**Nuclear Data Section**

**International Atomic Energy Agency**

**P.O.Box 100, A-1400 Vienna, Austria**

**Memo CP-D/1015**

**Date:** 15 May 2021

**To:** Distribution

**From:** N. Otsuka

**Subject: NRDC2021 - Conclusions and Actions**

Drafts of Conclusions and Actions of the 2021 NRDC meeting are appended to this memo. Please give your comments by 15 June 2021 if any.

Additions of the following conclusion and actions were proposed after the meeting. (included in the appended list in green):

* Conclusion: The participants were reminded that the NRDC expressed its desire in the NRDC 1996 meeting that products “repackaging” data originally compiled by network accurately reflect the data taken from network sources and that those sources receive proper credit and reference as to version and date of the database from which the information was extracted (c.f. INDC(NDS)-360 p.14).
* Action to Pritychenko: (Standing action) Provide NSR database to Zerkin with the name aliases to improve the search of EXFOR entries by the author name (WP2014-53).
* Action to All: Preparing for NRDC-2022 discussion about policy (methods/formats) of off-line dissemination of EXFOR data by NRDC members to external users’ communities and conditions/requirements for further re-distribution ([Zerkin's presentation-3](https://www-nds.iaea.org/nrdc/nrdc_2021/present/zerkin3.pdf#page=39)).
* Action to All: Investigate possibility for opening public Web access to lab reports of the institutes of EXFOR-Area responsibility.

