

IFIF

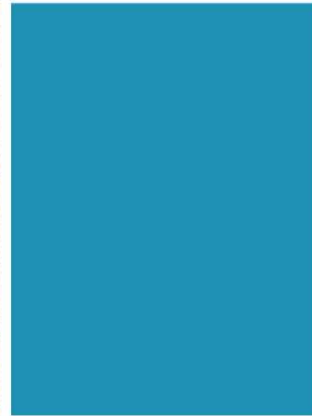


Feed the world

International  
Feed  
Industry  
Federation

# IFIF Comparison project on international feed safety assurance schemes

Mr Alexander Döring,  
Chairman, IFIF Technical Committee  
Sun City – 10-12 April 2013

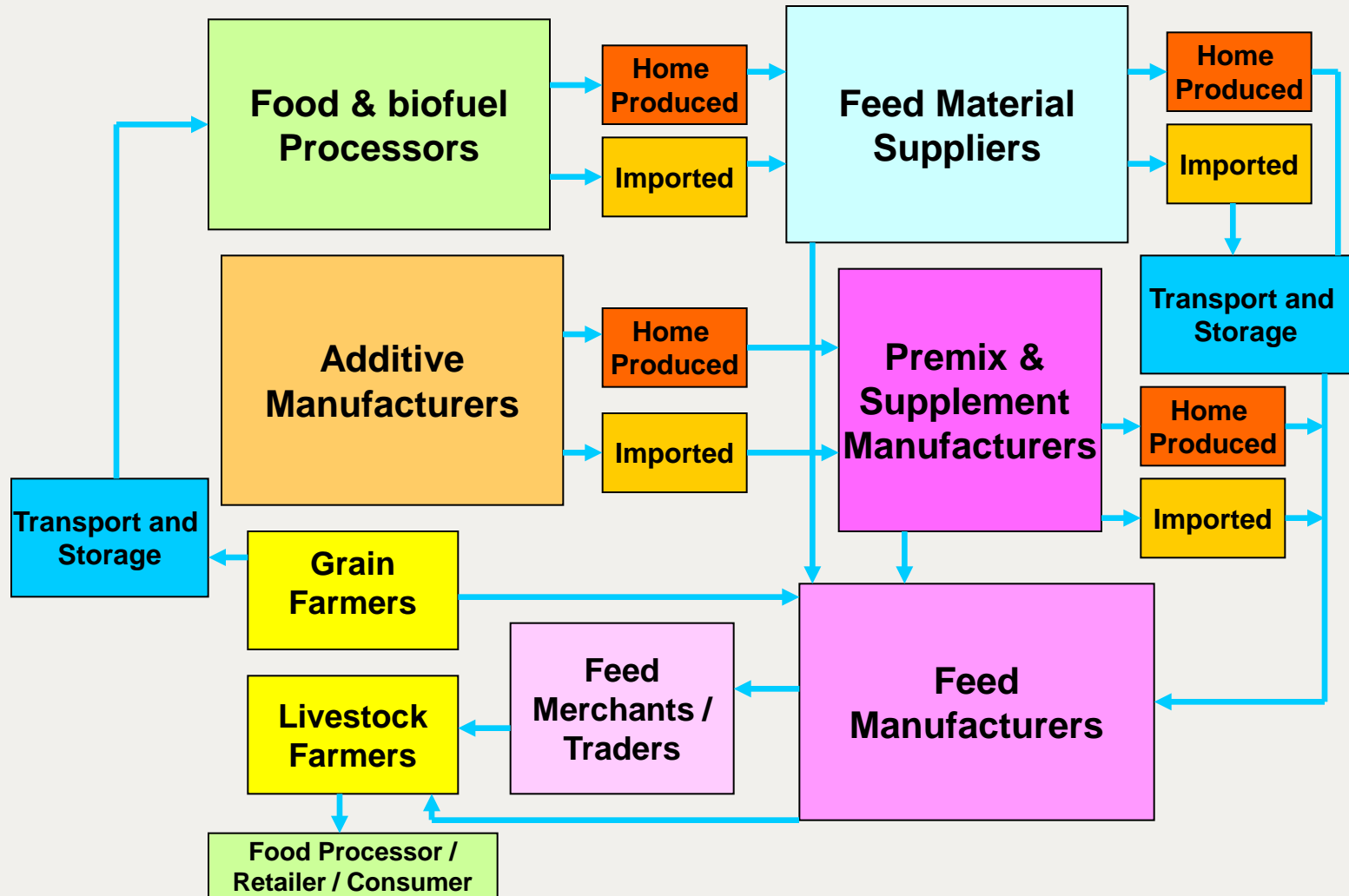


# Feed ingredients pose a major risk to food safety



- **Feed Ingredients are diverse:**
  - Animal proteins e.g. fish meal
  - Primary Products, e.g. cereals
  - Processed Products / By-Products, e.g. soyabean meal
  - Minerals, e.g. limestone (Calcium carbonate)
  - Surplus Food Products, e.g. biscuits
- **Operators have to buy from across continents:**
  - A test and accept/reject policy is not viable
  - The CCPs for many hazards e.g. heavy metals & mycotoxins, are before the feed mill
  - Auditing is unrealistic
  - Supplier assurance back to source is the only way of effectively ensuring safety

# The Supply Chain is Complex – we need Assurance Controls throughout



# Assurance Schemes – vital in ensuring safe feed ingredients

- What matters is not only the generic safety characteristics of the product but also the way it has been produced and handled (e.g. through storage and transport)
- Enforcement agencies can't police and check everyone and everything
- Feed businesses need clear information on the steps taken by their suppliers to guarantee the safety of their products
- Increasing demand from market players and some national competent authorities to source only from assured suppliers certified by independent, accredited certification bodies
- The supply chain is complex – requires numerous schemes

