EMERGING RISKS EXCHANGE NETWORK (EREN)
Minutes of the 34th meeting

28-29 October 2025
09:00-17:30 / 09:00-13:00
Minutes agreed on 18 November 2025

Location: EFSA - Parma (Meeting Room 00/M07+00/M08) and Web-conference

Attendees:

- Network Participants:

Country	Organisation
Austria	Austrian Agency for Health and Food Safety (AGES)
Belgium	University of Liege
Bulgaria	Risk Assessment Center on Food Chain (RACFCH), Ministry of Agriculture
Croatia	Croatian Agency for Agriculture and Food (HAPIH)
Cyprus	State General Laboratory
Czech Republic	Ministry of Agriculture of the Czech Republic
Denmark	National Food Institute, Technical University of Denmark
Estonia	National Centre for Laboratory Research and Risk Assessment (LABRIS)
Finland	Ruokavirasto /Finnish Food Authority
France	French Agency for Food, Environmental and Occupational Health & Safety (ANSES)
Germany	Federal Office of Consumer Protection and Food Safety (BVL)
Hungary	University of Veterinary Sciences Budapest, Department of Digital Food Science
Ireland	Food Safety Authority of Ireland
Italy	Istituto Zooprofilattico Sperimentale della Lombardia e dell'Emilia Romagna
Latvia	Institute of Food Safety, Animal Health and Environment "BIOR"
Lithuania	State Food and Veterinary Service
Luxembourg	Luxembourg Veterinary and Food Administration – ALVA
Netherlands	Netherlands Food and Consumer Product Safety Authority (NVWA)
Norway	Norwegian Food Safety Authority
Poland	National Veterinary Research Institute (PIWet), Puławy, Poland
Portugal	ASAE - Autoridade de Segurança Alimentar e Económica
Slovak Republic	Ministry of Agriculture and Rural Development

Country	Organisation
Slovenia	Ministry of Agriculture, Forestry and Food Administration of the Republic of Slovenia for Food Safety, Veterinary Sector and Plant Protection
Spain	Universidad de Zaragoza
Sweden	Swedish Food Agency

- Observers:
  Federal Food Safety and Veterinary Office (Switzerland); Ministry of Agriculture and Rural Development (Albania); Food Safety Agency (Bosnia and Herzegovina); Institute for Public Health (Montenegro); Food and Veterinary Agency (North Macedonia); General Directorate of Food and Control, Dept. of Risk Assessment (Türkiye); Health Canada and Canadian Food Inspection Agency (Canada); New Zealand Food Safety in the Ministry for Primary Industries and the New Zealand Institute for Public Health and Forensic Science (PHF Science) (New Zealand).

- International Organisations:
  Food and Agriculture Organization of the United Nations (FAO)

- European Commission/Other EU Agencies representatives:
  DG SANTE; EEA, ECHA, SCHEER

- EFSA:
  KNOW Unit: Bernard Bottex (Chair), Milen Georgiev, David Bravo Lobo, Angelo Magiore, Raquel Garcia Mattas, Yannick Spill, Carsten Behring, Georgi Chobanov, Aikaterini Vlachou, Georgia Gkrintzali, Rene Elliott;
  Ernesto Liebana Criado (BIOHAW); Tobin Robinson (Environment, Plants & Ecotoxicology), Victoria Munier (Mentimeter); Kamila Dziadek (Chief Scientist Office).

- StaDG-ER
  Nicola King (ESR NZ) for point 5.3.;
  Lis Alban (UECBV) for point 7.2..

1. Welcome and apologies for absence

The Chair welcomed the participants.
Apologies were received from representatives of Malta, Romania and Greece.

2. Adoption of agenda

The agenda was adopted without changes.

3. Follow up from previous meeting

Previous Minutes: The minutes of the 33rd Network meeting had been previously agreed by written procedure with deadlines for comments by 6 June 2025 and published on the EFSA website on 10 June 2025.

