The Rapid Alert System for Food and Feed of the European Union

30 years of keeping consumers safe

Directorate-General for Health & Consumers

EU Flag
30 years of keeping consumers safe
Rapid Alert System for Food and Feed (RASFF)
FOREWORD

It is with great pleasure that I welcome you to this publication celebrating the 30 years of the Rapid Alert System for Food and Feed – or RASFF.

Food safety is an issue of national and international significance. It is an issue that affects all countries and has a substantial impact on both public health and economic activity. European consumers expect the highest level of safety when it comes to the food that they eat – and rightly so.

Operating since 1979, RASFF is one of the great success stories of the EU’s integrated approach to food safety, showing the power of communication and collaboration. By providing a system for the swift exchange of information between member countries and the coordination of response actions to food safety threats, it has become an indispensable tool for protecting and reassuring European consumers.

The European Commission – together with the countries and organisations belonging to RASFF – continue to work hard in further shaping this essential tool that is contributing to high food safety standards in the EU, preventing dangerous food or feed from reaching the consumer and allowing swift action to be taken to remove such products from the market.
RASFF has come a long way since its beginnings in 1979. Looking to the future, the number of notifications continues to rise and the system is moving into new regions and parts of the world. International cooperation will likely be one priority area for action, for example with other systems like the International Food Safety Authorities Network (INFOSAN) of the World Health Organization.

In addition, the coming years should see RASFF and its work become more formalised as its practices and rules are set into law, making the system more transparent. In the more immediate future, we will have the brand new RASFF Portal, where citizens can access a searchable RASFF database.

I would like to take this opportunity to thank the RASFF member countries for helping to make RASFF the effective tool that it has become today. My gratitude also goes to the European Commission delegations worldwide that facilitate the transmission of notifications to third countries, allowing problems originating there to be resolved.

The RASFF system can only function well thanks to the continuing and excellent collaboration between public authorities, consumers and business operators. Information sharing is one of our most powerful tools against food safety risks. RASFF thus highlights how we can work most effectively to share information in order to tackle food safety challenges and protect consumers.

I look forward to seeing how RASFF further develops and grows stronger over the next 30 years.

Androulla Vassiliou
European Commissioner for Health
Introduction to RASFF

It is no surprise that consumers want to know that the food they eat is safe. Food and feed safety is a key public concern. Yet so-called ‘food crises’, such as those concerning melamine and dioxins, tend to weaken European citizens’ confidence in the food industry’s ability to deliver safe food. In addition, trade and the distribution of food and feed have become more international and the European Union (EU) is now the world’s biggest food importer and one of the biggest food exporters. These developments raise new challenges in the efforts to ensure food safety for EU consumers.
Nonetheless, the EU has one of the highest levels of food safety in the world – largely thanks to the solid body of EU legislation in place, which ensures that food and feed are safe. In particular, the EU’s food safety strategy rests on the idea that food safety starts at the farm. The rules apply from farm to fork, whether our food is produced in the EU or imported from elsewhere in the world.

There is no such thing as zero risk, but the EU does its utmost, through a comprehensive food safety strategy, to keep risks to a minimum with the help of modern food and hygiene standards drawn up to reflect the most advanced scientific knowledge. Therefore, the primary focus of the European Commission and Member States centres on maintaining this high level of safety and ensuring quick responses to any threats that do arise. One key tool used to react rapidly to food and feed safety crises and incidents is RASFF – the Rapid Alert System for Food and Feed.

RASFF enables information to be shared rapidly and efficiently between food and feed control authorities in Member States and the European Commission where a health risk has been identified. In this way, countries can act rapidly and in a coordinated manner, in order to avert food safety risks before they can harm consumers.

All 27 EU Member States are members of RASFF, together with the European Commission and the European Food Safety Authority (EFSA). Iceland, Liechtenstein and Norway are also full members of RASFF, by virtue of the Agreement on the European Economic Area (EEA).

Switzerland, having implemented the EU veterinary border controls in 2009, is included in RASFF as far as border controls of products of animal origin are concerned.

“RASFF’s main purpose is to keep citizens safe. This is always our number one priority when dealing with food and feed crises.”

– José Luis De Felipe Gardón, Head of Sector – RASFF, European Commission (1997-present)
2009 marks the 30th anniversary of RASFF. This booklet is a celebration of RASFF, highlighting its achievements and how it has made a concrete impact on the everyday lives of EU citizens. It traces the history of the system from its beginnings and takes a look at how it may develop over the coming years.

The system in practice

When a RASFF member has any information about a serious health risk deriving from food or feed, it must immediately notify the European Commission using RASFF.

In particular, RASFF members have to notify the Commission if they take such measures as withdrawing or recalling food or feed products from the market in order to protect consumers’ health and if rapid action is required. They even have to notify if they agreed with the responsible operator that a food or feed should not be placed on the market if the measure is taken on account of a serious risk. The same applies when the product in question is placed on the market under conditions.
The notifying member uses a notification form to provide all the necessary details of the findings and the measures taken and adds all relevant documents such as bills, lists of companies having received the products, analytical reports, etc. The Commission verifies this information, compiles it and then communicates it straight away to all RASFF members.

**Types of notification**

RASFF notifications are classified into four types.

