



Brussels, 23.9.2016
SWD(2016) 316 final

COMMISSION STAFF WORKING DOCUMENT
Accompanying the document

REPORT FROM THE COMMISSION

Report to facilitate the calculation of the assigned amount of the European Union, and the report to facilitate the calculation of the joint assigned amount of the Union, its Member States and Iceland pursuant to Article 3(7bis), (8) and (8bis) of the Kyoto Protocol for the second commitment period, as required under Article 3(2) of Council Decision (EU) 2015/1339

{COM(2016) 618 final}

STRUCTURE

This document generally follows the structure and the requirements set out in Annex I to Decision 2/CMP.8 (*Implications of the implementation of decisions 2/CMP.7 to 5/CMP.7 on the previous decisions on methodological issues related to the Kyoto Protocol, including those relating to Articles 5, 7 and 8 of the Kyoto Protocol*).

In addition, this document also reflects the additional guidance contained in Decision 3/CMP.11. This decision contains relevant provisions related to reporting and accounting for the second commitment period under the Kyoto Protocol, including the specification of elements for this report. Chapter 2 of this report presents the items of information as required above.

The deadline for submitting the report to facilitate the calculation of the assigned amount for the second commitment period under the Kyoto Protocol was originally 15 April 2015 in accordance with Decision 2/CMP.8 of the Conference of the Parties serving as the meeting of the Parties to under the Kyoto Protocol.

A functioning common reporting format (CRF) reporter software was not available for the GHG inventory submissions and for the calculation of the assigned amount in 2015. According to Decision 4/CMP.11 of the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol, the CRF Reporter version 5.0.0 was not functioning in order to enable Annex I Parties to prepare their inventory submissions. In the same Decision, the CMP noted that a delay in the submission of the CRF tables by a Party also delays the submission of the report to facilitate the calculation of its assigned amount referred to in Decision 2/CMP.8, paragraph 2.

1. INTRODUCTION

The targets (quantified emission limitation commitments, QELRCs) for the Union and its Member States are listed in the Doha Amendment with a footnote stating that those targets are based on the understanding that they will be fulfilled jointly by the European Union (EU) and its Member States, in accordance with Article 4 of the Kyoto Protocol. The Union, its Member States at the time, Croatia¹ and Iceland also issued a joint declaration upon the adoption of the Doha Amendment, expressing their intention to fulfil their commitments in the second commitment period jointly.²

Article 4 of the Kyoto Protocol requires Parties that agree to fulfil their commitments under Article 3 of the Kyoto Protocol jointly to set out in the relevant joint fulfilment agreement the respective emission level allocated to each of the Parties. Council Decision (EU) 2015/1339 on the conclusion, on behalf of the EU, of the Doha Amendment to the Kyoto Protocol to the UNFCCC and the joint fulfilment of commitments thereunder (from here onwards also referred to as "the ratification decision") sets out the terms of the joint fulfilment and the respective emission levels for the Union, the Member States and Iceland (Annex I to that Decision).³ Those emission levels were determined in line with the existing responsibilities under EU legislation contained in the EU's 'Climate and Energy package'.

Negotiations between the EU and Iceland on the joint fulfilment were completed in June 2014. The agreement was signed on 1 April 2015 and approved on behalf of the Union on 13 July 2015⁴ (from here onwards also referred to as the "agreement with Iceland") and it contains the same terms of the joint fulfilment as set out in Council Decision 2015/1339.

In the ratification decision, the Commission is tasked to prepare the report to facilitate the calculation of the assigned amount of the Union and the report to facilitate the calculation of the joint assigned amount of the Union, its Member States and Iceland ("the joint assigned amount"). The Member States and Iceland will submit their own initial reports, which will determine their assigned amounts as equal to their emission levels as agreed under the joint fulfilment.

The Kyoto Protocol requires the parties to a joint fulfilment agreement to notify the Convention Secretariat of the terms of that agreement on the date of deposit of their instruments of ratification or approval.

¹ Croatia only joined the EU on 1 July 2013, i.e. after the adoption of the Doha Amendment.

² FCCC/KP/CMP/2012/13/Add.1

³ OJ L 207/1, 4.8.2015, p. 1

⁴ Council Decision (EU) 2015/1340 of 13 July 2015 on the conclusion, on behalf of the European Union, of the Agreement between the European Union and its Member States, of the one part, and Iceland, of the other part, concerning Iceland's participation in the joint fulfilment of commitments of the European Union, its Member States and Iceland for the second commitment period of the Kyoto Protocol to the United Nations Framework Convention on Climate Change (OJ L 207/15, 4.8.2015, p. 15)

2. PROVISION OF INFORMATION

2.1. Inventories of anthropogenic emissions by sources and removals by sinks of greenhouse gases not controlled by the Montreal Protocol

The annual greenhouse gas inventory of the EU covers anthropogenic emissions by sources and removals by sinks of greenhouse gases not controlled by the Montreal Protocol arising on the territory of the Union, calculated as the sum of the emissions and removals of the 28 Member States as reported in their respective national inventories. For the purposes of the joint fulfilment of the EU, its Member States and Iceland under the second commitment period of the Kyoto Protocol, the joint greenhouse gas inventory submitted by the EU under the Kyoto Protocol reflects the sum of emissions and removals of the 28 Member States plus other non-EU territories that are part of the Kyoto Protocol and Iceland (from here onwards referred to as the "joint inventory").

The complete joint inventory of anthropogenic emissions by sources and removals by sinks of greenhouse gases not controlled by the Montreal Protocol for all years from the base year to the year 2014 for the EU, its Member States and Iceland is submitted as a separate document in conjunction with this report in accordance with paragraph 1(a) of Annex I to Decision 2/CMP.8. The greenhouse gas inventory is reported based on the UNFCCC reporting guidelines on annual greenhouse gas inventories, the guidelines for the preparation of information required under Article 7 of the Kyoto Protocol (Decision 15/CMP.1 and Annex III of Decision 3/CMP.11) and the guidance for reporting information on activities under Article 3(3) and (4), of the Kyoto Protocol (Decision 6/CMP.9).

2.1.1. Geographical coverage of the joint inventory under the second commitment period of the Kyoto Protocol

The joint inventory under the Kyoto Protocol covers the geographical coverage of the 28 Member States and Iceland under the Kyoto Protocol as specified in the table below:

Table 2-1 Geographical coverage of the joint inventory under the Kyoto Protocol

Member State	Geographical coverage
Austria	Austria
Belgium	Belgium consisting of Flemish Region, Walloon Region and Brussels Region
Bulgaria	Bulgaria
Croatia	Croatia
Cyprus	Republic of Cyprus (Area of the Republic of Cyprus under the effective control of the Government of the Republic of Cyprus)
Czech Republic	Czech Republic
Denmark	Denmark excluding Greenland and the Faeroe Islands.
Estonia	Estonia
Finland	Finland including Åland Islands

Member State	Geographical coverage
France	<p>The geographical scope of the inventory under the Kyoto Protocol for the year 2013 is without Mayotte i. e. Metropolitan France, the overseas departments (Guadeloupe, Martinique, Guyana and Réunion) and 2 overseas communities (Saint Barthélemy and Saint-Martin), excluding the other French overseas communities (French Polynesia, Wallis and Futuna, Saint-Pierre and Miquelon and Mayotte) and overseas territories (the French Southern and Antarctic Lands) and New Caledonia</p> <p>The geographical scope of the inventory under the Kyoto Protocol for the period 2014-2020 is with Mayotte i. e. Metropolitan France, the overseas departments (Guadeloupe, Martinique, Guyana, Réunion and Mayotte) and 2 overseas communities (Saint Barthélemy and Saint-Martin), excluding the other French overseas communities (French Polynesia, Wallis and Futuna, Saint-Pierre and Miquelon) and overseas territories (the French Southern and Antarctic Lands) and New Caledonia</p>
Germany	Germany
Greece	Greece
Hungary	Hungary
Ireland	Ireland
Italy	Italy
Latvia	Latvia
Lithuania	Lithuania
Luxembourg	Luxembourg
Malta	Malta
Netherlands	The legal territory of the Netherlands used in the inventory includes a 12-mile zone from the coastline and also inland water bodies. It excludes Aruba and the Netherlands Antilles, which are self-governing dependencies of the Royal Kingdom of The Netherlands. Emissions from offshore oil and gas production on the Dutch part of the continental shelf are included.
Poland	Poland
Portugal	Mainland Portugal and the two Autonomous regions of Madeira and Azores Islands
Romania	Romania
Slovakia	Slovakia
Slovenia	Slovenia
Spain	Spanish part of Iberian mainland, Canary Islands, Balearic Islands, Ceuta and Melilla
Sweden	Sweden
United Kingdom	The territorial coverage has been extended to include complete coverage of emissions for the UK's Crown Dependencies and those UK Overseas Territories that joined the UK's ratifications of the UNFCCC and the Kyoto Protocol during its first commitment period. The final extent of territorial coverage for the second commitment period of the Kyoto Protocol has yet to be fully determined, as it will depend on which of the UK's Crown Dependencies and Overseas Territories join the UK's ratification in respect of the second commitment period.
Iceland	Iceland

2.1.2. Greenhouse gas inventory for 1990-2014

The information described below is taken from the joint inventory, which covers the sum of the inventories of the Member States and Iceland for all emissions and removals of greenhouse gases on the territory of the Member States and Iceland subject to the emission reduction commitments under the Kyoto Protocol (see 2.1.1 above). Under the terms of the joint fulfilment, the combined base year emissions of the EU, its Member States and Iceland equal the sum of emissions and removals in the respective base years chosen by each Member State and Iceland plus any emissions resulting from the application of Kyoto Protocol Article 3(7bis) (from here onwards referred to as the "combined base year"). The information on the calculation and choices for the combined base year is contained in section 2.2.

In 2014, the total combined GHG emissions, without LULUCF, were 4 290 million tonnes CO₂ equivalents, or 24.4% below 1990 levels (Figure 1). Compared to the combined base year, emissions in 2014 were 27.0% lower (Figure 2). Under the Doha Amendment of the Kyoto Protocol, the EU, its Member States and Iceland have agreed to jointly reduce their combined average annual emissions during 2013-2020 by 20% compared to their combined base year emission levels. Table 2-2 shows the combined GHG emissions of Member States and Iceland.

