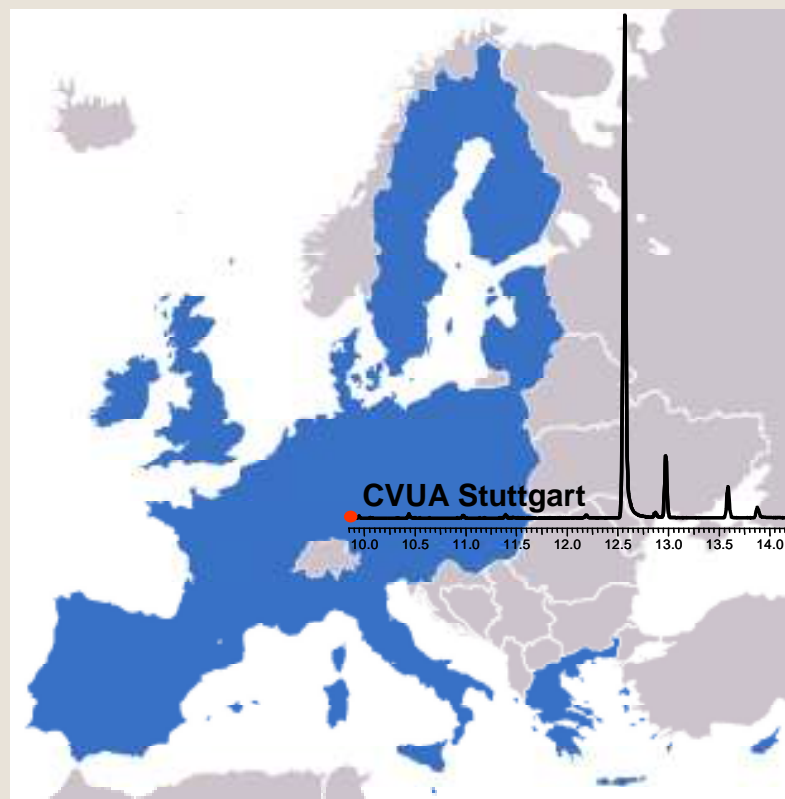


Overview CRL-NRL - Regulations, Network



1st CRL/NRL Pesticide Residue Training Workshop

6th-7th December, 2006 – Stuttgart, Germany

Ellen Scherbaum

CVUA Stuttgart,

CRL single residue methods



Luis

Martin-Plaza

Email:

Luis.martin-plaza@cec.eu.int

Responsible for the
Commission for the
4 Pesticide CRLs



Introduction

Until 2004:

- EPRW every 2 years
- AQC meeting every 2 years
- PT every year
- Coordinated Monitoring Program
- FVO missions to the member states



To ensure the high standard of official labs and the compliance of products regarding pesticides in the EC



Legislation – R 882 / 2004 (Official Controls)

Articles 32 & 33:

Describes a concept of a network of

Community Reference Laboratories (CRLs)

and **National Reference Laboratories** (NRLs)

to improve the overall quality of **official labs** in the EC



Legislation – R Official Controls 882 / 2004

That's not a new concept, but besides the already existing CRLs for several fields including...

- Biological risk (6 CRLs)

Biotoxins, viral and bacterial contamination, etc

- Animal health (11 CRLs)

NDV, AI, CSF, ASF, SVD, Bluetongue, AHS etc

- GMOs (1 CRL)

- Feed additives (1 CRL)

- Chemical risk (4 CRLs)

Article 32.5 says **other CRLs may be included in the list ...**



Call for Selection and Designation of CRLs

July 2005:

....

