Comments and free-text value fields may be in any case (or mix of upper and lower case) desired by the user.

Apart from comments and free-text fields, normative text value fields shall be constructed using only exclusively all uppercase or exclusively all lowercase.

Integer values shall consist of a sequence of decimal digits with an optional leading sign (‘+’ or ‘-’). If the sign is omitted, ‘+’ shall be assumed. Leading zeroes may be used. The range of values that may be expressed as an integer is:

-2,147,483,648 ≤ x ≤ +2,147,483,647 (i.e., -231 ≤ x ≤ 231-1).

(OR -9223372036854775808 <= x <-= +9223372036854775807 (i.e., -263 ≤ x ≤ 263-1).

NOTE – The commas in the range of values above are thousands separators and are used only for readability. They are not included in the integer representation in the actual message.

Non-integer numeric values may be expressed in either fixed-point or floating-point notation. Both representations may be used within an OPM, OMM, OEM, or OCM.

Non-integer numeric values expressed in fixed-point notation shall consist of a sequence of decimal digits separated by a period as a decimal point indicator, with an optional leading sign (‘+’ or ‘-’). If the sign is omitted, ‘+’ shall be assumed. Leading and trailing zeroes may be used. At least one digit shall appear before and after a decimal point. The number of digits shall be 16 or fewer.

Non-integer numeric values expressed in floating point notation shall consist of an optional sign, a mantissa, an alphabetic character separating the mantissa from its exponent, and the exponent, constructed according to the following rules:

1. The sign may be ‘+’ or ‘-’. If the sign is omitted, ‘+’ shall be assumed.
2. The mantissa must be a string of no more than 16 decimal digits with a decimal point (‘.’) in the second position of the ASCII string, separating the integer portion of the mantissa from the fractional part of the mantissa.
3. The character used to denote exponentiation shall be ‘E’ or ‘e’.
4. The exponent must be an integer and may have either a ‘+’ or ‘-’ sign (if the sign is omitted, then ‘+’ shall be assumed). Exponent values can range from -324 to +308.
5. The maximum positive floating-point value is approximately 1.798E+308, with 16 significant decimal digits precision. The minimum positive floating-point value is approximately 4.94E-324, with 16 significant decimal digits precision.