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# BEST PRACTICE IN LABORATORY POLICY DEVELOPMENT

NATIONAL LAUNCH OF THE GUIDELINES FOR SUSTAINABLE  
LABORATORY INFRASTRUCTURE DEVELOPMENT IN THE  
PHILIPPINES

Event Proceedings | 23 June 2021



# I. BACKGROUND



## Global launch

On April 2021, the United Nations Industrial Development Organization (UNIDO) and the International Network on Quality Infrastructure (INetQI) launched the “Laboratory Policy Guidelines: A Guide to Development and Implementation.” This guidance document draws on the wealth of experience and knowledge of UNIDO member countries and addresses the needs related to the development and strengthening of the Laboratory Infrastructure (LI), a key component of any National Quality Infrastructure (NQI).

The virtual event was attended by almost 400 participants from 87 countries and was participated by high-level

speakers from the World Trade Organization, the International Laboratory Accreditation Cooperation, the International Bureau of Weights and Measures (BIPM), and the International Organization for Standardization, as well as representatives from Colombia and Namibia, sharing their experiences and views on the need for a sustainable LI and how the document will assist decision-makers in constructing a laboratory policy based on good practices.

The guidance document complements the existing UNIDO published documents: Quality Policy Guiding Principles, Technical Guide and Practical Tool.

# Launching of the Laboratory Policy Guidelines in the Philippines



**dti**  
PHILIPPINES

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**GQSP**  
GLOBAL QUALITY  
AND STANDARDS PROGRAMME

**INet QI**  
INTERNATIONAL NETWORK ON  
QUALITY INFRASTRUCTURE

## National Launch of the UNIDO GQSP Laboratory Policy Guidelines

GUIDANCE ON SUSTAINABLE  
LABORATORY  
INFRASTRUCTURE  
DEVELOPMENT

23 JUNE 2021 | 15:00- 17:00 (PHT)

In collaboration with the Competitiveness and Innovation Group of the Department of Trade and Industry (DTI-CIG) and the Industrial Technology Development Institute of the Department of Science and Technology (DOST-ITDI), UNIDO held the Philippine launch of the Laboratory Policy Guidelines on 23 June 2021.

The virtual event served as a venue for both stakeholders and duty-bearers to reflect on the country situation with regard to national quality and laboratory infrastructure, their relevance and importance in nation-building and how they can drive inclusive and sustainable growth in economic sectors, especially those highly impacted by the COVID-19 pandemic. Challenges, gaps, and opportunities in relation to laboratory infrastructure were also surfaced, taking into account the need to diversify Philippine industries, where large firms and micro-, small, and medium enterprises (MSME) alike are participating in global value chains, engaging in export, contributing to manufacturing resurgence, and creating employment and other income-generating activities.

The national launch was graced by almost 170 participants coming from key government agencies, private sector laboratories, SMEs, academe and development partners. It was also a part of a series of activities geared toward supporting Philippine enterprises, particularly SMEs, during the commemoration of the International MSME Day on 27 June 2021 and the Philippine SME Week to be celebrated this year in the first week of August.



## II. SPEAKERS



### MODERATOR:



#### MR. NAPOLEON K. JUANILLO JR.

*Assistant Secretary*

Competitiveness and Innovation Group  
Department of Trade and Industry

### OPENING MESSAGES:



#### MR. STEIN HANSEN

*Regional Director and Representative,  
Regional Office Hub, Bangkok, Thailand, and  
Country Representative ad interim*

United Nations Industrial Development Organization



#### DR. RAFAELITA ALDABA

*Undersecretary, Competitiveness and Innovations Group*

Department of Trade and Industry



#### MR. BERNARDO CALZADILLA – SARMIENTO

*Managing Director, Department of Digitalization, Technology,  
and Agri-business*

United Nations Industrial Development Organization (UNIDO)

