WP2002-1

Actions of previous meetings (2000, 2001)

1. General Actions of the NRDC Meeting May 15-19 2000, Obninsk, Russia

General Actions

A1:	**(NDS)**	Remove the RIKEN Data Centre entry from the Network document
A2:	**(NDS)**	Make all of the IAEA-NDS Documentation series available on the WWW in PDF format. This may require scanning of previous paper copies
A3:	**(All)**	Send/give the electronic format (MS-Word or Excel) of their Centre's Progress Report, and any other paper distributed during the meeting which should be included in the meeting report, to NDS before 15 June 2000.
A4:	**(NDS)**	**(Old A2)** Send the ENDF (DBMS and text libraries) to VNIIEF and CJD.
A5:	**(Lammer)**	**(Old A3)** Include the PC program package for calculation of Fission Yield distributions by A. C. Wahl in the NDS data collection
A6:	**(All)**	To support the joint project of Russia, Ukraine (UkrNDC) and Belarus (Minsk-Sosny) on development of Internet site structure and web pages for nuclear databases and related software. This support would include establishment of contacts of project initiators with European, US and other centers and organisations interested in collaboration, cooperation or partnership in this project.
A7:	**(Dunaeva)**	Keep other centers informed on the status of the proposed project.
A8:	**(NDS)**	Distribute respective parts of the ADLIST address database to other centers for review for incorrect or outdated addresses.
A9:	**(All concerned)**	Send ADLIST corrections to NDS.
A10:	**(NEA-DB)**	Update the NRDC web page (kept by NEA-DB) and add a page on Frequently Asked Questions (FAQ).
A11:	**(All)**	Send contributions to the FAQ page to NEA-DB
A12:	**(NEA-DB)**	Provide a link from the NRDC page to the Network document.
A13:	**(All)**	Provide a link from their home page to the NRDC page.
A14:	**(All)**	Add Sophiya Taova's e-mail address to the distribution for CP memos: Taova@expd.vniief.ru

2. Actions and Conclusions from the NRDC Meeting 28-30 May 2001, Vienna, Austria

CONCLUSIONS

CINDA and CINDA2001

C1: The CINDA2001 format as proposed in WP2001-23 is accepted with the addition of hierarchy 7 for multiple authors. The CINDA2001 quantity codes given in a new Dictionary 45 (see WP2001-24, last page) will be reviewed by the NEA Data Bank and be finalized by a working group consisting of McLane, Kellett, Lammer, Maev.
There will be the following new dictionaries:
44 Conversion of EXFOR quantities (Dict.36) to new CINDA quantities (Dict.45)
45 (New) CINDA quantities
46 Conversion of old CINDA quantities (Dict.42) to new CINDA quantities (Dict.45)
47 Reader codes
48 Spectra codes

C2: The 2001 CINDA book will be issued as **Supplement** to CINDA2000. The format will be as shown as **Layout 4** in WP2001-27.

C3: The deadline for receiving CINDA entries to be included in the book is 1 November (for expected publication in January 2002).

C4: NEA will continue to produce the CD version of CINDA which will be distributed together with the book to all recipients.

EXFOR/CINDA Dictionary System
(see also Conclusion C1 above on new dictionaries for CINDA2001)

C5: Dictionary transmissions should be four times a year.

C6: NEA-DB still needs the dictionaries in "TRANS" format (as described in the EXFOR Systems Manual, Chapter 6).

C7: Starting with the year 2000, conferences will be coded with a 4 digit year. The total length will therefore be up to 10 characters. CINDA will use, in all cases, the first 8 characters of the EXFOR code until transmission in the new CINDA 2001 format begins.

C8: The proposal to add the OXI code to EXFOR dictionary 9 (Compounds) and DANIEL dictionary 27 (Nuclides and Compounds) as detailed in Memo 4C-4/113 (= WP 2001-10) is accepted.

C9: The final implementation of "wild cards" in Dictionary 36 is deferred until all centers can use them. (Note: The use of the wild cards '*' (for all particles) and '*F' (for fission fragments) in SF7 (particle considered) of dictionary 36 was agreed in principle at the 1997 NRDC meeting.) *See also Action **A12.***

General EXFOR matters

C10: Reactions with many reaction products should be coded in the variable product nucleus formalism (ELEM/MASS) allowing coding in one subentry rather than individual subentries for each product.

C11: NNDC will be responsible for co-ordinating the compilation of all charged particle data produced at facilities in USA and Canada.

EXFOR coding rules and dictionary changes

C12: The proceedings of the 2000 Tsukuba conference will be published as a Supplement to the Journal Nucl.Sci.Technol. and should be coded in CINDA under both, the conference code and the journal code.

