



EFSA TSE activities 2021-2022

EURL on TSE
19th Annual meeting
17-18 October 2022



CONTENT

Finished:

- ABP renewable fuels 2022

Ongoing:

- CWD monitoring
- 2021 EU summary report 2021
- Pig PAP

Pipeline:

- Negligible risk classical scrapie CZ



CONTENT

Finished:

- **ABP renewable fuels 2022**

Ongoing:

- CWD monitoring
- 2021 EU summary report 2021
- Pig PAP

Pipeline:

- Negligible risk classical scrapie CZ
- Atypical CWD

ABP APPLICATION

multi-step catalytic co-processing hydro-treatment for the production of renewable fuels using **Category 3** animal fat and used cooking oils

BpRR (British Petroleum)

Animal fat: Standard processing method: Processing method 1 (pressure sterilization) **133 °C, 3 bar, 20min**
Used cooking oil

Catalytic co-processing hydro-treatment using a middle distillate followed by a stripping step.
pressure > 60 bars temperature >270°C >4.7 minutes



ABP APPLICATION

- Most resistant hazard: hazard identification. Indicator pathogens. Not prions

Approach:

- spores from non-pathogenic, heat forming indicator bacterial species (*Bacillus pasteurii* and *Desulfotomaculum pasteurii*)

Standard application

- reduction of $5 \log_{10}$ in the spores of *B. subtilis* and $6 \log_{10}$ reduction in the spores of *C. botulinum*

Adopted: 28 September 2022
Published: XX October 2022



CONTENT

Finished:

- ABP renewable fuels 2022

Ongoing:

- **CWD monitoring**
- 2021 EU summary report 2021
- Pig PAP

Pipeline:

- Negligible risk classical scrapie CZ



CWD MONITORING

- Detection of CWD in Norway 2016
- EFSA opinion (I) December 2016: proposal 3-year monitoring programme
 - **ToR1:** *"aimed at **detecting CWD and/or estimating the prevalence of CWD** in Norway, Sweden, Finland, Iceland, Estonia, Latvia and Poland, which are the EU and EEA countries with reindeer and/or moose populations, depending on the level of prevalence which is wished to be detected"*.
- Com. Reg. (EU) 2017/1972: Estonia, Finland, Latvia, Lithuania, Poland and Sweden. Compulsory monitoring following EFSA opinion 2018-2020.
- Q4 2017 and Sweden (2021/2022 surveillance)
- Prion protein genotype for positives and negatives (or a sample).



CWD MONITORING

	Norway			Sweden	Finland
					
	Reindeer	Moose	Red deer	Moose	Moose
2016	4	2			
2017	9	1	1		
2018	6	1			1
2019		2		3	
2020	1	1		1	1
2021		2	1		
2022	1	2	1		
TOTAL	21	11	3	4	2



CWD MONITORING TOR1

EFSA is requested to provide a scientific opinion on the monitoring of CWD, based on the **results** of the above-mentioned **monitoring programme** including the **statutory** data available in the EFSA database, **and any other monitoring data collected with the same epidemiological objective** and having become available since the publication of previous EFSA opinions on CWD

ToR1

- To **analyse** the **results** of the monitoring programme carried out in Norway, Sweden, Finland, Iceland, Estonia, Latvia, Lithuania and Poland between 1 September 2017 and 28 February 2022 and, in particular, to assess if the **two objectives** as set in the 2016 EFSA opinion on CWD in cervids have been **met**



CWD MONITORING TOR1

- **EFSA proposal (2017) and legal requirements (2001/999).** Summary of the country-specific implementation
- **The analysis of the surveillance data.**
 - Description of general and intensified surveillance
 - Description surveillance data (EFSA database)
 - Evaluation of objectives (representativeness and sensitivity)
 - Description of the outcomes: caseload and prevalence (Ly- & Ly+)
- **Estimation of the minimum detectable prevalence (design prevalence)**
- **Estimation of the sensitivity of the surveillance system**



CWD MONITORING TOR2

ToR2

- To describe any **new knowledge** on the **epidemiology** of CWD in Europe/European Union.
- Available epidemiological knowledge until the last EFSA CWD opinion (2019)
 - Summary previous Opinions (CWD I, II and III)
 - North America vs. Europe
- New epidemiological knowledge since the last EFSA CWD opinion
 - Mostly based on the Norwegian experience from 2019



