Draft template for biennial activity report from JCTLM Member organizations

All JCTLM Members are invited to attend the Members’ and Stakeholders’ Meeting, which is held once every two years, and submit a report of their activities in support of traceability in laboratory medicine over the preceding period.

For that purpose this template document provides guidance to JCTLM Members for drafting their biennial activity report. Organizations are invited to provide the information below for submission to the Executive Committee.

Organization: LNE (Laboratoire National de Métrologie et d'Essais)

JCTLM Member status: National and Regional member

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Period covered: 2018 – 2019

1. Major achievement(s) in support of standardization in laboratory medicine

(Please describe what activities your organization has undertaken related to the implementation of reference measurement systems in laboratory medicine during the last two years, including but not limited to information on: the production of certified reference materials; the development of reference measurement methods; or the establishment of calibration (reference) measurement services. Outline the measurement area(s)/measurands covered, and, provide a listing of the relevant technical/scientific publications.)

- In 2019, nominations for certified reference materials LNE CRM HbA1c 401, 402, and 403 were accepted for listing in the JCTLM Database
- LNE actively participates in standardization activities in cooperation with different IFCC Working groups:
  o As part of EMPIR project AntiMicroResist, LNE initiated the development of a candidate reference measurement procedure for procalcitonin measurement in human serum and the associated CRMs. This work is directly supporting activities of IFCC WG-PCT that is chaired by LNE;
  o As part of EMPIR project NeuroMet, LNE initiated the development of a candidate reference measurement procedure for Tau protein measurement in CSF and the associated CRMs. This work is directly supporting activities of IFCC WG-CSF;
  o As part of EMPIR project CardioMet, LNE initiated the development of primary calibrators that will be used to calibrate candidate reference measurement procedures developed within IFCC WG-ApoMS for apolipoproteins apoA-I, B, C-I, C-II, C-III, E and apo (a)
  o Through its membership in IFCC committee on bone metabolism, LNE contributed in the organization of commutability studies on PINP and PTH with the objective to standardize clinical measurements for these biomarkers

Relevant publications:

2. Planned activity(ies) in support of standardization in laboratory medicine

(Please outline R&D project(s) and/or programme(s) planned by your organization in the next two years including information on: new measurement area(s)/measurands of interest for your organization; new CRMs and renewals of materials; development of methods (new measurands and improved measurement technique/principle); and extensions of your calibration measurement service(s) portfolio.)

- As part of EMPIR project SeptiMet, LNE will:
  - pursue the development of a candidate reference measurement procedure for procalcitonin measurement in human serum and the associated CRMs. This work is directly supporting activities of IFCC WG-PCT that is chaired by LNE;
  - initiate the development of candidate reference measurement procedure for a panel of sepsis markers.

- As part of EMPIR project NeuroMet2, LNE will:
  - pursue the development of a candidate reference measurement procedure for Tau protein measurement in CSF and the associated CRMs. This work is directly supporting activities of IFCC WG-CSF;
  - initiate the development of candidate reference measurement procedure for the measurement of phosphorylated Tau protein in CSF.

- As part of EMPIR project CardioMet, LNE will pursue the development of primary calibrators that will be used to calibrate candidate reference measurement procedures developed within IFCC WG-ApoMS for apolipoproteins apoA-I, B, C-I, C-II, C-III, E and apo (a).

3. Promoting traceability in laboratory medicine

(Please describe activities your organization has undertaken during the last two years for promoting traceability in laboratory medicine including but not limited to a listing of your publication(s), presentation(s) and other communication(s) on traceability at international and national conferences or congresses, or other forums for clinical laboratory medicine)

- Through its membership in IFCC Working Group on Commutability, LNE contributed in the preparation on recommendations on commutability assessment that were subject to 3 publications in clinical chemistry. A fourth manuscript was recently submitted on how to correct non-commutability of CRMs.
- Through its membership in JCTLM Working Group on Traceability Education & Promotion, LNE contributed in disseminating and promoting the metrology concepts paving the road towards implementation of reference measurement systems in laboratory medicine.
Relevant presentations:

- October 2019: EQALM Congress, Ljubliana (Slovenia): “why and how to assess commutability of EQA Materials?”
- Sept 2019: congress of the Korean Society of clinical biology, Pusan (South Korea): “Standardization of lipoprotein testing”
- May 2019: IFCC congress, Barcelona (Spain): “Standardization of advanced lipoprotein testing: the BioSITrace project”

4. Reference laboratory networks /collaborations focusing on developing /implementing reference measurement systems

(Please describe your participation in laboratory networks, forums or professional/technical committees linked to reference measurements system development/implementation, and contributions to JCTLM Working Group activities.)

- LNE is a member of the CRMLN (Cholesterol Reference Method Laboratory Network) and as such it participates in biannual interlaboratory comparisons
- LNE is co-chair of the European Metrology Network “TraceLabMed”
- LNE actively participates in CCQM Working Group on Proteins (PAWG)
- LNE participates in JCTLM Working Group on Traceability Education & Promotion
- LNE participates in SFBC Working Group on Bilirubin
- LNE participates in SFBC Working Group on Kidney Disease
- LNE participates in SFBC Working Group on LDL Cholesterol

5. Open questions and suggestions to be addressed by JCTLM

(Suggestions on issues related to standardization and metrological traceability that should be considered by the JCTLM)

Note: The information of this report will be accessible publicly on the relevant JCTLM Members webpage, unless the author of the report states otherwise. In the case the organization does not authorize the publication of the report in part or full, the author will add a statement to clarify which part(s) of the report will /will not be rendered public.