

2021 Annual Report Alert and Cooperation Network



Neither the European Commission nor any person acting on behalf of the Commission is responsible for the use that might be made of the following information.

Luxembourg: Publications Office of the European Union, 2022

© European Union, 2022
Reuse is authorised provided the source is acknowledged.

The reuse policy of European Commission documents is regulated by Decision 2011/833/EU (OJ L 330, 14.12.2011, p. 39).

For any use or reproduction of photos or other material that is not under the EU copyright, permission must be sought directly from the copyright holders.

PDF	ISBN 978-92-76-52918-7	doi:10.2875/328358	EW-07-22-326-EN-N
PRINT	ISBN 978-92-76-52917-0	doi:10.2875/488074	EW-07-22-326-EN-C

2021 Annual Report

Alert and Cooperation Network

CONTENTS

05	IN BRIEF
-----------	-----------------

06	THE ALERT AND COOPERATION NETWORK
-----------	--

08	MAIN ACTIVITIES OF THE ALERT AND COOPERATION NETWORK IN 2021
-----------	---

11	THE ALERT AND COOPERATION NETWORK IN FIGURES
11	Rapid Alert System for Food and Feed notifications
20	Non-compliance notifications
22	Fraud notifications

25	NEXT DEVELOPMENTS
-----------	--------------------------

IN BRIEF

Since 2021, information related to non-compliances with the EU legislation of cross-border nature detected throughout the agri-food chain are now shared between Member States through a unique online platform, iRASFF, managed by the European Commission.

This annual report covers all the information shared in 2021 within iRASFF, between members of the Rapid Alert System for Food and Feed network (RASFF), the Administrative Assistance and Cooperation network (AAC) or the Agri-Food Fraud Network (FFN). Those networks are part of a single entity: the Alert and Cooperation Network (ACN).

2021 shows an increase in the number of notifications for each component of the Alert and Cooperation Network in comparison with previous years. This illustrates the continued commitment of Member States' competent authorities, despite the challenging context of the Covid-19 pandemic, to detect and report non-compliances, be they with or without health risk, or suspected of fraudulent practice. In 2021, as in 2020, a high number of those notifications related to a major ethylene oxide incident. The European Commission continued to assist Member States, through both expertise and IT support to facilitate the increasing exchange of information.

The Commission also kept liaising with third countries involved in notifications, especially those from which notified products originate, to call on them for corrective actions. Drawing from the data circulated within the Alert and Cooperation Network, the European Commission adapted the measures on reinforced checks at EU borders for products imported into the EU.

Due follow-up was given to suspicious cross-border fraudulent activities, leading to launching specific actions such as the coordinated control plan on authenticity of herbs and spices, the results of which were published in 2021.

1. THE ALERT AND COOPERATION NETWORK

The 'Alert and Cooperation Network' (ACN) is composed of the Rapid Alert System for Food and Feed network (RASFF), the Administrative Assistance and Cooperation system network (AAC) and the Agri-Food Fraud Network (FFN) as established by Regulation 2019/1715 on the Information Management System for Official Controls (the IMSOC Regulation)¹.

Since March 2021, the three networks work together to allow a smooth exchange of information between Members States' competent authorities and to facilitate cooperation among them. The Commission is the manager of the system and also ensures the technological support to the Members.

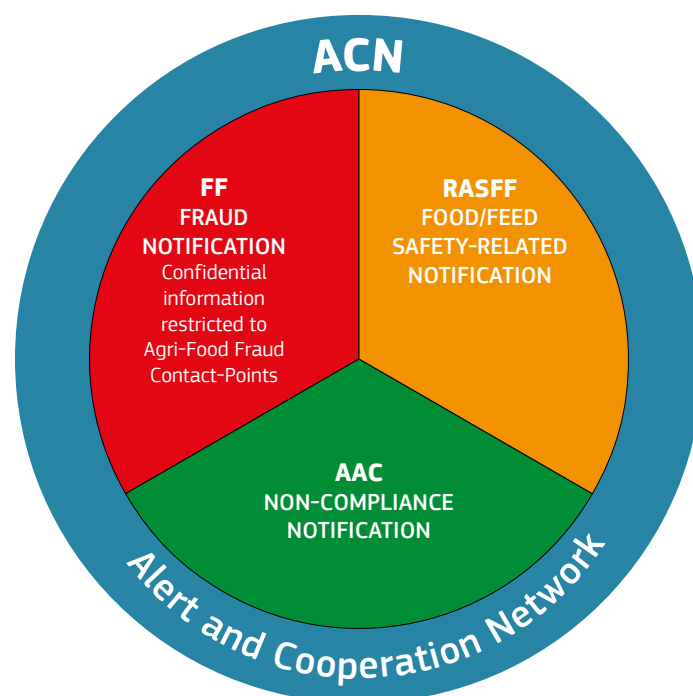


Fig 1: Components of the Alert and Cooperation Network

The present report shows the activities of the ACN.

The **Rapid Alert System for Food and Feed** enables competent authorities to rapidly exchange information on serious direct or indirect **risks** to human health in relation to food or feed, or serious risks to human or animal health or to the environment in relation to feed. The **Administrative Assistance and Cooperation system** allows competent authorities to share information (and subsequently investigate and take action) on **cross-border violations of the European Union agri-food chain legislation** that do not present *a priori* a health risk. In cases where **potentially fraudulent or deceptive practices** are identified, Member States can cooperate to further investigate the fraud suspicions by reporting the case in the **Agri-Food Fraud Network**.

All information exchanges take place via the “**iRASFF**” platform through which all notifications related to risks and all the requests for assistance regarding non-compliances are shared. In case of suspicion of fraud, as data are strictly confidential, they follow a restricted information flow available only for Food Fraud Network contact points.

¹ Commission Implementing Regulation (EU) 2019/1715 of 30 September 2019 laying down rules for the functioning of the Information Management System for Official Controls and its system components (the IMSOC Regulation)





RASFF notifications relate to a risk deriving from food, food contact material or feed or a serious risk to animal health and to the environment derived from feed.

Non-compliance notifications are made in case of non-compliance of a food, food contact material or feed that does not present a risk, in case of non-serious risks to animal health, or in case of risks to plant health or animal welfare.

Fraud notifications are made when a fraud is suspected in a non-compliance, implying an intentional action by businesses or individuals for the purpose of making an economic gain.

The iRASFF system allows an easy flow of information. For example, it is possible for food fraud elements to be added to a RASFF notification and shared (in a confidential way) within the Food Fraud Network. A non-compliance notification can become a RASFF notification if further details on health concerns are made available. This flexibility allows to adapt to any situation, contributing to a fit-for-purpose tool that aims at protecting the end consumers.

Members of the Alert and Cooperation Network are all the European Union Member States, the EEA countries (Norway, Iceland, and Liechtenstein), the European Food Safety Authority (EFSA), Switzerland and the European Commission (which also manages the network). They have access to at least one component of iRASFF. Only the contact points of the Agri-Food Fraud Network have access to food fraud notifications. As Northern Ireland has a special status being part of the internal market, a special arrangement has been agreed between FSA Northern Ireland and DG SANTE in order to ensure that it can continue to report to EU Member States and the Commission findings within the scope of the RASFF and to receive information through the system and that it can request cooperation and respond to request from EU Member States in the frame of AAC network including FF notifications. A single Contact Point has been established at the FSA Northern Ireland for this purpose.

The European Union Agency for Law Enforcement Cooperation (Europol) and the European Union Agency for Criminal Justice Cooperation cooperate with the EU Food Fraud Network when relevant.

All members have appointed dedicated **single Contact Points** with out-of-hours arrangements (24/7) to address any emergency related to a RASFF notification made outside office hours.



2. MAIN ACTIVITIES OF THE ALERT AND COOPERATION NETWORK IN 2021

The year 2021 recorded the **highest number of exchanges** ever reached in the activity of every component of the Alert and Cooperation Network. This represents a great achievement as it testifies to the proper use of the system and the high level of cooperation among the network members.

In 2021, 4607 notifications were transmitted through RASFF, supplemented by 19064 follow-up notifications (providing additional information such as on measures taken and traceability details). Parallel exchanges inside the network took place through the “conversation” tool that permits a rapid communication flow between Contact Points. The system registered 5748 conversations regarding RASFF notifications.

Further, 2290 non-compliance notifications were shared during the year, themselves leading to 4694 parallel conversations between network members, which are essential to facilitate administrative cooperation.

Finally, suspicions of fraud have been transmitted in 407 cases. Those requests for cooperation among Member States related to fraud are not confirmed frauds, but contribute to alerting other network members to trigger investigations by the countries concerned.

To ensure the quality of all these exchanges the Commission monitors the flow of information that goes through the iRASFF platform. All the notifications are periodically reviewed to find, in agreement with the Contact Points, if they comply with the necessary criteria to be transmitted and if they are transmitted in the appropriate database, informing the corresponding Contact Point. For instance many non-compliances where a health risk was identified were escalated from AAC to RASFF for further follow-up. Furthermore all non-compliances, with or without health risk, are regularly reviewed to find possible suspicions of fraud. If a suspicious case is found the European Commission invites Member States to look into the matter.

