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

**ON FOOD AND FOOD INGREDIENTS TREATED WITH IONISING RADIATION  
FOR THE YEAR 2013**

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

## ON FOOD AND FOOD INGREDIENTS TREATED WITH IONISING RADIATION FOR THE YEAR 2013

### 1. INTRODUCTION

The current report, as requested 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 1 January to 31 December 2013. It contains a compilation of the information forwarded to the European Commission by 26 Member States. Malta and Croatia did not submit data for 2013. Croatia joined the EU as of 1 of July 2013.

### 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>.

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<sup>1</sup> 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).

<sup>2</sup> [http://ec.europa.eu/food/food/biosafety/irradiation/index\\_en.htm](http://ec.europa.eu/food/food/biosafety/irradiation/index_en.htm)

## 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  $^{60}\text{Co}$  or  $^{137}\text{Cs}$ ;
- 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.

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<sup>3</sup> OJ C 265, 1.9.2012, p. 3.

<sup>4</sup> 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>5</sup> OJ C 283, 24.11.2009, p. 5.

### 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 Member States in 2013, in particular, regarding the categories and quantities of food and food ingredients treated and the doses administered.

#### 3.1. Summary for the EU

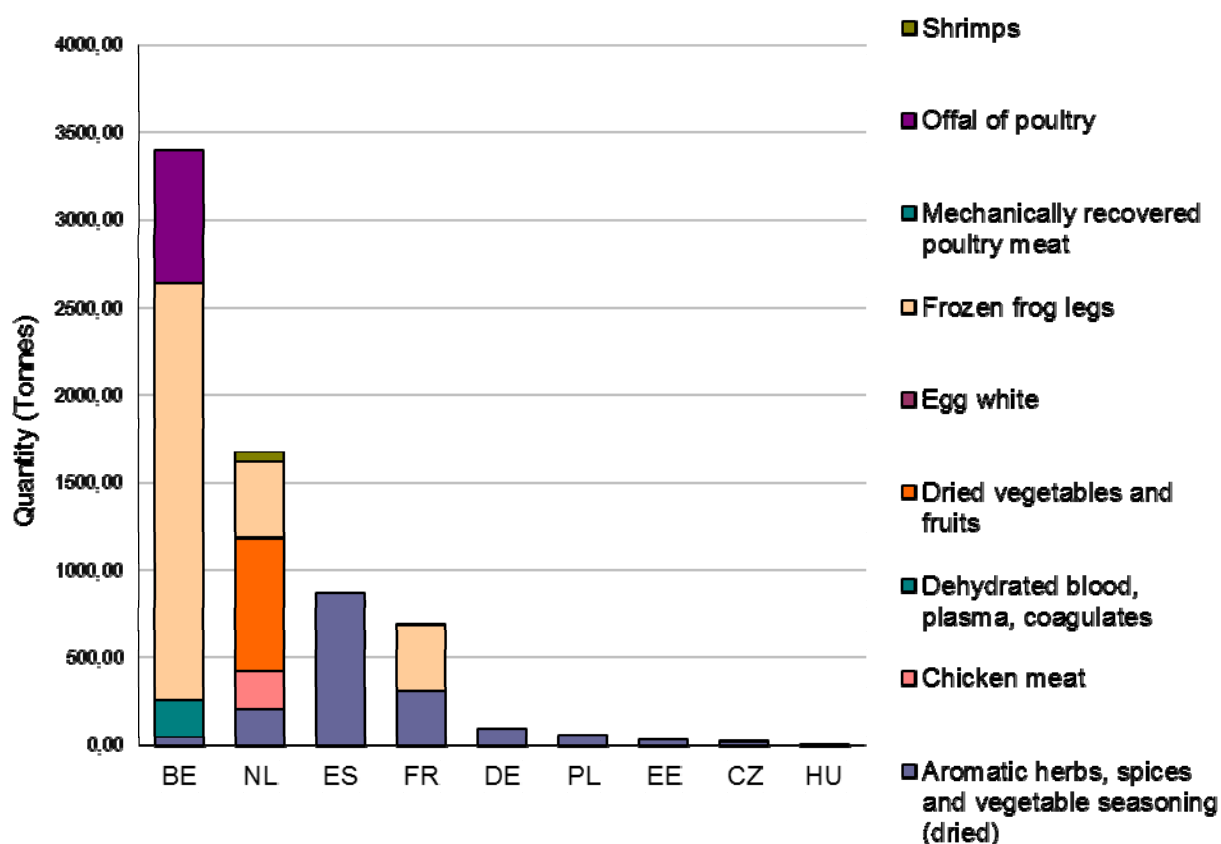
The following table summarises the quantities of foodstuffs (in tonnes) treated by ionising radiation in the approved irradiation facilities located in 13 Member States within the European Union:

Member State	Number of approved facilities	Treated quantity (tonnes)
Belgium	1	3399.3
Bulgaria	2	No food irradiated
Czech Republic	1	24.4
Germany	4	103.3
Estonia	1	35.2
Spain	3*	871.0
France	5	691.0
Italy	1	No food irradiated
Hungary	1	6.7
Netherlands	2	1678.6
Poland	2	66.7
Romania	1	No food irradiated
United Kingdom	1	No food irradiated
<b>Total:</b>	<b>25</b>	<b>6876.2</b>

\* No food was irradiated in two of the three facilities.

