


Procedure file

Basic information	
COD - Ordinary legislative procedure (ex-codecision procedure) Directive 1988/0169A(COD)	Procedure completed
Foods and food ingredients treated with ionising radiation. Framework Directive	
Subject 3.10.10 Foodstuffs, foodstuffs legislation 4.60.04.04 Food safety	

Key players			
European Parliament	Former committee responsible		
	ENVI Environment, Public Health and Consumer Protection		27/07/1994
		V BLOCH VON BLOTTNITZ Undine-Uta	
Council of the European Union	Council configuration	Meeting	Date
	General Affairs	2158	25/01/1999
	Social Affairs	2081	07/04/1998
	Energy	2035	27/10/1997
	Competitiveness (Internal Market, Industry, Research and Space)	2007	21/05/1997

Key events			
27/07/1989	Committee referral announced in Parliament, 1st reading		
25/09/1989	Vote in committee, 1st reading		
25/09/1989	Committee report tabled for plenary, 1st reading	A3-0029/1989	
10/10/1989	Debate in Parliament		
11/10/1989	Decision by Parliament, 1st reading	T3-0083/1989	Summary
24/11/1993	Vote in committee, 1st reading		
02/12/1993	Decision by Parliament, 1st reading	T3-0683/1993	Summary
06/11/1997	Committee referral announced in Parliament, 2nd reading		
03/02/1998	Vote in committee, 2nd reading		Summary
17/02/1998	Debate in Parliament		Summary
18/02/1998	Decision by Parliament, 2nd reading	T4-0077/1998	Summary
07/04/1998	Parliament's amendments rejected by Council		
15/10/1998	Formal meeting of Conciliation		

	Committee		
08/12/1998	Final decision by Conciliation Committee		Summary
25/01/1999	Decision by Council, 3rd reading		
27/01/1999	Debate in Parliament		
28/01/1999	Decision by Parliament, 3rd reading	T4-0051/1999	Summary
22/02/1999	Final act signed		
22/02/1999	End of procedure in Parliament		
13/03/1999	Final act published in Official Journal		

Technical information

Procedure reference	1988/0169A(COD)
Procedure type	COD - Ordinary legislative procedure (ex-codecision procedure)
Procedure subtype	Legislation
Legislative instrument	Directive
Legal basis	EC before Amsterdam E 100A
Stage reached in procedure	Procedure completed
Committee dossier	CODE/4/10003

Documentation gateway

Legislative proposal	COM(1988)0654 OJ C 336 30.12.1988, p. 0007	02/12/1988	EC	Summary
Economic and Social Committee: opinion, report	CES0678/1989 OJ C 194 31.07.1989, p. 0014	31/05/1989	ESC	
Committee report tabled for plenary, 1st reading/single reading	A3-0029/1989 OJ C 291 20.11.1989, p. 0006	25/09/1989	EP	
Text adopted by Parliament, 1st reading/single reading	T3-0083/1989 OJ C 291 20.11.1989, p. 0038-0067	11/10/1989	EP	Summary
Modified legislative proposal	COM(1989)0576 OJ C 303 02.12.1989, p. 0015	15/11/1989	EC	Summary
Reconsultation	COM(1993)0570	10/11/1993	EC	
Committee final report tabled for plenary, 1st reading/single reading	A3-0365/1993 OJ C 342 20.12.1993, p. 0003	24/11/1993	EP	
Text adopted by Parliament confirming position adopted at 1st reading	T3-0683/1993 OJ C 342 20.12.1993, p. 0015-0033	02/12/1993	EP	Summary
Committee draft report	PE207.220	01/03/1994	EP	
Council position	09389/1/1997 OJ C 389 22.12.1997, p. 0036	27/10/1997	CSL	Summary
Commission communication on Council's position	SEC(1997)2043	04/11/1997	EC	Summary
Committee draft report	PE225.058	18/12/1997	EP	

Committee recommendation tabled for plenary, 2nd reading	A4-0042/1998 OJ C 080 16.03.1998, p. 0005	03/02/1998	EP	
Text adopted by Parliament, 2nd reading	T4-0077/1998 OJ C 080 16.03.1998, p. 0084-0130	18/02/1998	EP	Summary
Commission opinion on Parliament's position at 2nd reading	COM(1998)0188	19/03/1998	EC	Summary
Joint text approved by Conciliation Committee co-chairs	3631/1998	09/12/1998	CSL/EP	
Committee draft report	PE225.318	15/12/1998	EP	
Report tabled for plenary by Parliament delegation to Conciliation Committee, 3rd reading	A4-0008/1999 OJ C 128 07.05.1999, p. 0002	20/01/1999	EP	
Text adopted by Parliament, 3rd reading	T4-0051/1999 OJ C 128 07.05.1999, p. 0014-0066	28/01/1999	EP	Summary
Follow-up document	COM(2002)0549	09/10/2002	EC	Summary
Follow-up document	COM(2004)0069	25/02/2004	EC	Summary
Follow-up document	C(2009)7395	30/09/2009	EC	
Follow-up document	COM(2011)0359	27/06/2011	EC	Summary
Follow-up document	COM(2012)0016	26/01/2012	EC	Summary
Follow-up document	COM(2012)0017	26/01/2012	EC	Summary
Follow-up document	COM(2012)0659	14/11/2012	EC	Summary
Follow-up document	COM(2014)0052	04/02/2014	EC	Summary
Follow-up document	COM(2015)0069	25/02/2015	EC	Summary
Follow-up document	COM(2016)0738	25/11/2016	EC	Summary
Follow-up document	COM(2019)0454	08/10/2019	EC	Summary
Follow-up document	COM(2021)0079	24/02/2021	EC	

