**Nuclear Data Section**

**International Atomic Energy Agency**

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

**Memo CP-D/1080**

**Date:** 2023-04-18

**To:** Distribution

**From:** N. Otsuka

**Subject: Improvement of Dictionary 3 (Institutes) for efficient compilation**

**Reference:** CP-D/1079, 4C-2/0120

The presentation by Vidya Devi and Jagjit Singh in the EXFOR workshop and my report on inst-finder (Memo CP-D/1078) show improvement of dictionary 3 expansions could help automation of institute coding. Based on my experience with inst-finder development, I summarized possible (and not comprehensive) improvement by (1) replacement of expansion, (2) addition of new institute codes, and (3) deletion of a few institute codes used seldom.

**1. Replacements of expansions** include

* addition of the city name
* Addition of abbreviation (e.g., BARC) or adoption of the abbreviation as the primary institute name (e.g., RIKEN instead of “Institute of Physical and Chemical Research).
* Replacement of an abbreviation with its full spelling when use of the abbreviation is not very typical (e.g., “Technische” instead of “Tech.”).
* unification of the language within the country (e.g., Italian/German rather than English for the names of the Italian/German universities).

For the last item, English translation could be more convenient for expansions of some countries (e.g., “Institute of Physics and Power Engineering (IPPE)” is more convenient than “Fiziko-Energeticheskii Inst., Obninsk”? Expansions are sometimes in English but sometimes in Russian for the Russian institutes defined in Dictionary 3.)

The proposed replacements are listed in **Appendix** of this memo.

**2. Addition of institutes codes** are proposed for the following frequently occurring institutes:

**Dictionary 3 (Institutes)**

|  |  |
| --- | --- |
| 1USACMG | Central Michigan University, Mt.Pleasant, MI |
| 2ITYUPG | Universita degli Studi di Perugia + INFN Perugia |
| 2JPNNAO | National Astronomical Observatory of Japan, Mitaka |
| 3KORSKK | Sungkyunkwan University, Suwon |

**3. Deletion of institutes codes** are proposed for the following institutes. These two codes are used only two entries (31514 and A0456) and their retransmissions are foreseen to replace these codes with 3INDIND:

**Dictionary 3 (Institutes)**

|  |  |
| --- | --- |
| 3INDJCB | Janta College, Bakewar |
| 3INDTHO | Thoubal College, Thouba |

**4. Deletion of obsolete codes starting from 2JAP** is proposed except for 2JAPJAE, 2JAPKTO, 2JAPTOH, 2JAPTOK and 2JAPTIT, which are still used in 20763, 20793, 20845, 20847, 20851, 20853, 20871 and 20897. The other 2JAP codes are not used in EXFOR and CINDA anymore. See Memo 4C-2/120 for more details about replacement of 2JAP with 2JPN.