CWD MONITORING TOR3

ToR3

- To recommend, if considered appropriate, **future CWD monitoring** activities for the EU based on an assessment of the epidemiological situation
- Framing through SWOT (strengths, weakness, opportunities, threats).
- Defining different objectives of the future surveillance (animal health (introduction risk, status recognition), environmental issues, epidemiological knowledge, spillover risk, public health/zoonotic potential)
- Provisions of general surveillance recommendations

CWD MONITORING TOR4

ToR4

- Based on what is known about the epidemiology of CWD in Europe/European Union, to describe the **criteria** relevant for considering an **area not to be infected with CWD**
 -
 - Need of defining the concept of area
 - Combination of criteria: multiple requirements
 - Multistep progressive strategy to achieve status of area free from infection



CWD MONITORING TOR5

ToR5

- To provide the design of a **genotyping protocol** for positive samples, and for the negative samples of the 3-year monitoring programme stored as per point 3.3, section III.A of Annex III of Regulation (EC) No 999/2001, specifying which negative samples should be genotyped, the codons of the PRNP gene to be genotyped and **recommending genotyping assay/s** for the implementation of the requirement by the NRLs
- Defining different objectives: detection, frequency, res/sus
- Focus on polymorphic species (by country)
- Multi-aim sample size
- Recommendations, not protocol.



CWD MONITORING

Mandate received:	4 February 2022
Assigned mandate:	EFSA-Q-2022-00114
Charter approved:	15 February 2022
Acceptance mandate:	22 February 2022
Working group established (DoI?):	2 March 2022
Meetings:	7 April 2022
	11 May 2022
	10 June 2022
	18 July 2022
	4-5 September 2022
	20 October 2022
	17 November 2022
Deadline for submission of opinion:	31 March 2023



CONTENT

Finished:

- ABP renewable fuels 2022

Ongoing:

- CWD monitoring
- **2021 EU summary report 2021**
- Pig PAP

Pipeline:

- Negligible risk classical scrapie CZ



2021 EUSR TSE

- 27 MS + Northern Ireland
8 non – EU RC: Bosnia and Herzegovina, Iceland, Montenegro, North Macedonia, Norway, Serbia, Switzerland
Turkey (first time)
Albania: no surveillance

CATTLE

- No change in tested animals 1,021,252 (-9%)
2 H-BSE in France & Spain
4 L-BSE in France (2), Germany & Spain
1 C-BSE in England. dairy cow (FS) Somerset, 6.5y
2 H-BSE Brasil and 1 H-BSE Canada



2021 EUSR TSE

SHEEP

- No change in tested animals 311,174 (-6.4%)
- 551 cases (19.8%)
 - 448 (81.3%) CS from 6 MS ES (184), IT (148), EL(74)
 - 55 CS from IS
 - 103 (18.7%) AS from 13 MS PT, HU
 - 9 AS: IS (1) NO (8)

GOATS

- No change in tested animals 118,457 (-1.8%)
- 224 cases (-31.7%)
 - 219 (97.8%) CS from 6 MS. CY (135), ES (45), IT (23)
 - 5 (2.2%) AS

2021 EUSR TSE

SHEEP GENOTYPE

- 98.6% genotyped in NSP3, NSP30, NSP4 and NSP5
- 5,411 random genotype, 9 MS. Excluding CY, 7.9% susceptible (IT 21.2%)

GOAT GENOTYPE

- 152 cases genotyped (2 AS, 149 CS and 1 inconclusive)
N146 and Q222 when available



