



An APEC Project Proposal: Building laboratory capabilities to assure water quality in Asia Pacific economies



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Presentation on behalf of experts from co-sponsoring economies: Australia, Canada; China; and Singapore

APMP Meetings, November 2021



Project objectives



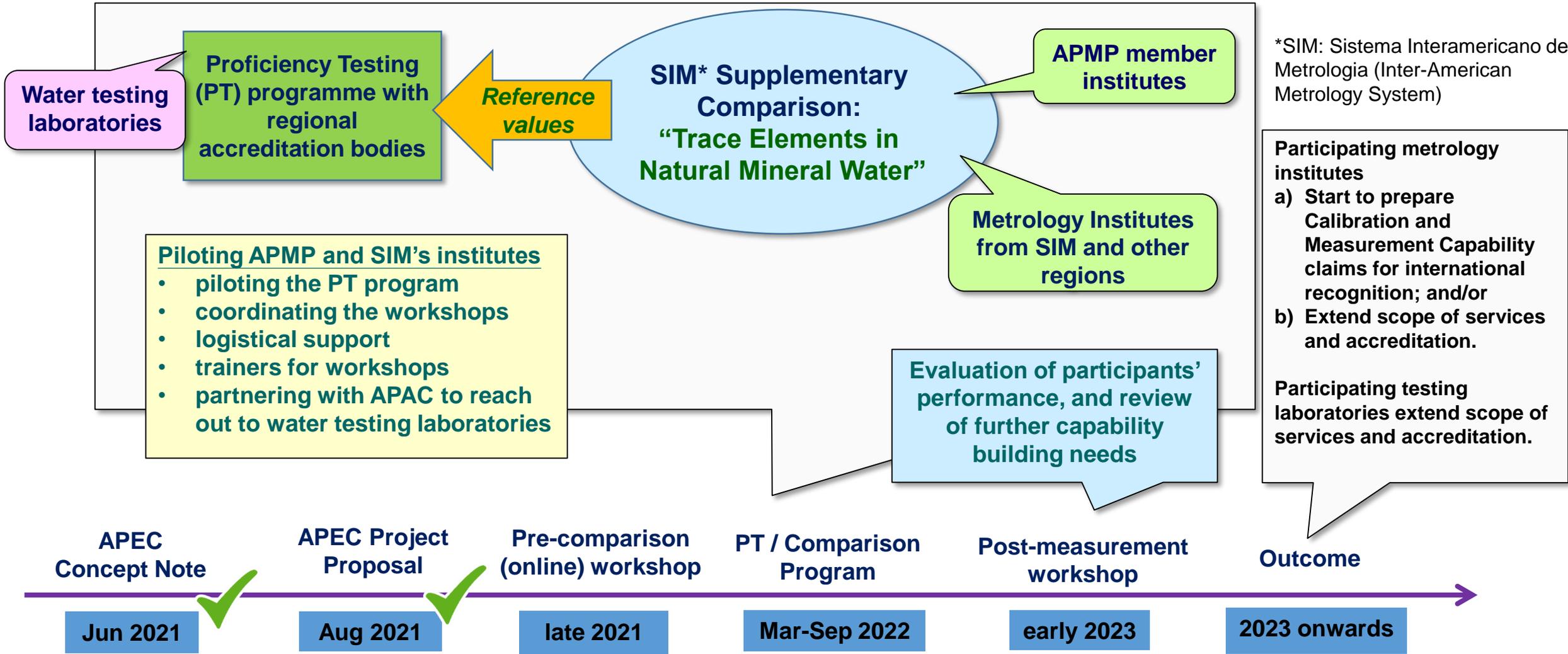
Regional experts will work with Asia Pacific laboratories to build capabilities to measure parameters affecting water quality and sanitation through training workshops and comparison programs. Outcomes will help build sustainable, internationally recognised testing capabilities.



The project will support policy makers make informed decisions to assure water quality in the region, essential for the protection of public health (including in the fight against COVID-19), and future economic and environmental sustainability.



Project outline



*SIM: Sistema Interamericano de Metrologia (Inter-American Metrology System)

A Series of Water Comparisons



- With a view to establishing a capability building network on **drinking water**, a series of **RMO comparisons (and associated PTs, workshops, etc.)** are planned in the coming few years aimed at supporting participating Asia Pacific economies in demonstrating competence (preferably) in the form of CMCs
- **Measurands:** Elements and nutrients (e.g. nitrate, phosphate, etc.)
- The programme supports **United Nations (UN) SUSTAINABLE DEVELOPMENT GOAL 6: CLEAN WATER AND SANITATION** - Ensure access to water and sanitation for all !

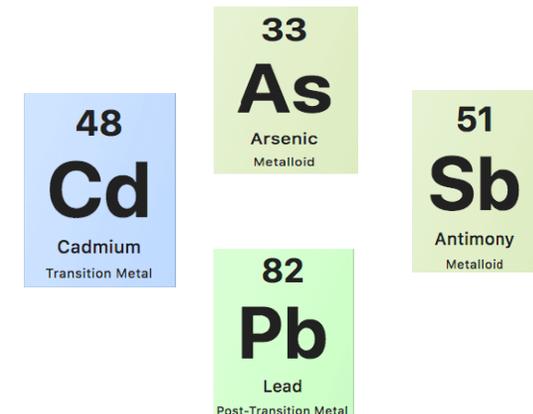
<https://www.un.org/sustainabledevelopment/water-and-sanitation/>

The First Supplementary Comparison and (parallel) PT Programme



- A **SIM Supplementary Comparison (SC)** for “**Elements in Natural Mineral Water**” to be proposed by National Research Council, Canada (**NRCC**) via the Inter-American Metrology System (**SIM**)
- Samples prepared by Government Laboratory, Hong Kong, China (**GLHK**)
- The same test materials are to be used for a **PT Programme**, to be run in parallel to the SC
- NMIs/DIs with CMCs that participated in the **SC** will provide the assigned values to assess PT performance
- Suggested measurands: **Sb, As, Cd, Pb**

Measurand	Range, µg/kg	Health-related limit
Antimony	0.1 - 30	0.005 mg/L
Arsenic	0.1 - 30	0.01 mg/L
Cadmium	0.1 - 30	0.003 mg/L
Lead	0.1 - 30	0.01 mg/L



Proposed Schedule for the SIM Supplementary Comparison

Time Schedule	Phase
Early Mar 2022	Call for participation
Late Mar 2022	Deadline for registration
Apr 2022	Distribution of samples
Aug 2022	Deadline for submission of results
Sep – Dec 2022	Presentation of participants' results at regional meetings and CCQM IAWG meeting



Proposed Schedule for the parallel-run Proficiency Testing (PT) programme

Time Schedule	Phase
Early Mar 2022	Call for participation
Late Mar 2022	Deadline for registration
Apr 2022	Distribution of samples
Aug 2022	Deadline for submission of results
Sep – Dec 2022	Determine PT Assigned Values* and issuing of Interim Report
1 st half 2023	Issue of Final Report

** Metrologically traceable assigned values from metrology institutes with demonstrated capabilities (published CMCs in the KCDB). Such assigned values are independently determined and are thus not affected by potential biases in the methods used by the participating laboratories. In addition, they are unaffected by the size and performance of the cohort of participating laboratories.*

Thank you