**Alert notifications** are sent when a food or feed presenting a serious health risk is on the market and when rapid action is required. The RASFF member that identifies the problem and takes the relevant actions (e.g. withdrawal of the product) triggers the alert. The goal of the notification is to give all RASFF members the information to confirm whether the product in question is on their market, so that they can also take the necessary measures.

**Information notifications** are used when a risk has been identified about food or feed placed on the market, but the other members do not have to take rapid action. This is because the product has not reached their market or is no longer present on their market or because the nature of the risk does not require rapid action.

**Border rejections** concern food and feed consignments that have been tested and rejected at the external borders of the EU (and the European Economic Area – EEA) when a health risk has been found. The notifications are sent to all EEA border posts in order to reinforce controls and to ensure that the rejected product does not re-enter the EU through another border post.

Any information related to the safety of food and feed products which has not been communicated as an alert or an information notification, but which is judged interesting for the control authorities, is transmitted to the members under the heading ‘News’.

The notifying member uses a notification form to provide all the necessary details of the findings and the measures taken and adds all relevant documents such as bills, lists of companies having received the products, analytical reports, etc. The Commission verifies this information, compiles it and then communicates it straight away to all RASFF members.

**Types of notification**

RASFF notifications are classified into four types.

**Alert notifications** are sent when a food or feed presenting a serious health risk is on the market and when rapid action is required. The RASFF member that identifies the problem and takes the relevant actions (e.g. withdrawal of the product) triggers the alert. The goal of the notification is to give all RASFF members the information to confirm whether the product in question is on their market, so that they can also take the necessary measures.

**Information notifications** are used when a risk has been identified about food or feed placed on the market, but the other members do not have to take rapid action. This is because the product has not reached their market or is no longer present on their market or because the nature of the risk does not require rapid action.

**Border rejections** concern food and feed consignments that have been tested and rejected at the external borders of the EU (and the European Economic Area – EEA) when a health risk has been found. The notifications are sent to all EEA border posts in order to reinforce controls and to ensure that the rejected product does not re-enter the EU through another border post.

Any information related to the safety of food and feed products which has not been communicated as an alert or an information notification, but which is judged interesting for the control authorities, is transmitted to the members under the heading ‘News’.
The Commission must inform a non-member of RASFF (third countries) if a product subject to a notification has been exported to that country or when a product originating from that country has been the subject of a notification. In this way, the country can take corrective measures and thus avoid the same problem in the future.

The structure of the system comprises a set of clearly identified contact points in the Commission and in all RASFF member organisations, which exchange information clearly and rapidly.
RASFF members have a **round-the-clock service** to ensure that urgent notifications are sent, received and responded to in the shortest time possible.

The system does not aim to ‘name and shame’ businesses, but strikes a balance between openness and protection of commercial information. Therefore, while the competent authority is informed of the trade names and the identity of individual companies, this information is not released to the general public. Nonetheless, a RASFF notification implies that measures have been, or are being, taken and, thus, that consumers are being protected from the potential threat. Where the protection of human health requires greater transparency, Member States and the Commission take action to communicate the necessary information to consumers on a case-by-case basis.
It was an incident concerning oranges that prompted the EU Member States to set up a system to inform each other in cases of a risk to human health following food-related problems. The event sparked widespread panic across Europe, and beyond, as it was found to be the result of political terrorism.
Orange terrorism

It was 1978 in Maastricht (the Netherlands) and small, silver-coloured globules – later identified as mercury – had been found in oranges from Israel. Dutch health officials began a nationwide search and a week later, 25 oranges from Israel were discovered to have been injected with mercury. More were found in nine towns in what was then West Germany.

An extremist group calling itself the Arab Revolutionary Army-Palestine Command claimed it had doctored the fruit to disrupt Israel’s economy. The economic impact of the incident was clear in West Germany, which annually imported 140 million tonnes of citrus products from Israel, halting all sales of oranges while the fruit was checked. In addition, it provoked large-scale concerns among the general public about the safety of their food.

As a result of this incident, the Member States’ food control authorities met on 13 February 1979 and proposed the idea to construct a rapid alert system. The authorities did not want to wait until formal legislation could be implemented and so Belgium, Denmark, France, Germany, Ireland, Italy, Luxembourg, the Netherlands and the United Kingdom came to a ‘gentlemen’s agreement’ to set up a system. The aim of this tool was to inform each other in cases where there was a risk to human health due to a problem concerning food.

The idea was to focus on cases where there was genuine concern that consumers’ health could be harmed. RASFF’s founders wanted the system to be able to tackle any issue that arose and have a level of flexibility and freedom from formalised rules.

“In the beginning, the system was really small. There were only one or two people from the Member States and three from the Commission; we were an efficient team.”

– Olga Demine, previous member of the RASFF team, European Commission (1979–1996)
Creating the system

What did this mean in practice? For the members of the new system, it meant they needed a national authority competent for food safety. Rules and standards governing food products were also a prerequisite to the system. How could one know what should be subject to a notification if one did not know what was safe and what was not? This also implied that the creation of laboratories for checking and controlling food products.

In addition, they had to set up contact points both at national level in the Member States and in the European Commission, responsible for transmitting and receiving notifications to and from the Commission.
30 years ago, when an inspector took samples for analysis and a health risk was found, he could voluntarily choose to take measures. His actions were independent and isolated; information was not always sent to his colleagues or to any centralised administration for taking wider measures. Therefore, in order to implement RASFF, Member States had to quickly set up such a system to collect information from the field and to communicate this information between them.