Figure 2.1 Combined GHG emissions for the period 1990-2014 (excluding LULUCF) in Mt CO₂eq

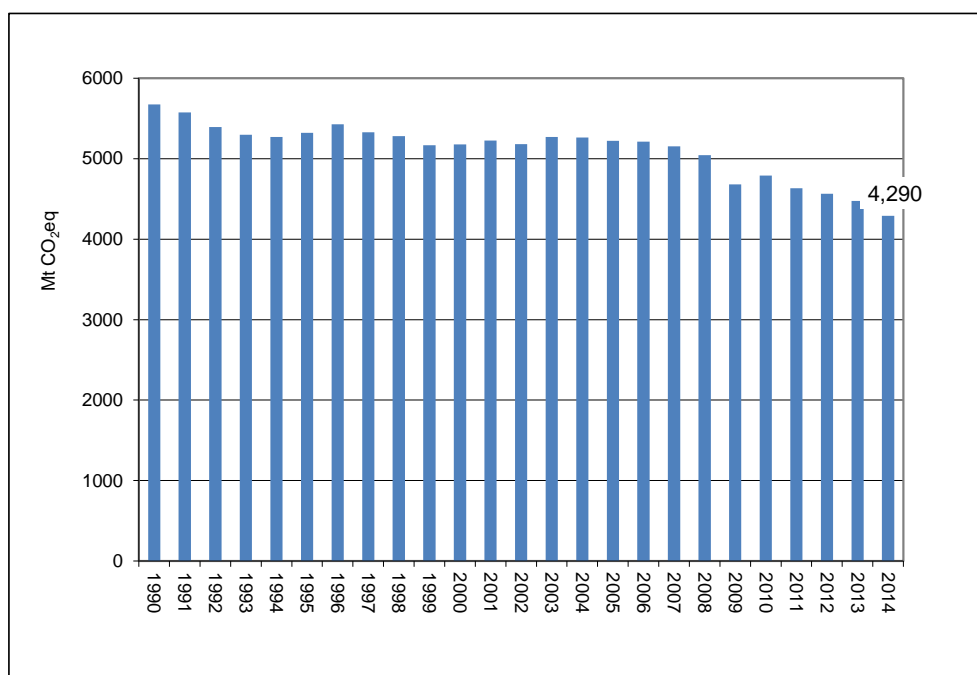


Table 2-2 Greenhouse gas emissions in Mt CO₂ equivalents for the Member States, the EU and Iceland (excl. LULUCF)

Member State	Base year	1990	1995	2000	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Austria	78.9	78.8	79.8	80.4	92.8	90.0	87.2	87.1	80.2	84.9	82.6	79.9	80.0	76.3
Belgium	147.8	146.0	154.0	149.2	144.8	141.0	136.5	138.7	125.8	133.3	122.8	118.8	119.4	113.9
Bulgaria	114.6	104.0	73.5	58.3	62.7	63.3	67.2	66.0	57.1	59.8	65.1	60.0	54.9	57.2
Croatia	31.2	34.8	24.4	27.0	31.1	31.5	33.0	31.7	29.7	29.0	28.4	26.1	25.0	24.5
Cyprus	5.7	5.7	7.1	8.4	9.3	9.6	9.9	10.1	9.9	9.6	9.3	8.7	8.0	8.4
Czech Republic	199.3	199.3	158.1	150.9	148.7	150.5	151.3	146.5	138.0	140.2	138.8	134.7	130.7	125.9
Denmark	71.0	70.7	78.6	71.1	66.7	74.5	69.8	66.2	63.2	63.6	58.4	53.5	55.5	51.2
Estonia	40.0	40.0	19.9	17.1	18.3	17.7	20.8	19.4	16.2	19.9	20.5	19.4	21.7	21.1
Finland	71.4	71.3	71.8	70.0	69.5	80.7	79.2	71.3	67.7	75.9	68.0	62.4	63.3	59.1
France	548.1	548.1	547.0	554.3	554.8	543.1	534.0	527.2	506.5	514.5	487.0	488.4	486.5	458.9
Germany	1 249.9	1 246.1	1 118.5	1 041.1	989.9	997.2	970.2	972.1	904.7	939.4	920.2	924.7	943.5	900.2
Greece	107.7	104.8	110.8	127.7	136.0	132.2	135.0	131.3	124.8	118.7	115.7	112.2	104.7	101.4
Hungary	109.6	94.1	75.7	73.6	75.9	74.9	73.1	71.3	65.1	65.5	63.8	60.1	57.6	57.2
Ireland	56.4	56.2	59.9	69.3	70.4	69.8	69.1	68.5	62.9	62.3	58.2	58.7	58.5	58.3
Italy	521.9	521.9	533.4	554.5	578.9	569.1	561.1	549.5	498.9	508.4	494.8	468.7	438.9	418.6
Latvia	26.2	26.2	12.8	10.4	11.4	11.9	12.4	11.9	11.1	12.3	11.5	11.4	11.3	11.3
Lithuania	47.1	47.1	21.6	18.7	22.3	22.6	24.6	23.7	19.3	20.1	20.6	20.4	19.1	19.0
Luxembourg	12.9	12.9	10.1	9.7	13.0	12.9	12.3	12.2	11.6	12.2	12.1	11.8	11.2	10.8
Malta	2.0	2.0	2.5	2.6	3.0	3.1	3.2	3.2	3.1	3.1	3.2	3.3	3.0	3.0
Netherlands	224.6	222.2	232.2	220.3	214.4	209.4	208.3	207.7	201.9	213.8	200.0	195.3	195.0	187.1

Member State	Base year	1990	1995	2000	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Poland	579.9	472.9	445.2	392.2	396.9	411.0	410.9	402.8	385.5	406.2	403.3	396.9	393.4	380.3
Portugal	65.0	60.7	71.4	84.0	88.2	83.1	80.6	78.3	75.2	70.4	68.9	67.1	65.0	64.6
Romania	301.1	251.9	182.8	140.5	146.6	148.9	146.3	141.2	123.5	117.0	121.7	120.1	110.0	109.8
Slovakia	74.7	74.7	54.7	49.9	51.5	51.4	49.5	50.2	45.6	46.5	45.7	43.3	42.9	40.6
Slovenia	20.3	18.6	18.8	19.1	20.5	20.7	20.8	21.5	19.6	19.6	19.6	19.0	18.3	16.6
Spain	288.7	285.9	325.7	385.1	438.5	431.3	440.1	409.0	371.5	360.8	360.4	355.4	327.4	328.9
Sweden	72.1	71.9	74.0	68.9	67.0	66.9	65.4	63.1	59.1	65.0	61.0	57.6	55.9	54.4
United Kingdom	803.7	799.8	752.2	717.3	695.7	690.0	677.7	657.7	599.3	613.9	565.7	582.6	569.8	527.2
EU-28	5 873.9	5 668.7	5 316.6	5 171.5	5 219.0	5 208.1	5 149.5	5 039.3	4 676.7	4 786.0	4 627.1	4 560.5	4 470.6	4 285.6
Iceland	3.6	3.6	3.4	4.0	3.9	4.5	4.7	5.1	4.9	4.7	4.5	4.6	4.5	4.6
EU-28+Iceland	5 877.6	5 672.3	5 320.0	5 175.5	5 222.9	5 212.6	5 154.2	5 044.5	4 681.6	4 790.7	4 631.6	4 565.0	4 475.2	4 290.2

Note: The base year presented includes the emissions from deforestation in the base year for Denmark, Ireland, the Netherlands, Portugal and the United Kingdom in accordance with Article 3.7bis of the Doha amendment to the Kyoto Protocol.

2.2. Identification of base years for the second commitment period

The joint inventory reflects the base years as chosen by the Member States and Iceland in their national inventories. The sections below provide information on these choices. Table 2-3 provides an overview of Member States' and Iceland's base years.

2.2.1. Base year for CO₂, N₂O and CH₄

For carbon dioxide (CO₂), methane (CH₄) and nitrous oxide (N₂O) all Member States and Iceland use 1990 as base year with the following exceptions:

- The base year for Slovenia is 1986.
- The base year for Bulgaria and Poland is 1988.
- The base year for Romania is 1989.
- The base year for Hungary is the average of the years 1985 to 1987.

The choice of these different base years for these Member States is based on Article 4(6) of the United Nation Framework Convention on Climate Change. These are the same base years for these gases as in the first commitment period, apart from Cyprus and Malta who did not have a QELRC in the first commitment period and hence have identified their base year for the first time under the second commitment period.

2.2.2. Base year for hydrofluorocarbons, perfluorocarbons, sulphur hexafluoride in accordance with Article 3(8) of the Kyoto Protocol

For hydrofluorocarbons, perfluorocarbons and sulphur hexafluoride, the choice of base year for the Member States and Iceland remains as in the first commitment period (see Table 2-3 below). Cyprus and Malta did not have to identify a base year in the first commitment period. They selected 1990 as base year for these gases.

2.2.3. Base year for nitrogen trifluoride in accordance with Article 3(8bis) of the Kyoto Protocol

According to Article 3(8bis) of the Doha Amendment to the Kyoto Protocol, any Party included in Annex I may use 1995 or 2000 as its base year for nitrogen trifluoride (NF₃) for the purposes of the calculation referred to in paragraph 7 bis. The base year choices of the 28 Member States and Iceland related to NF₃ are documented in Table 2-3 below. Most Member States have selected 1995.

Table 2-3 Choice of base years for different greenhouse gases for the EU Member States and Iceland for the second commitment period under the Kyoto Protocol

Member State	Base year for CO ₂ , CH ₄ and N ₂ O	Base year for HFCs, PFCs and SF ₆	Base year for NF ₃
Austria	1990	1990	2000
Belgium	1990	1995	1995
Bulgaria	1988	1995	1995
Croatia	1990	1990	2000
Cyprus	1990	1995	1995
Czech Republic	1990	1995	1995

Member State	Base year for CO ₂ , CH ₄ and N ₂ O	Base year for HFCs, and SF ₆ PFCs	Base year for NF ₃
Denmark	1990	1995	1995
Estonia	1990	1995	1995
Finland	1990	1995	1995
France	1990	1990	1995
Germany	1990	1995	1995
Greece	1990	1995	2000
Hungary	1985-1987	1995	1995
Ireland	1990	1995	1995
Italy	1990	1990	1995
Latvia	1990	1995	1995
Lithuania	1990	1995	1995
Luxembourg	1990	1995	1995
Malta	1990	1990	1995
Netherlands	1990	1995	1995
Poland	1988	1995	2000
Portugal	1990	1995	2000
Romania	1989	1989	2000
Slovakia	1990	1990	2000
Slovenia	1986	1995	1995
Spain	1990	1995	1995
Sweden	1990	1995	1995
United Kingdom	1990	1995	1995
Iceland	1990	1990	1995

Based on the choices documented in Table 2-3, the combined base year emissions for the joint fulfilment for each gas is the sum of the base year emissions of the gas concerned in 28 Member States plus the emissions from Iceland in its base year.

