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KCDB REPORT TO THE 10th JCRB MEETING

The BIPM key comparison database Website is available at <http://www.bipm.org/kcdb>. We report here on the evolution of the KCDB since the 9th JCRB meeting.

1. Appendix C

Only a very few CMCs have been published since the 9th JCRB meeting. These are:

- an update of CMCs in Photometry and Radiometry for 13 countries (EUROMET), and
- an update of CMCs in Length for 2 countries (EUROMET).

We are now preparing some 500 CMCs in Chemistry (from all RMOs), which were examined in April 2002 but are not yet formally approved.

We are also expecting some 2000 CMCs in Ionizing Radiation (EUROMET), which have already undergone inter-regional review and have been in preparation for more than a year but have not even been submitted for final approval.

On the basis of this experience, we would strongly recommend that RMOs submit subsets of CMCs as soon as they are ready, rather than waiting for the whole set of CMCs covering a Metrology area to be drawn up.

CMCs in Thermometry and in Time and Frequency have not as yet been included in the Appendix C database, but we are aware that files are being drawn up and are in circulation. It is possible, therefore, that all Metrology areas will be covered before the end of the transition period of the MRA.

2. Appendix B

Appendix B content

The number of CIPM and RMO key and supplementary comparisons recorded in the Appendix B database has slowly increased since the last JCRB meeting. On 26 February 2003, Appendix B contained a total of 479 CIPM and RMO key and supplementary comparisons. It also contained the results of some 68 comparisons, 20 more than at the time of the 9th JCRB. Also, several BIPM key comparisons have had their results updated with new measurements.

Four EUROMET key comparisons have now had their results linked to those of the corresponding CC key comparison: one in the field of Mass and Related Quantities (High Pressure), two in the field of Chemistry (Gases) and one in the field of Electricity (Capacitance).

On 4 March 2003, we intend to launch onto the Web the results of an APMP key comparison (APMP.RI(II)-K2.Co-58) linked to those of a CIPM key comparison (the ongoing BIPM.RI(II)-K2.Co-58) in the field of Ionizing Radiation (Radioactivity).

Speaking globally, we have observed intense activity regarding Appendix B over the last few months, but not with regard to Appendix C.

Appendix B design

Since April 2002, considerable effort has been devoted to the complete re-design of the Appendix B database structure and the development of a new Website for hosting the KCDB¹. This new Website should be online on 4 March 2003.

3. Visits, publicity

Visits to the KCDB

The number of external connections to the KCDB Website is slowly increasing: we received a little more than 3000 visits in December 2002. As it is still very difficult to identify who is visiting the KCDB, we intend to provide an optional on-line registration form for visitors (linked to the new KCDB Newsletter), in addition to a Contact form and a “What’s New” section. It is intended that registered visitors will regularly receive issues of the KCDB Newsletter (1st issue scheduled for September 2003). Consideration is also being given to broadening the Search strategies available within the KCDB. *Any views/input from the JCRB on this would be appreciated.*

Publicising the KCDB

We try to publicise the KCDB as often as we can through, for example, the publication of papers in Newsletters, the presentation of posters at Congresses and the wide distribution of the KCDB leaflet.

We will demonstrated the KCDB live on the Web at the NIST stand at the conference PITTCOM'2003 in March 2003. We are grateful to the NIST for their hospitality.

¹ We resolve these purely technical matters with the assistance of an external international company based in France (SQLI). Any modification in design, however, is handled by the BIPM.