



Dioxins in feed fat in Germany 2011 – a feed crisis

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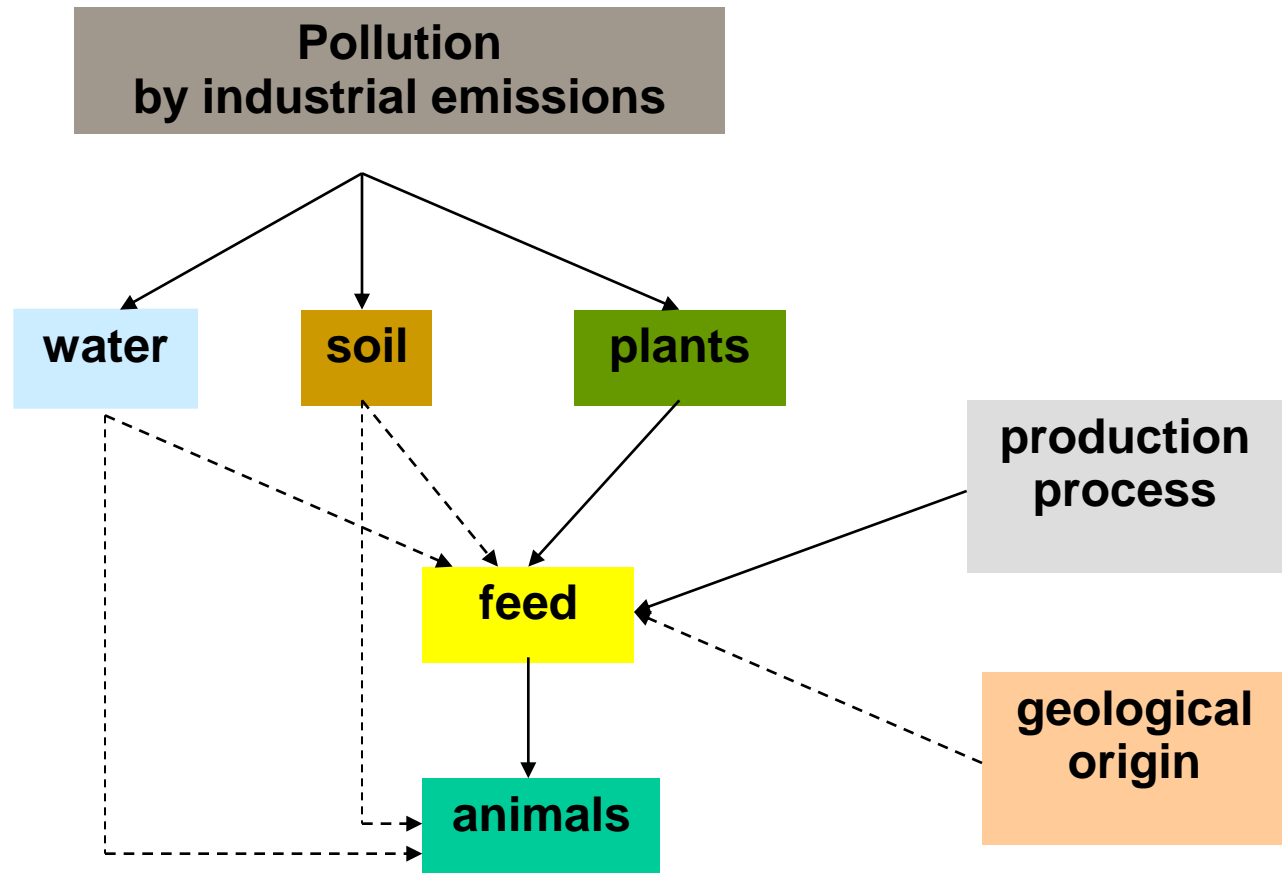
Federal Ministry of Food, Agriculture and Consumer Protection

Ileida, 19./20. October 2011

Outline

- Dioxins in feed
- Dioxin - case in Germany 2010/2011
- Measures of the competent authorities
- Conclusions

Dioxins in feed



Dioxins in feed

Dioxins in

- ↪ feed fat
- ↪ citrus pulp
- ↪ aspiration dust
- ↪ kaolinitic clay
- ↪ fatty acids
- ↪ trace elements
- ↪ potato peels
- ↪ artificial dried green fodder
- ↪ vitamin premixture