2.3. Terms of the joint fulfilment under Article 4 of the Kyoto Protocol for the second commitment period

The Kyoto Protocol, under Article 4, provides the option for Parties to fulfil their commitments under Article 3 jointly.

The European Union and its Member States already made use of this option during the first commitment period (2008-2012), fulfilling their respective commitments under Article 3 (1) of the Kyoto Protocol jointly as a bloc of 15 countries, which were Member States of the Union at the time the Kyoto Protocol was ratified.

For the second commitment period, upon adoption of the Doha amendment to the Kyoto Protocol, the European Union, its Member States and Iceland stated that the European Union and its 28 Member States again intend to fulfil their reduction targets under the second commitment period jointly⁵.

The ratification decision (Council Decision (EU) 2015/1339) sets out the terms of the joint fulfilment between the Union and its Member States and Iceland. The same terms are integral part of the Agreement between the European Union and its Member States, of the one part, and Iceland, of the other part, concerning Iceland's participation in the joint fulfilment of the

⁵ Declaration made in footnotes 4, 6 and 8 to Annex B of the Doha Amendment and Council Decisions (EU) 2015/1339 and 2015/1340

commitments of the European Union, its Member States and Iceland in the second commitment period of the Kyoto Protocol in accordance with Council Decision (EU) 2015/1340.

Members of the joint fulfilment agreement for the second commitment period

The EU its Member States and the Republic of Iceland are members of this agreement (referred to as ‘the members’). The following States are at present Member States of the European Union: the Kingdom of Belgium, the Republic of Bulgaria, the Czech Republic, the Kingdom of Denmark, the Federal Republic of Germany, the Republic of Estonia, Ireland, the Hellenic Republic, the Kingdom of Spain, the French Republic, the Republic of Croatia, the Italian Republic, the Republic of Cyprus, the Republic of Latvia, the Republic of Lithuania, the Grand Duchy of Luxembourg, Hungary, the Republic of Malta, the Kingdom of the Netherlands, the Republic of Austria, the Republic of Poland, the Portuguese Republic, Romania, the Republic of Slovenia, the Slovak Republic, the Republic of Finland, the Kingdom of Sweden, the United Kingdom of Great Britain and Northern Ireland.

Iceland participates in this agreement pursuant to the agreement with Iceland concerning Iceland’s participation in the joint fulfilment of the commitments of the EU, its Member States and Iceland in the second commitment period of the Kyoto Protocol to the United Nations Framework Convention on Climate Change.

Provisions of the joint fulfilment relevant to the calculation of the assigned amounts

The joint assigned amount is calculated pursuant to the quantified emission limitation and reduction commitment listed in the third column of the table contained in Annex B to the Kyoto Protocol and in accordance with the provisions of Article 3 thereof. The assigned amounts of the members are determined in accordance with the terms of the joint fulfilment (see sections 2.3.1 and 2.4 below).

The combined base year emissions of the members to the joint fulfilment equal the sum of emissions in the respective base years applicable to each Member State and Iceland.

If land use, land-use change and forestry constituted a net source of greenhouse gas emissions in 1990 for any Member State or Iceland, that member shall, pursuant to Article 3(7bis) of the Kyoto Protocol, include in its emissions base year or period the aggregate anthropogenic carbon dioxide equivalent emissions by sources minus removals by sinks in the base year or period from land-use change (deforestation) for the purpose of calculating the joint assigned amount of the members determined in accordance with Article 3 (7bis), (8) and (8bis) of the Kyoto Protocol.

The calculation pursuant to Article 3(7ter) of the Kyoto Protocol shall apply to the joint assigned amount of the second commitment period determined in accordance with Article 3 (7bis), (8) and (8bis) of the Protocol and the sum of the average annual emissions of the members for the first three years of the first commitment period multiplied by eight.

2.3.1. Respective emission levels allocated to the members to the joint fulfilment

The joint quantified emission limitation and reduction commitment for the members listed in the third column of Annex B of the Kyoto Protocol for the EU, its 28 Member States and Iceland is 80%. The joint assigned amount of the Members is determined pursuant to Article

3(7bis), (8) and (8bis) of the Kyoto Protocol on the basis of the combined base year (see section 2.4).

The respective emission levels of the members to the joint fulfilment are as follows:

- The emission level and assigned amount for the EU is the difference between the joint assigned amount of the members, and the sum of the emission levels of the Member States and Iceland.
- The assigned amount of the EU is counted against the emissions of greenhouse gases listed in Annex A to the Kyoto Protocol that are also covered by the EU Emissions Trading System (EU ETS) pursuant to Directive 2009/29/EC of the European Parliament and of the Council amending Directive 2003/87/EC⁶ so as to improve and extend the greenhouse gas emission allowance trading scheme of the Community. The sectors covered by the EU Emissions Trading System are those specified in Annex I of the EU ETS Directive and taking into account the application of its Articles 24 and 27.
- The emission levels of the Member States and Iceland cover the emissions from sectors and gases listed in Annex A to the Kyoto Protocol not covered by Directive 2009/29/EC of the European Parliament and of the Council amending Directive 2003/87/EC so as to improve and extend the greenhouse gas emission allowance trading scheme of the Community. This includes all emissions from sources and removals by sinks covered by Article 3(3) and (4) of the Protocol as well as all emissions of nitrogen trifluoride (NF₃) under the Kyoto Protocol. These emission levels are no longer derived as a reduction percentage compared to base year emissions as in the first commitment period, but as an absolute figure, expressed in tonnes of carbon dioxide equivalents listed for each Member State and Iceland. The figure for individual Member States is equal to the sum of each Member State's Annual Emissions Allocation under Decision No 406/2009/EC on the effort of Member States to reduce their greenhouse gas emissions to meet the Community's greenhouse gas emission reduction commitments up to 2020 (Effort Sharing Decision) for the years 2013 to 2020 before the application of Article 3(7bis).⁷ The respective emission levels of the 28 Member States and Iceland in accordance with Article 4(1) and (5) of the Protocol and before application of Article 3(7bis) are listed in Table 2-4

Table 2-4 Emission levels of the Member States and Iceland set out in the terms of the joint fulfilment before application of Article 3(7bis) for the second commitment period under the Kyoto Protocol

Country	Emission level [tonnes of CO ₂ eq.]
Belgium	584 228 513
Bulgaria	222 945 983
Czech Republic	520 515 203
Denmark	269 321 526
Germany	3 592 699 888
Estonia	51 056 976

⁶ OJ L140, 5.6.2009, p. 63

⁷ OJ L140, 5.6.2009, p. 136

Country	Emission level [tonnes of CO ₂ eq.]
Ireland	343 467 221
Greece	480 791 166
Spain	1 766 877 232
France	3 014 714 832
Croatia	162 271 086
Italy	2 410 291 421
Cyprus	47 450 128
Latvia	76 633 439
Lithuania	113 600 821
Luxembourg	70 736 832
Hungary	434 486 280
Malta	9 299 769
Netherlands	919 963 374
Austria	405 712 317
Poland	1 583 938 824
Portugal	402 210 711
Romania	656 059 490
Slovenia	99 425 782
Slovakia	202 268 939
Finland	240 544 599
Sweden	315 554 578
United Kingdom	2 743 362 625
Iceland	15 327 217

The terms of the joint fulfilment determine that the assigned amounts of the members shall be equal to their respective emission levels, adjusted for Article 3(7bis) of the Kyoto Protocol.

The assessment of compliance of the joint fulfilment at the end of the second commitment period does not require changes to the annual inventory reporting. The EU, the 28 Member States and Iceland will continue to report individually on emissions by sources and removals by sinks, submitting full greenhouse gas inventories covering all anthropogenic emissions by sources and removals by sinks for gases listed on Annex A to the Kyoto Protocol and all source categories covered by the UNFCCC reporting guidelines occurring on their territories under the Kyoto Protocol.

The EU will report in its national inventory report on the combined emissions of the 28 Member States and Iceland (see also section 2.1 above).

2.4. Calculation of the assigned amounts pursuant to Article 3(7bis), (8) and (8bis)

As previously stated, the combined base year emissions of the EU, its Member States and Iceland are equal to the sum of the respective base year emissions of the 28 Member States and Iceland. The combined base year emissions represent the aggregate sum, taking account of the choice of base years for CO₂, N₂O, CH₄, HFCs, PFCs, SF₆ and NF₃ for each Member State, as provided in Table 2-3.

Table 2-5 presents the base year emissions as well as the net emissions in the base year/period reported in relation to the conversion of forests (deforestation) that are to be included in the base year emissions for those countries for whom land-use change and forestry constituted a net source of greenhouse gas emissions in the base year/period in accordance with Article 3(7bis) of the Kyoto Protocol and , paragraph 5(b) of the Annex to Decision 13/CMP.1 as replaced by

paragraph 2 of Annex I to Decision 3/CMP.11. The latter are also included in the calculation of the joint base year emissions.

Table 2-5 Base year emissions of the EU Member States and Iceland, calculated pursuant to Article 3(7bis)

Member State	Base year emissions	Net emissions in 1990 due to deforestation where LULUCF sector is a net source of emissions	Final base year emissions, after application of Art. 3(7bis)
tonnes CO₂ equivalent			
Combined base year emissions	5 873 451 818	5 517 296	5 879 036 636
Austria	78 855 136	0	78 855 136
Belgium	147 811 094	0	147 811 095
Bulgaria	114 582 372	0	114 582 372
Croatia	31 204 631	0	31 204 631
Cyprus	5 646 847	0	5 646 847
Czech Republic	199 266 852	0	199 266 852
Denmark	70 973 233	6 583	70 979 816
Estonia	39 996 697	0	39 996 697
Finland	71 350 147	0	71 350 147
France	548 086 318	0	548 086 318
Germany	1 249 872 158	0	1 249 872 158
Greece	107 674 753	0	107 674 753
Hungary	109 574 819	0	109 574 819
Ireland	56 417 601	8 340	56 425 940
Italy	521 920 601	0	521 920 601
Latvia	26 311 539	0	26 311 539
Lithuania	47 215 485	0	47 215 485
Luxembourg	12 889 364	227 296	13 116 660
Malta	2 000 252	0	2 000 252
Netherlands	223 818 012	752 270	224 570 282
Poland	580 020 010	0	580 020 010
Portugal	60 689 753	4 276 759	64 966 512
Romania	304 651 060	0	304 651 060
Slovakia	74 504 046	0	74 504 046
Slovenia	20 327 584	0	20 327 584
Spain	288 694 596	0	288 694 596
Sweden	72 057 123	0	72 057 123
United Kingdom	803 473 698	246 048	803 719 746
Iceland	3 633 558	0	3 633 558

Note: All figures were rounded to tons in the calculation of base year emissions.

