

Brussels, 17.12.2015 COM(2015) 665 final

# REPORT FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT AND THE COUNCIL

ON FOOD AND FOOD INGREDIENTS TREATED WITH IONISING RADIATION FOR THE YEAR 2014

EN EN

# REPORT FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT AND THE COUNCIL

# ON FOOD AND FOOD INGREDIENTS TREATED WITH IONISING RADIATION FOR THE YEAR 2014

#### 1. Introduction

The current report, provided for by Article 7(4) of Directive 1999/2/EC of the European Parliament and of the Council on the approximation of the laws of the Member States concerning foods and food ingredients treated with ionising radiation<sup>1</sup>, covers the period from 1st January to 31 December 2014. It contains a compilation of the information forwarded to the European Commission by 27 Member States and one EFTA country. Croatia did not submit data for 2014.

#### 2. LEGAL BASIS AND BACKGROUND

Article 7(3) of Directive 1999/2/EC, requires Member States to forward to the Commission every year:

 the results of checks carried out in the ionising radiation 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.

Article 7(4) of the Directive requires the Commission to publish in the *Official Journal of the European Union:* 

- 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 every year by the national supervisory authorities.

Information on general aspects of food irradiation is available on the website of the Commission's Directorate-General for Health and Consumers<sup>2</sup>.

#### 2.1. Irradiation facilities

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. Article 7(3) of Directive 1999/2/EC requires Member States to inform the Commission on the list of their approved irradiation facilities.

Irradiation of food and food ingredients may only be carried out by means of the following sources, listed in Annex II to the Directive:

- Gamma rays from radionuclides <sup>60</sup>Co or <sup>137</sup>Cs;

Directive 1999/2/EC of the European Parliament and of the Council of 22 February 1999 on the approximation of the laws of the Member States concerning foods and food ingredients treated with ionising radiation (OJ L 66, 13.3.1999, p. 16).

http://ec.europa.eu/food/food/biosafety/irradiation/index\_en.htm

- X-rays generated from machine sources operated at or below a nominal energy (maximum quantum energy) level of 5 MeV;
- Electrons generated from machine sources operated at or below a nominal energy (maximum quantum energy) level of 10 MeV.

The list of approved irradiation facilities in Member States is publicly available, as it was published by the Commission<sup>3</sup>.

#### 2.2. Irradiated food and food ingredients

The irradiation of dried aromatic herbs, spices and vegetable seasonings is authorised at EU level by Directive 1999/3/EC of the European Parliament and of the Council on the establishment of a Community list of food and food ingredients treated with ionising radiation<sup>4</sup>. In addition, seven Member States have notified to the Commission that they maintain national authorisations for certain food and food ingredients, in accordance with Article 4(4) of Directive 1999/2/EC. The list of national authorisations has been published by the Commission<sup>5</sup>.

Any irradiated foodstuff containing one or more irradiated food ingredient must be labelled with the words "irradiated" or "treated with ionising radiation". If an irradiated product is used as an ingredient in a compound food, the same words shall accompany its designation in the list of ingredients. In the case of products sold in bulk, these words shall appear together with the name of the product on a display or notice above or beside the container in which the products are placed.

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 Commission.

# 3. RESULTS OF CHECKS CARRIED OUT IN IRRADIATION FACILITIES AND DOSES ADMINISTERED

This section of the report deals with the results of the checks carried out in irradiation facilities, in particular, regarding categories and quantities of products treated and 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.

The following tables and figures show the results of checks carried out in the approved irradiation facilities in Europe in 2014, in particular concerning the categories and quantities of food and food ingredients treated and the doses administered.

-

OJ C 265, 1.9.2012, p. 3.

Directive 1999/3/EC of the European Parliament and of the Council of 22 February 1999 on the establishment of a Community list of food and food ingredients treated with ionising radiation (OJ L 66, 13.3.1999, p. 24).

<sup>&</sup>lt;sup>5</sup> OJ C 283, 24.11.2009, p. 5.

#### 3.1. Summary for the EU

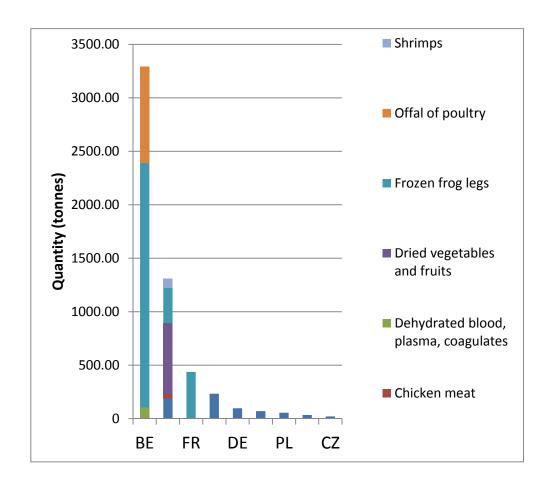
The following table summarises the quantities of foodstuffs (in tonnes) treated by ionising radiation in the approved irradiation facilities located in 13 Member States within the European Union:

Member State	Number of approved facilities	Treated quantity (tonnes)	
Belgium	1	3289.6	
Bulgaria	2	No food irradiated	
Czech Republic	1	20.1	
Germany	4	97.3	
Estonia	1	33.7	
Spain	3*	233.1	
France	5	463.3	
Italy	1	No food irradiated	
Hungary	1	70.0	
Netherlands	2	1308.2	
Poland	2*	55.0	
Romania	1	No food irradiated	
United Kingdom	1	No food irradiated	
Total EU-MS:	25	5543.3	
Norway	1	7.6	
Total:	26	5550.9	

<sup>\*</sup> Food was irradiated only in one approved irradiation facility.

