## **Draft minutes for the SC-C-NPU Committee meeting**

Linköping, Sweden, October 4.-5. 2012

#### Item

- The meeting opened October 4<sup>th</sup> 9:00 a.m.
  - Participants: Robert Flatman (RF) (Chair)
  - René Dybkaer (RD)
  - Ulla Magdal Petersen (UMP) (secretary)
  - Helle Møller Johannessen (HMJ)
  - Gunnar Nordin (GN)
  - Urban Forsum (UF)
  - Daniel Karlsson (DK) (absent for some items)
  - Apologies from: Ivan Bruunshuus, Françoise Pontet (FP), Xavier Fuentes-Arderiu, Kazuyoshi Yamauchi, Georges Férard (GF)

## GN was thanked for his service as secretary, with message from Françoise Pontet:

Now that he has fully passed the baton to Ulla, I think we ought to warmly congratulate and thank Gunnar for all the outstanding work of secretariat he has performed during the past 6 years 1/2. I must stress that many activities which were performed by our C-SC during that period of time could be finalized due to his hard and efficient work. I mean not only taking notes during meetings, and reporting them in the minutes, exchanging and often leading e-mail and telephone discussions, but also his supporting help in various communications (papers, posters, oral presentations), his presence to represent the SC-C-NPU each time necessary in Conferences and Congresses.

I rapidly understood that I could count on him for any help, and this has been a great support for me during my chairmanship.

I do wish good luck to Ulla and send her many cheers for her new position, which she will fulfill very successfully, as we can trust her.

Kindest regards to all.

Françoise

- 2. The agenda was approved with correction of minor errors, and some rearragement of items and their numbering.
- 3. The minutes from last meeting in Copenhagen 26th 27th April 2012 were approved.
  - 4. Review of members and corresponding members.

The current IFCC members are:

- Robert Flatman (Chair) AUS 1st 2012 01 2014
- Urban Forsum SE 1st 2011 01 2013
- Ulla Magdal Petersen DK 2nd 2012 01 2014
- René Dybkaer (Consultant) DK

A new IFCC titular member has been appointed:

Kazuyoshi Yamauchi 2012 06 - 2014

There is still one IFCC vacancy unfilled.

The members of the committee for the Silver Book revision are:

- George Férard (Chair) FR 2nd 2010 01- 2012 12
- Francoise Pontet (IUPAC co-Chair) FR 2nd 2010 01- 2012 12
- René Dybkaer DK 2nd 2010 01- 2012 12

- Xavier Fuentes-Arderiu ES 2nd 2010 01- 2012 12
- Dongchon Kang JP 2nd 2010 01- 2012 12
- Clem McDonald US 2nd 2010 01- 2012 12
- Gilbert Hill CA 2nd 2010 01- 2012 12

Corresponding Members (as nominated by Full IFCC Members' Societies) are:

- Gilbert Hill (Canadian Society of Clinical Chemistry (CSCC))
- Helle Johannessen (Danish Society of Clinical Biochemsitry (DSKB))
- Georges Férard (Société Française de Biologie Clinique (SFBC))
- Masayuki Totani (Japan Society of Clinical Chemistry (JSCC))
- Dalius Vitkus (Lithuanian Society of Laboratory Medicine)
- Valentina Koloska (Macedonian Society of Medical Biochemists)
- Jens Georg Gleditsch (Norwegian Society of Medical Biochemistry)
- Nada Majkic-Singh (Society of Medical Biochemists of Serbia (DMBS))
- Ariadna Padró-Miquel (Sociedad Española de Bioquímica Clínica y Patología Molecular (SEQC)
- Arden Forrey (American Association for Clinical Chemistry (AACC))

Members of current IUPAC projects are:

2001-070-1-700 (Properties and units for urinary calculi)

- Chair: Gunnar Nordin
- Pedro de Araujo
- · René Dybkaer
- Urban Forsum
- Antonin Jabor
- Wolf Külpmann

