

WORK PROGRAMME of EURL for

EURL AO

PERIOD: 2018

Version 1.0
(date 29/11/2017)

CONTACT DETAILS

Ralf Lippold
EU Reference Laboratory for Pesticides in Food of Animal Origin and Commodities with high Fat Content
(EURL AO)

Chemisches und Veterinäruntersuchungsamt Freiburg
(State Institute for Chemical and Veterinary Analysis of Food)
Bissierstrasse 5
79114 Freiburg
Germany

Tel. +49 761 8855 132 (direct extension)
fax +49 761 8855 100
e-mail: ralf.lippold@cvuafr.bwl.de
e-mail of the EU-RL: eurl-pesticides@cvuafr.bwl.de

SUMMARY

INTRODUCTION page 3

ACTIVITIES

- 1. TO ENSURE AVAILABILITY AND USE OF HIGH QUALITY METHODS AND TO ENSURE HIGH QUALITY PERFORMANCE BY NRLs page 4
- 2. TO PROVIDE SCIENTIFIC AND TECHNICAL ASSISTANCE TO NRLS page 8
- 3. TO PROVIDE SCIENTIFIC AND TECHNICAL ASSISTANCE TO THE EUROPEAN COMMISSION AND OTHER ORGANISATIONS page 9
- 4. REAGENTS AND REFERENCE COLLECTIONS..... page 12
- 5. REQUIREMENTS RELATED TO OTHER LEGISLATION..... page 13

REMARKS..... page 14

INTRODUCTION

(Regarding relevant regulations and functions)

Regulation (EU) 625/2017 Art 94(2):

European Union reference laboratories designated in accordance with Article 93(1) shall be responsible for the following tasks insofar as they are included in the reference laboratories' annual or multiannual work programmes that have been established in conformity with the objectives and priorities of the relevant work programmes adopted by the Commission in accordance with Article 36 of Regulation (EU) No 652/2014:

(taking into account Art 147 of (EU) 625/2017)

1

TO ENSURE AVAILABILITY AND USE OF HIGH QUALITY METHODS AND TO ENSURE HIGH QUALITY PERFORMANCE BY NRLs.

Please, provided activities related to Regulation (EU) 2017/625:
(Number of Sub-activity boxes can be adjusted by EURL)

- *Art. 94.2.a Providing national reference laboratories with details and guidance on the methods of laboratory analysis, testing or diagnosis, including reference methods.*
- *Art. 94.2.b Providing reference materials to national reference laboratories*
- *Art. 94.2.c Coordinating the application by the national reference laboratories and, if necessary, by other official laboratories of the methods referred to in point (a), in particular, by organising regular inter-laboratory comparative testing or proficiency tests and by ensuring appropriate follow-up of such comparative testing or proficiency tests in accordance, where available, with internationally accepted protocols, and informing the Commission and the Member States of the results and follow-up to the inter-laboratory comparative testing or proficiency tests.*
- *Art. 94.2.l Where relevant for their area of competence, cooperate among themselves and with the Commission, as appropriate, to develop methods of analysis, testing or diagnosis of high standards.*

Sub-activity 1.1 *Scope-Extension for organochlorine, organophosphorous and pyrethroid pesticides*

Objectives: Keeping methods up to date and assistance for NRLs extending their scope

Description: Certain pesticides in food of animal origin and high fat commodities (mainly organochlorine, organophosphorous and pyrethroid pesticides) can be considered as introduced in the daily routine of NRLs. The evaluation of the results of EU Proficiency Tests (EUPTs) of the EURL-AO (EUPT AO-01 to AO-12) shows the progress achieved during the last 10 years. However, there is also further need for improvement for these groups. Therefore, the spectrum of analytes will be extended continuously.

Expected Output: support of NRLs (and OfLs), in particular in case of scope extension

Duration: permanent task

Sub-activity 1.2 Extension of Commodity Groups for New Method for GC amenable pesticide

Objectives: The method developed in 2017 shall be extended to further commodity groups.

Description: In 2017 EURL AO has developed a multi-residue method (MRM-method) based on QuChERS for analysis of GC amenable pesticides in liver and eggs applying GC-MS/MS. This work will be expanded to other matrices of interest e.g. milk powder and muscle. The results of the validation studies will be presented at the EPRW 2018 in Munich.