There are 25 approved irradiation facilities within the European Union located in 13 Member States. No foodstuff was irradiated in 7 of the 25 approved facilities. Only 9 out of 13 Member States irradiated foodstuffs in 2013.

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 2013:



There are no approved facilities in the following Member States: Denmark, Ireland, Greece, Cyprus, Latvia, Lithuania, Luxembourg, Austria, Slovenia, Slovakia, Finland, Sweden, Portugal.

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)
Aromatic herbs, spices and vegetable seasoning (dried)	4 - 7.9
Dehydrated blood, plasma, coagulates	2.2 - 6.6
Frozen frog legs	2.7 - 4.7
Offal of poultry	3.1 - 4.4

### 3.3. Czech Republic

Foodstuffs	Absorbed dose (kGy)
Aromatic herbs, spices and vegetable seasoning (dried)	5.66 - 9.92
Dried vegetables and fruits*	6.65 - 8.7

\* Leccinum sp., Suillus luteus, Boletus edulis and dried mushrooms mixture

### 3.4. Germany

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

### 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)	9.31

### 3.7. France

Foodstuffs	Absorbed dose (kGy)
Aromatic herbs, spices and vegetable seasoning (dried)	5-10
Frozen frog legs	1-10
Mechanically recovered poultry meat	4-10

### 3.8. Hungary

Foodstuffs	Absorbed dose (kGy)
Aromatic herbs, spices and vegetable seasoning (dried)	2 - 10

### 3.9. Netherlands

Foodstuffs	Absorbed dose (kGy)
Aromatic herbs, spices and vegetable seasoning (dried)	4-8
Chicken meat	3-5
Dried vegetables and fruits	2-8
Egg white	1
Frozen frog legs	4-8
Shrimps	3

### 3.10. Poland

Foodstuffs	Absorbed dose (kGy)
Aromatic herbs, spices and vegetable seasoning (dried)	5 - 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 and the methods used to detect treatment with ionising radiation.