# Hazards in feed and impact on food safety

## Chemical hazards (non exhaustive) (1)

Hazard	Potential sources	Animal product
Radionucleides: $^{90}\text{Sr}$ , $^{131}\text{I}$ , $^{137}\text{Cs}$	Pasture, forages, crops	Milk, meat
Heavy metals (As, Cd, Pb, Hg, Ni, ...)	Sea plants, micro and macro minerals, soil, etc.	Higher: Fish, kidney, liver Lower: meat and milk
Mycotoxins (fusarium trycothecens, etc.)	Grains, co-products from grain processing	Milk (aflatoxin) (limited transfer for most other toxins)
Plant toxins (tremetone, alkaloids)	Botanical impurities in forages and crops	Milk, meat

# Hazards in feed and impact on food safety

## Chemical hazards (non exhaustive) (2)

Hazard	Potential sources	Animal product
Dioxins, PCBs	Natural presence; Environmental contamination; Heat processes.	Fat (in <b>milk</b> , meat, egg yolk)
Organochlorine pesticides	Environmental contamination	Fat
Veterinary drugs, pesticides, processing aid residues	Feed produced from treated animals/crops; use of antibiotics in fermentation processes	Meat, <b>milk</b> , etc.
Others (melamine, etc.)	Deliberate adulteration of feed	<b>Milk</b> , meat,

# TEC Committee Project update for a comparison project on international feed safety assurance schemes (1)

- **I. Overview and key driver**
  - coordinated action at international level
  - stimulate harmonization efforts between internationally operating feed safety assurance schemes
  - reduce audit costs
  - improve audit quality and efficiency
  - 90% of the underlying feed safety requirements laid down in the schemes are similar or even identical

# TEC Committee Project update for a comparison project on international feed safety assurance schemes (2)

- streamline company efforts to meet scheme requirements
- FAO report on feed safety impacts on food safety 2009
- harmonized guidance on feed safety risk assessment at global level
- CODEX Task Force succeeded in adopting new global draft guidance on feed safety risk assessment and the prioritisation of feed safety hazards at its last meeting in Bern in February 2013.
- increase the robustness and efficacy of feed safety assurance schemes while stimulating mutual recognition and harmonization and seeking market acceptance of downstream feed and food chain partners



# TEC Committee Project update for a comparison project on international feed safety assurance schemes (3)

- **II. Project deliverables**
  - IFIF Vision on feed safety assurance & benchmark checklist(s)
  - IFIF/FAO manual on good animal feeding as well as the new draft CODEX guidance document on feed safety risk assessment .
  - practical independent benchmark exercise

## Some examples of feed safety assurance systems



# Global harmonisation of risk assessment/management

- **Risk Management - Good practices:**
  - Codex Code of Good Animal Feeding (2004)
  - IFIF / FAO Feed Manual
- **Risk Assessment:**
  - Codex guidelines on Risk Assessment in feed
  - Proposal from TFAF (Feb. 2013)
- **Contaminants:**
  - Codex Prioritised list of hazards in feed
- **Annual Global Feed Regulators Meeting (IFIF/FAO)**
  - Exchange of views on emerging global feed safety risks

## Conclusions

- **Safe, balanced feed** is essential for animal health, public health and resource efficiency
- Increasing demand for animal products drives need for **optimisation of feed resources** with **further safety challenges**
- **Harmonisation of feed safety risk assessment / management (prioritisation of feed hazards** - new CODEX guidelines documents are a first key step but still a long way to go
- Feed safety must be handled at **each level of the feed chain**
- **Good Animal Feeding is a solution to certain health challenges** (e.g. to reduce the need for antibiotics)



# FEFAC's vision & experience





# THE EUROPEAN FEED MANUFACTURERS CODE (EFMC)



# Background & FEFAC Vision

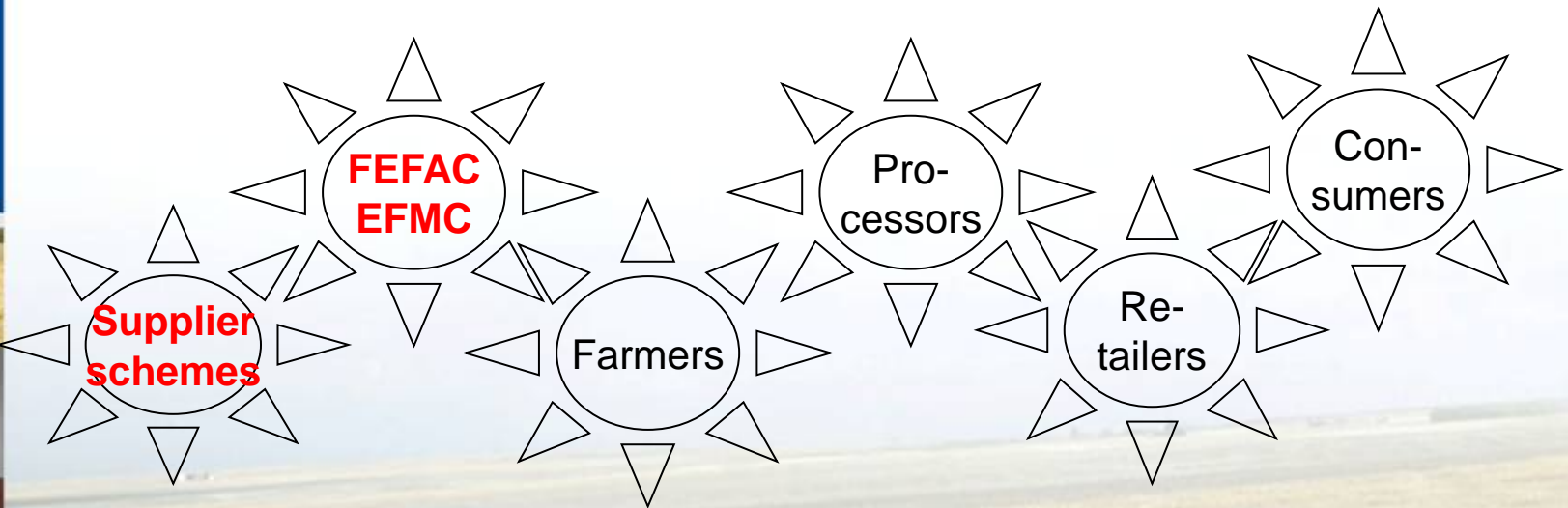
- **Feed and Food Crises**
- **Development of Feed Assurance Schemes**
- **Key drivers for Harmonisation and Mutual Recognition of European Feed Safety assurance schemes**