Additional information

European Commission

[EUR-Lex](#)

Final act

[Directive 1999/2](#)
[OJ L 066 13.03.1999, p. 0016](#) Summary

Foods and food ingredients treated with ionising radiation. Framework Directive

This proposal for a Council Directive concerns the control of irradiation of foodstuffs. The rationale behind the proposed legislation is twofold: to guarantee a high level of protection to the consumer and to ensure the free circulation of irradiated foods. As food irradiation is already permitted in some Member States, the Commission's proposal aims to ensure high standards throughout the EC and that differing national rules do not obstruct trade. The main aspects of the proposal are as follows : - restriction of irradiation to a limited list of foodstuffs. (in all the cases, there is a specific justification for permitting irradiation : e.g. to decrease the use of chemicals and reduce the risk of disease. - specification of maximum doses permitted and of radiation sources which may be used. - provisions for the labelling of irradiated foods at the

wholesale stage. - requirements for the registration of irradiation facilities. Third countries exporting irradiated foods to the EC would have to ensure their irradiation facilities complied with similar provisions. - simplified procedures under which the Directive may be modified to take account of technical progress. ?

Foods and food ingredients treated with ionising radiation. Framework Directive

The EP delivered its Opinion on the proposal at its first October 1989 plenary session. The EP voted 263 to 66 with 10 abstentions to reject the Commission's proposal. It proposed no less than 36 amendments with the result that the proposal, as it now stands, would only authorise the process for spices, condiments and dried aromatic plants.?

Foods and food ingredients treated with ionising radiation. Framework Directive

This modified proposal for a Council Directive on the approximation of Member States' laws concerning foods and food ingredients treated with ionising radiation takes into account a number of the amendments put forward by the EP. The list of products for which the treatment would be permitted has been reduced in this amended text. Furthermore, certain EP amendments, in particular that relating to public access to scientific data, have been taken on board. The Commission did not accept the EP amendments restricting the scope of the Committee procedure.?

Foods and food ingredients treated with ionising radiation. Framework Directive

The Commission proposal was divided into two parts, giving rise to two common positions intended to be adopted simultaneously: - a framework Directive laying down general provisions, - an implementing Directive establishing, without prejudice to the final positive list, an initial positive list of foods and food ingredients that may be treated with ionizing radiation. The texts adopted take account of most of the 35 amendments tabled at first reading. The common position on the framework Directive stipulates that the Commission will, by 31 December 2000 at the latest, submit a proposal for the adoption of the final positive list, which will supplement the initial positive list. Pending adoption of the final positive list, Member States may: - if certain conditions are met, maintain or authorize the treatment of foods and food ingredients with ionizing radiation; - in compliance with the Treaty, maintain national bans both on irradiation in their territory and on the marketing of foods or food ingredients treated with ionizing radiation, provided that such foods or food ingredients are not contained in the initial positive list. The common position also makes provision for: - detailed labelling, with no exemption threshold for ionized ingredients used in compound ingredients included in finished products; - an obligation on the Member States to inform the Commission of checks carried out in irradiation facilities and at the product marketing stage; - the use of standardized reference methods to detect treatment with ionizing radiation. ?

Foods and food ingredients treated with ionising radiation. Framework Directive

The Commission supports the common position, which partially meets the objectives of its 1988 proposal. The fact that it has taken so long to reach this agreement can be put down to the difficulties involved in reconciling the contradictory legislation of the Member States and the delicate nature of the ionization process, which is often wrongly associated with the risk of a nuclear accident. ?

