OPERA FM94-BUFR Encoding and Decoding Software Release notes for Version 3.2

December 2012

This release of the BUFR software includes the source code, BUFR tables, documentation and examples. Please note that the BUFR tables are a result of other ongoing OPERA activities. The tables included in this distribution are the most recent available as of December 2012. In the future new tables may be released by OPERA, so be sure to check the OPERA home page for updated BUFR tables before using them operationally.

The new software version uses BUFR Edition 4 as default for encoding, unless overridden by the command line option –e3. BUFR Edition 4 should present no problems to any BUFR decoder, since the edition 4 is already supported (for decoding) by the BUFR software version 3.0, which is available since 5 years.

What's new in this version:

- implementation of BUFR Edition 4 modification descriptors:
    2 7 y (change of scale, width and refence value)
    2 8 y (change width of ascii field)
    2 41 y (event)
    2 42 y (conditioning event)
    2 43 y (categorical forecast)

- added two functions to z-compress data values from memory or to z-decompress to memory (see bufr_io.h and bufr_io.c)

- use BUFR edition 4 as default for encoding (can be changed per command line option)

- use WMO tables version 14 and OPERA tables 247 – version 8 as default for encoding (can be changed via section.1 file)

- encbufr option -e3 to encode with BUFR edition 3

- documentation update (BUFR software description, API documentation)