Expected Output: Output: support of NRLs (and OfLs), in particular in case of commodity extension

Duration: up to 4 Months, to be performed before May 2018

Sub-activity 1.3 Accurate Mass GC-MS and GC-MS/MS

Objectives: Applicability of GC accurate mass instrumentation couple in routine workload

Description: For quantification methods based on GC- or LC-MS/MS detection are used as golden standard in pesticide routine analysis. In case of food of animal origin mainly less polar, often fat soluble pesticides are found. For screening of a higher number of pesticides the use of high resolution accurate screening instruments like GC or LC coupled ToF or Orbitrap can be used to check for MRL compliance of the samples. The information obtained can be used to re-analyse the sample in case of later findings. It is foreseen to compare GC-MS/MS with GC-Orbitrap results for the matrices milk powder and meat.

Expected Output: support of NRLs (and OfLs), in particular in case of decisions for buying new instrumentation and introducing new technologies

Duration: up to 6 Months

Sub-activity 1.4 Standards of Metabolites and Inclusion in Multi Residue Methods

Objectives: Availability of Standards for Metabolites of Pesticides and the possibility of their Inclusion in Multi Residue Methods

Description: The MRL definition includes for a quite number of pesticides metabolites of these pesticides. In many cases metabolites included in the residue definition are not commercially available. It is planned to check the availability of metabolites for pesticides in food of animal origin and store the data found in an Excel table. The Excel table will be made available for the network AO (EURL – NRL – OfL) in CIRCA BC.

This task will be done in cooperation with the German BVL.

In case of new standards of metabolites are available, the EURL AO will check whether there are amenable within a multi residue method.

Expected Output: support of NRLs (and OfLs), in particular in case of scope extension

Duration: permanent task

Sub-activity 1.5 *Feeding study*

Objectives: Production of test material with real residues.

Description: The EURL AO will conduct two feeding studies for the matrices egg and fish in co-operation with EURL for Cereals and Feedingstuffs (EURL CF). Pesticide residues in feed can be transferred to the animals. For most feed/pesticide/animal combinations the transfer will not result in pesticide residue levels measurable in the animals. However, residues in eggs and in fish could be of interest. The following two task focus on this.

This is a continuation from the work programme 2016/17. It was difficult to find a partner for executing the study. The partner from the last feeding study will not overtake this task. Therefore a new partner has to be found. In 2018 a University will assist EURL AO and take over the part of feeding hen's and the fishes.

Expected Output: support of Commission, EFSA, NRLs (and OfLs), in particular in case of pesticides and metabolites to be present in samples. Test Items for checking the extractability of the residues from the matrix (task in 2019).

Duration: less than 1 month in 2018

Sub-activity 1.6 *Evaluation of Background of Extracts*

Objectives: Evaluation of the Clean-up Efficiency

Description: Application of the multi-residue method (MRM-method) based on QuChERS for analysis of GC amenable pesticides in 2017 applying GC-MS/MS. The extracts will be analysed with scanning accurate mass systems. The resulting data (chromatograms) will be evaluated 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 clean-up with the aim to reduce matrix effects in GC- and LC-MS for a better quantification.

Expected Output: support of NRLs (and OfLs), to avoid false qualitative (negative) and quantitative results.

Duration: about 1 month in 2018

Sub-activity 1.7 *Test Material Service (Art. 94.2.b)*

Objectives: Providing Test Material for the Internal Quality Control

Description: Rest overs from previous EUPT AO will be offered to NRLs (and OfLs) via CIRCA BC to be used for the internal quality control.

Expected Output: support of NRLs (and OfLs), to check the quality of their methods.

Duration: permanent task

Sub-activity 1.8 EUPT AO-13 (Art. 94.2.c)

Objectives: Performing of a High Quality Proficiency Test

Description: Performance of a proficiency test (EUPT) for MRM-pesticides. EUPT AO-13 will be performed with all NRLs and OfLs of the EU Member States and Associated States. It is designed for 90 to 130 participating laboratories (intention 110: 28 NRLs, 78 EU-OFLs, 2 EFTA laboratories, 1 Candidate State laboratory and 1 Third Country laboratory) and the target analytes lists will comprise 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. The time schedule will be coordinated with the other pesticide EURLs and the Commission to avoid overlapping periods.

Expected Output: Improvement of the quality assurance and reliability of analysis.

