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Memo CP-D/472

Date: 27 October 2006
To: Distribution
From: O. Schwerer
Subject: **Conclusions and Actions of the 2006 NRDC meeting**

Please find attached the Conclusions and Actions of the 2006 NRDC meeting in Vienna. They are sorted by main topics and renumbered.

Please give your feedback about any mistakes or omissions by the end of November. The complete meeting report, including also a meeting summary, the status reports of the centres and part of the working papers, will, as usual, then be published as an INDC report. Anyway work on the 41 Actions has already begun and need not wait for the full report.

Remember also that the status reports, working papers and PowerPoint presentations presented at the meeting are available from our NRDC web page (<http://www-nds.iaea.org/nrdc-int/>).

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Conclusions and Actions of the 2006 NRDC Meeting

Conclusions

General

- C1 The next NRDC meeting will be a meeting of technical staff and is planned for October 2007 in Vienna.

EXFOR, General

- C2 The extension of the compilation scope of EXFOR area J to include antiproton data from the world (not only Japan) is approved.
- C3 A first version of the “current compilation” webpage was presented and will be placed on an internal webpage (open to NRDC members, not publicised).
- C4 The introduction of a new EXFOR area K for photonuclear data from Japan (compiled by JCPRG) is agreed.
- C5 The meeting decided that better completeness in photonuclear data compilation should be achieved. In particular photoneutron and photofission data, as well as (g,p) and (g,a) cross sections, should be covered completely.
- C6 (Info) Schwerer reported on the EXFOR compilation workshop held in Bombay and on his visit to CNDC. Hopefully the Indian nuclear data group will be represented as observers at the next NRDC meeting, and coverage of Chinese works in EXFOR will considerably improve in the near future.
- C7 The proposal of WP2006-7 (generation of BibTex citations) was well received. V. Zerkin will look into implementation. Inclusion of DOI numbers in REFERENCE may be considered for the future.
- C8 The NRDC appreciate Koning’s paper WP2006-3 (Recommendations to improve the quality of EXFOR) and the necessary corrections are initiated (Action A10). On items 3 and 4 (quality flagging and review team) it is recommended that the initiative comes from outside the NRDC. Once this activity is initiated (e.g. within WPEC) the NRDC should be informed and become involved.
- C9 (Info) Common EXFOR master file: NEA-DB and NNDC started from new common master file, but they usually update the TRANS files individually. This may account for small time synchronization differences, but in essence the files should be the same.

- C10 The new procedure for coverage of conferences (Rev. to WP2006-13) is approved
- C11 The table of responsibilities for journal coverage is updated (JRNC to ATOMKI; IZV to Sarov; reference to current compilation webpage)

Common EXFOR/CINDA dictionaries

- C12 The dictionary updates will from now on be distributed together with the latest version of CHEX and the corresponding ZVV dictionaries.

EXFOR software

- C13 (Info) The new EXFOR editor was presented by Sarov, and the first version distributed to the centres.
- C14 (Info) CHEX was updated and the latest version is available from the NDS web page <http://www-nds.iaea.org/exfor-master/programs/>
- C15 (Info) On request, NDS can offer local databases and/or web retrieval systems to other network centres
- C16 (Info) JCPRG is working on new version of GSYS, to be ready by the end of the year. See also Action A25
- C17 The meeting emphasizes the need for more cooperation in software development in all areas concerning EXFOR. The digitizing program by JCPRG and the EXFOR editor are first examples. The next project should be computational formats. (See also Action A24)

EXFOR, technical

- C18 The list of permitted characters (Manual p.1.3) is extended by the following characters: { } | (for later use to code special characters as in NSR)
- C19 Compilers should take into account a sufficient number of significant digits when digitizing
- C20 The new status code RCALC is approved (CP-D/457, WP2006-11)
- C21 Another option to refer to monitor data from evaluated libraries is planned for the future. Under MONIT-REF, in the field now used for referring to an EXFOR accession number, a reference to an evaluated file can be given. The detailed formalism needs to be developed.
- C22 LEVEL-PROP: The separating comma for a missing level identification field is NOT needed (example in manual to be corrected; CHEX to be updated)

- C23 Usage of Ref-type X for electronic preprints is approved (CP-D/446, WP2006-11)
- C24 Separate codes for AKE (Average kinetic energy) and KE (Kinetic energy) are retained. AKE is averaged over all products. See also Actions A28 and A29
- C25 The new report code ISINN- (for the conference series Int. Seminar on Interactions of Neutrons with Nuclei) is approved (CP-D/467, WP2006-11)
- C26 Production cross sections for decay gammas will be coded PAR,SIG,DG (modification of proposal in CP-D/470, WP2006-11)
- C27 The proposed dictionary modifications of WP2006-14 (spin observables in polarization entries) are approved. See also Action A30

CINDA

- C28 The CINDA book draft (WP2006-12) was discussed in detail. Draft CINDA pages containing the final modifications will be circulated for feedback.
- C29 CINDA master file is ready, and is being used in two centres. All centres are welcome to download the master file from the NDS CINDA area. Manual input and corrections of the existing file are now possible, although further changes of the master file may arise. Regular input generated from EXFOR can begin.
- C30 NDS will produce quarterly an automatic extension of CINDA based on the current EXFOR database.