Some countries had added internal challenges to overcome in the effort to establish a workable system. For example, in some Member States a range of administrative levels operates from national to federal state and so on, with regions granted varying levels of competence and independence. As a result, acceptance had to be spread among all levels.

In 1979 spoiled calamari prompted the first notification. The European Commission called the contact points in each Member State to tell them about the issue and what measures had been taken to protect consumers. Because all communication was done by telephone, no written record has survived giving more information.
RASFF in its infancy

At the beginning, RASFF was used as a short-term surveillance and alarm system to cope with serious and immediate dangers – in other words, it only covered products, destined for consumers, which posed a serious and immediate threat to their health. The definition of what was a ‘serious and immediate danger’ was not covered by the legislation and was intentionally kept flexible. In this way, the system was ready to deal with any issues that arose.

At that time, the rapid alert system’s main objective was to inform the competent authorities in order to protect the consumer, but also to limit unnecessary commercial damage or barriers to trade. This has to be understood in the context of how the European Commission was organised in those days: a Directorate-General dedicated to health and consumers was yet to be created and preparations for the creation of the internal market were getting under way.
Food safety on the ground

An example of RASFF in practice in the early days: on 15 June 1981 at 16:34 the UK Department of Health called the European Commission to say that they had been informed by the World Health Organization that the Swiss health authorities had found the bacterium *Clostridium botulinum type E* in screw-top glass jars containing white bean curd with chilli manufactured in Hong Kong. *Clostridium botulinum* produces the neurotoxin botulin, which causes muscular paralysis. The Swiss authorities had ordered the removal of this product from their domestic market. By 17:10 that day, the contact points in the Netherlands, France, Luxembourg and Ireland had been informed. However, because all communication was done by telephone, information could only be passed on if someone was in the office to take the call. Thus, the contact points for the other countries could only be contacted on the following day.

Early communications

A ‘red telephone’ – i.e. a direct line installed in the relevant ‘Food Products’ service at the Commission – as well as fax’s ‘ancestor’, the telex link, were used by the contact point in each Member State to send information directly to the Commission. The Commission then evaluated the information received and was able to automatically transmit the message to the other contact points. The way notifications were dealt with varied considerably across Member States, owing to differences in the responsibilities, powers and structures of the authorities responsible.

In 1980, telex began to be used as the main method of communication. It later became possible to electronically store telexes, which eventually turned into a network reducing time to retype messages and send and receive information. Standard forms were used to serve as models for data to be communicated, thus facilitating the information exchange.
Fraud with wine

In 1985, the organic compound diethylene glycol (DEG) – known as ‘anti-freeze’ – was added by some Austrian producers of white wines to improve their ‘mouth feel’. Glycols occur naturally in wine and make the wine seem thicker and droplets mount up the glass. The DEG appears to have been added to make the wines sweeter, upgrading the dry to sweet wines – it is more costly to produce sweet wines and the addition of sugar is easier to detect. Fortunately, it turned out that the substance's acute toxicity is rather low.

This fraud caused severe economic damage lasting for several years to all Austrian wine producers – both those that had been adulterating the wine and the rest of the trade. The Austrian authorities, although not yet part of the EU, actively cooperated to identify and trace the source of the various brands of wine. Millions of litres of wine were involved.

The information-handling problem was enormous and significantly improved through RASFF. Almost 10 000 different labels were identified and because the details of each batch were transmitted to Brussels, they then had to be retransmitted to the Member States. This led to an important improvement in the retransmission system for data by telex. The incoming telexes were stored on punched tape so that they could be retransmitted on an automatic basis after verification.

A much more serious case of wine adulteration occurred in 1986 when 23 people died in Italy because a fraudulent Italian winemaker added toxic methanol to increase the alcohol content of his wine. The case was reported late in the evening and the immediate retransmission through the rapid alert system enabled the French authorities to seize quantities of this wine the next day thus avoiding further deaths.
Mitigating the impact of Chernobyl

On 26 April 1986, the Chernobyl disaster occurred – an accident at the Chernobyl Nuclear Power Plant in Ukraine, then part of the Soviet Union. It resulted in a severe release of radioactivity into the environment. Two people died in the initial steam explosion, but most of the estimated 4,000 deaths from the accident were attributed to radiation.

On 30 April, the Danish contact point sent a telex using RASFF saying that crops had been contaminated by a fall-out cloud spreading from Chernobyl. The same day, the RASFF officer at the European Commission announced an alert and called all Member State experts to Brussels for a meeting on 5 May.

In order to take control of the situation and provide a legal basis for action, the Commission drafted a proposal for a temporary ban on food imports from Eastern Europe directly affected by the disaster, which was agreed on 12 May by the Council. This was followed by a regulation setting limits for radioactive contamination of foods to enable the internal market to function and to establish conditions for the resumption of imports.

The introduction of the improved systems of data transmission in 1985 was absolutely vital to the handling of the alert following the Chernobyl incident. In this case the system was operated on a continuous basis enabling up-to-the-minute data to be circulated between the Member States. Information was also exchanged with countries in the former Eastern bloc and with countries of the European Free Trade Association (EFTA). Many people were involved in gathering the information from all over Europe.
A flexible system growing in strength

In the late 1980s, the food network remained characterised by its great flexibility. Over the years it developed cohesion between the different contact points and a feeling of responsibility, which would eventually result in the exchanges becoming more frequent. The contacts were also used for bilateral exchanges when there was no need for a formal RASFF notification. The network allowed for a collegial cooperation, which went well beyond the strict implementation of a legal act and provided opportunities for mutual help.