2021 EUSR TSE

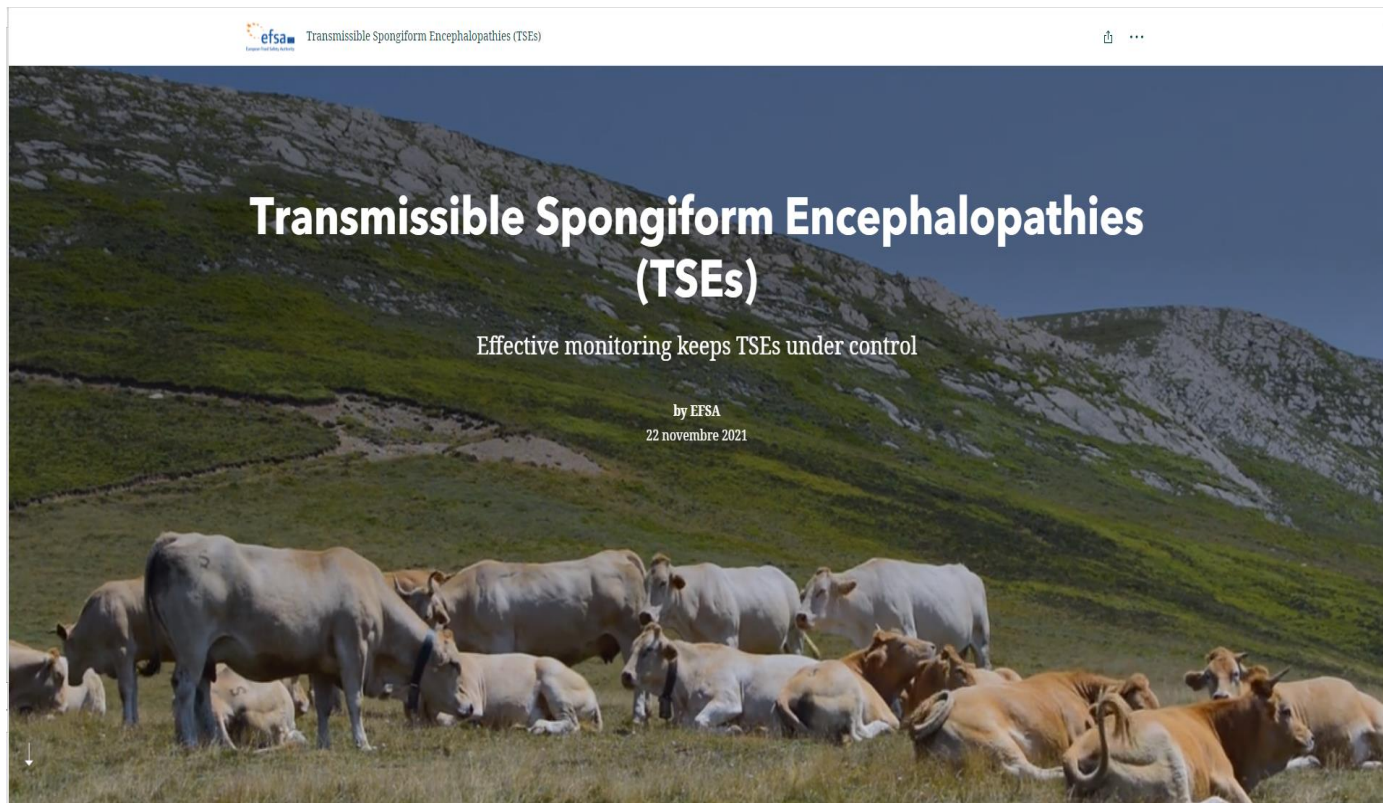
CERVDIS

- 5,854 by 8 MS (82.1% from SE and RO)
70.2% from the hunted/slaughtered fit for human consumption (HSHC)
No cases
- NO: 21,670
2 cases in moose, 1 case in red deer

<https://www.efsa.europa.eu/en/topics/topic/transmissible-spongiform-encephalopathies-tses>