## PRESENTER:



### MR. MIKE PEET

International Expert, Quality Policy & Quality Infrastructure

## PANEL:



### MR. JAMES EMPEÑO

*Director*

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DTI- Philippine Accreditation Bureau (PAB)



### DR. ANNABELLE V. BRIONES

*Director*

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DOST- Industrial Technology Development Institute



### MS. JONALYN SAMONTE

*Technical Operations Manager-Chemical testing, Multilaboratory – Health & Nutrition/Industries & Environment*

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SGS Philippines Inc



### MR. NIMA BAHRAMALIAN

*Associate Industrial Development Expert*

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UNIDO

## CLOSING:



### DR. ROWENA CRISTINA GUEVARA

*Undersecretary for Research and Development*

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Department of Science and Technology

As represented by:



### DR. ANNABELLE V. BRIONES

*Director*

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DOST- Industrial Technology Development Institute



# KEY MESSAGES



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## DR. RAFAELITA ALDABA

*Undersecretary*

Competitiveness and Innovations Group  
Department of Trade and Industry

**“Today’s launch serves as an important venue to inform and discuss the GQSP laboratory policy guidelines along with the steps needed to improve the National Quality Infrastructure and framework in order for the Philippines to meet international standards, as well as to identify challenges, gaps, opportunities in relation to laboratory infrastructure.”**

- » Emphasized the important role of laboratories as a key component of a country’s national quality infrastructure for proving the compliance of products and services with regulations and conformity with market requirements.
- » Shared that the DTI, DOST and other government agencies, industry stakeholders and the private sector have been advocating the establishment of a National Quality Infrastructure in the country to integrate metrology standardization, testing, accreditation and certification, which are currently being implemented by DOST- National Metrology Laboratory and DTI’s Bureau of Philippine Standards and Philippine Accreditation Bureau.
- » DTI is currently waiting for the official approval and start of the implementation of the Global Quality Standards Program, Philippines special measure for PPEs, medical devices and other essential goods, which is another initiative and partnership with UNIDO.
- » The most recent updated Philippine Development Plan (PDP) highlighted the need for a unified NQI system to support standardization, quality and technical regulations program. Also, two NQI bills were previously filed to integrate and coordinate NQI policies and programs towards a culture of quality, innovation, competitiveness, sustainable development, and compliance with international commitments.



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## MR. BERNARDO CALZADILLA – SARMIENTO

*Managing Director*

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Department of Digitalization, Technology, and Agri-business  
UNIDO

**“Quality infrastructure is a critical element in promoting and sustaining a country’s economic development and its capacities to ensure the well-being of its people and environment. Successful and sustainable exports to the global marketplace, for instance, are increasingly dictated by demonstrable compliance with international quality requirements for goods and services.”**

- » Emphasized the importance of a distinguished quality infrastructure tailored-fit to the needs of the country.
- » Mentioned that the ability of middle-income countries like the Philippines to compete in the global markets and participate in the value chain are hindered many times by the difficulties in providing proof of compliance and by the technically sophisticated quality requirements.
- » Added that having the appropriate internationally-recognized laboratory infrastructure helps address concerns around food safety, and the protection of health and the environment, thereby ensuring that products and services meet the triple bottom line of sustainable development.
- » Shared UNIDO’s long track record in the development of quality and laboratory infrastructure and in quality policies to improve the industrial, economic and environmental performance in developing countries.
- » Stated that the most important element in order to develop quality infrastructure is to have the appropriate tools to improve and sustain the investment. Establishing a laboratory is not that difficult, but maintaining accreditation and ensuring that test results are accurate is more difficult.
- » Mentioned that UNIDO under the GQSP framework can contribute in the opportunities brought about by the evolving business environment. It can help businesses adapt to what is going to be a very challenging post pandemic era.