There are 25 approved irradiation facilities within the European Union located in 13 Member States. Only 8 out of 13 Member States irradiated foodstuffs in 2014.

The following histogram summarises the quantities of foodstuffs (in tonnes) and the category of products treated by ionising radiation in approved irradiation facilities within the European Union in 2014:



There are no approved facilities in the following Member States: Denmark, Ireland, Greece, Cyprus, Latvia, Lithuania, Luxembourg, Austria, Slovenia, Slovakia, Finland, Sweden, Portugal. No information is available to date regarding the situation in Croatia and in Malta.

The following tables show the categories of products irradiated in the Member States concerned and the doses administered.

#### 3.2. Belgium

Foodstuffs	Absorbed dose (kGy)	
Dehydrated blood, plasma, coagulates	4.9 - 6.4	
Frozen frog legs	3.9 - 4.8	
Offal of poultry	3.5 - 4.8	

# 3.3. Czech Republic

Foodstuffs	Absorbed dose (kGy)
Aromatic herbs, spices and vegetable seasoning (dried)	4.04 - 9.95

## 3.4. Germany

Foodstuffs	Absorbed dose (kGy)
Aromatic herbs, spices and vegetable seasoning (dried)	10

#### 3.5. Estonia

Foodstuffs	Absorbed dose (kGy)
Aromatic herbs, spices and vegetable seasoning (dried)	10

### **3.6.** Spain

Foodstuffs	Absorbed dose (kGy)
Aromatic herbs, spices and vegetable seasoning (dried)	8.98 - 10

#### **3.7.** France

Foodstuffs	Absorbed dose (kGy)
Aromatic herbs, spices and vegetable seasoning (dried)	5-10
Frozen frog legs	1-10

## 3.8. Hungary

Foodstuffs	Absorbed dose (kGy)
Aromatic herbs, spices and vegetable seasoning (dried)	2 - 8

### 3.9. Netherlands

Foodstuffs	Absorbed dose (kGy)
Aromatic herbs, spices and vegetable seasoning (dried)	4-8
Chicken meat	5
Dried vegetables and fruits	2-8
Frozen frog legs	4
Shrimps	3

### **3.10.** Poland

Foodstuffs	Absorbed dose (kGy)
Aromatic herbs, spices and vegetable seasoning (dried)	5 - 10

## **3.11.** Norway

Foodstuffs	Absorbed dose (kGy)
Aromatic herbs, spices and vegetable seasoning (dried)	10

# 4. RESULTS OF CHECKS CARRIED OUT AT THE PRODUCT MARKETING STAGE AND METHODS USED TO DETECT IRRADIATED FOODS

The following tables show the results of the checks carried out at the product marketing stage in Europe and the methods used to detect treatment with ionising radiation.

#### 4.1. Summary for the EU

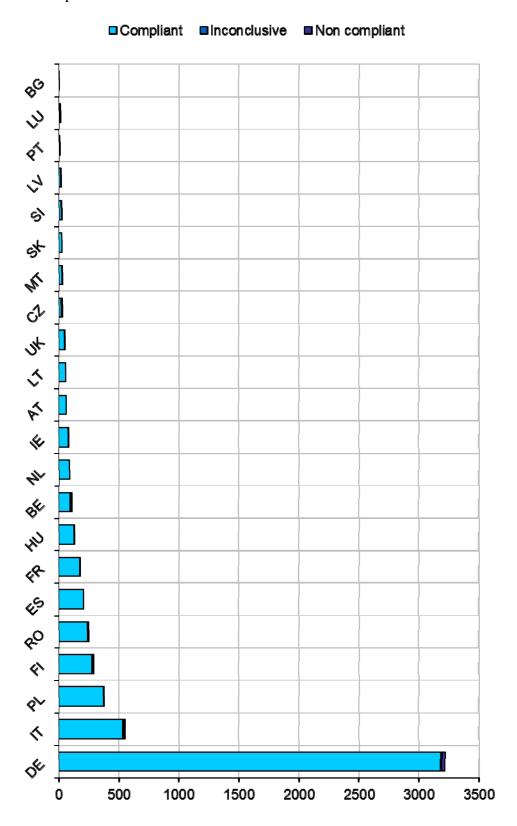
The following table summarises the samples analysed and the results obtained for the European Union:

Member State	Compliant	Inconclusive	Non- compliant	Total samples	% Versus EU total samples
BE	92	15	2	109	1,9%
BG	4	0	0	4	0,1%
CZ	20	5	5	30	0,5%
DK	NCP	NCP	NCP	NCP	NCP
DE	3179	13	22	3214	55,6%
EE	NCP	NCP	NCP	NCP	NCP
IE	80	0	1	81	1,4%
EL	NCP	NCP	NCP	NCP	NCP
ES	204	0	0	204	3,5%
FR	174	0	4	178	3,1%
HR	NDS	NDS	NDS	NDS	0%
IT	533	10	9	552	9,6%
CY	NCP	NCP	NCP	NCP	NCP
LV	12	0	2	14	0,2%
LT	59	0	0	59	1,0%
LU	8	0	2	11	0,2%
HU	125	0	3	128	2,2%
MT	22	4	4	30	0,5%
NL	88	0	0	88	1,5%
AT	64	0	0	64	1,1%
PL	372	2	3	377	6,5%
PT	11	0	0	11	0,2%
RO	240	1	2	243	4,2%
SI	17	2	0	19	0,3%
SK	24	0	0	24	0,4%
FI	273	6	10	289	5,0%

SE	NCP	NCP	NCP	NCP	NCP
UK	45	1	4	50	0,9%
Total	5646	59	73	5779	100%
EU	97,7%	1,0%	1,3%	100,0%	

NDS: No data submitted; NCP: No check performed

The following histogram summarises the samples analysed and the results obtained per EU Member State:



# 4.2. Belgium. Number of Samples: 109

		Nun			
Foodstuff category	Foodstuffs analysed at product marketing stage	Compliant	Inconclusive	Non- Compliant	CEN method used
	Fruit (dried)	5	0	0	EN 1788
Cereals, seed, vegetables, fruit and their	Mushrooms or mushrooms products (dried)	3	0	0	EN 1788
products	Vegetables and vegetable products (dried)	3	1	0	EN 1788
Fish, crustaceans, shellfish and their products	Crustaceans, shellfish, mussels and other aquatic animals (including their products)	26	2	0	EN 1788
Herbs and spices	Herbs and spices (frozen)	14	6	0	EN 1788
_	Tea	21	0	0	EN 1788
Meat and meat products	Frog legs	11	2	0	EN 1788
Other	Food supplements	9	4	2*	EN 1788
	Total:	92	15	2	
Total	% of analysed samples:	84,4%	13,8%	1,8%	

irradiation not allowed

## 4.3. Bulgaria. Number of Samples: 4

		Nur	Number of Samples: 4			
Foodstuff category	Foodstuffs analysed at product marketing stage	Compliant	Inconclusive	Non- Compliant	CEN method used	
	Aromatic herbs, spices and vegetable seasoning (dried)	2	0	0	EN 13751	
Herbs and spices	Aromatic herbs, spices and vegetable seasoning (dried)	1	0	0	EN 1788 EN 13751	
	Tea	1	0	0	EN 1788 EN 13751	
	Total:	4	0	0		
Total	% of analysed samples:	100%	0%	0%		

#### 4.4. Czech Republic. Number of Samples: 30

		Nun	Number of Samples: 30			
Foodstuff category	Foodstuffs analysed at product marketing stage	Compliant	Inconclusive	Non- Compliant	CEN method used	
Cereals, seed,	Mushrooms or mushrooms products (dried)	2	0	0	EN 1788	
vegetables, fruit and their products	Vegetables and vegetable products (dried)	3	1	0	EN 1788	
Herbs and spices	Aromatic herbs, spices and vegetable seasoning (dried)	4	0	0	EN 1788	
	Herbal teas / Infusions	2	0	0	EN 1788	
Other	Food supplements	5	1	2*	EN 1788	
Other	Soup	4	3	3**	EN 1788	
	Total:	20	5	5		
Total 9	% of analysed samples:	66,7%	16,7%	16,7%		

<sup>\*</sup> Both samples were identified as being positive for irradiation. The irradiated products were not labelled. In one case the indication of treatment was not given on the documents accompanying or referring to irradiated foodstuffs so it was not clear whether the products were irradiated in facility approved by the EU or not. In the second case the foodstuffs were irradiated in facility not approved by the EU.

#### 4.5. Denmark

No checks were carried out at product marketing stage in 2014.

#### 4.6. Germany. Number of Samples: 3214

		Num			
Foodstuff category	Foodstuffs analysed at product marketing stage	Compliant	Inconclusive	Non- Compliant	CEN method used
Cereals, seed, vegetables, fruit	Cereal products	19	0	0	EN 1788; EN 1787
and their products	Fruit (dried)	98	0	0	EN 13708; EN 1788; EN 1787; EN 13751
	Fruits (fresh)	59	0	0	EN 1788; EN 1787; EN 13751
	Mushrooms (fresh)	1	0	0	EN 1788; EN 1787; EN 13751

<sup>\*\*</sup> The samples were identified as being positive for irradiation. The irradiated products were not labelled. The indication of treatment was not given on the documents accompanying or referring to irradiated foodstuffs so it was not clear whether the products were irradiated in facility approved by the EU.