In all this flow of information, **cooperation** among Contact Points in Members States and the European Commission is essential. For this, working group meetings have been regularly organised and Standard Operational Procedures agreed between the Members to have a common basis and understanding of the system.

Also, the European Commission ensures **communication with non-member countries** in different ways, either directly through the online database of RASFF notifications “**RASFF Window**”² (to which nearly 100 countries have access), by exchange of e-mails, or through the **INFOSAN network**. A new version of RASFF Window was released in April 2021. It now allows real-time updating from iRASFF, instead of a daily update as had been the case up to then.

In RASFF Window, non-member countries access the notification and its annexes only if they are country of origin or country of distribution of the incriminated product. They can then provide feedback about their investigations and measures taken, and the European Commission transmits their input as follow-up in the system. There were nearly 1300 non-member follow-up notifications transmitted in 2021.

One part of the RASFF Window database is publicly accessible, with information on the product, hazard, organisations involved, risk decision and measures taken. To have access to the complete information and to all the follow-up notifications, you need to be a member of RASFF, which is possible only for competent authorities of member countries.

The general public can also consult the “**RASFF consumers’ portal**”³, a consumer-friendly part of the RASFF Window tool providing information on food recall notices related to RASFF notifications. It provides links to public health warnings, issued by food safety authorities and food companies. By using this free tool, European consumers are able to identify food that has been flagged in the system allowing them to make more informed choices.

² <https://webgate.ec.europa.eu/rasff-window/screen/search>

³ <https://webgate.ec.europa.eu/rasff-window/screen/consumers>



In 2021 **pesticides** have been the most important hazard notified, representing 27 % of the health-related notifications. Among pesticides the unauthorised substance **ethylene oxide** still represented a challenge for the system, with 468 RASFF notifications transmitted. Many other findings were related to pesticides for which the European Union has recently repealed the authorisation for the EU market.

Among fraud suspicions the most frequent request for cooperation has been related to the **illegal movement of cats and dogs** that amounted to 114. More than half of those requests involved animals coming from non-EU countries. 20 additional requests were created in the system as simple non-compliances, where fraudulent activities were not suspected but administrative assistance was needed (e.g. verifying microchip in a database belonging to another country). Animals are often accompanied by falsified health certificates, illegally issued EU passports, providing false information on the origin, or forged rabies anti-body laboratory results. The latter is particularly a concern for animals coming from countries where rabies is still widespread. Increasing amount of exchanges shows that Member States are building good collaboration in tackling this cross-border problem. In the meantime the European Commission is working on the launch of a specific plan to address this issue.

E-commerce is becoming more and more an important route by which products reach consumers. The current pandemic only increased the demand for shopping without leaving home, which contributed to the threats associated with this difficult-to-control part of the agri-food chain. Currently, products traded online that are posing health risk, are non-compliant or subject to suspicion of fraud, are notified in iRASFF. In 2021, a total of 281 RASFF notifications related to e-commerce as the main way of trade were reported by member countries. Half of all requests for products traded online concerned dietetic foods, food supplements and fortified foods. The second largest product category was food contact material, found in 33% of requests. This latter figure is largely due to the launch of an **EU Enforcement Action**⁴ in May 2021 (still ongoing) on non-authorised **Food Contact Materials (FCM) containing bamboo 'powder'**. Preliminary data show that almost 90% of these illegal products found on the market are offered online by e-traders and e-platforms.

⁴ https://ec.europa.eu/food/safety/agri-food-fraud/eu-coordinated-actions/bamboo-zling_en

EU Coordinated Control Plan on herbs and spices

In 2021 the results of the first coordinated control plan on herbs and spices launched by the European Commission were published. It represents until now the largest investigation into the authenticity of culinary herbs and spices in terms of participating countries and number of analyses: it was carried out by twenty-one EU Member States, Switzerland and Norway and it implied nearly 10 000 analyses carried out on 1 885 samples.

The objective of this coordinated control plan was to establish the prevalence of non-compliances and of possible illegal practices in the marketing of herbs and spices in the European Economic Area. Information available to the European Commission and to Member States indicated that adulterated herbs and spices were present on the EU market, often remaining undetected.

The authenticity of six different herbs and species was assessed by the Joint Research Center using a range of state-of-the-art analytical techniques. Cumin, curcuma, oregano, paprika/chilli, pepper and saffron were selected taking into account their trade volumes, commercial value and history of fraud cases.

The percentage of samples which were deemed at risk of adulteration (mainly related to the presence of non-declared plant material) were 17% for pepper, 14% for cumin, 11% for curcuma, 11% for saffron and 6% for paprika/chilli. Oregano was identified as the most vulnerable with 48% of samples at risk of contamination, with olive leaves in most cases.

Further information can be found at the [DG SANTE website](#).

During the years 2020 and 2021, several EU countries have carried out a special action aimed at combating the illegal introduction of **horses** into the food chain.

This action has shown that the ambiguous status of equines is a considerable source of income for equine traffickers. Indeed, horses excluded from the food chain no longer have any market value at the end of their life. Traffickers have therefore developed the business of falsifying the passports of these horses in order to re-introduce them into the food chain.

The actions showed that the problem shifted from one country to another depending on the controls carried out.

As a result, in countries where numerous checks have been carried out, Member States have observed a reduction in the number of equidae slaughtered, and a shift in slaughtering to other countries. Several hundred falsified passports were discovered and placed under seizure by the various services. Criminal organisations have been identified in some countries. The phenomenon is therefore not currently eliminated, because not all countries have participated in this action yet, but it has been stopped in many countries.

This action has also highlighted that some traders are trying to introduce into the food chain equines that are sick or have received unauthorized drug treatments.

The fight against fraud in this area is therefore not over, and it will continue in the following years.



3. THE ALERT AND COOPERATION NETWORK IN FIGURES

3.1. The Rapid Alert System for Food and Feed

Among the 4607 RASFF notifications transmitted in 2021, 4102 concerned food, 236 feed, and 269 food contact material. In comparison with 2020, increases of 19.6% and 3.5% in the number of original notifications were registered for food and feed respectively.

It is interesting to highlight that original notifications on food contact materials more than doubled compared to last year, increasing from 123 (with an average of 138 in the period 2017-2020) to 269 in 2021. Such a trend is a direct consequence of the EU coordinated action on plastic Food Contact Materials (FCM) made of bamboo 'powder' illustrated at page 19.

In 2021, 53 RASFF "incidents" were transmitted through the system. An incident is created in iRASFF when two or more notifications are linked as, for instance, they share the same upstream traceability for similar (but not identical) products or they are about identical products but different lots. The most frequent 'incident' concerned presence of ethylene oxide (25 incidents).

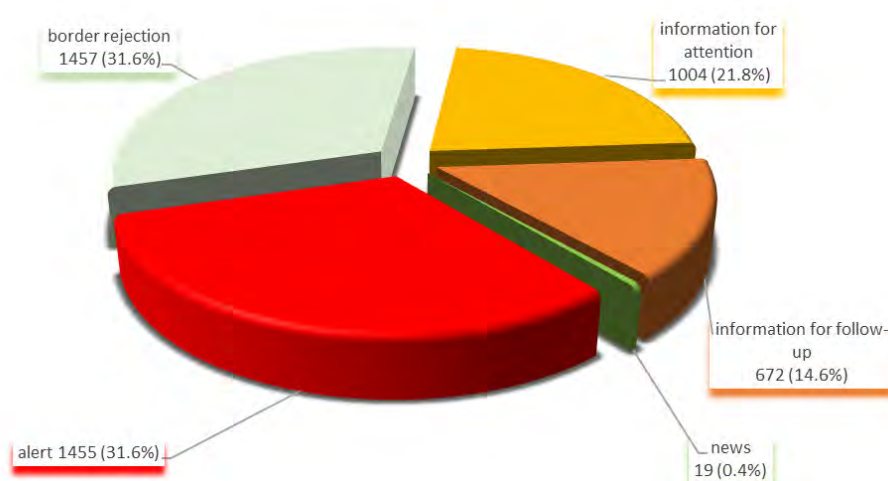


Fig.2: RASFF notifications by type

In 2021 one-third of original notifications were *alerts* (1455), number that increased by 4% in comparison with the previous year. Alert notifications are transmitted when food, feed or food contact materials presenting a serious risk are present on the market and when rapid action is required in another member country than the notifying country. This means that in 1455 cases products with serious health-risk, following a RASFF notifications, have been removed from the European market.

For 1457 cases, products were blocked at the European borders at the border control posts and never reached the European market (border rejection notifications). This number came back to the levels of 2019, after the decline registered in 2020. When information about a rejected consignment is present in the Trade Control and Expert System (TRACES), border inspectors can use that information to start a RASFF notification and transmit it in the network. Sharing information about rejections at the borders among all members of the Alert and Cooperation Network allows competent authorities to perform the necessary risk evaluations and to reinforce controls on the appropriate goods entering the European Union. It therefore represents a good example of active and fruitful cooperation made possible by this system.



