34th Meeting of the Stakeholder Discussion group on Emerging Risks
25-26 November 2025
Web-minutes

These web minutes summarise the topics presented and discussed at the 34th meeting of the Stakeholder Discussion Group on Emerging Risks.

1. Welcome

2. Adoption of the agenda

The agenda for the 34th StaDG-ER meeting was presented and adopted by consensus.

3. Introduction to the event

An update on the status of the action points from the previous meeting was provided to the group by EFSA.

4. StaDG-ER members - Presentation and discussion of new emerging issues

4.1 Emerging mycotoxin remediation methods - by Nicola King (PHF Science, New Zealand)

Available reports in the literature suggest an increase of mycotoxin levels in a variety of crops due to climate change. The presentation highlighted emerging novel mycotoxin remediation methods, noting technology readiness and challenges in scaling lab-based solutions to real-world applications. Technologies discussed included cold atmospheric plasma, pulsed electric fields, approaches using nanoparticles including nanozymes, and microbial consortia. However, the adoption of those methods remains limited due to concerns about, among others, possible toxic residues, potential changes in food quality and economic factors. The presentation concluded by highlighting the need to monitor these emerging technologies and collect data on breakdown products and possible nutritional impacts.

4.2 Cesium-137 contamination of foods - by Nicola King (PHF Science, New Zealand)

The group considered the emerging concern of radioactive cesium-137 contamination in food after the recent detection in frozen shrimps and cloves received at the U.S. border. These foods were traced back to environmental contamination from an Indonesian metal recycling plant. The discussion addressed both the potential sources of contamination and the implications for public health and trade. The example of Sweden's proactive measures (e.g. gamma portals in recycling plants) and monitoring wild boars now feeding in post-Chernobyl contaminated areas due to climate change was discussed. Participants highlighted the challenges associated with monitoring low-level radioactivity and the limitations of the regulation in place, the Eurotom Treaty being designed to address nuclear accidents or radiological emergencies. There was broad agreement on the need for improved cross-border data sharing and early warning systems. The group recommended exploring further with EREN and the Commission if and how radioactive contamination is monitored in food and feed in the EU.

4.3 Anti-processing trend and impact on contaminants - by Kalila Hajjar (FEDIOL)

An "anti-processing" trend has developed in the EU, in response to ultra-processed foods. The presentation addressed the risks of anti-processing trends on food safety, illustrating the critical role of refining steps in reducing contaminants like mycotoxins and heavy metals in vegetable oils production. Key refining steps, such as deodorisation and bleaching, were highlighted as essential for reducing the level of contaminants, with case studies demonstrating their efficacy in mitigating *Alternaria* toxins and nickel. Challenges included consumer misconceptions and unclear definitions of "ultra-processed foods". Participants stressed the need for science-based communication to clarify the role of processing in food safety and nutrition and harmonise definitions of processing categories.

4.4 Shiga toxin-producing E. coli (STEC)- increased occurrence – Case study - by Ondina Afonso (EuroCommerce)

A case study was introduced on the increased occurrence (+ 7%) of Shiga toxin-producing E. coli (STEC) in the food supply chain. Key issues included uncertainties in data from companies' own checks for STEC monitoring, and data linking outbreaks to specific sources; there was also discussion on results discrepancies, depending on the methodologies used. Data gaps in understanding the drivers behind the case study were also discussed. Regulatory challenges were noted, as in the EU there is not a microbiological criterion for STEC in meat. Future priorities include expanding monitoring to fruits and vegetables, harmonizing testing methodologies, and conducting research to identify contamination hotspots. Collaborative efforts with reference labs and food safety authorities aim to enhance data consistency and traceability, including plans to share results within EU member states.

4.5 Potential risks of getting Screwworm in the EU due to climatic changes - by Jan Dahl (Copa Cogeca)

The topic outlined the potential risk of Screwworm introduction into the EU driven by climate change and global trade. Potential gaps in surveillance systems, limited data available on vector ecology in European environments, as well as regulatory challenges in detecting infestations in live animal imports and the feasibility of adopting eradication methods like sterile insect techniques were discussed as relevant factors to be considered to ensure early detection. The participants recommended drafting a briefing note analysing biological and trade-related risks with a focus on integrating the issue into broader animal health and climate risk frameworks. The group also recommended further scenario analysis, enhancing EU-wide surveillance capacity and exploring collaborative strategies for early detection and response.