**Conclusions and Actions of the NRDC 2021 Meeting**

**(Draft 15 May 2021)**

**Conclusions**

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| **General** | |
| C1 | The next full NRDC meeting will be held in Vienna, Austria between 13 and 17 June 2022 (4 or 5 days). |
| C2 | The next technical NRDC meeting will be held in Vienna, Austria in the 2nd quarter of 2023. |
| C3 | The next EXFOR compilation workshop will be held in Vienna, Austria in the 4th quarter of 2022. |
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| **EXFOR Statistics and Coverage** | |
| C | The Network finalized 1227 new entries after the NRDC 2019 meeting (448 new entries between NRDC 2018 and 2019 meetings, and 521 new entries between NRDC 2017 and 2018 meetings). |
| C | The participants reviewed a revised NRDC Protocol Appendix B in WP021-05. CNPD will continue scan of PAN in addition to BAS. |
| C | The centres should inform NDS the result of journal scan for every issue even if there is no article for EXFOR compilation. |
| C | Exclusion of a problematic entry from the final tape is a good solution to avoid delay in finalization of the other entries transmitted in the same preliminary tape. |
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| **Manuals and Dictionary** | |
| C | The particle code EC (electron capture) will be used when  (1) detection of electron capture activity is mentioned by the author without further specification of the radiation type (e.g., X-ray, Auger electron), or  (2) the electron capture branching ratio is assumed by the author to determine the quantity measured.  (See also CP-D/989 = WP2021-07). |
| C | Revisions of EXFOR Formats Manual in page 6.2 “Nuclide and compound symbol other than an elemental symbol”, page 7.11 “Trailing comma in code field of ERR-ANALYS” and page 7.2 “Presence of keywords” (CP-D/1011=WP2021-08) were approved. (Addendum: Two revisions were added to the memo and distributed as Memo CP-D/1011(Rev.) on 10 May 2021 without a comment from centres.) |
| C | A dummy facility code will be added in Dictionary 18 (Facility). This code will be used only when the experiment was performed without a facility, but the location of the experiment is coded in the Institute Field of FACILITY. |
| C | When the REACTION SF6 indicates differentiation by the same parameter twice,  (1) a particle combination must appear after the slash (e.g., DA/DA,\*/\*+\* rather than DA/DA,\*+\*/\*);  (2) the heavier particle must appear after the lighter particle (e.g., DA/DA,N/P rather than DA/DA,P/N)  as proposed in CP-D/1014=WP2021-10. |
| C | Revisions of EXFOR Formats Manual Chapter 6 “REACTION specification” and LEXFOR “Differential data” (CP-D/1014=WP2021-10) were approved. N.B. “lightest” is understood as “lowest Z, then the lowest A”. |
| C | Addition of the new information identifier ANG-SEC (secondary angle) and its description in the EXFOR Formats Manual proposed in CP-D/1014=WP2021-10 were approved. |
| C | The code AMP (parameter and new CINDA code) and L (reaction type and web quantity) will be expanded to “scattering length”. The scattering amplitude will be compiled with ,AMP,,MSC as proposed in 4C-3/416=WP2021-11. |
| C | Revisions of LEXFOR “Data type” and EXFOR Formats Manual Chapter 7 “ANALYSIS” proposed in CP-D/982=WP2021-12 were approved. |
| C | REACTION spelling for the quantities measured by Coulomb excitation require further discussion. |
| C | Addition to LEXFOR “Scattering” (partial scattering) proposed in CP-D/1002=WP2021-14 was approved. |
| C | The upper limit of the level energy of the reaction product for partial scattering can be coded only when the upper limit is mentioned by the author. |
| C | Revision of the LEXFOR “Fitting coefficients” (LEG/RS0 and LEG/RSD) proposed in CP-D/1007=WP2021-15 was approved. |
| C | An addition of particle code (e.g., N2) or nuclide code (e.g., 0-NN-2) is not done for compilation of the experimental works introduced in WP2021-16*.* |
| C | A new heading E-EXC-C-ER (Error in excitation energy of initial compound nucleus) proposed in CP-D/991=WP2021-26 was approved. |
| C | The name of the subfield for the observed radiation per decay will be renamed from “Abundance” to “Intensity”. (See also CP-D/1005=WP2021-33). |
| C | Addition to LEXFOR “Decay data” proposed in CP-D/1005=WP2021-33 was approved. |
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| **EXFOR Compilation Needs** | |
| C | The gamma spectra measured in Baghdad and Moscow and published in “Baghdad Atlas” (GAMMAATLAS) will be kept in area 3 and 4 entries. NNDC may compile the gamma production cross sections derived from the measured gamma spectra by UC Berkley for area 1 following as the “data derived by other than the author” following the instruction in LEXFOR “Data type”. N.B. The derivation is documented in A.M.Hurst et al., Nucl. Instrum. Meth. Phys. Res. A995(2021)165095. See also CP-C/0489 and 4C-3/0418 (=WP2021-21). |
| C | Retroactive scanning was done by CNDC for the articles published in CST (Vol.1. No.1 to Vol. 54 No.8), CTNP (Vol. 1 No.1 to Vol.13 No.4) and CNPR (Vol.14 No.1 to Vol.37 No.2) as summarized in Memo CP-S/005=WP2021-22. |
