Conclusions and Actions of the 2005 NRDC Meeting

Conclusions

The **next NRDC meeting** will be a full meeting (centre heads and technical staff) and will be held in Vienna during 4 days in September or October 2006. (Note added by editor: after the meeting, the date was set to 25 – 28 September 2006).

CINDA

- C2 NDS will maintain also a **common CINDA master file**
- NDS will from now on **convert** all received EXFOR TRANS file to a **CINDA** file and update CINDA with it and send it to the originating centre
- C4 The revised **CINDA Manual**, as submitted by NEA-DB and revised at this meeting, is approved.

Common EXFOR/CINDA dictionaries

- C5 The **reformed dictionaries** as described in memos CP-D/438-440 are accepted.
- C6 On request, the **dictionaries** are available from NDS also in **database** form.

EXFOR, general

- C7 **Compilation scope:** Data measured in **inverse kinematics**, which would be in the category of obligatory compilation if target and projectile were exchanged, must be compiled also (i.e. are added to the list of obligatory compilation, category "A").
- C8 Compilation responsibilities: ATOMKI will also be in charge of experiments in cooperation with Free Univ. Brussels, Cyclotron Department (EXFOR code 2BLGVUB)
- C9 **Compilation responsibilities**: Add "**Photonuclear Data** under coordination of CDFE" to UkrNDC and NNDC

- C10 The clarification of **compilation responsibilities** as given in WP 2005-10 is adopted
- For all compilations of new literature, an **author proof** copy should be sent, and the approval, or "no reply to author proof", should be included under STATUS.
- The meeting took note of the release of the **common EXFOR master file** as of 1 July 2005. Any special operations on the master file, outside the normal TRANS operations, if at all necessary, must be communicated to the NRDC via memos.

EXFOR, technical

- The coding of **isotopic abundances** (proposed at the 2004 NRDC meeting) is **not** followed up for the time being, until the need is demonstrated.
- Wildcards in SF7 for Dict. 236 are now acceptable to all. Details of implementation will be agreed (see Action A27)
- C15 Extension of **multiple reactions** is accepted as proposed in WP 2005-26: *Components of a vector or tensor polarization quantity* will be added to the list of allowed cases in LEXFOR.
- The **new headings and units** proposed in WP 2005-27 are approved: POL-BM-MIN, POL-MB-MAX, +ERR-SYS, -ERR-SYS (Dictionary 24); PB (picobarn), FB (femtobarn) (Dictionary 25)
- C17 Neutron multiplicity from fission will be coded with NU for all projectiles
- C18 **Total kinetic energy distribution** will be coded with connecting the particles in SF7 with +, e.g. ,DE,LF+HF
- Quantities PR,NU/DE,FF and PR,NU/DE,A should have dimension FY because they are not differential by energy (they are dependent on secondary energy but not differential). Also the units in the affected entries (PT/FIS/MEV) must be corrected.
- C20 The proposal on storage of **covariance files** is accepted (WP 2005-25). Retrieval interfaces at the centres will be developed as need arises.

Software

- V. Zerkin is encouraged to proceed with the concept of "**Projects**" in CINDA (WP 2005-21). This item will be reconsidered at the next meeting. (See also Action A31.)
- The meeting notes that all **digitizing software packages** recently compared by the centres (WP 2005-24) give satisfactory results, and that the major source of discrepancies is the "human factor". (See also Action A32.)
- The meeting encourages steps to improve **cooperation in software development**, beginning with the Exfor editor (Sarov + NDS). Centres are encouraged to inform each other about software developments where cooperation is possible and/or desirable.

Recommendation

Compilations with serious formal and/or physics mistakes are increasingly being transmitted to the network coordinator. As a consequence of this increasing number of errors over the previous 12 months, further considerable time and effort has to be spent by the coordinating centre, and other network centres, checking these entries, pointing out mistakes, and requesting corrections before these compilations can be added to the EXFOR database.