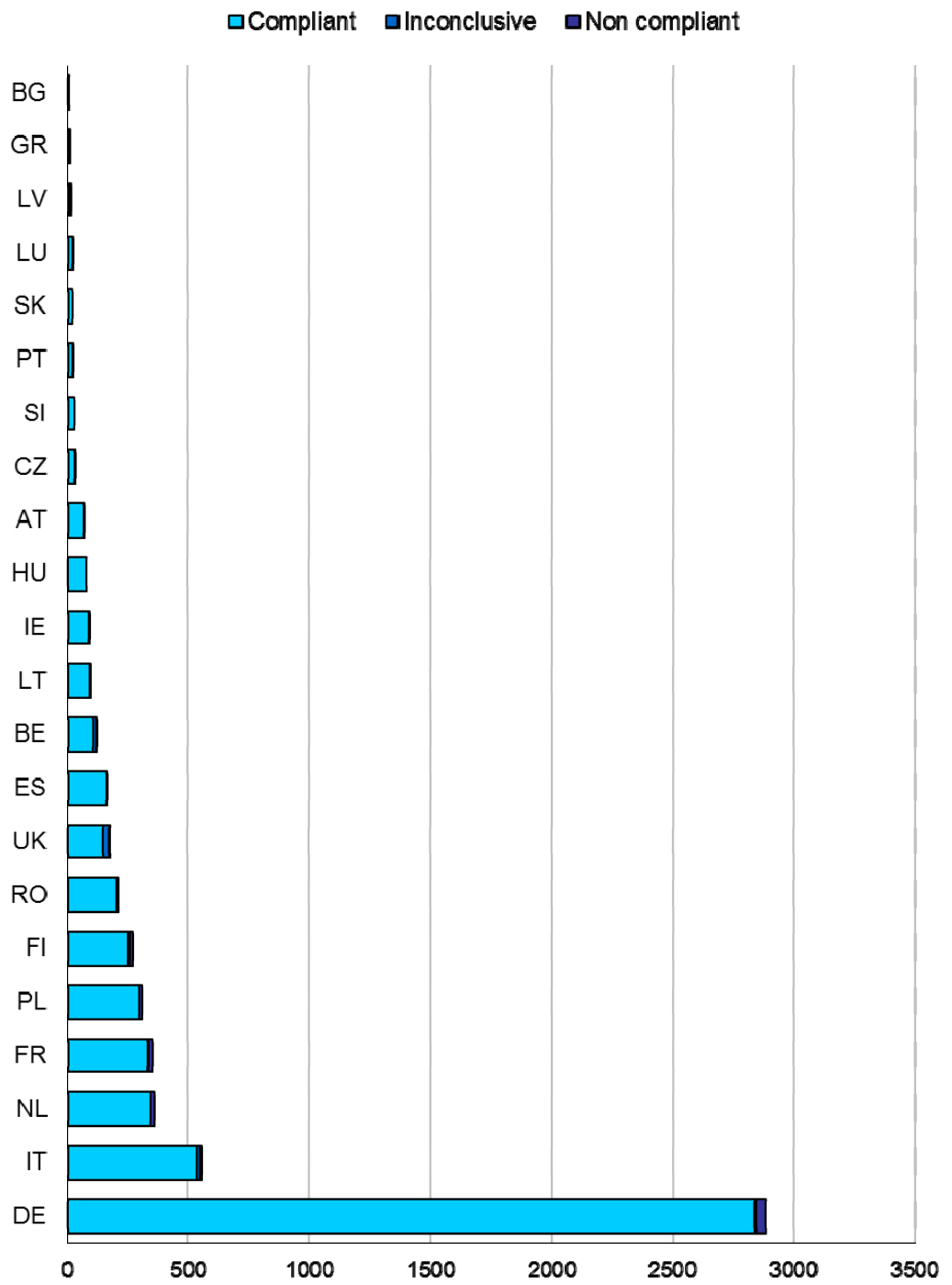
#### 4.1. Summary for the EU

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

Member State	Compliant	Inconclusive	Non-compliant	Total samples	% Versus EU total samples
BE	104	16	3	123	<b>2,1%</b>
BG	5	0	0	5	<b>0,1%</b>
CZ	26	1	3	30	<b>0,5%</b>
DK	NCP	NCP	NCP	NCP	
DE	2839	9	38	2886	<b>50,5%</b>
EE	NCP	NCP	NCP	NCP	
IE	90	0	1	91	<b>1,6%</b>
EL	10	0	0	10	<b>0,2%</b>
ES	162	0	0	162	<b>2,8%</b>
FR	167	0	7	174	<b>3,0%</b>
HR	NDS	NDS	NDS	NDS	
IT	535	10	8	553	<b>9,7%</b>
CY	NCP	NCP	NCP	NCP	
LV	8	0	5	13	<b>0,2%</b>
LT	95	0	2	97	<b>1,7%</b>
LU	18	0	2	20	<b>0,4%</b>
HU	81	0	0	81	<b>1,4%</b>
MT	NDS	NDS	NDS	NDS	
NL	340	0	20	360	<b>6,3%</b>
AT	65	0	7	72	<b>1,3%</b>
PL	296	3	10	308	<b>5,4%</b>
PT	19	1	3	23	<b>0,4%</b>
RO	201	4	3	208	<b>3,6%</b>
SI	28	0	0	28	<b>0,5%</b>
SK	21	0	0	21	<b>0,4%</b>
FI	252	7	13	272	<b>4,8%</b>
SE	NCP	NCP	NCP	NCP	
UK	149	22	5	176	<b>3,1%</b>
<b>Total EU</b>	<b>5511</b>	<b>73</b>	<b>130</b>	<b>5713</b>	<b>100%</b>
	<b>96,4%</b>	<b>1%</b>	<b>2%</b>	<b>100%</b>	

NDS: No data submitted; NCP: No check performed

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





#### 4.2. Belgium. Number of Samples: 123

Foodstuff category	Foodstuffs analysed at product marketing stage	Number of Samples: 123			CEN method used
		Compliant	Inconclusive	Non-Compliant	
Cereals, seed, vegetables, fruit and their products	Fruit (dried)	5	0	0	EN 1788
	Mushrooms (fresh)	3	0	0	EN 1788
	Pasta products	7	6	1*	EN 1788
	Vegetables and vegetable products (dried)	4	0	0	EN 1788
Fish, crustaceans, shellfish and their products	Molluscs	20	0	0	EN 1788
	Shrimps	18	0	0	EN 1788
Herbs and spices	Herbs and spices (frozen)	16	2	0	EN 1788
	Tea	19	2	0	EN 1788
Meat and meat products	Frog legs	2	6	1*	EN 1788
Other	Food supplements	10	0	1**	EN 1788
<b>Total:</b>		<b>104</b>	<b>16</b>	<b>3</b>	
<b>Total % of analysed samples:</b>		<b>85%</b>	<b>13%</b>	<b>2%</b>	

\* erroneously labelled

\*\* irradiation not allowed

#### 4.3. Bulgaria. Number of Samples: 5

Foodstuff category	Foodstuffs analysed at product marketing stage	Number of Samples: 5			CEN method used
		Compliant	Inconclusive	Non-Compliant	
Herbs and spices	Aromatic herbs, spices and vegetable seasoning (dried)	4	0	0	EN 1788
	Tea	1	0	0	EN 1788
<b>Total:</b>		<b>5</b>	<b>0</b>	<b>0</b>	
<b>Total % of analysed samples:</b>		<b>100%</b>	<b>0%</b>	<b>0%</b>	

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

Foodstuff category	Foodstuffs analysed at product marketing stage	Number of Samples: 30			CEN method used
		Compliant	Inconclusive	Non-Compliant	
Cereals, seed, vegetables, fruit and their products	Garlic	3	0	0	EN 1788
	Instant noodles	1	0	0	EN 1788
	Mushrooms or mushrooms products (dried)	3	0	0	EN 1788
Herbs and spices	Aromatic herbs, spices and vegetable seasoning (dried)	8	1	0	EN 1788
	Herbal teas / Infusions	2	0	0	EN 1788
Other	Food supplements (yucca powder)*	4	0	1	EN 1788
	Soup*	5	0	2	EN 1788
<b>Total:</b>		<b>26</b>	<b>1</b>	<b>3</b>	
<b>Total % of analysed samples:</b>		<b>87%</b>	<b>3%</b>	<b>10%</b>	

\* 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 which accompany or refer to irradiated foodstuffs, so it was not possible to say if the product was irradiated in a facility approved by the EU.