	Mushrooms or mushrooms products (dried)	155	0	0	EN 1788; EN 1785; EN 1787; EN 13751
	Potatoes	7	0	0	EN 1788
	Pulses	187	0	0	EN 1788; EN 1787; EN 13751
	Vegetables and vegetable products (dried)	42	0	0	EN 1788; EN 1787; EN 13751
	Vegetables (fresh)	28	0	0	EN 1787; EN 13751
Fish, crustaceans,	Crustaceans, shellfish, mussels and other aquatic animals (including their products)	197	0	1*	EN 1786; EN 1788; EN 1787; EN 13751
shellfish and their products	Fish and fish products	43	0	4*	EN 1786; EN 1788
	Fish and seafood (dried)	16	0	0	EN 1786; EN 1788
	Aromatic herbs, spices and vegetable seasoning (dried)	1228	3	2**	EN 1788; EN 1785; EN 1787; EN 13751
Herbs and spices	Other (condiments)	229	2	1**	EN 1788; EN 1785; EN 1787; EN 13751
	Tea	182	0	0	EN 1788; EN 1785; EN 1787; EN 13751
	Meat (except poultry and game)	9	0	0	EN 1786
	Meat (from different birds, kangaroo, hare)	119	0	0	EN 1784; EN 1786
Meat and meat	Meat products (except sausages)	40	0	0	EN 1784; EN 1786
products	Other	13	0	0	EN 1784; EN 1788; EN 1787; EN 13751
	Sausage products	19	0	0	EN 1784; EN 1786
Milk and milk	Butter (with herbs)	3	0	0	EN 13751
products	Cheese (containing spices/herbs)	48	0	0	EN 1788; EN 1787
	Cheese (preparations without herbs and spices)	27	0	0	EN 1784
		13			

	Milk and milk products	15	0	2*	EN 1787
	Food supplements	139	2	7*	EN 1786; EN 13751
Other	Meals and dishes (prepared)	31	0	2*	EN 1786; EN 1788; EN 13751
	Other	21	0	0	EN 1784; EN 1788; EN 1787; EN 13751
	Sauces and soups (dehydrated)	204	6	3*	EN 1788; EN 13751
	Total:	3179	13	22	
Total	Total % of analysed samples:		0,4%	0,7%	

<sup>\*</sup> irradiation not allowed

#### 4.7. Estonia

Due to budgetary restrictions, no checks were carried out at product marketing stage in Estonia in 2014.

## 4.8. Ireland: Number of Samples: 81

		Num	Number of Samples: 81		
Foodstuff category	Foodstuffs analysed at product marketing stage	Compliant	Inconclusive	Non- Compliant	CEN method used
	Berries	8	0	0	EN 1788 EN 13751
Cereals, seed, vegetables, fruit	Cereals, seed, vegetables and fruit	4	0	0	EN 1788 EN 13751
and their products	Fruit (dried)	1	0	0	EN 1788 EN 13751
	Seeds 2  Aromatic herbs, spices	0	0	EN 1788 EN 13751	
Herbs and spices	Aromatic herbs, spices and vegetable seasoning (dried)	19	0	0	EN 1788 EN 13751
-	Tea	8	0	Non-Compliant  0  0  0  0	EN 1788 EN 13751
Other	Food for particular nutritional uses	6	0	0	EN 1788 EN 13751
	Food supplements	32	0	1*	EN 1788 EN 13751
	Total:	80	0	1	
Tota	ıl % of analysed samples:	98,8%	0,0%	1,2%	

<sup>\*</sup> erroneously labelled

<sup>\*\*</sup> erroneously labelled

#### 4.9. Greece

No checks were carried out at product marketing stage in Greece in 2014 as there were no findings of non compliant products from previous controls. A control program of 10 samples (herbs and spices) has been planned for 2015.

### 4.10. Spain. Number of Samples: 204

		Num	ber of Samples	: 204	
Foodstuff category	Foodstuffs analysed at product marketing stage	Compliant	Inconclusive	Non- Compliant	CEN method used
	Fruit (dried)	18	0	0	EN 13708
Cereals, seed,	Mushrooms or mushrooms products (dried)	10	0	0	EN 1788 EN 13751
vegetables, fruit and their products	Nuts	11	0	0	EN 1787
products	Oil seeds	Ing stage         Compliant         Inconclusive         Compliant           18         0         0           ducts         10         0         0           11         0         0         0           cts         14         0         0           ets         14         0         0           oducts         8         0         0           spices assoning         39         0         0           usions         13         0         0           s (fresh)         52         0         0           Total:         204         0         0	EN 1788 EN 13751		
	Vegetables and vegetable products (dried)		EN 1788 EN 1787 EN 13751		
Fish, crustaceans, shellfish and their products	Crustaceans, shellfish, mussels and other aquatic animals (including their products)	20	0	0	EN 1786
then products	Fish and fish products	8	0	Non-Compliant  0  0  0  0  0  0  0  0  0  0  0  0  0	EN 1786
	Aromatic herbs, spices and vegetable seasoning (dried)	39	0	0	EN 13751
Herbs and spices	Herbal teas / Infusions	13	0	0	EN 13751
	Herbs and spices (fresh)	52	0	0	EN 1787 EN 13751
Meat and meat products	Poultry meat	4	0	0	EN 1786
	Total:	204	0	0	
Tota	nl % of analysed samples:	100,0%	0,0%	0,0%	

