#### Nuclear Data Section International Atomic Energy Agency P.O.Box 100, A-1400 Vienna, Austria

#### Memo CP-D/480

Date:18 January 2007To:DistributionFrom:O. Schwerer

**Subject:** Compilation responsibilities as revised 2006

Attached is the summary of the compilation scope and responsibilities as discussed and revised at the 2006 NRDC meeting. It also includes some corrections concerning the journal scanning coverage which were clarified in e-mails after the meeting.

This summary is included also in the meeting report INDC(NDS)-0503; it is distributed herewith also as a CP memo for easy reference.

Distribution:

oblozinsky@bnl.gov vml@bnl.gov drochman@bnl.gov nordborg@nea.fr hasegawa@nea.fr manokhin@ippe.obninsk.ru samaev@obninsk.ru mmarina@ippe.ru blokhin@ippe.obninsk.ru feliks@polyn.kiae.su chukreev@polyn.kiae.su S.Dunaeva@iaea.org taova@expd.vniief.ru varlamov@depni.sinp.msu.ru chiba@earth.sgu.ac.jp kato@nucl.sci.hokudai.ac.jp ohnishi@nucl.sci.hokudai.ac.jp ohbayasi@meme.hokudai.ac.jp yxzhuang@iris.ciae.ac.cn gezg@iris.ciae.ac.cn hongwei@iris.ciae.ac.cn

tarkanyi@atomki.hu stakacs@atomki.hu katakura.junichi@jaea.go.jp vlasov@kinr.kiev.ua kaltchenko@kinr.kiev.ua ogritzay@kinr.kiev.ua nklimova@kinr.kiev.ua volee@kaeri.re.kr jhchang@kaeri.re.kr volee@kaeri.re.kr ohtsuka@nucl.sci.hokudai.ac.jp A.Nichols@iaea.org A.Mengoni@iaea.org schwerer@iaeand.iaea.org v.zerkin@iaea.org henriksson@nea.fr exfor@nea.fr ganesan@barc.gov.in

# **Review of Compilation Scope and Responsibilities**

## **Review of Compilation Scope**

(as updated at the 2006 NRDC Meeting and finalized on 30 November 2006)

### **General categories**

Category	Data type
A - Compulsory compilation	All experimental data for incident projectile energy $\leq 1 \text{ GeV}$ and projectiles with A $\leq 12$ , unless listed in Cat. B; and data measured in inverse kinematics, which fulfill these criteria when target and projectile are exchanged.
	For photonuclear data compilation is highly recommended. Completeness should be achieved in particular for photoneutron and photofission data.
B - Voluntary compilation	Neutron- or charged-particle data with $E_{in} > 1$ GeV; Heavy ion data for projectiles with A > 12; Vector and tensor polarization data; Kerma factors (integral data only)
C - Separate transmission	Other data types, as specified in the table below

## **Separate Transmission Series**

CIC *)	Centre	Data types
J	JCPRG	Charged-particle nuclear data for projectiles with nonpositive baryon number <i>from all parts of the world</i> .
V (extinct)	NDS	Evaluated neutron data

\*) Centre Identification Character

### **Review of Compilation Responsibilities**

(as updated at the 2006 NRDC Meeting)

Centre	Basic responsibility	Additional compilation
NNDC	Neutron data and CPND from USA and Canada	Photonuclear data (coordinated by CDFE)
NEA-DB	Neutron data from NEA countries	CPND (coordinated by NDS)
NDS	Neutron data and CPND from "rest of the world" (areas not covered otherwise)	
CJD	Neutron data from former Soviet Union (except Ukraine)	
CAJAD	CPND from former Soviet Union (except Ukraine)	CPND from "rest of the world" (coordinated by NDS)
CDFE	Photonuclear data	
CNDC	Neutron data and CPND from China (entries submitted through NDS)	
JCPRG	CPND and photonuclear data from Japan	CPND for projectiles with nonpositive baryon number from all parts of the world.
ATOMKI	CPND from ATOMKI and data measured in cooperation with Juelich or with Free Univ. Brussels (entries submitted through NDS)	
UkrNDC	Neutron data and CPND from Ukraine (entries submitted through NDS)	Photonuclear data (coordinated by CDFE)
RFNC	CPND on light nuclei, coordinated with other centers	
Indian compilation activity <sup>*</sup>	Neutron data and CPND from India, coordinated and assisted by NDS	

Special case: Two or more institutions from different service areas:

If two institutions from different service areas are involved, the primary institution defines the responsible centre. See **LEXFOR**, **Institutes** for definition of primary institution.

### **LEXFOR / Institutes /Compilation Responsibility**

If two or more institutions of different service areas are involved, the following rules shall determine the centre responsible.

- 1. The institute containing the facility used, if at least one of the authors belongs to that facility, should determine the center responsible.
- 2. If an itinerant group uses the facility of another institution, the institute of the primary investigator of the itinerant group shall determine the centre responsible.

<sup>\*</sup>coordinated by Dr. S. Ganesan, BARC., Mumbai, India

3. In an ambiguous case, the institution from which one is most likely to obtain further information on the experiment should be used to determine the centre responsible.