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## MR. STEIN HANSEN

*Regional Director and Representative,  
Regional Office Hub, Bangkok, Thailand, and  
Country Representative ad interim*

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United Nations Industrial Development Organization

**“In the recovery efforts for Philippine industries and enterprises during this pandemic, it will be important for the country to integrate forward-looking approaches that will strengthen capacities to adopt to the emerging challenges in relation to global value chains, industry diversification, and market access. The launch of the laboratory policy guidelines offers the opportunity for knowledge transfer and open discourse among government and development partners on how to move together as one, taking a “whole-of-nation” approach, in supporting our industries and other private sector players to face the various challenges mentioned.”**

- » Acknowledged that the event takes an important place among UNIDO’s collaborations with the Government of the Philippines in striving toward the country’s 2040 vision through the implementation of the priority actions identified in the Philippine Development Plan, 2017 – 2022. He also expressed UNIDO’s gratitude to the strong partnership with the Department of Trade and Industry (DTI) and the Department of Science and Technology (DOST).
- » An appropriate laboratory policy and the associated laboratory infrastructure can positively and substantially contribute to the 2030 Agenda for Sustainable Development.
- » Institutions and service providers within the country’s quality ecosystem will continually need to be strengthened and expanded in order to meet new technical requirements, assist consumers in making informed choices, encourage the measurement and testing of innovative solutions, and be part in the roll out of good practices.
- » Stressed the importance of the activity as support to the Philippine MSMEs who aspire to bounce back from the pandemic and grow toward greater participation in global markets.



## III. PRESENTATION

### MR. MIKE PEET

*International Expert, Quality Policy & Quality Infrastructure*

Presented the key elements of the [Laboratory Policy: A guide to development and implementation](#) publication.

### WHY A LABORATORY POLICY?

- » Cited issues and challenges that indicates the need for a laboratory policy:
  - » Growing concern for the safety of goods and services;
  - » Need to increase the quality of domestic products;
  - » Gaps in technical capabilities;
  - » Appreciation of the laboratories' role in strengthening NQI;
  - » The lack of a policy to holistically and systematically address the weaknesses in the technical capacities of laboratories.
- » Noted that when any economy strengthens its Laboratory Infrastructure (LI), it usually occurs in an environment where there are many other pressing demands on available public resources.
- » Emphasized that investments in LI should not only seek to address immediate needs. It is important they are also channeled to areas where they could act as an enabler and multiplier for longer-term added value.
- » Stated that an appropriate LP and the associated LI system can also positively and substantially contribute to the UN Sustainable Development Goals (SDGs) as envisaged by the 2030 Agenda for Sustainable Development.

### HOW IT WAS DEVELOPED?

- » Shared that the Laboratory Policy (LP) is a result of the strengthened partnership between UNIDO and INetQI, to address the needs related to the development and strengthening of the Laboratory Infrastructure (LI) which is a key component of Quality Infrastructure.

### WHAT DOES IT COVER?

The document covers three areas that need to be addressed in order to develop and implement a Laboratory Policy successfully:

- » **Macro-level (policy level):** the guide identifies the guiding principles for the formulation of a Laboratory Policy;
- » **Meso-level (institutional level):** looks at the elements needed to enhance trust in the test and measurement data laboratories provide, including the need for appropriate accreditation of its activities; and
- » **Micro-level (operational level):** the guide identifies and considers common issues that have surfaced during support for the development and strengthening of laboratories in previous interventions.

## HOW SHOULD IT BE IMPLEMENTED?

The document identifies and describes five steps in the development an implementation of a Laboratory Policy:

- » Doing the groundwork;
- » Strategic planning;
- » Preparation of a draft Laboratory Policy and the building of consensus;
- » Obtain approval; and
- » deploying the Laboratory Policy.

