

Monitoring and Quality Assurance in the Food Supply Chain

“Who takes care
of food safety?”

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Monitoring and **MoniQA** Quality Assurance

Monitoring and Quality Assurance in the Food Supply Chain
“Working for safer foods by harmonising worldwide food quality and safety monitoring and control strategies.”

Contract NO. FOOD-CT-2006-36337

MoniQA

Network of Excellence

Funded by the European Commission
within the Sixth Framework Programme (FP6)
Topic T5.4.5.1: Quality and safety control strategies for food (NOE)



Coordinator: Roland Ernest Poms, ICC

International Association for Cereal Science and Technology,
Vienna, Austria

33 member institutions from 20 countries / 4 continents

Currently >140 registered institutions from >35 countries

A total of **155 researchers** including 40 doctoral students

Currently approx. 400 registered staff

Duration: **5 years** – starting 1 February 2007

EU funding: 12.3 M €



SIXTH FRAMEWORK
PROGRAMME



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...in a nutshell

MoniQA Network of Excellence

Towards harmonisation of analytical methods to monitor and control quality and safety in the food supply chain

Integration -----

--International Collaboration

Harmonisation ----- Validation

Cost Efficient Food Safety Management-----

----- Reliable Food Analysis

Better Regulations ----- Socio-Economic Impact

Sustainability ----- MoniQA2

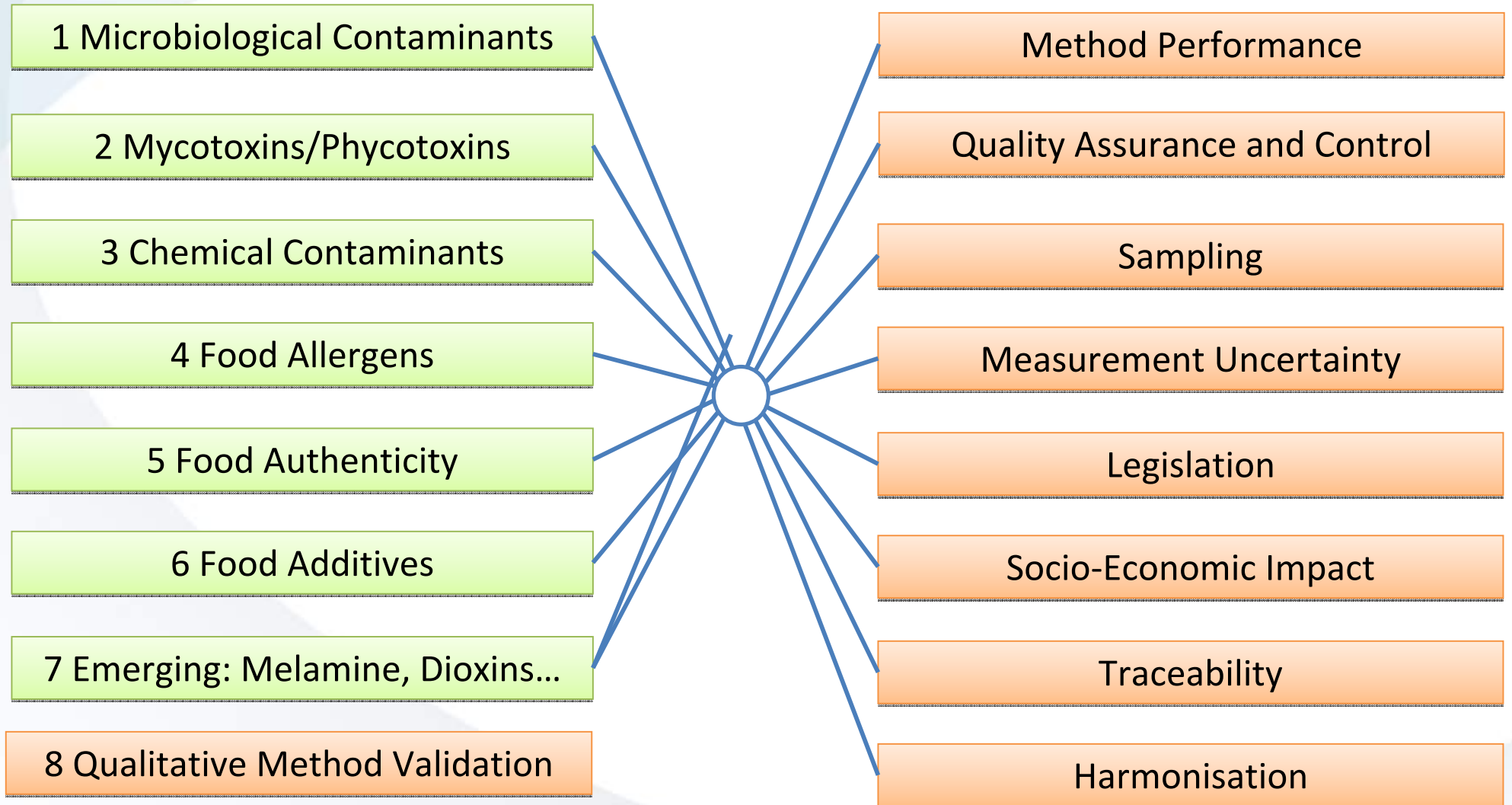


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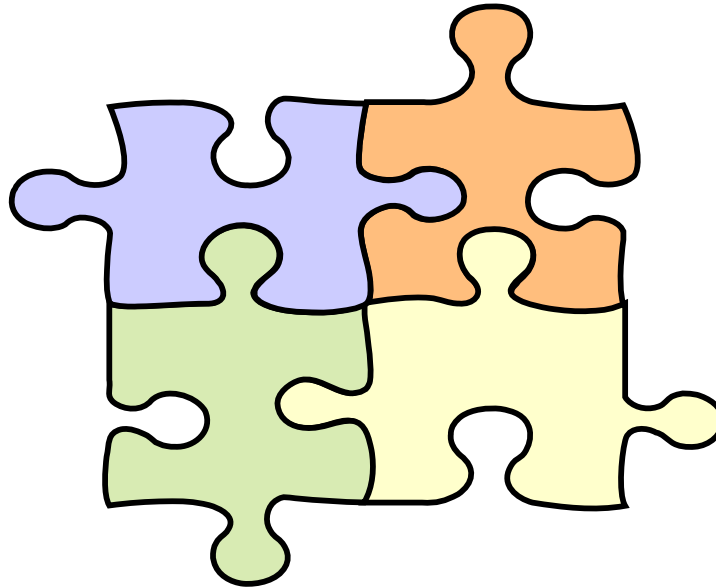
MoniQA Priority Topics and Working Groups



Impact: MoniQA Stakeholder Interaction

Industry / SMEs

- *Food Manufacturers*
- *Retailer*
- *Food Industry Lobby*
- *Method providers / Test kit providers*
- *Providers of Reference Material*
- *Laboratories*
- *Trade organisations*