Base year emissions and net emissions in 1990 due to deforestation are derived from GHG inventory submissions in 2016. The calculation of the net emissions from deforestation includes all emissions and removals in 1990 reported in the categories forest land converted to

other land uses calculated as deforestation emissions from land areas deforested in 1990, plus any emissions and removals from land areas deforested in the previous 19 years (as these land areas continue to be accounted for under deforestation for 20 years in accordance with the accounting rules under the Kyoto Protocol), plus non-CO₂ emissions reported in CRF tables 4.I to 4.V that are related to deforestation.

If reported, base year emissions include indirect CO₂ emissions to ensure consistency with the scope of reported greenhouse gas emissions in the first commitment period.

Pursuant to Article 3(7bis), (8) and (8bis) of the Kyoto Protocol and paragraph 2 of Annex I to Decision 3/CMP.11 under the Kyoto Protocol, the assigned amount for the second commitment period shall be equal to the percentage inscribed in the third column of Annex B to the Kyoto Protocol of the aggregate anthropogenic carbon dioxide equivalent emissions of greenhouse gases from the sources listed in Annex A to the Kyoto Protocol in the base year or period multiplied by eight, taking into account Article 3(7bis) of the Kyoto Protocol as explained above. This method of calculation is applied to the calculation of the joint assigned amount only. It does not apply to the calculation of the individual assigned amounts for the Union, the Member States individually, or Iceland. Thus, the calculations of the base year emissions do not play a role in the calculation of their individual assigned amounts, which are instead determined pursuant to the joint fulfilment agreement.

This calculation results in a joint assigned amount of 37 616 498 648 tonnes CO₂eq. for the EU, its Member States and Iceland (see Table 2-6). As was the case for the first commitment period, the joint assigned amount units will not be issued separately but instead the assigned amounts of each member of the joint fulfilment agreement and the assigned amount of the EU are recorded in the compilation and accounting database and the EU and each of the Member States and Iceland can issue their respective assigned amount units in their respective registries.

Table 2-6 Calculation of the joint assigned amount

	Combined base year emissions	Of which are emissions in 1990 due to deforestation (Article 3(7bis) Kyoto Protocol)	Emission reduction commitment as laid down in the third column of Annex 1 of the Doha amendment to the Kyoto Protocol	Calculated joint assigned amount for the period 2013-2020
	tonnes CO ₂ eq.	tonnes CO ₂ eq.	%	tonnes CO ₂ eq.
European Union, Member States plus Iceland	5 873 451 818	5 517 296	80%	37 625 402 324

The respective assigned amounts of each Member State and Iceland are equal to the emission levels agreed under the terms of the joint fulfilment, listed in Annex 2 of the ratification decision and the results of the application of the second sentence of Article 3(7bis) of the Kyoto protocol for that Member State or Iceland. This is in accordance with paragraph 5(c) of the annex to Decision 13/CMP.1 of the Kyoto Protocol as replaced by paragraph 2 of Decision 3/CMP.11 of the Kyoto Protocol which requires that *“those Parties that have reached an agreement in accordance with Article 4 to fulfil their commitments under Article 3 jointly*

shall use the respective emission level allocated to each of the Parties in that agreement instead of the percentage inscribed for it in the third column of Annex B". The final assigned amounts for each Member State and Iceland are shown in Table 2-7. The individual assigned amounts of each Member State and Iceland shall be issued in the Kyoto registry of the respective Member States and Iceland.

Table 2-7 Assigned amounts for individual Member States and Iceland

Member States and Iceland	Assigned amount in tonnes CO₂ eq. taking into account Article 3 (7bis)
Austria	405 712 317
Belgium	584 228 513
Bulgaria	222 945 983
Croatia	162 271 086
Cyprus	47 450 128
Czech Republic	520 515 203
Denmark*	269 363 657
Estonia	51 056 976
Finland	240 544 599
France	3 014 714 832
Germany	3 592 699 888
Greece	480 791 166
Hungary	434 486 280
Ireland*	343 520 594
Italy	2 410 291 421
Latvia	76 633 439
Lithuania	113 600 821
Luxembourg	72 191 526
Malta	9 299 769
Netherlands*	924 777 902
Poland	1 583 938 824
Portugal*	429 581 969
Romania	656 059 490
Slovakia	202 268 939
Slovenia	99 425 782
Spain	1 766 877 232
Sweden	315 554 578
United Kingdom*	2 744 937 332
Iceland	15 327 217

Note: * Member States for which net emissions from deforestation in the base year were added to the base year emissions in the assigned amount calculation

For the calculation all figures were rounded to tons.

The assigned amount of the EU is the difference between the joint assigned amount calculated in Table 2-6 and the sum of the assigned amounts of the Member States and Iceland in Table 2-7 and amounts to 15 826 887 124 tonnes CO₂eq (see calculation in Table 2-8). The assigned amount of the EU shall be issued in the Kyoto registry of the EU.

Table 2-8 Assigned amount of the European Union

Assigned amounts	tonnes CO ₂ eq
A. Joint assigned amount	37 625 402 324
B. Sum of assigned amounts of Member States and Iceland	21 791 067 463
C. Assigned amount of the European Union (A-B)	15 834 334 860

Note: For the calculation all figures were rounded to tons.

For the assessment of compliance with the joint fulfilment agreement at the end of the second commitment period, the total GHG emissions of the EU, its Member States and Iceland from sources listed in Annex A to the Kyoto Protocol for the period 2013 to 2020 shall be compared to the total amount of Kyoto units retired in the Kyoto registries of the EU, its Member States and Iceland.

2.5. Calculation of the commitment period reserve for the European Union in accordance with Decision 11/CMP.1

Parties are required by Decision 11/CMP.1 under the Kyoto Protocol and paragraph 18 of Decision 1/CMP.8 to establish and maintain a commitment period reserve as part of their responsibility to manage and account for their assigned amount. The commitment period reserve equals the lower of either 90% of a Party's assigned amount pursuant to Article 3(7bis), (8) and (8bis) or 100% of its most recently reviewed inventory, multiplied by 8.

For the purposes of the joint fulfilment, the commitment period reserve applies to the EU, its Member States and Iceland individually.

Table 2-9 provides a calculation using both methods to calculate the commitment period reserve. The last column presents the commitment period reserve applicable for the second commitment period for the EU and for each Member State and Iceland based on the lower value resulting from the two methods.

Table 2-9 Commitment period reserve of the European Union and the EU-28 Member States and Iceland

	Assigned amount for second commitment period	90% of assigned amount	100% of most recently reviewed inventory multiplied by 8	Commitment period reserve
	tonnes CO ₂ eq.			
European Union	15 834 334 860	21 777 272 968	34 284 967 695	21 777 272 968
Austria	405 712 317	365 141 085	610 660 949	365 141 085
Belgium	584 228 513	525 805 662	910 932 952	525 805 662
Bulgaria	222 945 983	200 651 385	457 577 755	200 651 385
Croatia	162 271 086	146 043 977	183 191 025	146 043 977
Cyprus	47 450 128	42 705 115	67 154 564	42 705 115
Czech Republic	520 515 203	468 463 683	1 007 079 816	468 463 683
Denmark	269 363 657	242 427 291	409 353 224	242 427 291
Estonia	51 056 976	45 951 278	168 473 921	45 951 278
Finland	240 544 599	216 490 139	472 840 617	216 490 139
France	3 014 714 832	2 713 243 349	3 671 193 181	2 713 243 349
Germany	3 592 699 888	3 233 429 899	7 201 617 232	3 233 429 899
Greece	480 791 166	432 712 049	811 226 504	432 712 049
Hungary	434 486 280	391 037 652	457 801 242	391 037 652
Ireland	343 520 594	309 168 535	466 029 371	309 168 535
Italy	2 410 291 421	2 169 262 279	3 348 697 719	2 169 262 279
Latvia	76 633 439	68 970 095	90 988 696	68 970 095
Lithuania	113 600 821	102 240 739	153 111 249	102 240 739
Luxembourg	72 191 526	64 972 374	86 164 652	64 972 374
Malta	9 299 769	8 369 792	23 861 158	8 369 792
Netherlands	924 777 902	832 300 112	1 496 455 075	832 300 112
Poland	1 583 938 824	1 425 544 942	3 042 300 527	1 425 544 942
Portugal	429 581 969	386 623 772	516 180 208	386 623 772
Romania	656 059 490	590 453 541	892 057 462	590 453 541
Slovakia	202 268 939	182 042 045	325 260 814	182 042 045
Slovenia	99 425 782	89 483 204	132 658 495	89 483 204
Spain	1 766 877 232	1 590 189 509	2 631 410 204	1 590 189 509
Sweden	315 554 578	283 999 120	435 061 898	283 999 120
United Kingdom	2 744 937 332	2 470 443 599	4 217 627 183	2 470 443 599
Iceland	15 327 217	13 794 495	36 774 779	13 794 495

Note: The most recently reviewed inventory will be the inventory for the year 2014 as part of the 2016 UNFCCC submission.

For the calculation all figures were rounded to tons. The figure for the EU is the assigned amount of the EU as presented in Table 2-8.

2.6. Difference between the assigned amount for the second commitment period and the average emissions for the first three years of the preceding commitment period

According to Article 3(7ter) of the Kyoto Protocol, any positive difference between the assigned amount of the second commitment period and the average annual emissions for the first three years of the preceding commitment period multiplied by eight shall be transferred to the cancellation account.

In line with the terms of the joint fulfilment of the EU, its Member States and Iceland under Article 3 of the Kyoto Protocol, Article 3(7ter) is applied to the joint assigned amount of the second commitment period.

Table 2-10 Joint Assigned amount for the EU, Member States and Iceland for the second commitment period and average emissions for the first three years of the preceding commitment period

Joint assigned amount for the second commitment period	37 625 402 324 tonnes CO ₂ eq.
Average annual emissions for 2008 to 2010 for the EU, Member States and Iceland multiplied by eight	38 707 039 784 tonnes CO ₂ eq.

In accordance with paragraph 2 of Decision 2/CMP.11 of the Kyoto Protocol Parties shall clarify in their reports to facilitate the calculation of the assigned amount whether they have used in the calculation of the average annual emissions for the first three years of the preceding commitment period:

- (a) The gases and sources listed in Annex A to the Kyoto Protocol; or
- (b) The same greenhouse gases, sectors and source categories as those used to calculate the assigned amount for the second commitment period.