# Background: The concept of the Feed/Food Chain

## FEFAC's vision





# Development of the European Feed Manufacturers Code (EFMC)

- 1998 – FEFAC Guidelines
- 2001 – Addition of risk analysis based on HACCP principles
- 2002 – Independent Benchmarking exercise
- 2003 – Introduction of FEFAC General checklist
- 2004 – Development of the draft European Feed Manufacturers Code (EFMC)
- 2007 – 1<sup>st</sup> DG SANCO assessment, publication of the title in the Official Journal
- 2009 – 2<sup>nd</sup> DG SANCO assessment (medicated feed, detailed HACCP guidance)
- 2013 – 3<sup>rd</sup> DG SANCO guidance (microbial risk management)

# The EFMC shall...

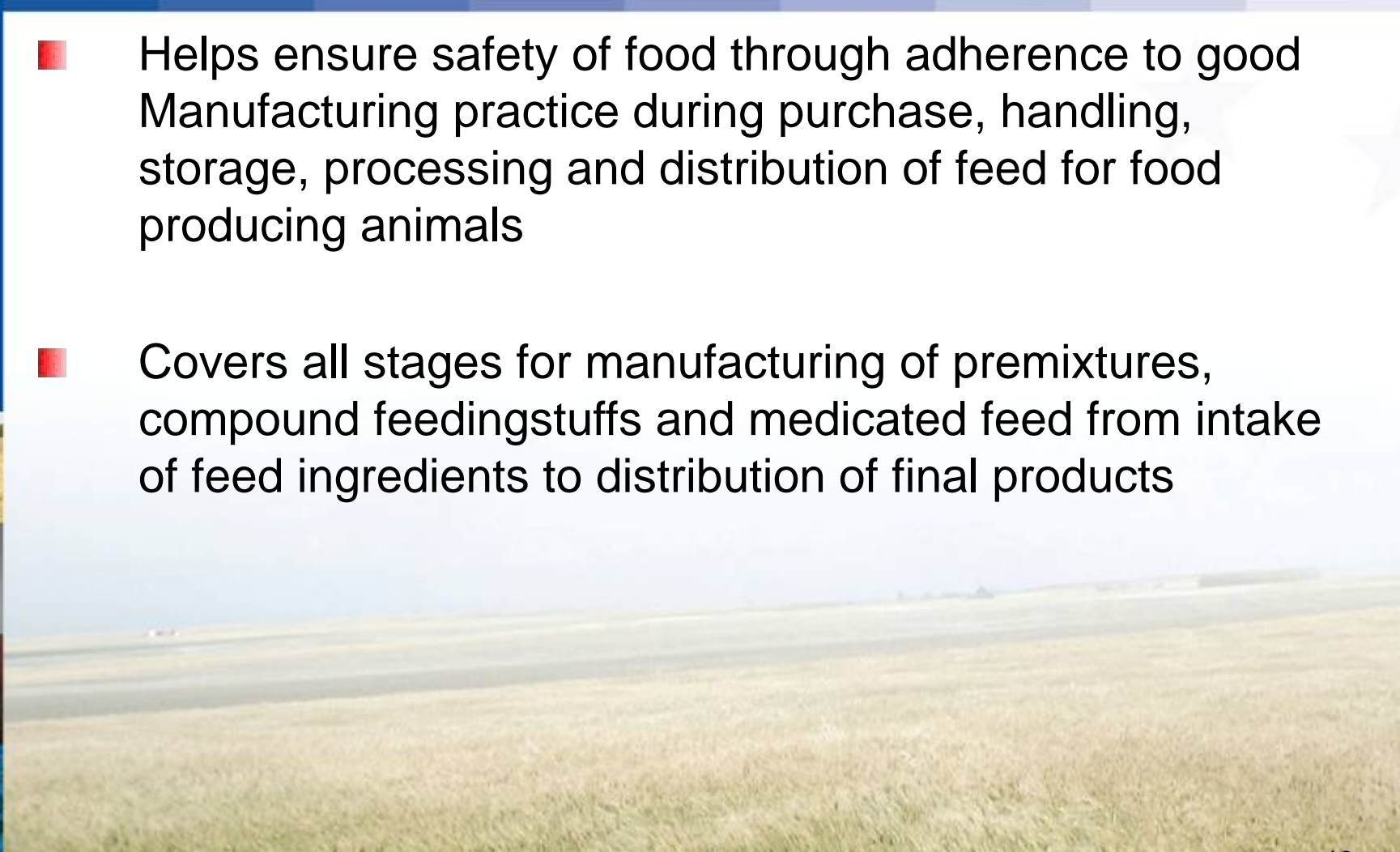
- Facilitate mutual recognition of national Codes of practice
- Ensure that coexistence of Quality Assurance Systems does not lead to unjustified EU trade barriers
- Provide practical information for benchmarking of national Codes of Practice
- Only cover safety related issues
- Meet the demands of EU Feed and Food legislation harmonisation
- Encourage suppliers to apply “top-of the pyramid” approach when testing raw materials
- Encourage “downstream” market partners to reference EFMC requirements for feed safety





