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TECHNOLOGY STRATEGY AND STANDARDIZATION

CH-0006

The Swiss NB, while wishing to thank the editor for his resolution proposal, still demands the resolution of Swiss comment CH-0006 to be improved as follows:

- 1) Part 4, 3.17.4, page 2, 522, line 6

The proposed definition of the components of the serial value is still not unambiguous, as it does not contain clear statements about the sign of each component.

According to the proposed resolution to part 4, 3.17.4.1, page 2,522, lines 14-22, page 2,533, lines 1-20, in the 1900 date-base system the serial value ranges from -693959 to +2958465, thus includes negative values.

The components definition shall express this by stating that the date component is signed, but the fractional component is not, by the following wording:

"Each unique instant in SpreadsheetML time is represented as a distinct numeric *serial value*, which is made up of a signed integer date and an unsigned fractional time component."

- 2) Ibidem

The currently proposed resolution allows for negative serial values, but fails to unambiguously specify their semantics. Thus add the following to the above definition:

"The serial value equals the signed time span from the respective base date, as defined in the table below, to the date represented, in units of days.

1900 date-base system	30 December 1899
1900 backward-compatible date-base system	31 December 1899
1904 date-base system	1 January 1904
1904 backward-compatible date-base system	1 January 1904

Note: In the 1900 date-base system, the serial value -1.25 encodes December 28, 1899, 6:00 p.m."

- 3) Part 4, 3.17.4.1, page 2,522, lines 14-22, page 2,533, lines 1-20

The proposed settings of the lower and upper limit conform with those of the ISO 8601:2004 date representation of years CE (i.e. 0000 and later).

The Swiss NB fully agrees to rely on ISO 8601:2004 for the date representation, but demands to make full usage of the devices defined therein. As the following references show, these include representations of years well BCE (i.e. before 0000):

ISO 8601:2004, section 3.5 defines an expansion facility widening the range to include dates BCE. Section 3.7 allows the use of this facility "by mutual agreement".

The Swiss NB takes the view that the 1900 date-base system should make use of this device and thus demands that the lower limit be extended accordingly. The definition of the 1900 date-base system shall be phrased as follows:

"In the 1900 date-base system, the lower limit is January 1, 9999 BCE, which has serial value -4'346'018. The upper limit is December 31, 9999 CE, which has serial value +2'958'465. In the 1904 date-base system, the lower limit is January 1, 9999 BCE, which has serial value -4348941. The upper limit is December 31, 9999 CE, which has serial value 2'957'003".

4) Ibidem

The current proposed resolution defines four date-base systems. We propose to deprecate the two backward-compatible ones, with the following text:

"The 1900 backward-compatible and the 1904 backward-compatible date-base system are of Class 2."

5) Part 4, 3.17.4.1, page 2,522, lines 14-22, page 2,533, lines 1-20 (editorial)
Write "lower limit" and "upper limit", consistently without a delimiting "-".