Official Journal of the European Union

L 318

English edition

Legislation

Volume 65

12 December 2022

Contents

[1] Text with EEA relevance.

EN

Acts whose titles are printed in light type are those relating to day-to-day management of agricultural matters, and are generally valid for a limited period.

The titles of all other acts are printed in bold type and preceded by an asterisk.

([1]) Text with EEA relevance.

II

(Non-legislative acts)

INTERNATIONAL AGREEMENTS

COUNCIL DECISION (EU) 2022/2417

of 26 July 2022

on the conclusion, on behalf of the European Union, of the Agreement between the European Union and the Republic of Moldova on the carriage of freight by road

THE COUNCIL OF THE EUROPEAN UNION,

Having regard to the Treaty on the Functioning of the European Union, and in particular Article 91, in conjunction with Article 218(6)(a) thereof,

Having regard to the proposal from the European Commission,

Having regard to the consent of the European Parliament [1],

Whereas:

(1) In accordance with Council Decision (EU) 2022/1165 [2] the Agreement between the European Union and the Republic of Moldova on the carriage of freight by road (the 'Agreement') was signed on 29 June 2022, subject to its conclusion at a later date.

(2) In view of the important disruptions in the transport sector in the Republic of Moldova caused by the war of aggression undertaken by Russia against Ukraine, it is necessary for operators from the Republic of Moldova to find alternative transit routes by road through the European Union and to find new markets to export their goods.

(3) Given that permits granted in the framework of the European Conference of Ministers of Transport multilateral quota system within the International Transport Forum and existing bilateral agreements with the Republic of Moldova do not allow for the necessary flexibility for road haulage operators from the Republic of Moldova to plan ahead for and increase their operations through and with the Union, it is crucial to liberalise the transport of freight by road for bilateral operations as well as for transit.

(4) In view of the exceptional and unique circumstances that necessitate the signature, provisional application and conclusion of the Agreement, and in accordance with the Treaties, it is appropriate for the Union to exercise temporarily the relevant shared competence conferred upon it by the Treaties. Any effect of this Decision on the division of competences between the Union and the Member States should be strictly limited in time. The competence exercised by the Union on the basis of this Decision and of the Agreement should therefore only be exercised with respect to the period of application of the Agreement. Accordingly, the shared competence thus exercised will cease to be exercised by the Union as soon as the Agreement ceases to apply. Without prejudice to other Union measures, and subject to compliance with those Union measures, that competence will, in accordance with Article 2(2) of the Treaty on the Functioning of the European Union (TFEU), again be exercised by the Member

[1] Consent of 10 November 2022 (not yet published in the Official Journal).

[2] Council Decision (EU) 2022/1165 of 27 June 2022 on the signing, on behalf of the Union, and provisional application of the Agreement between the European Union and the Republic of Moldova on the carriage of freight by road (OJ L 181, 7.7.2022, p. 1).

States thereafter. Furthermore, it is recalled that, as set out in Protocol No 25 on the exercise of shared competence annexed to the Treaty on European Union and to the TFEU, the scope of the exercise of the competence of the Union in this Decision covers only those elements governed by this Decision and the Agreement and does not cover the whole area. The exercise of Union competence by this Decision is without prejudice to the respective competences of the Union and of the Member States in relation to any ongoing or future negotiations for, or signature or conclusion of, international agreements with any other third country in that area.

(5) The Agreement should be approved on behalf of the Union,

HAS ADOPTED THIS DECISION:

Article 1

The Agreement between the European Union and the Republic of Moldova on the carriage of freight by road is hereby approved on behalf of the Union ([3]).

Article 2

1. The exercise of Union competence pursuant to this Decision and the Agreement shall be limited to the period of application of the Agreement. Without prejudice to other Union measures, and subject to compliance with those Union measures, after the end of that period of application the Union shall immediately cease to exercise that competence and the Member States shall again exercise their competence in accordance with Article 2(2) TFEU.

2. The exercise of Union competence pursuant to this Decision and the Agreement shall be without prejudice to the competence of the Member States concerning any ongoing or future negotiations for, or signature or conclusion of, international agreements related to the carriage of goods by road with any other third country, and with the Republic of Moldova with respect to the period after the Agreement has ceased to apply.

3. The exercise of the competence by the Union referred to in paragraph 1 covers only the elements governed by this Decision and the Agreement.

4. This Decision and the Agreement are without prejudice to the respective competences of the Union and the Member States in the area of carriage of goods by road with regard to elements other than those governed by this Decision and the Agreement.

Article 3

The President of the Council shall, on behalf of the Union, give the notification provided for in Article 12 of the Agreement.

Article 4

The European Commission, assisted by the representatives of the Member States as observers, shall represent the Union within the Joint Committee set up pursuant to Article 6 of the Agreement.

Article 5

This Decision shall enter into force on the date of its adoption.

([3]) The text of the Agreement is published in OJ L 181, 7.7.2022, p. 4.

Done at Brussels, 26 July 2022.

For the Council
The President
M. KUPKA

REGULATIONS

COMMISSION IMPLEMENTING REGULATION (EU) 2022/2418

of 9 December 2022

amending Regulation (EC) No 333/2007 as regards the methods for analysis for the control of the levels of trace elements and processing contaminants in foodstuffs

(Text with EEA relevance)

THE EUROPEAN COMMISSION,

Having regard to the Treaty on the Functioning of the European Union,

Having regard to Regulation (EU) 2017/625 of the European Parliament and of the Council of 15 March 2017 on official controls and other official activities performed to ensure the application of food and feed law, rules on animal health and welfare, plant health and plant protection products, amending Regulations (EC) No 999/2001, (EC) No 396/2005, (EC) No 1069/2009, (EC) No 1107/2009, (EU) No 1151/2012, (EU) No 652/2014, (EU) 2016/429 and (EU) 2016/2031 of the European Parliament and of the Council, Council Regulations (EC) No 1/2005 and (EC) No 1099/2009 and Council Directives 98/58/EC, 1999/74/EC, 2007/43/EC, 2008/119/EC and 2008/120/EC, and repealing Regulations (EC) No 854/2004 and (EC) No 882/2004 of the European Parliament and of the Council, Council Directives 89/608/EEC, 89/662/EEC, 90/425/EEC, 91/496/EEC, 96/23/EC, 96/93/EC and 97/78/EC and Council Decision 92/438/EEC (Official Controls Regulation) ([1]), and in particular Article 34(6) thereof,

Whereas:

(1) Commission Regulation (EC) No 333/2007 ([2]) lays down the methods of sampling and analysis to be used for the official control of the levels of trace elements and processing contaminants in foodstuffs.

(2) On the basis of the best available scientific information, the European Union Reference Laboratories in the field of contaminants in feed and food have elaborated a Guidance Document on the estimation of the Limit of Detection (LOD) and Limit of Quantification (LOQ) for measurements in the field of contaminants in feed and food ([3]). As this Guidance Document contains the best up to date technological knowledge, its conclusions should be reflected in the requirements for LOQs for analytical methods for arsenic set out in Regulation (EC) No 333/2007.

(3) Regulation (EC) No 333/2007 should therefore be amended accordingly.

(4) The measures provided for in this Regulation are in accordance with the opinion of the Standing Committee on Plants, Animals, Food and Feed,

HAS ADOPTED THIS REGULATION:

Article 1

The Annex to Regulation (EC) No 333/2007 is amended in accordance with the Annex to this Regulation.

([1]) OJ L 95, 7.4.2017, p. 1.

([2]) Commission Regulation (EC) No 333/2007 of 28 March 2007 laying down the methods of sampling and analysis for the control of the levels of trace elements and processing contaminants in foodstuffs (OJ L 88, 29.3.2007, p. 29).