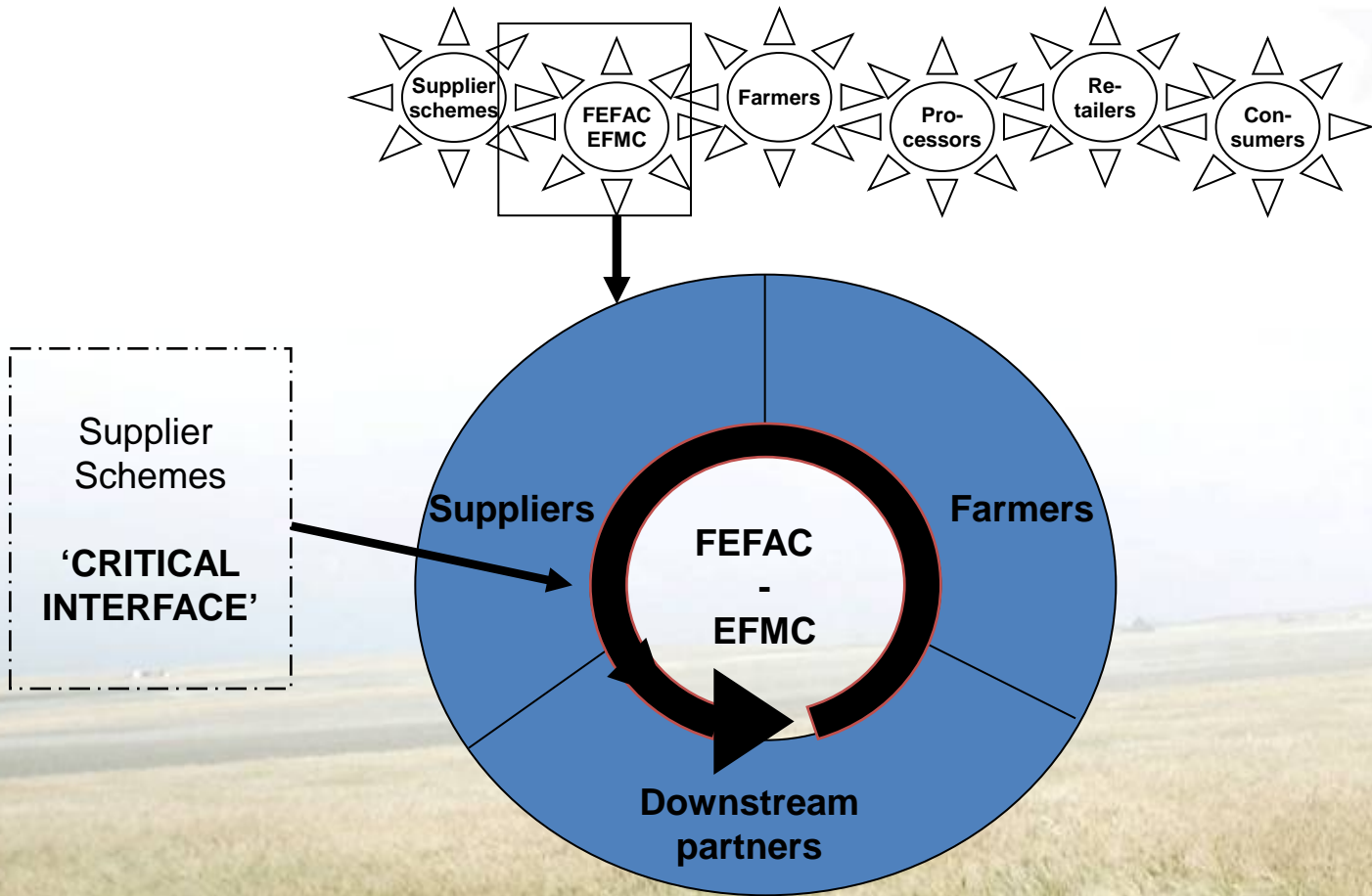
# The EFMC – Scope

- Helps ensure safety of food through adherence to good Manufacturing practice during purchase, handling, storage, processing and distribution of feed for food producing animals
- Covers all stages for manufacturing of premixtures, compound feedingstuffs and medicated feed from intake of feed ingredients to distribution of final products

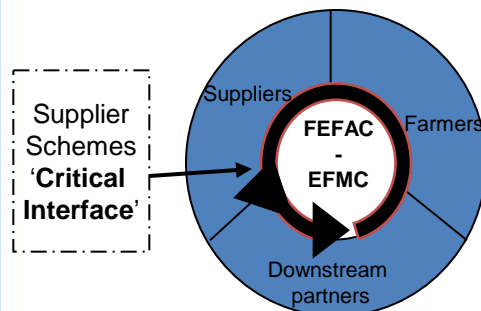


# The Role of the EFMC in the Food Chain

## THE 'CRITICAL INTERFACE'



# The Role of the EFMC in the Food Chain



1. The EFMC is only concerned with 'horizontal' = safety issues
2. Other Food Chain partners have their own codes
3. For total food chain security / synchronicity, all the codes must 'intermesh'
4. FEFAC is only concerned with specifying and controlling the "CRITICAL INTERFACE" – it will not be a supplier scheme owner
5. The supply scheme owners are responsible for meeting the needs of FEFAC's EFMC "Critical Interface"
6. Purpose of "Critical Interface" → Mutual recognition between national schemes






<b>Country (association)</b>	<b>Scope of national scheme *</b>	<b>Accreditation</b>	<b>Certification system available</b>	<b>Governmental endorsement</b>
<b>Austria (VFÖ)</b>	<b>M</b>			<b>YES</b>
<b>Belgium (OVOCOM)</b>	<b>PM, RM, M, T, FA</b>	<b>YES</b>	<b>YES</b>	<b>YES</b>
<b>Croatia (CFIA)</b>	<b>M, PM</b>			
<b>Cyprus (CFA)</b>				
<b>Czech Republic (CSMO ZZN)</b>	<b>PM, M</b>			<b>YES</b>
<b>Denmark (DAKOFO)</b>	<b>M</b>			<b>Yes</b>
<b>Finland (FFDIF)</b>	<b>M</b>			
<b>France (OQUALIM)</b>	<b>M</b>	<b>YES</b>	<b>YES</b>	<b>YES</b>
<b>Germany (QS)</b>	<b>M, T, RM</b>	<b>YES</b>	<b>YES</b>	<b>YES</b>
<b>Ireland (IGFA) – integration of UK’s code</b>	<b>M, PM, RM, T</b>	<b>YES</b>	<b>YES</b>	<b>NO</b>
<b>Italy (ASSALZOO)</b>	<b>M, PM, T</b>	<b>NO</b>	<b>YES</b>	<b>YES</b>