| C | All volumes of three Chinese journals (CST, CNPR and CTNP) were scanned by CNDC. All EXFOR related articles from this literature survey are summarized in CP-S/005 an 006 (=WP2021-22) and also added in the Article Allocation List. |
| **EXFOR Quality Control** | |
| C | The thick target yields compiled in EXFOR A0092.009 will be deleted (See also CP-D/0990=WP2021-25). |
| C | The data heading E-EXC-C-ER (Error in excitation energy of initial compound nucleus) proposed in Memo CP-D/991=WP2021-26 was approved. |
| C | The activation cross sections measured by the Karlsruhe renormalized with a new gold standard cross section are published as INDC(GER)-053 and the relevant EXFOR entries must be updated. See also CP-C/472=WP2021-27. |
| C | Inclusion of preliminary entries (i.e., entries in preliminary tapes) in databases is useful (e.g., for detailed comparison of the entry revised in the preliminary tape with the version in EXFOR Master). The access to the preliminary entries must be restricted (e.g., by password protection). |
| C | Deletion of a subentry is an option if it is coded with STATUS=UNOBT, and the article was published before 2000. |
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| **EXFOR Coding Rule** | |
| C | The isomeric flags of 102Nb, 102Tc, 108Rh, 128Sb and 132Sb proposed in CP-D/1009(Rev.)=WP2021-28 (taken from ENSDF/NUBASE) were approved. |
| C | The cross section of hydrogen in hydride molecule will be compiled with ,SIG,,HYD. A new modifier HYD (hydrogen part of the quantity) was approved. See also 4C-3/415 (Rev.)=WP2021-29. |
| C | Addition to LEXFOR “Thermal-neutron scattering” proposed in 4C-3/415 (Rev.)=WP2021-29 was approved. |
| C | Revision of LEXFOR by addition of the “General rule for compilation of reaction products” and “Reaction products that are unstable against prompt particle decay” in CP-D/646=WP2021-30 was approved. N.B. “unstable intermediate nucleus” is understood as a nucleus unstable against decay by emission of a light nuclide (e.g., n, p, d, t, h). |
| C | Revisions of LEXFOR “Fission yields” and “Reaction product” proposed in CP-D/984=WP2021-31 were approved. |
| C | Compilers should provide the source information under keyword STATUS. This must be done in the data subentries when the data in the entry are not from the same table or figure. This conclusion does not require retransmission of existing entries due to deviation from these rules. See also CP-D/1010 and CP-C/0490 (=WP2021-32). |
| C | Data source must be indicated under STATUS of each data subentry (not in the common subentry) when the data of the entry are from several sources (e.g., tables, figures). |
| C | The table or figure number under STATUS must be followed by the reference (e.g., “J. Nucl. Phys. 12(2021)345”) when there are two or more references under REFERENCE. Addition of reference is also recommended for an entry having a single reference, but retransmission due to absence of the reference is not requested. The table/figure number and reference will be in free text. |
| C | The detection of the 511 keV annihilation gamma-rays will be always coded with the particle code AR. If the authors report the gamma-gamma coincidence intensity (i.e., β+ intensity), the intensity value multiplied by two will be coded with mentioning it in free text. See also CP-D/1005=WP2021-33. |
| C | (1) A process \* followed by fission will be coded by \*+F in REACTION SF3 without SEQ in REACTION SF5. (2) A process \* following inelastic scattering will be coded by the code of the inelastically scattered particle rather than INL (e.g., N+F instead of INL+F). (3) The process code X will appear in the form of X+\* and not \*+X. See also Memo CP-D/993 (Rev.)=WP2021-34. |
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| **Tools for Compilation and Dissemination** | |
| C | The new version of CNPD EXFOR-Editor (ExfData Ver. 4.01) supports the new keyword SUPPL-INF (supplemental information), and also preparation of a TRANS tape from a set of EXFOR entries. See also WP2021-35. |
| C | The participants were reminded that the NRDC expressed its desire in the NRDC 1996 meeting that products “repackaging” data originally compiled by network accurately reflect the data taken from network sources and that those sources receive proper credit and reference as to version and date of the database from which the information was extracted (c.f. INDC(NDS)-360 p.14). |
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| **Other Business** | |
| C | Institute of Nuclear Physics (Almaty) made the cross sections tabulated in three preprints published by the institute in 1970, 1990 and 1991 computer readable. Digitized data in seven area F entries were replaced with the tabulated data, and five area D entries were created from the tabulated data. |
| C | The participants were informed by the WPEC SG50 coordinators and monitor that (1) templates of expected measurement uncertainties will soon be submitted for many neutron-induced observable measurements, and (2) WPEC SG50 is planning to develop a database with a stringent and parsable format that will be able to store “subjective” corrections on EXFOR data. |

