Calculating the KCRV
summarising the experience
of the CCQM GAWG

Approved by
18th GAWG
Sydney October 2007
Step 1

Is a value available from an independent method? (e.g., from gravimetry)

NO

YES
Step 2

We haven’t always documented this.

But it has always been a part of our discussions.
In the case of a preparative comparison, this is done by the fitting of the line 

*eg* K53 and P70

All of our comparisons are covered by this scheme

*(except K41)*
Step 4

Is a value available from an independent method? (e.g. from gravimetry)

- YES
  - Form weighted mean of participants results (and evaluate uncertainty)
    - Exclude discrepant data and/or form subsets (on technical grounds only)
      - Re-calculate weighted mean (and evaluate uncertainty)
        - Is weighted mean consistent with independent value within their uncertainties?
          - YES: KCRV is given by independent value
          - NO: Is participants data (after exclusion) statistically consistent with KCRV?
            - YES: KCRV is given by weighted mean (after exclusion of discrepant data and/or identification of subsets (on technical grounds only)
            - NO: Data and uncertainties not consistent. Evaluate alternative methods.

- NO
  - Evaluate alternative methods