The number of notifications slowly rose as awareness and understanding of the process grew among officials in various Ministries. Nonetheless, in 1992, notifications were still at the 10-per-year mark, and the European Commission continued to encourage Member States to inform on all food-related issues.

1992 saw the creation of the EU internal market. Previously, if a food-safety incident was local, there was no need to send a notification. However, with the new internal market, information had to be shared so that other national control services could take action.
In 1992, the rapid alert system for food was included for the first time in the Directive on General Product Safety (Council Directive 92/59/EEC) – together with the rapid alert system for non-food products (now called RAPEX). However, it did not fulfil the parameters of what food needed. In particular, it only focused on a product’s manufacturing, whereas food can ‘go bad’ at any stage from production to processing to delivery. There was reluctance to formalise rules concerning food with very strict legislation as it was feared that if food was harmonised, diversity would be lost – a vital quality of the EU.

Enter the fax

In 1992, the fax replaced telex as the source of transmission. This had a significant impact on the system’s efficiency and effectiveness: when tracing products with a potential health risk, the ability to describe and identify the label is crucial. In the pre-fax era, users had to write lengthy descriptions of the packaging and labels. The introduction of the fax, in contrast, meant that it was now possible to send a visual image of the label itself, facilitating identification.

“The introduction of the telex was a major innovation and laid the groundwork for the fax and the fax network, which made our job much easier.”

Many events affected the growth and development of RASFF in the mid-1990s. The EU faced several crises, which shaped and changed the functioning of not only RASFF but also the European Commission itself. These developments helped to strengthen RASFF, transforming it into an even stronger tool to keep citizens safe and healthy.
BSE and the restructuring of the European Commission

One of the most notable challenges the EU faced during this period was the Bovine Spongiform Encephalopathy (BSE) – or Mad Cow Disease – crisis that struck the UK in 1995. At that time, as RASFF did not cover live animals or feed, it was not directly involved in the crisis. Nonetheless, BSE had a profound impact on the European Commission and was one cause of its restructuring. The reorganisation of the Commission allowed RASFF to become what it is today as all services dealing with consumer health and safety were brought together in 1997 in a newly created Directorate-General, with the less ‘catchy’ name of ‘DG24’, only to be renamed two years later ‘DG Health and Consumer Protection’ – known to insiders as DG SANCO.

The newly born DG SANCO was also given the task of verifying that the rapidly growing body of food safety legislation was properly implemented. It set up a new department with inspectors, the Ireland-based Food and Veterinary Office (FVO).

Border hopping

While RASFF works to keep citizens safe from contaminated products from within the EU, it equally works to keep contaminated products from entering the EU from third countries. It has developed a system of border notifications so that once a product is rejected at one border post, all other border posts are aware of the situation.

This was the case when a ship containing contaminated food arrived in Germany. The German authorities inspected the contents, discovered the contamination and denied the cargo’s entry. The German authorities immediately notified RASFF and a border alert was sent out. This is why, two weeks later, when the same ship entered a port in Italy, inspectors there turned it away immediately, preventing contaminated goods from entering the EU and ensuring the safety of European citizens.
Better communication, a more effective RASFF

During the late 1990s, as communications improved, so did the system. Member States became more and more acquainted with its functioning and grasped its benefits better.

The national contact points allowed RASFF to have a single dedicated organisation to contact in case of a serious RASFF alert, greatly reducing the time needed to address such alerts. National contact points, in particular, were a key development for RASFF during this era.

The case of pistachios

In 1998, inspectors discovered high amounts of aflatoxins in pistachios imported from Iran. Aflatoxins are toxins produced by a naturally occurring, yet highly dangerous, form of fungus that can infect food and cause great harm if ingested by humans.

RASFF was informed that importers were bringing contaminated pistachios into the EU. Once aware of the situation it quickly sent out a notification to all of its members informing them of the situation. Incoming consignments of nuts were analysed and prevented from entering the EU if they contained contaminated pistachios.

To get to the root of the issues, Food and Veterinary Office inspectors then went to Iran to investigate the exact source of the contamination. The inspectors presented their report to the Commission so it could decide on the best course of action.

Based on this report, the Commission placed an immediate three-month ban on the imports of Iranian pistachio nuts. After the three months, the Commission had prepared a legal measure and imports were resumed, provided that all nuts underwent a double-check process on arrival at the EU border and were certified as being aflatoxin-free. This measure is still in place today.
Dioxins in Belgium

One of the key crises RASFF dealt with during this period of growth was the 1999 dioxins crisis in Belgium. Chickens in parts of Belgium and the Netherlands started falling ill and dying. It was eventually discovered that these animals had been infected by dioxins through contaminated feed. RASFF was only made aware of the issues relatively late in the crisis. This was due to the fact that at that time, feed was not covered by the system. As such, RASFF was only notified when the dioxins were discovered in the meat and not when the animals were becoming sick. As a result the scope of the problem was not fully understood until the crisis had spread and some 6 million chickens were culled as a result.