#### 4.5. Denmark

Due to limited financial resources, no checks were carried out at product marketing stage in 2013.

#### 4.6. Germany: Number of Samples: 2886

Foodstuff category	Foodstuffs analysed at product marketing stage	Number of Samples: 2886			CEN method used
		Compliant	Inconclusive	Non-Compliant	
Cereals, seed, vegetables, fruit and their products	Cereal products	9	0	0	EN 1788 EN 1787
	Cereals	1	0	0	EN 1787
	Fruit (dried)	80	0	0	EN 13708 EN 1788 EN 1787 EN 13751
	Fruits (fresh)	51	0	0	EN 1784 EN 1788 EN 1787
	Mushrooms (fresh)	14	0	0	EN 1788 EN 13751
	Mushrooms or mushrooms products (dried)	142	0	0	EN 1788 EN 1787 EN 13751

	Potatoes	10	0	0	EN 1788
	Pulses	66	0	0	EN 1788 EN 1787 EN 13751
	Vegetables and vegetable products (dried)	36	0	1*	EN 1788 EN 1787 EN 13751
	Vegetables (fresh)	19	0	0	EN 1788 EN 1787 EN 13751
Fish, crustaceans, shellfish and their products	Crustaceans, shellfish, mussels and other aquatic animals (including their products)	148	0	5**	EN 1786 EN 1788 EN 1787 EN 13751
	Fish and fish products	41	0	1***	EN 1784 EN 1786 EN 1788
	Fish and seafood (dried)	14	0	0	EN 1786 EN 1788 EN 13751
Herbs and spices	Aromatic herbs, spices and vegetable seasoning (dried)	1124	6	3**	EN 1788 EN 1787 EN 13751
	Herbs and spices (seasonings or condiments)	197	0	6*	EN 1788 EN 1787 EN 13751
	Tea	201	0	1*	EN 1788 EN 1787 EN 13751
Meat and meat products	Meat (except poultry and game)	31	0	0	EN 1784 EN 1786 EN 1787
	Meat products (except sausages)	48	0	0	EN 1784 EN 1786
	Other	1	0	0	EN 1788 EN 1786 EN 1787 EN 13751
	Poultry meat	118	0	0	EN 1786
	Sausage products	30	0	0	EN 1784 EN 1786
Milk and milk products	Butter (with herbs)	6	0	0	EN 1786
	Cheese (containing spices/herbs)	41	0	0	EN 1788 EN 1787
	Milk and milk products	1	0	0	EN 1787
Other	Coffee	0	0	1***	EN 1788
	Food supplements	154	1	4***	EN 1788 EN 13751
	Meals and dishes (prepared)	24	0	0	EN 1786 EN 1788 EN 13751
	Other	33	0	0	EN 1788 EN 1786 EN 1787 EN 13751

	Sauces and soups (dehydrated)	199	2	16*	EN 1788 EN 13751
<b>Total:</b>		<b>2839</b>	<b>9</b>	<b>38</b>	
<b>Total % of analysed samples:</b>		<b>98%</b>	<b>0%</b>	<b>1%</b>	

\* erroneously labelled

\*\* erroneously labelled and/or irradiation not allowed

\*\*\* irradiation not allowed

#### 4.7. Estonia

Due to lack of laboratories carrying out analyses for ionising radiation, no checks were carried out at product marketing stage in Estonia in 2013. Furthermore, according to the Estonian Competent Authorities, there were no suspicion cases on potential non-compliant irradiated foodstuffs on their market.

#### 4.8. Ireland: Number of Samples: 91

Foodstuff category	Foodstuffs analysed at product marketing stage	Number of Samples: 91			CEN method used
		Compliant	Inconclusive	Non-Compliant	
Cereals, seed, vegetables, fruit and their products	Berries	4	0	0	EN 1788 EN 13751
	Cereals, seed, vegetables and fruit	4	0	0	EN 1788 EN 13751
	Instant noodles	1	0	0	EN 1788 EN 13751
	Tomato Powder	1	0	0	EN 1788 EN 13751
Herbs and spices	Aromatic herbs, spices and vegetable seasoning (dried)	1	0	0	EN 1788 EN 13751
	Herbs and Spices	26	0	0	EN 1788 EN 13751
Meat and meat products	Burger Mix	1	0	0	EN 1788 EN 13751
Other	Food supplements	52	0	1*	EN 1788 EN 13751
<b>Total:</b>		<b>90</b>	<b>0</b>	<b>1</b>	
<b>Total % of analysed samples:</b>		<b>99%</b>	<b>0%</b>	<b>1%</b>	

\* erroneously labelled

#### 4.9. Greece: Number of Samples: 10

Foodstuff category	Foodstuffs analysed at product marketing stage	Number of Samples: 10			CEN method used
		Compliant	Inconclusive	Non-Compliant	
Herbs and spices	Aromatic herbs, spices and vegetable seasoning (dried)	9	0	0	EN 13751
	Herbal teas / Infusions	1	0	0	EN 13751
<b>Total:</b>		<b>10</b>	<b>0</b>	<b>0</b>	
<b>Total % of analysed samples:</b>		<b>100%</b>	<b>0%</b>	<b>0%</b>	