C13: RCL is to be deleted from the "Particle Considered" dictionary (EXFOR Dict.33).

C14: A new heading KT-K for kT in temperature units (e.g. Kelvin) as proposed in WP 2001-4(Rev) is adopted. The old heading KT is kept for kT in energy units.

C15: The reintroduction of the heading WVE-LN, to be used when wavelength is given in place of EN, is adopted as proposed in WP 2001-4(Rev).

C16: Zero errors are not allowed in the COMMON or DATA table. If the value of an error is unknown, the respective data field must remain blank.

C17: The quantity NN,POL/DA/DE,,K as proposed in CP-E/002 is approved. *See Action A34 on the other polarization quantities.*

C18: All angular correlations are coded as DA/CRL, and the existing codes with FY/CRL and KE/CRL remain. The quantities proposed in Memo 4C-4/107 (WP 2001-7) are accepted with COR replaced by DA/CRL. *See also Action A35.*

C19: The case outlined in WP 2001-8 should be coded PR/PAR,DA,G instead of PAR/M-,DA,G.

C20: The new IAEA report codes proposed in WP 2001-9 are not adopted, the proposed codes NEACRP-L- for the report NEANDC(E)-NEACRP-L, and PHCL for the journal Physicalia were adopted. The code HIP has to be clarified *(Action A36).*

C21: For the coding of isobaric analog states the proposal 1 in Memo CP-C/281, which is equivalent to the proposal in Memo CP-C/264, is adopted (see WP 2001-11).

C22: As a temporary solution, the coding of pions as PIN+PIP+X in REACTION SF3 is permitted (see memo CP-A/107, WP2001-12). However, in addition the coding of PIN/PIP in SF7 is required.
The addition of pions to dictionary 27 is, at this time, not accepted *(see, however, Action A37).*

C23: The code PI for unspecified pions will be added to EXFOR Dictionary 29.

C24: A new quantity, dσ/dN (cross section differential by number of outgoing neutrons) (WP 2001-15) will be coded as SIG/DN. The independent variable is to be coded under the heading N-OUT.

C25: The new units for product yields proposed in WP 2001-14(Rev) are agreed. In addition the unit MB/PRD (millibarns per product particle) is introduced for the quantity proposed in WP 2001-15 *(Conclusion C24).*

C26: The new headings LVL-INI and LVL-FIN are introduced for those cases where the initial and final levels are given as additional information but not as independent variables (see WP 2001-16). (As independent variables, the existing headings E-LVL-INI, E-LVL-FIN are to be used.)

C27: The quantity PRE,AP/DA,FF as proposed in memo CP-E/001 (WP2001-22) is adopted.

Software development on relational database platforms

C28: It would be useful to have frequent meetings among the people involved in the collaboration on the development of the nuclear reaction database and the associated programs. One meeting could be arranged as part or contiguous to the NRDC meeting. For effective co-operation, a minimum of one additional working group meeting annually is advisable. The means of arranging such a meeting should be investigated.

RECOMMENDATION

The NRDC would like to stress the significance of the forthcoming Nuclear Data Conference in Tsukuba to all members and their organisations. An invited paper, authored by representatives of the four core centers will be presented at this conference. The talk will explore the current and future services provided by the Nuclear Reaction Data Centers. It is highly desirable that representatives from each of these core centers be present at the conference.

The NRDC also plan to have a stand at the conference for the demonstration of online services and products available on CD-ROM, particularly EXFOR/CINDA/data plotting. Appropriate staff are needed to allow fruitful use to be made of this opportunity to discuss its services with nuclear data users, including experimentalists and evaluators.

ACTIONS

General

A1: **(All)** To inform the NDS of any documents in the IAEA-NDS series which need to be made available online in PDF format.

A2: **(Lammer)** **(old A5)** To prepare the IAEA-NDS- document for the PC version (by Denschlag et al) of a program package by A.C.Wahl for calculation of fission yield distributions.

A3: **(All)** **(old A11)** To send contributions on frequently askeds questions regarding nuclear data issues to the NEA-DB who will then include these as a link from the NRDC web page.

A4: **(NEA-DB)** **(old A12)** To provide a link from the NRDC page to the Network document

A5: **All** **(old A13)** To provide a link from their home page to the NRDC page

CINDA and CINDA2001

A6: **NEA-DB** To review the CINDA2001 quantity codes given in the new dictionary 45 *(see also Conclusion C1).*

A7: **all CINDA centres:** To complete table of WP2001-28 (Journals covered for CINDA) and send it to Meinhart Lammer by 30 June 2001

A8: **NDS** To create working environment for area 4 CINDA database located at NDS

A9: **CNDC** To compile Chinese experimental works (journals and conference proceedings) for CINDA and send to NDS in Reader format.