In another 1004 cases, (*information notifications for attention*) a risk was identified but it did not require rapid action because the product was present only in the notifying member country or it was not placed on the market or it was no longer on the market. *Information for follow-up* accounted for 672 notifications: a risk was identified and the product was or might have been placed on the market in another member country, but it did not require rapid action as it was considered not serious. 19 news notifications were also transmitted. *News* relate to any type of information concerning the food or feed safety which cannot be communicated under the previous types of notifications but it is judged interesting for the food and feed control authorities in member countries.

Considering only notifications on products found on the market (not rejected at the borders), the basis for the notifications in almost half cases were an *official control on the market*, followed by a *company's own check* (39%). Other ways to trigger a notification were less frequent, and derived mainly from *consumer complaints* (4%).

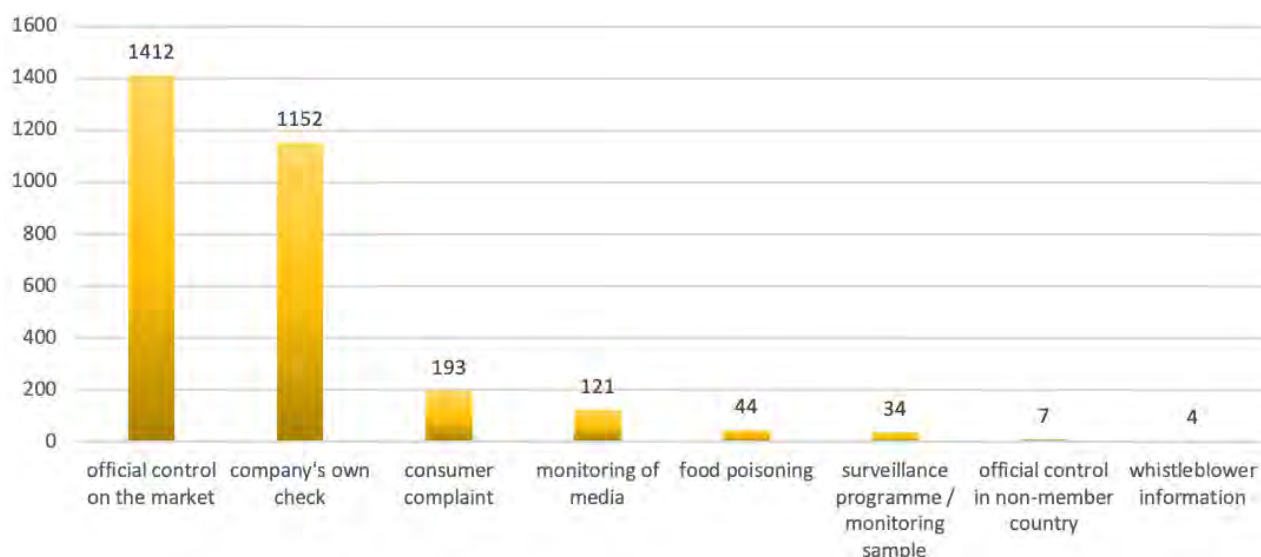


Fig.3: RASFF notifications related to products on the market by notifications basis

In the course of 2021, all Members of the Alert and Cooperation Network have been active in the RASFF network, the most active ones being Germany, Spain and the Netherlands with respectively 761, 524 and 446 notifications transmitted, followed by Belgium (389), Italy (389) and Poland (335).

Regarding the origin of the products, fig. 4 shows the number of notifications for every member country of origin. Poland was the first European country with 381 notifications of which 263 concerning the presence of Salmonella in poultry meat, which in 154 cases were notified by Poland itself.



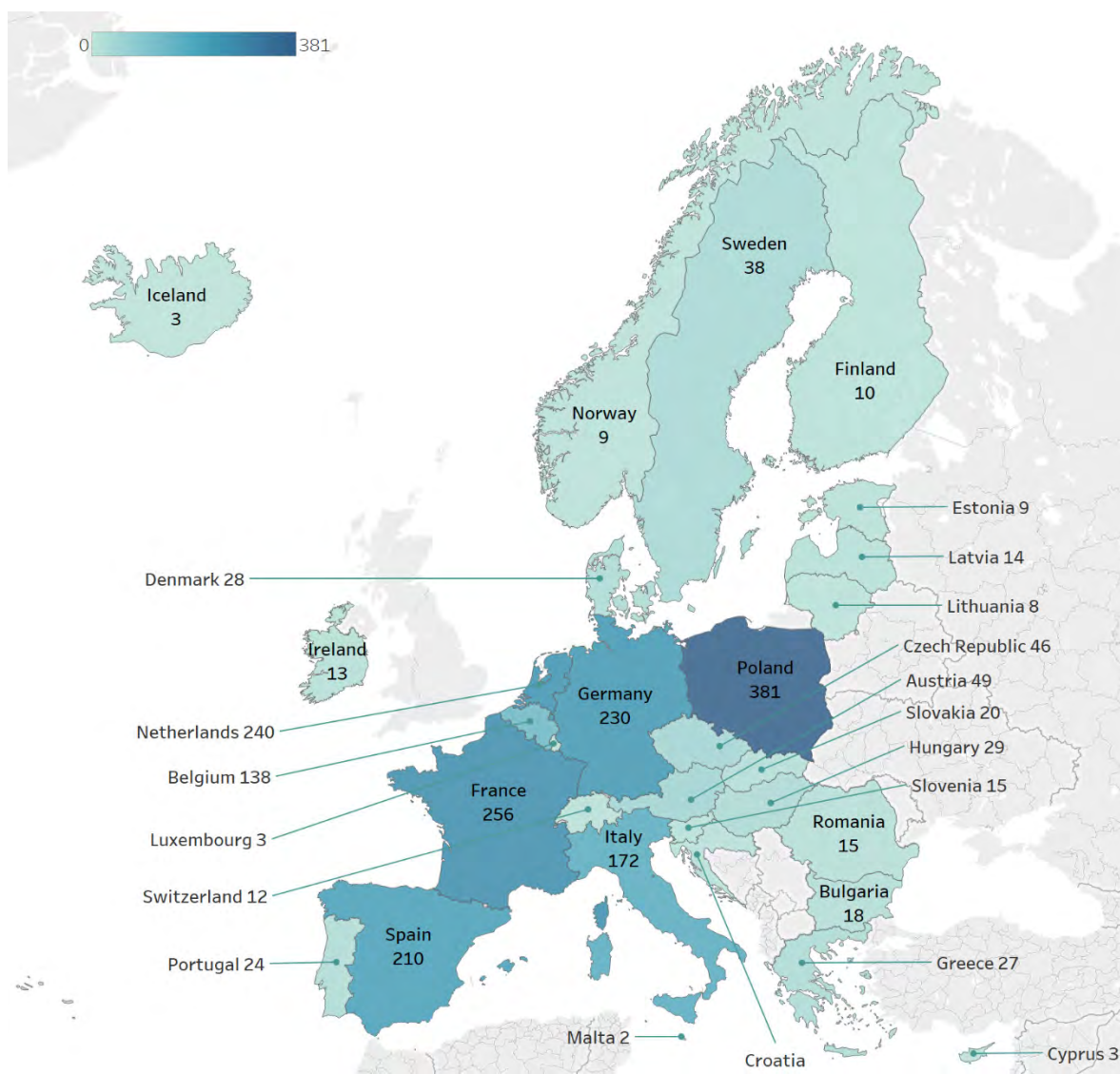


Fig. 4: RASFF notifications by European countries of origin

Considering non-member countries, Turkey was the most notified country with 613 notifications, mainly related to findings of pesticides (405), followed by India (383), with 272 notifications on pesticides and China (331) with almost half of the notifications (160) concerning food contact materials.

The European Commission systematically informs non-member countries when they are involved in a RASFF notification, either as countries of origin and as countries of distribution of the products. Their follow-ups are communicated through iRASFF to all members of the network. This flow of information is essential to improve collaboration between member and non-member competent authorities in order to avoid the repetition of the same hazard.

For each non-member country (origin of the product), fig. 5 shows the total number of RASFF notifications, the number of notifications for which follow-up was provided, and in the last column the percentage of notifications followed-up by each country.