#### 4.10. Spain: Number of Samples: 162

		Number of Samples: 162			
Foodstuff category	Foodstuffs analysed at product marketing stage	Compliant	Inconclusive	Non-Compliant	CEN method used
Cereals, seed, vegetables, fruit and their products	Fruit (dried)	8	0	0	EN 13708
	Mushrooms or mushrooms products (dried)	12	0	0	EN 1788 EN 13751
	Nuts	4	0	0	EN 1787
	Oil seeds	32	0	0	EN 13751
	Vegetables and vegetable products (dried)	24	0	0	EN 1788 EN 1787 EN 13751
Fish, crustaceans, shellfish and their products	Fish and fish products	17	0	0	EN 1786
Herbs and spices	Aromatic herbs, spices and vegetable seasoning (dried)	45	0	0	EN 1788 EN 1787 EN 13751
	Herbal teas / Infusions	10	0	0	EN 13751
Meat and meat products	Meat	10	0	0	EN 1786
<b>Total:</b>		<b>162</b>	<b>0</b>	<b>0</b>	
<b>Total % of analysed samples:</b>		<b>100%</b>	<b>0%</b>	<b>0%</b>	

#### 4.11. France: Number of Samples: 174

		Number of Samples: 174			
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	54	0	0	EN 1787
	Other	8	0	0	EN 1788
Fish, crustaceans, shellfish and their products	Shrimps	20	0	1*	EN 1786
Herbs and spices	Aromatic herbs, spices and vegetable seasoning (dried)	44	0	2*	EN 1788
Meat and meat products	Frog legs	10	0	0	EN 1786
	Meat and meat products	31	0	4*	EN 1784
<b>Total:</b>		<b>167</b>	<b>0</b>	<b>7</b>	
<b>Total % of analysed samples:</b>		<b>96%</b>	<b>0%</b>	<b>4%</b>	

\* erroneously labelled

#### 4.12. Italy: Number of Samples: 553

		Number of Samples: 553			
Foodstuff category	Foodstuffs analysed at product marketing stage	Compliant	Inconclusive	Non-Compliant	CEN method used
Cereals, seed, vegetables, fruit and their products	Cereals	2	2	0	EN 1788 EN 13751
	Fruit (dried)	8	0	0	EN 13708 EN 13784 EN 1787

	Fruits (fresh)	7	0	0	EN 13708 EN 1788 EN 1787 EN 13751
	Garlic	17	1	0	EN 1788 EN 13784 EN 13751
	Mushrooms or mushrooms products (dried)	14	0	0	EN 1788 EN 1787 EN 13751
	Nuts	20	0	0	EN 13784 EN 1787 EN 13751
	Onions	22	0	0	EN 1788 EN 13784 EN 13751
	Other vegetables	4	0	0	EN 1788 EN 13751
	Potatoes	26	0	0	EN 1788 EN 13784 EN 13751
	Pulses	12	0	0	EN 13784 EN 13751
Fish, crustaceans, shellfish and their products	Crustaceans, shellfish, mussels and other aquatic animals (including their products)	95	1	0	EN 1788 EN 1786 EN 13751
	Fish and fish products	18	0	0	EN 1786 EN 1788 EN 13784
	Shrimps	38	3	4***	EN 1788 EN 13751
	Surimi	0	2	0	EN 1788
Herbs and spices	Aromatic herbs, spices and vegetable seasoning (dried)	124	0	1*	EN 1788 EN 13784 EN 13783 EN 1787 EN 13751
	Ingredients of plants food supplements	25	0	1**	EN 1788 EN 13784 EN 13751
	Tea	13	0	0	EN 1788 EN 1787 EN 13751
Meat and meat products	Frog legs	14	0	2	EN 1786 EN 13751
	Meat (except poultry and game)	36	0	0	EN 1786 EN 13784
	Poultry meat	39	0	0	EN 1786 EN 13784
Other	Meals and dishes (prepared)	0	1	0	EN 1788
	Sauces and soups (dehydrated)	1	0	0	EN 13751
	<b>Total:</b>	<b>535</b>	<b>10</b>	<b>8</b>	
	<b>Total % of analysed samples:</b>	<b>97%</b>	<b>2%</b>	<b>1%</b>	

- \* erroneously labelled
- \*\* erroneously labelled and/or irradiation not allowed
- \*\*\* erroneously labelled and/or irradiation in facilities not approved by the EU

#### 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 2013.

#### 4.14. Latvia: Number of Samples: 13

		Number of Samples: 13			
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	5	0	5*	EN 1788
<b>Total:</b>		<b>8</b>	<b>0</b>	<b>5</b>	
<b>Total % of analysed samples:</b>		<b>62%</b>	<b>0%</b>	<b>38%</b>	

\* irradiation not allowed

#### 4.15. Lithuania: Number of Samples: 97

		Number of Samples: 97			
Foodstuff category	Foodstuffs analysed at product marketing stage	Compliant	Inconclusive	Non-Compliant	CEN method used
Other	Food supplements	95	0	2*	EN 13783
<b>Total:</b>		<b>95</b>	<b>0</b>	<b>2</b>	
<b>Total % of analysed samples:</b>		<b>98%</b>	<b>0%</b>	<b>2%</b>	