([3]) Wenzl, T., Haedrich, J., Schaechtele, A., Robouch, P., Stroka, J., *Guidance Document on the Estimation of LOD and LOQ for Measurements in the Field of Contaminants in Feed and Food*; EUR 28099, Publications Office of the European Union, Luxembourg, 2016, ISBN 978-92-79-61768-3; doi:10.2787/8931.

Article 2

This Regulation shall enter into force on the twentieth day following that of its publication in the *Official Journal of the European Union*.

This Regulation shall be binding in its entirety and directly applicable in all Member States.

Done at Brussels, 9 December 2022.

For the Commission
The President
Ursula VON DER LEYEN

ANNEX

In point C.3.3.1. of the Annex to Regulation (EC) No 333/2007, point (a) is replaced by the following:

'(a) Performance criteria for methods of analysis for lead, cadmium, mercury, inorganic tin and inorganic arsenic

Table 5

Parameter	Criterion			
Applicability	Foods specified in Regulation (EC) No 1881/2006			
Specificity	Free from matrix or spectral interferences			
Repeatability (RSD_r)	$HORRAT_r$ less than 2			
Reproducibility (RSD_R)	$HORRAT_R$ less than 2			
Recovery	The provisions of point D.1.2. apply			
LOD	= three tenths of LOQ			
LOQ	Inorganic tin	≤ 10 mg/kg		
	Lead	ML ≤ 0,02 mg/kg	0,02 < ML < 0,1 mg/kg	ML ≥ 0,1 mg/kg
		≤ ML	≤ two thirds of the ML	≤ one fifth of the ML
	Cadmium, mercury	ML ≤ 0,02 mg/kg	0,02 < ML < 0,1 mg/kg	ML is ≥ 0,1 mg/kg
		≤ two fifths of the ML	≤ two fifths of the ML	≤ one fifth of the ML
	Inorganic arsenic and total arsenic	ML ≤ 0,03 mg/kg	0,03 < ML < 0,1 mg/kg	ML is ≥ 0,1 mg/kg
		≤ ML	≤ two thirds of the ML	≤ two thirds of the ML'

REGULATION (EU) 2022/2419 OF THE EUROPEAN CENTRAL BANK

of 6 December 2022

amending Regulation (EU) 2021/378 on the application of minimum reserve requirements (ECB/2021/1) *(ECB/2022/43)*

THE GOVERNING COUNCIL OF THE EUROPEAN CENTRAL BANK,

Having regard to the Treaty on the Functioning of the European Union,

Having regard to the Statute of the European System of Central Banks and of the European Central Bank, and in particular to Article 19(1) thereof,

Having regard to Council Regulation (EC) No 2531/98 of 23 November 1998 concerning the application of minimum reserves by the European Central Bank ([1]),

Whereas:

(1) Minimum reserves have until now been remunerated at the European Central Bank's (ECB) main refinancing operations rate. In order to align the minimum reserves remuneration more closely with money market conditions, the Governing Council decided on 27 October 2022 to set such remuneration at the Eurosystem's deposit facility rate (DFR). Under the prevailing market and liquidity conditions, the DFR better reflects the rate at which funds may be invested in money market instruments if not held as minimum reserves and the rate at which banks may borrow funds in the money market to fulfil minimum reserves. The change in the remuneration of minimum reserves seeks to ensure that the Eurosystem minimum reserves system neither puts a burden on the banking system in the euro area, nor hinders the efficient allocation of resources. In order to ensure an effective transition, the remuneration change should be aligned with the beginning of the maintenance period, starting on 21 December 2022.

(2) To ensure legal clarity and transparency, as a follow-up to the Governing Council's decision on 17 February 2022 to review the remuneration of non-monetary policy deposits at Eurosystem level, it is appropriate to also define the remuneration treatment of funds initially included in holdings of minimum reserves that are subsequently considered to fulfil the conditions of Article 3(1)(d) of Regulation (EU) 2021/378 of the European Central Bank (ECB/2021/1) ([2]), and thus are excluded from an institution's reserve holdings under that act.

(3) This Regulation should apply from 21 December 2022.

(4) Therefore, Regulation (EU) 2021/378 (ECB/2021/1) should be amended accordingly,

HAS ADOPTED THIS REGULATION:

Article 1

Amendment

Article 9 of Regulation (EU) 2021/378 (ECB/2021/1) is replaced by the following:

'*Article 9*

Remuneration

1. The relevant NCB shall remunerate holdings of minimum reserves in the reserve accounts at the average, taken over the maintenance period, of the Eurosystem's deposit facility rate (weighted according to the number of calendar days) according to the following formula (whereby the result is rounded to the nearest cent):

([1]) OJ L 318, 27.11.1998, p. 1.
([2]) Regulation (EU) 2021/378 of the European Central Bank of 22 January 2021 on the application of minimum reserve requirements (ECB/2021/1) (OJ L 73, 3.3.2021, p. 1).

$$R_t = \frac{H_t \cdot n_t \cdot r_t}{100 \cdot 360}$$

$$r_t = \sum_{i=1}^{n_t} \frac{DFR_i}{n_t}$$

Where:

R_t	=	remuneration to be paid on holdings of minimum reserves for the maintenance period *t*;
H_t	=	average daily holdings of minimum reserves for the maintenance period *t*;
n_t	=	number of calendar days in the maintenance period *t*;
r_t	=	rate of remuneration on holdings of minimum reserves for the maintenance period *t*; standard rounding of the rate of remuneration to two decimals shall be applied;
i	=	*i*th calendar day of the maintenance period *t*;
DFR_i	=	the deposit facility rate on each day i of the maintenance period.

2. The relevant NCB shall pay the remuneration on the holdings of minimum reserves on the second TARGET2 business day following the end of the maintenance period over which the remuneration was earned.

3. Funds included in holdings of minimum reserves that are subsequently excluded from those minimum reserves pursuant to Article 3(1)(d) shall be remunerated by the relevant NCB in accordance with the rules applicable to non-monetary policy deposits in Guideline (EU) 2019/671 of the European Central Bank (ECB/2019/7) (*), with effect from the date the specific condition of Article 3(1)(d) applies, as determined by the relevant NCB.

(*) Guideline (EU) 2019/671 of the European Central Bank of 9 April 2019 on domestic asset and liability management operations by the national central banks (ECB/2019/7) (OJ L 113, 29.4.2019, p. 11).'.

Article 2

Final provisions

This Regulation shall enter into force on the fifth day following that of its publication in the *Official Journal of the European Union*. It shall apply from 21 December 2022.

This Regulation shall be binding in its entirety and directly applicable in the Member States in accordance with the Treaties.

Done at Frankfurt am Main, 6 December 2022.

For the Governing Council of the ECB
The President of the ECB
Christine LAGARDE

DECISIONS

COMMISSION IMPLEMENTING DECISION (EU) 2022/2420

of 1 December 2022

amending the Annex to Implementing Decision (EU) 2021/641 concerning emergency measures in relation to outbreaks of highly pathogenic avian influenza in certain Member States

(notified under document C(2022) 8991)

(Text with EEA relevance)

THE EUROPEAN COMMISSION,

Having regard to the Treaty on the Functioning of the European Union,

Having regard to Regulation (EU) 2016/429 of the European Parliament and of the Council of 9 March 2016 on transmissible animal diseases and amending and repealing certain acts in the area of animal health ('Animal Health Law') ([1]), and in particular Article 259(1), point (c), thereof,

Whereas:

(1) Highly pathogenic avian influenza (HPAI) is an infectious viral disease in birds and may have a severe impact on the profitability of poultry farming causing disturbance to trade within the Union and exports to third countries. HPAI viruses can infect migratory birds, which can then spread these viruses over long distances during their autumn and spring migrations. Therefore, the presence of HPAI viruses in wild birds poses a continuous threat for the direct and indirect introduction of these viruses into establishments where poultry or captive birds are kept. In the event of an outbreak of HPAI, there is a risk that the disease agent may spread to other establishments where poultry or captive birds are kept.