2021 EUSR TSE

STORYMAP

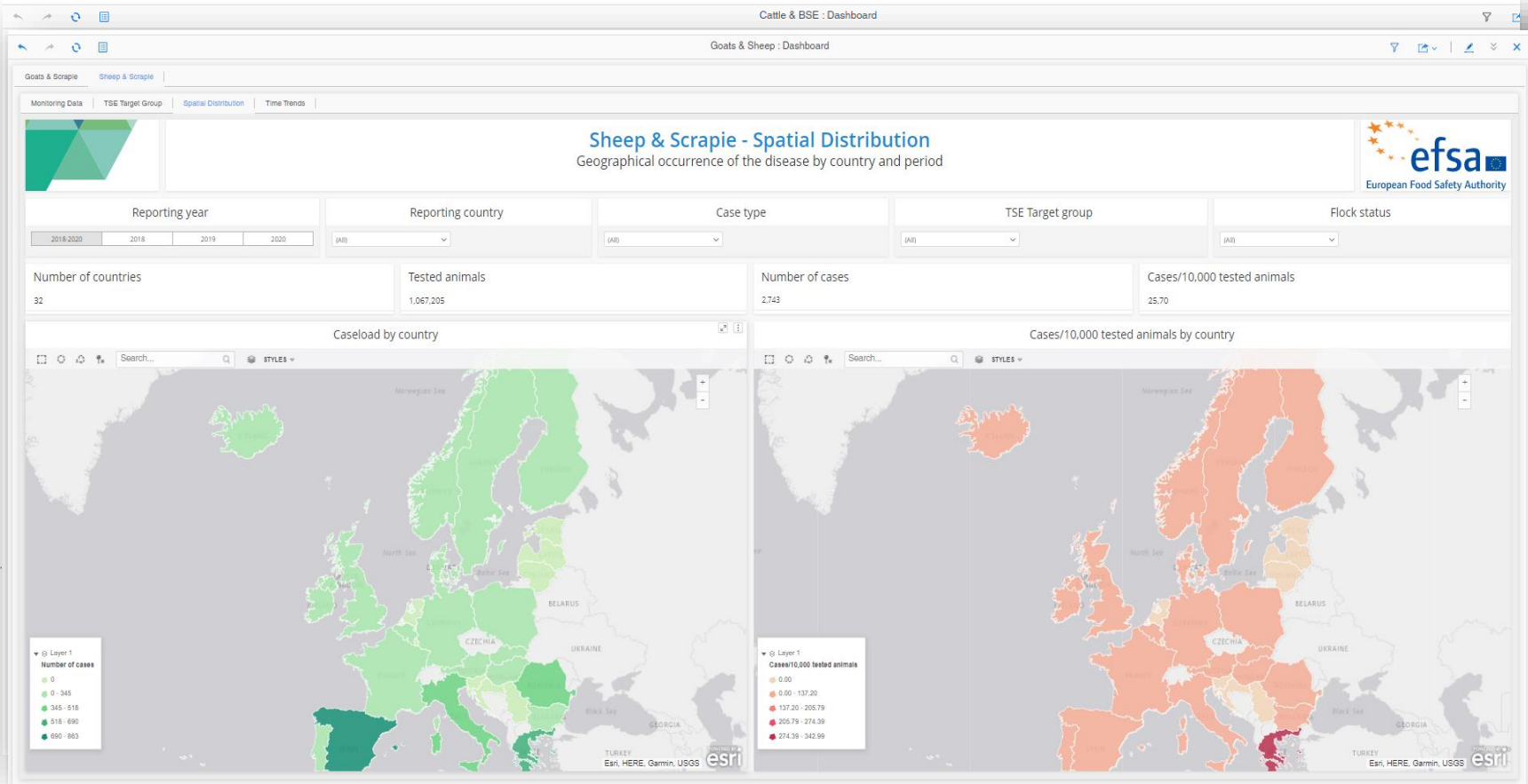


<https://storymaps.arcgis.com/stories/43e7cf4146534e2c8f7c5dce66fe1e56>



2021 EUSR TSE

DASHBOARD



<https://www.efsa.europa.eu/en/microstrategy/cattle-bse>

<https://www.efsa.europa.eu/en/microstrategy/sheep-goats-scrapie>

<https://www.efsa.europa.eu/en/microstrategy/cervids-cwd>



CONTENT

Finished:

- ABP renewable fuels 2022

Ongoing:

- CWD monitoring
- 2021 EU summary report 2021
- **Pig PAP**

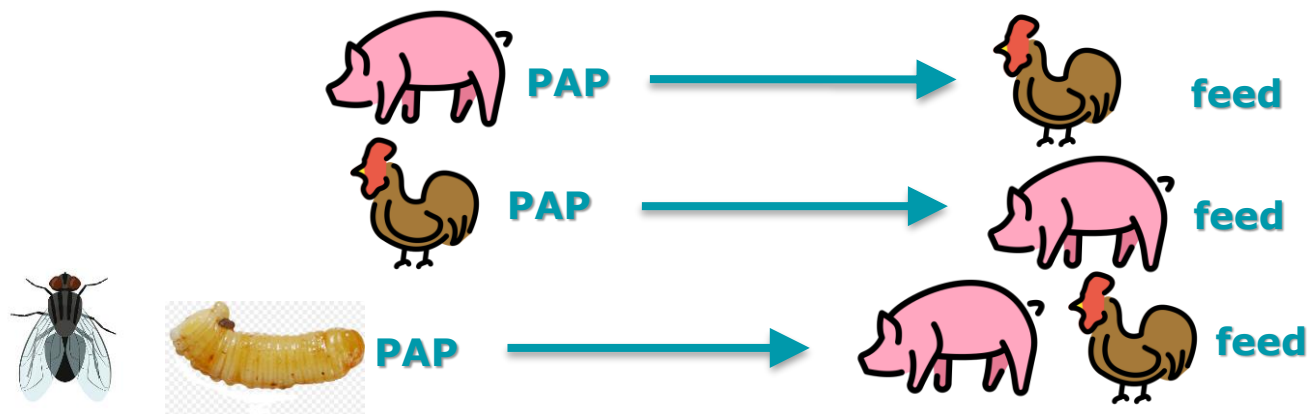
Pipeline:

- Negligible risk classical scrapie CZ

PIG PAP

Commission Regulation (EU) No 2021/1372:

- PAP from pigs and insects in poultry feed;
PAP from poultry and insects in pig feed;
Ruminant C&G in non-ruminant





PIG PAP

- **Processed Animal Protein (PAP):** animal protein derived entirely from **Category 3** material or products derived from them (except hides and skins, hooves, feathers, wool, horns, hair and fur, adipose tissue, catering waste not from international means of transport)
- Annex X Com Reg (EU) 2011/142: “Processed animal protein of mammalian origin must have been submitted to processing method 1 (pressure sterilisation)”

Derogations using methods 2-5 or 7 for :

- Petfood
- Organic fertilisers and soil improvers
- Fuel

But not for feed for farmed animals!



