

## PH1D: Develop and maintain registers of authorized laboratories to perform water quality analyses

REGULATORY FUNCTION: PUBLIC HEALTH		PH1D
<b>OBJECTIVE PH1</b>  There are rules ensuring public health standards for safe drinking water and sanitation	<b>ACTION CARD PH1D</b>  <b>DEVELOP AND MAINTAIN REGISTERS OF AUTHORIZED LABORATORIES TO PERFORM WATER QUALITY ANALYSES</b>	
<b>COST:</b> High <b>FREQUENCY:</b> Regular <b>TARGET GROUPS:</b> Regulators, ministries of health, service operators		
<b>DESCRIPTION</b>  Regulators support ministries of health in establishing laboratory accreditation schemes and maintaining registers of accredited laboratories for undertaking drinking water sampling and analyses. Whereas accreditation schemes and their management remain almost exclusively under the responsibility of ministries of health, actual operation of registers can be outsourced to regulators, with an objective of making drinking water quality testing more convenient for operators.		
<b>EXPECTED OUTCOMES</b> <ul style="list-style-type: none"><li>• Transparent registers of authorized laboratories are in place.</li><li>• Service operators organize sample testing processes internally.</li><li>• Analysed results are easily accessible and subject to regulatory correction.</li></ul>		
<b>EXAMPLE 1: INDIA</b>  In <b>India</b> , a register of accredited laboratories is managed by the National Accreditation Board for Testing and Calibration Laboratories (NABL). NABL was established with the objective of providing the government, industry associations and industry in general with a Conformity Assessment Body accreditation scheme, that involves third-party assessments of technical competence of testing including medical and calibration laboratories, proficiency testing providers, and reference material producers. NABL offers accreditation services in a non-discriminatory manner, with an accreditation system in accordance with ISO/ IEC 17011: 2017 (Conformity assessment – requirements for accreditation bodies accrediting conformity assessment bodies). The NABL accreditation system also acknowledges the requirements of Mutual Recognition Arrangements (MRAs) of which NABL is a member.		
<b>EXAMPLE 2: UNITED KINGDOM</b>  In the <b>UK</b> , the Drinking Water Inspectorate (DWI) administers regulations that require that every drinking water supplier must ensure that its analytical methods, laboratory procedures, analytical equipment, sampling procedures, transport of samples, and storage of samples are checked periodically by an accredited third party. The Department for Business, Energy and Industrial Strategy		

appointed the United Kingdom Accreditation Service (UKAS) as the sole accreditation body for assessing drinking water testing facilities and sampling arrangements in accordance with ISO/IEC 17025 and the Drinking Water Testing Specification (DWTS).

Accreditation of sampling procedures, transport and storage of samples, laboratory analysis and on-line monitoring to EN ISO/IEC 17025, or its equivalent, is a regulatory requirement. Accreditation to DWTS provides assurances to the DWI that companies comply with all the requirements of regulation. The Drinking Water Inspectorate maintains a list of companies including UKAS-accredited laboratories on its website.

**A list of organisations carrying out drinking water testing; showing their accreditation status for drinking water testing \***

Organisation	Accreditation Status			Electronic Reporting **
	UKAS No.	Sampling	Analysis	
Aberdeen City Council	1325		ISO17025 DWTS	NO

## LINKS

India: <https://nabl-india.org>

UK: <https://www.dwi.gov.uk/drinking-water-products/laboratory-information/>

<https://www.dwi.gov.uk/drinking-water-products/laboratory-information/designated-test-laboratories-and-consultants/>

<https://www.ukas.com/wp-content/uploads/2021/12/LAB-33-Food-and-Feed-Control-Laboratories-NRLs.pdf>

## INTERNAL CAPACITIES NEEDED AND THE ROLE OF PARTNERS

Capacity is required to accredit and establish registers of authorized laboratories, including the need to first establish a central accreditation body, commonly under ministries of health. Ministries also have the ability to undertake shadow sampling and testing, for comparison with results from laboratories undergoing accreditation, in order to determine their eligibility for inclusion in the register. This could also be potentially outsourced to independent accredited laboratories. Ministries of health will require a range of administrative capacities to establish protocols for accreditation, and development partners could provide support in this process.