5. Follow up on previous issues discussed and updates

5.1 Update on Microplastic Soil Contamination and Migration through the Food Chain - by Luigi Tozzi (SAFE)

An update on microplastic soil contamination and its migration through the food chain was provided, emphasising recent research findings and ongoing uncertainties. Studies have shown that vegetables can absorb nanoplastics via the root system, highlighting a potential pathway for human exposure. Further research is needed to investigate the uptake mechanisms of nanoplastics and their occurrence in the food chain. The need for coordinated research and harmonised data was emphasised for risk assessment. The discussion also touched on the restriction of intentionally added microplastics in the EU. Overall, the presentation highlighted the need for science-based approaches to address the issue of microplastic contamination. EFSA informed that a mandate is expected to be received soon, which will help to comprehensively address the issue of microplastic contamination. In the meantime, the mandate has been received by EFSA and is available on Open EFSA (link).

5.2 Is Crimean Congo Haemorrhagic Fever (CCHF) becoming an emerging risk in Italy? – by Maurizio Ferri (FVE)

The presentation reported on the potential emergence of Crimean Congo Haemorrhagic Fever (CCHF) as a risk in Italy, presenting recent epidemiological trends and surveillance data with emphasis on its vector-borne transmission dynamics, and the role of climate change in expanding tick habitats. The understanding of CCHF virus (CCHFV) transmission routes, particularly the role of migratory birds in spreading infected ticks to new regions is still limited. Data limitations were noted in human surveillance due to high rates of subclinical infections, complicating the case detection and risk assessment. A better integration of animal and human health monitoring systems was recommended. Some participants debated the interpretation of seroprevalence data in cattle and the potential for viral amplification in wildlife reservoir as well as the urgency of risk mitigation measures. The participants recommended expanding One Health surveillance to monitor CCHFV in cattle, equine, and human populations, and analyse tick morphology and viral presence.

Collaborative efforts between veterinary, medical, and ornithological professionals are needed to enhance early detection and public awareness. EFSA informed that three scientific opinions on vector-borne disease transmission and climate change impacts are due by March 2026. Additionally, citizen science initiatives were proposed to support tick surveillance in northern Europe, where climate change may alter vector distribution.

5.3 Updates on mycotoxins management report - by Gianlucca Nurra (COCERAL)

The discussion followed up on the topic of mycotoxin management in the food and feed supply chain. A report is published every two years to provide an overview of how Coceral members manage mycotoxin risks in the intermediate supply chain. The report covers the agrosupply distributors, grain collectors, and traders, and provides a statistical assessment of their answers to a questionnaire. The 2023 report underlined the measures to prevent mycotoxin occurrence, and the importance of guiding farmers on existing prevention tools, sampling and testing. The main changes for the 2025 report include the addition of new sections that will explain what mycotoxins are and their risks, provide detailed information on EFSA and the EU regulatory framework, list sampling and testing practices, and offer insights into members' perceptions of mycotoxin risks and their prevention strategies, as well as the potential impact of climate change on mycotoxin occurrence. The survey for the next report has been launched and will close by 15 January 2026, with the aim of publishing the report by the end of February or mid-March 2026.

5.4 Food supplements - EFSA's Focal Point Tailor Made Activity - Results & Way forward - by Milen Georgiev (EFSA)

The presentation provided an update on the progress of EFSA's Focal Point Tailor-Made Activity (FP TMA) on food supplements that is expected to continue until mid-2026. The first results of the three work packages were presented, including the creation of a community of knowledge, the analysis of data from the nutrivigilance systems to identify correlations between food supplement intake and adverse health effects, and the identification of food supplements made of plants containing substances predicted to be carcinogenic, mutagenic and/or reprotoxic. The future steps will involve further investigations on market presence, product composition, and exposure data for food supplements suspected to contain these substances, in order to understand if there is a possible risk for the population. The possibility for stakeholders to provide such information, in addition to the information gathered by some Member States with pre-notification systems was discussed. EFSA will follow-up by building up a list of plant-based food supplements with the substance(s) of interest for this project.

5.5 EREN updates, 11th survey, Newsletter – by Milen Georgiev (EFSA)

An update was provided about the 34th Emerging Risks Exchange Network (EREN) meeting (28-29 October 2025), including highlights from the 11th survey, updates of past briefing notes (BNs), assessment criteria for characterising potential emerging risks and recent newsletter publications. A brief description on the issues subject to the latest survey and the feedback collected at the latest EREN meeting are reported below:

- **Foodborne diseases caused by *Klebsiella spp.***

Klebsiella spp. was assessed as a potential foodborne emerging risk, considering its presence in food-producing animals, water, and fresh produce. It was concluded that further information is needed to determine its role in the food chain and associated hazards.