Foods and food ingredients treated with ionising radiation. Framework Directive

A report on long-awaited proposals concerning the irradiation of food was adopted by the Committee. The report (codecision, second reading) by Mrs Undine-Uta BLOCH VON BLOTTNITZ (Greens, D) amends two common positions established by the Council on Commission proposals for: 1. A framework directive on the approximation of the laws of the Member States concerning food and food ingredients treated with ionizing radiation. The directive will lay down conditions for the manufacture, marketing, import and - following an amendment adopted by the committee yesterday - analytical testing of irradiated foodstuffs. It also deals with the authorization of irradiation facilities and labelling; 2. An implementing directive on the establishment of a Community list of foods and food ingredients treated with ionizing radiation. Initially, the list contains only one category of food (dried aromatic herbs, spices and vegetable seasonings), where radiation can be used instead of fumigants which leave potentially toxic residues. The intention is to add other foods to the list over time. The original Commission proposal was made in 1988 and received a first reading (with amendments) in Parliament in 1989. Its aim is to harmonize national laws so as to create a level playing field in this area of the single market. At present, according to the rapporteur, food irradiation is a commercial practice in only three Member States (France, Belgium and the Netherlands), while Germany and Sweden ban it outright. Accepting that consumers may have cause for concern about food irradiation, the committee agreed that its sole purpose is to reduce food-borne disease, to retard or arrest decay and to rid food of organisms harmful to plants. However, opposing the common position, members did not accept that it could also be used to reduce loss of foodstuffs by premature ripening, germination or sprouting. Moreover, by 15 votes to 14 the committee insisted that food irradiation must take full account of health requirements and must not be used as a substitute for hygiene or health practices or good manufacturing or agricultural practice. By the same majority, it agreed that the international food irradiation (radura) symbol may be used to indicate the presence of irradiation in foodstuffs. It also decided, this time by 18 votes to 14, that food irradiation may only be authorized if it is essential to the consumer. The committee also wants greater involvement of Parliament under the codecision procedure (eg in connection with the inclusion of new foodstuffs in the approved list). Addressing the committee before the vote, Mr Jack CUNNINGHAM, UK Minister of Agriculture, Fisheries and Food and current President of the Agriculture Council, said that food irradiation technology could make a valuable contribution to public health through reducing contamination of food and the risk of food-borne illness. The measures proposed would ensure that stringent internationally recognized safeguards were in place over food irradiation.?

Foods and food ingredients treated with ionising radiation. Framework Directive

Commissioner Bjerregaard stated that she could accept almost none of Parliament's amendments. In particular she rejected Amendments Nos 1, 2 (in part), 5, 9, 11, 13, 14, 15, 16, 17, 18, 20, 21, 22, 26, 27, 28, 29, 30, 31, 32 and 33 and the first part of Amendments Nos 3, 4, 7 and 12.

Foods and food ingredients treated with ionising radiation. Framework Directive

Adopting the recommendation for second reading by Mrs Undine Bloch von Blottnitz (Green, D), Parliament amended the common position. In particular it asked to be consulted under the codecision procedure on any modification of the directive pursuant to Article 100a of the EC Treaty and on each addition of a foodstuff to the approved list. Parliament also called for: - ionizing radiation not to be used as a substitute for hygiene or health practices or good manufacturing or agricultural practice; - and for the directive to apply not only to manufacture, marketing and importation but also to analytical testing of foodstuffs treated with ionizing radiation. Other amendments by the rapporteur and the Greens advocating introduction of a logo or limiting authorization for radiation to cases where it was essential for the consumer were rejected by the plenary. ?

Foods and food ingredients treated with ionising radiation. Framework Directive

The Commission accepts the amendments which best reflect consumers' concerns and which clarify the text (reference to a positive Community list of foodstuffs and ingredients) and the amendment requiring treatment by irradiation not to be used instead of hygiene or health practices or good manufacturing or agricultural practice. The Commission cannot accept the amendments which: - require that Parliament be involved in the arrangements concerning the Commission's obligation to consult the Scientific Committee for Food; - deprive the Commission of the power to take decisions in the light of safeguard measures adopted by the Member States; - impose specific analytical test procedures for detection of food treated with ionizing radiation; - shorten the grace period for prohibition of irradiated foodstuffs not complying with the directive. ?

Foods and food ingredients treated with ionising radiation. Framework Directive

Long-awaited legislation on the irradiation of food was approved yesterday 8 December by the joint Parliament/Council Conciliation Committee. The full House is expected to adopt the text in January at about the same time as the Council. The aim is to harmonize national laws so as to create a level playing field in this area of the single market. At present, according to the rapporteur, Undine-Uta BLOCH VON BLOTTNITZ (Greens, D), food irradiation is a commercial practice in only three Member States (France, Belgium and the Netherlands), while Germany and Sweden have banned it. The original Commission proposal was made in 1988. Parliament held a first reading in 1989, but the second reading was held up until February this year pending agreement in Council on a common position. The final compromise texts incorporate much of the substance of the 14 second-reading amendments adopted by Parliament. The legislation adopted involves two texts: 1. A framework directive on the approximation of the laws of the Member States concerning food and food ingredients treated with ionizing radiation. The directive lays down conditions for the manufacture, marketing, import and compulsory labelling of irradiated foodstuffs and for the authorization of irradiation facilities; 2. An implementing directive establishing a Community list of foods and food ingredients treated with ionizing radiation. Initially, the list contains only one category of food (dried aromatic herbs, spices and vegetable seasonings). Other foods can only be added to the list via the codecision procedure. In the meantime, Member States may maintain existing restrictions. Council accepted Parliament's view that ionizing radiation should not be used as a substitute for hygiene or health practices or good manufacturing or agricultural practice. It also accepted a parliamentary amendment acknowledging that consumers may have cause for concern about the consequences of the use of food irradiation. Parliament was also keen to ensure that the methods used to test whether foodstuffs have been irradiated are effective. To meet this concern, the Council agreed that Member States must inform the Commission of the test methods used and that these methods must be standardized or validated. ?

