Conclusions and Actions of the 2003 NRDC Meeting
and
General Actions of the 2002 NRDC Meeting *(see last page)*

CONCLUSIONS

General

C1 The NRDC Protocol (approved at the 2002 NRDC Meeting) is amended by adding item 9 on "Problematic entries":
NDS will create a new subdirectory of the open area NDSX4.TRANS for those problematic entries which were removed from a PRELIM transmission. These entries will be reviewed by the other centers and can be finalized at the next NRDC meeting.

C2 The next (full) NRDC meeting (4 days) is planned for the week following the Santa Fe Conference (i.e. starting 4 October 2004) in Brookhaven.

EXFOR/CINDA Dictionaries

C3 Dictionary 7 will be split into two: new dictionary 7 (conferences only) and dictionary 207 for books. The format will be unchanged.

C4 The particle dictionaries (EXFOR dictionaries 13, 28, 29, 33) will be unified also in EXFOR dictionaries (combined particle dictionary 33, as used already in archive dictionary).

C5 A new dictionary 236 will be created by V. McLane which will provide more space for code expansions and no longer contain the numerical equivalents for the REACTION subfields.

C6 A new dictionary 235 will be added containing work types for EXFOR and CINDA. (Note: present dictionary 35 contains similar information for REACTION SF9).

C7 The proposed dictionary 46 (not mentioned in WP2003-6), containing the correspondence between EXFOR quantities and (new) CINDA quantities, will be replaced by an additional column in the new dictionary 236.

C8 Numbering of dictionaries: The correspondence dictionary for old and new CINDA quantities will be dictionary 47, while the dictionary for CINDA Reader codes will be dictionary 52. The numbers of the other new dictionaries will be as indicated in WP2003-6.

C9   The dictionaries, including all new CINDA dictionaries, will be provided in all formats (Archive, TRANS, Daniel-backup). The backup dictionaries should be provided also in zipped form.

C10   The new nuclides dictionary 227 is approved in the format provided by McLane (Addition to WP2003-4) and a new Compounds dictionary 209 will be introduced.

CINDA and common CINDA/EXFOR items

C11   All Japanese CINDA entries (including CPND) will go to NEA-DB (by e-mail).

C12   The CINDA Protocol (**Revision** of WP 2003-25) is approved.

C13   The NEA-DB will print the CINDA2003 book (cumulative issue). NDS will send them the CINDA file for book production. The deadline for transmissions to be included is end of August 2003. NDS will inform the NEA-DB of the number of copies normally sold by IAEA.

C14   The following changes of the CINDA2001 format were approved:
- The quantity field will be in columns 24-26 (1 character less than before)
- The institute code will start with the area code in column 27
- The date of last update will be included on each record in columns 125-132.
- Comments will be shortened (from 40 in original proposal) to 38 characters

C15   The following new Reference types are introduced for both CINDA and EXFOR:
  A   Abstract of Conference
  K   Abstract of Journal
  X   Preprint
       A and K will replace * for Abstract (was used in CINDA only).
          The "Content" code proposed in WP 2003-5 is not introduced.
          Reference types P (Progress report) and S (Conference report) are
kept.

C16   Reminder: All reference codes in CINDA will be as in EXFOR, even in cases where there were differences in the past (some long journal, report and conference codes had shorter versions in CINDA).

C17   The proposal of WP 2003-5 for the conversion of MANY and FPROD, using Z=999 for both, is adopted.

C18   When converting from old CINDA, centers should be aware that spontaneous fission data must be in separate blocks from neutron fission data. The energy field must be checked for SPON so that the reaction will correctly be specified as (0,F).

C19 The revised schedule for the cooperation on CINDA as summarized in WP 2003-26 is agreed.

C20 The meeting notes that, since NSR will take over the compilation of theoretical works from CINDA, the inclusion of NSR into the network should be considered.

General EXFOR matters

C21 Both check programs CHEX and TEST-EXF are useful to the network. CAJAD is recommended to consider releasing the source code (and the code to update the dictionaries) to the network, to make sure that TEST-EXF will continue to be available and be maintained in the future.

Technical EXFOR matters

C22 When new codes in REACTION SF5 or SF 8 are introduced, the sequence of codes within a subfield should maintain consistency with other similar codes in dictionary 36.