2006-048-2-700 (Recent advances in Nomenclature, Properties and Units: strategy for promoting SC-NPU achievements)

- Françoise Pontet (chair)
- de Araujo, Pedro
- Xavier Fuentes-Arderiu

2006-008-1-700 (Mapping of IFCC-IUPAC laboratory coding system to SNOMED CT (SNOMED CT - Systematized Nomenclature of Medicine Clinical Terms)

- Ulla Magdal Petersen (chair)
- Ivan Bruunshuus
- Urban Forsum
- Daniel Karlsson
- Gunnar Nordin

2010-035-3-700 (Establishing definitions for non-referenced terms in the NPU terminology)

- Helle Møller Johannessen (chair)
- Ivan Bruunshuus
- Robert Flatman
- Urban Forsum
- Ulla Magdal Petersen
- Gunnar Nordin

Members of current IUPAC projects are all Elected Members of the IUPAC subcommittee, with RF as Chair and UMP as Secretary.

- 5. Budget for the meeting:
  - RD, RF and UMP will apply for IFCC funding. Travel expenses for HMJ and GN will be covered by project 2006-008-1-700.
- 6. Next meeting will be in Istanbul in August 2013 in connection with the 44th IUPAC Congress August

- 11.-16. RF will ask FP for advice on dates and meeting facilities.
- 7. Report on negotiations between the NPU stakeholders regarding the future management, and status for the proposed Steering Committee and Statement of Intent.
  - Work has been ongoing during summer 2012. A Statement of Intent has been signed by IFCC, IUPAC and the Danish Board of eHealth (DBeH), formalizing the role of DBeH as manager of and repository for the NPU terminology.
  - A Steering Committee (SC) has been constituted, and work on Terms of Reference for SC is ongoing. RF vill send out revised copies of the minutes of the latest teleconference meeting.
  - Comments from the C-SC-NPU: The SC is an opportunity for representatives of IUPAC and IFCC to join in commitment to their common property. (It seems a very large committee, and that may change over time.) Needs that should soon be adressed by the SC are to
    - 1. signal the prescence of an organisation able to support the continuity and stability of the NPU terminology, e.g. as news on the IFCC and IUPAC websites
    - initiate work on a regularly updated Users' Guide for the NPU terminology, to support the work of the National Relese Centres and the users of the terminology.

#### 8. Report from members:

- GN: The Swedish 'National Patient Overview' will use the NPU terminology for representation of laboratory information. Ressources for the technical solution is been granted, and work is ongoing. Inter-county communication is functioning, but still fragile. Demonstration of the EQUALIS NPU services.
  - A new frame system, HealthShare, will receive input from distributed systems into the NPÖ. An agreement on common units for determination of some hormones has been approved by several medical societies in Sweden,
- RF: Australia has declared for LOINC coding. In some fields results produced by different devices
  or techiques are not comparable, and there is a need to communicate info on technique with the
  result value.
- UMP: 'Trivial names' are in demand for the NPU Codes in Denmark they are not defining or unique. Inferring the wrong investigations and results from the 'trivial names' has caused some undesired events.
- RD: Flyer/leaflet and paper on 'Recommendations for clinical laboratory science reports regarding properties, units, symbols: the NPU format' has been communicated. Comments should be sent to GF.
- HMJ: Has received her degree in Information Technology. And is nominated as a IUPAC division VII Committee member.
- DK: IHTSDO work: the final draft model for Observable entities is still developing. Calculated indexes have been discussed recently, and the decision is NOT to include actual formula, but to use the trivial names for each calculation formula.
- 9. Project report: Vocabulary for nominal properties and nominal examinations basic and general concepts and associated terms (VIN) (IUPAC project 2004-023-1-700).
  - GN: The VIN went prematurely into public hearing, and corrections are still needed. Definitions on some basic concepts have been removed, leaving them as primitives.
  - Report from FP appended below.
  - GN/RD: The VIN and Silver Book (SB) need to agree they do not always. The SB must be determining in the general structure VIN simply supplies detail. Input to the work is welcomed.
- 10. Project report: The promotion project (IUPAC project 2006-048-2-700).
  - RF: wikipedia content waits for finalizing. Input is welcomed. The wiki publication is probably the

final deliverable from the project, which is expiring.

