

ASIA PACIFIC LEGAL METROLOGY FORUM

REPORT ON PROGRESS OF INTERCOMPARISON OF NON-AUTOMATIC
WEIGHING INSTRUMENT TESTING

September 1997

OVERVIEW

The scope of this intercomparison is to provide a transparent basis for the comparability of pattern approval evaluation of weighing instruments carried out by legal metrology authorities in the Asia-Pacific region. Some members of WELMEC are also participating to provide a comparability with pattern evaluation testing in Western Europe.

As stated in last year's report the two non-automatic weighing instruments of the same pattern (refer to section on artefacts) were evaluated by the National Standards Commission's (Australia) Pattern Approval Laboratory. These instruments were dispatched, Instrument A for New Zealand and Instrument B for People's Republic of China on 22 July 1996. From these economies the instrument were circulated amongst the participating legal metrology authorities (refer to section on participants) in accordance with a circulation schedule. This schedule has been revised a number of times due to problems associated with testing and circulation. Three extra economies have stated their intention to join the intercomparison namely Indonesia, Russia and Vietnam.

The current status of the intercomparison is as follows:

INSTRUMENT A: Has been tested by New Zealand, The Department of Agriculture in Ohio, USA, Canada, Division of Measurement Standards in California, USA and Japan. It has been returned to NSC for re-evaluation before continuation of the program.

An evaluation report has been received from New Zealand and Ohio. Reports from Canada, California and Japan anticipated.

INSTRUMENT B: Has been tested by People's Republic of China, Germany and Britain. The instrument is currently at NWML in England pending its return to NSC for re-evaluation before continuation of the program.

Evaluation reports have been received from People's Republic of China and Germany.

There have been a few problems associated with the progress of this intercomparison due mainly to communication difficulties and the inability of participants to fit the proposed circulation schedule within their normal activities. However the generous cooperation of the participants has ensured its relatively smooth progression. During

testing, both instruments have malfunctioned. This malfunction is the same for both instruments and consists of the keyboard module freezing during EMS testing. Both instruments have been repaired and although there is no apparent change in their weighing performance it was deemed timely to return them to NSC for re-evaluation.

It should be noted that no results will be published until the end of the intercomparison, once all the data has been properly collated and a report written.

When both instruments have been re-tested at NSC and any variation in their weighing performance determined a revised circulation schedule for both instruments will be published. Hopefully this will occur some time in late October or early November.

Any further enquires regarding the progress of the intercomparison should be directed to the Intercomparison Coordinator:

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PARTICIPANTS

The following are participating in the intercomparison: Australia, Canada, People's Republic of China, Indonesia, Japan, Republic of Korea, Malaysia, New Zealand, Papua New Guinea, Chinese Taipei, Vietnam, United States of America, United Kingdom and Germany.

ARTEFACTS

The two non-automatic weighing instruments used in this intercomparison are of a type intended for direct trading with the public and have tare and price computing facilities. These instruments are of the same pattern:

Manufacturer: CAS Corporation
Model: CAS AP-1
Maximum capacity: 15 kg