# 4.11. France. Number of Samples: 178

		Number of Samples: 178			
Foodstuff category	Foodstuffs analysed at product marketing stage	Compliant	Inconclusive	Non- Compliant	CEN method used
Cereals, seed, vegetables, fruit and their products	Cereals, seed, vegetables and fruit	46	0	0	EN 1787
	Other	8	0	0	EN 1788
Fish, crustaceans, shellfish and their products	Crustaceans, shellfish, mussels and other aquatic animals (including their products)	19	0	0	EN 1786
The production of the producti	Fish and fish products	als	EN 1786		
Herbs and spices	Aromatic herbs, spices and vegetable seasoning (dried)	45	0	0	EN 1788
Meat and meat	Frog legs	9	0	0	EN 1786
products	Meat and meat products	46	0	2**	EN 1784
	Total:	174	0	4	
Tota	l % of analysed samples:	97,8%	0,0%	2,2%	

<sup>\*</sup> irradiation not allowed

# 4.12. Italy. Number of Samples: 552

		Num	Number of Samples: 552				
Foodstuff category	Foodstuffs analysed at product marketing stage	Compliant	Inconclusive	Non- Compliant	CEN method used		
Cereals, seed, vegetables, fruit and their products	Dried spices	119	6	0	EN 13708 EN 13784 EN 1788 EN 13783 EN 1787 EN 13751		
	Dried tomatoes	1	0	0	EN 1788		
	Fruit (dried)	9	0	0	EN 13708 EN 1788 EN 1787		
	Fruits (fresh)	3	0	0	EN 13708 EN 13751		
	Garlic	14	0	0	EN 13784 EN 1788 EN 1787 EN 13751		

<sup>\*\*</sup> erroneously labelled

	Mushrooms or mushrooms products (dried)	16	0	2*	EN 13708 EN 13784 EN 1788 EN 1787 EN 13751
	Nuts	13	0	0	EN 13784 EN 1788 EN 1787 EN 13751
	Oil seeds	3	0	0	EN 1787 EN 13751
	Onions	11	0	0	EN 1788 EN 13783 EN 13751
	Other (crystallized ginger, tomato paste, sweet potato powder, hazelnut flour)	4	0	0	EN 13784 EN 1788
	Potatoes	18	0	0	EN 1788 EN 13751
	Pulses	13	0	0	EN 1788 EN 13751
	Rice	2	0	0	EN 1788
	Seeds	2	0	0	EN 13751
	Shallots	1	0	0	EN 13751
	Tea	8	0	0	EN 1788 EN 13783 EN 1787
Fish, crustaceans, shellfish and their products	Bivalve molluscs (unspecified)	5	0	0	EN 1788 EN 13751
their products	Cephalopods (unspecified)	8	1	0	EN 13784 EN 1786 EN 1788
	Clams	9	0	0	EN 13751
	crabs	1	0	0	EN 13751
	Crayfish	13	0	0	EN 1788 EN 13751
	Crustaceans	5	0	0	EN 1788 EN 1785 EN 13751
	Fish and fish products	33	1	0	EN 13784 EN 1786 EN 1785 EN 13751
	Mussels	13	0	0	EN 13784 EN 1786 EN 1788 EN 13751
	Octopuses	5	0	0	EN 1788 EN 13751
	Other	12	0	0	EN 1788

	Prawns	11	0	0	EN 1788 EN 13751
	Scallops	1	0	0	EN 1788
	Shrimps	21	0	0	EN 1788 EN 1785 EN 13751
	Squids	10	0	0	EN 1788
	Frog legs	11	0	4***	EN 13784 EN 1786 EN 1785
	Meat and meat products	5	0	0	EN 13784 EN 1786
Meat and meat products	Meat (except poultry and game)	49	0	0	EN 13784 EN 1786 EN 1785
	Meat, offal, meat products	and game)  Meat, offal, meat  1	0	EN 1785	
	Poultry meat	44	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	EN 13784 EN 1786 EN 1785	
	Food additive	1	0	0	EN 1788
	Food supplements	21 0 0 0 10 11 0 4***  ucts 5 0 0 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	EN 1788		
Other	Raw material of plant origin, intended for use as an ingredient in food supplement	34	2	3**	EN 1788 EN 13751
	sauces (prepared)	3	0	0	EN 1788
	Total:	533	10	9	
Total	al % of analysed samples:	96,6%	1,8%	1,6%	

<sup>\*</sup> erroneously labelled

#### **4.13.** Cyprus

Due to lack of laboratories carrying out analyses for ionising radiation, no checks were carried out at product marketing stage in Cyprus in 2014.

### 4.14. Latvia. Number of Samples: 14

		Num			
Foodstuff category	Foodstuffs analysed at product marketing stage	Compliant	Inconclusive	Non- Compliant	CEN method used
Herbs and spices	Aromatic herbs, spices and vegetable seasoning (dried)	3	0	0	EN 1788
Other	Food supplements	9	0	2*	EN 1788
Total:		12	0	2	
Tota	al % of analysed samples:	85,7%	0,0%	14,3%	

<sup>\*</sup> irradiation not allowed

<sup>\*\*</sup> erroneously labelled and/or irradiation not allowed

<sup>\*\*\*</sup> erroneously labelled and/or irradiation in facilities not approved by the EU