For the EU the provision in subitem (b) above implies that emissions from deforestation would be added for the respective years for five Member States (Denmark, Ireland, the Netherlands, Portugal and the UK) in line with the assigned amount calculation. For 1990 these emissions are about 0.09% of the base year emission of the EU, its Member States and Iceland. Therefore, both ways of calculating the average annual emissions lead to a very similar result. For both methods (a) and (b), the joint assigned amount for the second commitment period is lower than the average annual emissions for the period 2008 – 2010 multiplied by eight. The figure presented in Table 2-10 above has been calculated based on option (a) - the gases and sources listed in Annex A to the Kyoto Protocol. This choice was made because the calculation is simple and more transparent. On the other hand option (b) is more in accordance with the EU's interpretation of Article 3.7ter, but would be less transparent as it requires a more complex calculation of the emissions from deforestation for 5 Member States for three years.

The joint assigned amount for the second commitment period is lower than the average annual emissions for the period 2008 – 2010 multiplied by eight as indicated in Table 2-10. Thus, no positive difference occurs and no cancellation needs to be performed.

2.7. Application of paragraphs 23 – 26 of decision 1/CMP.8

According to Decision 1/CMP.8, paragraph 23, each Party included in Annex I with a commitment inscribed in the third column of Annex B as contained in annex I to this decision shall establish a previous period surplus reserve (PPSR) account in its national registry. Based on this provision, the EU, each Member State and Iceland will establish previous period surplus reserve accounts in their respective registries.

According to Decision 1/CMP.8, paragraph 24, where the emissions of a Party referred to in paragraph 23 above in a commitment period are less than its assigned amount under Article 3, the difference shall, on request of that Party, be carried over to the subsequent commitment period, as follows:

(a) Any ERUs or CERs held in that Party's national registry that have not been retired for that commitment period or cancelled may be carried over to the subsequent commitment period, up to a maximum for each unit type of 2.5 per cent of the assigned amount calculated pursuant to Article 3(7) and (8);

(b) Any AAUs held in that Party's national registry that have not been retired for that commitment period or cancelled shall be added to the assigned amount for that Party for the second commitment period. That part of a Party's assigned amount consisting of AAUs held in that Party's national registry that has not been retired for that commitment period or cancelled shall be transferred to its previous period surplus reserve account for the subsequent commitment period, to be established in its national registry.

According to Decision 1/CMP.8, paragraph 23 the European Union, each Member State and Iceland establish previous period surplus reserve accounts in their respective registries.

According to Decision 1/CMP.8, paragraph 24 (a) of decision 1/CMP.8, the EU, each Member State and Iceland may carry over any remaining ERUs and CERs that have not been retired or cancelled for the first commitment period in their respective registries to the second commitment period. The 2.5 per cent limit in paragraph 24 (a) of Decision 1/CMP.8 will be calculated based on the assigned amounts of the Member States, Iceland and the EU calculated pursuant to Article 3(7) and (8) for the first commitment period.

According to decision 1/CMP.8, paragraph 24 (b) the EU, each Member State and Iceland may carry over any remaining AAUs that have not been retired or cancelled for the first commitment period in their respective registries to their respective previous period surplus reserve accounts.

According to Decision 1/CMP.8, paragraph 25, units in a Party's previous period surplus reserve account may be used for retirement during the additional period for fulfilling commitments of the second commitment period up to the extent by which emissions during the second commitment period exceed the assigned amount for that commitment period, as defined in Article 3(7 bis), (8) and (8 bis), of the Kyoto Protocol. This provision will be applied to the EU, its Member States and Iceland individually due to the fact that the previous period surplus reserve accounts will be established in the Kyoto registries of the EU, its Member States and Iceland. Units in a member's Previous Period Surplus Reserve account may be used for retirement during the additional period for fulfilling commitments of the second commitment period, up to the extent by which that member's emissions during the second commitment period exceed its respective assigned amount for that commitment period.

According to Decision 1/CMP.8, paragraph 26, units may be transferred and acquired between previous period surplus reserve accounts. This provision will be applied to the EU, its Member States and Iceland individually due to the fact that the previous period surplus reserve accounts will be established in the Kyoto registries of the EU, its Member States and Iceland.

2.8. Application and calculation pursuant to paragraph 13 in the annex of Decision 2/CMP.7

According to paragraph 13 in the annex of Decision 2/CMP.7 for the second commitment period, additions to the assigned amount of a Party resulting from forest management under Article 3(4), and from forest management project activities undertaken under Article 6, shall not exceed 3.5 per cent of the base year greenhouse gas emissions excluding land use, land-use change and forestry pursuant to Article 3(7) and (8), or any amendments thereto, times the duration of the commitment period in years. Similar to the general accounting of emissions and removals under Article 3(3) and (4), Member States and Iceland will apply this provision individually. The maximum accountable quantities resulting from forest management that can be added to the assigned amounts to Member States are presented in Table 2-11.

Table 2-11 Maximum accountable quantities resulting from forest management under Article 3, paragraph 4 in the second commitment period

Member State	Forest management cap for the 2nd commitment period
	tonnes CO ₂ eq.
Austria	22 079 438
Belgium	41 387 107
Bulgaria	32 083 064
Croatia	8 737 297
Cyprus	1 581 117
Czech Republic	55 794 719
Denmark	19 872 505
Estonia	11 199 075
Finland	19 978 041
France	153 464 169
Germany	349 964 204
Greece	30 148 931
Hungary	30 680 949
Ireland	15 796 928
Italy	146 137 768
Latvia	7 367 231
Lithuania	13 220 336
Luxembourg	3 609 022
Malta	560 070
Netherlands	62 669 043
Poland	162 405 603
Portugal	16 993 131
Romania	85 302 297
Slovakia	20 861 133

Member State	Forest management cap for the 2nd commitment period
Slovenia	5 691 724
Spain	80 834 487
Sweden	20 175 995
United Kingdom	224 972 636
Iceland	1 017 396

Note: For the calculation all figures were rounded to tons.

2.9. Information related to LULUCF activities under Article 3(3) and (4) of the Kyoto Protocol

As in the first commitment period, Member States and Iceland will continue to apply Article 3(3) and (4) of the Kyoto Protocol and decisions agreed thereunder individually. Member States will account individually for emissions by sources and removals by sinks from Kyoto LULUCF activities and will individually decide on accounting modalities and elections where foreseen under the Kyoto Protocol. Any issuance of removal units (RMUs) or cancellation of units resulting from the accounting under Articles 3(3) and (4) should be made to the Member States' and Iceland's Kyoto registries.

2.9.1. Identification of the selection of single minimum values for tree crown cover, land area and tree height for use in accounting under Article 3(3) and (4)

Member States have selected threshold values for the forest definition for reporting on the activities afforestation, reforestation and deforestation under Article 3(3) and forest management, if elected under Article 3(4) of the Kyoto Protocol for the first commitment period. As the EU aggregates Member States' information, the same values are used as those elected by Member States for the required single minimum values for tree crown cover, land area and tree height in accordance with the forest definition used for reporting to the FAO. Table 2-12 presents an overview on Member States' and Iceland's selections. The definitions for the second commitment period shall be the same as for the first commitment period. Cyprus and Malta did not have a commitment in the first commitment period and selected definitions for the second commitment period.

Table 2-12 Member States' and Iceland's selection of threshold values for the forest definition for reporting under Article 3(3) and (4)

Member State	Minimum value for tree crown cover	Minimum tree height	Minimum area for forest land area
Austria	30 %	2 m	0.05 ha
Belgium	20 %	5 m	0.5 ha
Bulgaria	10 %	5 m	0.1 ha
Croatia	10 %	2 m	0.1 ha
Cyprus	10 %	5 m	0.3 ha
Czech Republic	30 %	2 m	0.05 ha
Denmark	10 %	5 m	0.5 ha
Estonia	30%	2 m	0.5 ha
Finland	10 %	5 m	0.5 ha
France	10 %	5 m	0.5 ha
Germany	10 %	5 m	0.1 ha
Greece	25 %	2 m	0.3 ha
Hungary	30 %	5 m	0.5 ha
Ireland	20 %	5 m	0.1 ha

Member State	Minimum value for tree crown cover	Minimum tree height	Minimum area for forest land area
Italy	10 %	5 m	0.5 ha
Latvia	20 %	5 m	0.1 ha
Lithuania	30 %	5 m	0.1 ha
Luxembourg	10 %	5 m	0.5 ha
Malta	30 %	5 m	1 ha
Netherlands	20 %	5 m	0.5 ha
Poland	10 %	2 m	0.1 ha
Portugal	10 %	5 m	1 ha
Romania	10 %	5 m	0.25 ha
Slovakia	20 %	5 m	0.3 ha
Slovenia	30 %	2 m	0.25 ha
Spain	20 %	3 m	1 ha
Sweden	10 %	5 m	0.5 ha
United Kingdom	20 %	2 m	0.1 ha
Iceland	10 %	2 m	0.5 ha

2.9.2. Election of activities under Article 3(4), for inclusion in the accounting for the first commitment period and second commitment period

Article 3(4) of the Kyoto Protocol provides the option to include the activities forest management, cropland management, grazing land management and revegetation in the accounting of the commitments for the first commitment period. In the second commitment period all Parties included in Annex I have to account for anthropogenic greenhouse gas emissions by sources and removals by sinks resulting from any activity under Article 3(4) already elected in the first commitment period, and for forest management (Decision 2/CMP 7, Annex, Paragraph 7). In addition, they may also choose to elect further activities from the ones above for inclusion in its accounting for the second commitment period as well as wetland drainage and rewetting can be chosen as an additional activity.

The EU will report in the joint inventory under the Kyoto Protocol the sum of the 28 Member States' and Iceland's greenhouse gas emissions by sources and removals by sinks from land-use, land-use change and forestry activities under Article 3(3), for forest management and the additional elected activities under Article 3(4) of the Kyoto Protocol, based on the election of activities by Member States. Table 2-13 presents an overview of the Member States' and Iceland's elections of activities under Article 3(4) as reported in their reports to facilitate the calculation of the assigned amount for the second commitment period.