Actions

General

- A1 All (Continuing) All recognized policy papers for consideration by the NRDC members need to be prepared and distributed four weeks before the annual NRDC meeting. This will ensure adequate thought and discussion prior to the meeting.
- A2 All (Continuing) Review the Citation Guidelines (2004 version from NRDC internal webpage) and send updates to NDS by 1 April 2007; if needed, a reminder will be sent before the end of the year.
- A3 All Update CP memo distribution list with NDS version; including Nichols and Hasegawa

EXFOR, general

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| A4 | All | (Continuing) All centres should give high priority to compiling new compilations |
| A5 | NDS | Continue to try developing sensible means of data communication between laboratories and the network via the major journals |
| A6 | All | (Continuing) Follow the procedures described in WP 2005-30 for journal coverage. Instead of the reaction code, it is sufficient to give data type (neutron, charged particle, photonuclear) and priority (A = obligatory, B = voluntary) |
| A7 | All | (Continuing) Follow the procedures described in WP 2005-31 for compilation of new publications (but without including the e-mail address, para. 4) |
| A8 | Schwerer | (Continuing) Review the EXFOR Basics Manual and submit revision when time permits. Also include the "C4" computational format |
| A9 | All | (Continuing) On the proposal of WP 2005-14: store locally pdf versions of EXFOR relevant articles and discuss within the centres what part can be shared with a central archive kept at NDS |
| A10 | All | Go through the error lists of WPs 2006-3, 4 and 5 and retransmit the necessary corrections asap. Centres must check the original references before doing the corrections; also check for additional errors. |
| A11 | Henriksson | Keep the NRDC informed of any developments in establishing a working group on improvements of EXFOR (re WP2006-3). |
| A12 | Zerkin | Develop revised EXFOR format (items 1-3 of WP2006-18) and report on trial implementation at the next meeting. |
| A13 | All | Check at their centres what consequences the revised format would have on their software. |
| A14 | All | Give feedback to NDS on the "current compilation" webpage |
| A15 | NDS | Develop automatic e-mail reminders on delayed compilations based on current compilation webpage |

Common EXFOR/CINDA dictionaries

- A16 Henriksson, Zerkin, Otsuka Compare the internal dictionaries used in their centres, in particular for URL addresses to generate hyperlinks to references, and explore possibilities for including them in the shared dictionary system.

EXFOR software

- A17 NDS Distribute test version of CHEX, compatible with wildcards for SF7 in dictionary 236, together with revised dictionary 236 for testing.
- A18 All Give feedback on EXFOR editor to Sarov
- A19 All Give feedback to NDS on the existing CHEX version (bugs, refinements)
- A20 Zerkin Contact Trkov about correction of X4TOC4 (bug no.2 of WP2006-9)
- A21 Zerkin Communicate with other interested centres about exchange of information on usage of C4 (X4TOC4) and similar formats, with the goal of developing a common computational format
- A22 Sarov, NDS Continue development and testing the EXFOR editor in cooperation with NDS and other data centres.
- A23 Zerkin Adapt XTRACT (VMS-based indexing program for EXFOR files) for use under Windows
- A24 NDS Investigate possibilities to hold a meeting of software specialists on EXFOR software before the next NRDC meeting. (Conclusion C17)
- A25 All Give feedback on the digitizing software GSYS to JCPRG

EXFOR, technical

- A26 Otsuka (Continuing) Submit summary on tensor polarization data as a memo to remove inconsistencies in dictionary expansions
- A27 Rochman On WP2006-10: investigate with NSR and ENSDF experts how Greek and other special symbols are implemented and report to NRDC
- A28 NDS Clarify quantities KE (Kinetic energy) and AKE (Average kinetic energy) in LEXFOR

- A29 All Check KE and AKE EXFOR entries compiled in their area and correct if necessary
- A30 NNDC, JCPRG Retransmit corrections requested in WP2006-14
- A31 All Check WP2006-15 for remaining corrections to be transmitted
- A32 Dunaeva Distribute list of duplications for action
- A33 All (Continuing) When coming across report codes in dictionary 6 which differ significantly from what is shown on the cover, submit additional explanation to NDS for inclusion in dictionary 6

CINDA

- A34 Cinda centers (Continuing) Search for illegal experimental entries for MANY and replace them with individual entries
- A35 All Give feedback on the draft CINDA annexes (see <http://www.nea.fr/html/dbdata/data/cindabook/>) and introduction
- A36 All Inform NEA-DB about needs for copies of CINDA book
- A37 All After implementation of the modifications discussed at this meeting, check CINDA file for a particular target and give feedback to NEA-DB
- A38 Zerkin On WP 2006-17: distribute a more detailed technical proposal on “projects” in CINDA for internal discussions in centres
- A39 Zerkin, Henriksson, Otsuka, other volunteers Form working group on Projects in CINDA
- A40 Zerkin Plan meeting of this working group (A39)
- A41 NEA-DB Distribute final version of CINDA manual including latest corrections

Summary of changes in compilation procedures and responsibilities

- A new coverage control and compilation status web page, maintained by NDS, is introduced:

<http://www-nds.iaea.org/exfor-master/x4compil/>

(Note added after the meeting: it is already in use and helps to speed up compilation.)

- A new procedure for covering conferences is introduced
- Better coverage of data from India through the start of an Indian compilation activity (following a compilation workshop held at BARC Bombay)
- Better coverage of data from China through intensified activities of CNDC (additional staff participating in compilation, coverage of 10 Chinese journals)
- Agreement on improved completeness for photonuclear data and start of a photonuclear EXFOR series at JCPRG (area K)
- Extension of JCPRG area J