\* M = Feed manufacturing PM = Pre-mixtures RM = Raw materials T= Transport FA = Feed additives



<b>Country (association)</b>	<b>Scope of national scheme *</b>	<b>Accreditation</b>	<b>Certification system available</b>	<b>Governmental endorsement</b>
<b>Lithuania (LGPA)</b>				
<b>Luxembourg (OVOCOM)</b>	PM, M, T	YES	YES	
<b>Netherlands (PDV)</b>	RM, PM, M, T	YES	YES	YES
<b>Poland (IZBA Gospodarcza)</b>	M			
<b>Portugal (IACA)</b>	PM, M			YES
<b>Slovakia (AFPWTC)</b>	M			YES
<b>Slovenia (GZS)</b>	M			YES
<b>Spain (CESFAC)</b>	PM, M	YES	YES	YES
<b>Sweden</b>	Code not requested at the moment	–	–	–
<b>Switzerland (VSF)</b>	M, PM, RM, T	YES		YES
<b>United Kingdom (AIC)</b>	M, PM, RM, T	YES	YES	YES

\* M = Feed manufacturing PM = Pre-mixtures RM = Raw materials T= Transport FA = Feed additives

# RASFF results 2012

- 324 feed notifications
  - 57 % for feed for farmed animals and 43% for petfood
  - 10% less than in 2011 (due to a decrease in the number of border rejections for bird seeds with aflatoxins).
  - 5% are alerts, 57% information and 38% border rejections.
  - 10% of all notifications to the RASFF (feed and food).
  - 29% of contamination cases (alerts and info – not border rejection) triggered by company own checks
- Most frequent cases:
  - 153 microbiological contamination of feed materials
  - 67 presence of aflatoxins in bird seeds
- Dioxin/PCBs permanent issue for the feed chain: 16 notif (vs 24 in 2011), thereof 3 alerts (vs. 4 in 2011)







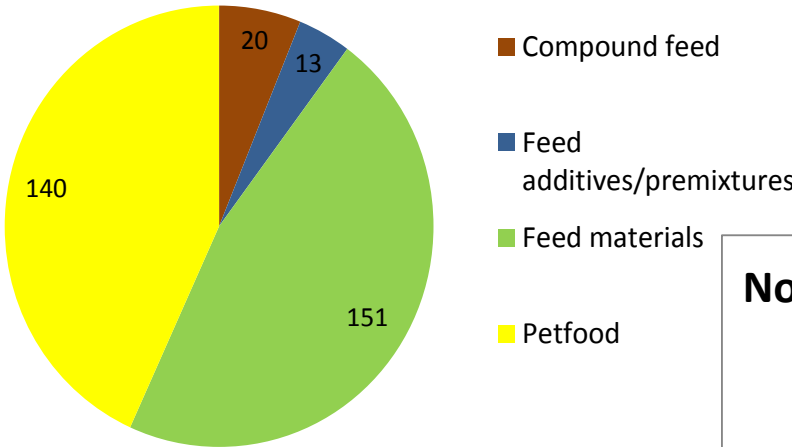
# RASFF results 2012/2013

- Contamination with traces of GM events not authorised in the EU triggered a single notification to the RASFF in 2012 (rice proteins from China);
- The fraudulent presence of a biocide (DDAC) in premixtures at relatively high concentration was detected in 2012 and gave rise to three notifications.
- **15 RASFF alerts linked to presence of aflatoxin in maize harvested in 2012 in South Eastern Europe and by-products thereof require in 2013 specific attention and monitoring from feed business operators.**

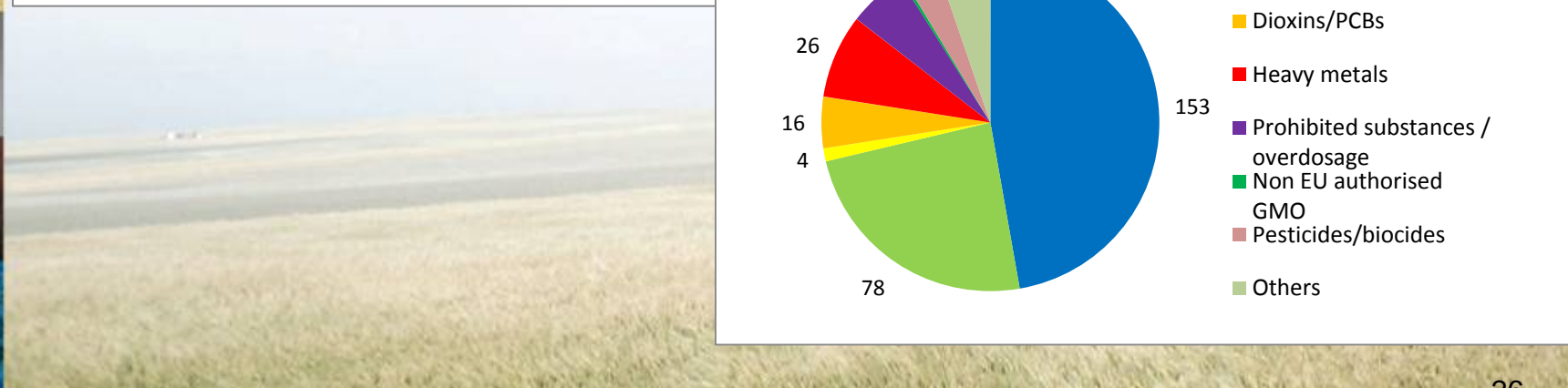
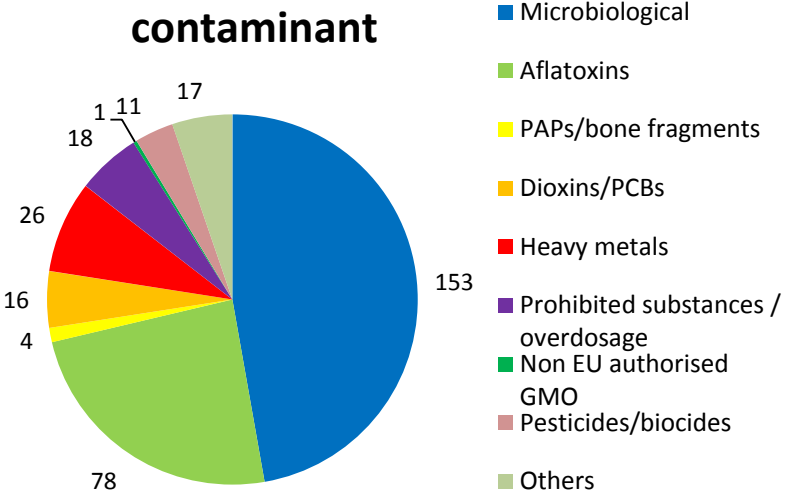