## 4.15. Lithuania. Number of Samples: 59

		Num			
Foodstuff category	Foodstuffs analysed at product marketing stage	Compliant	Inconclusive	Non- Compliant	CEN method used
Herbs and spices	Aromatic herbs, spices and vegetable seasoning (dried)	5	0	0	EN 13783
	Tea	7	0	0	EN 13783
Other	Food supplements	47	0	0	EN 13783
Total:		59	0	0	
Tota	ıl % of analysed samples:	100,0%	0,0%	0,0%	

# 4.16. Luxembourg: Number of Samples: 11

		Nun			
Foodstuff category	Foodstuffs analysed at product marketing stage	Compliant	Inconclusive	Non- Compliant	CEN method used
Other	Food supplements	8	1	2*	EN 1788
Total:		8	1	2	
Total % of analysed samples:		72,7%	9,1%	18,2%	

<sup>\*</sup> irradiation not allowed

#### 4.17. Hungary. Number of Samples: 128

		Num			
Foodstuff category	Foodstuffs analysed at product marketing stage	Compliant	Inconclusive	Non- Compliant	CEN method used
Herbs and spices	Aromatic herbs, spices and vegetable seasoning (dried)		0	3*	EN 1788
Total:		125	0	3	
Total % of analysed samples:		97,7%	0,0%	2,3%	

<sup>\*</sup> erroneously labelled

## 4.18. Malta. Number of Samples: 30

		Nun			
Foodstuff category	Foodstuffs analysed at product marketing stage	Compliant	Inconclusive	Non- Compliant	CEN method used
Cereals, seed, vegetables, fruit and their products	vegetable products l	1	0	0	EN 13751
Herbs and spices	Aromatic herbs, spices and vegetable seasoning (dried)	21	4	4*	EN 1788 EN 13751
	Total:	22	4	4	
Tota	al % of analysed samples:	73,3%	13,3%	13,3%	

erroneously labelled

# 4.19. Netherlands. Number of Samples: 88

		Num	Number of Samples: 88			
	Foodstuffs analysed at product marketing stage	Compliant	Inconclusive	Non- Compliant	CEN method used	
	fruits	9	0	0	EN 1788 EN 13751	
Cereals, seed,	grains and grains products	13	0	0	EN 1788 EN 13751	
vegetables, fruit and their products	nuts and seeds	7	0	0	EN 1788 EN 13751	
products	vegetable and vegetable products	8	0	0	EN 1788 EN 13751	
Fish, crustaceans, shellfish and their products	Shrimps	13	0	0	EN 1788 EN 13751	
Herbs and spices	Aromatic herbs, spices and vegetable seasoning (dried)	15	0	0	EN 1788 EN 13751	
	bakery products	1	0	Non-Compliant  0  0  0  0  0	EN 1788 EN 13751	
Other	game and poultry	9	0		EN 1788 EN 13751	
Other	soup chips etc	12	0	0	EN 1788 EN 13751	
	special food	1	0	0	EN 1788 EN 13751	
	Total:		0	0		
Tota	l % of analysed samples:	100,0%	0,0%	0,0%		

# 4.20. Austria. Number of Samples: 64

		Nun			
	Foodstuffs analysed at product marketing stage	Lambiant	Inconclusive	Non- Compliant	CEN method used
Cereals, seed, vegetables, fruit and their products	Fruit (dried)	33	0	0	EN 13708
	Nuts	31	0	0	EN 1787
	Total:	64	0	0	
Total % of analysed samples:		100,0%	0,0%	0,0%	

# 4.21. Poland: Number of Samples: 377

		Numb			
Foodstuffs category	Foodstuffs analysed at product marketing stage	Compliant	Inconclusive	Non-Compliant	CEN method used
	Fruit (dried)	5	0	0	EN 1788
	Fruits (fresh)	3	0	0	EN 1788
	Fruit (tropical)	7	0	0	EN 1784
	Garlic	16	0	0	EN 1788
	Mushrooms (fresh)	4	0	0	EN 1788
Cereals, seed, vegetables, fruit	Mushrooms or mushrooms products (dried)	5	0	0	EN 1788
and their products	Nuts	33	0	0	EN 1787
	Onions	1	0	0	EN 1788
	Potatoes	1	0	0	EN 1788
	Pulses	2	0	0	EN 1788
	Vegetables and vegetable products (dried)	4	0	0	EN 1788
	Vegetables (fresh)	3	0	0	EN 1788
	Crustaceans or molluscs (frozen)	1	0	0	EN 1788
Fish, crustaceans, shellfish and their	Crustaceans, shellfish, mussels and other aquatic animals (including their products)	2	0	0	EN 1786
products	Fish and fish products	10	0	Non-Compliant  0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	EN 1786; EN 1788
	Prawns and snacks (fried)	1	0	0	EN 13751
	Shrimps	7	0	0	EN 1788; EN 13751
Herbs and spices	Aromatic herbs, spices and vegetable seasoning (dried)	98	0	0	EN 1788; EN 13751
	Herbal teas / Infusions	5	0	0	EN 1788; EN 13751
	Other	3	0	0	EN 1788; EN 13751
	Tea	18	0	0	EN 1788; EN 13751

