



Agence Fédérale pour
la Sécurité de la
Chaîne Alimentaire

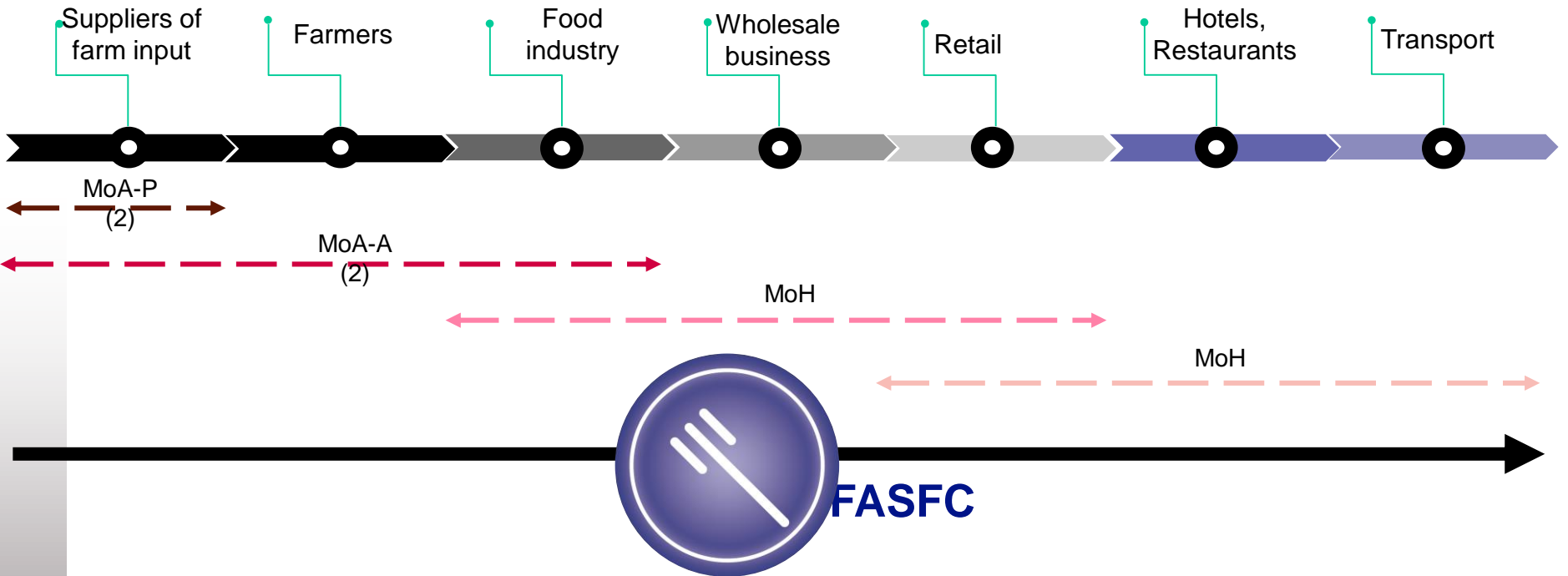
Belgian guidelines on pesticide residues in feed.

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Optimising food chain checks

Our goal :





