Memo 4C-3/139

To:

Distribution

25 September 1975

From:

H.D. Lemmel HOL

Subject:

Lexfor update of 6 June 1975

The Lexfor update dated 6 June 1975 arrived here only on 15 October.

Please, find our comments on the following pages. Additional minor points will be included in the next update of the NDS-X4 Manual, which will be distributed soon.

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Lexfor-update of 6 June

1. The last paragraph of the cover page announces that it is hoped to start on the re-organization of the manual this summer.

NDS is not in favor of starting such a re-organization before action 28 of the March 1975 4C-Meeting has been fulfilled and the outcome discussed. This action says to investigate the possibility of restructuring EXFOR/LEXFOR manuals ... Reorganizing the Manual is a very time-consuming job, which should not be started before we have agreed on a concept for it.

Instead, many corrections and additions to the Manual in its present structure are overdue and should be made soon (see 4C-3/110 of 13 Nov 1974, 4C-3/126 of 1 July 1975, and others).

- 2. We received the page "Data" twice. The page "Center-of-mass" was missing instead.

 Also the page SINGLE-1 was duplicated and we wonder whether another page was missing instead.
- 3. Differential Data: We disagree with the wording of the newly introduced paragraph on triple differential cross-sections. Why is there the restriction "to be used only ..."? A proposed revised wording will be included in the NDS-X4-Manual update to follow soon.
- 4. Free Text: A valid paragraph was inadvertently (?) omitted.
- 5. Incident-Neutron Energy: Both corrections made on this page introduce new mistakes. 1.) Read "EN-MIN" and "EN-MAX" instead of "EN-MAX". 2.) The statement that no incident energy should be given for data under NUC-QUANT is not correct. See memo 4C-1/21 page 3.
- 6. <u>Isomeric States</u>: The previous item 2., which was wrongly omitted in the Feb 1975 update, is still missing. This concerns the residual nucleus in reactions leading to isomeric states. Part of this information may as well be included under <u>RESID-NUC</u>.
- 7. Monoisotopic Elements: There are still an element symbol and an A-number wrong, although this page was now re-submitted with corrections a second time. Compare Memo 4C-3/97 of 74-4-8 page 2 and the page NDS-LX4 of 74-11-15.
- 8. Particles: Codes must be used followed by ... (the word "used" was omitted thus changing the meaning of this sentence). Both page numbers mentioned are wrong.
- 9. Quantum-Numbers: Both corrections made on this page introduce new mistakes. The first correction makes no sense the way it stands. In the second correction the last line should either be cancelled, or corrected to include also "1." without the plus-sign as acceptable parity value.
- 10. Reference: At the bottom of this page two sentences from the agreed text were omitted. (Trivial, but why?)

In the last paragraph, the last sentence is not clear to us.

11. RESID-NUC: We noticed that Dictionary 2 was not up-to-date with respect to RESID-NUC. It is being updated, and a cross-referencing to this dictionary will be helpful.

The cross-referencing to the ISOTOPE coding (manual page VIII.12, and not VIII.13) is misleading since the rules for coding the ground-state differ between ISO-QUANT and RESID-NUC.

12. Changing of Lexfor keywords, such as changing 'Metastable States' to 'Isomeric States' is welcome in principle but should not be done without correcting throughout all parts of the Manual the cross-referencing to the Lexfor entry concerned.