C23 The dictionary 27 codes for fundamental particles are approved as given in the 3rd and 4th column of WP 2003-10 with the following modifications:
- 0-K0-0 will be used for neutral kaons, and
- –1 will be replaced by 1 in the Z field.

C24 The decision about a new lepton dictionary (memo CP-A/135, WP 2003-10) is postponed until it is needed for compilation.

C25 The process code TCC (Total charge changing, WP 2003-11) is approved.

C26 The proposal on Total Spin Transfer (WP 2003-13) is approved.

C27 The new formalism for correlated particles for REACTION SF7 (WP 2003-14) is approved using + as separator. This may be used also in EN-SEC.

C28 The proposal on Longitudinal Momentum (WP 2003-15, CP-C/313) is approved.

C29 The proposal of WP 2003-16 (Partial cross section for production of specified number of product particles) is approved. In addition, the definition of DN is changed to "differential with number of outgoing particles".

C30 As a consequence of the above, the coding of the quantity "Probability of emission of 'n' prompt fission neutrons" is changed to

(…,F)NPART,PR/NUM,NU

This replaces the coding proposed in WP 2003-17.

C31   The new quantities for secondary particle spectra are agreed as proposed in WP 2003-18.

C32   New formalism for DECAY-MON is agreed as proposed in WP 2003-19.

C33   The clarification on DIS and CON (WP 2003-20, CP-C/324) is agreed.

C34   The new coding for Transmission (WP2003-21) is agreed.

ACTIONS

General

A1	**All**	(Continuing) 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 will include establishment of contacts of project initiators with European, US and other centers and organisations interested in collaboration, cooperation or partnership.
A2	**Dunaeva**	(Continuing) Keep other centers informed on the status of the proposed project.
A3	**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.
A4	**Zerkin**	Discuss with Slavutytch Nuclear Data Bank joining the migration project rather than pursuing VMS upgrades
A5	**NDS**	Put new draft of "Citation Guidelines" on NDS open area.
A6	**All**	(Standing Action) Send any changes or updates of the "Citation Guidelines" to NDS
A7	**CAJAD, CNDC, JAERI, JCPRG, ATOMKI, CNPD, KAERI**	Send to NDS the information about manpower dedicated to activities for the network (for Annex 2 of the network document INDC(NDS)-401) by 31 July
A8	**All**	As soon as possible propose potential participants of compilation workshop (Vienna, December 2003) to NDS.

A9	**NDS**	Take lead in preparing a common paper of the core centres for the Nuclear Data Conference in Santa Fe, 26 Sept. – 1 Oct. 2004
A10	**All**	Provide names of participants of next year's NRDC meeting by the end of December to both NNDC and NDS.

EXFOR/CINDA Dictionaries

A11	**McLane, Schwerer**	Decide on a procedure for updating the new Nuclides Dictionary 227
A12	**McLane**	Provide file of new Nuclides Dictionary 227 to NDS.
A13	**NDS**	(Continuing) Remove the restrictions "for photonuclear data (only)" from all dictionaries at their earliest convenience.
A14	**Zerkin,McLane**	Agree on format for the new quantities dictionary 236 and submit to Schwerer
A15	**NDS**	Finalize and transmit the new CINDA dictionaries (including Dictionary 52 / Reader codes).

CINDA and common CINDA/EXFOR items

A16	**NEA-DB**	Send final list of area 2 CINDA reader codes to NDS
A17	**NEA-DB**	(Continuing) Submit the area 2 CINDA neutron master file in the new format to NDS and NNDC.
A18	**NEA-DB**	(Continuing) Send to NNDC the area 2 CINDA master file in exchange format for conversion to the new format.
A19	**NNDC**	(Continuing) Compare the two versions of area 2 master file as outlined above.
A20	**CNDC**	Compile all Chinese experimental works (journals and conference proceedings) for CINDA and send to NDS in Reader format. The first entries will be sent in July 2003.
A21	**McLane**	Produce revised CINDA 2001 Manual
A22	**CINDA centers**	(WP 2003-8, Section 2): 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

A23	**McLane, NEA-DB, CJD**	Check and confirm/clarify report codes given in WP 2003-8, Sections 4 and 5
A24	**CINDA centers**	Correct errors in report coding, as listed in Sections 6 and 7 of WP 2003-8
A25	**All CINDA centers**	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.