**Actions**

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| **EXFOR Statistics and Coverage** | | |
| A1 | All | (Standing action) Give the highest priority to compilation of new articles. |
| A2 | All | (Standing action) Correct erroneous entries listed on the EXFOR Feedback List according to the indicated priorities. All urgent corrections must be done by the next meeting. |
| A3 | Otsuka | (Continuing action) Send transmission statistics and correction statistics to centres every four months. |
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| **Manuals and Dictionaries** | | |
| A4 | Otsuka | (Continuing action) Update Dictionaries every six months. |
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| A5 | Otsuka | (Continuing action) Revise the EXFOR Formats Manual for   1. “DECAY-DATA” and “RAD-DET” (CP-D/874=WP2016-28), 2. “Reaction specification” (CP-D/880 Rev.=WP2016-29, CP-D/896=WP2016-33, CP-N/143=WP2018-12, CP-D/1014=WP2021-10, CP-D/993(Rev.)=WP2021-34), 3. “LEVEL-PROP” (CP-D/882=WP2016-30), 4. “ERR-ANALYS” (CP-D/894 Rev.=WP2016-32, CP-D/1011=WP2021-08), 5. “FACILITY” (CP-D/899=WP2016-34), 6. “REFERENCE” (CP-C/452=WP2017-08, CP-D/920=WP2017-33, CP-D/953Rev=WP2018-08, NRDC2018 Conclusion 4), 7. “STATUS” (CP-D/915=WP2017-09), 8. “INC-SPECT” (CP-D/932=WP2017-31), 9. BIB Section (CP-D/942=WP2018-09), 10. “SAMPLE” (CP-D/964=WP2019-08), 11. “REACTION” and “SUPPL-INF” (CP-D/965 Rev.=WP2019-21). 12. “DECAY-DATA”, “PART-DET” and “RAD-DET” (CP-C/393=WP2019-27), 13. “Coding of nuclides and compounds” (CP-D/1011=WP2021-08), 14. “Presence of keyword” (CP-D/1011=WP2021-08). 15. “ANG-SEC” (CP-D/1014=WP2021-10), 16. “ANALYSIS” (CP-D/982=WP2021-12). |
| A6 | Otsuka | (Continuing action) Revise LEXFOR for   1. "Thermal Neutron Scattering" (4C-3/403 =WP2016-08, 4C-3/415(Rev.)=WP2021-29), 2. “Fission Yields” (CP-D/895=WP2016-09, CP-D/974=WP2019-33, CP-D/984=WP2021-31), 3. “Thick- and thin-target yields” (CP-D/893=WP2016-31), 4. “Isomeric flags” (CP-D/896=WP2016-33), 5. “Status” (CP-D/904=WP2016-35, CP-C/443=WP2016-36), 6. “Sample” (CP-D/928=WP2017-35), 7. “Multilevel Resonance Parameters” (CP-D/953Rev=WP2018-08), 8. “Reference” (CP-D/953Rev=WP2018-08), 9. “Thermonuclear reaction rate” (CP-D/956=WP2018-11), 10. “Sums” (CP-D/964=WP2019-08), 11. “Polarization” (CP-D/970=WP2019-09), 12. “Kerma factor” (4C-4/219=WP2019-10), 13. “Institute” (CP-D/976=WP2019-11), 14. “Supplemental information” (CP-D/965 Rev.=WP2019-21). 15. “Decay data” and “Outgoing particles” (CP-C/393=WP2019-27), 16. “Independent and Cumulative data” (CP-D/977 Rev.=WP2019-29 Rev.), 17. “Data type” and “Delayed fission neutrons” (4C-3/414 Rev.=WP2019-30 but removing SF5=IND, CP-D/982=WP2021-12), 18. “Status” (CP-D/973=WP2019-32), 19. “Ratios” (CP-D/974=WP2019-33), 20. ~~“Fission yields” (CP-D/974=WP2019-33),~~ 21. “Differential data” (CP-C/1014=WP2021-10), 22. “Scattering” (CP-D/1002=WP2021-14), 23. “Fitting coefficients” (CP-D/1007=WP2021-15), 24. ““Light-Nuclei Reactions (Z ≤6)” (CP-D/646=WP2021-30), 25. “Reaction product” (CP-D/984=WP2021-31), 26. “Fission” (CP-D/993(Rev.)=WP2021-34), 27. “Outgoing particles” (CP-D/993(Rev.)=WP2021-34). |
| A7 | Zerkin ~~Fleming~~ | (Continuing action) Summarize the role of family flags (also known as family codes, c.f. EXFOR Formats Manual Chapter 6) in ZCHEX (c.f. WP2017-11) ~~and verify their potential use in JANIS~~. |
| A8 | Otsuka | (Continuing action) Propose a revised NRDC Protocol Appendix B “Scanning responsibility” for elimination of journals assigned to a centre but also scanned by NDS (c.f. WP2021-05). |
| A9 | Zerkin Otsuka | (Continuing action) Propose a numbering scheme for compound codes defined in Dictionary 209. |
| A10 | Otsuka | ~~Check if we can make the process code EC (electron capture) obsolete.~~  Add the usage of the particle code EC (electron capture) in Dictionary 33 according to Conclusion XX. |