Chemical/physical risks:

Create **4 different CRLs for pesticides**

- CRL for cereals and feeding stuffs
- CRL for fruit and vegetables
- CRL for food of animal origin
- CRL for single residue methods



Criteria for Selection

- Evidence of financial and economic standing
- Suitable qualified staff
- Equipment
- Accredited and validated methods
- Administrative infrastructure
- Knowledge of international standards
- List of available reference substances
- Take account of research activities
- **Ranking in EU-PTs**
- **No. of samples analysed per year**
- Experience in organisation events and PTs



Criteria for Selection

- Evidence of financial and economic standing
- Suitable qualified staff
- Equipment
- Accredited and validated methods
- Administrative infrastructure
- Knowledge of international standards
- List of available reference substances
- Take account of research activities
- **Ranking in EU-PTs**
- **No. of samples analysed per year**
- Experience in organisation events and PTs

Application document with 90 pages



Timing – Creation of new CRLs

- Criteria for selection
- First call for interest: summer 2005
- Selection panel (DG Sanco, FVO, DG Research, EFSA)
November – December 05
- Adoption by Commission and Publication: June 06
- Submission of working programmes: May – June 06
- NRLs nominated by MS (not yet finished)
- Start activities: from July 2006
- **December 2006 1st Joint Workshop**



CRLs in the area chemical food safety

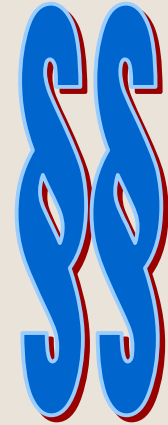
- CRLs pesticides
 - Vegetables and fruits: **Spain**-Almeria-Valencia
 - Cereals and feeding stuffs: **Denmark**-Copenhagen
 - Animal origin & high fat content: **Germany**-Freiburg
 - Single residue methods: **Germany**-Stuttgart
- CRL Heavy metals: JRC-Geel
- CRL Dioxins and PCBs: Germany-Freiburg
- CRL PAHs: JRC-Geel
- CRL Mycotoxins: JRC Geel



CRLs - General Tasks

**Improve the quality, accuracy
and comparability of the results at official labs**

- Organisation of Proficiency Tests
- Workshop & Training of laboratories in the MS
- Development and validation of new analytical methods
- Providing scientific and technical assistance to the Commission e.g. coordinated monitoring programme
- Collaborating with third countries labs
- Development/Improvement of the analytical QC guidelines



Pesticides, a challenging task!



- **Hundreds of pesticides in**
- **Hundreds of different matrices**
- **Residue levels from <1 ppb to 10 ppm**
- **Matrix-induced effects in GC and LC applications**
- **Many findings (e.g. >30 in one raisin sample)**
- **Pesticides have different physico-chemical properties**
- **Some are pH, light, temperature labile**



Pesticides, a lot to do!



Pesticides, a field to cooperate!



Pesticides, a good field to built a network!

CRLs have to built and foster a network

CRLs have to built structures for an easy information access

....