Causes

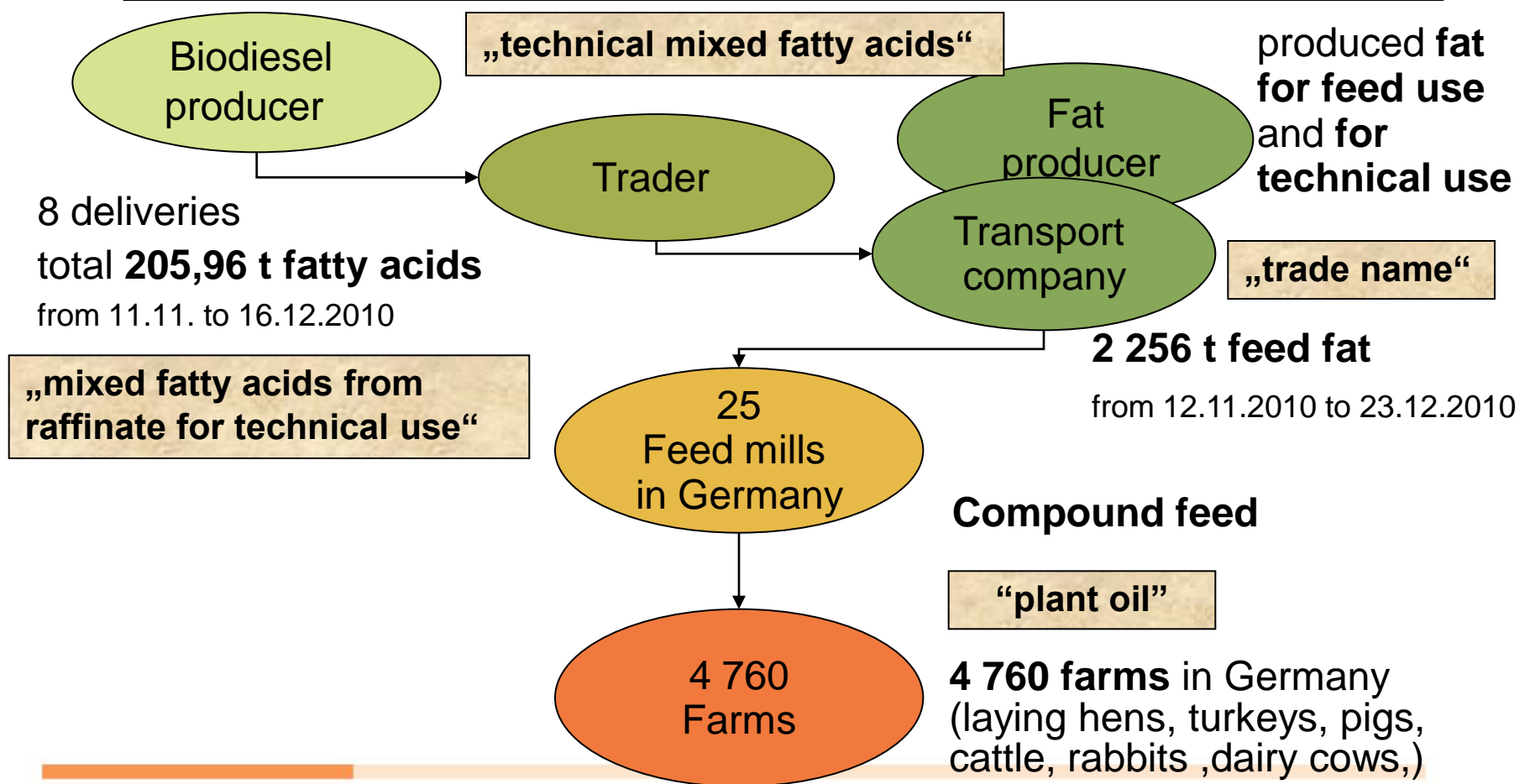
- ⇒ contamination with mineral oil
- ⇒ contaminated processing aid
- ⇒ unsuitable cleaning fraction
- ⇒ geological origin
- ⇒ unsuitable cleaning fraction
- ⇒ production process
- ⇒ contaminated processing aid
- ⇒ drying process
- ⇒ contaminated carrier

Dioxin case in Germany 2010/2011

Detection of the contamination

- Analytical result of self-control from a compound feed producer: 1.56 ng PCDD/F – WHO TEQ/kg compound feed
- Compound feed was produced using feed fat from a feed fat producer in Germany
- Source: contaminated fat mixture produced from fatty acids
- Analytical result on 21.12.2010
Information of the regional authority on 22.12.2010