- **Zoonotic potential of *Corynebacterium silvaticum* and its occurrence in Europe**

Corynebacterium sylvaticum was evaluated for its zoonotic potential, with reported cases in Germany linked to occupational or direct contact with wild animals. It was concluded that more information is needed to assess its emerging risk, due to limited surveillance data and a lack of understanding of its toxin production and severity of effects.

- **The potential for global spread of *Shewanella spp.***

Shewanella spp. was discussed for its potential to spread and cause human illness, with various clinical presentations and reported cases. However, due to uncertainty and limited information, it was concluded that further data is needed to assess its emerging risk in Europe.

- **6PPD-Q A ubiquitous tire rubber–derived chemical induces acute mortality in coho salmon**

6PPD, a tire rubber-derived chemical, was re-assessed due to new evidence showing its presence in surface water, sediments, airborne particles, and various food matrices, including fish, honey, and vegetables. Further information is needed, particularly on human exposure through food in Europe, to better understand its toxicology and potential risks, and therefore it was classified as requiring further information.

- **Probiotics and Antibiotic Resistance: Emerging Risks and Regulatory Challenges**

The potential risk of probiotics as a reservoir for antibiotic-resistant genes was discussed, with evidence suggesting that some probiotics may contain mobile antibiotic-resistant genes that can be transferred to pathogens. Although 60% of participants considered it a rapidly growing concern, it was concluded that further information is needed to understand the plausible pathways and potential impacts, particularly on immunocompromised individuals, and to determine the role of probiotics in the global antimicrobial crisis.

- **Chloropicrin, a banned chemical with agricultural fumigant properties**

Chloropicrin, a pesticide fumigant forbidden in Europe and used for war purpose in Ukraine was discussed as a potential emerging risk due to residues detected in crops imported from Ukraine. Around 40% of survey respondents considered it a concern for contamination of agricultural commodities, such as grain, however, it was agreed that further information is needed to confirm exposure and assess the risk to consumers.

- **Inorganic arsenic in plant-based alternatives to dairy or meat**

Inorganic arsenic in plant-based alternatives to dairy and meat was discussed, with findings from a Finnish national project suggesting increased consumption and potential exposure, particularly in light of the decreased toxicological reference value. However, it was concluded that inorganic arsenic is a well-known and regulated hazard, and further information is needed to assess the actual exposure and arsenic levels in new plant-based products.

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

Lagocephalus sceleratus (Pufferfish) was discussed due to its invasive presence in the Mediterranean Sea, posing ecological, economic, and public health concerns, including fatal poisoning through consumption. Although nearly 60% of respondents considered it an emerging issue, it was concluded that further information is needed to assess the hazard and exposure, and that the risk is driven by changes in the exposure scenario, particularly in new areas, highlighting the need for awareness and communication campaigns.

- **Human infection with type 1 avian paramyxoviruses (APMV 1)**

Human infection with type 1 avian paramyxoviruses (APMV-1) was discussed as a potential emerging risk, with recent reports of fatal cases in immunocompromised individuals raising concerns about its zoonotic potential. However, it was concluded that further information is needed to better understand the risks and determine if it is an underrated zoonotic risk, rather than considering it an emerging risk at this time.

- ***Bacillus spp*. as agricultural biocontrol agents – recent outbreak linked to *B. velezensis***

The recent foodborne outbreaks linked to *Bacillus spp.* Was presented, 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. It was concluded that further information is needed, highlighting the generic need for rigorous safety assessment prior to commercial use, diagnostic capacity and options post-market surveillance to detect potential outbreaks.

- **Oropouche Virus: A Potentially Emerging Risk for Europe**

The Oropouche virus was discussed, with concerns about its expansion to new territories in Central and South America, as well as its potential spread to Europe through travel-associated cases and invasive mosquito species, such as the Asian tiger mosquito. Although the risk is not considered immediate, it was agreed that the situation warrants monitoring and further information is needed to fill knowledge gaps, particularly regarding the competence of European mosquito species to transmit and establish the virus in Europe.

6. Horizon scanning

6.1 EFSA Horizon Scanning updates by Bernard Bottex (EFSA)

The EFSA process on horizon scanning involves biannual cycles of signal collection and analysis, in collaboration with a broad network of stakeholders, EFSA's scientific units, and external partners. EFSA reported the signals identified during the 2nd semester of 2025 that are currently being analysed. Participants were invited to comment on the classification of these signals, to provide 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 relevance 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.