Third Country	Notifications	Follow-up	Follow-up (%)
Albania	11	9	82
Algeria	1	0	0
Angola	1	0	0
Argentina	47	15	32
Australia	10	0	0
Azerbaijan	8	0	0
Bangladesh	8	1	13
Belarus	2	0	0
Benin	1	0	0
Bolivia	8	0	0
Bosnia and Herzegovina	7	5	71
Brazil	188	51	27
Cambodia	2	1	50
Cameroon	6	0	0
Canada	8	1	13
Cape Verde	1	1	100
Chile	9	0	0
China	331	0	0
Colombia	7	4	57
Costa Rica	29	0	0
Côte d'Ivoire	3	0	0
Cuba	2	1	50
Dominican Republic	8	0	0
Ecuador	33	13	39
Egypt	124	1	1
Ethiopia	4	0	0
Faeroe Islands	1	1	100
Falkland Islands	4	0	0
French Polynesia	1	0	0
Georgia	38	5	13
Ghana	16	0	0
Guatemala	3	1	33
Guyana	2	0	0
Honduras	5	0	0
Hong Kong	19	9	47
India	383	78	20
Indonesia	20	14	70
Iran	65	0	0
Israel	3	1	33
Japan	6	0	0
Jordan	1	0	0
Kenya	1	0	0
Kosovo	3	3	100
Laos	4	0	0
Lebanon	15	4	27
Madagascar	4	0	0
Malaysia	10	0	0
Maldives	1	0	0
Mauritania	9	0	0
Mauritius	3	0	0
Mexico	14	0	0
Moldova	1	0	0
Morocco	72	11	15
Mozambique	2	0	0
Namibia	1	0	0
New Zealand	13	0	0
Nicaragua	5	0	0
Niger	3	0	0
Nigeria	23	0	0
Northern Ireland	1	1	100
Oman	1	0	0
Pakistan	33	0	0
Papua New Guinea	1	0	0
Paraguay	5	0	0
Peru	18	5	28
Philippines	11	3	27
Republic of North Macedonia	10	3	30
Russia	22	3	14
Saudi Arabia	4	0	0
Senegal	8	1	13
Serbia	13	2	15
Seychelles	3	0	0
Singapore	2	0	0
Solomon Islands	1	0	0
South Africa	11	4	36
South Korea	14	1	7
Sri Lanka	29	2	7
Sudan	1	0	0
Syria	15	0	0
Taiwan	8	1	13
Thailand	40	13	33
Togo	4	1	25
Tunisia	7	0	0
Turkey	613	111	18
Turkmenistan	1	0	0
Uganda	27	0	0
Ukraine	46	44	96
United Arab Emirates	4	0	0
United Kingdom	150	52	35
United States	122	21	17
Uruguay	8	1	13
Uzbekistan	7	0	0
Venezuela	1	0	0
Vietnam	44	9	20
Yemen	1	0	0
Zimbabwe	2	0	0

Fig. 5: Notifications by non-member countries (origin of the notified product), number of feed-back received by the Commission and rate of feed-back

3.1.1. Hazard categories

Fig. 6 sorts the most recurrent RASFF notifications, presented as combinations of hazard category, product category and country of origin of the product. This table regards all kinds of products (food, feed and food contact material), all possible origins (EU and non-EU) and types of control (at the borders and on the market).

Hazard	Product category	Origin	Total
Pesticide residues	Fruits and vegetables	Turkey	359
Salmonella	Poultry meat and poultry meat products	Poland	263
Salmonella	Herbs and spices	Brazil	116
Pesticide residues	Nuts, nut products and seeds	India	99
Pesticide residues	Fruits and vegetables	Egypt	63
Aflatoxins	Fruits and vegetables	Turkey	57
Aflatoxins	Nuts, nut products and seeds	Iran	44
Aflatoxins	Nuts, nut products and seeds	Egypt	41
Aflatoxins	Nuts, nut products and seeds	United States	40
Aflatoxins	Nuts, nut products and seeds	Turkey	39

Fig. 6: Top 10 number of recurrent RASFF notifications

The following figures focus on food only. Notifications concerning feed and food contact material are treated separately afterwards.

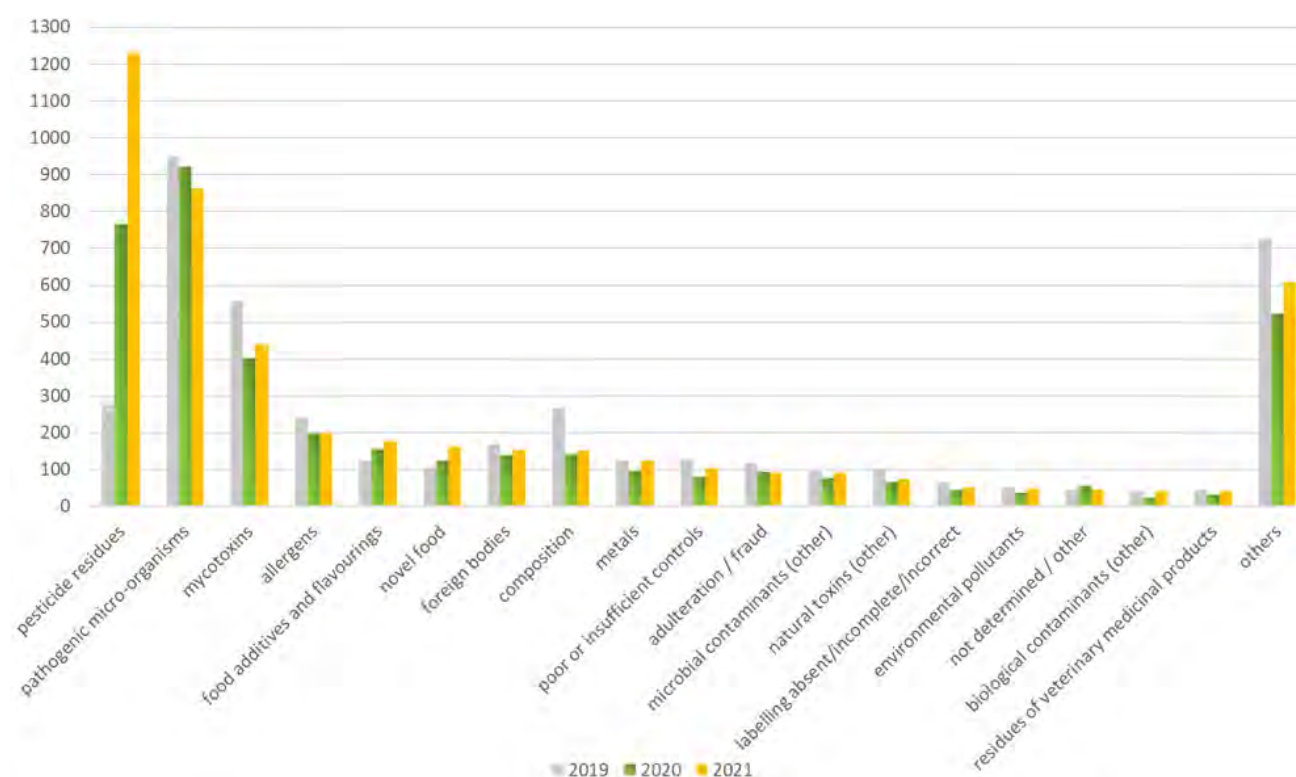


Fig. 7: RASFF notifications by food hazard category 2019-2021

3.1.2. Pesticide residues

As fig. 7 shows, in 2021, pesticide residues were the most reported issue in RASFF and this for the first time in its history: 1231 notifications, representing an increase by 61% in comparison with 2020 and more than quadruplicated in comparison with 2019.

Making abstraction of the ethylene oxide incident, on which more information is given below, pesticide residue issues reported to RASFF much more often involve commodities from non-member countries, partly because of the 394 reported rejections at the border, of which 248 notified by Bulgaria. Nevertheless, from 384 notifications regarding pesticide residues in products that circulated on the market, there are only 67 that are not traceable to a non-member country of origin.

For Turkey, which is the most reported origin, the number of RASFF notifications (not taking into account ethylene oxide) went from 191 to 361, in particular due to non-compliances for citrus fruits such as lemons, oranges, mandarins and grapefruits. For these, except for grapefruits, mandatory checking at the border was heightened to 20% in October 2021⁵ and certification at origin was required (not for lemons).

Chlorpyrifos and chlorpyrifos-methyl, substances of which the approval was not renewed in 2020, were an important factor in this increase. In 2019, [EFSA](#) identified concerns for chlorpyrifos and its related substance chlorpyrifos-methyl, about possible genotoxic effects and neurologic effects during development and concluded that no safe exposure level could be established. This means that any non-compliance holds a potential health risk and that member countries from then on notified all non-compliances for these substances in RASFF.

