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# General structure and terminology of BIPM codes for atomic clock and psfs data

The BIPM code of a Cesium clock (unchanged rule) is composed of 7 digits as :

- the statistical index ⇒ one digit (always 1), for internal use at BIPM
- the clock type/maker ⇒ two digits
- the clock serial number ⇒ last four digits

The BIPM code of a hydrogen maser already contributing to TAI in August 2017 (unchanged rule) is composed of 7 digits as :

- the statistical index ⇒ one digit (always 1), for internal use at BIPM
- the clock type ⇒ two digits (always 40)
- the last two digits of the laboratory code ⇒ two digits
- ordinal number of the clock in the laboratory or ⇒ two digits
  the last two digits of the clock serial number

**The BIPM code of a non-Cesium atomic clock that starts contributing to TAI after August 2017 is composed of 7 digits as :**

- **the statistical index ⇒ one digit (always 1), for internal use at BIPM**
- **the clock type ⇒ two digits**
- **the clock model/maker ⇒ two digits**
- **the last two digits of the clock serial number**

The BIPM code of a primary or secondary frequency standard (unchanged rule) is composed of 7 digits as :

- the statistical index ⇒ one digit (always 1), for internal use at BIPM
- the transition type ⇒ two digits
- the last two digits code of the laboratory ⇒ two digits
- the ordinal number of the psfs in the laboratory ⇒ two digits
  (this number identifies the psfs and should not be modified)

Code of the laboratory can be accessed at : http://webtai.bipm.org/database/labcode.html.
Codes for clock types, clock transition and clock models can be accessed at : http://webtai.bipm.org/database/clock.html.

**A dedicated tool has been created to automatically generate a clock code :** http://webtai.bipm.org/database/howtoclk.html. (Please inform the BIPM of any new clock code assigned with the tool).

Examples:

| **Clock type** | **Statistical index** | **Clock type code** | **serial number** | |
|---|---|---|---|---|
| Cs clocks | | | | |
| H-P/Agilent/Symmetricom 5071A High perf. | 1 | 35 | **XXXX** | |
| H-P/Agilent/Symmetricom 5071A Low perf. | 1 | 36 | **XXXX** | |
| | | | two last digit of the BIPM laboratory code | \| Ordinal number of the clock in the laboratory (in 2 digits) or the last two digits of the serial number |
| Hydrogen masers | | | | |
| T4S-iMaser 3000 ACTIVE HYDROGEN MASER | 1 | 4110 | **XX** | |
| VCH-1003A ACTIVE HYDROGEN MASER | 1 | 4150 | **XX** | |
| VCH-1033 ACTIVE HYDROGEN MASER | 1 | 4151 | **XX** | |
| Primary Frequency Standard, Cs transition | 1 | 92 | **XX** | **XX** |
| Secondary Frequency Standard, Rb transition | 1 | 93 | **XX** | **XX** |

**Examples of running Primary and Secondary Frequency Standards**

| Acronyms | BIPM codes | PFS | pfsCode |
|---|---|---|---|
| IT | 100**11** | ITCsF2 | 1921102 |
| NIST | 100**02** | NIST-F1 | 1920201 |
| NPL | 100**17** | NPL-CsF1 | 1921701 |
| OP | 100**08** | SYRTE-FO1 | 1920801 |
| OP | 100**08** | SYRTE-FO2 | 1920802 |
| OP | 1000**8** | SYRTE-FORb | 1930803 |
| PTB | 100**05** | PTB-CsF1 | 1920503 |
| SU | 100**38** | SU-CsFO2 | 1923802 |

Note: The last two digits of pfsCode are the choice of each laboratory, and should not change. This table provides only an example.