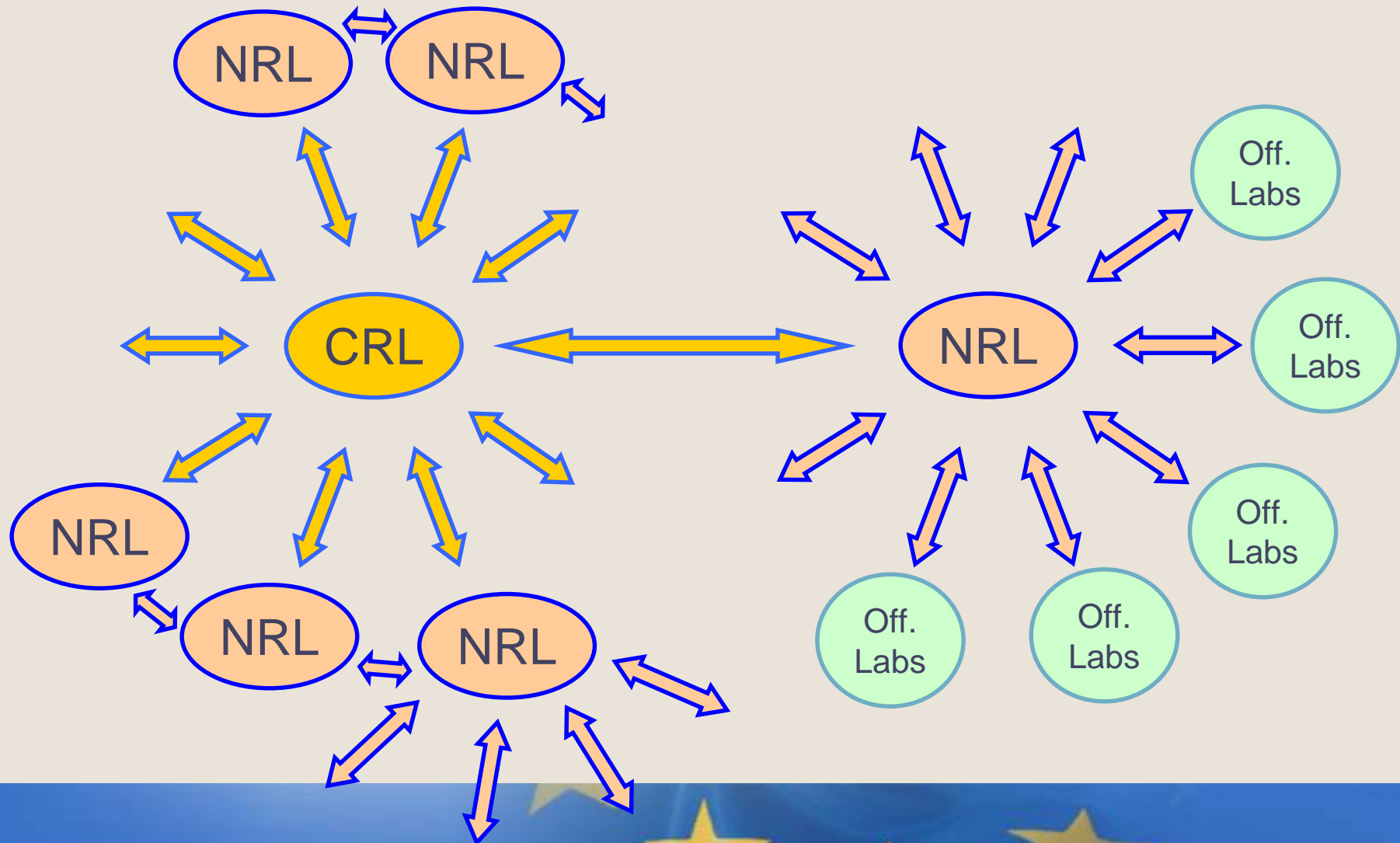
NRLs have to built and foster a network

NRLs have to built structures for an easy information access

....



Pesticides, a good field to build a network!



Pesticides, need of analytical equipment!



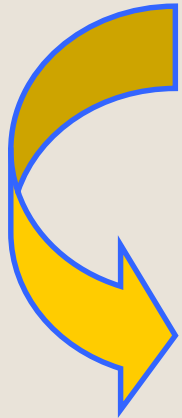
Pesticides, need of analytical equipment!

15 years ago: ECD with capillary column

12 years ago: GC-MSD

8 years ago: LC-MS(/MS)

4 years ago: GC-ToF

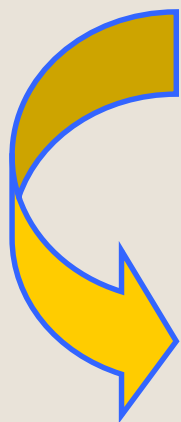


A new column type, sorbent, injector, detection mode, software may facilitate our lives enormously...



Pesticides, need for analytical equipment!

A new column type, sorbent, injector, detection mode, software may facilitate our lives enormously...



It is necessary to be in contact with the industry, to know what is available, confront them with our needs, talk to them...



Pesticides, need for analytical equipment!

Directly here at the workshop:

Agilent Technologies

Applied Biosystems Europe

ScienceServe GmbH - ACD/Labs Division

Sigma-Aldrich

Thermo Fisher Scientific

Varian, Inc.

Waters GmbH

Thank you for your contributions!



CRLs and NRLs!

...are very useful in the harmonisation process building a network!

Aim is to increase the current analytical scope through EU in quantity and quality of the results and thus

to **improve the consumer protection** within the EU!



Questions?

