Questionnaire previous to the 2005 meeting of the CCL/CCTF joint working group

The CIPM on its meeting in autumn 2004 has decided that the unperturbed ground-state hyperfine quantum transition of ^{87}Rb
may be used as a secondary representation of the second with a frequency of
f_{Rb}= 6 834 682 610.904 324 Hz

and an estimated relative standard uncertainty (1σ) of 3 x 10^{-15}

1. Frequency sources in the microwave domain

   1.1. Have you made or are you aware of new absolute frequency measurements of the Rb hyperfine transition?

   Yes No

   If yes, please list the values and uncertainties obtained and refer to the publication in which they may be found. Please be sure to include measurements made in other laboratories.

   1.2. Are you aware of absolute frequency measurements of other microwave standards that should be proposed as secondary representations of the second?

   Yes No

   If yes, please list the values and uncertainties obtained and the method used and refer to the publication in which they may be found. Please be sure to include measurements made in other laboratories in your country.

   1.3. Are you currently developing new frequency sources in the microwave domain?

   Yes No

   If yes, please give a brief description of your experiment.

2. Frequency sources in the optical domain

   2.1. Have you made or are you aware of new absolute optical frequency measurements suitable to serve as secondary representations of the second?

   Yes No

If yes, please list the values and uncertainties obtained and refer to the publication in which they may be found.

2.2. Are you currently developing new frequency sources in the optical domain?

Yes No

If yes, please give a brief description of your experiment.

NAME: ……

INSTITUTE:……