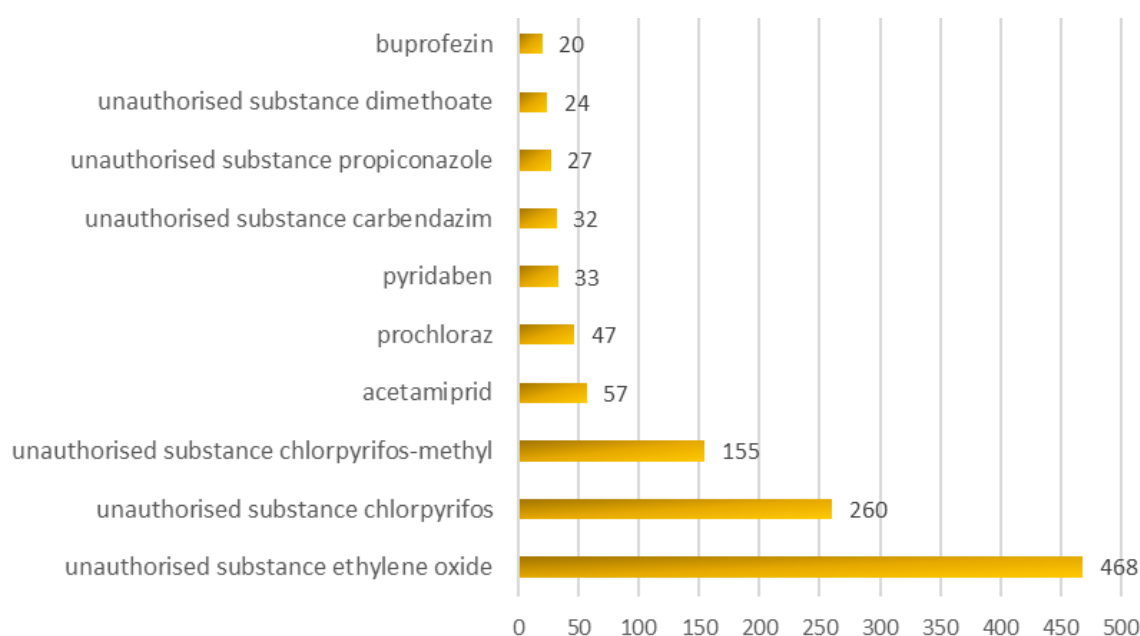


Fig. 8: number of RASFF notifications on pesticides in food (top 10)

The incident with the contamination of food ingredients with **ethylene oxide**, a genotoxic carcinogen and thus where no safe level can be established, that started with sesame seeds in 2020 (see [RASFF annual report 2020](#)) continued and diversified in 2021. Contamination with ethylene oxide was reported 468 times. Non-compliance, established as quantification of the sum of ethylene oxide and its metabolite 2-chloroethanol above the maximum residue limit, was notably found in locust bean gum which had been used as food additive in a wide variety of products. This led to the biggest ever food recall operation in the EU history. Findings then further spread to other types of gum but also to food supplements, spices and various other commodities but less frequently.

⁵ Commission Implementing Regulation (EU) 2021/1900 of 27 October 2021 amending Implementing Regulation (EU) 2019/1793 on the temporary increase of official controls and emergency measures governing the entry into the Union of certain goods from certain third countries implementing Regulations (EU) 2017/625 and (EC) No 178/2002 of the European Parliament and of the Council

3.1.3. Pathogenic microorganisms

With 863 notifications, pathogenic microorganisms remain a very important hazard category in food products even if the total number of notifications related to this has been slightly decreasing over the last few years.

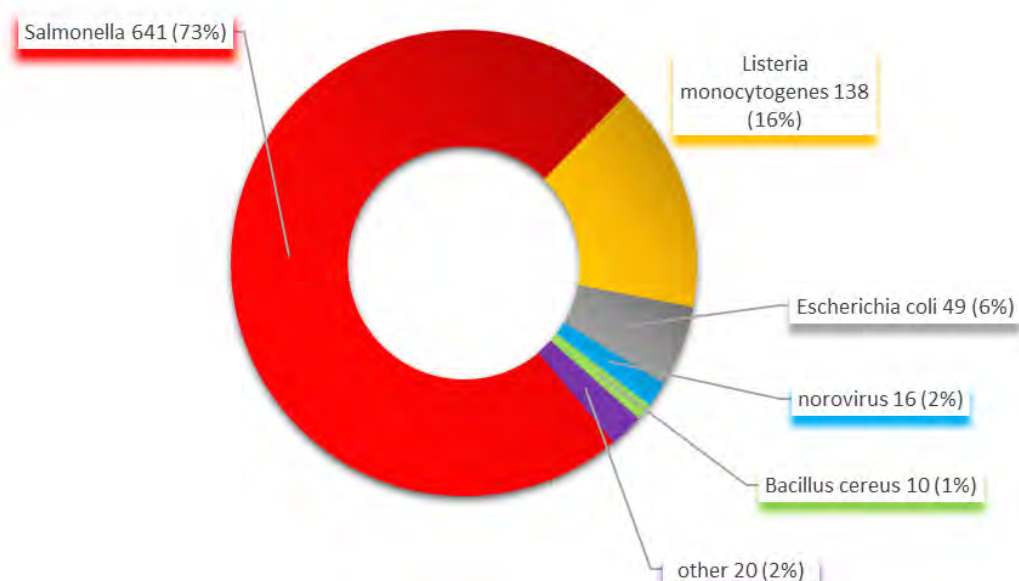


Fig. 9: RASFF notifications on pathogenic microorganisms in food

Three-quarters of the notifications transmitted (641) were due to the presence of *Salmonella*. In almost half of them (334) *Salmonella* was detected in poultry meat and poultry meat products, mainly with a Polish origin (284). In a considerable number of notifications (145) the product concerned belonged to the herbs and spices category (in 116 cases it concerned black pepper from Brazil).

Listeria monocytogenes accounted for 16% of the notifications related to pathogenic microorganisms in food. The most common food category concerned by these notifications was, like in the past, products of animal origin: milk and milk products (45 notifications), meat and meat products, included poultry meat (37), fish and fishery products (33).

89 notifications were related to the detection of *Escherichia coli*, and in 48 cases they were about the more dangerous *Shigatoxin-producing Escherichia coli* found mainly in meat product other than poultry (33).

Norovirus was notified in 16 cases (they were 50 in 2020): 13 notifications concerned bivalve molluscs of which 10 in oysters.

3.1.4 Foodborne outbreaks

In 2021, 33 foodborne outbreaks were notified in RASFF. From these 33 notifications on foodborne outbreaks, 14 identified *Salmonella* as the (probable) cause, four were linked to *Listeria monocytogenes*, four were linked to histamine poisoning, three were linked to *norovirus* and three to *Escherichia coli*.

In total, nine notifications were related to a multi-country foodborne outbreak. In such event, the European Food Safety Authority (EFSA) and the European Centre for Disease Prevention and Control (ECDC) may decide, after consulting with the Commission, to launch a joint action. It may also be started at the Commission's request. Such joint EFSA-ECDC action can take the form of a Rapid Outbreak Assessment (ROA), which is made public, or of a Joint Notification Summary (JNS), which is not made public. Both are jointly prepared by EFSA and ECDC in close cooperation with affected countries.

The ROA gives an overview of the situation in terms of public health and identifies the contaminated food vehicle that may have caused the outbreak. It also includes results of trace-back and trace-forward investigations to help identify the origin of the outbreak and where contaminated products have been distributed. Involved network members use RASFF notifications to inform about their food investigations in the context of the outbreak. When finalised, EFSA and ECDC make an anonymised version of the ROA public on their website.



ROA in 2021:

- 25 February 2021 - Multi-country outbreak of *Salmonella Enteritidis* sequence type (ST)11 with infections linked to poultry products in the EU/EEA and the United Kingdom. Available [here](#).
- 20 July 2021 - Multi-country outbreak of *Salmonella Braenderup* ST22, presumed to be linked to imported melons. Available [here](#).
- 14 October 2021 - Multi-country outbreak of multiple *Salmonella enterica* serotypes linked to imported sesame-based products. Available [here](#).

The joint notification summary (JNS) is a summary of the state of play of a smaller scale multi-country food-borne outbreak with a brief preliminary assessment made by ECDC and EFSA, shared only in the Early Warning and Response System (EWRS), in the Epidemic Intelligence Information System (EPIS) and RASFF platforms. JNS in 2021:

- 5 February 2021 - Multi-country cluster of *Listeria monocytogenes* serogroup IIa, CC415, ST394 infections (“Ny9”) linked to fish products.
- 24 March 2021 - Multi-country outbreak of *Salmonella Enteritidis* sequence type (ST)11 linked to consumption of bovine minced meat.
- 14 April 2021 - Multi-country cluster of *Listeria monocytogenes* clonal complex 1 (CC1) infections linked to soft cheese.
- 11 June 2021 - Clusters of *Salmonella Mbandaka* and *S. Havana* infections possibly linked to sesame-based products.
- 3 August 2021 - Multi-country cluster of *Listeria monocytogenes* serogroup IIa, CC415, ST394 infections (“Ny9”) linked to fish products.

3.1.5 Mycotoxins

The presence of mycotoxins in food was notified in 450 cases (6% increase compared to 2020 but 23% of decrease compared to 2019) representing the third most notified hazard category, similarly to previous years. Three-quarters of the notifications were border rejections.

Most of the cases related to the detection of aflatoxins (399), in particular in nuts (273). However the most recurrent notification, like in 2020, concerned dried figs from Turkey (57). The most frequently in food is aflatoxin B1, a carcinogenic and mutagenic substance. In the remaining cases, notifications were mainly due to ochratoxin A (47) detected in particular in spices and dried figs.

3.1.6 Other hazard categories

The other most frequently notified food hazard categories in 2021 were *allergens* (198 notifications) with *undeclared sulphites* as first hazard (41 notifications), *food additives and flavourings* (176 notifications regarding mainly *unauthorised or too high content of additives*) and *composition* (151) mostly related to the presence of *unauthorized substances in food supplements* (95).