(2) Regulation (EU) 2016/429 establishes a new legislative framework for the prevention and control of diseases that are transmissible to animals or humans. HPAI falls within the definition of a listed disease in that Regulation, and it is subject to the disease prevention and control rules laid down therein. In addition, Commission Delegated Regulation (EU) 2020/687 ([2]) supplements Regulation (EU) 2016/429 as regards the rules for the prevention and control of certain listed diseases, including disease control measures for HPAI.

(3) Commission Implementing Decision (EU) 2021/641 ([3]) was adopted within the framework of Regulation (EU) 2016/429 and it lays down emergency measures at Union level in relation to outbreaks of HPAI.

(4) More particularly, Implementing Decision (EU) 2021/641 provides that the protection, surveillance and further restricted zones established by the Member States following outbreaks of HPAI, in accordance with Delegated Regulation (EU) 2020/687, are to comprise at least the areas listed as protection, surveillance and further restricted zones in the Annex to that Implementing Decision.

([1]) OJ L 84, 31.3.2016, p. 1.

([2]) Commission Delegated Regulation (EU) 2020/687 of 17 December 2019 supplementing Regulation (EU) 2016/429 of the European Parliament and the Council, as regards rules for the prevention and control of certain listed diseases (OJ L 174, 3.6.2020, p. 64).

([3]) Commission Implementing Decision (EU) 2021/641 of 16 April 2021 concerning emergency measures in relation to outbreaks of highly pathogenic avian influenza in certain Member States (OJ L 134, 20.4.2021, p. 166).

(5) The Annex to Implementing Decision (EU) 2021/641 was recently amended by Commission Implementing Decision (EU) 2022/2322 ([4]) following outbreaks of HPAI in poultry or captive birds in Belgium, Germany, Ireland, France, Croatia, Italy, Hungary and the Netherlands that needed to be reflected in that Annex.

(6) Since the date of adoption of Implementing Decision (EU) 2022/2322, Ireland, France, Italy, Hungary and the Netherlands have notified the Commission of further outbreaks of HPAI in establishments where poultry or captive birds were kept, located in the Monaghan County in Ireland, in the Bretagne, Centre-Val de Loire, Hauts-de-France, Nouvelle-Aquitaine, Occitanie and Pays de la Loire administrative regions in France, in the Emilia-Romagna and Lombardy Regions in Italy, in the Bács-Kiskun, Békés and Csongrád-Csanád Counties in Hungary and in the Friesland, Zuid-Holland and Limburg Provinces in the Netherlands.

(7) The competent authorities of Ireland, France, Italy, Hungary and the Netherlands have taken the necessary disease control measures required in accordance with Delegated Regulation (EU) 2020/687, including the establishment of protection and surveillance zones around those outbreaks.

(8) In addition, the competent authority of France decided to establish further restricted zones in addition to the protection and surveillance zones established for certain outbreaks located in that Member State.

(9) Moreover, one outbreak confirmed in the Netherlands is located in close proximity to the border with Germany. Accordingly, the competent authorities of these Member States have duly collaborated with regard to the establishment of the necessary surveillance zone, in accordance with Delegated Regulation (EU) 2020/687, as the surveillance zone extends into the territory of Germany.

(10) Furthermore, the outbreak confirmed in Ireland is again located in close proximity to the border between Ireland and Northern Ireland. In accordance with the Agreement on the withdrawal of the United Kingdom of Great Britain and Northern Ireland from the European Union and the European Atomic Energy Community ('Withdrawal Agreement'), and in particular Article 5(4) of the Protocol on Ireland/Northern Ireland in conjunction with Annex 2 to that Protocol, Regulation (EU) 2016/429, as well as the Commission acts based on it, apply to and in the United Kingdom in respect of Northern Ireland after the end of the transition period provided for in the Withdrawal Agreement.

(11) Consequently, the emergency measures laid down in Implementing Decision (EU) 2021/641 apply in the United Kingdom in respect of Northern Ireland. Therefore, the competent authorities of Ireland and the United Kingdom in respect of Northern Ireland have duly collaborated with regard to the establishment of the necessary protection and surveillance zones in accordance with Delegated Regulation (EU) 2020/687, as the protection and surveillance zones related to the outbreak confirmed in Ireland extend into the territory of the United Kingdom in respect of Northern Ireland.

(12) The Commission has examined the disease control measures taken by Germany, Ireland, France, Italy, Hungary, the Netherlands and the United Kingdom in respect of Northern Ireland, in collaboration with those Member States and the United Kingdom in respect of Northern Ireland, and it is satisfied that the boundaries of the protection and surveillances zones in Germany, Ireland, France, Italy, Hungary, the Netherlands and in the United Kingdom in respect of Northern Ireland, established by the competent authority of those Member States and of the United Kingdom in respect of Northern Ireland are at a sufficient distance from the establishments where the outbreaks of HPAI have been confirmed.

(13) In order to prevent any unnecessary disturbance to trade within the Union and to avoid unjustified barriers to trade being imposed by third countries, it is necessary to rapidly describe at Union level, in collaboration with Germany, Ireland, France, Italy, Hungary, the Netherlands and the United Kingdom in respect of Northern Ireland, the protection and surveillance zones duly established by these Member States and the United Kingdom in respect of Northern Ireland in accordance with Delegated Regulation (EU) 2020/687, as well as the further restricted zones established by France.

([4]) Commission Implementing Decision (EU) 2022/2322 of 21 November 2022 amending the Annex to Implementing Decision (EU) 2021/641 concerning emergency measures in relation to outbreaks of highly pathogenic avian influenza in certain Member States (OJ L 307, 28.11.2022, p. 164).

(14) Therefore, the areas listed as protection and surveillance zones for Germany, Ireland, France, Hungary, Italy, the Netherlands and for the United Kingdom in respect of Northern Ireland, as well as the areas listed as further restricted zones for France in the Annex to Implementing Decision (EU) 2021/641 should be amended.

(15) Accordingly, the Annex to Implementing Decision (EU) 2021/641 should be amended to update regionalisation at Union level to take account of the protection and surveillance zones duly established by Germany, Ireland, France, Italy, Hungary, the Netherlands and the United Kingdom in respect of Northern Ireland, and of the further restricted zones established by France in accordance with Delegated Regulation (EU) 2020/687, and the duration of the measures applicable therein.

(16) Implementing Decision (EU) 2021/641 should therefore be amended accordingly.

(17) Given the urgency of the epidemiological situation in the Union as regards the spread of HPAI, it is important that the amendments to be made to Implementing Decision (EU) 2021/641 by this Decision take effect as soon as possible.

(18) The measures provided for in this Decision are in accordance with the opinion of the Standing Committee on Plants, Animals, Food and Feed,

HAS ADOPTED THIS DECISION:

Article 1

The Annex to Implementing Decision (EU) 2021/641 is replaced by the text set out in the Annex to this Decision.

Article 2

This Decision is addressed to the Member States.

Done at Brussels, 1 December 2022.