\* irradiation in facilities not approved by the EU

#### 4.16. Luxembourg: Number of Samples: 20

		Number of Samples: 20			
Foodstuff category	Foodstuffs analysed at product marketing stage	Compliant	Inconclusive	Non-Compliant	CEN method used
Fish, crustaceans, shellfish and their products	Raw frozen large prawns	10	0	0	EN 1788
Meat and meat products	Frog legs	5	0	0	EN 1786
Other	Food supplements	3	0	2*	EN 1788
<b>Total:</b>		<b>18</b>	<b>0</b>	<b>2</b>	
<b>Total % of analysed samples:</b>		<b>90%</b>	<b>0%</b>	<b>10%</b>	

\* irradiation not allowed in Luxembourg, products are coming from USA

#### 4.17. Hungary: Number of Samples: 81

		Number of Samples: 81			
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)	81	0	0	EN 1788
<b>Total:</b>		<b>81</b>	<b>0</b>	<b>0</b>	
<b>Total % of analysed samples:</b>		<b>100%</b>	<b>0%</b>	<b>0%</b>	

#### 4.20. Netherlands: Number of Samples: 360

		Number of Samples: 360			
Foodstuff category	Foodstuffs analysed at product marketing stage	Compliant	Inconclusive	Non-Compliant	CEN method used
Cereals, seed, vegetables, fruit and their products	Other	101	0	0	EN 1788 EN 13751
Fish, crustaceans, shellfish and their products	only category is reported	40	0	8*	EN 1788 EN 13751
Herbs and spices	Only category is reported	83	0	1***	EN 1788 EN 13751
Meat and meat products	Only category is reported	3	0	0***	EN 1788 EN 13751
Other	Food for particular nutritional uses	3	0	0	EN 1788 EN 13751
	Food supplements	83	0	11**	EN 1788 EN 13751
	Poultry	27	0	0	EN 1788 EN 13751
<b>Total:</b>		<b>340</b>	<b>0</b>	<b>20</b>	
<b>Total % of analysed samples:</b>		<b>94%</b>	<b>0%</b>	<b>6%</b>	

\* erroneously labelled

\*\* irradiation in facilities not approved by the EU

\*\*\* no reason provided

#### 4.21. Austria: Number of Samples: 72

		Number of Samples: 72			
Foodstuff category	Foodstuffs analysed at product marketing stage	Compliant	Inconclusive	Non-Compliant	CEN method used
Fish, crustaceans, shellfish and their products	Crustaceans, shellfish, mussels and other aquatic animals (including their products)	20	0	2**	EN 1786
Herbs and spices	Aromatic herbs, spices and vegetable seasoning (dried)	30	0	0	EN 1788 EN 13751
Other	Sauces and soups (dehydrated)	15	0	5*	EN 1788 EN 13751
<b>Total:</b>		<b>65</b>	<b>0</b>	<b>7</b>	
<b>Total % of analysed samples:</b>		<b>90%</b>	<b>0%</b>	<b>10%</b>	

\* erroneously labelled

\*\* irradiation not allowed



#### 4.22. Poland: Number of Samples: 308

Foodstuffs category	Foodstuffs analysed at product marketing stage	Number of Samples: 308			CEN method used
		Compliant	Inconclusive	Non-Compliant	
Cereals, seed, vegetables, fruit and their products	Berries	1	0	0	EN 1787
	Cereals, seed, vegetables, fruit	1	0	0	EN 1784
	Dried fruit	4	0	0	EN 13708
	Fruits (fresh)	2	0	0	EN 1784 EN 1788
	Fruit (tropical)	7	0	0	EN 1784 EN 1788
	Garlic	13	0	0	EN 1788
	Mushrooms (fresh); Mushrooms or mushrooms products (dried)	1	0	0	EN 1788
	onions	1	0	0	EN 1788
	Potatoes	2	0	0	EN 1788
	Pulses	3	0	0	EN 1788
	Soups	1	0	0	EN 1788
	Tea	1	0	0	EN 1788 EN 13751
	Vegetables and vegetable products (dried)	1	0	0	EN 1788
	Vegetables (fresh)	1	0	0	EN 1788
Fish, crustaceans shellfish and their products	Crustaceans or molluscs (frozen)	1	0	0	EN 1788
	Crustaceans, shellfish, mussels and other aquatic animals (including their products)	5	0	0	EN 1786
	Fish and fish products	15	0	0	EN 1786
	Shrimps	4	0	0	EN 13751
Herbs and spices	Aromatic herbs, spices and vegetable seasoning (dried)	63	0	0	EN 1788 EN 13751
	Garlic	4	0	0	EN 1788
	Herbal teas/Infusions	1	0	0	EN 13751
	Herbs and spices (fresh)	3	0	0	EN 1788
	Other	1	0	0	EN 1788
	Tea	1	0	0	EN 1788 EN 13751
Meat and meat products	Meat	9	0	0	EN 1784 EN 1786
	Meat (except poultry and game)	5	0	0	EN 1784 EN 1786
	Meat from different birds, kangaroo, hare)	5	0	0	EN 1784 EN 1786
	Poultry meat	5	0	0	EN 1784 EN 1786