General EXFOR matters

A26	**All**	(Continuing) Check/retransmit those entries from the list of pending retransmissions (distributed by McLane at the 2001 NRDC meeting) which still need correction
A27	**CPND centers**	(Continuing) Check the list of references identified as missing in EXFOR during the CRP on Medical Radioisotope Production, and distributed by Tarkanyi; communicate with Tarkanyi and NDS concerning which items they will compile from their area of responsibility. References not covered in this way will then be available for compilation by others.
A28	**McLane**	Check whether conversion of EXFOR 60000 series was finished and communicate result to NEA-DB
A29	**NEA-DB, NDS**	(Continuing) Convert any remaining 60000 and 70000 series entries to proper EXFOR entries of area 2 and 3.
A30	**All**	All centers should give high priority to compiling new publications.
A31	**McLane**	(Continuing) Send to all participating centers a memorandum of understanding that defines compilation responsibilities resulting from the agreement with Phys.Rev.C (on EXFOR archiving of experimental data published in Phys.Rev.C).
A32	**Dunaeva, Chukreev**	(Continuing) Once the agreement between NNDC and the publishers of Phys.Rev.C has been put into operation, try to establish a similar agreement with the publisher of Yadernaya Fizika.

A33 NDS   (Continuing) Compare EXFOR master files received from other centres with the NDS file, and as far as possible correct them (with help of other centers).

A34 NDS   (Continuing) Make available to all centres the "final" EXFOR master file, together with a matching set of dictionaries.

A35 JCPRG   (Continuing) After upgrading, send HENDEL (Web-based EXFOR editor) to the other centres for testing and comments.

A36 All   Give priority to data sets that NNDC requests regarding the compilation of alpha-induced reactions on "alpha-nuclei" (O-16 through Ti-44).

A37 All   Compile with priority data related to the new Co-ordinated Research Project on "Nuclear Data for Production of Therapeutic Radionuclides" (see WP 2003-28).

A38 McLane   Make available a platform independent version of the ORDER program.

A39 All   The following centers volunteer to participate in a test of EXFOR coverage completeness for a few main journals for one "test" year, 1998. Included will be neutron data and CPND up to 1 GeV, excluding projectiles heavier than alpha. Results will be sent to NNDC and NDS before the next meeting.
                       NNDC: PR/C
                       ATOMKI: NIM/B
                       CAJAD: ARI, RCA
                       VNIIEF: YF (=PAN)
                       NEA-DB: EPJ/A
                       NDS: NP/A
                       JCPRG: PR/B, PRL

Technical EXFOR matters

A40 McLane/   (Continuing) Improve the LEXFOR entry on 'Correlations'
Schwerer   with respect to the clarifications requested in WP 2002-5.

A41 McLane   (Continuing) Correct the LEXFOR entry for the proposed coding of 4-momentum transfer (WP 2002-6).

A42 McLane   (Continuing) Check whether there is a LEXFOR entry on the

process code FUS (total fusion, Dictionary 30); if not, provide such an entry.

A43 McLane   (Continuing) Try to resolve the problems in order to define the various polarization quantities for LEXFOR and dictionary 36 consistently.

A44 Schwerer   (Continuing) Delete RCL from dictionary 33.

A45 McLane   Produce a list of quantities related to Product Yields and Thick Target Yields with a detailed explanation and including reference to an appropriate paper as an example, and produce revised LEXFOR entries on them.

Miscellaneous

A46 Lammer/NDS   (Continuing) Include the PC program package for calculation of Fission Yield distributions by A. C. Wahl in the NDS data collection.

General Actions of the 2002 NRDC meeting

A1: All   **(Continuing)** 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.

A2: Dunaeva   **(Continuing)** Keep other centers informed on the status of the proposed project.

A3: All   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.

A4: NDS   Assist the Slavutych Laboratory, Ukraine, in upgrading their NDIS (Telnet-based nuclear data system), which was not upgraded since 1999.

A5: NDS   Consider organizing an EXFOR compilers' workshop, either separately or adjacent to next years' Technical NRDC Meeting.

A6: All   Check the "Citation Guidelines" document (available from NNDC and NDS websites) and send updates to NDS who is taking over its maintenance.