

MEMORANDUM 4C-2/25

From: H. Potters
Subject: Proposals, answers to memos

27th March 1972

A. Proposals

1. EXFOR-efficiency

At last I am able to find time to set myself down in order to decrease the EXFOR efficiency (ϵ_{X4}) to be defined as

$$\epsilon_{X4i} = \frac{SW_i}{MP_i} \quad (i = 1, 2, 3, 4, 9)$$

where SW is the number of subworks transmitted, MP is the number of written pages in EXFOR memos and i is the centre number or 9 (for the overall efficiency). The calculations gave rise to the table added as an appendix to this memo.

2. Date of REFERENCE

We would like to propose the following modification :

The last subfield should be yymmdd (year, followed by month and day, two digits each). The year is compulsory, the month should be given if known, and the day is completely optional.

Reason: This was the only exception in EXFOR where the date field was not complete. There is a tendency by coders to put the full date (e.g. of a private communication) as they do at HISTORY. Why not let them do so, as it does not commit anybody else? The same is valid for the third and fourth fields for the STANDARD (see memo 4C-2/26, D.5).

3. Quantity modifiers meaning multiplication with a factor

It occurs several times (30069 003,005; 20033 005,009; 20087 002,003) that a cross-section has been given as sigma times abundance or branching ratio. There are four solutions :

- (a) Add modifiers A (for abundance) and B (for branching ratio) to dictionary 12. This is consistent with modifiers like AG, 2AG.

- (b) Add modifier FCT meaning: times factor explained in free text.
- (c) Continue to use the DRT modifier.
- (d) Use no modifier at all but explain in free text.

We will agree with any solution except (c).

4. Statistical weight factor

Following our memo 4C-2/21, point 7, last paragraph (statistical weight factor) we give the reference: 70 Helsinki, Vol. 1, p. 513, where in table IV instead of J, g is given.

5. Modification to dictionaries

(a) Dictionary 3 (INSTITUTE)

Change:

2FR BOR (CEA+UNIV. OF BORDEAUX, TALENCE, GIRONDE)

2GERFRK (J.W.GOETHE UNIV., FRANKFURT+INSTITUTE FUER KERNFYSIK, UNIV. FRANKFURT)

2JAPYOK (RIKKYO (ST.PAUL) UNIV., YOKOSUKA AND TOKYO)

(b) Dictionary 5 (JOURNALS)

Add:

PSC (PHYSICA SCRIPTA) PHYSICA SCRIPTA. 2 SWD

Extinct:

AF (ARK. FYS) ARKIV FOER FYSIK. 2 SWD.

PSC comes in the place of AF from 1970 on.

B. Answers to memos

6. 4C-4/16

We have a convention to use the REL modifier in this case. See, however, our remarks in memo 4C-2/26, point C.9.

7. 4C-3/49 (Note to programmers) and its answer in 4C-1/21

We vote for the "simple sensible rule". Some simple character manipulation in the ISO-QUANT part of the checking programmes (which still has to be written anyway) can throw out the REL and DRT modifiers. No objection to the proposed dictionaries.

8. 4C-3/52, part 1

(a) Point 27: We did not amend memo 4C-3/43; we asked some questions, as the formulation does not seem very clear to us.

(b) 4CM/VII/16 at 32

The X under EXFOR Manual cannot be removed (see memo 4C-2/26, point D.3(c)).

9. 4C-3/52, part 2, point (a)

(a) Quite a lot of the data we saw cannot be renormalised by multiplying with a factor. More details about the normalisation procedure are necessary.

(b) In cases where you can simply multiply, we can distinguish between tables with one normalisation value and a point-by-point normalisation.

In the latter case we will always put the standard in the table. In the first case it is as easy to give two numbers (old and new standard) as one in your computer input (the old standard has to be checked against literature anyhow). So we want to leave it to the discretion of the compiler whether he puts the standard in free text or in COMMON or DATA, as standard does not define the data.

10. 4C-3/52, part 2, points (c), (d), (e)

(a) Point (c)

Okay; for our comments on half-lives see memo 4C-2/26, point C.18.

(b) Point (d)

We agree with what is said in memo 4C-1/21, page 5 and 6.

(c) Point (e)

See our memo 4C-2/27, 30075 005-007, General.

11. 4C-1/21

We agree with the general philosophy of this memo and with most of its points. Two remarks :

(a) Page 2, last paragraph

Okay, drop RATIO and OTHER. OTHER was originally proposed by NDS (4C-3/33) to represent standards the reaction type of which did not belong to the scope of EXFOR. If we drop it we have to allow for purely free text under STANDARD.

(b) Page 6, Miscellaneous

We made the proposal for EN-RES-ERR in memo 4C-2/20 for consistency reasons. We would not like to force NNCSC to change their old data. A certain tolerance towards the way the large number of old data have to be entered into EXFOR seems a practical policy to us.

Distribution

A. Abramov (5 copies)
S. Pearlstein (5 copies)
J. Schmidt (5 copies)
CCDN

APPENDIX

i	Centre	Last tape	Last memo	Efficiency
1	NNCSC *	1005	1/22	595/81 = 7.3
2	CCDN	2005	2/28	989/95 = 10.4
3	NDS †	3005	3/53	831/141 = 5.9
4	CJD	4003 §	4/18	59/22 = 2.7
9	Overall			2474/332 = 7.5 ¶

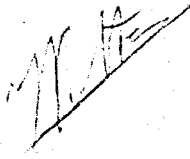
* Including ^{FO} transmissions.

† Excluding memos 3/17, 3/18, 3/40, 3/41 and the first half of 3/43, being general documents, of which we are all guilty. Memo 3/23 was written on account of NNCSC.

§ Tape 4002 is still missing.

¶ If somebody wants to include the general documents here he has to count the pages

MEMORANDUM 4C-2/25

From: H. Potters 1. EXFOR-efficiency

At last I am able to find time to set myself down in order to decrease the EXFOR efficiency (ϵ_{X4}) to be defined as

$$\epsilon_{X4_i} = \frac{SW_i}{MP_i} \quad (i = 1, 2, 3, 4, 9)$$

where SW is the number of subworks transmitted, MP is the number of written pages in EXFOR memos and i is the centre number or 9 (for the overall efficiency). The calculations gave rise to the table added as an appendix to this memo.

APPENDIX

i	Centre	Last tape	Last memo	Efficiency
1	NNCSC *	1005	1/22	595/81 = 7.3
2	CCDN	2005	2/28	989/95 = 10.4
3	NDS †	3005	3/53	831/141 = 5.9
4	CJD	4003 §	4/18	59/22 = 2.7
9	Overall			2474/332 = 7.5 ¶

* Including ³transmissions.

† Excluding memos 3/17, 3/18, 3/40, 3/41 and the first half of 3/43, being general documents, of which we are all guilty. Memo 3/23 was written on account of NNCSC.

§ Tape 4002 is still missing.

¶ If somebody wants to include the general documents here he has to count the pages