	Meat	13	0	0	EN 1784; EN 1786
	Meat and meat products	2	0	0	EN 1784; EN 1786
Meat and meat	Meat (except poultry and game)	4	0	0	EN 1784; EN 1786
products meat	Meat (from different birds, kangaroo, hare)	1	0	0	EN 1784
	Meat, offal, meat products	2	2       0       0         4       0       0         1       0       0         2       0       0         12       0       0         36       0       1*         8       0       0         3       0       0         4       0       0         17       1       2**         3       0       0         19       0       0         2       0       0         72       2       3	0	EN 1784; EN 1786
	Poultry meat	12	0	0	EN 1784; EN 1786
Milk and milk	Cheese (containing spices/herbs)	36	0	1*	EN 1788
Milk and milk products	Cheese (cottage)	8	0	0	EN 1788
	Cheese (ripened)	3	0	0	EN 1788
Milk and milk products  Other	Cocoa	4	0	0	EN 1788
	Food for particular nutritional uses	11	1	0	EN 1788; EN 13751
	Food supplements	17	1	2**	EN 1788; EN 13751
Other	Meals and dishes (prepared)	3	0	0	EN 1788
	Other	6	0       0         0       0         0       0         0       0         0       0         0       0         0       0         0       0         1       0         0       0         0       0         0       0         0       0         0       0         0       0         0       0         2       3	0	EN 1788; EN 13751
Other	Sauces and soups (dehydrated)	19	0	0	EN 1788
	Soup	2	0	0	EN 1788
	Total:	372	2	3	
Total %	% of analysed samples:	98,7%	0,5%	0,8%	

<sup>\*</sup> irradiation not allowed

# 4.22. Portugal: Number of Samples:11

		Num	Number of Samples: 11			
Foodstuff category	Foodstuffs analysed at product marketing stage	Compliant	Inconclusive	Non- Compliant	CEN method used	
Cereals, seed, vegetables, fruit and their products	Cereal products	1	0	0	EN 13751	
Herbs and spices	Aromatic herbs, spices and vegetable seasoning (dried)	2	0	0	EN 13751	
	Herbal teas / Infusions	1	0	0	EN 13751	
	Tea	1	0	0	EN 13751	

<sup>\*\*</sup> erroneously labelled, irradiation not allowed

	Food supplements	4	0	0	EN 13751
Other	Other	1	0	0	EN 13751
Other	Sauces and soups (dehydrated)	1	0	0	EN 13751
Total:		11	0	0	
Total % of analysed samples:		100,0%	0,0%	0,0%	

<sup>\*</sup> irradiation not allowed

## 4.23. Romania. Number of Samples: 243

		Number of Samples: 243			
Foodstuff category	Foodstuffs analysed at product marketing stage	Compliant	Inconclusive	Non- Compliant	CEN method used
	Fruit (dried)	1	0	0	EN 13751
Cereals, seed, vegetables, fruit	Oil seeds	1	0	0	EN 13751
and their products	Vegetables and vegetable products (dried)	22	0	0	EN 13751
Herbs and spices	Aromatic herbs, spices and vegetable seasoning (dried)	147	1	0	EN 1788 EN 1787 EN 13751
1	Herbal teas / Infusions	9	0	0	EN 13751
	Tea	12	0	0	EN 13751
Other	Food supplements	6	0	1*	EN 1788 EN 13751 EN 1787
	Other	42	0	1**	EN 13751
	Total:		1	2	
Total % of analysed samples:		98,8%	0,4%	0,8%	

<sup>\*</sup> irradiation not allowed

## 4.24. Slovenia: Number of Samples: 19

		Number of Samples: 19			
Foodstuff category	Foodstuffs analysed at product marketing stage	Compliant	Inconclusive	Non- Compliant	CEN method used
Cereals, seed, vegetables, fruit and their products	Garlic	2	0	0	EN 13751
	Vegetables and vegetable products (dried)	5	0	0	EN 1788 EN 13751
Herbs and spices	Aromatic herbs, spices and vegetable seasoning (dried)	2	0	0	EN 13751
	Other	1	0	0	EN 13751
	Tea	5	0	0	EN 1788 EN 13751

<sup>\*\*</sup> irradiation in facilities not approved by the EU

Total % of analysed samples:		89,5%	10,5%	0,0%	
Total:		17	2	0	
Other	Sauces and soups (dehydrated)	0	2	0	EN 1788
Meat and meat products	Frog legs	2	0	0	EN 1786

## 4.25. Slovakia: Number of Samples: 24

		Number of Samples: 24			
Foodstuffs category	Foodstuffs analysed at product marketing stage	Compliant	Inconclusive	Non- Compliant	CEN method used
Cereals, seed,	Cereals, seed, vegetables and fruit	2	0	0	EN 1784
vegetables, fruit	Fruit (dried)	1	0	0	EN 1784
products	Nuts	13	0	0	EN 1784
	Oil seeds	1	0	0	EN 1784
Herbs and spices	Aromatic herbs, spices and vegetable seasoning (dried)	5	0	0	EN 1788
Milk and milk products	Cheese (containing spices/herbs)	1	0	0	EN 1784
	Cheese (ripened)	1	0	0	EN 1784
	Total:		0	0	
Total % of analysed samples:		100,0%	0,0%	0,0%	