Dioxin case in Germany 2010/2011



Dioxin case in Germany 2010/2011

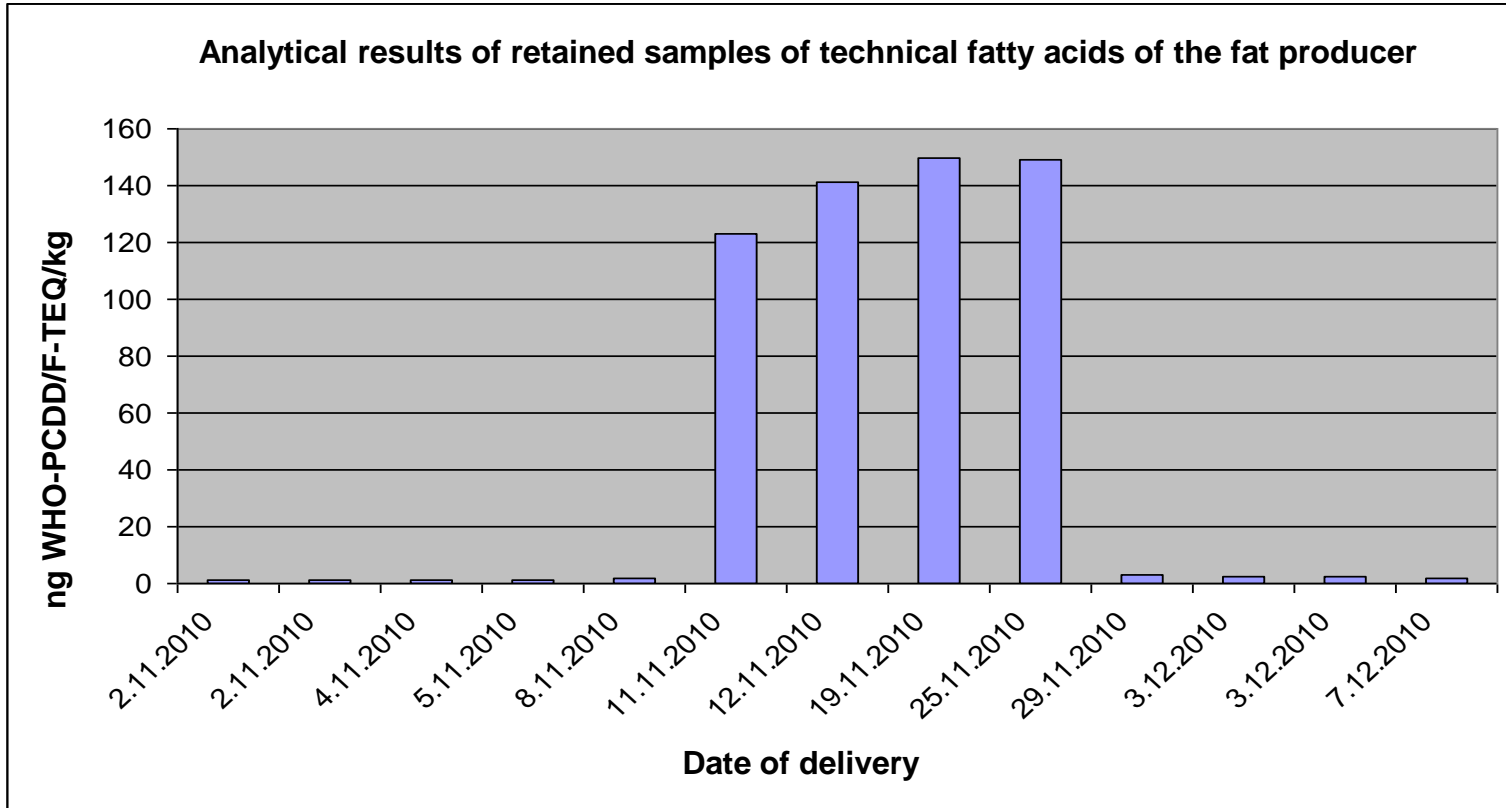
The source of dioxins in fatty acids from the biodiesel production could be:

- ✚ contaminated raw materials
(used cooking oils and category III materials)
- ✚ contaminated filter materials or other technical processing aids.

