### WP2008-12

# Status of new compilation and procedure for creation CINDA reference

Last year we suggested (WP2007-17):

1. at the same time with registration reference in EXFOR control database create "dummy" EXFOR entry, which contains information needed for CINDA database:

- Reaction code
- Laboratory
- Reference
- Title
- Authors

2. every Monday with same time of updating EXFOR control database send a set of "dummy" EXFOR files to responsible center;

3. responsible center checks "dummy" EXFOR files and sends final to NDS in two-three weeks;

4. NDS updates CINDA every month according to EXFOR and "dummy" EXFOR files even if there is no response from the center.

In January – February 2008 NDS made 16 "dummy" EXFOR Entries.

The results are:

- 1. 10 of "dummy" Entries were booked during the same week and 7 of them compiled in EXFOR month later (from areas NEA DB and NDS)
- 2. still not compiled 3 (ATOMKI), 1 (JCPRG) and 5 (NEA DB, neutron-induced reactions)
- 3. nobody responds on "dummy" EXFOR files
- 4. such compilation takes a lot of time (around 20% of the whole article's compilation)
- 5. it is not easy just to add "dummy" files to EXFOR because in the same time NEA DB continues updating CINDA (it will be additional duplications)

The whole EXFOR compilation statistics of this year is:

- 167 articles registered,
- 70 Entries are in EXFOR,
- 17 in Prelim,
- 39 reserved and
- 41 need booking.

| Centre | Compiled in EXFOR                |                      |                                  |                      | booked for compilation           |                      |                                  |                      | not booked yet                   |                       |                                  |                      |
|--------|----------------------------------|----------------------|----------------------------------|----------------------|----------------------------------|----------------------|----------------------------------|----------------------|----------------------------------|-----------------------|----------------------------------|----------------------|
|        | neutron-<br>induced<br>reactions |                      | non-neut<br>induced<br>reactions |                      | neutron-<br>induced<br>reactions |                      | non-neut<br>induced<br>reactions |                      | neutron-<br>induced<br>reactions |                       | non-neut<br>induced<br>reactions |                      |
|        | # of<br>articles                 | Delay<br>in<br>month | articles                         | Delay<br>in<br>month | articles                         | Delay<br>in<br>month | articles                         | Delay<br>in<br>month | articles                         | Delay<br>sin<br>month | articles                         | Delay<br>in<br>month |
| NNDC   | 5                                | 0                    | 12                               | 1                    |                                  |                      |                                  |                      | 3                                | 4                     | 8                                | 3                    |
| NEA DB | 7<br>(+5)*                       | 0                    | 9                                | 0                    | 3                                | 2                    | 5                                | 3                    | 7                                | 5                     |                                  |                      |
| NDS    | 12(+1)                           | 0                    | 13(+8)                           | -1                   |                                  |                      | 2                                | 3                    |                                  |                       |                                  |                      |
| CJD    | 1                                | 0                    |                                  |                      |                                  |                      |                                  |                      | 6                                | 3                     |                                  |                      |
| CaJaD  |                                  |                      | (+1)                             | 2                    |                                  |                      |                                  |                      |                                  |                       | 1                                | 2                    |
| CPND   |                                  |                      |                                  |                      |                                  |                      |                                  |                      |                                  |                       |                                  |                      |
| JCPRG  |                                  |                      |                                  |                      |                                  |                      | 19                               | 5                    |                                  |                       | 3                                | 2                    |
| ATOMKI |                                  |                      | 3                                | 0                    |                                  |                      | 3                                | 3                    |                                  |                       | 1                                | 2                    |
| UkrNDC |                                  |                      | 2                                | 1                    |                                  |                      | 4                                | 5                    |                                  |                       |                                  |                      |
| CDFE   |                                  |                      | 2(+2)                            | -1                   |                                  |                      |                                  |                      |                                  |                       | 1                                | 2                    |
| India  | 2                                | 2                    | 2                                | 3                    |                                  |                      | 3                                | 7                    |                                  |                       | 5                                | 3                    |
| any    |                                  |                      |                                  |                      |                                  |                      |                                  |                      |                                  |                       | 6                                | 5                    |
| Sum    | 27 (+6)                          |                      | 43 (+11)                         |                      | 3                                |                      | 36                               |                      | 16                               |                       | 25                               |                      |

Statistic in the table includes information about the area of responsibility for 2008.

\* number in parentheses means – number of the Entries in Preliminary Transes

As it can be seen from statistics compilation can be done in 1-2 months before or after publication. On the Web it said -2.5 months. It means that some articles were compiled before publication or in some cases it is only reference added to old Entry.

## **Conclusions:**

The delay in compilation is caused by:

- 1 difficulties in getting data from the author (most of the articles that are not compiled contains on the figures double differential cross sections);
- 2 part of the published data are preliminary and authors don't want to give data before finishing analysis (sometimes it takes ages);
- 3 additional for charged particle induced reactions sometimes still some uncertainty in responsibility of compilation area;
- 4 compilation time can be and have to be reduced to 1-2 months after publication.

#### Suggestions

Option 1 (instead of creating dummy" EXFOR files):

- 1.compile article in EXFOR without data (anyway it is 80% of compilation time) with comment that data are unobtainable and why (preliminary data, author refused to give data, etc.)
- 2.compile article in EXFOR with digitized data if it is possible with similar comment
- 3.in any case send to author for approval
- 4.after 2 months delay NDS takes responsibility on compilation as it was done with CNDC

#### Option 2 (creating "dummy EXFOR files")

- 1.If the responsible centre cannot compile the article in timely manner (numerical data are not available etc.), the centre should submit the minimum information of the article in order to keep it in CINDA and EXFOR.
- 2. The information should be compiled in the EXFOR format as follows
  - (a) BIB section should contain the following keyword:

TITLE, AUTHOR, INSTITUTE, REFERENCE, REACTION, FACILITY, STATUS, HISTORY

to satisfy the minimum requirement of both CINDA and EXFOR. Other keywords are optional. Note that a new status code (say, CINDA) should be coded under STATUS. If numerical data are not available from the authors, it should be explained under STATUS (e.g. "No reply from N. Otuka - 2008/09/22", "N. Otuka cannot provide experimental data - 2008/09/22").

- (b) COMMON section should contain incident energy under EN (or energy range under EN-MIN and EN-MAX). If the certain value of the incident energy is unknown, give it in floating number (e.g. 1.5E+07 for about 15 MeV). Other constants of the subentry are optional.
- (c) NODATA record can be used in stead of DATA section.
- 3.If the dummy file is not submitted within 6 months after publication, NDS will take the responsibility for compilation of the article (or assign it to another center) according to Action 21 of the 2005 NRDC meeting *for area X (a special area code for dummy EXFOR files)*.