Briefing Notes: Seven case files were updated successfully (after resolving previous technical issues in the platform). The updates in past BNs include more details of *Yersinia spp*. carrying virulence and AMR genes, findings of *Vibrio spp*. in seafood, further analysis of degradation of explosives in excavation samples from Baltic sea, more details on Shiga toxin producing *Escherichia albertii*, insights on specific toxin gene profile of *Bacillus cytotoxicus*, and further analytical results on *Baylisascaris procyoni* and on issues implicated in raw meat-based diets for pets. None of the updated case files needed re-analysis.

4. Methodology

4.1a. Test on Decision Criteria at the discussion

The meeting included a focused session on testing decision criteria for classifying emerging risks, prompted by previous requests for more transparency and systematic conclusions. Denmark, Hungary, France, Ireland, and Belgium, in collaboration with EFSA, developed a draft set of structured criteria to complement the existing survey tool and encourage more consistent, evidence-based discussions. An interactive online tool (Mentimeter) captured real-time input on criteria such as novelty, risk magnitude, likelihood, and reliability of evidence, allowing structured debate and immediate feedback. This pilot exercise aims to refine the process through group testing and feedback, supporting clearer documentation of how consensus is reached on emerging risks.

4.1b. Results on Decision Criteria Test

While online real-time input is engaging, it may introduce bias if results are visible before the survey ends, and limited discussion time or running separate surveys for each topic complicates scheduling. EREN representatives usually consult experts before responding to surveys but must rely on earlier preparation during meetings. It was suggested to include more structured questions and additional qualifiers at the briefing note stage so responses can be provided in the assessment survey beforehand, enabling members to focus only on key points at the meeting. This structured process is welcomed as it should enhance decision-making on risk categorisation and facilitate both follow-up and external communication.

4.2. AI use in EFSA related activities

EFSA's approach to artificial intelligence (AI), is guided by a strategic roadmap and the establishment of interdisciplinary Fusion team to support agile, product-oriented development. EFSA has piloted and plans to broadly implement Microsoft Copilot to enhance staff productivity in document management and meeting summarization, while also rolling out Databricks to enable "citizen development," where non-IT staff can independently build AI tools. Key applications include automated food fraud detection models and the AutoCAT tool, which streamlines the critical appraisal step in systematic reviews by highlighting relevant text for expert assessment without replacing human oversight. Ethical use of AI is a central focus, with the introduction of an internal AI communication and monitoring activity. EFSA also collaborates with other EU agencies and international partners to share best practices and stay aligned with evolving regulatory and technical standards. Overall, the integration of AI aims to drive efficiency, improve risk analysis, and maintain scientific rigor through responsible, expert-led implementation.

5. MSs signals and updates

5.1. Foodborne diseases caused by Klebsiella spp.

At the EREN meeting, Klebsiella spp. were identified as ubiquitous gram-negative bacteria increasingly found on food-producing animals, fresh produce, and wastewater. Although Klebsiella pneumoniae is a known hospital pathogen, documented food-borne outbreaks are rare; concerns centre on intrinsic antibiotic resistance and the potential spread of carbapenem-resistance genes via the food chain. The group agreed that "further information needed" as evidence is currently insufficient to classify Klebsiella as an emerging food-borne hazard, but potential One-Health surveillance approach and systematic sampling will offer better understanding on the actual exposure and resistance, with results from an extensive Belgian genomic study anticipated to inform future assessments.

5.2. Zoonotic potential of *Corynebacterium silvaticum* and its occurrence in Europe.

The EREN meeting examined the zoonotic potential of *Corynebacterium silvaticum*, a newly described member of the *C. diphtheriae* complex detected in wildlife and domestic pigs across several European countries. Some strains can produce diphtheria toxin, and two human infections in Germany—both involving lymphadenitis with abscesses—were reported, raising occupational exposure concerns. However, the true magnitude of human risk and the possibility of foodborne transmission remain unclear due to limited data. Although the case may be an early signal warranting attention the evidence is too limited and uncertain to categorise it as an emerging risk at this stage. The final consensus was to classify the topic as "further information needed". The group outlined that more info from surveillance and targeted studies are needed to clarify *C. silvaticum* zoonotic and foodborne potential within the EU food safety framework.

