**SDMX STATISTICAL GUIDELINES**

**SDMX Cross-Domain Code Lists**

## CL\_UNIT\_MULT

**Name**: Code list for the Unit Multiplier (UNIT\_MULT).

**Description**: This code list provides code values for indicating the magnitude in the units of measurement.

**Version**: 1.1.

**Date**: 15 September 2017.

| **Recommended code value** | **Recommendedcode description** | **Annotation** |
| --- | --- | --- |
| 0 | Units | In scientific notation, expressed as ten raised to the power of zero (100) |
| 1 | Tens | In scientific notation, expressed as ten raised to the power of one (101) |
| 2 | Hundreds | In scientific notation, expressed as ten raised to the power of two (10²) |
| 3 | Thousands | In scientific notation, expressed as ten raised to the power of three (10³) |
| 4 | Tens of thousands | In scientific notation, expressed as ten raised to the power of four (104) |
| 5 | Hundreds of thousands | In scientific notation, expressed as ten raised to the power of five(105) |
| 6 | Millions | In scientific notation, expressed as ten raised to the power of six (106) |
| 7 | Tens of millions | In scientific notation, expressed as ten raised to the power of seven (107) |
| 8 | Hundreds of millions | In scientific notation, expressed as ten raised to the power of eight (108) |
| 9 | Billions | In scientific notation, expressed as ten raised to the power of nine (109) |
| 10 | Tens of billions | In scientific notation, expressed as ten raised to the power of ten (1010) |
| 11 | Hundreds of billions | In scientific notation, expressed as ten raised to the power of eleven (1011) |
| 12 | Trillions | In scientific notation, expressed as ten raised to the power of twelve (1012) |
| 13 | Tens of trillions | In scientific notation, expressed as ten raised to the power of thirteen (1013) |
| 14 | Hundreds of trillions | In scientific notation, expressed as ten raised to the power of fourteen (1014) |
| 15 | Quadrillions | In scientific notation, expressed as ten raised to the power of fifteen (1015) |
| -1 | Tenths | In scientific notation, expressed as ten raised to the power of minus one (10-1) |
| -2 | Hundredths | In scientific notation, expressed as ten raised to the power of minus two (10-2) |
| -3 | Thousandths | In scientific notation, expressed as ten raised to the power of minus three (10-3) |
| -4 | Ten-thousandths | In scientific notation, expressed as ten raised to the power of minus four (10-4) |
| -5 | Hundred-thousandths | In scientific notation, expressed as ten raised to the power of minus five (10-5) |
| -6 | Millionths | In scientific notation, expressed as ten raised to the power of minus six (10-6) |
| -7 | Ten-millionths | In scientific notation, expressed as ten raised to the power of minus seven (10-7) |
| -8 | Hundred-millionths | In scientific notation, expressed as ten raised to the power of minus eight (10-8) |
| -9 | Billionths | In scientific notation, expressed as ten raised to the power of minus nine (10-9) |
| -10 | Ten-billionths | In scientific notation, expressed as ten raised to the power of minus ten (10-10) |
| -11 | Hundred-billionths | In scientific notation, expressed as ten raised to the power of minus eleven (10-11) |
| -12 | Trillionths | In scientific notation, expressed as ten raised to the power of minus twelve (10-12) |
| -13 | Ten-trillionths | In scientific notation, expressed as ten raised to the power of minus thirteen (10-13) |
| -14 | Hundred-trillionths | In scientific notation, expressed as ten raised to the power of minus fourteen (10-14) |
| -15 | Quadrillionths | In scientific notation, expressed as ten raised to the power of minus fifteen (10-15) |

**Remarks**: The UNIT\_MULT concept as defined in the SDMX Glossary can be represented by an Integer data type as well as this code list. In order to keep the two possible representations fully compatible, this code list uses the hyphen character in codes for negative values. The hyphen is technically allowed in the SDMX standard. However, the guideline for creating SDMX code lists usually does not recommend it to be used for codes because it might be confused with a mathematical minus but in this case the meaning of the hyphen is the mathematical minus. This not only makes the two representations (Integer, code list) fully compatible for SDMX messages, but also allows using the concept directly in formulas (e.g. VTL scripts) without the need for additional parsing.