This crisis served as a turning point for RASFF. It showed the lack of understanding among Member States of RASFF’s role and function and was a real wake-up call for the RASFF team. To remedy this, the European Commission boosted its efforts to communicate with Member States and their contact points and created better procedures explaining when and how to notify RASFF. They organised more training sessions and worked to promote the visibility of RASFF. These efforts and new procedures greatly improved the functioning of RASFF and established a better, more concrete method of operation.

The crisis was not only a turning point for RASFF, but also for the EU’s entire food safety policy. Work soon started on a Commission’s White Paper on food safety that would prepare a whole new ‘safety of the food chain’ approach for the new millennium. A new body of legislation – of which some key acts are mentioned below – would be created, implementing the now well-known EU food safety catchphrase ‘from farm to fork’.

“The Commission did a lot to further mutual confidence by having frequent meetings with the contact points.”

– Klaus Holch, Head of Unit of the Danish contact point (1979–1989)
The shift away from the fax

Though the use of fax had been revolutionary, it had become cumbersome by 2000. Fridays for the RASFF team at the Commission would usually be spent in front of the fax machine sending out notifications. Each notification comprising around 10 pages needed to be communicated to over 60 contact points. Given the sheer amount of pages that needed to be transmitted across Europe, each notification took at least six or seven hours to be sent to all participants.

Therefore, in 2000, RASFF made the shift from fax to CIRCA, an email-based transmission system. This new technology allows notifications to be transmitted quickly and to a greater number of contacts. Fridays are no longer spent in front of the fax machines, allowing the RASFF team to devote more time to the assessment of the received notifications.

MPA in pork

In 2002, Dutch farmers realised that their pigs were giving birth to fewer piglets and some were becoming ill. Farmers eventually realised that medroxyprogesterone (MPA), a residue of contraceptive pills for women, had somehow ended up in pig feed produced in Belgium, preventing female pigs from becoming pregnant and making others sick.

RASFF was notified as soon as the problem was discovered. A notification was then promptly sent out to all members, informing them of the contaminated pork so they could take action in their countries and ensure no citizens consumed contaminated meat.

Unlike the Belgian dioxin crisis only a few years earlier, national authorities – in this case the Dutch – contacted RASFF immediately about the issue at hand. With early notification, RASFF was able to inform all Member States of the issue and help the national authorities contain the contaminated pork. Clearly Member State’s use of RASFF had grown, and they had developed greater confidence in the system.

“The relationship between RASFF and the FVO is growing. Information passes quickly between the two and RASFF keeps the FVO up-to-date on updates to the system.”

– Andrew Owen-Griffiths, FVO
RASFF and the Food and Veterinary Office (FVO): an important relationship

With the working relationships between RASFF and Member States growing in strength, RASFF became more important as an input to the FVO’s inspection programme. Working with information provided by RASFF about the risks that RASFF members had discovered allowed the FVO to better target its inspections and helped ensure a maximum level of protection and safety for European citizens.

RASFF alerts inform the FVO about food safety risks and which products are affected. This information allows the FVO to conduct thorough risk assessments to determine how serious each threat is and if a given risk needs to be properly inspected.

The FVO does not have endless resources, and using RASFF notifications together with other information sources allows it to determine what cases need to be investigated immediately. This means that the FVO’s resources can give priority to cases which pose a significant threat to the general public and deal with them quickly and efficiently, ensuring the public’s health and safety.

In addition to exchanging information, the RASFF team also trains and assists the FVO to ensure all inspectors are aware of recent updates and changes to the system. Such assistance is necessary to ensure that no notifications ‘fall through the cracks’ and are not properly dealt with. This interaction between RASFF and FVO is crucial. Findings from FVO inspections have also regularly led to RASFF notifications in which RASFF members provide information about further investigations and measures they have taken following the problems that were discovered by the FVO. Today, the FVO has developed a monitoring follow-up system to their inspection reports, to ensure that the threat has been completely eradicated and there are no additional issues to address.
FROM THE FOOD LAW TO THE HYGIENE PACKAGE
2002–2006

A legal basis for RASFF

The legal basis and formalised procedures for RASFF were laid down in 2002 under Regulation (EC) Nº 178/2002, which laid down the general principles and requirements of food law, the procedures in matters of food safety and established the European Food Safety Authority (EFSA).

Previously a patchwork of rules had operated across the EU Member States. The food-safety crises of the 1990s showed that a simpler and more comprehensive EU-wide approach to food legislation was needed. The result was a new piece of ‘umbrella’ legislation known as the Food Law, which not only sets out the principles applying to food safety. It also lays down definitions, principles and obligations covering all stages of food and feed production and distribution. In particular, the Food Law specified when a RASFF notification is required.

It essentially consolidated tasks that RASFF had taken on itself on a voluntary basis – such as border rejections and informing third countries. Its ultimate goal was to improve EU food safety, ensure a high level of consumer protection and restore and maintain confidence in the EU food supply.

This period is essentially ‘bookended’ by two pieces of legislation that have a significant impact on RASFF: Regulation (EC) Nº 178/2002 – also known as the Food Law – and the Hygiene Package.
Several of the significant incidents of the preceding years had originated in animal feed. The new approach also paid closer attention to the risks from contaminated feed. Thus, following the Commission’s overall ‘farm to fork’ policy, under the Food Law, feed products destined for food-producing animals were now subject to notification under RASFF.

