

Planned Work Programme for 2016 and 2017 as of 6 October 2015

Explanatory remark

This planned work programme reflects the tasks of EURLs as fixed in REGULATION (EC) No 882/2004. Furthermore, SANTE/10305/2015 CIS and its ANNEX define **four operational objectives** for the work of the EU Reference Laboratories for 2016 and 2017. In the following planned work programme for 2016 and 2017, the fulfilment of these objectives is indicated for each topic (directly under title of each topic). Then, the above mentioned SANTE document describes **activities** to be funded specifically for each EURL. Also the fulfilment of these activities is indicated. Furthermore, it includes the **request from the Commission of 24 September 2015** (i) to initiate new work on the analysis of short and medium chain chlorinated paraffins in feed and food, (ii) assistance to the Commission related to the analysis of brominated flame retardants and perfluor alkylated substances in feed and food.

1. General tasks of EURL

Covering the **operational objectives**:

- ✓ To ensure the availability of scientific and technical assistance provided by the EU-RLs,
- ✓ To ensure a sound and efficient management of EU-RL funding cycle.

1.1. Technical and scientific support to the Commission.

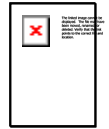
1.2. Compilation of the **Technical and Financial Report for 2015** by 31 March, 2016.

1.3. Optional, if the EU Commission considers this helpful: Compilation of a separate **Technical Report for 2016** by 31 March, 2017 and of a Technical Report for 2017 by 31 March 2018. Otherwise, compilation of the Technical Report for 2016 and 2017 by 31 March 2018.

1.4. Compilation of the Financial Report for 2016 and 2017 by 31 March 2018.

1.5. Compilation of the **planned activities, estimated budget and performance indicators for 2018** (or 2018 and 2019) by 1 September 2017.

1.6. Participation in annual co-ordinating meetings and general management activities of the **Commission** (e.g. meetings between COM and directors of EURLs).



- 1.7. Participation in annual co-ordinating meetings and general management activities of other **EURLs for contaminants/residues**, as far as necessary.
- 1.8. **Maintenance of contacts to National Reference Laboratories (NRLs)** and build-up of contacts to possibly newly selected NRLs. The tasks of the EURL and NRLs is to cover dioxins, dioxin-like PCBs and indicator PCBs in food and feed and in particular analytical issues related to both confirmatory and screening methods. However, the structure and capabilities of NRLs differ from Member State to Member State requiring a more complex system of linking the NRLs with the EURL/NRL network. Therefore, the EURL compiled a list with all NRLs and contact points in this field and keeps this list updated. The list includes contact data and information about analytical capabilities.
- 1.9. In cooperation with the competent NRLs, **maintenance of contacts to Official Laboratories (OFLs)** and build-up of contacts to newly selected OFLs in cooperation with NRLs, for inclusion of OFLs in proficiency tests (PTs).
- 1.10. **Documentation services** (updating of the FIS-VL platform/publicly accessible EURL-website on regular basis with focus on disseminating information to NRLs. Constant monitoring of analytical methodology and EU legislation).
- 1.11. **Cooperation with international organizations**, in particular EFSA, CEN, WHO and UNEP (also for harmonization of requirements in the field of POPs analysis), where necessary.
- 1.12. Participation and presentation of EURL activities at most important international **conferences** in the relevant area.

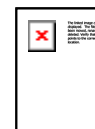
2. Development and validation of analytical methodology

Covering:

- the **operational objectives**
 - ✓ To ensure the development and use of high quality analytical methods across the EU-RL framework
 - ✓ To maintain appropriate level of proficiency testing ensuring efficiency of control analysis methods
- the **specific activity** for the EURL for dioxins and PCBs
- the **request from the Commission** of 24 September 2015

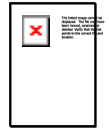
2.1. PCDD/Fs, PCBs and dioxin-like compounds

- 2.1.1. Performance of **four interlaboratory studies/proficiency tests (PTs) for determination of PCDD/Fs and PCBs in food and/or feed** (two PTs in 2016 and



two PTs in 2017) for further improvement of analytical methods with regard to correct determination of PCDD/Fs and PCBs by screening or confirmatory methods (see 3.2).

- 2.1.2. Harmonization of extraction methods and fat determination for food:
Test of applicability of different extraction methods for extraction of fat and analytes of interest for possible harmonization/standardization.
- 2.1.3. Evaluation/optimization and comparison of automated, semi-automated and manual extraction and clean-up procedures (permanent task) focusing on analysis of PCDD/Fs and PCBs in **complex food and feed matrices**.
- 2.1.4. Evaluation of GC-HRMS and/or GC-MS/MS methods with focus on the reliability of analysis of PCDD/Fs and PCBs in **complex food and feed matrices** at various levels.
- 2.1.5. Determination of PCDD/Fs and PCBs in animal blood, evaluation of results and of correspondence between blood and animal tissue (permanent task).
- 2.1.6. Selection and testing of possible test material (food, feed) for applicability in future proficiency tests.
- 2.1.7. Development, optimization and validation of bioanalytical methods: Screening methods for checking of EU-regulated food matrices (in particular **complex matrices**) for compliance with MLs and ALs (permanent task).
- 2.1.8. Optimization/development and validation of new bioanalytical methods for screening of EU-regulated feed matrices (permanent task), in particular in **complex matrices**. Focus will be on extraction and clean-up steps, assay-performance and statistical evaluation of bioanalytical results. PCDD/F-BEQs and DL-PCB-BEQs are measured separately on H4L1.1 rat hepatoma cells and/or on highly sensitive H4L7.5 rat hepatoma cells containing 20 DRE (available from University of California Davis, USA).
- 2.1.9. Validated methods for screening of food and feed will be applied to confirmed routine samples to enlarge the already existing QC-data base ultimately leading to performance re-evaluation.
- 2.1.10. Evaluation of the bioassay response of polychlorinated naphthalenes (PCN): Polychlorinated naphthalenes (PCN) are a group of 75 planar compounds structurally similar to the highly toxic 2,3,7,8-TCDD suggesting an aryl hydrocarbon (AhR)-mediated mechanism of toxicity. PCNs can be recognized as environmental pollutants, and current evidence shows that they are found in humans and other biota. The sensitivity of various hepatoma cell systems upon exposure of standard dilution series of selected PCNs shall be tested, by establishing dose-response curves and aiming at re-evaluation of unbiased REP-factors.