3.1.7 Feed

In line with 2020, RASFF notifications on feed (236) accounted for around 5% of the total number of notifications.

41% of such cases were a result of a company's own check, followed by official controls on the market (30 %), and border controls (22%).

The most common hazard was *Salmonella* (41%), the only pathogenic microorganism reported in feed. Other microbiological contaminations regarded consignments infested with *moulds* (4.8%) and high count of *Enterobacteriaceae* (5.2%; in two cases also with presence of *Salmonella*).

Some notifications (25) reported a non-compliant composition of feed, of which 14 regarded the presence of *too high content of ragweed* (*Ambrosia* spp.) seeds. Belgium notified almost all notifications on the latter.

Lastly, in 23 notifications a feed additive was reported. Their majority concerned unauthorised substances, in 5 the addition of *cannabidiol* (CBD).



3.1.8 Food Contact Material

269 notifications concerning Food Contact Materials were transmitted in 2021, mostly (176) related to the presence of unauthorised substances in plastic products (half of them, 87, e-commerce related). In most cases bamboo was detected (154) but also bamboo and maize together (22), while 12 concerned the presence of wheat (see below paragraph on the *EU Enforcement Action on plastic Food Contact Materials (FCM) made of bamboo 'powder'*).

82 original notifications regarded the migration of a wide variety of substances. The majority concerned *primary aromatic amines* (27 original notifications), followed by *melamine* (13), *formaldehyde* (10), *volatile organic constituents* (9), *chromium* (5), *lead* (5), *cadmium* (3), *cobalt* (2), *aluminium* (2). 5 original notifications regarded a *too high level of overall migration*.

Most original notifications on Food Contact Material (157) originated from China. Concerning notifying countries, the top reporting Member State was Spain (48), followed by Germany (40) and Belgium (38).



EU Enforcement Action on plastic Food Contact Materials (FCM) made of bamboo 'powder'

A EU Action was launched in May 2021 (still ongoing) on Food Contact Materials (FCM) containing bamboo 'powder' and illegally sold in the EU market.

Plastic materials intended for contact with food may in fact only be manufactured with substances authorised in accordance with Regulation (EU) 10/2011⁶ on plastic food contact material. This ensures that any substance used has been thoroughly assessed.

Placing plastic FCMs containing non-authorised additives (such as bamboo), on the market is therefore illegal, and it may also present a public health risk as it could allow for accelerated degradation of certain plastics. This can lead to substances transferring from the plastic into food.

When put on the market, these plastic FCMs are often presented as 'natural', 'eco-friendly', 'compostable' or 'recyclable' and hence as a sustainable alternative to plastic materials, when they are actually plastic. They trick environmentally conscious consumers into buying something they believe to be sustainable. They in fact mislead the customer as the bamboo or other plant-based additive is added as a filler to the plastic (to give volume and shape), making the plastic non-recyclable and therefore even less eco-friendly. Sometimes the products are also falsely declared as made of 100% bamboo.

Preliminary data show that almost 90% of the products found on the market are offered online by e-traders and e-platforms. On the contrary, food contact materials that were stopped at the border were only sporadically linked to online trade.

The main objective of the action plan is to ensure that:

- plastic products containing such illegal plant-based additives, which do not comply with EU rules, are rejected at the borders and do not enter the EU market
- tax duties for plastic products that were wrongly declared are recovered
- business operators are reminded, by Member States' enforcement and competent authorities, about the illegality of these products including through the support of e-platforms
- consumers are made aware of the issue including health risks.

The European Commission also assists EU countries in ensuring that these products are no longer placed on the EU market.

The close cooperation with the European Anti-Fraud Office – OLAF (data analysis and intelligence gathering, contact to the investigative forces in the MS) and the Directorate-General Taxation and Custom Union (on possible tax evasion) are key for the success of this "Bamboozling" action.

More information can be found [here](#).

⁶ Commission Regulation (EU) No 10/2011 of 14 January 2011 on plastic materials and articles intended to come into contact with food

3.2 Non-compliance notifications

In 2021 non-compliance notifications have reached the number of 2290, confirming that the system has continued to be used constantly by the members of the network and that it represents a valuable tool to exchange information and asking other member countries for cooperation. Some countries are using it in a more systematic way than others. Germany is confirmed as taking more advantage of the system with 34% of all notifications.

Most non-compliance notifications concerned cases related to *food* (84%), followed by *feed* (8%), and *food contact materials* (4%). Some few notifications concerned new categories considered by the system as from the end of 2019, when the IMSOC Regulation entered into force extending its scope: animal health and welfare (87), plant health and plant protection products (4).

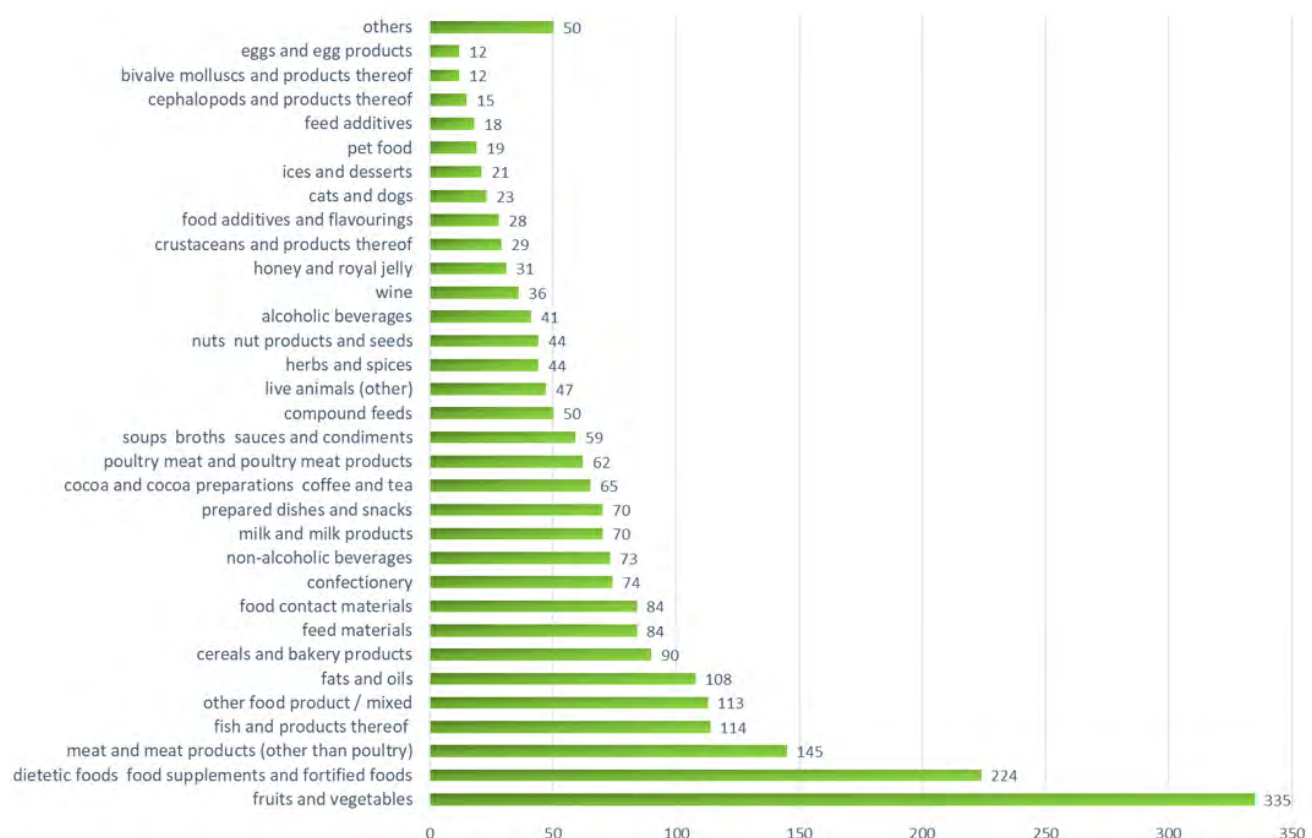


Fig. 10: non-compliance notifications per product category

Like the previous year, in 2021, the top reported product category was fruits and vegetables (15% of all non-compliances notifications). Three quarters of these notifications were concerning pesticides maximum residues limits exceedances that have not triggered RASFF notifications as because the exceedances did not imply a health risk. Other recurrent non-compliances were microbiological contaminations without a proven health risk, mislabelling (incomplete list of ingredients, non-compliant nutrition declaration or indication of the quantity), and the presence of foreign bodies.

In line with 2020, the second most notified category was dietetic food, food supplements and fortified food (10%), most of which traded online. Notifications concerning this product category decreased over the years, as it instead ranked first in 2018 and 2019. Such cases regarded unauthorised health claims, unauthorised substances or novel foods, and incomplete or missing information in the list of ingredients or on the responsible food business operators.

Meat and meat products was the third most reported category (6%), with violations ranging from incomplete labels concerning ingredients and traceability, to lack of or incomplete documentation.