In addition, the Food Law established EFSA as an independent source of scientific advice and communication on risks associated with the food chain. In close collaboration with national authorities and in open consultation with its stakeholders, EFSA provides independent scientific advice and clear communication on existing and emerging risks.

**RASFF on the rise**

In 2002, the number of notifications exceeded 3 000 – a rise of some 330% from the level in 1999 (698) and a near-doubling of the number in 2001 (1 567)! These increases were in part due to the growing awareness following the significant food safety crises of previous years, such as BSE and dioxins. In particular, the general public were more conscious of food safety issues, which motivated Member States to take more action.

At the time there were two types of notification: alert and information, with the latter by far outnumbering the former. 2004 saw the introduction of news notifications, which are a sort of advance notice of any information of which Member States should be aware as this information could potentially become the subject of a full notification in the future. These categories of notification enabled Member States to focus and prioritise action.
These numbers continued to grow, reaching 4,414 in 2003 and 5,562 in 2004 to 7,170 in 2005. After that, the number of notifications seems to have settled to about 7,000 per year. This pattern is shown in the figure.

One reason for the overall growth in notifications was the increasing understanding among Member States about what they need to notify. Member States realised that it was to their advantage to be actively involved in RASFF as it placed them all on a level playing field. Over time, the use of RASFF became routine, with increasingly formalised procedures.

In addition, 1 May 2004 saw 10 more countries join the EU, which meant 10 more Member States reporting on food safety issues. While the number of notifications transmitted by the newly joined countries was relatively low at the beginning, it quickly rose.

In 2003, weekly reports of RASFF notifications started to be released to the general public on the system’s website, with the aim of boosting the system’s transparency. In this way, food and feed business operators could ascertain whether any part of their supply chain was affected by a problem and could take the necessary precautions.

“Usage of the system has improved over time. There were significantly more notifications due, in large part, to Member States being more familiar with RASFF and better knowing how to use it.”

– Michael Winter, former member of the German contact point
Making imports safer: information provided to third countries

RASFF has informed third countries of problems with products originating from their territories since 2000, in order to prevent the problem detected recurring. The information is transmitted to third countries via the Commission Delegations. In 2008, for example, third countries were informed 2,342 times of a problem.

The system also informs third countries if a product notified through RASFF was exported to them. In 2008, such information was sent 586 times.

When a problem is detected, the Commission has a range of measures it can take depending on the nature of the problem. If the risk does not require urgent measures, it sends a letter or organises a meeting with the mission or embassy of the country concerned. The third country can then take measures: for example, it may ‘delist an establishment’, which means that it is removed from the list of approved companies that fully comply with EU legislation requirements and can export to the EU. The third country might also suspend exports, strengthen controls or change the rules. In addition, Member States intensify checks at import.

When the guarantees received are not sufficient or when immediate measures are required, a decision may be made to take measures such as prohibition of import, systematic control at the EU borders, mandatory presentation of health certificates, etc.

The Commission can also send a letter to a Member State when it wants to draw its attention to a recurrent problem notified through RASFF, requesting that specific guarantees are given that the problem is being or has been dealt with.
Monitoring progress over time

RASFF helps to identify where progress has been made and where problems still persist. For example, in 2003, RASFF received a total of 763 notifications on aflatoxins – a highly carcinogenic substance. This number was more than twice the 2002 levels (288). Most of the notifications concerned pistachios (508, almost exclusively originating from Iran). The number of notifications on aflatoxins in pistachios from Iran stayed at the same high level until 2006, when it dropped significantly to 276 and again in 2007, falling to 126. Nonetheless, the quantity of pistachio imports for the period 2005–07 remained stable, indicating that the situation has improved. Monitoring needs to continue, however, because the problem is rather seasonal and a bad harvest could easily make things worse again.

Stronger rules

2006 marked a significant milestone for food safety in the EU, with the entry into application of a large body of food and feed legislation. The Food ‘Hygiene Package’, the Regulation on microbiological criteria for foodstuffs, the Regulation on official feed and food controls, and the Feed Hygiene Regulation, aim to tighten and harmonise EU food safety measures. These laws apply at every point in the food chain, in line with the EU’s ‘farm to fork’ approach.
A key aspect of the new legislation was that all food and feed operators, from farmers and processors to retailers and caterers, had primary responsibility for ensuring that food put on the EU market met the required safety standards. It also included important new requirements on the traceability of food and feed and for business operators to report risks they had discovered in the products they placed on the market.

In particular, as a result of the Feed Hygiene Regulation, the scope of RASFF was extended from feed for food producing animals to all types of commercially produced feed and the risks are extended to animal health and environmental risks resulting from feed.

The Regulation on official feed and food controls was relevant to RASFF because the information sent through RASFF is the result of the control actions carried out by the Member States. The harmonisation of the control systems in Member States should benefit the degree in which the RASFF notifications from one Member State can be used as an input to the controls carried out by another Member State.

**Aflatoxins in dog food from the USA**

In early 2006, RASFF was alerted by the US Food and Drug Administration that dog food was recalled in the USA because of high levels of aflatoxins. The presence of high levels of aflatoxins can cause severe liver damage leading to acute aflatoxicosis. The cause was the use of highly contaminated maize for the production of pet food. In the USA, 23 dogs died and another 18 fell ill due to dog food contaminated by aflatoxins. The levels found in pet food causing death and serious illness were in the range of 200–250 μg/kg total aflatoxins and the levels in the range of 100 μg/kg were reported to result in less severe dog health problems. In the EU, a regulatory maximum level has been established for maize used for the production of animal feed of 20 μg/kg aflatoxin B1 and a maximum level of 10 μg/kg aflatoxin B1 in pet food (the level of aflatoxin B1 is about 50-80% of the total aflatoxin).

