



Antimicrobial resistance: Roles of Reference Laboratories and EU actions

Workshop of the CRL AMR

3-4 May 2007

Kris De Smet
European Commission
DG SANCO



1. Community Reference Laboratories

- A new network
- Specific tasks

2. National Reference Laboratories

- State of play of designation
- Specific tasks

3. EU actions with regard to anti-microbial resistance



1. Community Reference Laboratories



Legal basis for new CRLs

- Official Food and Feed Control
= Reg. 882/2004 ⇒ List (Annex VII)
- Other specific legislation :
Residues/Animal Health/TSE
- Decision 90/424/EEC = Financial assistance

Selection of new CRLs

- Agreed procedure
 - no obligation for formal call for proposals
 - but need to be transparent for selection process. “informal” call for proposals to national authorities
- Applications to be submitted through national authorities



Selection of new CRLs

- Commission selection panel with external support (EFSA, RTD) to assess respective merits
- Notification to authorities before draft Commission decision to be submitted to SCoFCAH



Selection of new CRLs

**COMMISSION REGULATION (EC) No
776/2006 of 23 May 2006**

**amending Annex VII to Regulation (EC) No
882/2004 of the European Parliament and
of the Council as regards Community
reference laboratories**



A new network

1. CRL for milk and milk products, France
2. CRL for the analysis and testing of zoonoses (salmonella), The Netherlands.
3. CRL for the monitoring of marine biotoxins, Spain.
4. CRL for monitoring the viral and bacteriological contamination of bivalve molluscs, UK.
5. CRL for *Listeria monocytogenes*, France.
6. CRL for Coagulase positive Staphylococci, including *Staphylococcus aureus*, France.



A new network

7. CRL for *Escherichia coli*, including Verotoxigenic *E. Coli* (VTEC), Italy.
8. CRL for *Campylobacter*, Sweden.
9. CRL for parasites (in particular *Trichinella*, *Echinococcus* and *Anisakis*), Italy.
- 10. CRL for antimicrobial resistance, Denmark.**
11. CRL for animal proteins in feedingstuffs, Belgium.
12. CRL for transmissible spongiform encephalopathies (TSEs), UK



Total number of CRLs

Biological risks: 12

Animal Health: 13

Chemical risks: 13

GMO: 1

Feed additives: 1

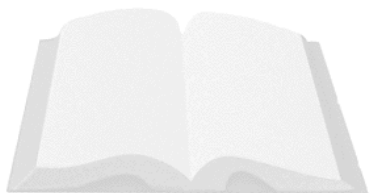
Budget for 2007
10.5 millions €

TOTAL: 40 laboratories



Main CRL tasks

- providing NRLs with details of analytical methods
- coordinating application by NRLs of the methods
- conducting training courses for NRLs
- providing scientific support to the Commission



2. National Reference Laboratories





State of play of designation of NRLs

- Regulation (EC) 882/2004, Art. 33
- *"Member States shall arrange for the designation of one or more national reference laboratories for each Community reference laboratory"*
- *"Member States shall communicate the name and address of each national reference laboratory to the Commission, the relevant Community reference laboratory and other Member States."*



Main NRL tasks

- To collaborate with their CRL
- To coordinate the activities of official laboratories
- To organise comparative tests
- To ensure the dissemination of information supplied by the CRL
- To provide scientific support to their CA



Underperformance of NRL

■ Phase 1

- CRL contacts NRL
 - Identification of cause
 - Additional training if necessary
- Repetition of comparable test if feasible
- On confidential basis

■ Phase 2 (continuing underperformance)