Table 2-13 Member States and Iceland's elections of activities under Article 3(4) in the second commitment period

Member State	Cropland management	Grazing land management	Revegetation	Wetland Drainage and rewetting
Austria	Not elected	Not elected	Not elected	Not elected
Belgium	Not elected	Not elected	Not elected	Not elected
Bulgaria	Not elected	Not elected	Not elected	Not elected
Croatia	Not elected	Not elected	Not elected	Not elected
Cyprus	Not elected	Not elected	Not elected	Not elected
Czech Republic	Not elected	Not elected	Not elected	Not elected
Denmark	Elected	Elected	Not elected	Not elected
Estonia	Not elected	Not elected	Not elected	Not elected
Finland	Not elected	Not elected	Not elected	Not elected

Member State	Cropland management	Grazing land management	Revegetation	Wetland Drainage and rewetting
France	Not elected	Not elected	Not elected	Not elected
Germany	Elected	Elected	Not elected	Not elected
Greece	Not elected	Not elected	Not elected	Not elected
Hungary	Not elected	Not elected	Not elected	Not elected
Ireland	Elected	Elected	Not elected	Not elected
Italy	Elected	Elected	Not elected	Not elected
Latvia	Not elected	Not elected	Not elected	Not elected
Lithuania	Not elected	Not elected	Not elected	Not elected
Luxembourg	Not elected	Not elected	Not elected	Not elected
Malta	Not elected	Not elected	Not elected	Not elected
Netherlands	Not elected	Not elected	Not elected	Not elected
Poland	Not elected	Not elected	Not elected	Not elected
Portugal	Elected	Elected	Not elected	Not elected
Romania	Not elected	Not elected	Elected	Not elected
Slovakia	Not elected	Not elected	Not elected	Not elected
Slovenia	Not elected	Not elected	Not elected	Not elected
Spain	Elected	Not elected	Not elected	Not elected
Sweden	Not elected	Not elected	Not elected	Not elected
United Kingdom	Elected	Elected	Not elected	Elected
Iceland	Not elected	Not elected	Elected	Not elected

Information on how the national system under Article 5(1) of the Kyoto Protocol will identify land areas associated with activities under Article 3(4) and how Member States ensure that land that was accounted for in the first commitment period continues to be accounted for in the second commitment period is provided in the individual initial reports of the Member States and Iceland or in their national inventory reports – as appropriate - because the development of the methodological approach to identify land areas is part of the Member States’ responsibilities.

2.9.3. Identification of the frequency of accounting for activities under Article 3(3) and (4)

Member States and Iceland identify the accounting frequency for the activities under Article 3(3) and (4) in their respective reports to facilitate the calculation of the assigned amount. Member States and Iceland can choose to account at the end of the commitment period or annually. Table 2-14 reflects the decisions of the Member States and Iceland.

Table 2-14 EU-28 Member States’ and Iceland’s choice of accounting frequency

Member State	Annual accounting	Accounting at the end of the second commitment period
Austria		X
Belgium		X
Bulgaria		X
Croatia		X
Cyprus		X
Czech Republic		X
Denmark	X	
Estonia		X
Finland		X
France		X
Germany		X
Greece		X

Hungary	X	
Ireland		X
Italy		X
Latvia		X
Lithuania		X
Luxembourg		X
Malta		X
Netherlands		X
Poland		X
Portugal		X
Romania		X
Slovakia		X
Slovenia		X
Spain		X
Sweden		X
United Kingdom		X
Iceland		X

Each Member State and Iceland will account for net emissions and removals for each activity under Article 3(3) and (4), if elected, by issuing RMUs or cancelling Kyoto Protocol units based on the corresponding reported emissions and removals from these activities and the specific accounting rules. The EU will neither issue, nor cancel units based on the reported emissions and removals from activities under Article 3(3) and (4).

2.9.4. Forest Management Reference Levels as inscribed in the appendix to the annex to Decision 2/CMP.7

For the second commitment period forest management is a mandatory activity under Article 3(4) of the Kyoto Protocol, which will be accounted against a forest management reference level, i.e. a country-specific level of business-as-usual emissions or removals. RMUs will be issued only if forest management removals are higher, or emissions are lower, than the agreed forest management reference level. Otherwise, Kyoto units will be cancelled. Paragraph 1(i) of Annex I to Decision 2/CMP.8 requires the reporting of the forest management level and any technical corrections as contained in the inventory report. This information is reported in the reports to facilitate the calculation of the assigned amount of Member States and Iceland and their most recent greenhouse gas inventories in line with the explanations above that each Member State and Iceland will account for net emissions and removals for the forest management activity under Article 3(4) of the Kyoto Protocol.

The same applies to the requirement in paragraph 1(j) of Annex I to Decision 2/CMP.8 of the Kyoto Protocol to report Information on how emissions from harvested wood products originating from forests prior to the start of the second commitment period have been calculated in the reference level in accordance with Decision 2/CMP.7, annex, paragraph 16. This information is also provided in Member States's reports to facilitate the calculation of the assigned amount or in Member States' most recent inventory submissions.

2.9.5. Accounting for natural disturbances

According to Paragraph 33 of the Annex to Decision 2/CMP.7 the countries shall provide information on whether they intend to apply the provisions to exclude emissions from natural disturbances for the accounting for afforestation and reforestation under Article 3(3), of the Kyoto Protocol and/or forest management under Article 3(4), of the Kyoto Protocol during the second commitment period. Table 2-15 provides an overview on the decisions of Member

States whether they intend to use the provisions to exclude emissions from natural disturbances.

Table 2-15 Information on the use of the provision to exclude emissions from natural disturbances

Countries	Afforestation/Reforestation	Forest Management
Austria	No	Yes
Belgium	No	Yes
Bulgaria	Yes	Yes
Croatia	Yes	Yes
Cyprus	No	Yes
Czech Republic	No	No
Denmark	No	No
Estonia	No	Yes
Finland	No	Yes
France	Yes	Yes
Germany	No	No
Greece	Yes	Yes
Hungary	No	No
Ireland	Yes	Yes
Italy	Yes	Yes
Latvia	No	No
Lithuania	No	No
Luxembourg	Yes	Yes
Malta	Yes	Yes
Netherlands	Yes	Yes
Poland	No	No
Portugal	Yes	Yes
Romania	Yes	Yes
Slovakia	No	No
Slovenia	No	No
Spain	Yes	Yes
Sweden	Yes	Yes
United Kingdom	Yes	Yes
Iceland	Yes	Yes

Member States that intend to exclude emissions from natural disturbances are required to report country-specific information on the background level of emissions associated with annual natural disturbances that have been included in its forest management reference level and related explanations. This information is provided in Member States' and Iceland's reports to facilitate the calculation of their assigned amounts or their most recent greenhouse gas inventory submissions, as appropriate.

2.10. Description of the national system

A description of the national system is required pursuant to the Annex to Decision 2/CMP.8 if the Party did not have a quantified emission limitation and reduction target in the first commitment period. The EU already had a quantified emission limitation and reduction target in the first commitment period and provided this description in the report to calculate the assigned amount of the first commitment period. Subsequently any changes that occurred

were reported as part of the annual supplementary information under Article 7 of the Kyoto Protocol and included in the national inventory report.

Changes compared to the previous inventory submissions related to the national system are the following:

A key change to previous inventory submissions is that the Kyoto greenhouse inventory for the second commitment period has a different coverage of countries due to the scope of the terms of the joint fulfilment agreement for the second commitment period which includes 28 Member States and Iceland.

As part of the agreement between the EU, its Member States and Iceland (Council Decision (EU) 2015/1340), Regulation (EU) No 525/2013 on a mechanism for monitoring and reporting GHG emissions and for reporting other information at national and Union level relevant to climate change (Monitoring Mechanism Regulation) as well as current and future delegated and implementing acts based on this regulation are binding upon Iceland.

In accordance with the Monitoring Mechanism Regulation Article 6(1), a Union Inventory system is established to ensure the timeliness, transparency, accuracy, consistency, comparability and completeness of national inventories with regard the Union greenhouse gas inventory. The Commission's Staff Working Document (SWD (2013) 308 final) outlines the main elements of the Union inventory system. An overview is presented in Figure 2.2.

The Directorate-General for Climate Action of the European Commission has overall responsibility for the inventory of the EU while each Member State is responsible for the preparation of its own inventory which is the basic input for the inventory of the EU. DG Climate Action is supported in the establishment of the inventory by the following main institutions: the European Environment Agency (EEA) and its European Topic Centre on Air Pollution and Climate Change Mitigation (ETC/ACM) as well as the following other Directorates General of the European Commission: Eurostat, and the Joint Research Centre (JRC) .