The FASFC as it is today

Staff of approx. 1,300 employees including

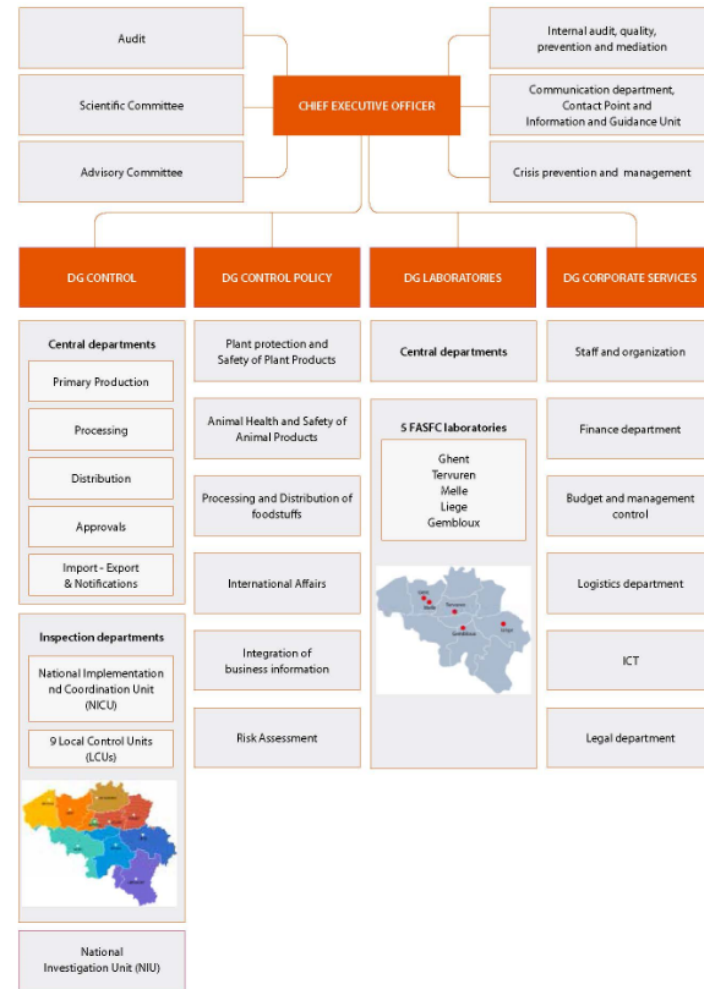
- approx. 660 in decentralised services of DG Control (PCU)
- Approx. 150 in its 5 laboratories
- Approx. 360 FTE other staff members: policy makers, frontline-inspectors, scientists, IT-specialists, communication experts, financial officers, laboratory technicians, support staff

560 part-time assigned veterinarians and bioengineers (slaughter houses, etc)

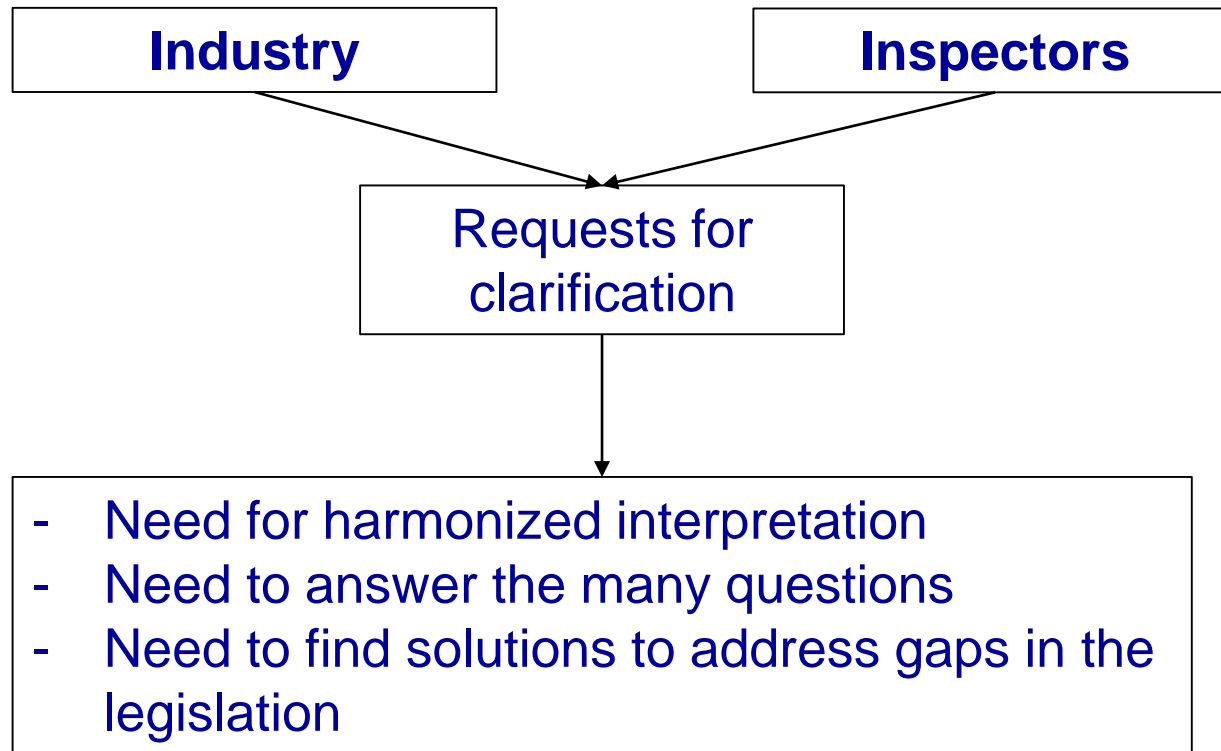




The FASFC as it is today



Why developing guidelines?



