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EXFOR-Editor Development

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First of all it is necessary to mention a great utility of the Workshop on software for EXFOR input that took part last May in Vienna. We are very thankful to all participants for their feedbacks. The EXFOR-Editor was thoroughly and completely tested. There were more than 60 remarks and proposals.

So our work was focused on implementation of these feedbacks. As the result we are presenting a new version of the EXFOR-Editor V1.7 (Fig.1).
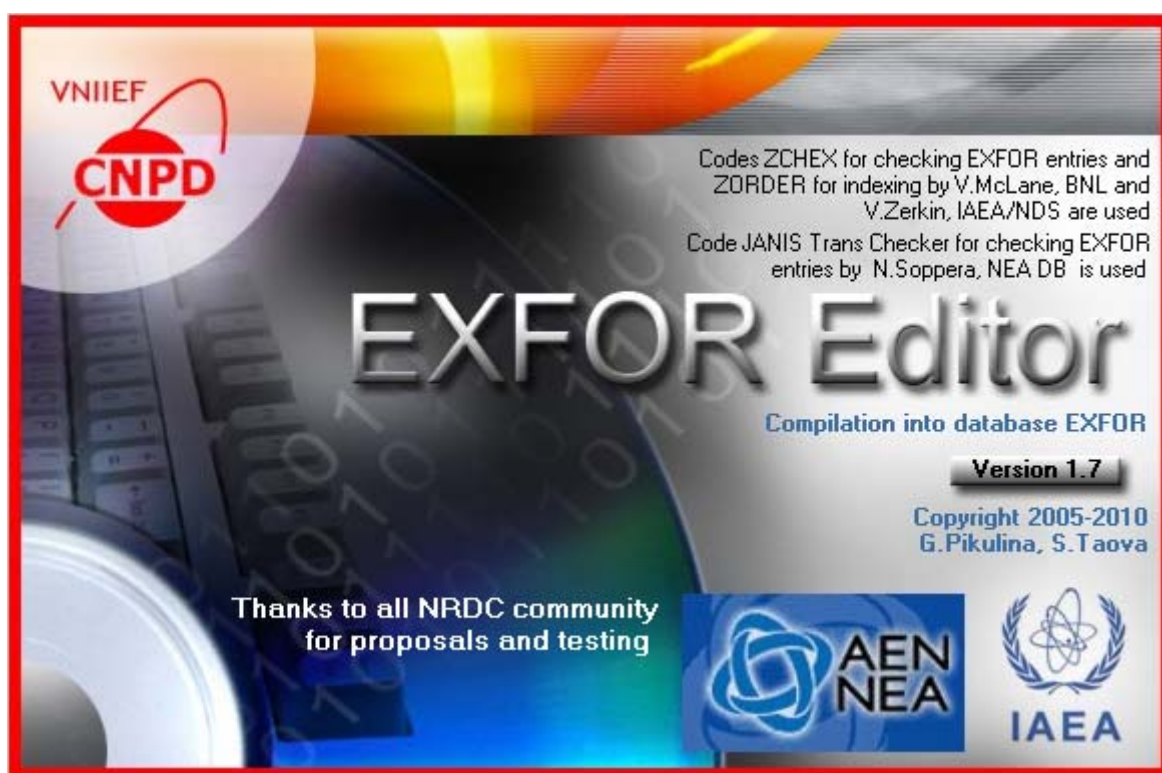

Fig.1 – Splash Screen for the EXFOR-Editor

First I would like to mention the fruitful collaboration with Nicolas Soppera from NEA DB. He prepared a version of JANIS Trans Checker code that can be launched under the EXFOR Editor. Now a user can look through the results of testing by JANIS Trans Checker from the main window of the EXFOR-Editor (Fig.2). Clicking the mouse on a row with an error description will highlight the wrong line in the Editor window.

Fig.2 – Testing Results by JANIS Trans Checker

So now the EXFOR-Editor provides two ways of checking. The first way is provided with the program ZChex by Victor Zerkin and the second one is carried out with the code JANIS Trans Checker by Nicolas Soppera. Using of both programs makes testing of EXFOR files more reliable. As one can see from statistics published on the web-page of NRDC, these two programs find different errors. They functionally add each other and don't duplicate. So we recommend using both of them.

Spelling check is accessible now from the dialog windows for entering and editing of the keyword information. A special button "Spell Checking" was added in these windows. Spelling check is performed using the tools of Microsoft WORD.

Many corrections in the EXFOR-Editor were based on the conclusions and actions of NRDC meeting in 2009. Let me mention some of them.

The special field for DOI code input is added to the REFERENCE window. Now the information for the REFERENCE keyword automatically includes the DOI code (C11).

A window for entering information on the AUTHOR keyword was changed. In this window there is a special button "Add nTOF". This button is provided for the author's list of articles containing the results of NTOF Collaboration(C5). The button "Transliterate Cyrillic Names" was also added to the AUTHOR window. It is used to convert Russian names to Latin equivalents according to transliteration rules.

The ERR-ANALYS window was added with the fields for the input of partial uncertainty ranges (C14).

Now a window for entering information on the TITLE keyword has an option "No title" with the corresponding comments (C1).

We try to implement as many feedbacks as possible. The main of them are the following.

Now there is a special option that permits using the Extinct and Obsolete codes from the EXFOR Dictionaries in the Editor. In the window of Dictionary Browser a search with a given symbol combination is implemented.

Table export into the external file of Text, Word and EXCEL formats is now available in the Data Table window. The exported file with experimental data may be inserted into another EXFOR file or sent to the author for checking.

Axis scale, ticks and labels on a plot of data table can be changed now. This opportunity simplifies checking of experimental data.

A possibility of case changing is now available in the main Editor window. All symbols of the selected text can be transformed into UPPERCASE or *lowercase* letters or a user can select another rule of transformation.

We also insert transcription table proposed by our colleagues from NEA DB for computer-compatible substitutes in WP 2009-22 to be inputted in EXFOR files.

This working paper contains the description of the main changes in the EXFOR-Editor. The appendix of the working paper contains the brief review of all new functions and corrected errors of this program.

More than 40 feedbacks were taken into account. We will continue the implementation of proposals and hope to have many new ones after this meeting.

We would like to emphasize once more that the EXFOR-Editor is the result of fruitful cooperation of CNPD (VNIIEF, Russian Federation), NDS IAEA, NEA DB (France) and the active users of our program from other Data centers. The development of the software package is continued. So we are interested in involving more participants in this process.