| ~~A11~~ | ~~Otsuka~~ | ~~Update Dictionary 34, 37 and 236 as suggested CP-D/974=WP2019-33.~~ |
| A | Otsuka | Update Dictionaries 2 and 236 as proposed in CP-D/1014=WP2021-10 (Combination of particle codes and their order in REACTION SF7).. |
| A | Otsuka | Update Dictionaries 32, 45, 113, 213 and 236 as proposed in 4C-3/416=WP2021-11. (scattering length). |
| A | Otsuka | Update Dictionary 34 and 236 as proposed in 4C-3/415 (Rev.)=WP2021-29 (cross section of hydrogen in hydride molecule). |
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| **CINDA** | | |
| A12 | Zerkin | (Continuing action) Export EXFOR to CINDA, and distribute it to other Centres every month. |
| A13 | Zerkin  Sublet | Keep NRDC informed about the situation about import of NSR to CINDA. |
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| **EXFOR Compilation Needs**  **(**Underlined items are registered inthe Article Allocation List.) | | |
| ~~A14~~ | ~~Fleming~~ | ~~(Continuing action) Compile with priority the articles cited in the NACRE II (an update and extension of European Compilation of Reaction Rates for Astrophysics) listed in Tables 1 and 2 of CP-D/833.~~ |
| A15 | Pritychenko | (Continuing action) Compile with priority W.G. Alberts+,R,NUREG/CP-0029,433,1982 ~~articles related to the~~ (neutron dosimetry cross sections) listed in the second table of CP-D/838. |
| A16 | Pritychenko | (Continuing action) Compile the thermal neutron-induced reaction data cited in Mughabghab’s “Atlas of Neutron Resonances” and listed in 4C-3/395. |
| ~~A17~~ | ~~Pritychenko~~ | ~~(Continuing action) Compile with priority prompt fission neutron multiplicities listed in CP-D/871.~~ |
| A18 | ~~Fleming~~ Foligno ~~Pritychenko~~ | (Continuing action) Compile G.N.Kim+,C,2002BRUSS,,613,2002 ~~articles presented in Reactor Dosimetry Symposia listed~~ in 4C-3/400=WP2016-16. |
| A19 | ~~Fleming~~ Pritychenko | (Continuing action) Compile F. Bischoff,R,RPI-328-87,146,1966 (thermal neutron scattering data) listed in 4C-3/404= WP2016-19. |
| A20 | Pritychenko | (Continuing action) Compile P.L.Reeder+,J,PR/C,15,2108,1977 (Pn values adopted in Rudstam’s review) listed in 4C-3/410=WP2018-20. |
| A21 | Pritychenko ~~Tada~~ | (Continuing action) Compile with priority R.G.Lanier+,R,UCAR-10062-89,71,1989 (proton-induced isotope production cross sections)listed in CP-D/725 Rev. (~WP2012-19). Notify Okumura if the assigned centre does not compile the high energy (E > 1 GeV) data in the list. |
| A22 | Pritychenko  ~~Taova~~ | (Continuing action) Compile with priority T.Mo+,J,NP/A,198,153,1972 ~~the articles related to~~ (ion beam analysis application) listed in CP-D/832 Rev. |
| A23 | Pritychenko Tada Taova | (Continuing action) Compile with priority the light charged-particle induced isotope production cross sections listed in CP-D/757. Notify Okumura if the assigned centre does not compile the high energy (E > 1 GeV) data in the list. |
| A24 | Pritychenko Tada | (Continuing action) Compile with priority the neutron source spectra listed in CP-D/700 (Rev.3). |
| A25 | ~~Devi Fleming~~ Foligno Gritzay ~~Mikhailiukova~~ Okumura Pritychenko Tada Varlamov ~~Wang~~ | (Continuing action) Compile articles reporting experimental fission product yields and listed in CP-C/464, 465 and 466. Inform Okumura if an article in the lists is not for EXFOR compilation. Transmit EXFOR entries relevant to these lists (and WP2019-20) separately from other EXFOR entries. |
| A26 | ~~Devi Fleming~~ Foligno Mikhailiukova ~~Wang~~ Okumura Pritychenko | (Continuing action) Compile articles reporting experimental fission product yields and listed in WP2019-20. Inform Okumura if an article in the list is not for EXFOR compilation. New and revised EXFOR entries relevant to these lists must be transmitted separately from other EXFOR entries. Transmit EXFOR entries relevant to this list (and CP-C/464, 465 and 466) separately from other EXFOR entries. |