Milk and milk products	Cheese containing spices/herbs	32	1	7*	EN 1788
	Cheese (cottage)	4	0	0	EN 1788
	Cheese (ripened)	1	1	0	EN 1788
	Milk and milk products	3	0	0	EN 1788
Other	Berries	1	0	0	EN 1787
	Dried fruit	2	0	0	EN 13708
	Food for particular nutritional uses	8	0	1**	EN 1788 EN 13751
	Food supplements	19	0	2***	EN 1788 EN 13751
	Fruit (tropical)	2	0	0	EN 1784 EN 1788
	Herbal teas/Infusions	2	0	0	EN 13751
	Mushrooms (fresh); Mushrooms or mushrooms products (dried)	10	0	0	EN 1788
	Other	1	0	0	EN 1788
	Sauces and soups (dehydrated)	19	0	0	EN 1788
	Soups	5	1	0	EN 1788
	Tea	23	0	0	EN 1788 EN 13751
	Vegetables and vegetable products (dried)	1	0	0	EN 1788
<b>Total:</b>		<b>296</b>	<b>3</b>	<b>10</b>	
<b>Total % of analysed samples:</b>		<b>96%</b>	<b>1%</b>	<b>3%</b>	

\* erroneously labelled

\*\* irradiation not allowed

\*\*\* custom, erroneously labelled

#### 4.23. Portugal: Number of Samples: 23

Foodstuff category	Foodstuffs analysed at product marketing stage	Number of Samples: 23			CEN method used
		Compliant	Inconclusive	Non-Compliant	
Herbs and spices	Aromatic herbs, spices and vegetable seasoning (dried)	6	0	0	EN 13751
	Herbal teas / Infusions	1	0	0	EN 13751
Other	Food supplements	12	1	3*	EN 13751
<b>Total:</b>		<b>19</b>	<b>1</b>	<b>3</b>	
<b>Total % of analysed samples:</b>		<b>83%</b>	<b>4%</b>	<b>13%</b>	

\* irradiation not allowed

#### 4.24. Romania: Number of Samples: 208

Foodstuff category	Foodstuffs analysed at product marketing stage	Number of Samples: 208			CEN method used
		Compliant	Inconclusive	Non-Compliant	
Cereals, seed, vegetables, fruit and their products	Fruit (dried)	1	0	0	EN 13751
	Seeds	13	0	0	EN 13751
	Vegetables and vegetable products (dried)	3	0	0	EN 13751

Herbs and spices	Aromatic herbs, spices and vegetable seasoning (dried)	133	4	3*	EN 1788 EN 13751
	Herbal teas / Infusions	22	0	0	EN 1788 EN 13751
	Tea	5	0	0	EN 13751
Other	Food for particular nutritional uses	2	0	0	EN 13751
	Food supplements	22	0	0	EN 1788 EN 13751
<b>Total:</b>		<b>201</b>	<b>4</b>	<b>3</b>	
<b>Total % of analysed samples:</b>		<b>97%</b>	<b>2%</b>	<b>1%</b>	

\* irradiation in facilities not approved by the EU

#### 4.25. Slovenia: Number of Samples: 28

Foodstuff category	Foodstuffs analysed at product marketing stage	Number of Samples: 28			CEN method used
		Compliant	Inconclusive	Non-Compliant	
Cereals, seed, vegetables, fruit and their products	Berries	5	0	0	EN 1787 EN 13751
	Garlic	5	0	0	EN 1788 EN 1786 EN 13751
Herbs and spices	Aromatic herbs, spices and vegetable seasoning (dried)	5	0	0	EN 1787 EN 13751
	Tea	5	0	0	EN 13751 en 1787
Meat and meat products	Chicken broth	1	0	0	EN 1788 EN 1786 EN 13751
	Meat and meat products	2	0	0	EN 1788 EN 1786 EN 13751
	Poultry meat	3	0	0	EN 1788 EN 1786 EN 13751
Other	Soup	2	0	0	EN 1788 EN 1786 EN 13751
<b>Total:</b>		<b>28</b>	<b>0</b>	<b>0</b>	
<b>Total % of analysed samples:</b>		<b>100%</b>	<b>0%</b>	<b>0%</b>	

#### 4.26. Slovakia: Number of Samples: 21

Foodstuffs category	Foodstuffs analysed at product marketing stage	Number of Samples: 21			CEN method used
		Compliant	Inconclusive	Non-Compliant	
Herbs and spices	Other	4	0	0	EN 1784 EN 1788
Meat and meat products	Other	1	0	0	EN 1784 EN 1788
Milk and milk products	Cheese (ripened)	1	0	0	EN 1784
Other	Other	15	0	0	EN 1784 EN 1788
<b>Total:</b>		<b>21</b>	<b>0</b>	<b>0</b>	
<b>Total % of analysed samples:</b>		<b>100%</b>	<b>0%</b>	<b>0%</b>	