Duration: permanent task

TO PROVIDE SCIENTIFIC AND TECHNICAL ASSISTANCE TO NRLs

Please, provided activities related to Regulation (EU) 2017/625:
(Number of Sub-activity boxes can be adjusted by EURL)

- *Art. 94.2.d Coordinating practical arrangements necessary to apply new methods of laboratory analysis, testing or diagnosis, and informing national reference laboratories of advances in this field.*
-
- *Art. 94.2.e Conducting training courses for staff from national reference laboratories and, if needed, from other official laboratories, as well as of experts from third countries.*
-
- *Art. 94.2.g Providing information on relevant national, Union and international research activities to national reference laboratories.*

Sub-activity 2.1 Workshop with NRLs AO; Art. 94.2.d and 94.2.g

Objectives: Discussion of EUPT AO-13 and general Exchange of Information

Description: The workshop in Freiburg will allow the comprehensive exchange of information on the results of EUPT AO-13. In addition, also other important analytical developments and aspects of general importance will be exchanged. Number of participants: 32 (28 NRLs, 4 experts)

Expected Output: Comprehensive exchange of information and strengthening of the cooperation between the EURL, NRLs and COM

Duration: permanent task

Sub-activity 2.2 Training Workshop (Art. 94.2.e)

Objectives: Training of methods and evaluation

Description: A training course will be offered at the EURL (after or before the workshop 2.1).

Expected Output: Exchange of knowledge

Duration: Permanent Task

Sub-activity 2.3 Visit of a NRL (Art. 94.2.e)

Objectives: Visit of a NRL with obvious analytical problems

Description: An NRL with obvious analytical difficulties will be visited allowing to identify problems directly in the laboratory – according to the experience, the identification of the real reason for underperformance is difficult on basis of questionnaires and/or exchange of emails and phone calls.

Expected Output: most efficient support of this NRL

Duration: permanent task

3

TO PROVIDE SCIENTIFIC AND TECHNICAL ASSISTANCE TO THE EUROPEAN COMMISSION AND OTHER ORGANISATIONS

Please, provided activities related to Regulation (EU) 2017/625:
(Number of Sub-activity boxes can be adjusted by EURL)

- *Art. 94.2.f Providing scientific and technical assistance to the Commission within the scope of their mission.*
- *Art. 94.2.h Collaborating within the scope of their mission with laboratories in third countries and with the European Food Safety Authority (EFSA), the European Medicines Agency (EMA) and the European Centre for Disease Prevention and Control (ECDC).*
- *Art. 94.2.i Assisting actively in the diagnosis of outbreaks in Member States of foodborne, zoonotic or animal diseases, or of pests of plants, by carrying out confirmatory diagnosis, characterisation and taxonomic or epizootic studies on pathogen isolates or pest specimens.*

Sub-activity 3.1 *Technical and Financial Report for 2016 and 2017, Art. 94.2.f)*

Objectives: Compilation of the Technical and Financial Report for 2016 and 2017
Description: to be submitted by 31 March 2018
Expected Output: Information of the Commission's services
Duration: permanent task

Sub-activity 3.2 *Planned activities and estimated budget for 2019 onwards, Art. 94.2.f)*

Objectives: Compilation of the planned activities and estimated budget for 2019 (or 2019-2021, depending on the EU Regulations)
Description: to be submitted possibly by 1 September 2018
Expected Output: Information of the Commission's services
Duration: permanent task

Sub-activity 3.3 *NRL-OfL-Contacts, (Art. 94.2.f)*

Objectives: Maintenance of contacts to official laboratories (OFLs) National Reference Laboratories (NRLs)

Description: 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 cooperation with the EURL for Single Residue Methods (EURL SRM).

Expected Output: Transparency on NRLs and OFLs, Clarification on inclusion of OFLs in EUPTs

Duration: permanent task

Sub-activity 3.4 Support of Commission and EFSA including Article 12 Proposals (Art. 94.2.f)

Objectives: Support of Commission and EFSA

Description: 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.

Expected Output: Improvement of MRL settings

Duration: permanent task

Sub-activity 3.5 *Documentation services I (Art. 94.2.f)*

Objectives: Maintenance of EURL

Description: 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.

Expected Output: Exchange of information

Duration: permanent task

Sub-activity 3.6 *(Documentation services II (Art. 94.2.f)*

Objectives: Maintenance of CIRCA BC platform

Description: Maintenance of the CIRCA-BC Domain in cooperation with the other EURLs for pesticide residues; continuous provision of the status of the enrolled members.

