

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

**Memo CP-D/674**

**Date:** 16 December 2010  
**To:** Distribution  
**From:** N.Otsuka  
**Subject:** Alteration flag in Dictionary 34 (TRANS.9101)

I was informed by CJD that the general quantity modifier AV is defined with an alteration flag O (obsolete) in the dictionary 34 of TRANS.9101. I compared the dictionary with the corresponding archive dictionary. The result is summarized below (in the sequence of lines in the archive dictionary):

Code	Flag	
	Archive dict.	Trans dict.
...	...	...
ASY	TRA	blank
AV	TRA	O (!)
AXX	OBS	O
AYY	OBS	O
AZZ	OBS	O
BRA	TRA	blank
...	...	...
DT	TRA	blank
G	TRA	O (!)
IPA	OBS	blank (!)
K	TRA	blank
...	...	...
TAP	TRA	blank
TM	TRA	O (!)
TRN	OBS	blank (!)
TST	TRA	blank
...	...	...

We observe the computer code for conversion from the archive dictionary to trans dictionary (DAN2X4) wrongly translated some flags in the Archive dictionary to the Trans dictionary.

Because the DAN2X4 is a Fortran code and can run on VMS machines only, I wrote a separated small program which reads alteration flags from the archive dictionary 34 and correct the DAN2X4 output. I will use this program for future trans dictionary distribution.

Note that the checking code (ZCHEX) uses another dictionary (backup dictionary) and it is not involved in this problem.

## Example of procession (TRANS.9101)

```
% ./zorder-trans.pl
Please input file
trans.9101
Flag O is added:
    parallel to beam direction in scattering plane      30000034000250
Flag O is removed:
    G          times statistical weight factor        3000003400034
Flag O is added:
    IPA         integrated over partial angular range 30000034000350
Flag O is removed:
    TM          per 1 MeV target thickness (for thick target yields) 3000003400089
Flag O is added:
    TRN         Transmission                         30000034000900
Flag O is removed:
    AV          Average                            3000003400113
%
```

### Distribution:

blokhin@ippe.ru	nrdc@jcprg.org
cgc@ciae.ac.cn	oblozinsky@bnl.gov
chiba@earth.sgu.ac.jp	ogritzay@kinr.kiev.ua
claes.nordborg@oecd.org	otto.schwerer@aon.at
emmeric.dupont@oecd.org	pronyaev@ippe.ru
fukahori.tokio@jaea.go.jp	r.forrest@iaea.org
ganesan@barc.gov.in	samaev@obninsk.ru
gezg@ciae.ac.cn	s.babykina@polyn.kiae.su
hongwei@ciae.ac.cn	scyang@kaeri.re.kr
jhchang@kaeri.re.kr	s.simakov@iaea.org
j.roberts@iaea.org	stakacs@atomki.hu
kaltchenko@kinr.kiev.ua	stanislav.hlavac@savba.sk
katakura.junichi@jaea.go.jp	sv.dunaeva@gmail.com
kato@nucl.sci.hokudai.ac.jp	taova@expd.vniief.ru
kiralyb@atomki.hu	tarkanyi@atomki.hu
l.vrapcenjak@iaea.org	varlamov@depni.sinp.msu.ru
manuel.bossant@oecd.org	vlasov@kinr.kiev.ua
manokhin@ippe.ru	vmclane@optonline.net
mmarina@ippe.ru	v.semkova@iaea.org
mwberman@bnl.gov	v.zerkin@iaea.org
nicolas.soppera@oecd.org	yolee@kaeri.re
nklimova@kinr.kiev.ua	zhuangyx@ciae.ac.cn
n.otsuka@iaea.org	