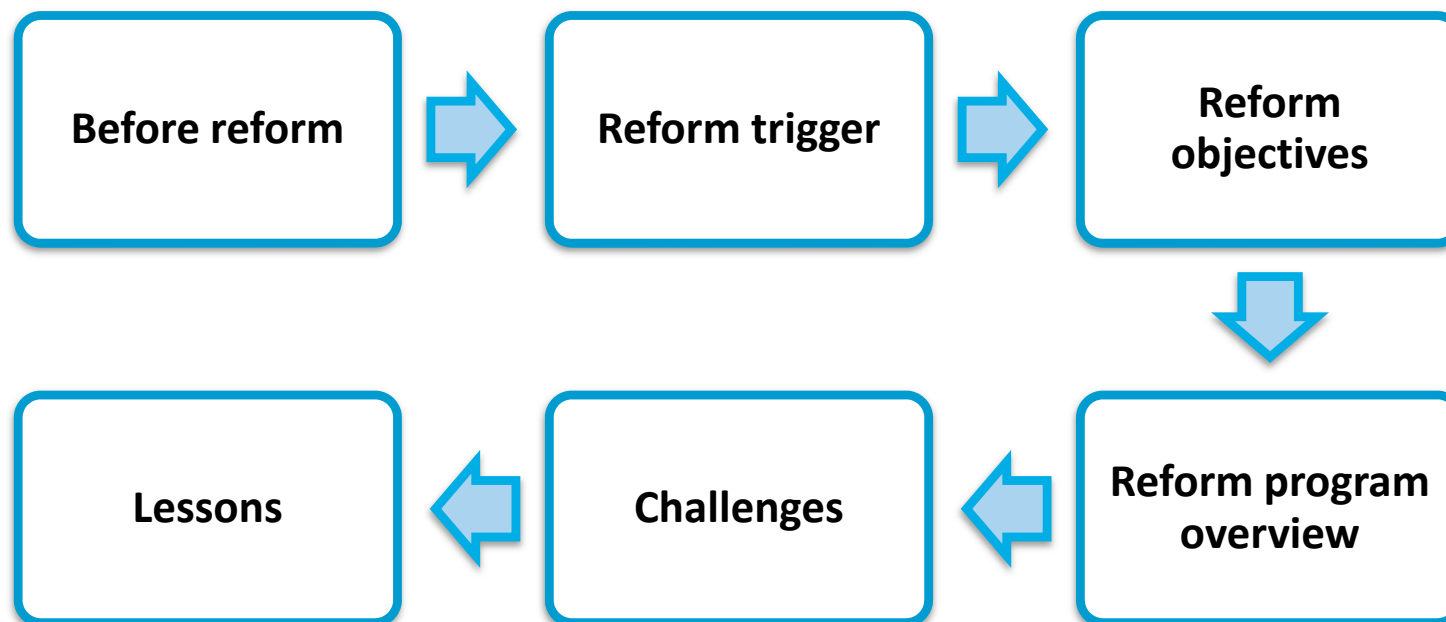
Module 12: Monitoring and Evaluation



- **Theory of Change**
- **Monitoring and Evaluation (M&E) model for QI reform**
- **Key performance indicators to monitor the achievement of the desired outcomes**
- **Evaluate the performance of QI institutions and the availability of sufficient and competent services**

Annex: Country Case Studies

To provide real examples of countries that have implemented QI reforms
(Germany, EAC, Ethiopia, Kyrgyzstan, South Africa, Pakistan, Brazil, and Turkey).



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Thank You