### The challenges and benefits of implementing a Laboratory Policy:

- » For regulatory and institutional level:
  1. Having an LP addresses the challenges related to regulatory framework as it encourages the use by both the public and private sector laboratories under a fair competition.
  2. Development of a communication channel so that laboratory infrastructure actors can articulate their issues with regulators who in turn can address and support them to be able to comply with the regulations.
  3. Issues on technical regulations once identified and considered in the development of LP can result to an appropriate and coherent testing and measurement requirements in regulations.
- » In the marketplace/ customers level, the policy can address issues on:
  1. How to develop appropriate market for laboratory services by providing the incentives and making the appropriate information available.
  2. The coverage of the laboratory services and how to attain a fit for purpose and sustainable coverage.
  3. The level of network between the different components of the lower priority infrastructure and how to ensure that everything is fit for purpose, focused, and are mutually supportive.
- » For the technical and laboratory level, LP can address challenges on human capital and equipment and the need to continually demonstrate technical capability and competence.

## WHO SHOULD BE INVOLVED IN ITS IMPLEMENTATION?

- » Stated the four different role players in developing policy:
  1. **Government level** have a vital role in enabling, coordinating, strengthening and educating as part of the implementation of the laboratory policy.
  2. **Private sector** should be actively involved and encouraged to finance activities that support and promote further development and expansion of laboratory capability and capacity.
  3. **The NGOs and civil society** should also be involved so that the consumer concerns are listened to and addressed.
  4. **The International QI community** is willing and available to assist to help the laboratory community in the Philippines to understand and adopt to global trends.



## IV. PANEL DISCUSSION



### MR. JAMES EMPEÑO

Director

Philippine Accreditation Bureau (PAB)  
Department of Trade and Industry

**“Laboratory policy is the beginning of the development of more competent, more responsive laboratories in the future, in order to help protect our families, our environment, and the planet”**

In 1994, the Philippines had four (4) accredited laboratories. Currently, it has increased to 229 accredited laboratories nationwide. The accreditation scope of laboratories has expanded from chemical and mechanical testing to calibration, forensic, electrical and medical testing.

#### Importance of Laboratory Policy:

- » Highlighted that quality infrastructure is a critical element in promoting and ensuring sustainable economic development citing that in the ASEAN Region, competence of testing laboratories is mostly considered by regulating bodies affecting trade.
- » Stated that international acceptability of tests is imperative, since laboratory should provide information that are essential in trustworthy and critical decision making.
- » Added that developing a laboratory infrastructure usually starts by having a sensible laboratory policy.
- » Emphasized that laboratory policy is not only important to ensure quality and safety of products and services, but also to build consumer confidence and trust by complying with the international standards and by following laboratory best practices.

#### Challenges, Gaps, and Opportunities:

- » Limited access to accredited and affordable Proficiency Testing (PT) providers and Reference Material (RM) producers.
- » Shared that the significant challenge faced by the country at the outset of the pandemic was the lack of available testing labs to handle critical tests for PPEs. Local manufacturers and repurposing groups need to send samples abroad to secure conformity to standards and that the GQSP project on special measures Philippines with UNIDO will help address these issues.
- » Challenges in the conduct or maintenance of the accreditation system in order to sustain the competence of the laboratory. A laboratory policy is a helpful tool, which DTI highly supports and recommends.

#### Proposed Next Steps:

- » Recommended to OneLab, a laboratory network organized by the DOST together with other lab associations like the Philippine Association of Testing Laboratories, to consider the UNIDO document in establishing their own laboratory policy and added that the laboratory policy can help focus available resources in delivering the required test results efficiently.
- » Also mentioned that through these associations, the document can be disseminated widely amongst constituents and this value can be communicated to all stakeholders.
- » Stated that since laboratory infrastructure is a subcomponent of NQI and the UNIDO document can provide guidance in DTI's ongoing efforts to include this in the legislative agenda in Congress. DTI is currently drafting a bill for NQI, which highlights a national quality policy that aims for the promotion of quality culture coupled with a commitment to sustainability.