If a publication reports the results of different experiments undertaken at different laboratories or measured at one laboratory and subsequently analyzed at another laboratory, and either the laboratories are in different areas, or the incident-projectile is of a different type (*i.e.*, neutron, charged particle, or photon), the results are compiled in separate entries by the centre responsible for the data. The entries may be linked using the STATUS code COREL; see **Status** (Interdependent Data).

### 2004 NRDC Meeting, Conclusion C17:

If several institutes and several experimental facilities are involved in an experiment, the first author of the paper will determine the Centre responsible for the EXFOR compilation.

## Consolidated Summary:

If several institutes of different service areas are involved, the following rules determine the compilation responsibility:

- 1) The institute of the facility used, if at least one author is from this institute. If an itinerant group used the facility, the main investigator of this group determines the centre responsible.
- 2) If facilities of different laboratories from different service areas are used, the institution from which it is most likely to obtain further information on the experiment should determine the centre responsible. This will normally be the corresponding author, or, if there is some doubt, the first author of the publication. In all such cases the other affected centre and NDS must be contacted before compilation to avoid duplication.
- 3) If separate experiments from different service areas with clearly separated results are reported in the same paper, the results should be compiled as separate entries. This separation is obligatory for different projectile types (neutron, charged particle, photon). In all such cases cross references to the other entry must be given.

### Coverage of conferences (added at 2006 NRDC meeting)

To speed up the coverage of conference proceedings, the following steps are taken:

- If the proceedings were published in a scanned journal, they will be scanned by NDS;
- If the proceedings are published in a separate book, the responsibility for scanning will be as follows:
  - if a staff member of one of the NRDC Centres is among the participants, this Centre will send to NDS a list of references relevant to EXFOR within two months after the conference;
  - if no data centre participates in the conference, NDS takes the responsibility to check once per month the AIP website and NDS can ask any Centre to scan these proceedings.

#### Coverage of major journals

Coverage of major journals by data centre (*updated November 2006*):

PR/C	NNDC
PRL	NNDC
NSE	NNDC
ARI	NDS
NP/A	NDS
CNP	NDS
NIM/A and B	NDS
PL/B	NDS
YF	CAJAD
EPJ	CAJAD
IZV	CNPD
YK	CJD
ANE	NEA
RCA	NEA
AEJ	JCPRG
NST	JCPRG
NSTS	JCPRG
AHP	ATOMKI
JRN	ATOMKI
JRN/L	ATOMKI

Each responsible Centre will rapidly assess the contents of an issue of the above journals, and communicate rapidly with relevant compilation centres and NDS to point out their need to compile as soon as possible. *Each responsible Centre will check this list on the Compilation Status website.* 

These lists of references must be written in a way that makes it clear which Centre is responsible for compilation. Therefore, we propose the following form for the Coverage control system:

- 1. Journal name, volume, issue, page, year, laboratory. Or it can be NSR code and laboratory, data type (neutron / charged particle / Photonuclear), *CINDA code from dictionary 45 and representation of the data (table or graphic).*
- 2. NDS should receive these lists within one month after issue of publication.

## Coverage of Chinese journals by CNDC (added at 2006 NRDC meeting)

CNDC agreed to cover the following Chinese journals on a regular basis, and to compile all relevant papers in EXFOR:

Dictionary 5 code	Journal title	Language
CST	Atomic Energy Science and Technology	Chinese
NPR (to be added)	Nuclear Physics Review	Chinese
РНЕ	High Energy Physics and Nuclear Physics	Chinese
HFH	Journal of Nuclear and Radiochemistry	Chinese
NTC	Nuclear Techniques	Chinese
CPL	Chinese Physics Letters	English
CNDP	Communication of Nuclear Data Progress	English
CNST	Nuclear Science and Techniques	English
ASI	Acta Physica Sinica	English
СРН	Chinese Physics	English

#### Speeding up compilation of new publications

- 1. For neutron data, the responsibility for compilation in areas 1, 2, 3, 4 should be clear (remember that neutron data from Japan belong to area 2). Nevertheless, the responsible centres should inform NDS about their compilation plans.
- 2. For CPND, the reference has to be booked for compilation by the responsible Centre within one month after publication (or after the centre was informed by another centre covering the particular journal). Usually, NDS sends the list of publications that are relevant for compilation within two weeks after publication.
- 3. To avoid duplications, it is preferable to send the plan of compilations to NDS in the form: reference, EXFOR number, laboratory, where experiment was done.
- 4. The references relevant to EXFOR have to be included in EXFOR within six months after publication. If there is no possibility to receive data from the author (no reply to e-mail), the compiler can digitize curves and point out under STATUS that there was no response from the author.
- 5. After this period, NDS will take the responsibility for compilation of such papers (or assign to another centre). Any nuclear data centre is free to send their own compilation proposals about the list of delayed articles after six months. This list is available from the EXFOR compilation control webpage (see column "Any").
- 6. Photonuclear data are coordinated by CDFE. At present, apart from CDFE, only NNDC, NDS *and JCPRG* have photonuclear data series (L, G, *and K*, respectively). All correspondence about compilation of photonuclear data should go to CDFE with copy to NDS.