Foods and food ingredients treated with ionising radiation. Framework Directive

The Parliament approved the joint text approved by the Conciliation Committee for a Directive concerning foods and food ingredients treated with ionising radiation. The Parliament's Rapporteur was Ms. U. BLOCH von BLOTTNITZ (D, Green). The agreement reached in conciliation would enable standard rules to be drawn up on ionised food and thus increase the chances of devising an acceptable system of labelling. ?

Foods and food ingredients treated with ionising radiation. Framework Directive

PURPOSE: to adopt a framework directive on the approximation of the laws of the Member States concerning foods and food ingredients treated with ionising radiation. **COMMUNITY MEASURE:** Directive 1999/2/EC of the European Parliament and the Council on the approximation of the laws of the Member States concerning foods and food ingredients treated with ionising radiation. **CONTENT:** the framework directive fixes conditions for the manufacture, marketing, importing and compulsory labelling of ionised foodstuffs. It envisages that the Commission will submit no later than 31/12/2000, a proposal for the adoption of the definitive positive list of foodstuffs which may be treated with ionising radiation to the exclusion of all others, which will complete the initial positive list. Until the adoption of this definitive list, Member States may: a) maintain existing authorisations concerning the treatment of foodstuffs with ionising radiation provided that: - the treatment of the foodstuff concerned has been subjected to a favourable opinion of the Scientific Committee for Food; - the overall average absorbed radiation dose does not exceed the limit values recommended by the Scientific Committee for Food; - ionising radiation and placing on the market are effected in accordance with this directive. b) in compliance with the rules of the Treaty, continue to apply existing national restrictions or bans on ionising radiation of foodstuffs and on trade in irradiated foodstuffs which are not included in the initial positive list established by the implementing directive. The directive also proposes: - full labelling without exemption thresholds for irradiated ingredients

used in compound ingredients forming part of the finished product; - obliging Member States to inform the Commission of the results of checks carried out in the ionising irradiation facilities and at the product marketing stage; - the use of standardised methods such as reference methods, for the detection of irradiated food. The directive finally stipulates that treatment by irradiation should not be used as a substitute for hygiene or health practices or good manufacturing or agricultural practice. ENTRY INTO FORCE: 20/03/1999 DEADLINE FOR TRANSPOSITION: Member States shall bring into force their laws, regulations and administrative provisions to comply with the directive in such a way as to: - permit the marketing and use of irradiated foodstuffs by 20/09/2000; - prohibit the marketing and use of irradiated foodstuffs not complying with this directive by 20/03/2001.?

Foods and food ingredients treated with ionising radiation. Framework Directive

The European Commission adopted a report on food irradiation in the EU, which includes information on whether irradiated food placed on the EU market is correctly labelled. The report, the first of its kind, is based on the results of checks undertaken by national authorities in the Member States. In general, the report indicated a high level of compliance with the requirements of the EU food irradiation Directive 1999/2/EC. The checked irradiation facilities complied with most of the provisions and only a very limited number of irradiated samples have been detected which were not labelled or which were not authorised for irradiation treatment, with the exception of dietary supplements. For the latter, the Commission asked the Member States to control this sector and expects a sharp decrease of the number of irradiated dietary supplements as a result of these checks. It should be stated that the United Kingdom authorities found evidence of irradiation in 42% of certain dietary supplements. As most of these supplements cannot be irradiated legally in the EU, the Commission has asked the other Member States to check this particular sector. The Commission invites the Member States to regularly perform the necessary checks on irradiation facilities and on food products in order to enforce the requirements of the Directive in the whole EU. The Commission will develop guidelines to ensure more uniform reporting of results.?