It is known that during the production process of biodiesel dioxins and other organic substances are concentrated in the oil and heavy metals in the glycerol fraction.

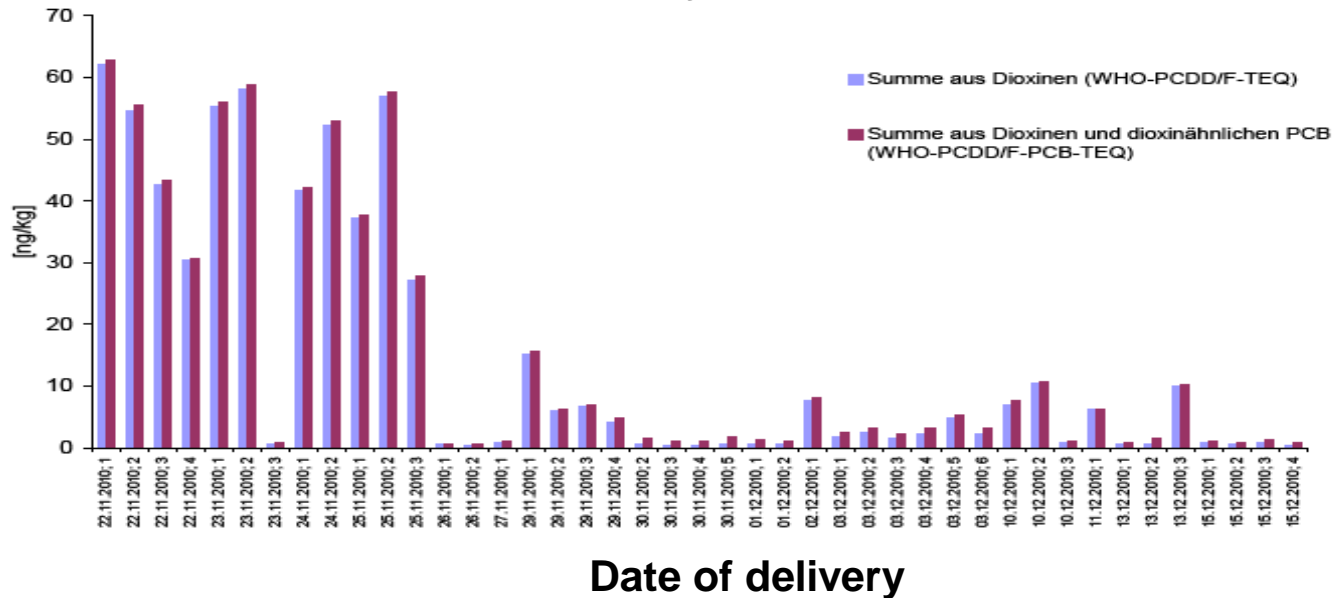
Experts assume that the congener pattern changes during the distillation process. This needs further investigations.

Dioxin case in Germany 2010/2011



Dioxin case in Germany 2010/2011

Feed fat – official analytical results



Dioxin case in Germany 2010/2011

Compound feed – official analytical results of random samples

Compound feed for	Analytical results	Number of samples above the maximum level of 0,75 ng WHO-PCDD/F- TEQ/kg
Poultry	23	0
Pigs	41	0
Cattles	4	0
Rabbits	5	0
Total	73*	0

* Analytical results in the range of 0.039 (+/- 0.008) to 0.418+/- 0.12)

Dioxin case in Germany 2010/2011

Food – official analytical results

Food	Number of samples	Number of samples above the maximum level
Eggs and egg products	230	35
Meat from laying hens	20	5
Pork	507	10
Other food	150	0
Total	917	50

Measures of the competent authorities



**From 4 760 blocked farms
4 468 were located
in Lower Saxony.**

In Lower Saxony

- **40% of the feed production**
- **1/3 of the egg production**
- **1/3 of the pig production of Germany.**

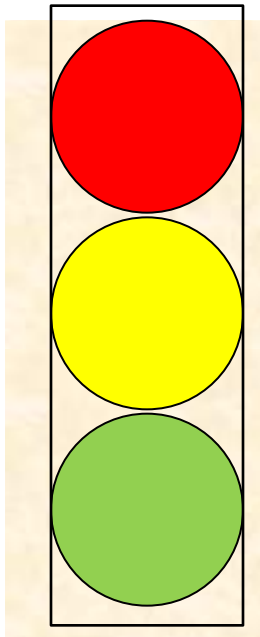
Measures of the competent authorities

Measures before raising of restrictions on blocked farms

- ☒ Analysis of retained samples of feed and feed fats
- ☒ Analysis of meat, eggs or milk from animals fed with contaminated feed
- ☒ Tracing back of feed fats to compound feed and to farms
- ☒ Calculation of the dioxin content of the daily ration containing contaminated feed batches already consumed
- ☒ Combination of these information for each farm
- ☒ Decision on the basis of a farm specific risk assessments