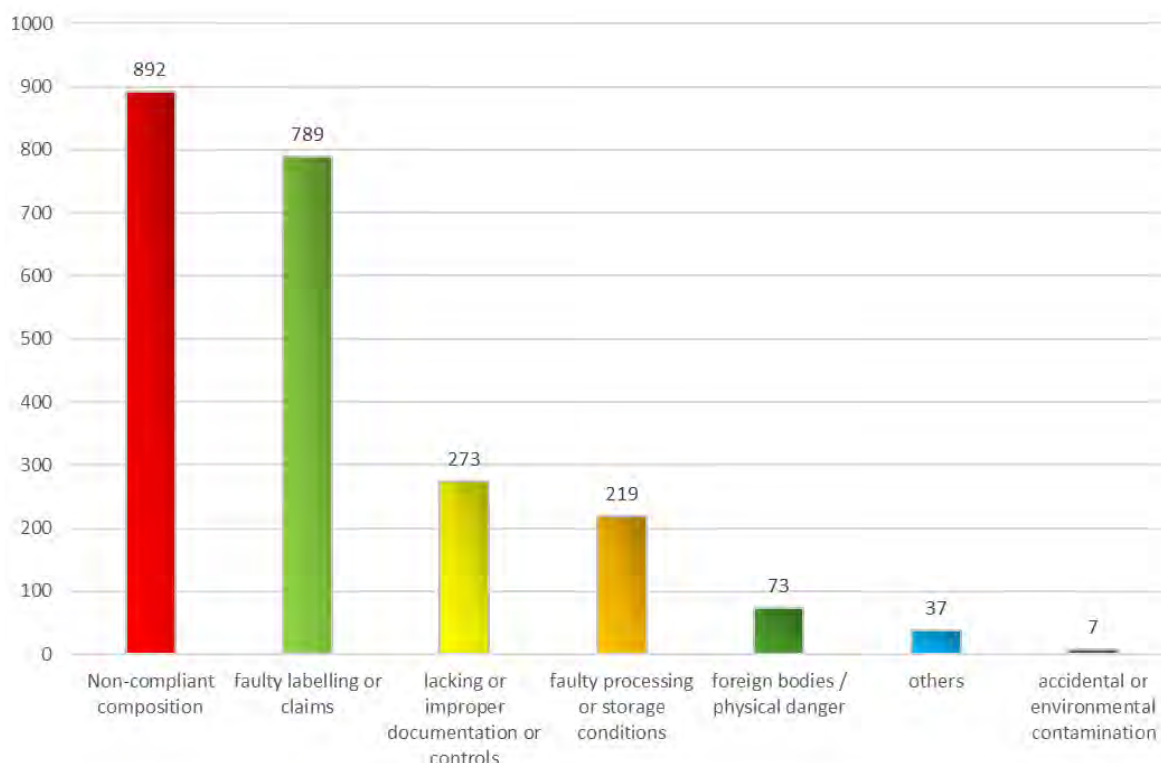


Fig. 11: Non-compliance notifications by non-compliance categories

The most recurrent non-compliances categories for 2021 are shown in fig. 11. Bearing in mind that a notification may relate to more than one non-compliance, the classification took into account the main alleged violations reported by Member States.

The top reported type of violation is *non-compliant composition*, accounting for 39% of the total number. This category includes the detection of pesticides residues above their Maximum Residues Level (MRL), (that following a risk assessment performed by Member States' competent authorities does not represent a health risk), unauthorised additives or their unauthorised use in a specific product, unauthorised ingredients, unauthorised novel foods (often cannabidiol, CBD). *Faulty labelling or claims* is appearing in the second position (35%) with cases concerning incomplete labels or labels missing required information (i.e. list of ingredients, nutrition declaration, name of the product) and unauthorised health claims (e.g. food supplement marketed as curing arthrosis, skin irritations, asthma, heartburn or reducing the possibility of acute respiratory infections or pet food with alleged anti-inflammatory effects).

Lacking or improper documentation or controls follows (12%) with cases on animal identification documents and trade documents for goods with incomplete, non-compliant or missing data.

10% of notifications concerned *faulty processing or storage conditions*, including poor hygiene conditions, microbiological contamination, and unsuitable organoleptic characteristics.

In addition, *foreign body/physical danger* was found in 3% of cases and includes foreign bodies of different nature (plastic particles, packaging materials, insects etc.). A few cases (7 notifications) were *accidental or environmental contamination*, and concerned contaminations during production. Lastly, most notifications belonging to the category *others* were requests for assistance between Member States centered on information sharing for the approval and registration status of several operators.



3.3. Fraud notifications

In 2021 the number of requests to the members of the network for cooperation related to suspicions of fraud reached a total of 407, slightly increased compared to 2020 (they were 349) with main part of the increase due to the significant number of requests registered on the **illegal movement of pets** (114). It must be stressed again that these requests are only suspicions of fraud that require further investigations by the countries concerned.



Fig.12: Number of requests for cooperation related to fraud suspicions by product categories notified

As for 2019 and 2020, fish and products thereof was the second main category (10%). The majority of such requests remained suspicions of illegal treatments, and primarily of colour-stabilizing treatments in tuna. Requests usually concerned tuna intended for canning, that is treated to restore a bright fresh-looking red colour to mislead the consumer and sell it at a higher price. The suspicions on illegal treatments of tuna continue in 2021 as reported by whistleblowers, as 39% of the fraud notifications on fishery products involved suspicions of illegal treatment of tuna (carbon monoxide, nitrates and nitrites), abuse of additives (ascorbic and citric acid) and labelling deficiencies. A foodborne outbreak was reported in RASFF with 12 persons poisoned after consuming tuna illegally treated with a high dose of nitrites.

Other suspicions of fraud regarded the undeclared addition of water in frozen pangasius fillets and shrimps. This misleads the consumers on the net weight of the product, making them purchase fish fillets which instead largely consist of water both injected to the product or as a glazing agent.

Fats and oil decreased compared to previous years, and were the third most reported category for 2021 (8%), together with *meat and meat products other than poultry meat*. Nevertheless, most remain related to marketing standards of olive oil and more specifically to olive oil or virgin olive oil sold as extra virgin olive oil.

Suspicious on *meat and meat products other than poultry meat* (category followed by "*poultry and poultry meat products*") mainly concerned forged documentation, followed by the illegal trade of such goods or exceedance of water.

The number of requests regarding *horses* (18) remained steady and continued to be related to falsified documents, mainly passports. With such forgery, horses that are not fit for human consumption or for which traceability is altered, could unlawfully brought on the food chain.

14 out of 16 requests concerning *plants and plant protection*



products regarded the sale of products containing a wide variety of active substances which are not authorised in the EU (for example diuron, carbetamide, bromacil, tebuconazole, and captan). 2 notifications regarded the illegal trade of plants due to non-compliant documents (missing EU plant passport or falsified phytosanitary certificate).

Dietetic foods, food supplements and fortified food were in 15 exchanges, and mainly concerned suspicions of a different composition than declared such as capsules being advertised for their high content of vitamin D and then not containing such an ingredient. They also concerned the sale of unapproved substances, such as 2,4-Dinitrophenol (DNP), a chemical used as pesticide or explosive but diverted as a rapid weight loss supplement. Used it can be fatal for humans and this substance (mainly sold online) is thus illegal to trade as a weight loss product.

The requests on *fruits and vegetables* (13), covered a variety of issues ranging from the possible use of unauthorised substances posing a risk to consumers to falsified traceability not allowing consumers to identify the origin, operators involved or species of the product.

Finally, among the most frequent, 13 requests were related to adulteration of *honey and royal jelly*, and 12 regarding *nuts, nut products and seeds*.

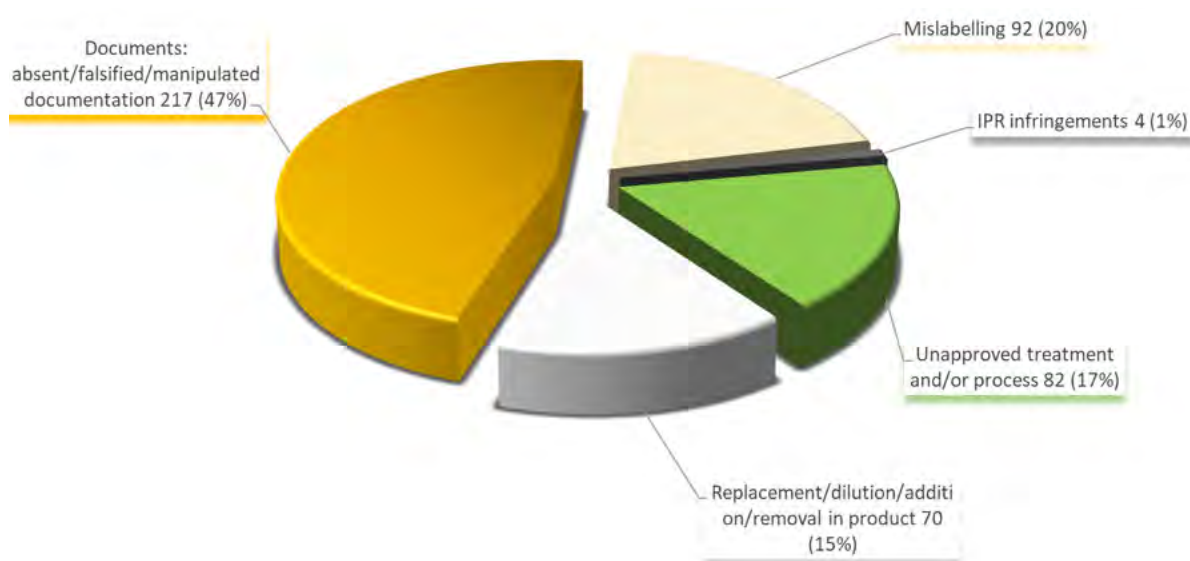


Fig.13: Types of non-compliances related to fraud suspicions

Considering that for each request in the system more than one category of non-compliance can apply, and thus be chosen, the overall number of non-compliances was 465 (while the total number of notifications have been 407).