The contaminated dog food was exported to more than 10 EU countries and competent authorities in the EU undertook rapid action through RASFF to trace and detain the possibly contaminated consignments of pet food originating from the involved company in the USA. In Europe, no cases of serious illness or deaths of pets were reported.
On 1 January 2007, RASFF welcomed two new members, Romania and Bulgaria, who joined the EU. In 2009, Switzerland became a partial member. RASFF now counts 31 countries and 3 organisations as members and is still open to expansion to other neighbouring countries.

Together with the new members, RASFF is contributing more to food and feed safety in Europe, and also internationally. Recently, it has started collaborating with international partners and has worked to address food and feed crises on a global scale. What is clear is that RASFF has entered into a new, worldwide phase.

**Melamine: a global crisis**

It was also in 2007 that the world faced one of the biggest food safety crises to date. The USA notified RASFF that melamine had been found in pet food imported from China. Melamine increases nitrogen levels in pet food, giving the false appearance that it is of higher quality. However, melamine is toxic and can cause numerous health issues such as cancer and respiratory problems. Only a few cases of contaminated pet food appeared in the EU but more were discovered in feed for food-producing animals. Nonetheless, the problem was merely heralding the crisis that broke out full-scale in 2008.

Later in 2008, it was found that milk and infant food originating from China were contaminated with melamine. As a result, six infants died in China and...
over 300,000 people became ill. Luckily, this global crisis had a much smaller impact on the EU as it is illegal to import milk from China.

Though Europe was only marginally affected by the melamine crisis, globalisation meant that products containing contaminated milk ingredients were shipped around the world. Due to the global scope of the problem, the EU and RASFF needed to collaborate with third countries as well as with regional networks and the World Health Organization (WHO) alert system, the International Food Safety Authorities Network (INFOSAN).

This was the first time such a level of international cooperation existed in terms of tackling a food safety crisis. Since the melamine crisis was global, INFOSAN took the lead role, gathering information from amongst others China, the Food and Drug Administration of the USA and RASFF, to send the most accurate and up-to-date information to all INFOSAN members across the globe.

Launched in 2004, INFOSAN – the International Food Safety Authorities Network – is an information network, which disseminates information about food safety issues. INFOSAN has contacts, or national focal points, in over 160 member countries that receive information from the WHO in the form of INFOSAN notes about relevant food safety issues and distribute it to all relevant ministries in their country. These INFOSAN notes are sent 6-12 times a year and contain information about everything from the food safety implications of a disease outbreak to food allergies.

In addition, national contact points are to inform INFOSAN when there is an emergency situation regarding food contamination and food-borne disease with international implications. Contact points ensure that appropriate measures are taken at national level when there is an international food safety threat.

RASFF works with INFOSAN and the two share information, for now, only on a case-by-case basis. But RASFF has a great deal of experience in food safety emergencies that INFOSAN could use to make the most effective international food safety tool. A closer cooperation in the future seems only natural.

“INFOSAN and RASFF work well together. We are making INFOSAN better through the use of RASFF’s data and international training exercises.”

– Jørgen Schlundt, WHO INFOSAN
A stronger relationship with Member States

As highlighted through previous examples, some Member States were somewhat reluctant to send notifications about contamination or other issues in their territory. There was a fear of receiving negative publicity and losing consumer confidence in national products.

However, over time and with better training and communication between Member States and the European Commission, trust in RASFF has grown exponentially. Member States are now much more willing to report problems to RASFF and are no longer afraid of receiving negative feedback from consumers. With more trust in the system, RASFF has become a more effective tool and citizens benefit from the higher level of safety.

Since their creation, national contact points have found their roles within RASFF, becoming an effective and vital tool for the efficacy of the system. In addition, they have streamlined their processes to guarantee the speed of transmitting notifications to the relevant bodies. Given the growing numbers of notifications, such harmonised procedures are evidently necessary.

Moving with the times

The rising number of notifications means there is a pressing need to keep abreast of technological advances to ensure that all alerts are properly addressed and stored. RASFF’s current system, CIRCA, is a document-based database where users can log in and see all of the new notifications that have been posted since they last checked. This system worked well when there were significantly fewer notifications.

But now, with notifications numbering in the thousands, it is becoming harder to tackle the massive amount of incoming notifications and follow-up and ensure all notifications are properly addressed.

RASFF is currently developing a new technology to present original notifications and their follow-up in an integrated way, so that Member States have a better overview of the state of business of any notification at any given time. Especially with bigger
food crises this is not a luxury when a notification can generate hundreds of follow-up notifications. This new online platform is designed to be more interactive and easier to use.

In addition, to manage information provided to non-RASFF member countries RASFF Window was developed. Prior to its creation, all RASFF communication with non-RASFF member countries went through the EC delegation in each country. It would often take days to transmit notifications through the delegations to their host countries. RASFF Window gives non-RASFF member countries limited access to a database of notifications. The specific login given for each non-RASFF member country only allows officials from that country to see the RASFF notifications relevant to them. RASFF Window is updated daily and member countries and non-RASFF member countries alike use the system that includes a powerful search tool to select notifications on the basis of numerous parameters.

