

**Submission to
Australian Government Productivity Commission
Standards and Accreditation
By Julie Ivison**

My submission is an individual one. I am a Chemist who has worked in Analytical Testing Laboratories, both NATA and Non-NATA accredited, government and non-government, over the past 35 years. I have been a NATA signatory for 25 years and a NATA assessor for 15 years.

My long personal experience in laboratories has demonstrated clearly the essential need for the maintenance of high standards of quality of analysis in any environment, whether it be in industry or government, as laboratory measurements can affect so many real-world outcomes, whether it be, for example, the concentration of a pharmaceutical compound for medical application, the acidity of soils prior to steel or concrete construction, the octane rating of gasoline for automobiles or the analysis of nutrients in Great Barrier Reef waters.

“When you measure what you are speaking about, and express it in numbers, you know something about it, but when you cannot measure it...your knowledge is of a meagre and unsatisfactory kind. It may be the beginning of knowledge, but you have scarcely, in your thoughts, advanced to the stage of science.” Lord Kelvin 1890.

Accurate and precise measurement is the basis for science. Independent, constructively critical assessments at a consistently high standard, of a laboratory's ability to produce accurate and precise results, within an all embracing quality system, is essential to ensure quality outcomes for the purchaser of testing services.

Consistency of assessment of laboratories is essential if the measurements are to be meaningful and comparable. In my view, this consistency can best be achieved by having one laboratory accreditation body which has adequate funding to provide the desirable frequency of competent assessments of laboratories, whether the assessments be by on-site inspection, proficiency testing programs or other assessment tools.

Many laboratories are not NATA accredited because of the cost of accreditation. The Australian Government, through increased funding of NATA, should ensure that NATA/ISO17025 accreditation is available to all laboratories. As a minimum, State and Federal Governments should insist on using only NATA/ISO17025 accredited laboratories for any testing for which it is responsible.

NATA utilises the voluntary assistance of technical assessors. Increased Government funding could ensure that assessors were provided with training to ensure their consistency of approach.

In summary, the following are essential in the national interest:

- Consistency and high standard of assessment at frequent intervals for the maintenance of high quality test results from laboratories
- Ongoing, increased funding of NATA by the Australian Government to enable an increased number of laboratories to be accredited to ISO17025
- State and Federal governments entering into Memoranda of Understanding with NATA

Julie Ivison
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