| A27 | Pritychenko | (Continuing action) Compile deuteron-induced reaction data compiled by the Frascati group and listed in CP-D/758. |
| A28 | Gritzay | (Continuing action) Compile B.A.Nemashkalo+,C,88BAKU,,593,1988 published in the “Nuclear Spectroscopy and Structure” (Nucleus) conference proceedings and listed in CP-D/881 with J,SNP,55,69,1992. |
| A29 | Zholdybayev ~~Gritzay Okumura Taova~~ | (Continuing action) Compile A.D.Duisebaev+,J,JEL,19,280,1974 ~~articles published in JEL and~~ listed in CP-D/952. |
| A30 | Gritzay | (Continuing action) Compile data measured with filtered neutrons measured at the KINR research reactor with numerical neutron spectra. |
| A31 | Pritychenko | (Continuing action) Monitor availability of P.E. Koehler’s time-of-flight spectra on DVDs received from ORELA in 2015 for EXFOR compilation. |
| ~~A32~~ | ~~Pritychenko~~ | ~~(Continuing action) Compile~~ ~~238~~~~U(n,f) cross sections in Table 4.6 of Zchariah W. Miller’s thesis (Univ. of Kentucky, 2015).~~ |
| ~~A33~~ | ~~Fleming Sublet~~ | ~~(Continuing action) Receive the experimental fission product yield data collected by Robert Mills. Identify the numerical data sets missing in EXFOR once they are received.~~ |
| A34 | Pritychenko | (Continuing action) Perform EXFOR completeness checking for the list of articles (4C-3/401, articles cited in S. Mughabghab’s “Atlas of Neutron Resonances”) to identify articles missing in EXFOR, and assign responsibility of compilation of the identified articles to centres by a memo. |
| A35 | Zholdybayev | (Continuing action) Scan domestic publications (*e.g.*, journals, laboratory reports) to identify articles for EXFOR compilation. |
| **EXFOR Quality Control**  (Underlined items are registered in the EXFOR Feedback List.) | | |
| ~~A36~~ | ~~Varlamov~~ | ~~(Continuing action) Correct reference code for VMU, and add its English translation (MUPB) under REFERENCE in M0293.001 as listed in CP-F/015=WP2018-26.~~ |
| ~~A37~~ | ~~Mikhailiukova~~ | ~~(Continuing action) Add English translation information of Russian journals (KSF, FCY, ZET, ZTF) under REFERENCE as listed in Memo CP-D/957=WP2018-24.~~ |
| ~~A38~~ | ~~Mikhailiukova Varlamov~~ | ~~(Continuing action) Correct reference codes including the year of publication in the volume number field listed in Memo 4C-4/216. (N.B. CJD reported progress in correction in Memo 4C-4/218).~~ |
| ~~A39~~ | ~~Fleming Mikhailiukova Pritychenko~~ | ~~Revise REACTION codes coded with SF6=POL and SF8=ASY listed in Memo CP-D/970=WP2019-09.~~ |
| A40 | ~~Fleming~~ Pritychenko ~~Varlamov~~ | (Continuing action) Replace J,PR/C,65,014004,2001 with J,PR/C,65,014004,2002 in 13782.001~~Revise reference codes under REFERENCE of 13782.001 and listed in Tables 1 and 2 of~~ (Memo CP-N/148=WP2019-25). |
| A41 | Pritychenko | (Continuing action) Replace REACTION SF3=A with EL in C0753.002~~Revise illegal REACTION codes (SF2=SF3) listed in~~ (CP-D/960=WP2019-31). |
| A42 | Okumura | (Continuing action) Revise EXFOR entries having STATUS=NCHKD listed in CP-D/973=WP2019-32. |
| ~~A43~~ | ~~Mikhailiukova~~ | ~~Check if TABLE can replace NCHKD by checking the source articles for 15 entries listed in CP-D/973=WP2019-32.~~ |
| ~~A44~~ | ~~Pritychenko~~ | ~~Replace the report code with conference code in EXFOR 13224 (CP-D/968=WP2019-34).~~ |
| ~~A45~~ | ~~Mikhailiukova~~ | ~~Merge EXFOR 41224 into EXFOR 41202 after deletion of 41224.002 (4C-4/222=WP2019-35).~~ |
| A46 | ~~Fleming~~ Foligno | (Continuing action) Consider addition of numerical data which are not superseded (SPSDD) and suitable for digitization, but still unobtainable (UNOBT) for neutron-induced reaction data published in old literature for 1H, 16O, 56Fe, 235U, 238U and 239Pu. |