Authorities

- *National / International Regulatory Bodies*
- *Validation, Standardisation, Proficiency Testing Bodies*
- *Authorities / Policy makers*
- *European Commission*

Research & Science

- *Universities*
- *Research institutes*
 - *PhD students*
 - *Young scientists*
 - *Senior Scientists*

Consumer

- *Consumer Protection Group*
- *Consumer Organisations*
- *The press and media*

MoniQA's Impact on Stakeholder Groups

Research

Industry

Consumers

Policy Makers

**International
collaboration,
clusters, new
access**

**Sound scientific
data, validated
methods,
consultancy**

**Safer foods,
easily accessible
food safety
information**

**Better future
regulations, data
and advice,
standards**

MoniQA provides validated and trustworthy results

Research



International collaboration, clusters, new access
Period 3 results

Scientific Network and Reseacher Mobility
Global scope

International Research Projects
New consortia and project proposals, better impact

Collaboration Agreements
Bilateral and multinational agreements, trans-continental, including
new emerging markets, developing countries

Access
To new expertise and large infra-structure

Clusters

Industry



Sound scientific data, validated methods, consultancy
Period 3 results

MoniQA Methods Database

Fully searchable, online

Reliable Rapid Methods

for food safety and quality analysis

Consultancy and Support for Food Safety Management

HACCP, appropriate analytical methods, leading laboratories into accreditation

Training and CPD

International Standards

Harmonized guidelines and protocols, international trade, consistent quality of food ingredients and products

Entering New Markets

Consumers



Safer foods, easily accessible food safety information
General and Period 3 results

Consumer Trust

Someone takes care of food safety

MoniQA Website

Listeria, Swine Flue, Nano-Tech, etc.