## DR. ANNABELLE V. BRIONES

Director



Industrial Technology Development Institute  
Department of Science and Technology

**“Laboratory policy is vital as a guide for decision-making, using it as a tool in a unified manner to develop the required capabilities and capacities critical in addressing national priorities and global needs.”**

### Importance of Laboratory Policy:

Stated the following points on why LP is important:

- » Laboratories require policy to deliver high-quality testing services, accurate interpretation of real-time results, efficient reporting of infrastructure improvements, commitment to the highest level of testing proficiency, standardization, and the conformity assessment requirements of the NQI.
- » The Philippines has public and private parties doing separate activities like certification, testing, calibrations, accreditation, and metrology. These are distributed in different government departments. Therefore, the laboratory policy is essential in putting together these activities for a strong national quality infrastructure.
- » LP can also aid in finding the efficient allocation of funds and the hiring of competent scientific, technical, and operations staff.
- » The Laboratory Policy is a guide for establishing organizations that support conformity assessment requirements of the NQI, pushed forward by the different government departments. DOST, for instance, is pushing for the modernization of the measurements in the metrology aspect.
- » It helps laboratories in decision-making in expanding their services and putting up satellite laboratories in the regions.
- » The LP may indirectly help the industry and the regulatory agencies in decision-making across trade borders to harmonize the safety and quality compliance reputation system.

### Challenges, Gaps, and Opportunities:

- » The Philippines is behind in proficiency testing in terms of challenges since it doesn't have a proficiency accreditation system.
- » Shared that the DOST initiative called the OneLab, a one-stop laboratory solution for testing and calibration needs presents an opportunity for the country as it is an accessible, one-touch point source and offers one standard price. This network is composed of 56

laboratories, and it continuously grows. Currently, it is comprised of 16 DOST regional science and technology laboratories, 7 DOST R&D Institute laboratories, 25 non-DOST laboratories, and 8 international laboratories coming from Australia, Vietnam, Thailand, Dubai, Malaysia, and Thailand.

### Proposed Next Steps:

- » There must be a concerted effort of concerned government departments that are working on NQI to draft the laboratory policy.
- » The implementation of the laboratory policy should be linked to the existing accreditation systems that are being implemented.
- » Priority with one over the other cannot be assigned because scientific and legal metrology go hand in hand, and both must be developed simultaneously or in parallel.
- » Scientific metrology and the legal metrology sectors represented by the regulators should closely coordinate with each other to avoid duplication of efforts and laboratory facilities. Hence, a laboratory policy is needed.



## MS. JONALYN SAMONTE

*Technical Operations Manager-Chemical testing  
Multilaboratory – Health & Nutrition/Industries &  
Environment,*

SGS Philippines Inc

**“Most of the laboratories, especially those small-scale testing laboratories can’t afford the Proficiency Testing or Reference materials. So, if there’s a laboratory policy that will be implemented, I think it will support uniform implementation on QA/QC practices in laboratories where we can afford to purchase reference materials and participate to proficiency testing which in turn can support to demonstrate competencies of the laboratories.”**

### **Challenges, Gaps, and Opportunities:**

- » Lack of communication between government and stakeholders when determining what laboratory infrastructure is needed.
- » Regulation in terms of products or samples that are being tested is limited.
- » Lack of supporting technical infrastructure such as access to suitable and reliable transportation and proficiency testing, which currently are acquired by laboratories abroad.
- » Limited or no access to grade A reagents, Certified Reference Materials (CRMs) and affordable PT.
- » Lack of access to suitable and affordable equipment and calibration services especially for laboratories with very specific tests; this is where some equipment presently is calibrated abroad.
- » Challenges in moving artifacts, proficiency testing samples, reference materials across borders.

### **Importance and Benefits of Laboratory Policy:**

- » In terms of the technical aspect in laboratory, LP can address better physical and human resources by improving the technical operations on the laboratories.
- » For the marketplace level, customers can have better interaction with laboratories within the marketplace. Added that with DOST’s OneLab, SGS is benchmarking with other laboratories for new opportunities or new capabilities.

- » LP can assist in preparing a coherent and predictable environment for laboratories and others in the laboratory infrastructure as a result of national intervention.