# RASFF results 2012

### Notifications in 2012 by type of feed



### Notifications in 2012 by type of contaminant

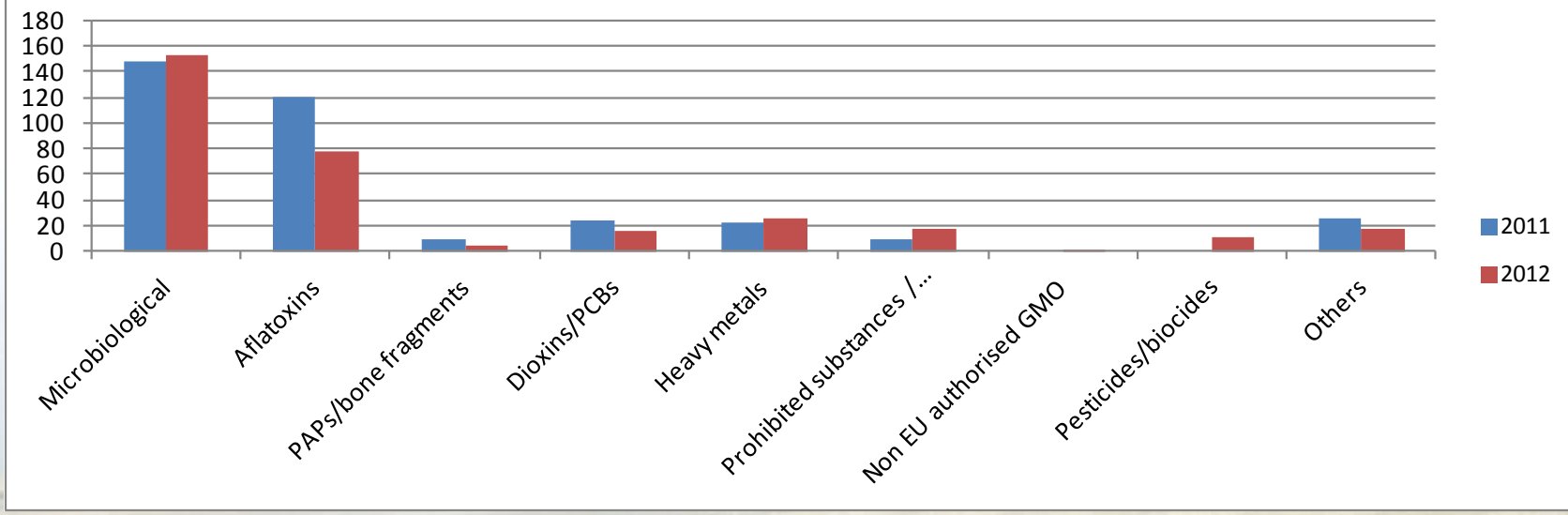




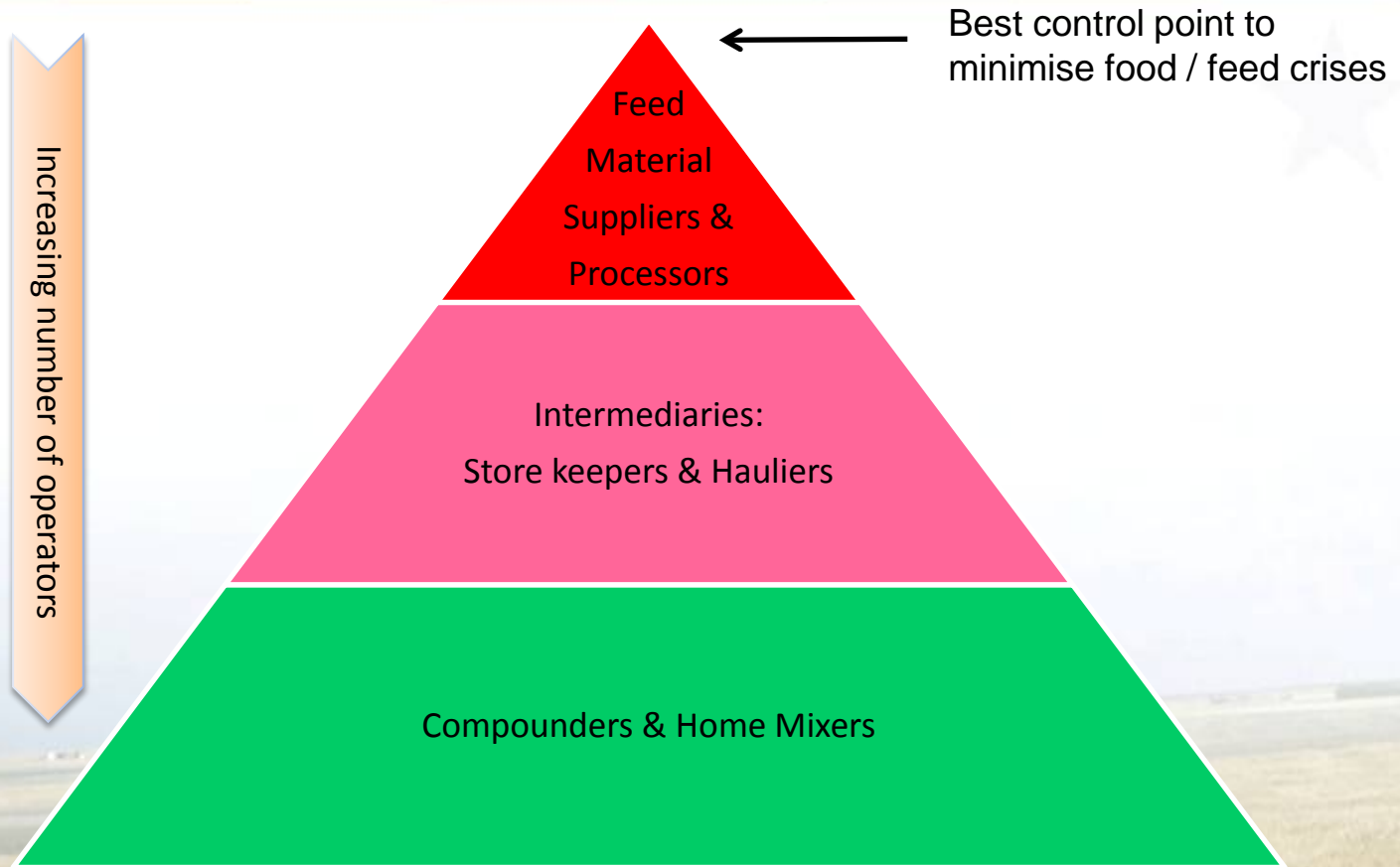