Unlike previous years the top reported category for 2021 was *absent/falsified/manipulated documentation*, reaching 47% of the total notifications. These concerned falsified documentation, which include the absence or forgery of documents and often leads to concerns over traceability issues. The entirety of requests on the trade of cats and dogs belonged to this category and constituted its majority. These concerned the suspicions of falsification of passports or of the documentation necessary for such animal to enter the EU. Another recurrent issue consisted in the suspicious falsification of accompanying documents of meat or fishery products (invoices, certifications, Common Health Entry Documents) to tamper information concerning their traceability. In addition, these requests often originated from unauthorised sales channels such as unauthorised establishments.

2021 marked the first year in which *mislabelling* was not the most reported non-compliance category. It indeed ranked second, with the number of such notifications decreasing from 37% in 2020 to 20% in 2021. This category concerns products that contain misleading information on the label, and thus deceive the consumers on what they are purchasing. The most common requests regarded the sale of olive oil labelled as extra virgin olive oil followed by incomplete or non-compliant information in the list of *ingredients or nutrition declarations*.

Unapproved treatment and/or process followed with 18% of notifications, regarding any treatment and/or process which is prohibited under EU law. These mainly concerned unauthorised pesticides in fruit and vegetables or colour-stabilising treatments of tuna to lead customers to believe that it is of better quality.

Replacement/dilution/ addition/removal in product is generally linked to a product being substituted by a different one or an ingredient being replaced. It concerned 14% of the requests, the majority of which related to honey adulterated with sugar, and to addition of water in fish and meat products.

IPR (Intellectual Property Rights) infringements specifically refers to the intentional misuse of a protected name in the marketing of a different product. The EU's rules on food quality aim at protecting the names of specific products that can be designated with a 'Geographical Indication' (GI) mark (i.e. Protected Designation of Origin, PDO, and Protected Geographical Indication, PGI). These marks protect the name of a product coming from a specific region and following a particular traditional production process which is recognised under intellectual property rights (IPR). The fraudulent use of well recognised brands is particularly misleading as the GI recognition is supposed to enable customers to trust and distinguish quality products. In 2021 these requests were notified four times: two cases concerned the falsification of PDO cheeses due to non-compliant composition (unauthorised presence of additives or raw cow's milk) compared to the product's specification. One notification instead was related to overpressure due to carbon dioxide in a PDO wine. Lastly, one case regarded the non-compliant composition of a PGI whisky as consequence of the addition of unauthorised additives.

As for 2019 and 2020, Belgium, France and Germany have shown the most interest in requesting administrative assistance and cooperation regarding suspicions of fraud, followed by France, Germany, Italy and Slovenia. In other countries, at the moment, this tool is not yet systematically used to combat food fraud.

The European Commission itself, as active member of the network, created 5% of requests (22), mainly concerning fishery products. The majority of them concerned the sharing of information and intelligence on suspicious intra-EU movements of eels and tuna frauds, the first consisting in the identification of certificates potentially linked to smuggling of eels, often linked with Operation Lake 2021 led by EUROPOL.

Concerning the origin, 69% of the requests concerned goods coming from the EU and 27% from outside the EU. For 4% of the cases, the origin was instead not specified or under investigation.

The Commission regularly coordinates the measuring of the prevalence of fraud occurrences in certain specific sectors of the food chain through coordinated control programmes, information and data collection exercises.

3.3.1. Suspicions of fraud in non-compliances and RASFF notifications

The Commission screens all the notifications created in iRASFF on a weekly basis in order to identify a potential intentional violation of the EU agri-food chain legislation, which may have remained unnoticed, or which requires coordination and follow-up at EU level and then contacts network members for clarification purposes.

In 2021, this regular screening of information allowed the Commission to identify potential fraud in 1079 RASFF notifications and in 375 AAC notifications. *Fruits and vegetables* ranked first for both types of notifications, as in 2020. Most of the suspicions concerned findings of pesticides in food or feed that are not approved in the EU and therefore considered potentially fraudulent practices. This explains the high number of notifications for this product category. The majority concerns fruits and vegetables originating from non-member countries where legislation regarding pesticides is different than the European one and allows the application of treatments not permitted in the EU. The detected hazards particularly concern pesticides that have been recently removed from the list of authorised substances.

The European Commission regularly sends official letters to invite third countries' authorities to conduct investigations and provide information on the measures taken in order to guarantee the prevention and control of fraudulent or deceptive practices throughout the agri-food chain. It also invites to trace back similar products from the notified companies which have already been exported to the EU and which might present similar non-compliances.

It thereby contributes to the implementation of official controls and safeguards measures to address risks to consumers, animal and plant health, animal welfare and the environment that animals and goods entering the Union might pose, while enabling a continued and enhanced cross-sectional cooperation to fight fraud.

COUNTRY	REPLY RATE
Bangladesh	33%
Brazil	100%
China	0%
Colombia	67%
Ecuador	10%
Egypt	54%
Ghana	0%
Honduras	0%
India	23%
Indonesia	50%
Lebanon	25%
Mexico	0%
Mozambique	0%
Nigeria	0%
Pakistan	0%
Russia	0%
Serbia	0%
South Africa	0%
Sri Lanka	50%
Thailand	69%
Togo	100%
Turkey	38%
United Kingdom	80%
Ukraine	96%
Vietnam	30%

Fig.14: Reply rate by third countries (%) regarding official letters sent

4. NEXT DEVELOPMENTS

The effectiveness of the Alert and Cooperation Network relies on the good functioning of the IT system and on a close collaboration between the actors concerned.

The European Commission keeps working on making the iRASFF platform, in which all exchanges of information take place, more and more fit-for-purpose and adequate to its scope. In 2022 iRASFF will also include a new specialised “Plant Health Network” for the exchange of notifications on plant health issues with intra-Union consignments. The work on RASFF Window, through which non-members can have access to some part of the information flow, is intended to be completed by adding email notifications for non-members and the public and also restoring the archive of previous RASFF notifications.

Regarding cooperation, a greater awareness among Member States’ competent authorities on the possible use of the Alert and Cooperation Network with regard to non-compliance notifications and suspicions of food fraud will continue to be improved thanks also to dedicated courses under the Better Training for Safer Food initiative of the European Commission.

Specific coordinated actions are taking place to follow-up suspicious cross border fraudulent activities, with the assistance of the relevant Commission services, including OLAF (European Anti-Fraud Office). An action on food contact materials containing bamboo is ongoing and one on the illegal movement of pets should be launched in the near future. Member States show a growing interest in joining such actions, that the Commission facilitates notably with the support of the Joint Research Centre (JRC) for analytical aspects.

Furthermore, the European Commission will continue to pay a special attention to the communication with non-members countries. Direct interaction between network members and non-members is envisaged for the future, allowing non-members to provide direct feed-back to the notifications.

Getting in touch with the EU

IN PERSON

All over the European Union there are hundreds of Europe Direct Information Centres. You can find the address of the centre nearest you at: <http://europa.eu/contact>

ON THE PHONE OR BY E-MAIL

Europe Direct is a service that answers your questions about the European Union. You can contact this service

- by freephone: 00 800 6 7 8 9 10 11 (certain operators may charge for these calls),
- at the following standard number: +32 22999696 or
- by electronic mail via: <http://europa.eu/contact>

Finding information about the EU

ONLINE

Information about the European Union in all the official languages of the EU is available on the Europa website at: <http://europa.eu>.

EU PUBLICATIONS

You can download or order free and priced EU publications from EU Bookshop at: <http://bookshop.europa.eu>. Multiple copies of free publications may be obtained by contacting Europe Direct or your local information centre (see <http://europa.eu/contact>).

EU LAW AND RELATED DOCUMENTS

For access to legal information from the EU, including all EU law since 1951 in all the official language versions, go to EUR-Lex at: <http://eur-lex.europa.eu>.

OPEN DATA FROM THE EU

The EU Open Data Portal (<http://data.europa.eu/euodp/en/data>) provides access to datasets from the EU. Data can be downloaded and reused for free, both for commercial and non-commercial purposes.