For the Commission
Stella KYRIAKIDES
Member of the Commission

ANNEX

'ANNEX

Part A

Protection zones in the concerned Member States* as referred to in Articles 1 and 2:

Member State: Belgium

ADIS reference number of the outbreak	Area comprising:	Date until applicable in accordance with Article 39 of Delegated Regulation (EU) 2020/687
BE-HPAI(P)-2022-00010	Those parts of the municipalities Kasterlee, Lille, Turnhout and Vosselaar contained within a circle of a radius of 3 kilometres, centered on WGS84 dec. coordinates long 4,930419, lat 51,27616.	30.11.2022

Member State: Denmark

ADIS reference number of the outbreak	Area comprising:	Date until applicable in accordance with Article 39 of Delegated Regulation (EU) 2020/687
DK-HPAI(P)-2022-00006	The parts of Slagelse municipality that are contained within a circle of radius 3 km, centered on GPS coordinates N 55,2347; E 11,3952	5.12.2022

Member State: Germany

ADIS reference number of the outbreak	Area comprising:	Date until applicable in accordance with Article 39 of Delegated Regulation (EU) 2020/687
	BAYERN	
DE-HPAI(P)-2022-00088	**Landkreis Landshut** 3 km um den Ausbruchsbetrieb GPS Koordinaten 12,469717/48,465004 Betroffen sind Gemeinden oder Teile der Gemeinden Aham Bodenkirchen Schalkham	3.12.2022
	Landkreis Rottal-Inn 3 km um den Ausbruchsbetrieb GPS Koordinaten 12,469717/48,465004 Betroffen sind Teile der Gemeinde Gangkofen.	3.12.2022

HESSEN		
DE-HPAI(P)-2022-00086	**Landkreis Gießen** 3 km Radius um den Ausbruchsbetrieb GPS Koordinaten: 8.887042/50.438181 Betroffen sind Teile der Gemeinde Hungen	30.11.2022
	Wetteraukreis 3 km Radius um den Ausbruchsbetrieb GPS Koordinaten: 8.887042/50.438181 Betroffen sind Teile der Gemeinden Wölfersheim, Echzell und Nidda	30.11.2022
NIEDERSACHSEN		
DE-HPAI(P)-2022-00089	**Landkreis Aurich** 3 km Radius um den Ausbruchsbetrieb GPS-Koordinaten 7.649228/53.428679 Betroffen sind Teile der Gemeinden Großefehn und Wiesmoor	8.12.2022
NORDRHEIN-WESTFALEN		
DE-HPAI(P)-2022-00084	**Oberbergischer Kreis** 3 km Radius um den Ausbruchsbetrieb (GPS-Koordinaten 7.685763/50.834267) Betroffen sind Teile: — des Oberbergischen Kreises mit der Gemeinde Morsbach	29.11.2022
RHEINLAND-PFALZ		
DE-HPAI(P)-2022-00084 DE-HPAI(NON-P)-2022-01219	**Kreis Altenkirchen** Union der 3 km-Radien um die Ausbruchsbetriebe mit den GPS Koordinaten: 7.685763/50.834267 7.640940/50.800340 Betroffen sind die Stadt Wissen und die Ortsgemeinde Birken-Honigsessen, jeweils ausserhalb der Ortslage Richtung Kreisgrenze zu NRW sowie die Ortsgemeinden Forst und Fürthen	15.12.2022
SCHLESWIG-HOLSTEIN		
DE-HPAI(P)-2022-00083	**Kreis Rendsburg-Eckernförde** 3 km Radius um Primär-Ausbruchsbetrieb GPS Koordinaten 9,799269/54,237815 Teile der Gemeinden Emkendorf, Bokel und Groß Vollstedt	1.12.2022

Member State: Ireland

ADIS reference number of the outbreak	Area comprising:	Date until applicable in accordance with Article 39 of Delegated Regulation (EU) 2020/687
IE-HPAI(P)-2022-00001 IE-HPAI(P)-2022-00003	That part of the County of Monaghan) that comprises the townlands of Largy, lying partly in the Electoral Division of Clones Rural and partly in the Electoral Division of Clones Urban, Aghafin, Atartate Glebe, Burdautien, Carney's Island, Carrivatragh, Cavan, Clonkirk, Clonkee (Cole), Corraghy, Creevaghy, Drumard, Edenaforan, Gortnawhinny, Legnakelly, Leonard's Island, Liseggerton, Lisnaroe Near, Lisoarty, Longfield, Magheramore, Mullanacloy, Shanamullen South, Tanderagee, Tirnahinch Near, Tirnahinch Far, all in the Electoral Division of Clones Rural, and Carrickmore and Drumadagory, all in the Electoral Division of St. Tierney That part of the County of Monaghan) that comprises the townlands of Largy, lying partly in the Electoral Division of Clones Rural and partly in the Electoral Division of Clones Urban, Aghafin, Altartate Glebe, Burdautien, Carney's Island, Carrivatragh, Cavan, Clonkirk, Clonkeen (Cole), Corraghy, Creevaghy, Drumard, Edenaforan, Gortnawhinny, Legnakelly, Leonard's Island, Liseggerton, Lisnaroe Near, Lisoarty, Longfield, Magheranure, Mullanacloy, Shanamullen South, Tanderagee, Tirnahinch Near, Tirnahinch Far, all in the Electoral Division of Clones Rural, and Carrickmore, Drumadagory and Drumaddarainy, all in the Electoral Division of St. Tierney	13.12.2022

Member State: France

ADIS reference number of the outbreak	Area comprising:	Date until applicable in accordance with Article 39 of Delegated Regulation (EU) 2020/687
	Département: Côtes-d'Armor (22)	
FR-HPAI(P)-2022-01419 FR-HPAI(P)-2022-01425	CALORGUEN EVRAN LE QUIOU SAINT-ANDRE-DES-EAUX SAINT-JUVAT SAINT-MADEN TREFUMEL TREVRON	8.12.2022
	Département: Eure (27)	
FR-HPAI(NON-P)-2022-00354	LA HAYE-SAINT-SYLVESTRE MELICOURT MESNIL-ROUSSET NOTRE-DAME-DU-HAMEL SAINT-PIERRE-DE-CERNIERES	7.12.2022

Département: Finistère (29)		
FR-HPAI(P)-2022-01421 FR-HPAI(P)-2022-01429	HENVIC TAULE	7.12.2022
Département: Ille-et-Vilaine (35)		
FR-HPAI(P)-2022-01418	RANNEE à l'est de la D95 et au sud des lignes de la belle etoile	30.11.2022
Département: Indre (36)		
FR-HPAI(P)-2022-01412	AIZE: Sud de D31 et route entre Moulin Bailly et Aize BUXEUIL: Sud de D960 ROUVRES LES BOIS	30.11.2022
Département: Landes (40)		
FR-HPAI(NON-P)-2022-00391	LEON SAINT-MICHEL-ESCALUS	16.12.2022
Département: Loiret (45)		
FR-HPAI(P)-2022-01407 FR-HPAI(P)-2022-01420 FR-HPAI(P)-2022-01432	AUVILLIERS-EN-GÂTINAIS BEAUCHAMPS-SUR-HUILLARD CHAILLY-EN-GÂTINAIS CHÂTENOY COUDROY AUVILLIERS-EN-GÂTINAIS BEAUCHAMPS-SUR-HUILLARD CHAILLY-EN-GÂTINAIS CHÂTENOY COUDROY NOYERS AUVILLIERS-EN-GÂTINAIS BEAUCHAMPS-SUR-HUILLARD CHAILLY-EN-GÂTINAIS CHÂTENOY COUDROY NOYERS	10.12.2022
Département: Mayenne (53)		
FR-HPAI(P)-2022-01418	BRAINS-SUR-LES-MARCHES FONTAINE-COUVERTE LA ROUAUDIERE SAINT-AIGNAN-SUR-ROE SAINT-MICHEL-DE-LA-ROE	30.11.2022
FR-HPAI(P)-2022-01431	ASSE-LE-BERENGER EVRON SAINTE-GEMMES-LE-ROBERT SAINT-GEORGES-SUR-ERVE	7.12.2022