EXFOR/CINDA Dictionary System

A10: **All** To propose revised format of Dictionary 27 (nuclides) well before the next meeting. (The goal of the reform is to reduce the frequency of updates of this dictionary while some automatic checking of the nuclides should remain possible).

A11: **McLane** To update the EXFOR manual and LEXFOR sections dealing with chemical compounds with the proposed new oxide codes (WP2001-10).

A12: **All** To ensure that they can use the "wild cards" in Dictionary 36 *(see Conclusion C9).*

A13: NDS To remove the restrictions "for photonuclear data (only)" from all dictionaries at their earliest convenience.

General EXFOR matters

A14: All To check/retransmit all entries included in the list of pending retransmissions by McLane distributed at the 2001 NRDC meeting.

A15: Dunaeva **(Old A29)** To make a benchmark test of Chukreev's code TEST-EXF vs. CHEX

A16: Tarkanyi **(Old A30)** To distribute updated list of references missing in EXFOR obtained in the framework of the CRP on Medical Radioisotope Production

A17: CPND centers **(Old A31)** To go through this list and communicate to Tarkanyi which works from their area of responsibility they will compile. Works not covered this way will then be free to be compiled by others.

A18: NEA-DB,NDS **(Old A32)** To convert remaining 60000 and 70000 series entries to proper EXFOR entries of area 2 and 3.

A19: All To delete all entries of the 80000 series from their local EXFOR data base.

A20: All **(Old A33)** In view of the poor statistics for EXFOR compilation of recent works, all centers should give higher priority to new works.

A21: McLane **(Old A34)** Send a memorandum of understanding about the compilation responsibilities resulting from the agreement with Phys.Rev.C to all participating centers.

A22: Dunaeva, Chukreev **(Old A35)** To try to establish an agreement with the publisher of Yadernaya Fizika similar to that between NNDC and Phys. Rev C.

A23: Maev To check with Varlamov on the status of the possible inclusion of Blokhin's compilation of emission spectra of photonuclear reactions in EXFOR (follow-up to old A36).

A24: NDS To make available the Word files of the EXFOR Systems Manual and the LEXFOR Manual on their FTP site in an appropriate subdirectory.

A25: All To send any comments on the above manuals to McLane before the 30th June 2001.

A26: McLane To update the manuals accordingly and send to NDS for inclusion on their FTP site prior to 31st August 2001.

A27:	**All interested**	To contact Liam Costello in order to obtain access to the NDS version of the CHEX code.
A28:	**Zerkin**	To investigate providing a version of the DANIEL library for use with the system-independent CHEX code, and to provide a version of the code library which interfaces with the new dictionaries. The subroutine names and calling parameters should remain unchanged.
A29	**McLane**	To provide a platform-independent version of the CHEX code using the system-independent library of dictionary subroutines resulting from Action A28.
A30	**Zerkin**	To rerun the list of multiple appearances of main references in EXFOR entries (WP 2001-20) taking into account superseded entries and deleted entries with subentry 1 remaining in the file.
A31	**All**	To correct those entries found to have errors which are given in WP 2001-19 and the revised version of WP 2001-20.
A32	**McLane**	To provide a list of data missing in EXFOR which is needed for the evaluation of alpha-alpha nuclei (that is nuclei with Z divisible by 2, A divisible by 4, e.g. 20Ne, 24Mg, 28Si, 32S) for astrophysical applications.
A33	**CPND centers**	To respond to this list and communicate to McLane which works from their area of responsibility they will compile.

EXFOR coding rules and dictionary changes

A34:	**McLane**	To clarify the questions raised in WP2001-6 on proposed Polarization quantities and update the proposed LEXFOR entry on Polarization.
A35:	**McLane**	To look into all types of 'correlations' and provide a more detailed LEXFOR entry and/or a new proposal.
A36:	**McLane**	To clarify the code HIP proposed in Memo CP-D/278 (WP 2001-9).
A37:	**All**	To consider and propose methods for coding fundamental particles in SF4, in particular negatively charged ones, e.g. negative pions.
A38:	**Babykina**	To send an example for the use of the code PART-OUT as proposed in Memo CP-A/108 (WP 2001-13).
A39:	**McLane**	To update the LEXFOR entry regarding the E-LVL headings, in particular with respect to the new headings LVL-FIN, LVL-INI.