Memo 4C-3/181

To: Distribution

From: H.D. Lemmel

Subject: Manual update

Reference: 4C-1/94 and 4C-1/95 of 5 Oct 1976

Reply to 4C-1/94

Memo 4C-3/153 was surely not an NDS-internal manual update, but explicitly a reply to 4C-1/68 requesting proper 4C-memos for Manual corrections. Thus it should have been taken care of for the Manual update.- O.K., that's where the misunderstanding was. I am sorry. It may still be worth while to review 4C-3/153 since it was based on a thorough survey, though a few items may be superseded meanwhile.

Re page III.4 and elsewhere: I guess we shall submit a proposal that Exfor entries and Dictionaries should under no circumstances be transmitted within the same file, in order to bring the Manual into agreement with generally adopted practice. (We believe that this can represent a valid argument, contrary to NNCSC's statement on page 2 of 4C-1/94.)

re page IV.2: We see no difference in the treatment of free text under ISO-QUANT resp. STANDARD, in principle.

re page VIII.11 item 5) on multiple report-codes: We agree to adding the proposed sentence, which is quite important for consistency with Cinda. However, we maintain that the rule about coding more than one identification of the same document, should be changed from a "must" to a "can" rule. Including NNCSC, this rule has not been followed consistently and we see no reason to enforce it.

Reply to 4C-1/95 and item VIII.24 HALF-LIFE of 4C-1/94

It would have been helpful to update the Manual page VIII.24 with the agreements reached so far (see attachment), in order to avoid repeating earlier discussions. The understanding of NNCSC that the data-heading keyword HL acts as an independent variable, is certainly not correct. See page VIII.21a.

We agree to adopting the keyword DECAY-DATA as used for CPND Exfor. The corresponding Manual entry will soon be submitted within the CPND Supplement to the Exfor Manual.

This, however, does not relieve NNCSC from updating page VIII.24 on HALF-LIFE.

Attachment

Distribution: Clearance: J.J. Schmidt

S. Pearlstein, NNCSC   NDS: P.M. Attree
L. Lesca, NDCC   H.D. Lemmel
V. Manokhin, CJD   R. Lessler
                                 A. Lorenz
                                 K. Okamoto
                                 J.J. Schmidt
                                 O. Schwerer
                                 P.M. Smith
                                 R. Yaghubian
                                 file

<u>HALF-LIFE</u> This keyword is used to explain, to which nucleus a half-life value refers which may be given in the COMMON or DATA section. The coded information given under this keyword in parentheses, repeats the data-heading keyword used in the COMMON or DATA section, and specifies the relevant nucleus (see Example 17).

If more than one half-life is given, the relevant nuclei <u>must</u> be coded under this keyword. If only one half-life value is given under the data-heading keyword HL and no explanation is given under this keyword, then the half-life of the residual nucleus is meant.

See also in Lexfor under Isomeric States.

The free text must include the source of the half-life value.

Half-life values in Exfor entries serve a double purpose: they may define a metastable state; and they may be, like a standard, basic parameters for deducing the cross-section value from the experiment.

Consequently, the half-life should be coded in computer-intelligible form

-   whenever a code indicating a metastable state occurs in target-nucleus, quantity or residual nucleus

-   when target nucleus or residual nucleus are not stable and their half-life is an essential parameter in the analysis of the experimental data.

Furthermore, for certain data types the half-life functions as an independant variable to be coded under the data heading HL without an explanation under the BIB keyword HALF-LIFE. Compare in Lexfor under Delayed Fission Neutron Data.

Overdue