Expected Output: Exchange of information

Duration: permanent task

Sub-activity 3.7 *Co-ordinating meetings I (Art. 94.2.f)*

Objectives: Participation in annual co-ordinating meetings and general management activities of the EURLs for Pesticides

Description: Inter-EURL-meetings in some cases in presence of DG-SANTE representatives will be carried out with the aim to discuss, plan, coordinate or evaluate EURL-activities such as the preparation of work programs, EUPTs or web-applications. In certain cases online-meetings or tele-conferences will be carried out. Date and place of these events will be decided later.

Expected Output: Coordination of the work of the 4 EURLs for pesticides

Duration: permanent task

Sub-activity 3.8 *Co-ordinating meetings II (Art. 94.2.f)*

Objectives: Participation in annual co-ordinating meetings and general management activities of the Commission

Description: If planned by the Commission, participation in annual co-ordinating meetings and general management activities of the Commission (e.g. meetings between COM and directors of EURLs or between COM and the new EURLs for contaminants)

Expected Output: Exchange of relevant information

Duration: permanent task

Sub-activity 3.9 *International Cooperation (Art. 94.2.h)*

Objectives: Cooperation with international organizations, in particular EFSA, CEN, WHO and UNEP, and other institutes, and dissemination of information

Description: If required, cooperation with international organizations, also for harmonization of requirements in the field of Pesticides analysis), where necessary; participation in EPRW 2018 and other conferences for dissemination of information and achievements of the EURL

Expected Output: Exchange of relevant information

Duration: permanent task

Sub-activity 3.10 *Scientific Committee for EUPT (Art. 94.2.f)*

Objectives: Harmonized EUPTs for Pesticide Residues

Description: Online and mail discussions about matrices and target lists for EUPTs. Participation in all meetings to discuss and evaluate EUPT results, and overall PT-performance.

Expected Output: Harmonized Procedures for EUPTs

Duration: permanent task

Sub-activity 3.11 *Scientific Committee for the SANTE Document (Art. 94.2.f)*

Objectives: Harmonized Analytical Quality Control for Pesticide Residue Analysis

Description: Contribute in the revision of "Method Validation and Quality Control Procedures for Pesticide Residue Analysis in Food and Feed": Participation in all meetings of the Advisory Group for the improvement of the document and contributions by mail contacts.

Expected Output: Harmonized Procedures for Analytical Quality Control in Pesticide Residue Analysis

Duration: permanent task

Sub-activity 3.12 *Analytical and Scientific Support for NRLs (Art. 94.2.f)*

Objectives: Solving of Analytical Problems and Interpretation of Data / Documents

Description: General scientific information will be provided to NRLs. In particular in case of problems, NRLs will be supported with methods for MRM-pesticides. In certain cases also the analytes could be supplied (e.g. in case of lack of information about pesticides and the availability of the standards, degradation of standards).

Expected Output: Improvement of the Analytical Quality Control and the Interpretation of Results.

Duration: permanent task

REAGENTS AND REFERENCE COLLECTIONS

Please, provided activities related to Regulation (EU) 2017/625:
(Number of Sub-activity boxes can be adjusted by EURL)

- **Art. 94.2.j** *Coordinating or performing tests for the verification of the quality of reagents and lots of reagents used for the diagnosis of foodborne, zoonotic or animal diseases and pests of plants.*

- **Art. 94.2.k** *Where relevant for their area of competence, establishing and maintaining:*
 - i. reference collections of pests of plants and/or reference strains of pathogenic agents;*
 - ii. reference collections of materials intended to come into contact with food used to calibrate analytical equipment and provide samples thereof to national reference laboratories;*
 - iii. up-to-date lists of available reference substances and reagents and of manufacturers and suppliers of such substances and reagents.*

➤ **Not applicable**

Sub-activity 4.1 (*name of Sub-activity*)

Objectives:
Description:
Expected Output:
Duration:

5

REQUIREMENTS RELATED TO OTHER LEGISLATION

Please specify applicable legislation:
(Number of Sub-activity boxes can be adjusted)

➤ **Not applicable**

Sub-activity 5.1 (*name of Sub-activity*)

| |
|--|
| Objectives: Description: Expected Output: Duration: |
|--|

REMARKS

Although the structure of the new templates was known there was an underestimation regarding the time needed to finalize the work programme. Therefore, it was not possible to harmonize the structure of the work programme together with the other 3 EURLs for pesticides (CF, FV and SRM).