Measures of the competent authorities

Risk assessment of the competent authorities



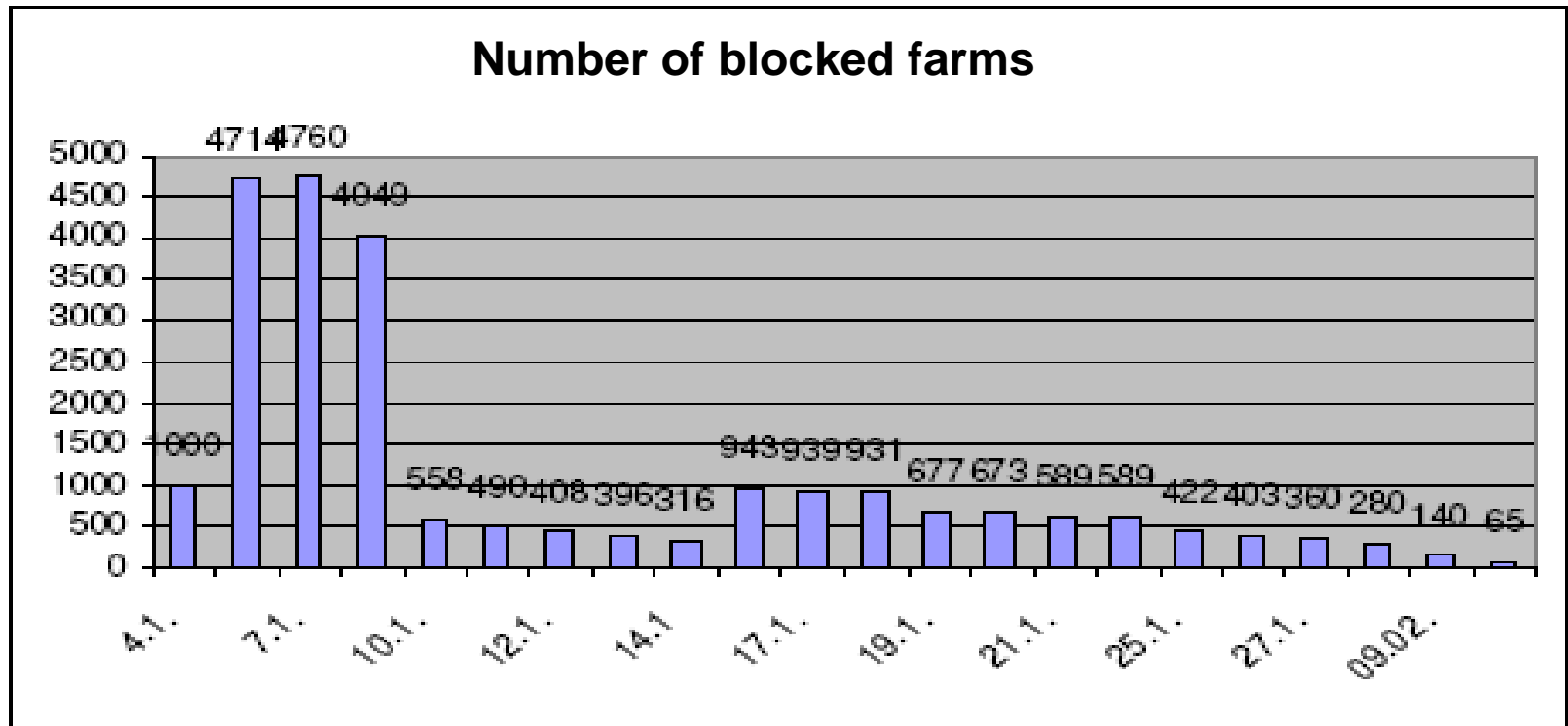
Real analytical result of feed fat ; dioxin content in the compound feed $> 0,5$ ng /kg → unsafe feed