- CRL informs COM
- COM informs CA and requires appropriate action



Lack of collaboration of NRL

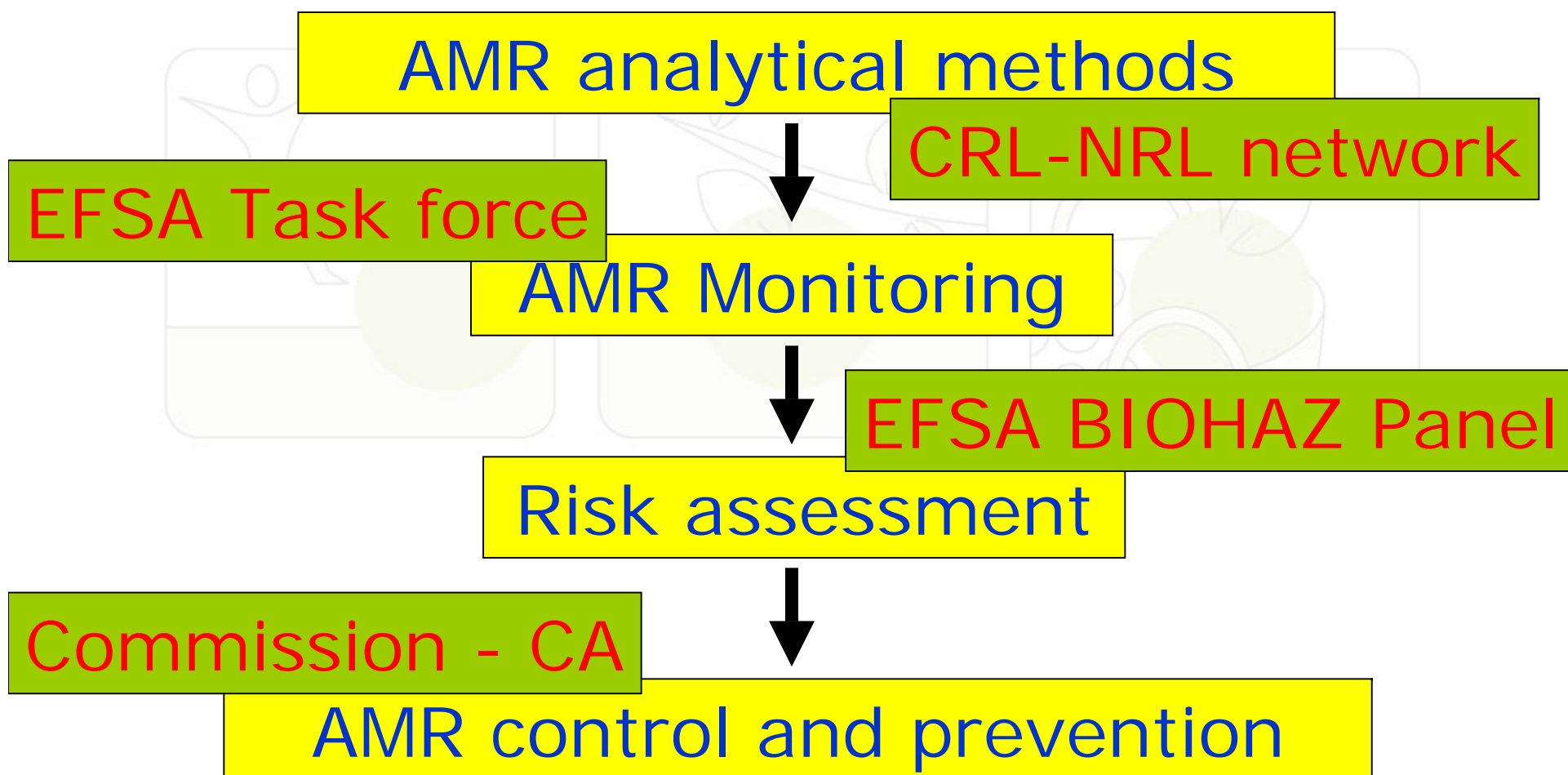
■ Phase 1

- CRL contacts NRL
 - Identification of cause
- CRL includes reason in its report to COM

■ Phase 2 (continuing lack of collaboration)

- CRL informs COM officially
- COM informs CA and requires appropriate action

3- EU actions with regard to anti-microbial resistance





EU actions: analytical methods

- Nomination of CRLs and NRLs
- Development and harmonisation of methods
- Harmonisation of cut-off values
- Harmonisation of reporting

Voluntarily if possible, mandatory if needed



EU actions: Monitoring in humans

- Task mandated to the European Centre for Disease Prevention and Control (ECDC)
- European Antimicrobial Resistance Surveillance System (EARSS): collecting susceptibility data on major pathogens such as MRSA



EU actions: Monitoring in food and animals

- Based on zoonoses monitoring Directive 2003/99/EC: reporting mandated to EFSA
- Commission Decision on a harmonised monitoring of antimicrobial resistance in *Salmonella* in poultry and pigs: voted on 24 April 2007
- Commission Decision on a baseline survey for *Campylobacter* in broilers including (harmonized) AMR testing



Commission decisions on harmonized AMR testing: starting point

- Report of EFSA Task Force on Zoonoses Data Collection including a **proposal** for a on harmonized monitoring scheme of AMR in *Salmonella* in fowl, turkeys and pigs and *Campylobacter jejuni* and *C coli* in broilers.
- Basis for discussion with competent authorities (Standing Committee on Food Chain and Animal Health)



Commission decisions on harmonized AMR testing

- Legal basis to make it mandatory:
Article 7(3) of the Zoonoses Monitoring Directive 2003/99/EC
- Two Decisions
(*Salmonella/Campylobacter*)
 - 170 isolates /pathogen /population /year
 - From harmonized sampling frames
 - Minimum number of antibiotics
 - Harmonized cut-off values
 - Harmonized reporting



Commission Decision on harmonized AMR testing *Salmonella*

| Year | All Salmonella serovars | | | |
|------|-------------------------|----------|---------|----------------|
| | Laying hens | Broilers | Turkeys | Slaughter pigs |
| 2007 | | | X | X |
| 2008 | X | | | |
| 2009 | X | X | | |
| 2010 | X | X | X | |
| 2011 | X | X | X | X |
| 2012 | X | X | X | X |



Commission Decision on harmonized AMR testing *Campylobacter*

- *C jejuni* and *C coli*
- Isolates from broiler caeca
- Intended in 2008
- Co-financing by Commission
- Probably agreed on 23 May 2003



EU actions: Risk assessment

Self-task of EFSA BIOHAZ Panel:

Upcoming opinion on foodborne
antimicrobial resistance as a
biological hazard



EU actions: Control and prevention in animals and food

- Prohibition to use antimicrobials within the frame of Salmonella control programmes
- Prohibition to use antimicrobials as growth promoters in feed
- (Too?) prudent approach towards the use of disinfectants for the removal of surface contamination of poultry carcasses



Good luck with your
workshop and your
network of CRL and
NRLs!