2.1.11. These PCNs will be checked for possible impurities by dioxin-like compounds, to ensure valid results when REP factors are derived from the dose-response curves.

2.2. Polychlorinated paraffins (CPs)

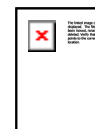
- 2.2.1. Development of a GC-MS(/MS)-method for determination of short and medium chain CPs in feed and food, including comparison of different ionization/MS techniques as available at EU-RL
- 2.2.2. Performance of one interlaboratory study/proficiency test (PT) for determination of short and medium chain CPs in standard solutions and/or food for laboratories performing CP analysis (in 2017)
- 2.2.3. Evaluation of PT results and comparison of different methods for determination of short and medium chain CPs

3. Quality assurance and quality control

Covering:

- the operational objectives
 - ✓ To maintain appropriate level of proficiency testing ensuring efficiency of control analysis methods
 - ✓ To ensure the availability of scientific and technical assistance provided by the EU-RLs
- the specific activity for the EURL for dioxins and PCBs

- 3.1. Performance of **QA/QC activities** for the carrying out of the EURL tasks/activities, as required by ISO 17025 and 17043 accreditation, for both parts of the EURL (confirmatory and bioanalytical screening methods).
- 3.2. Organisation of **four interlaboratory studies/proficiency tests (PTs)** on determination of PCDD/Fs and PCBs in **food and / or feed** (two PTs in 2016 and two PTs in 2017, see 2.1.1). The PTs will be addressed to NRLs with confirmatory methods and screening methods. Results will be discussed and conclusions be drawn at two EURL/NRL workshops organized in the first respectively second half of as well 2016 as 2017. One PT will focus also on the **reliability of analysis** of PCDD/Fs and PCBs in **complex food or feed matrices**.
- 3.3. **Follow-up** on performance of NRLs in EURL proficiency tests with special focus on underperformance



4. Technical and scientific support to Member States and the Commission, inclusive arbitration and training activities

Covering:

- the operational objectives
 - ✓ To ensure the development and use of high quality analytical methods across the EU-RL framework
 - ✓ To ensure the availability of scientific and technical assistance provided by the EU-RLs
- the request from the Commission of 24 September 2015

4.1. PCDD/Fs, PCBs and dioxin-like compounds

- 4.1.1. Analytical support to the Commission and to NRLs of Member States and Candidate Countries.
- 4.1.2. Annual training course for NRLs, either at the EU-RL or on-site training at NRL(s)
- 4.1.3. For specific tasks, working groups might be formed to address specific needs with regard to physical-chemical or bioanalytical aspects, e.g. regulation, development of physical-chemical screening methods, validation schemes, or practical guidelines on validation.
- 4.1.4. A core working group on Measurement Uncertainty (MU) was formed in 2012 which contributes to the harmonization of the application of MU and prepares a guidance document for this purpose. In cooperation with the three other EURLs for contaminants, this Core Working Group contributes also to the harmonized estimation of LOD and LOQ for measurements in the field of contaminants in food and develops a Guidance Document also for this goal as requested by the EU Commission. It is intended to finish the main work of this core working group in 2015 with communication of the two draft guidance documents to the NRL network for discussion and adoption. However, final amendments are to be envisaged for 2016 and therefore are part of the planned activities in this year.
- 4.1.5. A core working group “Dioxin and PCB congener patterns” was formed in 2012. This core working group will continue its work in 2016 and 2017.
- 4.1.6. Mission to NRLs and dissemination of scientific information if necessary
- 4.1.7. Individual follow-up and assistance to NRLs of which the analytical results from the interlaboratory study are not satisfactory
- 4.1.8. Analyses of official samples on request (submitted by EU Member States in case of dispute between Member States or in case of analytical problems with a responsible NRL)



- 4.1.9. Organisation of two annual workshops and discussion of interlaboratory studies/proficiency tests in both fields food and feed for dioxins, dioxin-like PCBs and indicator PCBs (see 2.1.1 and 3.2) for NRLs using confirmatory methods (based on GC/HRMS, GC/MS or GC/ECD, depending on the analyte) and / or screening methods (bioanalytical or GC-MS methods) The workshop concept will be based on organization of one workshop per year at the EURL in Freiburg and one workshop at one of the NRLs. Reports will be distributed independently from the two-years-period of the Commission Work Programme: As first step, draft reports will be circulated among participants for possible comments; then the final version will be prepared for distribution to the NRL network in due time before the following workshop.
- 4.2. Polychlorinated paraffins, brominated flame retardants and perfluor alkylated substances**
- 4.2.1. Assistance to the Commission related to the analysis of CPs, brominated flame retardants and perfluor alkylated substances in feed and food on request
- 4.2.2. Expert meetings might be organized for discussion of analysis of CPs and evaluation of results
- 4.2.3. Information of network on the findings with regard to analytical methods for determination of short and medium chain CPs
- 4.2.4. Presentation of PT results for CPs and discussion at second workshop in 2017