Therefore, the meeting recommends that all centres ensure that their EXFOR compilers are able to spend the necessary time to understand both the essentials of the article and the relevant EXFOR procedures, so that they are able to produce good quality initial compilations for the 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.
A3	All	Update CP memo distribution with A.Mengoni@iaea.org (new), yolee@kaeri.re.kr (Lee Young-Ouk, new), katakura.junichi@jaea.go.jp
		CINDA
A4	CNDC	(Continuing) Compile all Chinese experimental works (journals and conference proceedings) for CINDA and send to NDS in Reader format.
A5	CINDA centers	(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
A6	NNDC, NEA-DB, CJD	(Continuing) Check and confirm/clarify report codes given in WP 2003-8, Sections 4 and 5, by end of 2005
A7	CINDA centers	(Continuning) Correct errors in report coding , as listed in Sections 6 and 7 of WP 2003-8
A8	CINDA centers except NNDC	(Continuing) Search for illegal experimental entries for MANY and replace them with individual entries, and for the many illegal entries for FPROD which may be used only for lumped fission products. (MANY is allowed only for evaluated and theoretical data)
A9	Henriksson, Zerkin	Clarify differences in the converted area 2 CINDA file by 14 November

A10	Henriksson	Communicate to other centres the information needed for the introductory pages for the CINDA book
A11	all	reply to above Action A10
A12	Henriksson	keep others informed about developments on CINDA book
		Common EXFOR/CINDA dictionaries
A13	Zerkin	Prepare the dictionary system for distribution in form of relational database
		EXFOR, general
A14	NDS	Develop an external flagging system to indicate which data sets were adopted by evaluators
A15	CNDC	Provide to NDS list of 10 most important Chinese journals relevant to nuclear data, emphasizing in particular journals published in Chinese language
A16	All	(Continuing) Check/retransmit those entries from the list of pending retransmissions (distributed by McLane at the 2001 NRDC meeting) which still need correction
A17	NDS	Redistribute this list
A18	All	(Continuing) All centers should give high priority to compiling new publications
A19	Nichols	(Continuing) Communicate with major journals concerning data transfer to the network for inclusion in EXFOR.
A20	All	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)
A21	All	Follow the procedures described in WP 2005-31 for compilation of new publications (but without including the e-mail address, para. 4)

A22	Schwerer	(Continuing) Review the EXFOR Basics Manual and submit revision when time permits. Also include the "C4" computational format.
A23	All	On the proposal of WP 2005-14: store locally pdf versions of EXFOR relevant articles and discuss within the centers what part of it can be shared with a central archive kept at NDS
A24	All	Go through WP 2005-15 and retransmit the corrections asap
		EXFOR, technical
A25	Otsuka	Research the usage of quantity codes AKE and KE in EXFOR and come up with a proposal for consistent dictionary entries.
A26	Otsuka	Submit summary on tensor polarization data as a memo to remove inconsistencies in dictionary expansions
A27	NDS	Formulate detailed proposal for introducing wild cards in Dict.236 for SF7
A28	NDS	(Continuing) Check whether there is a LEXFOR entry on the process code FUS (total fusion, Dictionary 30); if not, provide such an entry.
		Software
A29	Sarov, NDS	Distribute beta-version of EXFOR editor to interested centers for review, and continue development in cooperation with Zerkin/NDS.
A30	Zerkin + NNDC	Look into possibility of using the "human readable EXFOR" format (being developed) also for a data uploading facility for authors.
A31	All	Give feedback to NDS on the proposal of WP 2005-21 (concept of Project in CINDA)
A32	All centres producing digitizing software	Consider making the digitizing software (including documentation) available to the network

Services

A33 All

Consider the proposal of NNDC (WP 2005-7) to publish the **state of knowledge on 1-2 nuclides** and express opinions and proposals on it to NNDC and NDS by the end of 2005.