Factsheets

e.g. on Melamine, Clenbuterol, Allergens

Public Events

British Science Festival, ESOF 2008 & 2010

Multilingual Information

available in 14 languages

Policy Makers



Better future regulations, standards, data and advice
Period 3 results

Better Future Regulations

Toolbox for socio-economic impact assessment

Case Studies to Assess Socio-Economic Impact of Regulation and Food Hazards

(Dioxins and PCBs, T-2 and HT-2 toxins in cereals and cereal products, aflatoxins in hazelnuts etc)

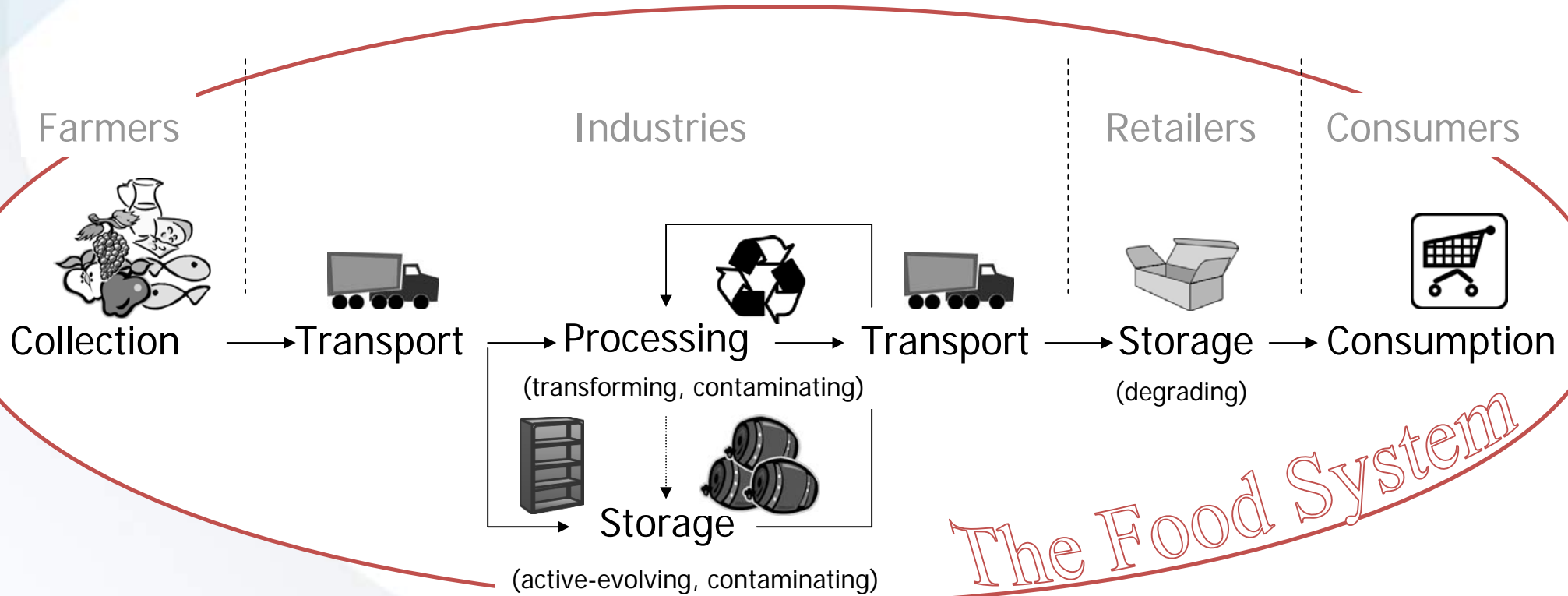
Input to Expert Summits and Events

Data and advice for science based policy making (ASEAN, Korea, Global, China, EXPO Shanghai, European Food Science Day etc)

International Standards

For international trading agreements, regulations and directives, providing scientific support and information to DG SANCO, DG Enterprise, CEN, ISO, IAM-Inter Agency Meeting and Codex Alimentarius, EFSA and SDOs