- 11. Project report: Silver Book Revision.
  - · Report from FP appended below.
  - Latest revision is from 02.10.2012. The SB is brought in accordance with ISO 80000. Chapter 4 is revised and chapter 10 added. Comments are welcomed to GF.
- 12. Project report: The definition project for non-referenced terms (IUPAC project 2010-035-2-700).
  - The WG have gone through about ¼ of the undefined terms. A set of guidelines are under development.
- 13. Project report Urinary calculi. (IUPAC project 2001-070-1-700). UF will ask an urologist ('Tiselius') to participate in finishing the project. It will not be necessary to update the collection of NPU definitions in the document if those present can serve as models for new definitions.
- 14. Project report: The Mapping project (IUPAC project 2006-008-1-700)
  - Report from DK on IHTSDO cooperation: during the time since the 2009 project work in mapping NPU properties to SNOMED CT projects, the IHTSDO has been in negotiations with Regenstrief Institute about mapping of LOINC properties with the plan to start NPU negotiations following a Regenstrief agreement. These negotiations have been lengthy but currently the target is to have an agreement in October 2012. Thus, project work is expected to be resumed shortly after this date.
  - UMP will ask for an extension to allow for the project to be either redefined or abandoned depending on outcome of IHTSDO negotiations.
- 15. The discussed and needed Molecular Diagnostics revision project is still waiting for a chair. Ariadna Padró-Miquel is willing to participate in the project. UMP will contact a Danish MBG specialist who has expressed interest and suggest that Xavier chair the project, alternatively aid UMP as Chair.
- 16. NPU participation in MedInfo 2013 in Copenhagen NPU should participate with at least a presentation or a poster.
  - One of the topics is Ontologies/Standards/Terminologies.
  - Deadline for papers and posters is 10. December.
  - A workshop or tutorial on NPU is a good chance to introduce the terminology deadline 10. January. Suggestions are needed.
- 17. Suggestions for new projects
- 18. Report from the Scandinavian Conference on Health Informatics (http://www.shi2012.org) and the Swedish Term conference (http://www.termkonferens.se/) October 2nd 3rd
  - UF and DK were the driving forces of the conferences, and it was successful congratulations!
  - UF presented the rationale for development of laboratory coding, GN the Swedish NPU Release
    Center, and UMP the principles and implementation of the NPU terminology at the conference,
    with the main intention of broadening the scope of our activities and the understanding of the
    NPU in the Nordic terminology context.
  - Presentations are available at www.shi2012.org
- 19. The upcoming IHTSDO meetings October 2012 in Stockholm, Sweden.
  - Relations between NPU and SNOMED CT Information from DK appended below
  - UMP and HMJ will participate in the Special Interest Group iPalm meeting
- 20. Terminological issues
  - Suggestion for revision of the format for representing units containing powers of 10 (e.g. x 10<sup>-6</sup>/L, x 10<sup>3</sup> IU/L). Remove 'x ', and remove space in front of 'IU'. NPU codes will continue to follow

ISO 80000 – users are free to use desired representations for units.

