



Planned work programme for 2014 (as submitted on 29.08.2013 and updated on 13.09.2013 and 16.10.2014)

Legal functions and duties

The functions and duties of the European Union Reference Laboratory are described in Regulation No 882/2004. Objectives for the period January - December 2014 will be:

General Objectives

- A. General tasks
- **B.** Development and validation of analytical methods
- C. Quality assurance and quality control including the organisation and implementation of proficiency tests
- D. Technical and scientific support to NRLs/ EU Official labs, Commission and third countries

Working plan for the period January - December 2014 and multi-annual goals

A. General Tasks

- 1. Participation in co-ordinating meetings and general management activities of EURLs for residues. The EURL "pesticides in food of animal origin and commodities with high fat content" (EURL-AO) needs a close cooperation with the other pesticide EURLs.
- 2. Compilation of the Technical and Financial Report for 2013 by 31 March 2014.
- 3. Compilation of the planned activities and estimated budget for 2015 by 31 August 2014.





- 4. For the EURL/NRL network, the list of all NRLs and contact points in the field "pesticides in food of animal origin and commodities with high fat content" will be kept updated. In addition, all OfLs as reported by the NRLs, will be added to this list and will be made available to the Commission and NRLs. This task will be performed in close connection to EURL SRM.
- 5. Maintenance of the EURL-website in cooperation with the other EURLs for pesticide residues, exchange of information via the website and updating on regular basis with the particular aim of disseminating information to NRLs. Information about important improvements of analytical methodology and major changes in EU legislation.
- 6. Maintenance of the CIRCA Domain in cooperation with the other EURLs for pesticide residues; continuous proving the status of the enrolled members.

B. Development and Validation of Analytical Methods

Analytical scientific work should cover the improvement of existing, approved multi-methods and the development and implementation of new multi-methods.

- Three groups of pesticides (organochlorine, organophosphorous and pyrethroid pesticides) can be considered to have been introduced to a certain degree in the daily routine of NRLs for pesticides in food of animal origin and high fat commodities. The evaluation of the results of EUPTs AO-01 to AO-08 showed that there were some advancements during the last 3 years but there is further need for improvement also for these groups. The spectrum of analytes will be extended continuously, also by inclusion of LC-MS-based methods (QuEChERS or SweEt-based). It is planned to add at least 20 new pesticides into the existing methods and to validate them in at least 2 matrices from different commodity groups.
- 2. Evaluating the outcome of a feeding study performed in summer 2013. Laying hens were fed with feed coming from EUPT CF 07: After feeding the blank test material the hens were fed with the test item of EUPT CF 07 and then fed again with the blank material.

The feed used in the study contains more than 20 pesticides. It is expected that in many cases residues of these pesticides and in some cases metabolites will occur in the eggs which are time depended. For all pesticides found curves showing the enrichment and the following decomposition will be evaluated. In addition, the egg test material will be useful to get information about the extractability of dosed pesticides in egg test material with different methods.





- 3. In cooperation with EURL FV: evaluating the background of extracts for MRM-pesticides (QuEChERS, SweEt) in food of animal origin. EURL FV has available software packages to extract matrix information from chromatograms achieved with LC-ToF-Equipment. EURL AO will analyse samples of animal origin from all commodity groups using LC-MS-(Q)-ToF. The resulting data (chromatograms) will be evaluated at EURL FV to get information about the density of matrix components being present through the whole chromatogram. The information will be used for interpretation of matrix effects and for improvement of the cleanup with the aim to reduce matrix effects in GC- and LC-MS for a better quantification.
- 4. Improvement of extraction and cleanup steps (QuEChERS, SweEt) for food of animal origin.

Actual MRM-methods for more polar pesticides like QuEChERS and SweEt are fast and well introduced in a quite number of laboratories. Combining extraction and centrifugation in one step can improve the applicability of the methods. This will be tested for at least two matrices from different commodity groups AO and about 100 pesticides. Co-extracted matrix compounds interfere with the target analytes (matrix suppression in LC-MS or matrix enhancement in GC-MS) may lead to wrong results. For at least two matrixes from different commodity groups further cleanup by using of alternative add ins for cleanup will be tested for about 100 pesticides and, if successful, validated.





C. Quality Assurance and Quality Control

- 1. As multi-annual goal, the availability of validated methods for the most important groups of pesticide residues in the most important matrices will be checked and promoted within the EURL / NRL network.
- 2. Maintenance of in-house QA/QC activities in consequence of the ISO 17025 accreditation of all analytical work done within the EURL.
- 3. Maintenance of proficiency testing in consequence of the ISO 17043 accreditation for performing EUPTs.
- 4. Performance of a proficiency test (PT) in cooperation with EURL SRM for MRMand SRM pesticides. The PT will be performed with all NRLs and OfLs of the EU Member States and Associated States and the results will be discussed with NRLs at the workshop in Freiburg. The PT will be based on egg matrix in line with the multi annual coordinated control programme. The PT will be designed for 80 to 120 participating laboratories (intention 100: 28 NRLs, 70 EU-OFLs, 2 EFTA laboratories) and the target analytes list comprises of about 50 to 80 MRM-pesticides (intention 65). The PT will be performed and evaluated in accordance with the general protocol for EU proficiency tests for pesticide residues in food and feed. Results will be discussed at the workshop (see D8). The schedule will be coordinated with the other pesticide EURLs and the Commission to avoid overlapping periods.
- 5. EURLs for FV, CF, SRM and AO will continue to establish defined criteria to evaluate whether a laboratory has had underperformance in the EUPTs, and if so, this laboratory could be a potential attendee for activity D.5.





D. Technical and Scientific Support to NRLs/EU Official labs, the Commission and Third Countries

- 1. General technical and scientific support to the Commission and its offices, as requested by the Commission.
- 2. Scientific support to the Commission and EFSA as regards the evaluation of possible applicability of proposed post-registration methods in routine analysis laboratories and residue definitions, esp. in the case of Art. 12 proposals.
- 3. Analytical support to the Commission upon request. Analyses of official samples submitted by EU Member States in case of dispute between Member States or in case of analytical problems with a responsible NRL. Upon request of the Commission EURL AO will analyse samples from other Member States for confirming critical results in crisis situations.
- 4. Support to the Commission for drafting of the EU coordinated working programme.
- Scientific support to NRLs
 NRLs will be supported with general scientific information and esp. in case of problems with methods for MRM-pesticides or the pesticides themselves (e.g. in case of lack of information about pesticides and the availability of the standards, degradation of standard).
- Analytical support to NRLs upon request.
 EURL AO will assist NRLs to establish new methods by providing them with test materials form previous EUPTs (test material service) or by exchange of samples and analysing them in parallel to show the validity of the results.
- 7. Missions to NRLs (at least one) if necessary (e.g. as an outcome of tasks C.4 and C.5).
- 8. A workshop with NRL-AOs in 2014 in Freiburg, Germany. In combination with the workshop a trainee for selected experts from NRLs will be offered.
- 9. At least one webinar will be organized individually or in collaboration with other EURLs for the network of NRLs and OfLs.