Free Entry Numbers in EXFOR

(M. Mikhaylyukova, V. Pronyaev, 4C-4/207, 2014-01-22, 2014-04-29 updated)

A map of free Entries (Entry number is not used in now-day EXFOR) was prepared by V.Zerkin and is presented in web-site

https://www-nds.iaea.org/exfor-master/x4compil/x4map.htm

They are marked as "Empty: #number".

Part of this map for area 4:

491) 40501/2 superseded 1977, B.I.Fursov J,AE,43,(4),261,197710 TRANS.4153:20110930	492) 40502/2 pt:22 1976, Ju.V.Ryabov J,AE,40,(4),339,197604 TRANS.4138:20060816	Empty: 40503	493) 40504/12 pt:11 1975, Yu.P.Gangrskiy C,75KIEV,5,245,197506 TRANS.4160:20130621	494) 40505/7 pt:37 1977, A.P.Degtyarev C,77KIEV,2,57,197704 TRANS.0000:20050926
495) 40506/2 pt:39 1977, B.I.Fursov J,AE,43,(3),181,197709 TRANS.4139:20060816	496) 40507/5 pt:128 1978, V.M.Kuprijanov J,AE,45,(6),440,7812 TRANS.0000:20050926	497) 40508/14 pt:377 1980, M.V.Savin J,AE,49,(4),236,198010 TRANS.0000:20050926	498) 40509/5 pt:156 1979, V.M.Kupriyanov J,AE,46,(1),35,197901 TRANS.4159:20130410	499) 40510/4 pt:40 1980, A.A.Van`kov J,AE,48,(6),377,198006 TRANS.4152:20110623
500) 40511/2 pt:63 1980, E.M.Kozulin C,80KIEV,2,25,8009 TRANS.0000:20050926	501) 40512/9 pt:302 1979, T.Bakalov R,JINR-P3-12796,1979 TRANS.4148:20100209	Empty: 40513	502) 40514/16 pt:71 1975, G.P.Dolya C,75KIEV,4,173,197506 TRANS.0000:20050926	503) 40515/7 pt:35 1980, V.M.Bezotosnyj C,80KIEV,2,21,8009 TRANS.0000:20050926

According to EXFOR manual, page 8.2:

"If an entire entry is to be deleted, NOSUBENT records must be included for each subentry that has been previously transmitted, **except for subentry 1. Subentry 1 will be kept** on the file for the record.

…

An entry is made under HISTORY, with the date of deletion and the code D. Free text information giving the **reason for the deletion must be included.**
The accession number of a deleted entry may never be used for another data set."

This rule means, that if an Entry was inserted in EXFOR, then Subent 001 has to be saved in any case. Only data Subents 002-… could be deleted.

Taking in attention this rule, centers started to use these free numbers for new compilations.

But at January 2014 Naohiko and me found, that some Entries (given as Empty) were presented in EXFOR old (1995 year) archive file. This means, that they were used already in EXFOR in past.

For area 4 (CJD responsibility) these numbers have been checked in the available EXFOR archive files (Naohiko) and in now-day CINDA (Marina).

The result is:

1) 40100, 41269, 41289 are not found in available EXFOR archive and are absent in CINDA.
2) 40015, 40115, 40308, 40384, 40626, 40701 are found in EXFOR archive, but are absent in CINDA.
3) 40217, 40270, 40395, 40435, 40494, 40503, 40513 are found in EXFOR archive and are present in CINDA.

4) 41573 is really free, reserved for new V.Shorin's (A.Alekseev) data. (this Entry was inserted in EXFOR already in trans 4162).

Following EXFOR rule, CJD will restore EXFOR Entries mentioned in 2) and 3).
Also CJD will make additional attempt to check Entries mentioned in 1) in old transes and old master files.

As of 29 April 2014:
40503 was included in prelim.4163 –
      - 10 Subents were restored and corrected,
      - 45 new data Subents were added with Tables data and digitized data.

<u>Proposals for centers:</u>
1. **Check presence of all Empty numbers in CINDA and available EXFOR archive files (master files and transes).**
2. **<u>Stop to use these Empty numbers before final checking will be done.</u>**
3. **NDS as coordinating center can provide archive files of EXFOR and CINDA to the centers for checking.**
4. **Restore in EXFOR the Entries which will be found in CINDA and/or EXFOR archive files (master files and/or transes):**
    - **Subent 001, if this Entry has to be deleted really,**
    - **Subent 001 and data Subents, if this Entry has to be compiled in EXFOR.**

Addendum (N.Otsuka, 2014-04-30)
EXFOR Entry Numbers in Manual CINDA Records and Missing in EXFOR Master

1. All manual CINDA records including `4,EXFOR` were extracted from the latest CINDA Master (CINDA-2014-01-27.zip).

2. Existence of the EXFOR entries extracted above were then checked against the latest EXFOR Master (EXFOR-2014-04-22.zip).

3. The following entries were found in CINDA but missing in EXFOR:

   <u>13877</u>, 13906

   20623, 21626, 21876

   30019, 30091, 30125, 30227, 30494, <u>30533</u>, <u>30535</u>, <u>30549</u>, <u>30929</u>, 31160, <u>32505</u>

   40115, 40217, 40270, 40384, 40395, 40435, 40494, 40503, 40513, <u>42423</u>

4. The underlined entry numbers are not listed in Appendix C of WP2014-32, namely they are not seen in various archives available at NDS.

Entry	Lab.	Reference	Author	Remark
13877	1USALAS	R,LA-158,1944	Anderson+	missing in EXFOR?
30533	3INDITK	C,77PUNE,2,236,1977	Nadkarni+	EXFOR 30509?
30535	3INDTRM	C,79MADRAS,2,232,1979 A,79JUELICH,,C22,1979 P,BARC-1126-10,1981	Ramaswami+ Iyer+ Iyer	EXFOR 30575?
30549	3AULAUA	P,AAEC/AP/PR-81,1981 C,79JUELICH,2,129,1975	Lang+ Walsh+	missing in EXFOR?
30929	3CPRAEP	R,HSJ-82291,6,1982	Cui	missing in EXFOR?
32505	3ARGCAB	W,DAWIDOWSKI,2000 J,NIM/B,168,462,2000	Blonstein+ Blostein+	EXFOR 31504?
42423	4RUSFEI	J,YK,2001,(1),80,2001 C,2001DUBNA,,225,2001	Isaev+ Isaev+	EXFOR 41423?