- Suggestion for using specific unit expressions with fractions (mg/kg, mmol/mol, ml/l) instead of powers of ten (x 10<sup>-6</sup> x 10<sup>-3</sup>). There are many complexities involved among the the proposed use of % for number fractions alone. UMP and GN will each work out examples of what the suggested change(s) will entail, and circulate them.
- UCUM as a 'standard' for units. It is a standard for communication of a broad collection of more
  or less authorized unit expressions, but it may be understood as a standard for unit use. DK will
  try to match all NPU units in use to the information in the UCUM table.
- 21. Items left for further discussions after the Copenhagen meeting
  - There are no news on possible collaborations with GS1.
  - RF earlier suggested the preparation of a top 100 concepts with NPU-codes, intended for promotional work. Terms for 200 common analyses/result types are collected in Australia, and LOINC codes and recommended units are established for them. UMP will try to establish NPU codes for the same 200 items for comparison.
  - Projects are difficult to establish and take years to finish. C-NPU often decides on minor revisions
    without having a formal project these decisions need to be communicated. A regularly revised
    'NPU User's Guide' will be suggested to the Steering Committee. The actual work may be done
    at DNBH if ressources can be found.
  - the proper kind-of-quantity for the outcome of a division between mass concentration of albumin
    in urine and substance concentration of creatinine in urine was discussed. "quotient
    (mass/substance)" was decided and implemented, but does not agree with the Silver Book
    decision "coefficient". The suggestions for the use of terms 'coefficient', 'factor', 'parameter' and
    'quotient' in ANNEX A of ISO 80000 are somewhat ambiguous, and further analysis is needed.
    UMP will describe her view in more detail.

#### 22. Miscellany

- 'Editorial' paper received from Xavier was introduced and will be considered further.
- A new terminological reference for cell types relevant in cancer diagnostics was accepted: the NIH NCI thesaurus <a href="http://ncit.nci.nih.gov/">http://ncit.nci.nih.gov/</a>. It may replace MeSH and CLSI H56-A references where cell type definitions are filed. If a cell type is filed without a definition, a reference and term from NCIt may be used, if no other source for a cell type definition is available.
- Cooperation with the IUPAC subcommittee for Chemical Education might be fruitful. GN will try to arrange a meeting at the IUPAC Congress in Istanbul.
- 23. The meeting closed October 5th 16.00.

The WG on 'Definitions' (2010-035-700 Establishing definitions for non-referenced terms in the NPU terminology) met on Wednesday 3. October, starting at 16.30 pm and ending about 19.00. Participants: HMJ (Chair), UMP, RF GN, UF

# **Appendices**

F Pontet

29 September 2012

REPORT ON THE NOMINAL PROPERTIES ("VIN") manuscript (May-September 2012)

- Thorough discussions were held in the Task Group in May and June to modify the text taking the reviewers' comments into account.
- Hard work was again provided to meet the deadline at the end of June.
- Some late modifications could not be implemented in the manuscript they were announced in the authors' replies to the reviewers's comments.
- The resulting discrepancies will have to be re-examined and solved during the public review.
- Intermediate unavailability of the PAC online service made the resubmission unexpectedly complicated, and it was finalized around mid July only.
- No news were then provided until René discovered by chance that the manuscript was posted for the public review on the IUPAC website, up to the 30 November: <a href="http://www.iupac.org/home/publications/provisional-recommendations/currently-under-public-review/currently-under-public-review-container/vocabulary-for-nominal-properties-and-nominal-examinations-basic-and-general-concepts-and-associated-terms.html">http://www.iupac.org/home/publications/provisional-recommendations/currently-under-public-review/currently-under-public-review-container/vocabulary-for-nominal-properties-and-nominal-examinations-basic-and-general-concepts-and-associated-terms.html</a>
- A complaining e-mail was sent to IUPAC and PAC secretariat. The latter apologized and accepted to extend the public review period until 29 February.
- Therefore, this link will be provided (by FP) to the interested colleagues (IFCC, JCGM-WG2 notably), to whom a 5 months period for the public review had been announced.