These new tools will bring RASFF up-to-date with cutting-edge technology and they are indispensable if RASFF is to be a source of global inspiration.
Members of RASFF
Partial RASFF members
Countries using RASFF window (9 June 2009)
Countries participating in RASFF seminar within the Better Training for Safer Food Programme
A world leader

RASFF has clearly proved itself to be an effective tool for keeping food and feed safe in Europe. Now it is taking the first steps towards working on a global scale. RASFF has approached the WHO about working together with INFOSAN, to create a strong global system to ensure food safety and thus to protect people across the globe.

Though the two systems work in different ways, INFOSAN has the opportunity to call on the experience and knowledge RASFF has gained over the past 30 years. With INFOSAN having taken the lead on the global scale, facing this formidable challenge, it can draw on the experience of RASFF for support and training.

As such, the RASFF team has headed up several training sessions organized under the framework of Better training for Safer Food Programme of the European Commission for different regional groups, including the Association of Southeast Asian Nations (ASEAN) and Mercado Común del Sur (MERCOSUR) as well as in Africa and non-EU European countries. It is helping these organisations develop their own regional alert systems based on the RASFF model. This will allow regional groups to better liaise with INFOSAN and RASFF when global crises occur as well as keeping their citizens safer on a day-to-day basis.

Creating effective regional systems has not always been easy. Experts sent by the RASFF team to help train regional authorities are faced with a very difficult task. Often third countries have none of the needed structures to implement an effective alert system. This problem is only compounded by mistrust between members of regional groups who may be suspicious of their neighbours and reluctant to share information about food safety issues in their territory.

Nevertheless, RASFF experts are making progress, training regional alert teams and supporting regional alert projects in their initial phases.

“Whether it is in the context of INFOSAN or through regional training sessions, the future of RASFF is international.”

Easing business operators’ fears

Food and feed business operators are a key part of making RASFF a successful tool. However, many operators are reluctant to work with the system. They may believe that if their product is reported as being unsafe for humans, the public will develop a negative view of their company. They thus may stop buying not only the contaminated product, but also any product made by the company.

However, the opposite is true – RASFF can help promote consumer trust. Its public notifications inform the general public about the safety of products. If a producer notifies the authority as soon as there is a problem, the problem can be contained and consumers kept safe. Citizens are more likely to trust a company that is honest and reports straight away any and all issues that could affect their health.

In addition, RASFF needs the help and information from industry to be as effective as possible. Such information is also needed to ensure the ability to trace everywhere a contaminated product has been – from the farm, to the factory, to the processing plant, to the store. When food and feed business operators cooperate with RASFF, authorities are able to track much more easily where contaminated products have been sent, allowing vendors to take bad products off the shelves sooner and keeping citizens safer.

There is still work to be done to gain food and feed business operators' trust, but already significant progress has been made in this area. Operators are increasingly willing to report unsafe products themselves. At least 200 notifications a year were reported by food and feed business operators themselves and this number is increasing.
Looking to the future

RASFF has come a long way since its inception in 1979. The number of notifications has grown exponentially and the system continues to expand into new areas and parts of the world. While still in its early stages, its relationship with INFOSAN has enormous potential to grow given the global dimension of food safety.

On a more practical level, RASFF is working on setting its practices and implementing rules into law. The Commission is currently drafting legislation to formalise much of RASFF’s day-to-day work. It is preparing legislation and presenting information to better explain the system: what is a notification, how to make it and to whom it should be sent. The planned legislation also includes guidelines for RASFF members, focusing on how they use and work with RASFF. Publication of these detailed procedures will make the work of RASFF more transparent than ever. Furthermore, in this special year for RASFF, the European Commission is opening a brand new RASFF Portal, giving citizens access to a searchable RASFF database, based on the existing RASFF Window.

RASFF’s first objective is to limit the number of contaminated goods in every member country and to reduce the number of border rejections. But the ultimate goal for RASFF, as an integral part of the EU food safety system, is to be ready and able to keep citizens safe in Europe but also in the rest of the world.
### Where to find more information

<table>
<thead>
<tr>
<th>Organization</th>
<th>Website</th>
</tr>
</thead>
<tbody>
<tr>
<td>RASFF Portal</td>
<td><a href="http://ec.europa.eu/rasff">http://ec.europa.eu/rasff</a></td>
</tr>
<tr>
<td>Food and feed safety in the EU</td>
<td><a href="http://ec.europa.eu/food">http://ec.europa.eu/food</a></td>
</tr>
<tr>
<td>EFSA</td>
<td><a href="http://www.efsa.europa.eu">http://www.efsa.europa.eu</a></td>
</tr>
<tr>
<td>EFTA Surveillance Authority</td>
<td><a href="http://www.eftasurv.int">http://www.eftasurv.int</a></td>
</tr>
<tr>
<td>FVO</td>
<td><a href="http://ec.europa.eu/food/fvo">http://ec.europa.eu/food/fvo</a></td>
</tr>
</tbody>
</table>
How to obtain EU publications

Our priced publications are available from EU Bookshop (http://bookshop.europa.eu), where you can place an order with the sales agent of your choice. The Publications Office has a worldwide network of sales agents. You can obtain their contact details by sending a fax to (352) 29 29-42758.