

Quantity vs. Quality in EXFOR Compilation

O. Schwerer, NDS

It is of concern to NDS that it seems that in some centre(s) there is strong pressure to produce a certain number of compilations within a certain (short) time, irrespective of the quality of compilation.

As a result, compilations with serious formal and/or physics mistakes are transmitted, and other network centres are spending considerable time and effort to check these entries, point out mistakes and request corrections. Some types of mistakes or omissions can only be found when going back to the original reference, which cannot always be done. Therefore it must be assumed that, in spite of the efforts of the other network centres, not all mistakes are found.

It is understood that occasional mistakes can occur at all centres, and the system of submitting preliminary transmissions first, to give the network a convenient way to check the entries before they are added to the master file, is in general working well. However, compilations obviously done in a hurry often do not fulfill the minimum standards necessary for a useful data exchange.

Satisfactory EXFOR compilation requires

- Careful reading of all parts of the reference relevant to the experiment and the numerical results
- Contacting the authors whenever necessary for clarifications and/or numerical data
- Checking the Exfor Manual, LEXFOR, and the latest version of the Archive dictionaries, for all relevant definitions, rules and codes. Using the interfaces developed for users (such as the "help files" in the retrieval interface) is not sufficient and has repeatedly led to misunderstandings and mistakes
- Checking the master file and recently transmitted Exfor files for relevant or requested references, before making compilations or related requests to other centres
- Following the procedures for updates and deletions, to avoid introducing errors and inconsistencies
- Including all relevant information in the entry. This is not primarily about free text explanations, but about compiling all numerical results and all related important "codable" information (such as decay data)

Compilers must be prepared and allowed to spend sufficient time to understand both the essentials of the article and the relevant Exfor procedures. Compilation will never be a pure routine matter, it often requires some search in various resources, discussions with colleagues, and decisions (e.g. whether the data are relevant to EXFOR, or whether new codes or formats should be introduced, etc.) which require both a sufficient physics background and the time to do the job carefully.