Foods and food ingredients treated with ionising radiation. Framework Directive

The Commission presented its report on food irradiation for the year 2002. The report is based on the information sent by the Member States: - in 2002, irradiation facilities had approval in seven Member States, but some Member States did not provide all the information requested with respect to food categories treated, quantities or doses; - as in 2001, eight Member States performed checks on foods placed on the market, whereas seven did not perform analytical checks during the period covered. In total, about 5000 food samples have been checked in 2002. Again the number of samples analysed differs widely from one to another Member State. About 1.4 % of products (without dietary supplements) on the market were found to be irradiated and not labelled. These products are herbs and spices or compound foods containing herbs and spices, frog legs, aquatic animal products, mushrooms, fresh fruits, tea, coffee, sauces and similar products; - in 2002, four Member States (United Kingdom, Ireland, Germany and The Netherlands) performed checks on dietary supplements and still found that 29.4 % of the products checked had been irradiated. As the treatment of these products by ionising radiation is not allowed in the EU, the Commission expects that the numbers of checks of these products are increased in all Member States and that irradiated dietary supplements are withdrawn from the EU market. On the basis of the available information, the Commission concludes that overall the situation has not changed compared to 2001. Also, the number of Member States carrying out controls has not increased, except for dietary supplements.

Foods and food ingredients treated with ionising radiation. Framework Directive

In accordance with the requirements of the Directive 1999/2/EC on the approximation of the laws of the Member States concerning foods and food ingredients treated with ionising radiation, the Commission presents a report giving the details of the approved irradiation facilities in the Member States as well as any changes in their status, and information provided by the national supervisory authorities.

The current report covers the period from 1 January 2008 to 31 December 2008. It contains a compilation of the information forwarded to the Commission by the 27 Member States.

- In 2008, 23 approved irradiation facilities were operational in 12 Member States in accordance with Article 7(2) of Directive 1999/2/EC. One irradiation facility has been approved. No approved irradiation facilities have been closed. Six irradiation facilities did not irradiate any food during 2008.
- A total quantity of 8,718.4 tonnes of products were treated with ionising irradiation in the Member States, 88.55 % of which were irradiated in three Member States:
- Belgium (41.19 %), the Netherlands (35.61 %) and France (10.85 %). The three biggest fractions within the irradiated categories are frog legs (28.16 %), herbs and spices (19.95 %) and poultry (18.97 %).
- 27 Member States submitted information regarding the checks carried out at the product marketing stage. Three Member States performed no analytical checks in official control and inspection. One of these Member States signalled that under its national legislation food business operators should carry out their own checks to ensure that rules on food irradiation, and other food law, are complied with.
- A total of 6,220 samples have been taken by 24 Member States, three Member States accounted for 70.57% of the samples (Germany 55%, Ireland 7.78% and the Netherlands 7.79%). 6,004 samples (96.53 %) were compliant with the provisions of the Directives. 142 samples (2.28 %) were non compliant. Reasons for non compliance are most often related to incorrect labelling and irradiation of categories for which this is not authorised. 74 samples (1.19 %) gave inconclusive results.
- Reasons for inconclusive results are most often related to non-confirmation after positive results from screening tests and/or to the difficulty to determine which of the ingredients were irradiated, even if they are labelled, in composed foodstuffs.

Foods and food ingredients treated with ionising radiation. Framework Directive

In accordance with the requirements of Directive 1999/2/EC, the Commission presents a report on foods and food ingredients treated with ionising radiation. The report covers the period from 1 January 2009 to 31 December 2009. It recalls that the Directive requires Member States

to forward to the Commission every year:

- the results of checks carried out in irradiation facilities, in particular regarding the categories and quantities of food and food ingredients treated and the doses administered and
- the results of checks carried out at the product marketing stage and the methods used to detect treatment with ionising radiation;
- the details of the approved irradiation facilities in the Member States as well as any changes in their status;
- a report on the information provided by the national supervisory authorities.

The report contains in mainly tabular form a compilation of the information forwarded to the Commission by the 27 Member States. It sets out the results of the checks carried out in irradiation facilities, in particular regarding the categories and quantities of products treated and the doses administered. According to the information submitted by the Member States, the controls carried out by the competent authorities confirmed the compliance of the approved irradiation facilities with the requirements of Directive 1999/2/EC.

In 2009, 20 approved irradiation facilities were operational in 12 Member States in accordance with Article 7(2) of Directive 1999/2/EC. One approved irradiation facility has been closed. Five irradiation facilities did not irradiate any food during 2009.

A total quantity of 6 637.17 tonnes of products were treated with ionising irradiation in the Member States, 84.5% of which were irradiated in three Member States (Belgium, France and the Netherlands). The four biggest fractions within the irradiated categories are frog parts, herbs and spices, poultry and dehydrated products (respectively: 42.80%, 23.78%, 18.59%, 10.15%).

27 Member States submitted information regarding the checks carried out at the product marketing stage. Three Member States did not perform any analytical checks in official control and inspection.

A total of 6 265 samples have been taken by 24 Member States. Three Member States accounted for 68.4% of the samples (Germany 50.58%, The Netherlands 12.31%, United Kingdom 5.51%). 6,045 samples (96.49%) were compliant with the provisions of the Directives. 127 samples (2.03%) were non compliant.