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Georges Férard and Françoise Pontet 2012

30 September

# REPORT ON THE SILVER BOOK REVISION (May-September 2012)

- A report on this project was sent to Ellis Jacobs (IFCC-CPD President) at his request
- The question of the special characters (presented in a large table) was raised to the IUPAC secretariat, and an answer was provided : the printer has a special software to manage these.
- The chapter on Nominal Properties still waits for the "VIN" manuscript review to be fully completed
- A summary of the revised Silver Book, dedicated to a description of the IUPAC & IFCC NPU format was accepted as a position paper for the special issue of CCLM organized by the IFCC Scientific Division
- The foreseen meeting in 2012 in Paris could not be organized because of the delay in the

review of the Nominal properties manuscript. This meeting could be organized in the Spring 2013, if the final version of the "VIN" is ready on time to allow this meeting then.

- The Leaflet was further discussed in the Task Group. It will be circulated again.

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### NPU and IHTSDO

DK 2012-10-05

In 2009, from April to September, there was a joint project where C-SC-NPU and Regenstrief Institute provided mappings from NPU and LOINC properties to SNOMED CT concepts in order to test a division of work and to test a proposed SNOMED CT model. From the C-SC-NPU side, the result of the project was that issues were identified but that the division of work was found reasonable and that the model was generally applicable to C-SC-NPU content.

During the time since the 2009 the IHTSDO has been in negotiations with Regenstrief Institute about mapping of LOINC properties with the plan to start C-SC-NPU negotiations following a Regenstrief agreement. These negotiations have been lengthy but currently the target is to have an agreement in October 2012. Thus, it is expected that work may be resumed shortly after this date.

As a further result of discussions in 2009 in the C-SC-NPU SNOMED CT mapping<sup>1</sup> project, three specific activities in relation to SNOMED CT were identified: (1) the mapping of all elements of C-SC-NPU properties to SNOMED CT, (2) the mapping of the current C-SC-NPU dedicated kinds-of-property to SNOMED CT, and (3) the maintenance of mappings including the continuous mapping of new C-SC-NPU content to SNOMED CT. The first two are projects with a finite scope while the latter is a long term maintenance function.

The mapping of C-SC-NPU elements to SNOMED CT, e.g. the mapping of substance terms used in C-SC-NPU kind-of-property definitions, will include proposals to IHTSDO for addition of missing concepts and housekeeping of existing C-SC-NPU content. Currently there are approximately 15 000 (?) elements in use.

The mapping of current C-SC-NPU dedicated kinds-of-property to SNOMED CT, i.e. the mapping of the active content of the current NPU Database, will include the mapping from the C-SC-NPU model to the more detailed IHTSDO model, to be finally decided upon by the IHTSDO given input from stakeholders. The project also includes the development of methods for doing this mapping, including mapping rules.

In terms of what's needed in an IHTSDO agreement, to be able to perform the two projects, the C-SC-NPU would need some SNOMED CT license and the possibility of submitting change requests to IHTSDO. In terms of resources, both projects would include the development and/or procurement of tools to support the activities as well as a significant amount of human resources.

By "mapping" is meant the activity of establishing a relation between an entity in one system to an entity in another system, systems here being terminological systems, entities being terms, codes, concepts or classes. The relation could be an equivalence relation meaning that the two entities are said to be of equivalent meaning, but other kinds are possible including e.g. subclass or superclass relations.

The third activity, i.e. the continuous maintenance of existing mappings and the mapping of new C-SC-NPU content, given the successful results of the previous projects and current estimations, the mapping of new C-SC-NPU content (elements and dedicated kinds-of-property) to SNOMED CT would require a relatively small amount of extra resources compared to the current work on developing C-SC-NPU content. This third activity may also include the C-SC-NPU to do content development from requests sent to the IHTSDO. This was part of the discussions in 2009 but the current position of the IHTSDO on this matter should be a question put at the Stockholm meeting. In this case, the agreement with IHTSDO would be more complex, with responsibilities on both ends. Details of this would have to be worked out.

All three activities would require funding and availability of resources, including staff, knowledge, tools, hardware etc. This funding will to a large extent have to come from NPU Terminology users, but it should be established before and in discussions with IHTSDO that C-SC-NPU and supporting organizations has the resources to perform these activities.