No analytical result of feed fat ; worst case = $61,6$ ng/kg; calculated dioxin content $> 0,5$ ng /kg → unsafe feed

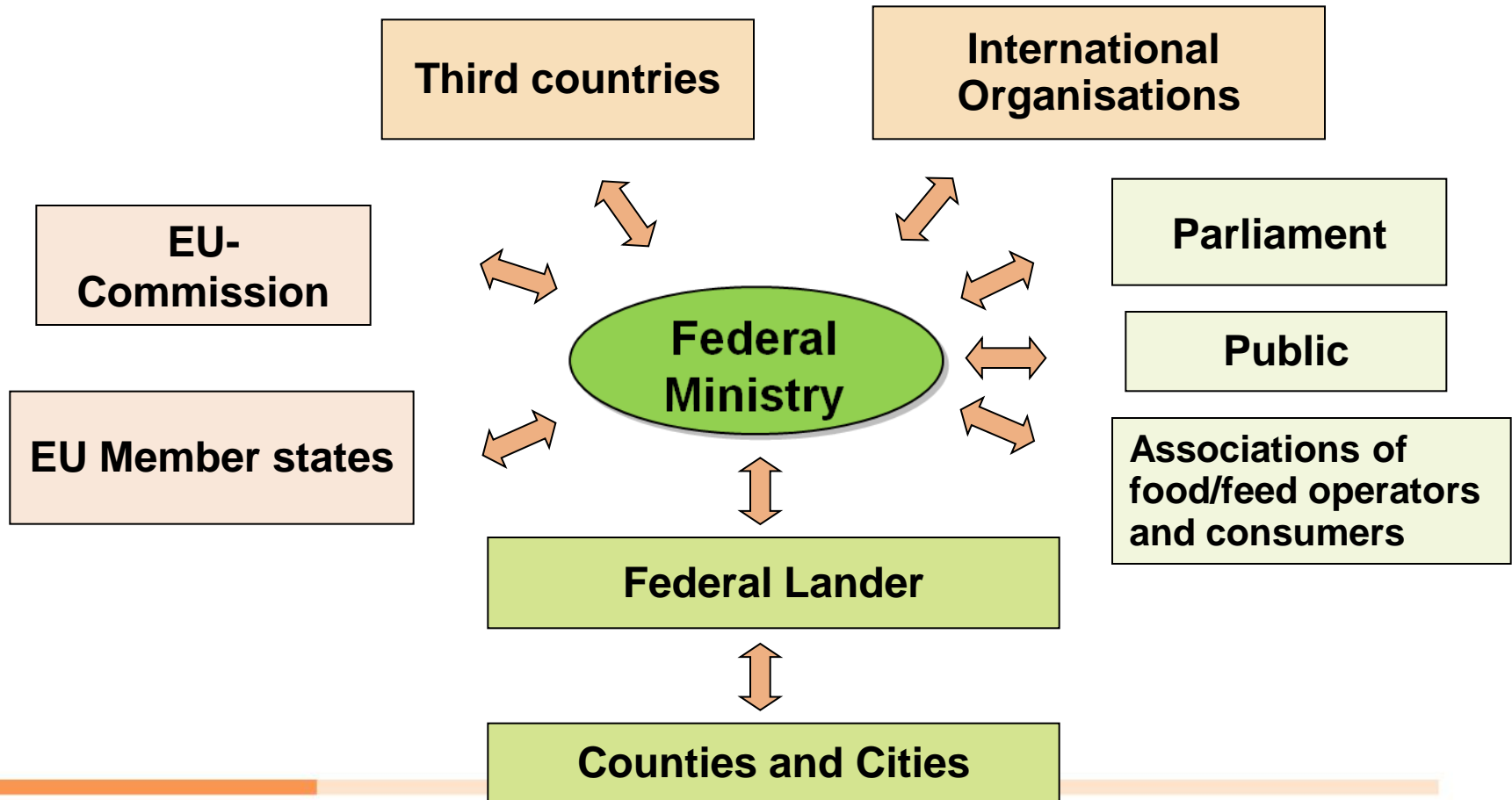
No analytical result of feed fat ; worst case = $61,6$ ng/kg; calculated dioxin content $< 0,5$ ng /kg → safe feed