5.3. The potential for global spread of Shewanella spp.

At the EREN meeting, Shewanella spp. were discussed as opportunistic pathogens increasingly found in water and seafood, with isolated cases of human infection but limited evidence of foodborne outbreaks. Concerns were raised about their adaptability, antimicrobial resistance, and the impact of global seafood trade and climate change on their spread. The group referred for ''further information needed'' from enhanced monitoring and research efforts, including genomic analysis to monitor their prevalence and understand better public health implications and food safety risks as Shewanella spp. are not currently classified as an emerging risk.

5.4. 6PPT-Quinone

The topic offered updates to a theme identified before about ubiquitous tire rubber–derived chemical induces acute mortality in coho salmon. Some findings about 6PPD-quinone (6PPD-Q), a breakdown product of the tyre rubber additive 6PPD, were presented to the EREN meeting as a widespread environmental contaminant with recognised acute toxicity in aquatic species, notably causing mortality in coho salmon. Participants noted growing concern about its presence in (sub)urban runoff and surface waters, and raised questions about potential hazards to ecosystems and food safety via water contamination affecting aquaculture and crop irrigation. Key challenges discussed included the lack of systematic surveillance data in Europe, difficulties in detecting the compound, and uncertainty about its risk to human health and food chains, with transmission pathways from environmental contamination to food remaining speculative. The consensus was that, while 6PPD-Q signals a potential emerging risk, evidence is currently insufficient ''further information needed'' to classify it as a direct food safety hazard in Europe; the group recommended prioritising targeted research and harmonised surveillance to clarify exposure routes and occurrence level in food and environment. The perspective of this topic is also considered by EEA.

5.5. Probiotics and Antibiotic Resistance: Emerging Risks and Regulatory Challenges

Some emerging concerns were presented surrounding the use of probiotics in food and feed, focusing on their potential to contribute to the spread of antimicrobial resistance (AMR). Discussion highlighted the widespread adoption of probiotics in various products, including functional foods and animal feed. The probiotic food supplements (other than vitamins or minerals) market is developing without centralized safety assessment or harmonised screening for resistance and rises some questions on the variability of the used strains, and their controls on genetic involvement, and the growing evidence that some probiotic strains may carry transferable resistance genes, potentially harbouring and disseminating antibiotic resistance through the food chain. The topic is within "further information needed" pending additional data on probiotics food supplements containing AMR transferable genes.

5.6. Chloropicrin, a banned chemical with agricultural fumigant properties

The meeting addressed the issue of chloropicrin, a chemical previously used as an agricultural fumigant but now banned in many jurisdictions due to its toxicity and environmental persistence. Discussion centred on the detection of chloropicrin residues in imported produce and the potential for 'exceptional' or illegal use in certain agricultural sectors. Participants noted the compound's acute toxicity, which poses health risks to workers and consumers if exposure occurs, and its environmental impact, particularly on soil and water quality. The group identified significant gaps in surveillance, especially regarding cross-border movement of contaminated goods and the effectiveness of current detection methods. While no major foodborne outbreaks have been linked to chloropicrin in recent years, the risk of illicit application and residue contamination remains a concern. The consensus was to categorise the issue as 'further information needed'' suggesting to maintain vigilance and ongoing monitoring. The perspective of this topic is also considered by EEA.

5.7. Inorganic arsenic in plant-based alternatives to dairy or meat

At the 34th EREN meeting, findings in a national project highlighted concerns about inorganic arsenic exposure from plant-based dairy and meat alternatives, particularly noting measurable levels in rice-based drinks, with oat- and soy-based products generally showing low or undetectable amounts. While current evidence does not indicate an emerging risk, the group identified a lack of comprehensive data especially for meat substitutes and agreed for "further information needed'' indicating possible info-sources from continued surveillance, targeted research, and close collaboration with regulatory bodies to ensure consumer safety as plant-based products become more popular. Results of few other similar national project-investigations on plant based-alternatives may complement the findings with results expected in 2027.