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# RASFF results 2012

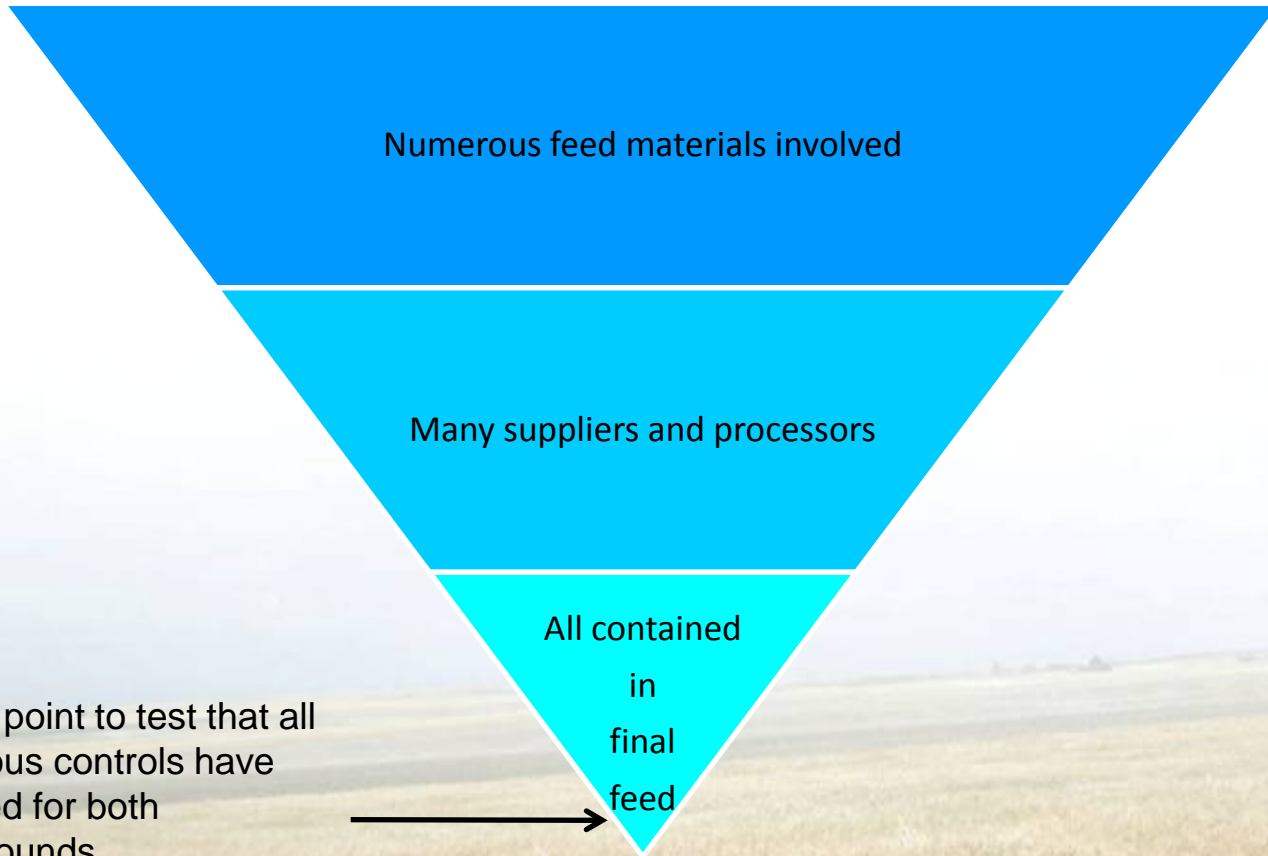
### Evolution of total notifications by type of contaminants between 2011 and 2012