| ~~A47~~ | ~~Fleming Otsuka~~ | ~~(Continuing action) Check the n-p scattering data set in EXFOR 22207.002 (G. Fink) against G. Fink’s thesis (e.g., reference frame – lab or c.m.).~~ |
| A48 | ~~Fleming~~ Foligno | (Continuing action) Provide a report on mistakes in bibliographies and spells on each preliminary tape. |
| A49 | ~~Otsuka~~  Pritychenko | (Continuing action) Revise EXFOR entries compiling data sets from ORELA 40 m flight station listed in the Appendix of 4C-3/407=WP2017-30 by addition of   1. the corrigendum under REFERENCE of the common subentry, 2. STATUS=OUTDT to each data subentry with the correction factor in free text. |
| ~~A50~~ | ~~Otsuka~~ | ~~(Continuing action) Submit a revised Memo CP-D/933 by addition of the remark to each subentry from Takács.~~ |
| ~~A51~~ | ~~Fleming Otsuka Tada~~  ~~Taova~~ | ~~(Continuing action) Following A45, revise the REACTION codes of the thick target considering the changes proposed in Appendix of CP-D/933=WP2017-28 once the originating centre receives extraction of Revised Memo CP-D/933 from Otsuka. Revised entries must be assembled in a preliminary tape without including other entries to make trace of corrections at NDS easier.~~ |
| A | Taova | Delete A0092.009. |
| A52 | Soppera | (Continuing action) Provide JANIS Import Log created from the EXFOR Master File to Otsuka on a regular basis. |
| A53 | Otsuka | (Continuing action) Assess the JANIS Import Log provided by Soppera as above, and register important errors to the EXFOR Feedback System. |
| A54 | Okumura | (Continuing action) Check if the usage of REACTION SF5=CUM/M- and (CUM)/M- in the EXFOR Master is consistent with CP-D/977 Rev.=WP2019-29 Rev. |
| A | Okumura Pritychenko | Revise DECAY-DATA and DECAY-MON records including EC (electron capture) listed in CP-D/0989=WP2021-07. |
| A | ~~Fleming~~ Foligno Okumura Pritychenko Tada Taova Wang | Revise REACTION SF3 and SF7 listed in Appendices 1, 2 and 3 of CP-D/1014=WP2021-10 (Combination of particle codes and their order in REACTION SF7). |
| A | Foligno Mikhailiukova Pritychenko Taova Varlamov | Revise REACTION SF8 listed in Memo CP-D/1007=WP2021-15 (LEXFOR "Fitting Coefficients"). |
| A | Okumura Pritychenko | Revise REACTION code etc listed in Memo CP-D/991=WP2021-26 (Partial elastic scattering?) |
| A | Foligno Pritychenko | Revise entries compiling activation cross sections from Karlsruhe based on INDC(GER)-0053. Use REACTION SF8=SPA with KT-DUMMY=25 keV for quasi-Maxwellian spectrum averaged cross section. See also CP-C/472=WP2021-27. |
| A | Foligno Okumura Pritychenko Tada | Revise entries involving isomers of Nb-102, Tc-102, Rh-108, Sb-128 and Sb-132 according to Appendix of Memo CP-D/1009 (Rev.)=WP2021-28. |
| A | Foligno Mikhailiukova Pritychenko | Revise entries involving several variable atomic and/or mass numbers listed in CP-D/0984 in WP2021-31. |
| A | Foligno Mikhailiukova Pritychenko | Revise entries having repetition of ELEMENT and/or MASS listed in CP-D/1012 in WP2021-31. |
| A | Foligno Okumura Pritychenko | Revise entries relevant to 511 keV gamma emission listed in CP-D/1005=WP2021-33. |
| A | Foligno Okumura Pritychenko  Varlamov Wang | Revise REACTION codes listed in CP-D/0993(Rev.)=WP2021-34 (Combination of process and other codes in REACTION SF3). |
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| **Tools for Compilation and Dissemination** | | |
| A55 | Fleming | (Continuing action) Make available on the NEA Data Bank web site the EANDC and NEANDC reports compiled in EXFOR and not available as INDC reports. |
| A56 | Pikulina | (Continuing action) Continue development and testing of the EXFOR-Editor and InpGraph in cooperation with NDS and other data Centres. |