5.8. Spread of *Lagocephalus sceleratus* (Pufferfish): Ecological, Economic, and Public Health Implications

The meeting addressed the rapid spread of *Lagocephalus sceleratus*, an invasive pufferfish species, in Mediterranean and adjacent waters. Known for its potent tetrodotoxin, this species poses significant risks to human health if consumed, as well as ecological and economic threats to local fisheries. Participants shared recent reports of accidental catches and illegal sales, highlighting the need for increased awareness among fishermen and consumers. Discussion focused on the challenges of controlling the spread, the absence of effective monitoring systems, and the risk of poisoning incidents. The consensus was to recommend enhanced surveillance, public education campaigns, and stricter enforcement of regulations concerning the handling and sale of pufferfish. The group emphasised the importance of cross-border cooperation to mitigate the ecological and public health risks associated with *Lagocephalus sceleratus*. The perspective of this topic is also considered by EEA.

5.9. Human infection with type 1 avian paramyxoviruses (APMV 1): is it an underrated zoonotic risk?

EREN participants discussed the zoonotic potential of type 1 avian paramyxoviruses (APMV 1), which are primarily associated with Newcastle disease in birds but have occasionally been linked to human infections. The group noted that reported human cases in the past are rare, typically occurring in individuals with direct occupational exposure to infected poultry, and generally result in mild respiratory symptoms. However, the possibility of more severe outcomes, including death in immunocompromised individuals as in recently referred cases was discussed. Key gaps identified included limited surveillance and diagnostic capacity for APMV 1 in human populations, as well as uncertainties regarding transmission dynamics. The consensus was for "further information needed", classifying APMV 1 as a low but potentially underrated zoonotic risk, warranting targeted surveillance in high-risk groups and further research into clinical manifestations and transmission pathways.

5.10. Foodborne outbreaks associated with *Bacillus spp.* and recent outbreak linked to *B. velezensis*, where a specific strain is an option to use as agricultural biocontrol agent.

The meeting reviewed recent foodborne outbreaks linked to Bacillus spp., particularly B. velezensis, which is an option to be used as a biocontrol agent in agriculture. The European Commission clarified that approval for biocontrol is at specific strain level and not at generic species level. Participants discussed documented incidents where contaminated products led to gastrointestinal illness, raising concerns about the safety of introducing live bacteria into food production systems. The group noted that, while Bacillus spp. are generally considered safe, certain strains can produce toxins or survive standard processing steps, presenting a risk to consumers. The discussion outlined "further information needed" highlighting the generic need for rigorous safety assessment prior to commercial use, diagnostic capacity and options post-market surveillance to detect potential outbreaks.

5.11. Oropouche Virus: A Potentially Emerging Risk for Europe.

The meeting examined the Oropouche virus (OROV), an arbovirus endemic to South America but increasingly viewed as a potential threat to Europe due to climate change and increased travel. Participants discussed recent outbreaks, the virus's transmission by biting midges and mosquitoes, potential vector competence in Europe and concerns about the lack of population immunity and potential misdiagnosis with other arboviral infections. The insufficiency in evidence directs for "further information needed" with suggestions for strengthening diagnostics, raising clinician awareness, and planning for risk assessments to evaluate the likelihood of OROV introduction into Europe, with consensus on promoting proactive monitoring and international collaboration. At present, the issue lies beyond EFSA's remit because no evidence of OROV transmission exists in Europe; consequently, it should be referred to the ECDC for further consideration.

6. EFSA and EREN activities

6.1. Cattle Abortions and Congenital malformations due to BTV-3 in Southern Belgium 2024

The meeting addressed the recent surge in cattle abortions and congenital malformations in southern Belgium attributed to Bluetongue Virus serotype 3 (BTV-3). Participants discussed the epidemiological patterns observed in 2024, including spread dynamics, likely transmission routes, and potential vectors. Concerns were raised regarding gaps in surveillance outside of known outbreak zones and the possibility of cross-border dissemination. The need for coordinated monitoring, enhanced diagnostic readiness, and sharing of outbreak data with neighbouring regions was emphasised. It was recommended to align animal health surveillance efforts with broader vector-borne disease monitoring frameworks to anticipate future incursions and improve early detection.

