RECOMMENDATIONS ADOPTED BY THE
INTERNATIONAL COMMITTEE FOR WEIGHTS AND MEASURES

RECOMMENDATION 1 (CI-2007):
Revision of the *Mise en pratique* list of recommended radiations

The International Committee for Weights and Measures,

*considering* that:

- improved frequency values of molecules in the optical telecommunications region, already documented in the list of standard frequencies, have been determined by femtosecond comb-based frequency measurements;
- frequencies of molecules in the optical telecommunications region have been determined by femtosecond comb-based frequency measurements for the first time;
- frequencies of certain iodine gas-cell absorptions close to the 532 nm optical frequency standard have been determined by femtosecond comb-based frequency measurements for the first time;

*proposes* that the list of standard frequencies be revised to include the following:

- an updated list of frequency values for the $^{12}$C$_2$H$_2$ ($v_1 + v_3$) band at 1.54 $\mu$m;
- the addition of frequency values for the $^{12}$C$_2$HD ($2v_1$) band at 1.54 $\mu$m;
- the addition of frequency values for the hyperfine components of the P(142) 37-0, R(121) 35-0 and R(85) 33-0 iodine transitions at 532 nm.