# Supply chain pyramid: primary testing at supplier level



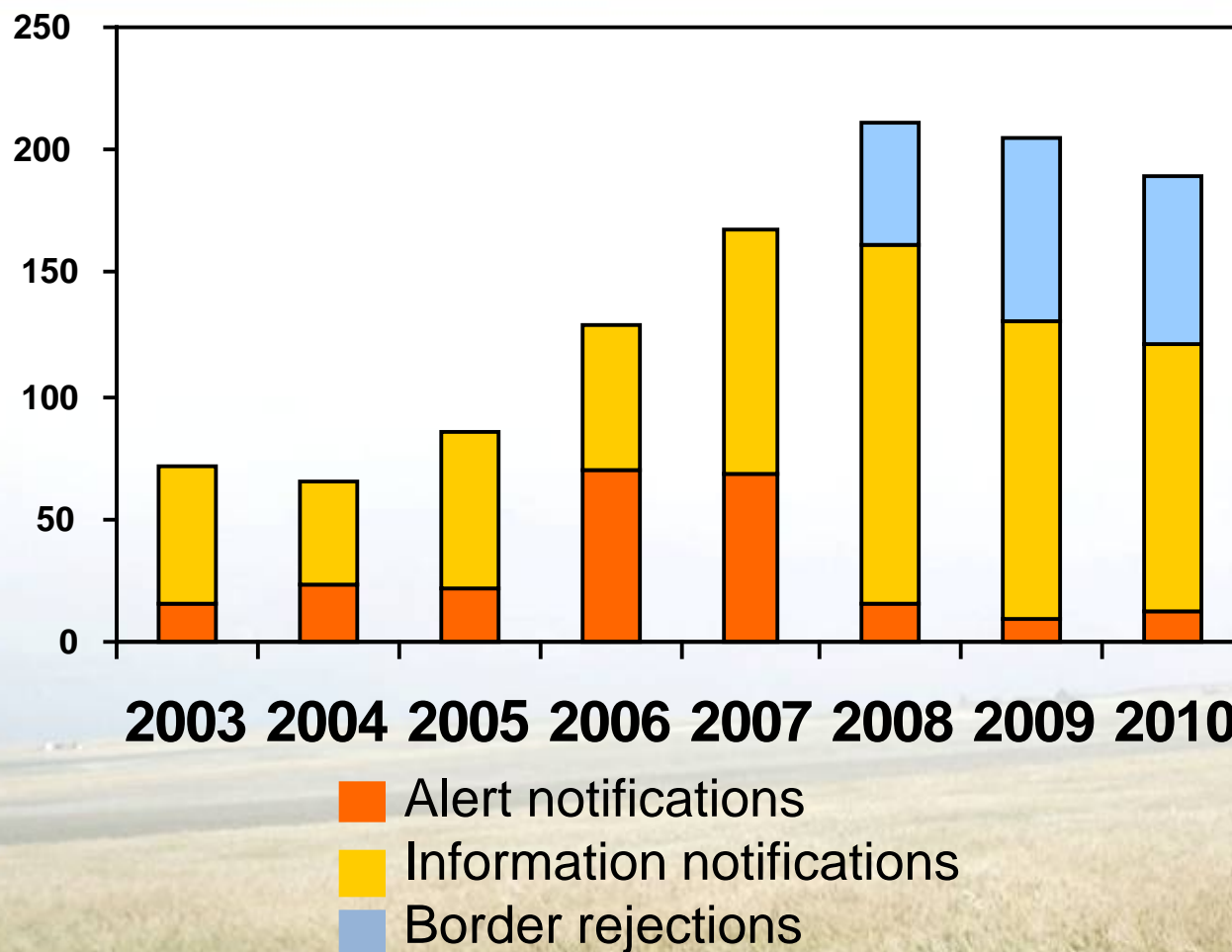
# Final verification that the system is working: testing of final compounds



Good point to test that all previous controls have worked for both compounds and feed materials



# Feed notifications to RASFF



# Overview of results 2006-2011: FVO mission on official feed controls

- The requirements for designation of the competent authorities carrying out official controls in the feed sector and the resources at their disposal were largely met;
- Deficiencies in the cooperation between different competent authorities affected official controls in the feed chain;
- Limited level of expertise of feed inspectors, notably as regards HACCP and cross-contamination;
- In many Member States, measures to avoid or minimize cross-contamination, as well as HACCP-based procedures were deficient, with poor controls on these topics.





# Overview of results 2006-2011: FVO mission on official feed controls

- While inspection and sampling programmes were largely risk-based, this approach did not take into account the reliability of operators' own checks;
- Official controls on imported feed were not satisfactorily complied with, where certain risks posed by imported products were not adequately taken into account;
- Requirements for antibiotics, coccidiostats and histomonostats as feed additives and for undesirable substances were largely met;
- Requirements concerning maximum permitted levels of residues of coccidiostats in non-target feed and for prohibited packaging material were not fully met.





# Lessons learned

- **Extensive monitoring** necessary to identify in an early stage contamination of the feed and food chain – need to follow “**top of the pyramid approach**”.
- **Feed safety risk assessment results must be available at all stages of the feed chain and regularly reviewed**
- To perform this extensive monitoring, need for a **rapid, cost efficient and reliable screening method**
- **Risk based maximum levels** are necessary for a efficient management of contamination incidents
- **Traceability** is of major importance to enable a quick, precise and reliable containment of the contamination incident
- **Communication** between authorities, between feed chain partners and between authorities and stakeholders is essential



# Strengthen contacts with third countries

- To implement the new Codex Alimentarius **guidance on risk assessment for feed safety impacts on food safety and prioritisation of feed safety hazards**
- To participate in the international fora for discussion between stakeholders and regulators on **emerging global feed safety issues** (The annual meeting of International feed regulators co-hosted by IFIF and FAO)
- To set up global early warning system on **emerging feed safety risks**



**Thank you for your  
attention**

**FEFAC**

Fédération Européenne des  
Fabricants d'Aliments Composés

Europäischer Verband  
der Mischfutterindustrie

European Feed  
Manufacturers' Federation