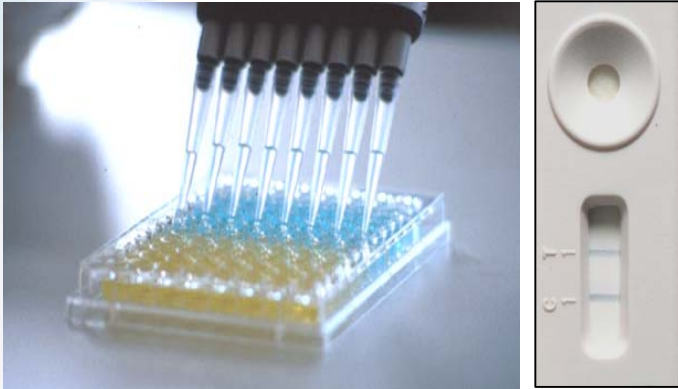
Monitoring food safety and quality along the entire chain



Need for rapid methods

- Fast results for rapid intervention
 - Control and inspection of in-coming raw material
 - Fast screening for decision making
 - Short storage and release/distribution times
 - Required traceability, liability, documentation
- Low cost equipment
- Low qualification of operator required
- Low or high throughput
- HACCP, quality control

Rapid method formats



➤ Immunochemical detection methods

- ELISA
- Dipstick Assay/Lateral Flow Device (LFD)
- Fluorescence Polarisation
- Biosensors/Lab on a chip



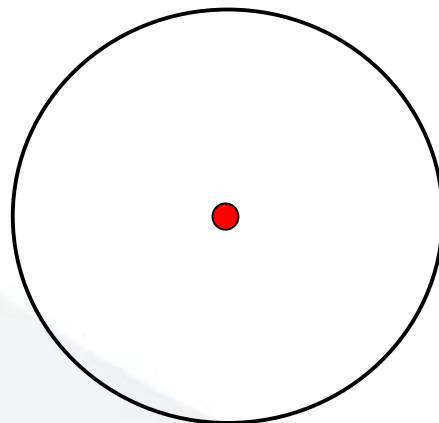
➤ DNA-based methods

- PCR + gel electrophoresis
- PCR-ELISA
- Real-Time PCR
- Biosensors/Lab on a chip

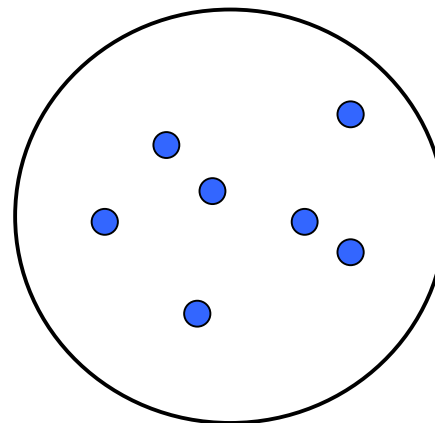
➤ Others

- Sensors
- NIR
- SPR

How well does my method perform?

