

WORK PROGRAM
FOR THE
EU REFERENCE LABORATORY
FOR PESTICIDE RESIDUES REQUIRING
SINGLE RESIDUE METHODS

Time: January-December 2013

LEGAL FUNCTIONS AND DUTIES

The functions and duties of the EU Reference Laboratory are described in Article 32 of the EC Regulation No 882/2004.

Contents:

- 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 and third country labs**

A. General Tasks

A.1 EURL meetings for coordination

Tasks: Missions will be carried out by one or more EURL-SRM members to participate in inter-EURL-meetings; with the aim to conduct, plan, coordinate or evaluate EURL-activities such as work programs, EUPTs, web-applications. Date and place of these meetings will be decided later. Meetings in presence of the AQC- and EUPT-advisory panels will be organized by the EURL-FV as a horizontal task.

A.2 Technical and scientific support to DG-SANCO

Tasks: See table below:

Code	Task	Activities
A.2.1	Support DG-SANCO in drafting the MACP	<ul style="list-style-type: none"> - Participation in meetings, - Evaluation of data and preparation of a pesticide priority list, - Revision of documents, - Communication with DG-SANCO, EFSA and other stakeholders
A.2.2	Support EFSA within the frame of the of the Networking Group on Pesticide Monitoring	<ul style="list-style-type: none"> - Participation in meetings, - Reading and Revision of documents, - Communication with DG-SANCO, EFSA and other stakeholders
A.2.3	Support to EFSA and DG-SANCO in activities concerning re-evaluation of pesticide MRLs according to Article 12 of Reg. 396/2005/EC	<ul style="list-style-type: none"> - Reading of documents - Revision of documents where requested - Literature and internet research - Evaluation of existing data concerning pesticide recoveries and LOQs - Conduction of experiments to examine analytical behavior, recoveries and LOQs of pesticides and metabolites taking into account the proposed residue definition and the applicability of methods in official control labs - Communication with DG-SANCO, EFSA and other stakeholders
A.2.4	Revision of AQC-document (in collaboration with all 4 EURLs)	<ul style="list-style-type: none"> - Participation in meetings - Revisions and drafting of text - Communication with other stakeholders
A.2.5	General communication with and assistance to DG-SANCO and EFSA	<ul style="list-style-type: none"> - E-mails and oral communications - Missions to Brussels or elsewhere

A.3 Compilation of annual financial and technical reports for 2012

Task: see title

A.4 Preparation of work program for 2014

Task: see title

A.5 Cooperation with International Organizations

Tasks: Cooperation with int. organizations such as the Codex Committee on Pesticide Residues (CCPR), CEN, FAO/IAEA will continue. As far as requested by DG-SANCO, missions to attend meetings will be conducted.

A.6 EURL Web-Services: upgrading, maintenance, programming (Horizontal task on behalf of and for the benefit of all 4 EURLs)

A.6.1 EURL-Web-Portal

Background: The Internet Portal of the four pesticide EURLs (www.eurl-pesticides.eu) aims to facilitate the dissemination of information to NRLs and OfLs in an efficient, timely and transparent way.

Task: In 2013 the portal and the individual web-sites of the EURLs will be further upgraded and gradually filled with further information. Missing features will be gradually implemented considering the needs and suggestions by DG-SANCO the 4 EURLs and the lab-Network.

A.6.2 EURL DataPool

Background: An “EURL DataPool” entailing numerous databases with information of practical interest to the network-laboratories has been installed and expanded within the frame of the previous work programs (www.eurl-pesticides-datapool.eu). The aim is to facilitate the conservation of knowledge and to offer the laboratories fast access to valuable information.

List of databases within the EURL-DataPool

Code	Database/Website	Task
6.2.1	EURL DataPool-Website	Extensive programming and restructuring of all DBs below and continuation of transfer to .NET 4.0-Framework
6.2.2	Method Validation DB	See above plus data collection for various methods (e.g. QuEChERS, QuPPE, SweEt) and its introduction into the DB
6.2.3	Methods DB	See above plus data collection for various methods and its introduction into the DB
6.2.4	Pesticides DB	See above and collection of further data on pesticides and introduction into the DB
6.2.5	Stability of Standards DB	See above plus collection of data from various labs and its introduction into the DB
6.2.6	Pesticide Authorizations DB	See above plus data collection and introduction into the DB
6.2.7	Commodities DB	See above plus data collection and introduction into the DB
6.2.8	Lab-Network DB	See above plus data collection and introduction into the DB
6.2.9	EUPT-Archive DB	See above plus data collection and introduction into the DB

B. Development and Validation of Analytical Methods

B.1 Quick Polar Pesticides Method (QuPPE Method)

Background: The EURL-SRM has developed a method for the simultaneous analysis of several highly polar pesticides not amenable to multiresidue procedures commonly employed by official labs. The method involves a common extraction followed by LC-MS/MS analysis in groups.