Département: Morbihan (56)		
FR-HPAI(P)-2022-01422 FR-HPAI(P)-2022-01435	EVELLYS -Partie de la commune à l'est de la D767 jusqu'à Siviac puis à l'est de la route allant à Naizin puis au sud de la D203 MOREAC – Partie de la commune à l'est de la D767 jusqu'à Porh Legal puis au nord de la D181 jusqu'à Keranna puis au nord de la route allant de Keranna à Kervalo en passant par Le Petit Kerimars, Bolcalpère et le Faouët d'En Haut REGUINY – Partie de la commune au sud de la D203 jusqu'à Le Pont Saint Fiacre RADENAC -Partie de la commune à l'ouest de la D11	13.12.2022
Département: Nord (59)		
FR-HPAI(P)-2022-01423	NEUF-BERQUIN STEENWERCK ESTAIRES LE DOULIEU	8.12.2022
FR-HPAI(P)-2022-01434	NEUF-BERQUIN STEENWERCK ESTAIRES LE DOULIEU AUBERS HERLIES ILLIES	11.12.2022
Département: Pas-de Calais (62)		
FR-HPAI(P)-2022-01427	ALLOUAGNE BURBURE CHOQUES GONNEHEM LABEUVRIERE LAPUGNOY LILLERS LOZINGHEM	10.12.2022
Département: Deux – Sèvres (79)		
FR-HPAI(P)-2022-01397	COULONGES-SUR-L'AUTIZE SAINT-MAIXENT-DE-BEUGNE	29.11.2022
FR-HPAI(P)-2022-01411 FR-HPAI(P)-2022-01415 FR-HPAI(P)-2022-01414 FR-HPAI(P)-2022-01417 FR-HPAI(P)-2022-01430 FR-HPAI(P)-2022-01436 FR-HPAI(P)-2022-01428	L'ABSIE LE BUSSEAU CHANTELOUP LA CHAPELLE-SAINT-ETIENNE COULONGES-SUR-L'AUTIZE LARGEASSE SAINT-MAIXENT-DE-BEUGNE SAINT-PAUL-EN-GATINE TRAYES VERNOUX-EN-GATINE	11.12.2022

	Département: Somme (80)	
FR-HPAI(P)-2022-01437	AMIENS BOVES CAGNY DURY SAINS-EN-AMIENOIS SAINT-FUSCIEN	12.12.2022
	Département: Tarn (81)	
FR-HPAI(P)-2022-01433	ALBI CARLUS CASTELNAU-DE-LEVIS MARSSAC-SUR-TARN ROUFFIAC LE SEQUESTRE TERSSAC	11.12.2022
	Département: Vendée (85)	
FR-HPAI(P)-2022-01397 FR-HPAI(P)-2022-01408	SAINT HILAIRE DES LOGES au nord de la D745 L'ORBRIE MERVENT SAINT-MICHEL-LE-CLOUCQ FOUSSAIS PAYRE à l'est de la D49	18.11.2022
FR-HPAI(P)-2022-01409	CHAMPAGNE-LES-MARAIS LUCON MOREILLES PUYRAVAULT SAINTE-DEMME-LA-PLAINE SAINTE-RADEGONDE-DES-NOYERS	18.11.2022
FR-HPAI(P)-2022-01410	BREUIL-BARRET LA CHAPELLE-AUX-LYS LOGE-FOUGEREUSE SAINT-HILAIRE-DE-VOUST	22.11.2022
FR-HPAI(P)-2022-01416	BREM-SUR-MER LANDEVIEILLE SAINT-JULIEN-DES-LANDES VAIRE	27.11.2022

Member State: Croatia

ADIS reference number of the outbreak	Area comprising:	Date until applicable in accordance with Article 39 of Delegated Regulation (EU) 2020/687
	Grad Zagreb	
HR-HPAI(P)-2022-00007	— gradske četvrti Brezovica i Novi Zagreb- zapad	6.12.2022

Zagrebačka županija		
HR-HPAI(P)-2022-00007	— općina Samobor, naselje Rakov potok; — općina Stupnik, naselja Donji Stupnik, Gornji Stupnik i Stupnički Obrež; — općina Sveta Nedjelja, naselja Kalinovica, Kerestinec, Mala Gorica i Žitarka.	6.12.2022

Member State: Italy

ADIS reference number of the outbreak	Area comprising:	Date until applicable in accordance with Article 39 of Delegated Regulation (EU) 2020/687
Region: Veneto		
IT-HPAI(P)-2022-00033	The area of the parts of Veneto Region contained within a circle of radius of three kilometres, centred on WGS84 dec. coordinates N45.211179, E11.272346	29.11.2022
IT-HPAI(P)-2022-00034	The area of the parts of Veneto Region contained within a circle of radius of three kilometres, centred on WGS84 dec. coordinates N45.221390806, E11.04331334	2.12.2022
IT-HPAI(P)-2022-00036	The area of the parts of Veneto Region contained within a circle of radius of three kilometres, centred on WGS84 dec. coordinates N45.771464, E12.147417	29.11.2022
IT-HPAI(P)-2022-00037	The area of the parts of Veneto Region contained within a circle of radius of three kilometres, centred on WGS84 dec. coordinates N45.741660, E12.452298	28.11.2022
IT-HPAI(P)-2022-00039	The area of the parts of Veneto Region contained within a circle of radius of three kilometres, centred on WGS84 dec. coordinates N 44.964074644, E12.282057809	6.12.2022
IT-HPAI(P)-2022-00040	The area of the parts of Veneto Region contained within a circle of radius of three kilometres, centred on WGS84 dec. coordinates N45.233473, E11.657231	1.12.2022
IT-HPAI(P)-2022-00042	The area of the parts of Veneto Region contained within a circle of radius of three kilometres, centred on WGS84 dec. coordinates N45.296865835, E10.878880005	4.12.2022
IT-HPAI(P)-2022-00043	The area of the parts of Veneto Region contained within a circle of radius of three kilometres, centred on WGS84 dec. coordinates N45.504494974, E12.616275373	3.12.2022
IT-HPAI(P)-2022-00045	The area of the parts of Veneto Region contained within a circle of radius of three kilometres, centred on WGS84 dec. coordinates N45.380764707, E11.07799142	10.12.2022

IT-HPAI(P)-2022-00047	The area of the parts of Veneto Region contained within a circle of radius of three kilometres, centred on WGS84 dec. coordinates N44.966036, E12.305402	13.12.2022
IT-HPAI(P)-2022-00048	The area of the parts of Veneto Region contained within a circle of radius of three kilometres, centred on WGS84 dec. coordinates N45.393604155, E11.098068838	10.12.2022
IT-HPAI(P)-2022-00050	The area of the parts of Veneto Region contained within a circle of radius of three kilometres, centred on WGS84 dec. coordinates N45.074265, E11.604144	18.12.2022
	Region: Lombardia	
IT-HPAI(P)-2022-00032	The area of the parts of Lombardia Region contained within a circle of radius of three kilometres, centred on WGS84 dec. coordinates N45.049383, E10.35708	29.11.2022
IT-HPAI(P)-2022-00041	The area of the parts of Lombardia Region contained within a circle of radius of three kilometres, centred on WGS84 dec. coordinates N45.040236, E10.36325	3.12.2022
IT-HPAI(P)-2022-00046	The area of the parts of Lombardia Region contained within a circle of radius of three kilometres, centred on WGS84 dec. coordinates N45.033964, E10.302944	16.12.2022
IT-HPAI(P)-2022-00051	The area of the parts of Lombardia Region contained within a circle of radius of three kilometres, centred on WGS84 dec. coordinates N45.073379, E10.367887	30.12.2022
	Region: Emilia Romagna	
IT-HPAI(P)-2022-00044	The area of the parts of Emilia Romagna Region contained within a circle of radius of three kilometres, centred on WGS84 dec. coordinates N44.79259, E10. 930896	5.12.2022
IT-HPAI(P)-2022-00049	The area of the parts of Emilia Romagna Region contained within a circle of radius of three kilometres, centred on WGS84 dec. coordinates N44.873686, E11.336651	11.12.2022
	Region: Friuli Venezia Giulia	
IT-HPAI(P)-2022-00035	The area of the parts of Friuli Venezia Giulia Region contained within a circle of radius of three kilometres, centred on WGS84 dec. coordinates N45.962481, E12.606420	26.11.2022