Reasons for non-compliance are most often related to incorrect labelling and irradiation of categories for which this is not authorised. 93 samples (1.48%) gave inconclusive results. Reasons for inconclusive results are most often related to non-confirmation after positive results from screening tests and/or to the difficulty to determine which of the ingredients were irradiated in composite foodstuffs, even if they are labelled.

Foods and food ingredients treated with ionising radiation. Framework Directive

In accordance with the requirements of Directive 1999/2/EC, the Commission presents a report on foods and food ingredients treated with ionising radiation. The report covers the period from 1 January 2010 to 31 December 2010. It recalls that the Directive requires Member States to forward to the Commission every year:

- the results of checks carried out in irradiation facilities, in particular regarding the categories and quantities of food and food ingredients treated and the doses administered and
- the results of checks carried out at the product marketing stage and the methods used to detect treatment with ionising radiation;
- the details of the approved irradiation facilities in the Member States as well as any changes in their status;
- a report on the information provided by the national supervisory authorities.

The report contains in mainly tabular form a compilation of the information forwarded to the Commission by the 27 Member States. It sets out the results of the checks carried out in irradiation facilities, in particular regarding the categories and quantities of products treated and the doses administered. According to the information submitted by the Member States, the controls carried out by the competent authorities confirmed the compliance of the approved irradiation facilities with the requirements of Directive 1999/2/EC.

In 2010, 24 approved irradiation facilities were operational in 13 Member States in accordance with Article 7(2) of Directive 1999/2/EC. One irradiation facility has been approved by Bulgaria and one by Estonia during 2010. No approved irradiation facilities have been closed. Seven irradiation facilities did not irradiate any food during 2010.

A total of 9 263.4 tonnes of products were treated with ionising irradiation in the Member States, 88.55 % of which were irradiated in three Member States: Belgium (63.11 %), the Netherlands (16.63 %) and France (11.06 %). The three biggest fractions within the irradiated categories are frog legs (47.67%), poultry (22.5 %) and herbs and spices (15.86 %).

27 Member States submitted information regarding the checks carried out at the product marketing stage. Three Member States did not perform any analytical checks in official control and inspection.

A total of 6 244 samples have been taken by 24 Member States, three Member States accounted for 69.17% of the samples (Germany 52.16 %, the Netherlands 10.47 %, and United Kingdom 6.53 %). 6,052 samples (96.92 %) were compliant with the provisions of the Directives. 144 samples (2.3 %) were non compliant.

Reasons for non-compliance are most often related to incorrect labelling and irradiation of categories for which this is not authorised. 48 samples (0.77 %) gave inconclusive results. Reasons for inconclusive results are most often related to non-confirmation after positive results from screening tests and/or to the difficulty to determine which of the ingredients were irradiated, even if they are labelled, in composed foodstuffs.

Foods and food ingredients treated with ionising radiation. Framework Directive

This report on food and food ingredients treated with ionising radiation covers the period 1 January to 31 December 2011. It gathers together

the information forwarded to the Commission by 25 Member States. Bulgaria and Malta did not supply any information.

In accordance with Directive 1999/2/EC of the European Parliament and of the Council, the Member States shall transfer to the Commission each year: (a) the results of checks carried out in irradiation facilities, in particular regarding the categories and quantities of food and food ingredients treated and the doses administered and (b) the results of checks carried out at the product marketing stage and the methods used to detect treatment with ionising radiation.

According to Directive 1999/2/EC, food and food ingredients may be irradiated only in approved irradiation facilities. For facilities in the EU, approval is given by the competent authorities of the Member States.

Irradiation of food and food ingredients may only be carried out by means of the following sources: (a) gamma rays from radionuclides ^{60}Co or ^{137}Cs ; (b) x-rays generated from machine sources operated at or below a nominal energy (maximum quantum energy) level of 5 MeV; (c) electrons generated from machine sources operated at or below a nominal energy (maximum quantum energy) level of 10 MeV.

The following are the main conclusions of the report:

- In 2011, 24 approved irradiation facilities were operational in 13 Member States in accordance with Article 7(2) of Directive 1999/2/EC. No new irradiation facilities have been approved. No approved irradiation facilities have been closed. Five irradiation facilities did not irradiate any food during 2011 (no data was submitted for the two facilities in Bulgaria).
- A total quantity of 8 067.5 tonnes of products were treated with ionising irradiation in the Member States, 90.45 % of which were irradiated in three Member States: Belgium (62.36%), the Netherlands (19.48%) and France (8.61%). The three biggest fractions within the irradiated categories are frog legs (48.52%), poultry (19.89%) and dried aromatic herbs and spices (14.98%).
- There has been a slight decrease in the total quantity of products irradiated in the EU compared to 2010 (9 263.4 tonnes). In France, there was a significant reduction in the quantity of dried aromatic herbs, spices and vegetable seasonings as well as in the quantity of poultry meat treated with ionising radiation: 65% and 75% respectively. In the Netherlands, there was a 2.85% increase in the total quantity of products treated with ionising radiation, mainly due to a sharp increase of the quantity of egg whites irradiated in 2011.
- 25 Member States submitted information regarding the checks carried out at the product marketing stage. One Member State did not perform any analytical checks in official control and inspection due to the fact that it does not have laboratories to carry out the analysis and that sending samples to be analysed abroad would be too expensive.
- A total of 5 397 samples have been analysed by 24 Member States, three Member States accounted for 67.4% of the samples (Germany 54%, Italy 7.8%, and the Netherlands 5.6%). 5 232 samples (97%) were compliant with the provisions of the Directives, 105 samples (2%) were non-compliant, 60 samples (1%) gave inconclusive results.
- Reasons for inconclusive results are most often related to non-confirmation after positive results from screening tests and/or to the difficulty to determine which of the ingredients were irradiated, even if they are labelled, in composed foodstuffs. The two main reasons for non-compliance of tested samples are incorrect labelling and forbidden irradiation; non-compliance is also due to irradiation in facilities not approved by the EU.

Foods and food ingredients treated with ionising radiation. Framework Directive

In accordance with Directive 1999/2/EC, the Commission presented a report on food ingredients treated with ionising radiation for the year 2012. The report contains a compilation of the information forwarded to the Commission by 27 Member States.

Irradiation facilities: according to the information submitted by the Member States, the controls carried out by the competent authorities confirmed the compliance of the approved irradiation facilities with the requirements of Directive 1999/2/EC.

In 2012, 24 approved irradiation facilities were operational in 13 Member States in accordance with Article 7(2) of Directive 1999/2/EC. No new irradiation facilities have been approved. No approved irradiation facilities have been closed. Five irradiation facilities did not irradiate any food during 2012.

Quantity of products treated: a total quantity of 7972 tonnes of products were treated with ionising irradiation in EU Member States, 91% of which were irradiated mainly in three Member States: Belgium (64.7%), Netherlands (18.5%) and France (7.7%). The three biggest commodities within the irradiated categories are: frog legs (36%), poultry (35%) and dried aromatic herbs and spices (15%). There has been a slight decrease in the total quantity of products irradiated in the EU compared to the previous year 2011 (8067.5 tonnes).

Checks at the product marketing stage: 27 Member States submitted information regarding the checks carried out at the product marketing stage. Five Member States did not perform any analytical checks in official control and inspection in 2012: Denmark, Estonia, Greece, Cyprus and Sweden.

Analysed samples: a total of 5182 samples have been analysed by 22 Member States, three Member States accounted for 66% of the samples (Germany 52.4%, the Netherlands 7.2%, and United Kingdom 6.2%). 4.979 samples (96.1%) were compliant with the provisions of the Directive, 123 samples (2.4%) were non-compliant, 80 samples (1.5%) gave inconclusive results.

The two main reasons for non-compliance of tested samples were incorrect labelling and forbidden irradiation; non-compliance was also due to irradiation in facilities not approved by the EU. Reasons for non-compliance are given in each table reporting the tests carried out in each Member State.

Foods and food ingredients treated with ionising radiation. Framework Directive

In accordance with Directive 1999/2/EC, the Commission presents a report on food ingredients treated with ionising radiation covering the period from 1 January to 31 December 2013.

The report contains a compilation of the information forwarded to the Commission by 26 Member States. Malta and Croatia did not submit data

for 2013. Croatia joined the EU as of 1 of July 2013.

The report shows tables and figures with the results of checks carried out in the approved irradiation facilities in Member States in 2013, in particular, regarding the categories and quantities of food and food ingredients treated and the doses administered. It also shows the results of the checks carried out at the product marketing stage and the methods used to detect treatment with ionising radiation.

In 2013, 25 approved irradiation facilities were operational in 13 Member States, and one new irradiation facility has been approved in Spain. No approved irradiation facilities have been closed.

Products treated: a total quantity of 6876 tonnes of products were treated with ionising irradiation in EU Member States, 84% of which were irradiated mainly in three Member States: Belgium (49.4%), Netherlands (24.4%) and Spain (12.7%). The two main commodities irradiated are frog legs (46.4%) and dried aromatic herbs and spices (24.4%). There has been a decrease of 14% in the total quantity of products irradiated in the EU compared to the previous year 2012 (7972 tonnes).

Marketing stage: 26 Member States submitted information regarding the checks carried out at the product marketing stage. Four Member States did not perform any analytical checks in official controls and inspections in 2013.

Analysed samples: a total of 5713 samples have been analysed by 22 Member States in 2013. Three Member States accounted for 66% of the samples (Germany 50.5%, Italy 9.7% and the Netherlands 6.3%. In 2012: Germany 52.4%, the Netherlands 7.2% and United Kingdom 6.2%).