### **Proposed Next Steps:**

- » Stated that SGS is very open to benchmarking and collaboration as it continues to invest in order to improve in the market. Moreover, it supports and promotes further development to expand the capability and capacity of laboratories.
- » As a best practice, shared that SGS developed a human resources training to improve their people’s competitive skills.
- » Ensures that the SGS is implementing its quality policy which also includes commitment for safety and health of their clients as well as their people and the services that it provides.



## V. KEY POINTS DURING THE Q&A

Below are the key discussions during the Q&A session with the panelist together with **Mr. Nima Bahramalian**, Associate Industrial Development Expert of UNIDO. The discussion was moderated by **Assistant Secretary Napoleon Juanillo** of the Department of Trade and Industry.

- » Director Empeño and Director Briones discussed the importance of uniting the various accreditation schemes across agencies in the Philippines and how it will help strengthen the NQI.
- » Mr. Bahramalian pointed out that the establishment of laboratory is often not the problem but is more on the harmonization and convergence of the investments into the laboratory infrastructure. This is very much related to the process through which the policy for laboratories were developed. He also added that the engagement of the different beneficiaries and stakeholders in the process of development of the laboratory policy can help overcome the challenges.
- » Mr. Bahramalian also stressed the relevance of The OneLab network of DOST highlighting it as one of the best practices as it really increases the reach of the quality infrastructure to the final consumers. He also shared that UNIDO is working on a global laboratory network called the lab net, where laboratory infrastructure certification schemes can be registered and their services are promoted to the consumers that would be interested.
- » Ms. Samonte agreed that a laboratory policy can assist in addressing the criticality of laboratory competence. She added that it will be good if it will be uniformly implemented and that the same procedure and objectives are followed by the laboratories all throughout the Philippines.
- » Dr. Briones commented on Dr. Peet's point on the need for customization of the LP to suit the Philippine situation. She stated that for the Philippines, priorities include addressing challenges on the access of proficiency testing and reference material. She also added that DOST is already looking at more advanced services that are not provided by the private sector and letting the private sectors handle other common services. Director Empeño agreed with Dr. Briones and added that PAB is working on the accreditation scheme for proficiency testing providers targeted this year and reference material producers for next year.
- » Ms. Samonte expressed her belief that a Laboratory Policy will further assist in cost effectively addressing laboratory control issues such as participation in inter laboratory comparisons, and cost-effective access to reference materials.
- » Mr. Bahramalian highlighted that a well- designed quality infrastructure customized to the current needs of the country with consideration to SMEs for national and export markets as well as on corrective investments to building the capacity for the future needs of the country will reduce the cost for the companies to prove compliance in the export markets.
- » Dr. Briones shared that DOST is supporting the establishment of a functional and effective National Quality infrastructure through the modernization and upkeep of the country's current national measurement system, which should also be updated in the current Metrology act of 2003.



## VI. CLOSING REMARKS:



### **DR. ROWENA GUEVARA**

*Undersecretary for Research and Development*

Department of Science and Technology

As represented by: Dr. Annabelle V. Briones

**“Looking at our laboratories’ future challenges, the importance of the UNIDO GQSP Laboratory Policy Guidelines to review our quality infrastructure index should be highlighted continually. This is to be able to adapt to increasingly evolving quality and trade standards. Finally, I look forward to the strong participation of the Philippines in the Global Quality Standards Programme of UNIDO.”**

- » Thanked all guests and speakers and expressed appreciation to all who attended the launch and in making it a successful event.
- » Stated that the laboratory policy guidelines can serve as a development tool for the government and private sector to promote fair trade in the Philippines and also worldwide.
- » Mentioned that she looks forward to a successful partnership between government laboratories and the private sector to come up with its own laboratory policy, maintain and sustain laboratory infrastructure and quality infrastructure and to further strengthen the National Quality infrastructure in the Philippines.



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