6.2. Tropilaelaps into regions neighbouring the European Union (EU) constitutes

The session covered the emergence and spread of Tropilaelaps mites into countries bordering the EU, with a focus on their impact on apiculture and pollinator health. Delegates highlighted recent detection events, pathways of introduction, and the risk of establishment in new territories. The discussion underscored the lack of effective border controls for bee movements and the potential implications for both commercial and wild bee populations. It was suggested that close collaboration between veterinary, plant, and environmental agencies is necessary to improve early warning and risk assessment. Consideration was given to integrating Tropilaelaps surveillance into existing pest and pollinator health programmes, as well as fostering knowledge exchange with countries already managing infestations.

6.3. FAO Food Safety Foresight: Approaches to Identify Future Food Safety Issues.

This agenda item summarised the Food and Agriculture Organization of the United Nations (FAO) methodological advances in horizon scanning and food safety foresight. The meeting reviewed strategies for anticipating emerging risks, such as utilising multidisciplinary expert panels, scenario analysis, and data-driven trend monitoring. The importance of proactive risk identification, rather than reactive management, was stressed. Attendees discussed the relevance of adapting these approaches within the EU context, particularly for rapidly changing food systems and supply chains. There was consensus on the value of linking foresight activities with regulatory and research agendas, as well as sharing best practices with other international agencies to strengthen collective preparedness.

6.4. EEA update on EU Early Warning System for emerging chemicals

The European Environment Agency (EEA) provided an update on the development of an EU-wide early warning system for emerging chemical hazards. Key features discussed included real-time data integration, inter-agency information sharing, and

mechanisms for rapid notification of newly identified risks. The group explored potential synergies with existing food and feed alert systems, as well as opportunities for joint monitoring with public health and environmental authorities. Recommendations focused on fostering interoperability between chemical and biological hazard tracking, and on investing in capacity-building for rapid assessment and regulatory response to chemical threats.

6.5. Offshore Wind Farms

Discussions centred on the expansion of offshore wind farms and their multifaceted impacts on marine ecosystems, fisheries, and food safety. Attendees considered evidence of altered marine habitats, changes in species distribution, and potential bioaccumulation of contaminants. The need to balance renewable energy development with environmental protection was highlighted, alongside calls for integrated monitoring of ecological and food safety outcomes. Future perspectives included exploring co-location opportunities with aquaculture and ensuring that environmental impact assessments are aligned with food chain risk assessment processes.

6.6. Info-intelligence

This section covered advances in information intelligence tools for surveillance, including the use of big data analytics, artificial intelligence, and automated news monitoring. The potential for these technologies to enhance early warning capabilities, detect weak signals, and support horizon scanning was explored. The group discussed the importance of integrating these tools with traditional surveillance systems and ensuring robust validation of automated outputs. Recommendations pointed to the need for ongoing investment in digital infrastructure and skills, as well as fostering collaboration across agencies to maximise the utility of info-intelligence for public health and food safety decision-making.

7. StaDG-ER info update

7.1. Follow up of 33rd and info foreseen for the 34th StaDG-ER

This section provided an update on the progress and outcomes from the 33rd StaDG-ER meeting, as well as planning for the upcoming 34th session, with stakeholders emphasising the importance of maintaining continuity and building on previously identified priorities, particularly in relation to emerging risks and surveillance strategies. The discussion drew connections with parallel activities in the EREN network, highlighting opportunities for alignment in risk assessment, early warning, and knowledge sharing, and there was consensus that collaborative planning, informed by diverse stakeholder perspectives, strengthens the overall effectiveness of both StaDG-ER and EREN initiatives.