6.2 EU Vulnerability for Access to Essential Nutritional Feed Additives- by Arnaud Bouxin (FEFAC)

Current concerns on EU's vulnerability in the supply of vitamins and amino acids, essential for feed were introduced focusing on market concentration, dependency on third countries (particularly China), and implications for animal health and welfare, and food security. The presenter highlighted uncertainties around EU production capacity, economic and geopolitical risks, and data limitations in assessing supply chain resilience affected by uncertain long-term availability and alternative sourcing options for key additives. Key issues included the EU's 100% dependency on imports for certain additives (e.g., vitamins B9, C, K3) and competitiveness challenges against low-cost producers. Regulatory issues include the development of contingency plans and harmonisation of import controls. Discussions underscored the need for strategic investments in EU manufacturing and diversification of suppliers to mitigate risks. Future priorities include advancing research on alternative production methods, enhancing data transparency, and policy measures to strengthen supply resilience. It was clarified that the development of EU self sufficiency towards critical raw materials has been prioritized by the European Commission.

6.3 HoliFOOD project- Latest results/achievements/milestones of the project – by Frederic Bayer (EUFIC)

The presentation gave an update on the HoliFOOD Food project, a European Horizon 2020 project aiming to build a system approach to predict food safety hazards and risks using AI and big data analytics. Its goal is to develop predictive models for chemical and biological emerging risks and to improve the food safety risk analysis framework in Europe. The project has made progress in developing predictive models for mycotoxins and pesticide residues. The models use a range of data, including weather, historical, and market data, to predict risks and provide early warnings. Future steps include integrating all models and algorithms into a front-end platform and continuing to refine the predictive models. The project is expected to deliver its results in 2026.

7. AI and Technology in Emerging Risks

7.1 The hidden risk exposed through technology – Digital Food Safety - by Bizhan Pourkomailian (Serving Europe)

The food sector might be exposed to hidden risk through the adoption of digital food safety technologies such as remote temperature monitoring, smart equipment, and automated data collection to mitigate operational risks and enhance compliance. This topic introduces challenges related to digitization. such as data security, system reliability, and integration into existing regulatory frameworks concerning the standardisation of digital solutions. Data gaps were noted in the validation of new technologies and their effectiveness across diverse food matrices. Key issues included scientific uncertainties around the accuracy of automated data compared to manual methods, gaps in long-term performance data for smart devices, and disagreements on standardising protocols across markets. Future priorities involve accelerating deployment, conducting comparative studies on manual vs. digital processes, and establishing cross-sector partnerships to harmonize standards. Participant were invited to share best practices for integrating innovative digital food safety technologies.

7.2 AI use in EFSA related activities – by Yannick Spill (EFSA)

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.

7.3 Food Fraud Project update – by Raquel Garcias Matas (EFSA)

The FFRAUD-ER project aimed to develop a computational model (CM) to identify food fraud incidents as drivers for food safety emerging risks, leveraging public data sources and expert-labeled datasets. Key issues included rigorous data source selection (14 prioritized, 4 selected), manual labeling of 7,000 incidents, and model refinement using XLNet, which outperformed alternatives in predictive accuracy. Challenges arose in data reduction (from 20,000 to 7,000 entries) and ensuring labeling consistency. Future perspectives involve implementing refinements, such as confidence thresholds, weighted feature analysis, and generative AI to prioritize high-risk signals. Monthly reports from EU Agri-Food Fraud suspicions (2024–2025) will expand datasets, while Power BI dashboards will visualize trends. EFSA plans to apply collaborative efforts with external experts and partners to enhance the model accessibility and its utility for anticipating food safety risks.

7.4 Use of computer vision systems as support for meat inspection – by Lis Alban (UECBV)

The agenda item was postponed for the next meeting due to unavailability of the presenter.

8. AOB

8.1 Event on Cultivated Meat in Japan – Horizon FEASTS Project- by Luigi Tozzi (SAFE)

The presentation outlined the FEASTS Horizon Project's mission to evaluate the role of cultivated meat and seafood (CM/CSF) in sustainable food systems, highlighting advancements in low-cost cell culture media, plant-based scaffolds, and tailored nutritional profiles. Key issues included reducing residual compounds, antibiotic residues, and addressing regulatory gaps, while noting Eastern consumers' trust in government-authorized products. Problematic points centred on scaling production costs and ensuring equitable access. Future perspectives emphasized continued research on diverse meat cuts and athlete-specific formulations, with SAFE organizing stakeholder dialogues to compile insights into a policy paper for policymakers. Next steps include monitoring

China's 2026 regulatory approval and advancing cost reductions, as demonstrated by Singapore's €6/200g cultivated meat milestone.

8.1 Final discussions & Conclusions

Participants reiterated the importance of ongoing collaboration and information exchange. The organisers thanked all participants for their contributions and closed the 34th StaDG-ER meeting.