Member State: Hungary

ADIS reference number of the outbreak	Area comprising:	Date until applicable in accordance with Article 39 of Delegated Regulation (EU) 2020/687
	Bács-Kiskun megye	
HU-HPAI(P)-2022-00211 HU-HPAI(P)-2022-00216 HU-HPAI(P)-2022-00219 HU-HPAI(P)-2022-00225	Bugac, Bugacpusztaháza, Fülöpjakab, Jakabszállás és Móricgát települések települések közigazgatási területeinek a 46.67844 és 19.65301 és a 46.679183 és a 19.663134, 46.686318 és a 19.661755, valamint a 46.695600 és a 19.681280 GPS-koordináták által meghatározott pont körüli 3 km sugarú körön belül eső területe.	7.12.2022
HU-HPAI(P)-2022-00212 HU-HPAI(P)-2022-00217 HU-HPAI(P)-2022-00226 HU-HPAI(P)-2022-00229 HU-HPAI(P)-2022-00230 HU-HPAI(P)-2022-00233-00235 HU-HPAI(P)-2022-00237 – 00242 HU-HPAI(P)-2022-00244 HU-HPAI(P)-2022-00247 – 00251 HU-HPAI(P)-2022-00256 – 00259 HU-HPAI(P)-2022-00262 HU-HPAI(P)-2022-00265	Csólyospálos, Harkakötöny, Jászszentlászló, Kiskunhalas, Kiskunmajsa, Kömpöc, Móricgát Szank és Zsana települések közigazgatási területeinek a 46.489980 és a 19.772640, a 46.544237 és a 19.741665, a 46.569793 és a 19.692088, a 46.494360 és a 19.781250, a 46.517887 és a 19.678431, a 46.465166 és a 19.753716, a 46.540082 és a 19.646619, a 46.491690 és a 19.689880, a 46.559267 és a 19.683815, a 46.457070 és a 19.620880, 46.511456 és a 19.726186, a 46.493138 és a 19.690420, a 46.485781 és a 19.676447, a 46.499678 és a 19.687294, a 46.484707 és a 19.693469, a 46.537062 és a 19.727489, a 46.520024 és a 19.725265, a 46.532441 és a 19.644402, a 46.545107 és a 19.702540, a 46.543879 és a 19.700779, a 46.556750 és a 19.783380, a 46.460140 és a 19.480575, a 46.469155 és a 19.769960, a 46.525178 és a 19.618940, a 46.566283 és a 19.627354, valamint a 46.497336 és a 19.775280 GPS-koordináták által meghatározott pont körüli 3 km sugarú körön belül eső területe.	21.12.2022

HU-HPAI(P)-2022-00215 HU-HPAI(P)-2022-00218 HU-HPAI(P)-2022-00220 – 00221 HU-HPAI(P)-2022-00223 – 00224 HU-HPAI(P)-2022-00227 – 00228 HU-HPAI(P)-2022-00231- 00232 HU-HPAI(P)-2022-00252	Bócsa és Bugac, Bugacpusztaháza, Kakantyú, Orgovány és Szank települések közigazgatási területeinek a 46.627319 és a 19.536083, 46.626416 és a 19.545777, a 46.630891 és a 19.536630, a 46.619573 és a 19.537445, a 46.622916 és a 19.537992, a 46.645837 és a 19.513270, a 46.640484 és a 19.524528, a 46.641252 és a 19.532421, a 46.616930 és a 19.545510, a 46.673759 és a 19.497050, valamint a 46.618622 és a 19.536336 GPS-koordináták által meghatározott pont körüli 3 km sugarú körön belül eső területe.	15.12.2022
HU-HPAI(P)-2022-00236 HU-HPAI(P)-2022-00243 HU-HPAI(P)-2022-00245 HU-HPAI(P)-2022-00253 HU-HPAI(P)-2022-00255 HU-HPAI(P)-2022-00260 – 00261 HU-HPAI(P)-2022-00263 – 00264	Csólyospálos és Kömpöc települések közigazgatási területeinek a 46.387300 és a 19.862000, a 46.449825 és a 19.874751, a 46.442671 és a 19.844208, a 46.442530 és a 19.847300, a 46.457047 és a 19.878295, a 46.457105 és a 19.878381, a 46.446674 és a 19.842729, a 46.432070 és a 19.844230, a 46.417660 és a 19.855820, valamint a 46.279380 és a 19.344527 GPS-koordináták által meghatározott pont körüli 3 km sugarú körön belül eső területe.	21.12.2022
HU-HPAI(P)-2022-00238	Harkakötöny, Kiskunhalas és Kiksunmajsa települések közigazgatási területeinek a 46.457070 és a 19.620880 GPS-koordináták által meghatározott pont körüli 3 km sugarú körön belül eső területe.	13.12.2022
HU-HPAI(P)-2022-00246	Kispáhi és Orgovány települések közigazgatási területeinek a 46.735284 és a 19.458263 GPS-koordináták által meghatározott pont körüli 3 km sugarú körön belül eső területe.	15.12.2022
HU-HPAI(P)-2022-00254	Bócsa, Soltvadkert és Tázlár települések közigazgatási területeinek a 46.563426 és a 19.472723 GPS-koordináták által meghatározott pont körüli 3 km sugarú körön belül eső területe.	25.12.2022
HU-HPAI(P)-2022-00257	Kiskunhalas település közigazgatási területének a 46.460140 és a 19.480575 GPS-koordináták által meghatározott pont körüli 3 km sugarú körön belül eső területe.	18.12.2022

HU-HPAI(P)-2022-00267	Kiskunfélegyháza, Pálmonostora és Petőfiszállás települések közigazgatási területeinek a 46.633607 és a 19.891596 GPS-koordináták által meghatározott pont körüli 3 km sugarú körön belül eső területe.	23.12.2022
HU-HPAI(P)-2022-00268	Jánoshalma és Mélykút települések közigazgatási területeinek a 46.279380 és a 19.344527 GPS-koordináták által meghatározott pont körüli 3 km sugarú körön belül eső területe.	23.12.2022
	Csongrád-Csanád megye	
HU-HPAI(P)-2022-00213	Algyő, Sándorfalva és Szeged települések közigazgatási területeinek a 46.353600 és a 20.173300 GPS-koordináták által meghatározott pont körüli 3 km sugarú körön belül eső területe.	3.12.2022
HU-HPAI(P)-2022-00214 HU-HPAI(P)-2022-00222	Szentes település közigazgatási területének 46.647079 és a 20.325001, valamint a 46.664455 és a 20.294252 GPS-koordináták által meghatározott pont körüli 3 km sugarú körön belül eső területe.	3.12.2022
HU-HPAI(P)-2022-00229 HU-HPAI(P)-2022-00256 HU-HPAI(P)-2022-00265	Csengele település közigazgatási területének a 46.494360 és a 19.781250, a 46.556750 és a 19.783380, valamint a 46.497336 és a 19.775280 GPS-koordináták által meghatározott pont körüli 3 km sugarú körön belül eső területe.	21.12.2022
HU-HPAI(P)-2022-00266	Bordány, Forráskút és Üllés Szeged települések közigazgatási területeinek a 46.359048 és a 19.888786 GPS-koordináták által meghatározott pont körüli 3 km sugarú körön belül eső területe.	21.12.2022
	Békés megye	
HU-HPAI(P)-2022-00269	Kaszaper és Tótkomlós települések közigazgatási területeinek a 46.437833 és a 20.778503 GPS-koordináták által meghatározott pont körüli 3 km sugarú körön belül eső területe.	22.12.2022