7.2. Use of computer vision systems as support for meat inspection

Attendees explored advancements in computer vision systems (CVS) and their application to meat inspection, discussing the integration of analytical algorithms

(e.g. Bayesian framework but also future opportunities of machine learning and artificial intelligence) and image analysis technologies to enhance efficiency, accuracy, and consistency in inspection outcomes. Stakeholders from both StaDG-ER and EREN networks expressed interest in sharing best practices and pilot project results, aiming to establish interoperable standards and validation protocols. The conversation underscored the importance of rigorously evaluating new digital tools within regulatory frameworks and highlighted that cross-network collaboration and stakeholder engagement are key to safeguarding public health while supporting the modernization of food safety sector.

8. Horizon Scanning

The EFSA process on horizon scanning involves biannual cycles of signal collection and analysis, in collaboration with a broad network of stakeholders, scientific units, and external partners. During the 34th EREN/EFSA meeting, EFSA reported on the signals identified during the 2nd semester of 2025 that are currently being analysed. Participants were invited to comment on the relevance of these signals for EFSA, to provide any additional information, and to propose new signals that could challenge EFSA's preparedness if they materialise. The addressed signals ranged from technological innovations—such as atmospheric ecosystem services and AI-designed proteins—to geopolitical and environmental challenges, including warfare-related contaminants and decarbonisation impacts. EFSA's methodology emphasises existing pre-assessment, gap analysis, partnership opportunities, and capacity building, ensuring that signals not currently covered by existing work programme, regulatory frameworks or strategy are further analysed for prioritisation.

9. Newsletter and News monitoring

The meeting highlighted that newsletters and news monitoring are essential tools for ensuring EREN, stakeholders and their expert contacts remain promptly informed and engaged on info-alerts and emerging risk discussions within extended food safety networks.

EFSA presented a rapid overview of recent news captured as of potentially interest, highlighting issues such as adverse effects associated with Garcinia Cambogia supplements, the impact of nanoplastics on *E. coli* pathogenicity, and rising lead levels in certain food groups. It was underscored the importance of coordinated risk communication and ongoing surveillance, drawing attention to new considerations for allergen labelling and artificial sweeteners. These updates, gathered through systematic news monitoring and platforms like FoodSafeR, aim to keep stakeholders informed and support proactive risk identification.

10. Any Other Business

10.1 Update from MPI in New Zealand

At the start of Day 2, ongoing work in New Zealand on allergenicity was presented, highlighting a collaborative programme engaging international experts and the local food sector to address emerging food allergy risks. The initiative featured a series of webinars covering the immunological foundations and treatments for food allergy, as well as the psychological and psychosocial impacts, including bullying and

socioeconomic barriers to care. The effort aimed to deepen broader understanding, promote information sharing, and reinforce the food sector's commitment to effective allergy management and risk reduction.

10.2. Leishmaniasis: Is It Spreading Northward (experience from Bulgaria)

A national study, complementing the entomological evidence, identified L. infantum (canine leishmaniasis) in the northern/central Bulgarian region in areas it had not previously been recorded, indicating a gradual northward spread within the country, which may align with a broader pattern in other countries. A topic briefing note was not included in the survey for assessment due to a wider EU mandate to EFSA on vector-borne diseases including Leishmania https://open.efsa.europa.eu/study-inventory/EFSA-Q-2025-00186.

10.3. Date for next meeting: to be confirmed

Following AESAN's invitation to EFSA to present its emerging-risk and horizon-scanning activities to AESAN's Scientific Committees, a valuable opportunity was identified to align the 35th EREN meeting with two significant milestones: the 25-year anniversary of AESAN and the renewal of the Scientific Committee, coupled with the Emerging-Risk Enhancement Training, scheduled for the second week of June 2026.

11. Summary and Conclusions

The respective briefing notes are to be updated in ERAP. The proposed decision-criteria should be refined, and the possibilities for integrating them into the briefing notes and the assessment survey should be examined.

12. Closure of the meeting

The 34 EREN was adjourned.