**Appendix: Typical combinations of predicted and correct codes**

|  |  |  |
| --- | --- | --- |
| **Code** | **Expansion (current)** | **Expansion (proposed)** |
| 1USACLU | Colorado University, Boulder, CO | University of Colorado, Boulder, CO |
| 2BLGMOL | C.E.N., Mol | SCK CEN (Belgian Nuclear Research Centre), Mol |
| 2GERJUL | Forschungszentrum Juelich | Forschungszentrum Juelich, Juelich |
| 2GERKLN | Universitaet zu Koeln | Universitaet zu Koeln, Koeln |
| 2GERPTB | Physikal. Techn. Bundesanst., Braunschweig | Physikalisch-Technische Bundesanstalt, Braunschweig |
| 2GERTHB | Tech.Hochschule, Braunschweig | Technische Universitaet Braunschweig |
| 2GERTHD | Tech.Universitaet, Darmstadt | Technische Universitaet Darmstadt |
| 2GRCTUA | Nat. Techn. Univ. of Athens | National Technical Univ. of Athens, Athens |
| 2ITYCAG | Univ. of Cagliari | Universita degli Studi di Cagliari + INFN Cagliari |
| 2ITYCAM | Universita degli Studi di Camerino | Universita degli Studi di Camerino, Camerino |
| 2ITYCIS | C.I.S.E., Milan | Centro Informazioni Studi ed Esperienze (CISE), Milan |
| 2ITYFRA | INFN Laboratori Nazionali di Frascati | INFN Laboratori Nazionali di Frascati, Frascati |
| 2ITYGVA | U.+INFN., Genova | Universita degli Studi di Genova + INFN Genova |
| 2ITYLEC | Univ.degli Studi Lecce + INFN Lecce | Universita degli Studi Lecce + INFN Lecce |
| 2ITYLGS | Lab.Naz.del Gran Sasso, Ist.Naz.di Fis.Nucl.,Assergi | LINFN Laboratori Nazionali del Gran Sasso, Assergi |
| 2ITYMES | Univ.of Messina | Universita degli Studi di Messina, Messina |
| 2ITYPAV | Univ.degli Studi di Pavia + INFN Pavia | Universita degli Studi di Pavia + INFN Pavia |
| 2ITYUBO | Bologna, Univ. + Ist. Naz. di Fis. Nucl. | Universita di Bologna + INFN Bologna |
| 2JPNHYO | Hyogo Agricult.Univ., Sasayama | Hyogo Agriculture Univ., Sasayama |
| 2JPNIPC | Inst.of Physical and Chemical Res. (RIKEN), Wako | RIKEN (Inst. of Physical and Chemical Research), Wako |
| 2JPNMZK | Miyazaki Univ., Miyazaki | Univ. of Miyazaki, Miyazaki |
| 2SWDSWR | Studsvik Science Research Laboratory | Studsvik Science Research Laboratory, Nykoeping |
| 2SWDUPP | Univ. of Uppsala | Uppsala Univ., Uppsala |
| 2SWTBAS | Basel Univ. | University of Basel, Basel |
| 2ZZZCER | CERN, Geneva | European Org. for Nuclear Research (CERN), Geneva |
| 3CPRHST | Chinese Univ. of Sci. and Tech., Hefei | Univ. of Science and Technology of China, Hefei |
| 3HKGHKG | Hongkong | Hong Kong |
| 3HKGHKU | Chinese Univ.of Hongkong | Chinese Univ. of Hong Kong |
| 3INDCCT | Calicut University, Calicut | University of Calicut, Calicut |
| 3INDTAT | Tata Institute, Mumbai | Tata Institute of Fundamental Research, Mumbai |
| 3INDTRM | Bhabha Atomic Research Centre, Trombay, Mumbai | Bhabha Atomic Research Centre (BARC), Trombay, Mumbai |
| 3POLIFJ | Niewodniczanski Instytut Fizyki Jadrowej, Krakow | Niewodniczanski Institute of Nuclear Physics, Krakow |
| 3POLWWA | Warszawa, University | Univ. of Warsaw, Warsaw |
| 3RUMBUC | Inst. de Fiz. si Ing. Nucl. Horia Hulubei, Bucharest | Horia Hulubei National Institute (IFIN-HH), Magurele |
| 3SAFITH | iThemba LABS, Somerset West | iThemba Laboratories, Somerset West |
| 3SAFSTL | Univ. of Stellenbosch | Stellenbosch Univ., Matieland |
| 3SAFUWC | Univ. of Western Cape, Bellville, Cape Town | Univ. of the Western Cape, Bellville |
| 3SAFWIT | Univ.of Witwatersrand, Johannesburg | Univ. of the Witwatersrand, Johannesburg |
| 3VN STH | Institute of Nuclear Science and Technique, Hanoi | Institute for Nuclear Science and Technology, Hanoi |
| 3ZZZIAE | IAEA, Vienna | International Atomic Energy Agency (IAEA), Vienna |
| 4ARMJER | Inst. Fiziki Armen. A.N., Jerevan | A.I. Alikhanyan National Sci. Lab. (YerPhI), Yerevan |
| 4ARMJSU | Jerevan State Univ., Jerevan | Yerevan State Univ., Yerevan |
| 4MLDAPI | Appl.Physics Inst.,Mold.Acad.Sci.,Chisinau | Inst. of Applied Physics, Chisinau |

**Distribution:**

a.koning@iaea.org

abhihere@gmail.com

aloks279@gmail.com

daniela.foligno@oecd-nea.org

dbrown@bnl.gov

draj@barc.gov.in

exfor@oecd-nea.org

fukahori.tokio@jaea.go.jp

ganesan555@gmail.com

gezg@ciae.ac.cn

iwamoto.osamu@jaea.go.jp

jmwang@ciae.ac.cn

kaltchen@ukr.net

kimdh@kaeri.re.kr

kimura.atsushi04@jaea.go.jp

l.vrapcenjak@iaea.org

manuel.bossant@oecd-nea.org

masaaki@nucl.sci.hokudai.ac.jp

marina-03-08@yandex.ru

michael.fleming@oecd-nea.org

mmarina@ippe.ru

nicolas.soppera@oecd-nea.org

n.otsuka@iaea.org

nrdc@jcprg.org

odsurenn@gmail.com

ogritzay@ukr.net

ogrudzevich@ippe.ru

otto.schwerer@aon.at

pikulina@expd.vniief.ru

pritychenko@bnl.gov

scyang@kaeri.re.kr

selyankina@expd.vniief.ru

sonzogni@bnl.gov

stakacs@atomki.mta.hu

stanislav.hlavac@savba.sk

sv.dunaeva@gmail.com

tada@nucl.sci.hokudai.ac.jp

taova@expd.vniief.ru

tarkanyi@atomki.hu

v.devi@iaea.org

v.zerkin@iaea.org

vidyathakur@yahoo.co.in

vsemkova@inrne.bas.bg

vvvarlamov@gmail.com

yolee@kaeri.re.kr

zholdybayev@inp.kz