Germany remains the leader in terms of controlling food products at marketing stage. 5511 samples (96.5%) were compliant with the provisions of Directive 1999/2/EC, 130 samples (2.3%) were non-compliant, and 73 samples (1.5%) gave inconclusive results. The two main reasons for non-compliance of tested samples were similar to the previous years, namely, incorrect labelling and forbidden irradiation. Non-compliance was also due to irradiation in facilities not approved by the EU. Reasons for non-compliance are given in each table reporting the tests carried out in each Member State.

Foods and food ingredients treated with ionising radiation. Framework Directive

In accordance with Directive 1999/2/EC of the European Parliament and of the Council, the Commission presented a report on foods and food ingredients treated with ionizing radiation. It covers the period 1 January to 31 December 2015.

The report is based on the checks carried out in the irradiation units the results of which the Member States send to the Commission each year.

Irradiation units: by 2015, there were 26 irradiation units approved in the European Union, located in 14 Member States (France, Germany, Spain, Bulgaria, Netherlands, Poland, Belgium, Czech Republic, Estonia, Croatia (new unit), Italy, Hungary, Romania and the United Kingdom. No approved radiation unit has been closed.

Treatment data: a total of 5 686 tonnes of products (+ 9.7% compared with 2014) were processed by ionization in the EU Member States, 80% of them in 2 Member States, mainly Belgium 68.9%) and the Netherlands (11.1%). The two main products subject to ionization in the EU were frogs' legs (54.75%) and dried herbs, spices and vegetable condiments (16.10%).

Controls at the marketing stage: 5 973 samples were analysed by 24 Member States in 2015, an increase of 3.4% compared with 2014. Among the products analysed in the European Union in 2015, the two main categories are "herbs and spices" (45.6%) and "cereals, seeds, vegetables, fruits and their products"(21%). Germany has carried out the most inspections.

The checks carried out by Member States in 2015 show that virtually all the products checked were in compliance with EU legislation. The two main reasons for non-conformity of the samples analysed were the same as in previous years, namely incorrect labelling and ionisation treatment in irradiation units not approved by the Union.

Foods and food ingredients treated with ionising radiation. Framework Directive

In accordance with Directive 1999/2/EC of the European Parliament and of the Council, the Commission presented a report on foods and food ingredients treated with ionizing radiation for the period 2016-2017.

Food irradiation is the treatment of foodstuffs by a certain type of radiant energy known as ionising radiation.

Directive 1999/2/EC (Framework Directive) on the approximation of the laws of the Member States concerning foods and food ingredients treated with ionising radiation lays down specific provisions for the manufacturing, marketing and importation of treated foods and food ingredients.

The report is based on information provided to the European Commission by 28 Member States in 2016 and 27 Member States in 2017. Malta has not provided any data for the year 2017.

The information and data contained in the report cover the following points:

Approved irradiation facilities in the Member States

Any food irradiated or containing irradiated ingredients must have been treated (irradiated) only at approved facilities. The list of approved irradiation facilities in Member States is published by the Commission in the Official Journal of the European Union. Any irradiated food or any irradiated food ingredient of a compound food must be labelled with the words irradiated or treated with ionising radiation.

There are now 24 irradiation facilities in the EU. Two previously approved irradiation facilities have been closed in 2015.

The facilities are located in 14 Member States: five in France, four in Germany, two in Bulgaria, the Netherlands, and Spain, one in Belgium, Czech Republic, Croatia, Estonia, Italy, Hungary, Poland, Romania and United Kingdom.

Of those 14 Member States equipped with irradiation facilities, Bulgaria, Italy, Romania and the United Kingdom did not irradiate any foodstuffs over the period covered by this report

To enforce correct labelling or to detect non-authorised products, several analytical methods have been standardised by the European Committee for Standardisation (CEN), following a mandate given by the European Commission.

Checks carried out in radiation facilities

A total quantity of 10 211 tonnes of products were treated with ionising irradiation in EU Member States during the years 2016 and 2017. The treatment took place mainly in two Member States: Belgium, which treated two thirds of the irradiated food of the EU (68%), and the Netherlands (13%).

The two main commodities irradiated in the EU are frog legs (ca 57%) and dried aromatic herbs, spices and vegetables seasoning (ca 21%).

Checks carried out at the marketing stage

For the period 2016-2017, 11 162 samples were analysed by 24 Member States, i.e. overall 7.02% less in average than in 2015.

From the total of 11 162 samples, 87 were not compliant (0.8%) and 113 samples (1%) gave inconclusive results. The non-compliance observed were mainly incorrect labelling and forbidden irradiation.

The percentage of non-compliance was lower than in the previous report.

At marketing stage, the majority of the products analysed were 'herbs and spices' (42%) and the 'cereals, seed, vegetables, fruit and their products' (22%). Under category 'Other' (foods supplements and soup and sauces) the percentage was 17%.