Member State: the Netherlands

ADIS reference number of the outbreak	Area comprising:	Date until applicable in accordance with Article 39 of Delegated Regulation (EU) 2020/687
NL-HPAI(P)-2022-00085	Those parts of the municipality Nederweert contained within a circle of a radius of 3 kilometres, centered on WGS84 dec. coordinates long 5.59, lat 51.65	2.12.2022
NL-HPAI(NON-P)-2022-00736	Those parts of the municipality Woerden contained within a circle of a radius of 3 kilometres, centered on WGS84 dec. coordinates long 4.84, lat 52.13	2.12.2022
NL-HPAI(P)-2022-00086	Those parts of the municipality Venray contained within a circle of a radius of 3 kilometres, centered on WGS84 dec. coordinates long 6.05, lat 51.54	13.12.2022

NL-HPAI(P)-2022-00087	Those parts of the municipality Krimpenerwaard contained within a circle of a radius of 3 kilometres, centered on WGS84 dec. coordinates long 4.8, lat 51.97	13.12.2022
NL-HPAI(P)-2022-00088	Those parts of the municipality Súdwest-Fryslân contained within a circle of a radius of 3 kilometres, centered on WGS84 dec. coordinates long 5.47 lat 52.92	14.12.2022

Member State: Austria

ADIS reference number of the outbreak	Area comprising:	Date until applicable in accordance with Article 39 of Delegated Regulation (EU) 2020/687
	STEIERMARK	
AT-HPAI(NON-P)-2022- 00021	Bezirk Graz-Umgebung: in der Gemeinde Kumberg die Katastralgemeinden Gschwendt, Hofstätten, Kumberg und Rabnitz und in der Gemeinde Eggersdorf bei Graz die Katastralgemeinden Hart bei Eggersdorf, Haselbach und Purgstall	3.12.2022

United Kingdom (Northern Ireland)

ADIS reference number of the outbreak	Area comprising:	Date until applicable in accordance with Article 39 of Delegated Regulation (EU) 2020/687
IE-HPAI(P)-2022-00001	Those parts of County Fermanagh contained within a circle of a radius of three kilometres, centred on GPS coordinates N 54,2073 and E -7,2153	7.12.2022
IE-HPAI(P)-2022-00003	Those parts of County Fermanagh contained within a circle of a radius of three kilometres, centred on GPS coordinates N 54.2093 and E -7,2219	13.12.2022

Part B

Surveillance zones in the concerned Member States* as referred to in Articles 1 and 3:

Member State: Belgium

ADIS reference number of the outbreak	Area comprising:	Date until applicable in accordance with Article 55 of Delegated Regulation (EU) 2020/687
BE-HPAI(P)-2022-00010	Those parts of the municipalities Arendonk, Beerse, Geel, Herentals, Kasterlee, Lille, Merksplas, Olen, Oud-Turnhout, Ravels, Retie, Turnhout, Vorselaar and Vosselaar, extending beyond the area described in the protection zone and contained within a circle of a radius of 10 kilometres, centered on WGS84 dec. coordinates long 4,930419, lat 51,27616.	9.12.2022
	Those parts of the municipalities Kasterlee, Lille, Turnhout and Vosselaar contained within a circle of a radius of 3 kilometres, centered on WGS84 dec. coordinates long 4,930419, lat 51,27616.	1.12.2022 -9.12.2022
FR-HPAI(P)-2022-01423	Those parts of the municipality Heuvelland contained within a circle of a radius of 10 kilometres, centered on WGS84 dec. coordinates long 2,709029, lat 50,670097.	15.12.2022

Member State: Bulgaria

ADIS reference number of the outbreak	Area comprising:	Date until applicable in accordance with Article 55 of Delegated Regulation (EU) 2020/687
	Region: Haskovo	
BG-HPAI(P)-2022-00021	The folowing village in the Haskovo municipality: Krivo pole, Koren and Momino	23.11.2022 – 2.12.2022
	The following villages in the Haskovo municipality: Elena, Knizhovnik, Malevo, Manastir, Dinevo, Rodopi, Stamboliyski, Stoykovo, Podkrepa The following villages in the Harmanli municipality: Slavyanovo, Bolyarski izvor The following villages in Stambolovo municipality: Malak izvor, Golyam izvor, Dolno Botevo, Kralevo, Gledka, Stambolovo, Tsareva polyana, Zhalti bryag	2.12.2022

Member State: Denmark

ADIS reference number of the outbreak	Area comprising:	Date until applicable in accordance with Article 55 of Delegated Regulation (EU) 2020/687
DK-HPAI(P)-2022-00006	The parts of Slagelse and Næstved municipalities beyond the area described in the protection zone and within the circle of radius 10 kilometres, centred on GPS koordinates coordinates N 55,2347; E 11,3952	14.12.2022
	The parts of Slagelse municipality that are contained within a circle of radius 3 km, centered on GPS coordinates N 55,2347; E 11,3952	6.12.2022 – 14.12.2022
DK-HPAI(NON-P)-2022-00148	The parts of Sønderborg municipality beyond the area described in the protection zone and within the circle of radius 10 kilometres, centred on GPS koordinates coordinates N 54,9365; E 9,9795	29.11.2022
	The parts of Sønderborg municipality that are contained within a circle of radius 3 km, centered on GPS coordinates N 54,9365; E 9,9795	21.11.2022 – 29.11.2022

Member State: Germany

ADIS reference number of the outbreak	Area comprising:	Date until applicable in accordance with Article 55 of Delegated Regulation (EU) 2020/687
	BAYERN	
DE-HPAI(P)-2022-00088	**Landkreis Dingolfing-Landau** 10 km Radius um den Ausbruchsbetrieb GPS Koordinaten 12.469717/48.465004 Betroffen sind Gemeinden oder Teile der Gemeinden Frontenhausen und Marklkofen.	12.12.2022
	Landkreis Landshut 10 km Radius um den Ausbruchsbetrieb GPS Koordinaten 12.469717/48.465004 Betroffen sind Gemeinden oder Teile der Gemeinden Adlkofen, Aham, Bodenkirchen, Geisenhausen, Gerzen, Kröning, Schalkam, Vilsbiburg	12.12.2022