# 4.27. Finland: Number of Samples: 289

		Number of Samples: 289			
Foodstuffs category	Foodstuffs analysed at product marketing stage	Compliant	Inconclusive	Non- Compliant	CEN method used
	Berries	4	2	0	EN 13751
	Berry products	2	0	0	EN 13751
	Cereal products	5	0	0	EN 13751
	Dried root products	5	0	0	EN 13751
	Fruit (dried)	1	0	0	EN 13751
Cereals, seed, vegetables, fruit and their	Mushrooms or mushrooms products (dried)	4	0	1*	EN 13751
products	Nut products	1	0	0	EN 13751
	Sea weed products	7	0	0	EN 13751
	Seeds	7	0	0	EN 13751
	Vegetables and vegetable products (dried)	14	0	2*	EN 13751
Herbs and spices	Aromatic herbs, spices and vegetable seasoning (dried)	118	2	3**	EN 13751
	Herbal teas / Infusions	11	0	0	EN 13751
	Tea	33	0	0	EN 13751

	Beverage ingredient	3	0	0	EN 13751
	Cocoa preparation	1	0	0	EN 13751
	Fat preparation	1	0	0	EN 13751
	Food for particular nutritional uses	5	0	1*	EN 13751
	Food supplements	36	2	1*	EN 13751
Other	Honey and other bee products	1	0	0	EN 13751
	Meals and dishes (prepared)	8	0	0	EN 13751
	Protein preparation	1	0	0	EN 13751
	Sauces and soups (dehydrated)	2	0	1*	EN 13751
	Snacks product	3	0	1*	EN 13751
	Total:		6	10	
Total % of analysed samples:		94,5%	2,1%	3,5%	

<sup>\*</sup> irradiation not allowed

#### 4.28. Sweden

Due to staff restriction no samples were analysed during the year 2014.

#### 4.29. United Kingdom: Number of Samples: 50

		Number of Samples: 50			
Foodstuff category	Foodstuffs analysed at product marketing stage	Compliant	Inconclusive	Non- Compliant	CEN method used
Cereals, seed, vegetables, fruit and their products	Instant noodles	17	1	1*	EN 1788 EN 13751
Fish, crustaceans, shellfish and their products	Crustaceans or molluscs (frozen)	1	0	0	EN 13751
Herbs and spices	Aromatic herbs, spices and vegetable seasoning (dried)	26	0	3*	EN 1788 EN 13751
	Ginger (Pickled)	1	0	0	EN 13751
	Total:	45	1	4	
Total % of analysed samples:		90,0%	2,0%	8,0%	

<sup>\*</sup> erroneously labelled, irradiation in facilities not approved by the EU

#### **4.30.** Norway

Due to lack of laboratories carrying out analyses for ionising radiation, no checks were carried out at product marketing stage in Norwat during the year 2014.

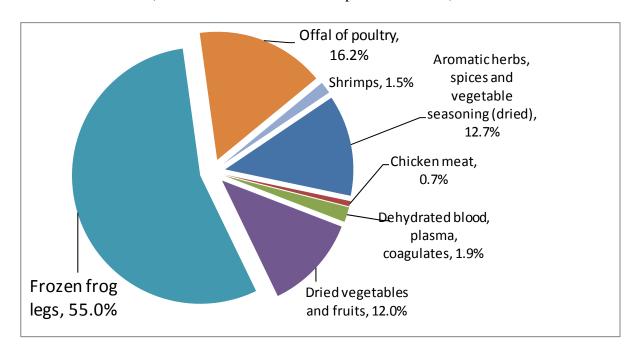
<sup>\*\*</sup> erroneously labelled, irradiation in facilities not approved by the EU

#### 5. SUMMARY

The current report covers the period from 1 January to 31 December 2014. It contains a compilation of the information forwarded to the Commission by 27 Member States. Croatia did not submit data for 2014.

In 2014, 25 approved irradiation facilities were operational in 13 Member States, in accordance with Article 7(2) of Directive 1999/2/EC. No approved irradiation facilities have been closed. Norway submitted data on quantities of foodstuff irradiated during the year 2014.

A total quantity of **5543.3 tonnes** of products were treated with ionising irradiation in EU Member States, 84% of which were irradiated mainly in two Member States: Belgium (59%) and Netherlands (24%). The two main commodities irradiated are frog legs (55%) and offal of poultry (16.2%). There is a regular decrease in the total quantity of products irradiated in the EU compared to the previous years: 6876 tonnes irradiated in 2013 (decrease of 19% in 2014 compared with 2013) and 7972 tonnes in 2012 (decrease of 14% in 2013 compared with 2012).



27 Member States submitted information on the checks carried out at the product marketing stage. Six Member States and Norway did not perform any analytical checks at product marketing stake during the year 2014.

A total of **5779** samples were analysed by 21 Member States in 2014. **Three** Member States accounted for 71.7% of the samples (Germany 55.6%, Italy 9.6% and the Netherlands 6.5%; in 2013: Germany 50.5%, Italy 9.7% and the Netherlands 6.3%). Germany remains the leader in terms of controlling food products at marketing stage. 5646 samples (97.7%) were compliant with the provisions of Directive 1999/2/EC, 73 samples (1.3%) were non-compliant, and 59 samples (1.0%) 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.