Figure 2.2 Inventory system of the European Union

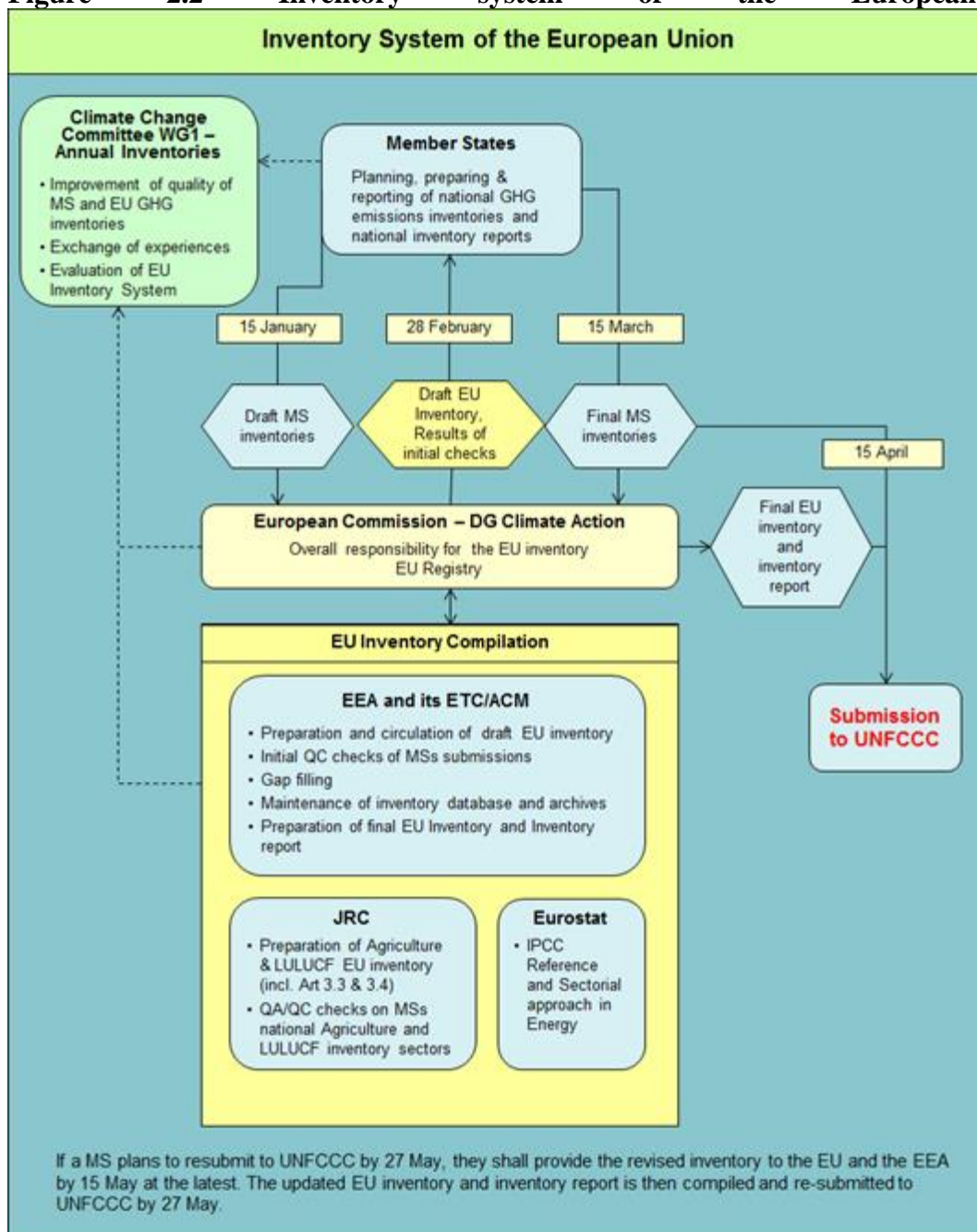


Table 2-16 shows the main institutions and persons involved in the compilation and submission of the EU inventory.

Table 2-16 List of institutions and experts responsible for the compilation of Member States’ inventories and for the preparation of the EU inventory

Member institution	State/EU	Contact address
Austria		Elisabeth Rigler Umweltbundesamt Spittelauer Laende 5, A-1090 Vienna
Belgium		Peter Wittoeck Federal Department of the Environment Place Victor Horta 40, B-1060 Brussels

Bulgaria	Detelina Petrova Executive Environment Agency 136, Tzar Boris III Blvd. 1618 Sofia
Croatia	Ms Iva Švedek Ekoneg - Energy and Environmental Protection Institute Koranska 5, 10000 Zagreb Ms Vlatka Palčić Ministry of Environmental and Nature Protection Radnička cesta 80 , 10000 Zagreb
Cyprus	Theodoulos Mesimeris Head of Climate Action Unit Department of Environment Ministry of Agriculture, Natural Resources and Environment 1498, Nicosia, Cyprus
Czech Republic	Ing. Eva Krtkova Czech Hydrometeorological Institute (CHMI) Na Šabatce 17, CZ 14306 Prague 4
Denmark	Ole-Kenneth Nielsen Aarhus University Frederiksborgvej 399, PO Box 358, DK-4000 Roskilde
Estonia	Katre Kets Adviser, Climate and Radiation Department and Cris-Tiina Türkson Senior officer, Climate and Radiation Department Ministry of the Environment Narva mnt 7a, 15172 Tallinn, Estonia
Finland	Riitta Pipatti Statistics Finland PB 6 A, FIN-00022 Statistics Finland
France	Pascale Vizey Direction Générale de l'Energie et du Climat (DGEC) Ministère de l'Environnement, de l'Energie et de la Mer (MEEM) Tour Sequoia, 92055 La Défense CEDEX and Centre Interprofessionnel Technique d'Etudes de la Pollution Atmosphérique (CITEPA) 42 rue de Paradis, F-75010 Paris Jean-Pierre Chang
Germany	Michael Strogies Federal Environmental Agency Wörlitzer Platz 1, D-06844 Dessau-Roßlau
Greece	Mr. Kyriakos Psychas Ministry of Environment and Energy, Climate Change Department, 147 Patission st, 11251 Athens, Greece
Hungary	Mr. Gábor KIS-KOVÁCS Hungarian Meteorological Service, Kitaibel Pál u. 1, 1024, Budapest, HUNGARY
Ireland	Paul Duffy Environmental Protection Agency PO Box 3000, Johnstown Castle, Co. Wexford, Ireland
Italy	M. Contaldi, R. de Lauretis, D. Romano National Environment Protection Agency (ANPA) Via Vitaliano Brancati 48, I-00144 Rome
Latvia	Agita Gancone Ministry of Environmental Protection and Regional Development Peldu street 25, LV-1494

Lithuania	Ms. Jolanta Merkeliene, Chief Desk Officer, Climate Change Policy Division of the Ministry of Environment Lithuanian Ministry of Environment A. Jaksto 4/9, LT 01105 Vilnius
Luxembourg	Eric De Brabanter Département de l'Environnement Ministère du Développement durable et des Infrastructures L-2918 Luxembourg Dr Marc Schuman Administration de l'Environnement 16 rue Eugène Ruppert L-2453 Luxembourg
Malta	Krista Rizzo Malta Resources Authority – Climate Change Unit Millennia, 2nd Floor, Aldo Moro Road, Marsa MRS 9065, Malta.
Netherlands	Wim van der Maas National Institute for Public Health and the Environment P.O. Box 1, 3720 BA Bilthoven, The Netherlands
Poland	Anna Olecka National Centre for Emissions Management Institute of Environmental Protection - National Research Institute Chmielna 132/134, 00-805 Warszawa, PL
Portugal	Eduardo Santos Agência Portuguesa do Ambiente, Departamento de Alterações Climáticas (DCLIMA) Rua da Murgueira, 9/9A, 2610-124 Amadora, Portugal
Romania	Sorin Deaconu National Environmental Protection Agency Splaiul Independentei 294, Sector 6, Cod Postal 060841, Bucharest, Romania
Slovakia	Milos Grajcar Ministry of the Environment of the Slovak Republic Climate Change Department (National Focal Point) Namestie L. Stura 1, 812 35 Bratislava 1, Slovak Republic Janka Szemesova Department of Emissions, Slovak Hydrometeorological Institute Jeseniova 17, 833 15 Bratislava, Slovak Republic
Slovenia	Tajda Mekinda Majaron Environmental Agency of the Republic of Slovenia Vojkova 1/b, SI-1000 Ljubljana
Spain	Maj Britt Larka Abellán Dirección General de Calidad y Evaluación Ambiental y Medio Natural Ministerio de Agricultura, Alimentación y Medio Ambiente Plaza de San Juan de la Cruz s/n, E-28071 Madrid
Sweden	Johan Kristensson The Ministry of the Environment and Energy, Street address: Rosenbad 4 Postal address: SE 103 33 Stockholm and Frida Löfström The Swedish Environmental Protection Agency Postal Address: Naturvårdsverket , SE-106 48 Stockholm ,Sweden
United Kingdom	Julia Sussams UK Greenhouse Gas Inventory GHG Statistics & Inventory Team Department of Energy & Climate Change
European Commission	Ana Maria Danila European Commission, DG Climate Action Beaulieu, BU-24 4/32, Brussels, Belgium

European Environment Agency (EEA)	Ricardo Fernandez, Spyridoula Ntemiri European Environment Agency Kongens Nytorv 6, DK-1050 Copenhagen, Denmark
European Topic Centre on Air Pollution and Climate Change Mitigation (ETC/ACM)	Nicole Mandl, Michael Gager, Elisabeth Rigler European Topic Centre on Air Pollution and Climate Change Mitigation Umweltbundesamt Spittelauer Laende 5, A-1090 Vienna, Austria
Eurostat	Michael Goll Statistical Office of the European Communities (Eurostat), Jean Monnet Building, L-2920 Luxembourg, Luxembourg
Joint Research Centre (JRC)	Giacomo Grassi, Adrian Leip Joint Research Centre, Institute for Environment and Sustainability, Climate Change Unit Via Enrico Fermi, I-21020 Ispra (VA), Italy

The Member States

All EU Member States are Annex I Parties to the UNFCCC. Therefore, all Member States have committed themselves to prepare individual national greenhouse gas inventories in accordance with UNFCCC reporting guidelines and to submit those inventories to the UNFCCC Secretariat by 15 April.

In this context, all Member States are required to establish, operate and seek to continuously improve national inventory systems in accordance to Article 5 of the Monitoring Mechanism Regulation. Detailed information on institutional arrangements/national systems of each Member State is included in the respective national inventory reports.

The EU's inventory is based on the inventories supplied by Member States. The total estimate of the EU greenhouse gas emissions should accurately reflect the sum of Member States' national greenhouse gas inventories. Member States are responsible for choosing activity data, emission factors and other parameters used for their national inventories as well as the correct application of methodologies provided in the 2006 IPCC Guidelines. Member States are also responsible for establishing quality assurance/quality control (QA/QC) programmes for their inventories. The QA/QC activities of each Member State are described in the respective national inventory reports.

For the EU to be able to provide the greenhouse gas inventory to the UNFCCC on time, all Member States are required to report individual greenhouse gas inventories prepared in accordance with UNFCCC reporting guidelines to the European Commission and to the European Environment Agency (EEA) by 15 January every year. After the submission of national GHG inventories and inventory reports, QA/QC checks are performed by the EU team. The outcome of these 'initial checks', together with the draft EU inventory report is sent to Member States for checking, reviewing and providing of comments. The Member States take part in the review and comment phase of the draft EU inventory report. The purpose of circulating the draft EU inventory report is to improve the quality of the EU inventory. The Member States check their national data and information used in the EU inventory report, answer to the initial checks findings and send updates, as relevant by the 15th March. In addition, they can comment on the general aspects of the EU inventory report by the same deadline.

During the UNFCCC review of the Union inventory, Member States are also required to provide answers related to the issues under their responsibility as soon as possible. In these cases, the issues are forwarded directly as requested by the EU team.

The European Commission, Directorate-General for Climate Action

The European Commission's Directorate-General for Climate Action (DG CLIMA) in consultation with the Member States has the overall responsibility for the EU inventory. Member States are required to submit their national inventories and inventory reports under the Monitoring Mechanism Regulation to the European Commission, DG CLIMA; DG CLIMA itself submits the inventory and inventory report of the EU to the UNFCCC Secretariat, on behalf of the EU. In the actual compilation of the EU inventory and inventory report, the European Commission, DG CLIMA, is assisted by the EEA including the EEA's ETC/ACM and by Eurostat and the JRC.