| A57 | All | (Continuing action) Provide Pikulina feedback on EXFOR-Editor and InpGraph. |
| A58 | Kimura | (Continuing action) Continue development and testing of GSYS in cooperation with NDS and other centres. |
| A59 | All | (Continuing action) Provide Kimura feedback on GSYS. |
| A60 | Soppera | (Continuing action) Continue development and testing of the JANIS TRANS Checker in cooperation with NDS and the other centres. |
| A61 | All | (Continuing action) Provide Soppera feedback on JANIS TRANS Checker. |
| A62 | Bhattacharyya | (Continuing action) Keep centres informed about the progress in development of the EXFOR-I editor. |
| A63 | Nayak | (Continuing action) Monitor progress in development of the EXFOR-I editor. |
| A64 | Otsuka | (Continuing action) Provide EXFOR News every month and consider updates to the IAEA NDS website. |
| A65 | Otsuka | (Continuing action) Support update of the Japanese editor (HENDEL) as time permits. |
| A66 | Zerkin | (Continuing action) Update ZCHEX based on comments from compilers. |
| A67 | All | (Continuing action) Provide feedback to NDS on the existing ZCHEX version (on bugs as well as desired additions.). Bugs must be reported with sample entries which are checked and not checked properly by ZCHEX. |
| A68 | Zerkin | (Continuing action) Develop and distribute the program package including a standalone platform independent program to generate X4+ from a standalone EXFOR entry. |
| A69 | All | (Continuing action) Consider to use the X4+ format for author approval, and also send feedback to Zerkin. |
| A70 | Zerkin | (Continuing action) Continue development of the EXFOR upload web tool. |
| A71 | Zerkin | (Continuing action) Every four months produce an EXFOR distribution with (a) full Dictionary distribution; (b) EXFOR in C4 and XC4 format; (c) Dictionaries in MS Access; (d) X4Map. |
| A72 | Zerkin | (Continuing action) Continue development of the additional database encompassing correction factors and relevant comments for suspect/erroneous data (X4-evaluated) presented in WP2010-19; keep NRDC informed about results, impact and usage statistics of the database. |
| ~~A73~~ | ~~Mikhailiukova Dunaeva Zerkin~~ | ~~(Continuing action) Clarify the requirements for the introduction of flags to indicate articles published in conference proceedings where the data are not available from the authors on the EXFOR Compilation Control System web page.~~ |
| ~~A74~~ | ~~Zerkin Okumura~~ | ~~(Continuing action) Consider translation of fission yields in EXFOR to a C4-like format in consultation with experts in the field.~~ |
| A75 | Zerkin Pritychenko | (Continuing action) Continue translation from EXFOR to NSR. |
| A76 | Jin Kimura Pikulina Zerkin | (Continuing action) Study problems in 2D calibration of original pictures, and process of approval of results of digitizing using plotting facilities. |
| A77 | Fleming Okumura Pritychenko | (Continuing action) Finalize and submit EXFOR entries including covariance data provided by Zerkin (WP2017-Z3). |
| ~~A78~~ | ~~All~~ | ~~(Standing action) Provide Zerkin a list of name aliases to improve the search of EXFOR entries by the author name (WP2014-53).~~ |
| A | Pritychenko | (Standing action) Provide NSR database to Zerkin with the name aliases to improve the search of EXFOR entries by the author name (WP2014-53). |
| A | All | Preparing for NRDC-2022 discussion about policy (methods/formats) of off-line dissemination of EXFOR data by NRDC members to external users’ communities and conditions/requirements for further re-distribution ([Zerkin's presentation-3](https://www-nds.iaea.org/nrdc/nrdc_2021/present/zerkin3.pdf#page=39)). |
| A | All | Investigate possibility for opening public Web access to lab reports of the institutes of EXFOR-Area responsibility. |

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