How to develop it?

- Establishment of a working group (authorities and industry)
- Listing of all issues
- Drafting of a document by the Agency
- Discussion and amendment of the draft document by the working group
- Publication

-> 2 years



The guidelines

Two parts

Compliance with
legislation

Risk assessment



Compliance with legislation

- Directive 2002/32 >< REG 396/2005
- Footnote 1 in the Annex I to Reg. 396/2005
 - Products used in food
 - Products used exclusively for feed
 - Dual purposes commodities (approach developed by the Commission in 2016)



Compliance with legislation

- Application of the MRL
 - General comment
 - Exported products
 - Compound feed
- Processing factors
- Analytical uncertainty



Risk assessment

Why this section?

- If the MRL is exceeded
- In many cases, it's not clear which MRL applies:
 - footnote 1
 - compound feed (additives, minerals,...)
 - no info on the processing factor
 - ...



Risk assessment

The Belgian guidelines are based on the principle that, in case of doubts regarding the application of the MRL's legislation, we should at least make a risk assessment.

A gap in the legislation should not lead to an absence of reaction.

-> need to harmonise the risk assessment approach



Risk assessment

- Animal safety
 - Based on the same approach applied for the food sector
 - Need for data regarding the weight and the consumption of the different animals categories (EFSA data)
 - Use of the same ARfD and ADI as for human (the human model is based on animals studies)



Risk assessment

- Consumer safety

- Crucial point: transfer factors from feed to food of animal origin.

- W. R. Leeman , K. J. Van Den Berg & G. F. Houben (2007)
Transfer of chemicals from feed to animal products: The use of transfer factors in risk assessment, Food Additives & Contaminants, 24:1, 1-13, DOI: 10.1080/02652030600815512



Risk assessment

Table VI. Transfer factors categorized by log $P_{c/w}$.

Log $P_{c/w}$	Transfer factor					
	Egg, P_{95} (N)	Whole milk, P_{95} (N)	Meat, P_{95} (N)	Fat, P_{95} (N)	Edible offal ¹ , P_{95} (N)	All matrices, P_{95} (N)
<0	0.03 (66)	0.02 (25)	0.02 (80)	0.01 (57)	0.02 (94)	0.02 (322)
0–1	0.05 (37)	0.03 (15)	0.04 (18)	0.01 (13)	0.30 (18)	0.04 (101)
1–2	0.04 (96)	0.02 (30)	0.01 (117)	0.01 (64)	0.02 (144)	0.02 (451)
2–3	0.13 (38)	0.01 (29)	0.02 (71)	0.02 (45)	0.04 (81)	0.03 (264)
3–4	0.92 (38)	0.33 (48)	0.01 (51)	14.1 (77)	0.21 (65)	2.00 (279)
4–5	0.11 (16)	0.03 (19)	0.05 (69)	0.58 (58)	0.08 (68)	0.25 (230)
5–6	2.43 (26)	0.43 (45)	0.03 (35)	17.0 (81)	1.50 (36)	14.0 (223)
6–7	1.60 (44)	0.52 (108)	0.33 (32)	30.0 (137)	2.62 (39)	14.0 (360)
7–8	0.75 (23)	0.90 (51)	0.33 (28)	16.3 (48)	2.79 (28)	2.73 (178)
>8	0.21 (13)	0.32 (30)	0.04 (8)	0.74 (27)	0.08 (8)	0.38 (86)
Metals total	0.17 (34)	0.12 (112)	0.82 (408)	0.35 (17)	6.61 (516)	3.54 (1087)
Accumulating metals	0.17 (30)	0.15 (54)	1.47 (219)	0.74 (10)	9.62 (290)	5.03 (603)
Non-accumulating metals	0.00 (4)	0.06 (58)	0.30 (189)	0.11 (7)	0.72 (226)	0.52 (484)

N , total amount of transfer factors in the respective subgroup; P_{95} , 95th percentile. Bold values: transfer factors indicating potential accumulation in the matrix.

¹Edible offal = liver and kidney.



Futur developments

- Development of a risk analysis tool
 - First draft on test
- The model start from the daily ration. To start from the raw material, we need to regroup data concerning the use of common raw materials in the daily ration for the different animal categories.
- Need for an update of the study used for the transfer factors.



Thank you for your attention



Work in Progress