$0,5$ ng/kg = action limit = safety margin

Measures of the competent authorities



Measures of the competent authorities



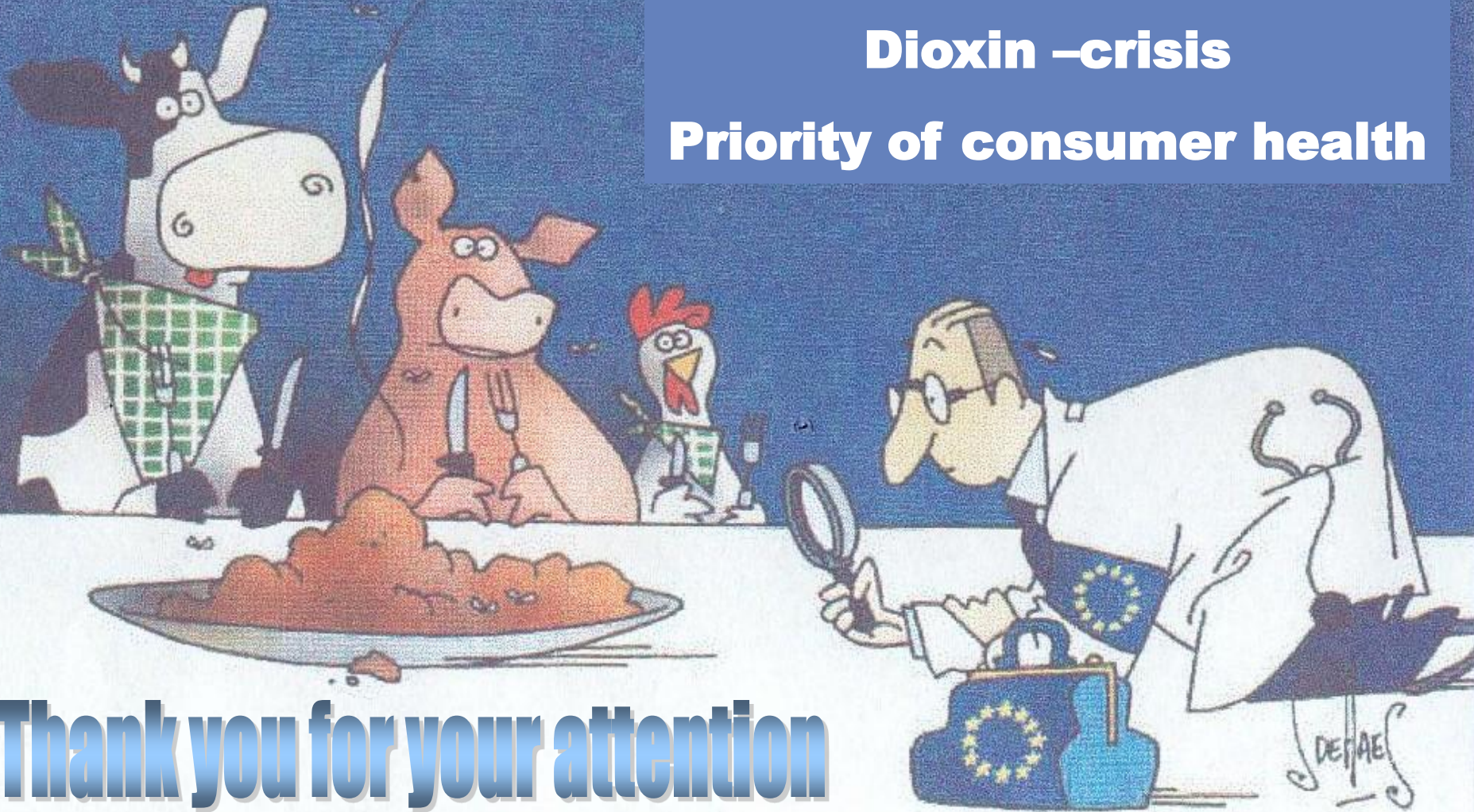
Conclusions

Germany has analysed the situation and developed an action plan in order to strengthening consumer protection in the feed chain:

- Approval of feed fat producers
- Separation of feed production from other activities of the establishments
- Analysis of risky feed before using
- Notification of results of unsafe feed from the laboratories to the authorities
- Establishment of a binding list for feed materials
- Implementation of financial guarantees against the risks of liability
- Revision of the penalties
- Establishment of a dioxin-monitoring and an early-warning system
- Strengthening of the quality of food and feed control
- Improvement of the information of the consumers about infringements

Dioxin –crisis

Priority of consumer health



Thank you for your attention

Reference: EU Commission 2000