#### 4.27. Finland: Number of Samples: 272

Foodstuffs category	Foodstuffs analysed at product marketing stage	Number of Samples: 272			CEN method used
		Compliant	Inconclusive	Non-Compliant	
Cereals, seed, vegetables, fruit and their products	Berries	14	0	1*	EN 13751
	Cereal products	8	0	0	EN 13751
	Fruit (dried)	3	0	0	EN 13751
	Mushrooms or mushrooms products (dried)	2	0	0	EN 13751
	Nuts	0	0	4*	EN 13751
	Vegetables and vegetable products (dried)	30	0	0	EN 13751
Herbs and spices	Aromatic herbs, spices and vegetable seasoning (dried)	111	1	2**	EN 13751
	Herbal teas / Infusions	7	0	0	EN 13751
	Tea	19	0	1*	EN 13751
Other	Amino acid preparation	1	0	0	EN 13751
	Beverage ingredient	8	0	0	EN 13751
	Cocoa nibs	1	0	0	EN 13751
	Food additive	1	0	0	EN 13751
	Food for particular nutritional uses	1	0	0	EN 13751
	Food supplements	33	5	4*	EN 13751
	Meals and dishes (prepared)	7	1	1*	EN 13751
	Protein preparations	2	0	0	EN 13751
	Sauces and soups (dehydrated)	4	0	0	EN 13751
<b>Total:</b>		<b>252</b>	<b>7</b>	<b>13</b>	
<b>Total % of analysed samples:</b>		<b>93%</b>	<b>3%</b>	<b>5%</b>	

\* erroneously labelled, irradiation in facilities not approved by the EU, irradiation not allowed

\*\* erroneously labelled, irradiation in facilities not approved by the EU.

#### 4.28. Sweden

In 2013, no checks were carried out at the product marketing stage.

#### 4.29. United Kingdom: Number of Samples: 176

Foodstuff category	Foodstuffs analysed at product marketing stage	Number of Samples: 176			CEN method used
		Compliant	Inconclusive	Non-Compliant	
Cereals, seed, vegetables, fruit and their products	Garlic	3	1	0	EN 13751
	Instant noodles	34	8	4*	EN 1788 EN 13751
	Mango Chutney	1	0	0	EN 13751
	Nuts	1	0	0	EN 13751
	Rice Crackers	1	0	0	EN 13751
Herbs and spices	Aromatic herbs, spices and vegetable seasoning (dried)	84	6	0	EN 1788 EN 13751
	Curry Paste	1	0	0	EN 13751
	Herbal teas / Infusions	1	1	0	EN 13751
	Herbs and spices (fresh)	5	1	0	EN 13751
	Tea	2	0	0	EN 13751

Other	Coffee	1	0	0	EN 13751
	Food supplements	11	4	1*	EN 1788 EN 13751
	Sauces and soups (dehydrated)	4	1	0	EN 13751
<b>Total:</b>		<b>149</b>	<b>22</b>	<b>5</b>	
<b>Total % of analysed samples:</b>		<b>85%</b>	<b>13%</b>	<b>3%</b>	

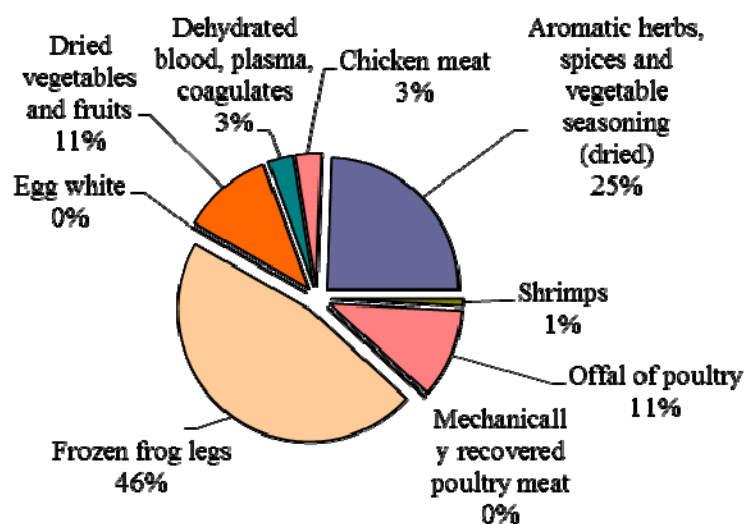
\* erroneously labelled, irradiation in facilities not approved by the EU, irradiation not allowed

## 5. SUMMARY

The current report covers the period from 1 January to 31 December 2013. It contains a compilation of the information forwarded to the Commission by 26 Member States. Malta and Croatia did not submit data for 2013.

In 2013, 25 approved irradiation facilities were operational in 13 Member States, in accordance with Article 7(2) of Directive 1999/2/EC. One new irradiation facility has been approved in Spain. No approved irradiation facilities have been closed. Seven irradiation facilities did not irradiate any food during 2013.

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).



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.

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.

**6. CORRIGENDUM TO THE REPORT FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT AND THE COUNCIL ON FOOD INGREDIENTS TREATED WITH IONISING RADIATION FOR THE YEAR 2012 (COM(2014) 52 FINAL)**

By this corrigendum, section 4.10 Spain, is replaced by the following:

**4.10. Spain**

Foodstuffs analysed at product marketing stage	Number of Samples: 141			CEN method used
	Compliant	Inconclusive	Non-Compliant	
Aromatic herbs, spices and vegetable seasoning (dried)	77	1	0	EN 1788; EN 13751; EN 1787
Fish and fish products	30	0	0	EN 1786
Herbal teas / Infusions	8	0	0	EN 13751
Meat and meat products	2	0	0	EN1786
Mushrooms or mushrooms products (dried)	9	0	0	EN 1788; EN 13751
Nuts	6	0	0	EN1787
Vegetables (dried)	8	0	0	EN13751; EN1787
<b>Total:</b>	<b>140</b>	<b>1</b>	<b>0</b>	
<b>Total % of analysed samples:</b>	<b>99%</b>	<b>1%</b>	<b>0%</b>	