Task: Further method development activities will be conducted with the aim to expand, where possible, the scope of the method by additional highly polar pesticides and metabolites such as N-Acetyl-AMPA. Further research will be done with aim to improve chromatographic behavior for some compounds already in the method or to accommodate more compounds within the same chromatographic runs. Activities to pursue the standardization of the method in CEN will continue.

B.2 Solutions for pesticides requiring modified MRMs

Background: Several pesticides and legally relevant metabolites are known to pose problems in analysis and are thus considered as “difficult” or non-amenable to multiresidue methods. In many cases analysis is possible following certain modifications of traditional multiresidue methods. Such modifications may entail pH-adjustment, temperature control, special measurement conditions, cleavage reactions to release conjugates etc..

Task: Studies will be conducted to enable the analysis of Prochloraz (sum) and Flonicamid (sum) including in each case the metabolites proposed by EFSA to be included in the residue definition. Studies will be also conducted to study the analytical behavior, recoveries and LOQs of further compounds under Art. 12 revision as required.

B.3 Study applicability of DART-Technique for the screening of selected SRM-pesticides¹⁾

Background: DART is a novel technique allowing qualitative / semi quantitative analysis of analytes located on sample surfaces without chromatographic separation and typically without or with minor sample preparation. The entire analysis is fast making the technique potentially suitable for screening applications. Due to insufficient budget in 2012 this activity was postponed to 2013.

Task: The EURL-SRM will perform experiments to check whether DART can be used to screen for various types of non-MRM-amenable pesticides (e.g. volatile pesticides such as ethylene oxide and highly polar pesticides (see QuPPE-method), thus allowing the selection of samples to be further analyzed by quantitative procedures. Priority will be given to pesticides and metabolites of high relevance in agriculture or those included in coordinated control plans of the EU.

¹⁾**Note/disclaimer:** This activity may be shifted to 2014 in case of insufficient budget

B.4 Studies on the analysis of selected volatile pesticides in F&V¹⁾

Background: Various highly volatile pesticides are employed in agriculture and crop storage as fumigants. As such pesticides are typically non-amenable to multiresidue methods they are typically rarely analyzed by official control laboratories. Simple methodologies are thus required.

Task: The EURL-SRM will implement a method for the analysis of phosphine and study the impact of various factors in the analytical results.

B.5 Studies on the analysis of selected polar pesticides in eggs

Background: certain highly volatile pesticides, may appear as residues in eggs following consumption of contaminated feed. Methods of analysis of such pesticides in milk are thus necessary.

Task: The EURL-SRM will conduct experiments to check the simultaneous analysis of various polar pesticides in eggs. Priority will be given to pesticides / metabolites of high relevance in agriculture, those included in the EU coordinated control program as well as on those that, based on information submitted by the applicants within the frame of pesticide registration, were demonstrated to produce relevant residues in milk.

B.6 Studies on the Analysis of Propineb as Propylenediamine²⁾

Background: Dithiocarbamates (DTCs) are among the pesticides most widely used in agriculture. Propineb is one of the most used ones and one of those DTCs with proper MRL. The residue is to be determined as propylenediamine.

Tasks: Studies will be conducted to study whether propylenediamine can be used to quantify propineb residues, whether the analysis can be employed routinely by labs and whether LC-MS/MS can be employed for analysis.

²⁾ **Note/disclaimer:** The development of methods may have to be shifted to 2014 in case of insufficient budget.

C. QA/QC (Quality Assurance and Quality Control)

C.1 EU Proficiency Test SRM 8

Task: A proficiency test covering single residue methods (SRM) will be performed. The commodity is yet to be decided.

All relevant documents and instructions will be distributed to the participants through the EURL website. Participant registration and data collection will be conducted using an online tool. Each participant will receive a detailed printed and electronic report summarizing the PT-scope, results, data treatment and additional information of the methods employed by the participants.

C.2 Preparation of a list showing which labs are obliged to participate in EUPTs in 2013 (horizontal task on behalf of and for the benefit of all 4 EURLs)

Task: using the EURL-DataPool and based on the pesticide scope covered by each lab a list of all labs obliged to participate in pesticide-related EUPTs in 2013 will be published. This list will be distributed to all NRLs and OFLs. Prior to generating this list the labs will be asked to update their commodity-scope profiles.