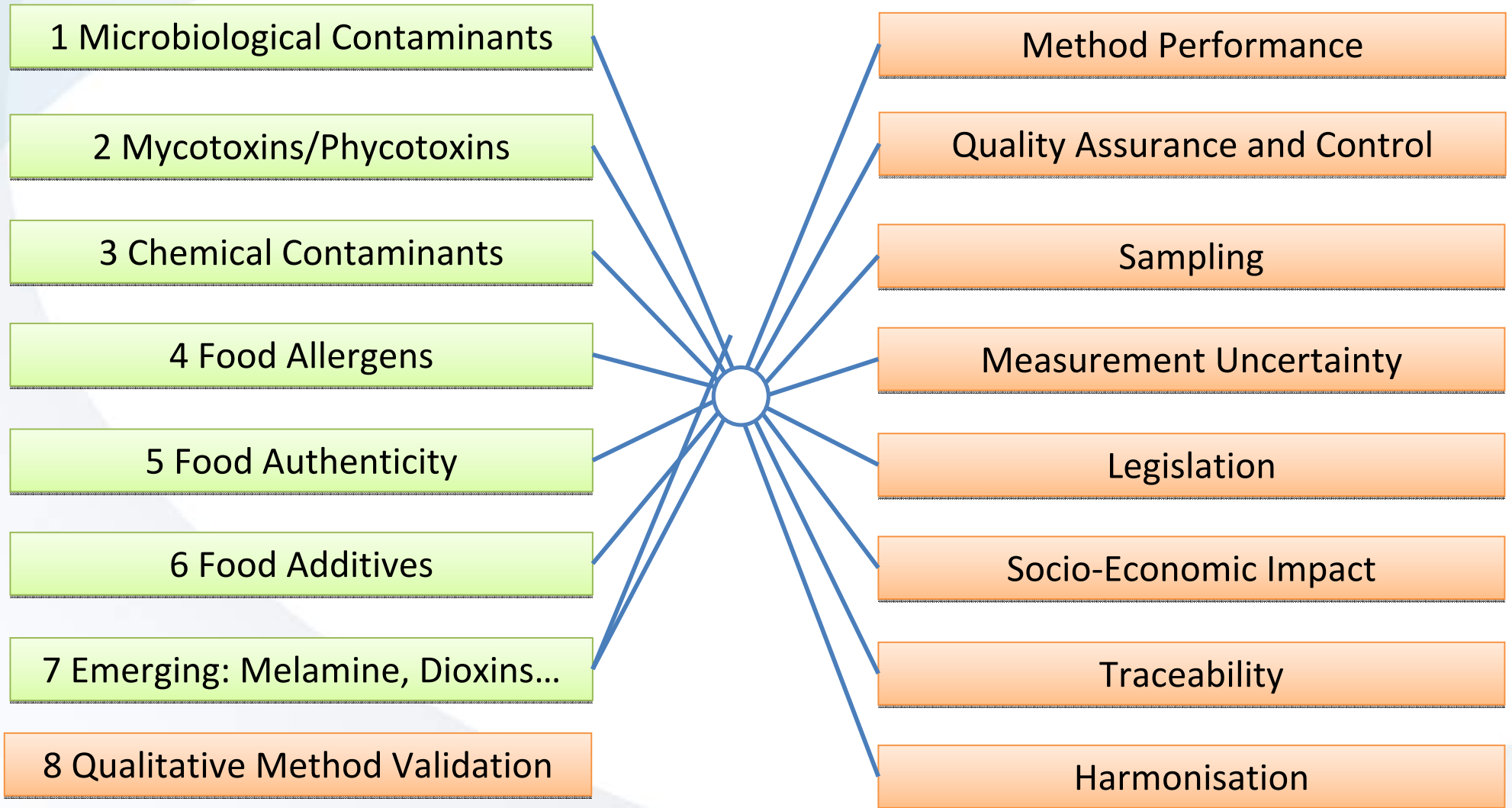


Ideal



Reality

MoniQA Working Groups



International Cooperation

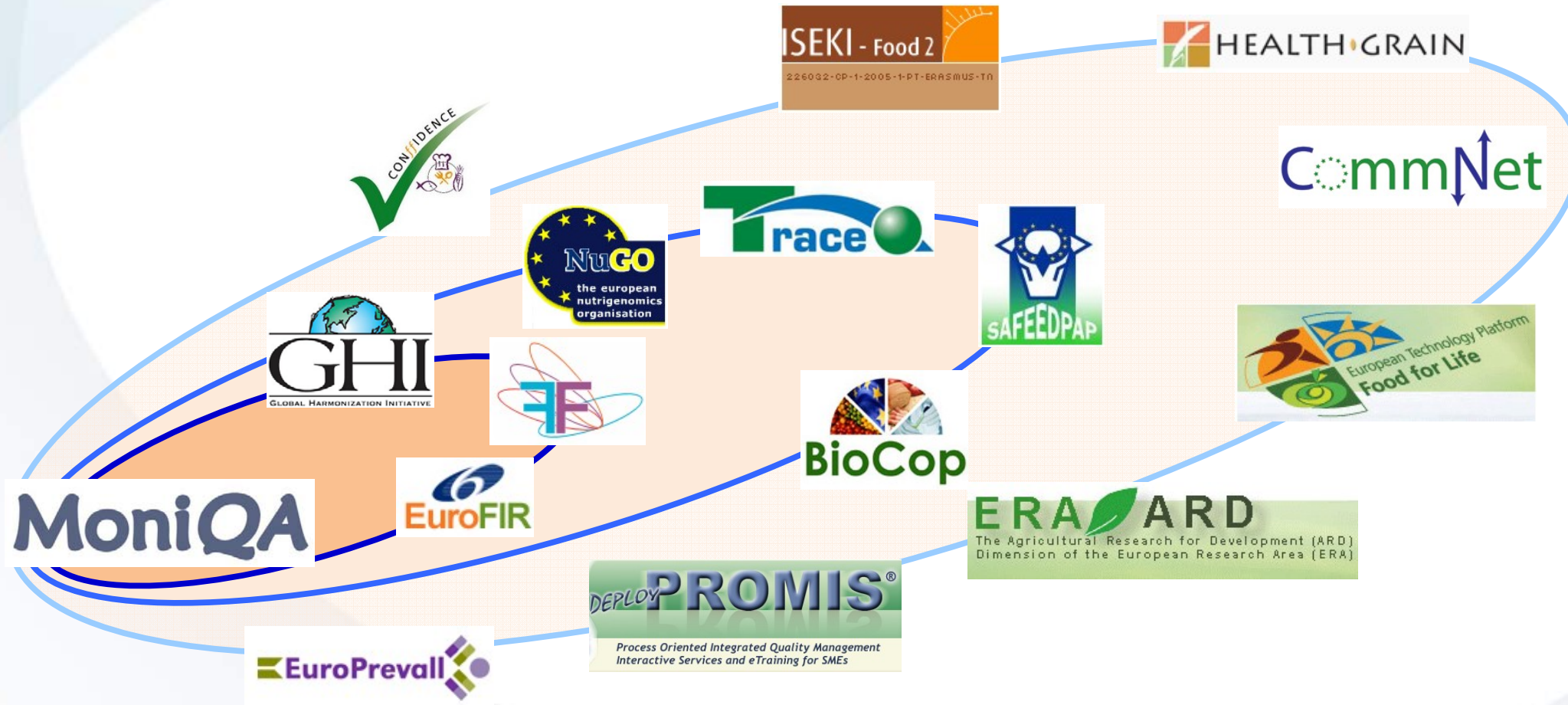
➤ New cooperation agreements

- CCOA, China – ESR, New Zealand (signed)
- Bute, Hungary – HCTU, Turkey (signed and funded)
- ICC, Austria – ESR, New Zealand (in preparation)
- ICC/MoniQA, Austria – CAAS, China
- ICC/MoniQA, Austria – Guelph, AFMNET Canada, International
- Food Research Collaboration (Twinning Project?, in preparation)

➤ New research projects/proposals

- PlantLibra (FP7 granted, start June 2010)
- UK-FSA-Allergen Material (UK-FSA granted, start 2010)
- Hungary-Turkey Allergen Project (nationally funded, start 2009)
- CHANCE (FP7 in negotiation)

Collaborating EU Projects and Initiatives



Support to DG SANCO, DG Enterprise, CEN, ISO, IAM-Inter Agency Meeting and Codex Alimentarius, EFSA and SDOs

Network of Experts: Key players



- Establish a **Europe-wide/global network system** for exchanging information to screen new hazards.
- Developing a **cooperative approach** (a common model) to address emerging risks in different sectors respecting the independence and autonomy of each organization.

How to get involved?

e.g. As Associated Partner (currently no access fee!!!)

- Voluntary participation "Dissemination" programmes,
- No participation in the Management Programme,
- Signing of a letter of interest and a non-disclosure agreement,
- Favourable conditions for participation in **MONIQA** events
- Limited collaboration and involvement in **Working Groups** – by invitation only
- Consideration for partnering in **new projects**
- Involvement and selective invitation to **expert panels**
- **Future offers** (subscriber fees are likely):
 - 1) participation in exchange and mobility programmes
 - 2) access to the MoniQA databases

Expression of interest ...please complete the form!

...go to **www.moniqa.org**

Thank you for your attention!

Roland Ernest Poms



www.moniqa.org
www.icc.or.at