PIG PAP

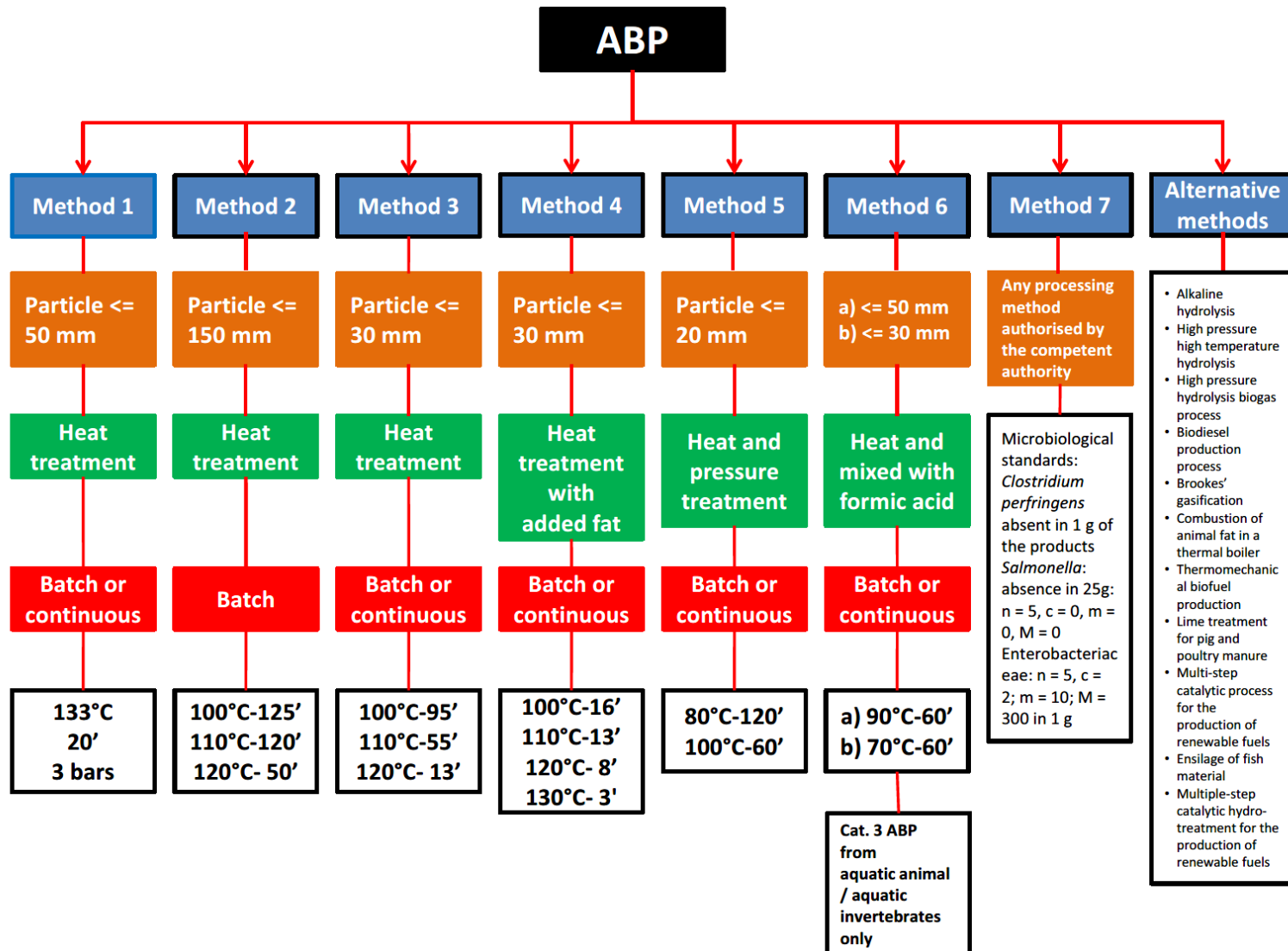
- EFPPA (European Fat Processors and Renderers Association): “**no EU operator applies method 1 for the processing of PAP of porcine origin**”

- **ToR**

The Commission requests EFSA to provide a scientific opinion concerning the **efficacy of methods 2 to 5 and method 7** to inactivate relevant pathogens when producing processed animal protein (PAP) of porcine origin intended to feed poultry and aquaculture animals.

In particular, the scientific opinion should comprise an assessment of the **level of inactivation of relevant pathogens that could be present in processed animal protein of porcine origin intended to feed poultry and aquaculture animals**

PIG PAP





PIG PAP

Draft mandate received:

3 June 2022

Final mandate received:

8 July 2022

Mandate number:

M-2022-00135

Question number:

EFSA-Q-2022-00455

Charter approved:

12 July 2022

Working group established:

2 September 2022

Deadline for submission of opinion:

30 June 2023



CONTENT

Finished:

- ABP renewable fuels 2022

Ongoing:

- CWD monitoring
- 2021 EU summary report 2021
- Pig PAP

Pipeline:

- Negligible risk classical scrapie CZ

CZ NEGLIGIBLE RISK

- Annex VIII, Chapter A, Section A, point 2 to Regulation (EC) No 999/2001,

a Member State can submit a request to the Commission to be recognised as a Member State, or zone of a Member State, with a negligible risk of classical scrapie.

- Czech Republic submitted a request to the Commission to be recognised a Member State with negligible risk of classical scrapie on 12 May 2022

Part of the dossier evaluated by the EC
Part commission to EFSA. Art 31. Scientific report
Level of testing
Future surveillance plan

CZ NEGLIGIBLE RISK

- EFSA: Evaluation of the application of **Sweden, Finland, Denmark** to be recognised as having a negligible risk of classical scrapie (2015)
- CZ application: mid-October





Thank you Questions?





Subscribe to

www.efsa.europa.eu/en/news/newsletters

www.efsa.europa.eu/en/rss



Engage with careers

www.efsa.europa.eu/en/engage/careers



Follow us on Twitter

[@efsa_eu](https://twitter.com/efsa_eu)

[@plants_efsa](https://twitter.com/plants_efsa)

[@methods_efsa](https://twitter.com/methods_efsa)