The consultation between the DG CLIMA and the Member States takes place in the Climate Change Committee established under Article 26 of the Monitoring Mechanism Regulation. The Committee is composed of the representatives of the Member States and chaired by the representative of the DG CLIMA. Procedures within the Committee for decision-making, adoption of measures and voting are outlined in the rules of procedure, adopted in November 2003. In order to facilitate decision-making in the Committee, working groups have been established, one of which is Working Group 1 on 'Annual inventories'. The objectives and tasks of Working Group 1 under the Climate Change Committee include:

- the promotion of the timely delivery of national annual GHG inventories as required under the monitoring mechanism;
- the improvement of the quality of GHG inventories on all relevant aspects (transparency, consistency, comparability, completeness, accuracy and use of good practices);
- the exchange of practical experience on inventory preparation, on all quality aspects and on the use of national methodologies for GHG estimation;
- the evaluation of the current organisational aspects of the preparation process of the EU inventory and the preparation of proposals for improvements where needed.

The European Environment Agency

Under Article 24 of the Monitoring Mechanism regulation, the role of the European Environment Agency (EEA) is defined as providing assistance to the Commission in its work. In relation to the inventories, this assistance includes the following:

- (a) Compilation of the Union greenhouse gas inventory and preparation of the Union greenhouse gas inventory report;
- (b) Performance of the quality assurance and quality control procedures for the preparation of the Union greenhouse gas inventory;
- (c) Preparation of estimates for data not reported in the national greenhouse gas inventories;

- (d) Conduction of the reviews of Member States' inventories.

The tasks of the EEA are facilitated by the European environmental information and observation network (Eionet), which consists of the EEA as central node (supported by European topic centres) and national institutions in the EEA member countries (see <http://eionet.eea.europa.eu>). Member States report the information reported pursuant to Article 7 of the Monitoring Mechanism Regulation to the Commission with a copy to the European Environment Agency, and for this reason they are making use of the EEA's ReportNet's Central Data Repository under the Eionet ('CDR', see <http://cdr.eionet.europa.eu/>).

Apart from the data capturing processes, and as part of its responsibility to compile the GHG inventory and prepare the Union GHG inventory report, the EEA is also responsible for the implementation of the QA/QC Programme of the EU, by performing inter alia a number of QA/QC checks focused on ensuring the completeness and consistency of the Union and Member States inventories.

Finally, in the end of the process the EEA is publishing the GHG inventory dataset and the EU National Inventory Report on its website. To facilitate the access of the GHG information to the general public, the EEA data viewer is also provided.

The EEA is further assisted by its European Topic Centre on Air Pollution and Climate Change Mitigation (ETC/ACM), which is an international consortium working with the EEA under a framework partnership agreement. The activities of the EEA's ETC/ACM are further deployed in the next paragraph.

The European Topic Centre on Air Pollution and Climate Change Mitigation

The EEA's European Topic Centre on Air and Climate Change Mitigation (ETC/ACM) was established by a contract between the lead organisation Institute for Public Health and the Environment (RIVM) in the Netherlands and EEA for the years 2014-2018. The EEA's ETC/ACM involves 14 organisations and institutions in eight European countries. The technical annex for the 2014 work plan for the EEA's ETC/ACM and an implementation plan specify the specific tasks of the EEA's ETC/ACM partner organisations with regard to the preparation of the EU inventory. Umweltbundesamt Austria is the task leader for the compilation of the EU annual inventory in the EEA's ETC/ACM. The specific tasks undertaken by EEA's ETC/ACM include:

- Initial QA/QC checks of Member States' submissions in cooperation with Eurostat, and the JRC, up to 28 February documented in the EEA review tool and compilation of results from initial checks (status and consistency reports);
- consultation with Member States in order to clarify data and other information provided;
- preparation of the draft EU inventory and inventory report by 28 February based on Member States' submissions;
- preparation of the final EU inventory and inventory report by 15 April (to be submitted by the Commission to the UNFCCC Secretariat);

The EEA's ETC/ACM provides the CRF Aggregator developed to ensure the EU submission is fully consistent with Member States' submissions. From the CRF aggregator the aggregated

EU inventory is transferred into the CRF reporter software for preparing the official EU GHG inventory submission.

Eurostat

Eurostat collects national energy statistics reported under the EU Energy Statistics Regulation on an annual basis. These data are used for the estimation of the IPCC Reference Approach and the Sectoral Approach. The EEA compares the results of the two approaches with Member States' CRF submissions. These comparisons are sent to Member States' during the consultation on the Draft EU GHG inventory by 28 February each year. The Energy Statistics Regulation (Regulation EC/1099/2008) as amended by Commission Regulation (EU) No 147/2013 of 13 February 2013 is the basis for Member States reporting of energy data to Eurostat. Article 6(2) of the Energy Statistics Regulation stipulates: 'Every reasonable effort shall be undertaken to ensure coherence between energy data declared in the energy statistics regulation, and data declared in accordance with Commission Decision No 280/2004/EC of the European Parliament and of the Council concerning a mechanism for monitoring Community greenhouse gas emissions and for implementing the Kyoto Protocol'. The consistency of energy balances and CRF activity data is essential for good quality GHG estimates in the energy sector, and therefore it is at the core of the QA/QC activities at EU level.

Joint Research Centre

The Joint Research Centre (JRC) performs the QA/QC of the LULUCF and Agriculture sectors and is responsible of the writing of the respective chapters. The QA/QC main activity is the annual checking of early versions of the each national GHG inventory. Focus is on errors and inconsistencies, with numerous interactions with national representatives for clarifications and improvements. Specific completeness and consistency checks are also carried out. For LULUCF, additional efforts to help member states in improving their reporting include annual technical workshops (<http://forest.jrc.ec.europa.eu/activities/lulucf/workshops/>), dedicated EU-funded projects, the AFOLU database, and a forest growth model whose results which may be used by countries to compare with their estimates. More information is provided in the QA/QC sections of the LULUCF and Agriculture chapters in the EU NIR.

2.11. Description of the national registry

For the purpose of meeting their obligations as Parties to the Kyoto Protocol and under Article 10 of Regulation (EU) No 525/2013 ("Monitoring Mechanism Regulation")⁸, each Member State and the EU operate a Kyoto Protocol national registry. In accordance with Decision 13/CMP.1 and Decision 24/CP.8 the Member States and the Union operate their national registries in a consolidated manner.

A description of the national registry is required pursuant to the Annex to Decision 2/CMP.8 if the Party did not have a quantified emission limitation and reduction target in the first commitment period. The EU already had a quantified emission limitation and reduction target in the first commitment period and provided a description of the national registry in the report to calculate the assigned amount of the first commitment period. Subsequently changes that occurred related to the national registry were reported as part of the annual supplementary information under Article 7 of the Kyoto Protocol included in the national inventory report.

⁸ OJ L 165, 18.6.2013, p. 13

Changes compared to the previous inventory submissions related to the Kyoto registry of the EU are the following:

Reporting Item	Description
15/CMP.1 annex II.E paragraph 32.(a) Change of name or contact	None
15/CMP.1 annex II.E paragraph 32.(b) Change regarding cooperation arrangement	No change of cooperation arrangement occurred during the reported period.
15/CMP.1 annex II.E paragraph 32.(c) Change to database structure or the capacity of national registry	<p>There was no change to the database structure as it pertains to Kyoto Protocol functionality in 2015.</p> <p>Versions of the CSEUR released after 6.3.3.2 (the production version at the time of the last Chapter 14 submission) introduced minor changes in the structure of the database.</p> <p>These changes were limited and only affected EU ETS functionality. No change was required to the database and application backup plan or to the disaster recovery plan. The database model is provided in Annex A.</p> <p>No change to the capacity of the national registry occurred during the reported period.</p>
15/CMP.1 annex II.E paragraph 32.(d) Change regarding conformance to technical standards	<p>Changes introduced since version 6.3.3.2 of the national registry are listed in Annex B.</p> <p>Each release of the registry is subject to both regression testing and tests related to new functionality. These tests also include thorough testing against the DES and were successfully carried out prior to the relevant major release of the version to Production (see Annex B). Annex H testing was carried out in February 2016 and the test report is attached.</p> <p>No other change in the registry's conformance to the technical standards occurred for the reported period.</p>
15/CMP.1 annex II.E paragraph 32.(e) Change to discrepancies procedures	No change of discrepancies procedures occurred during the reported period.

Reporting Item	Description
15/CMP.1 annex II.E paragraph 32.(f) Change regarding security	No change of security measures occurred during the reporting period.
15/CMP.1 annex II.E paragraph 32.(g) Change to list of publicly available information	No change to the list of publicly available information occurred during the reporting period.
15/CMP.1 annex II.E paragraph 32.(h) Change of Internet address	No change of the registry internet address occurred during the reporting period.
15/CMP.1 annex II.E paragraph 32.(i) Change regarding data integrity measures	No change of data integrity measures occurred during the reporting period.
15/CMP.1 annex II.E paragraph 32.(j) Change regarding test results	Changes introduced since version 6.3.3.2 of the national registry are listed in Annex B. Both regression testing and tests on the new functionality were successfully carried out prior to release of the version to Production. The site acceptance test was carried out by quality assurance consultants on behalf of and assisted by the European Commission; the report is attached as Annex B. Annex H testing was carried out in February 2016.

3. UNITS AND ABBREVIATIONS

t	1 tonne (metric) = 1 megagram (Mg) = 10 ⁶ g
Gg	1 gigagram = 10 ⁹ g = 1 kilotonne (kt)
AAU	Assigned Amount Unit
CER	Certified Emission Reduction
CH ₄	methane
CO ₂	carbon dioxide
CMP	Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol
COP	Conference of the Parties
CRF	common reporting format
DG	Directorate General
EEA	European Environment Agency
ERU	Emission Reduction Unit
ESD	Effort Sharing Decision
ETC/ACM	European Topic Centre on Air Pollution and Climate Change Mitigation
ETS	Emission Trading System
EU	European Union
GHG	greenhouse gas
GWP	global warming potential
HFCs	hydrofluorocarbons
HWP	harvested wood products
IPCC	Intergovernmental Panel on Climate Change
JRC	Joint Research Centre
KP	Kyoto Protocol
LULUCF	land use, land-use change and forestry
N ₂ O	nitrous oxide
NIR	national inventory report
PFCs	perfluorocarbons
PPSR	previous period surplus reserve
QA/QC	quality assurance/ quality control
RMU	Removal Unit
RIVM	Institute for Public Health and the Environment
QELRCs	quantified emission limitation commitments
SBSTA	Subsidiary Body for Scientific and Technological Advice
SF ₆	sulphur hexafluoride
SWD	Staff Working Document
UNFCCC	United Nations Framework Convention on Climate Change
WG	Working Group