C.3 Attend joint meeting to discuss and evaluate EUPT results

Task: Report of EUPT by December 2012

C.4 Establish criteria to assess PT-underperformance and overall PT-performance (HORIZONTAL ACTIVITY)

Background: EUPTs are a very valuable tool to assess the performance of laboratories in pesticide residue analysis. In case of underperformance corrective and follow-up actions are indicated both by the labs as well as by the responsible NRLs and EURLs. In certain cases training courses may be indicated. In the case of individual PT-results underperformance is well defined as it is reflected by the absolute z-score. When looking at multiple results generated within one PT or throughout many PTs, suitable underperformance criteria are yet to be set considering both analytical results and scope.

Task: In cooperation with the other three EURLs the criteria to evaluate whether a laboratory was underperforming in EUPTs will be further revised.

C.5 Assistance to labs in case of PT-underperformance

Task: see under D.

C.6 Update the “SRM-Pinboard” and promote concept of subcontracting analyses within the Lab-Network

Background: Within the frame of official controls, SRM analytes are less frequently analyzed compared to MRM analytes. OfLs often complain that limitations in the available resources prevent them of establishing suitable methods for the analysis of SRM-analytes or applying such methods in case they are established. Lab-cooperation and subcontracting of analyses will help to reduce the overall number of labs that will have to establish or apply SRMs thus improving overall efficiency and frequency of analysis of SRM compounds.

Task: Following the established performance criteria, a list of laboratories considered as proficient for the analysis of individual SRM-compounds will be established (“SRM-Pinboard” = Pool of Proficient SRM-Labs). This list will be updated as new PT results become officially available or whenever a lab wishes to enter the list or change its status. The updated list will be published in the EURL-portal.

D. Technical and scientific support to NRLs/EU official labs and third country labs

The dissemination of information to NRLs, OfLs and third country labs is achieved via personal communication and presentations in conferences, workshops and Trainings (see D.1 - D.3) as well as with the help of the EURL-Web-Portal (A.6.1) and the EURL-Datapool (A.6.2). The establishment of a comprehensive Network-DB is contributing in further strengthening the network (see A.6.2).

D.1 Joint EURL-AO/CF/SRM/FV Workshop for Pesticide Residues in Food

A joint workshop will be performed in Almería in collaboration with the EURL-AO, CF and SRM. NRLs and OfLs from all MS can attend, with the main objective to facilitate the interaction between them and the EURLs. The workshop will be held during two days, and will consist in technical and scientific communications regarding new activities of the EURLs and other

developments in the field of pesticide residues analysis in food and feed. An additional activity of this workshop will be presenting the new Quality control guidelines to the NRLs and voting for its technical approval.

D.2 Training event for selected labs in Stuttgart

Task: A small scale training-workshop will be conducted in Stuttgart for up to 12 participants. Laboratories to be invited will be selected based on PT-performance as well as importance within the country as regards the volume of official controls and may also include OfLs that are not NRLs. The workshop will cover technical aspects as regards the analysis of SRM-pesticides and exchange of experiences. Special needs and problems of the laboratories selected to participate will be considered in the design of the training program. The participants will be asked to cover parts of the costs (e.g. travelling fees). Additional ad-hoc trainings will be conducted as required.

D.3 Interaction with Labs (via E-mails, surveys, etc.)

Period: Throughout the year as required

D.4 Joint visit of 1 NRL + Seminar (with EURLs FV&CF)

Task: NRL(s) of one selected country will be jointly visited by representatives from the EURL-SRM, FV and CF. The country will be selected in agreement with DG-SANCO giving emphasis on poor EUPT scope, performance and participation over last years as well as on poor cooperation with the EURLs.

Prior to the inspection a detailed study of the EUPT results during the last years as well as the current analytical scope of all OfLs will be carried out. During the visit the possible reasons for the bad performance will be discussed, and advices will be given to improve performance and expand the scope. The EURL-SRM will send 1 representative to this visit. The country to be visited will be specified at a later stage in consultation with DG-SANCO.

D.4 Webinars

Background: As a horizontal task the EURL-FV will introduce the possibility to conduct webinars with the aim to disseminate information with the NRLs and OLs in an interactive yet cost effective way.

Task: In 2013 the EURL-SRM will organize at least two webinars individually or in collaboration with other EURLs.

D.4 Analysis of official samples, counter analysis (if required)

The EURL will ask DG-SANCO for approval of any activity this concerning and request for additional eligible budget, if required.