DE-HPAI(NON-P)-2022-01198	**Landkreis Miltenberg** 10 km Radius um den Ausbruchsbetrieb GPS Koordinaten 9.178982/49.740677 Betroffen sind die Städte und Gemeinden Erlenbach a.Main, Obernburg a.Main, Wörth a.Main, Elsenfeld mit den Gemarkungen Schippach und Rück, Eschau, Mönchberg, Röllbach, Collenberg mit der Gemarkung Reistenhausen, Bürgstadt, Miltenberg mit den Gemarkungen Wenschdorf, Mainbullau und Breitendiel, Weilbach mit den Gemarkungen Weckbach und Ohrenbach, Amorbach mit den Gemarkungen Reichartshausen und Boxbrunn im Odenwald	7.12.2022
	Landkreis Miltenberg 3 km Radius um den Ausbruchsbetrieb GPS Koordinaten 9.178982/49.740677 Betroffen ist die Stadt Klingenberg a. Main mit den Gemarkungen Trennfurt und Röllfeld sowie die Gemeinden Großheubach, Kleinheubach, Rüdenau und Laudenbach	28.11.2022 - 7.12.2022
DE-HPAI(P)-2022-00088	**Landkreis Mühldorf** 10 km Radius um den Ausbruchsbetrieb GPS Koordinaten 12.469717/48.465004 Betroffen sind Teile der Gemeinde Egglkofen und der Stadt Neumarkt St. Veit	12.12.2022
	Landkreis Rottal-Inn 10 km um den Ausbruchsbetrieb GPS Koordinaten 12,469717/48,465004 Betroffen sind Teile der Gemeinde Gangkofen.	12.12.2022
	HESSEN	
DE-HPAI(P)-2022-00086	**Landkreis Gießen** 10 km Radius um den Ausbruchsbetrieb GPS Koordinaten: 8.887042/50.438181 Betroffen sind Teile der Gemeinden Hungen, Lich und Laubach.	9.12.2022
	Landkreis Gießen 3 km Radius um den Ausbruchsbetrieb GPS Koordinaten: 8.887042/50.438181 Betroffen sind Teile der Gemeinde Hungen	1.12.2022-9.12.2022

DE-HPAI(NON-P)-2022-01198	**Landkreis Odenwald** In der Gemeinde Michelstadt die Gemarkungen Vielbrunn und Weitengesäß, in der Gemarkung Würzberg das Gebiet nördlich Mangelsbach und östlich der K 45, in der Gemeinde Bad König die Gemarkung Bad König östlich der Verbindungsstraße zwischen Kimbacher Straße und Mainstraße und östlich des Birkertsgrabens und nördlich der L 3318, die Gemarkungen Kimbach, Momart östlich der Straße Strathweg und nördlich der Hohe Straße, in der Gemarkung Fürstengrund das Gebiet östlich des Waldrandes, in der Gemeinde Lützelbach die Gemarkungen Lützel-Wiebelsbach, Breitenbrunn, Haingrund und Seckmauern, in der Gemeinde Breuberg die Gemarkung Rai-Breitenbach östlich der L 3259 und der Mühlhäuser Straße bis abzweig Kreuzstarße und südlich der Kreuzstraße und deren Verlängerung nach Osten bis zur Landesgrenze.	7.12.2022
	Landkreis Odenwald In der Gemeinde Michelstadt die Gemarkung Vielbrunn östlich der Langestein-Schneise und der K 94 ab dem Abzweig zur Alten Laudenbacher Straße	29.11.2022-7.12.2022
DE-HPAI(P)-2022-00086	**Wetteraukreis** 10 km Radius um den Ausbruchsbetrieb GPS Koordinaten: 8.887042/50.438181 Betroffen sind Teile der Gemeinden Nidda, Ranstadt, Florstadt, Reichelsheim, Echzell, Wölfersheim, Bad Nauheim, Münzenberg und Rockenberg.	9.12.2022
	Wetteraukreis 3 km Radius um den Ausbruchsbetrieb GPS Koordinaten: 8.887042/50.438181 Betroffen sind Teile der Gemeinden Wölfersheim, Echzell und Nidda	1.12.2022-9.12.2022
MECKLENBURG-VORPOMMERN		
DE-HPAI(P)-2022-00082	**Landkreis Nordwestmecklenburg** 10 km Radius um den Ausbruchsbetrieb GPS Koordinaten 10.634830/53.898535 Betroffen ist die Gemeinde Lüdersdorf, Ortsteil Herrnburg	2.12.2022
NIEDERSACHSEN		
DE-HPAI(P)-2022-00089	**Landkreis Aurich** 10 km Radius um den Ausbruchsbetrieb GPS Koordinaten: 7.649228/53.428679 Betroffen sind Teile der Gemeinden Großefehn, Wiesmoor, Aurich, Ihlow, Wittmund, Friedeburg, Hesel, Firrel und Uplengen.	17.12.2022
	Landkreis Aurich 3 km Radius um den Ausbruchsbetrieb GPS Koordinaten: 7.649228/53.428679 Betroffen sind Teile der Gemeinden Großefehn und Wiesmoor.	9.12.2022 - 17.12.2022

DE-HPAI(P)-2022-00066 DE-HPAI(P)-2022-00071 DE-HPAI(P)-2022-00073 DE-HPAI(P)-2022-00074 DE-HPAI(P)-2022-00075 DE-HPAI(P)-2022-00078	**Landkreis Cloppenburg** Union der 10 km- Radien um die Ausbruchsbetriebe mit den GPS Koordinaten: — 7.637125/52.928354 — 7.636603/52.946859 — 7.626829/52.927051 — 7.627312/52.927022 — 7.623793/52.928842 — 7.621157/52.951913 Betroffen sind Teile der Gemeinde Saterland und der Stadt Friesoythe.	29.11.2022
	Landkreis Emsland Union der 10 km- Radien um die Ausbruchsbetriebe mit den GPS Koordinaten: — 7.637125/52.928354 — 7.636603/52.946859 — 7.626829/52.927051 — 7.627312/52.927022 — 7.623793/52.928842 — 7.621157/52.951913 Betroffen sind Teile der Gemeinden Börger, Bockhorst, Breddenberg, Esterwegen, Hilkenbrook, Lorup, Rastdorf, Sögel, Spahnharrenstätte, Surwold, Vrees, Werlte und Werpeloh.	29.11.2022
	Landkreis Emsland Union der 3 km- Radien um die Ausbruchsbetriebe mit den GPS Koordinaten: — 7.637125/52.928354 — 7.636603/52.946859 — 7.626829/52.927051 — 7.627312/52.927022 — 7.623793/52.928842 — 7.621157/52.951913 Betroffen sind Teile der Gemeinden Börger, Breddenberg, Esterwegen und Lorup.	21.11.2022- 29.11.2022
DE-HPAI(P)-2022-00079	**Landkreis Osnabrück** 10 km Radius um den Ausbruchsbetrieb GPS Koordinaten: 8.103891/52.330964 Betroffen sind Teile der Gemeinden Belm und Wallenhorst und der Stadt Osnabrück.	1.12.2022
	Landkreis Osnabrück 3 km Radius um den Ausbruchsbetrieb GPS Koordinaten: 8.103891/52.330964 Betroffen sind Teile der Gemeinden Belm, Bissendorf, Bohmte, Bramsche, Ostercappeln, Wallenhorst und der Stadt Osnabrück.	23.11.2022- 1.12.2022

NORDRHEIN-WESTFALEN		
DE-HPAI(P)-2022-00085	**Kreis Kleve** 3 km Radius um den Ausbruchsbetrieb (GPS-Koordinaten 6.441599/51.772975) Betroffen sind Teile: — des Kreises Kleve mit der Stadt Rees	27.11.2022 – 5.12.2022
	Kreis Kleve 10 km Radius um den Ausbruchsbetrieb (GPS-Koordinaten 6.441599/51.772975) Betroffen sind Teile: — des Kreises Kleve mit den Städten Rees, Kalkar, Emmerich — des Kreises Borken mit den Städten Isselburg, Bocholt, — des Kreises Wesel mit den Städten Hamminkeln, Wesel, Xanten	5.12.2022
DE-HPAI(P)-2022-00080	**Oberbergischer Kreis** 3 km Radius um den Ausbruchsbetrieb (GPS-Koordinaten 7.710063/50.961332 Betroffen sind Teile: — des Oberbergischen Kreises mit der Gemeide Reichshof	24.11.2022 - 2.12.2022
	Oberbergischer Kreis 10 km Radius um den Ausbruchsbetrieb (GPS-Koordinaten 7.710063/50.961332 Betroffen sind Teile: — des Oberbergischen Kreises mit den Städten Wiehl, Waldbröl, Bergneustadt, Gummersbach und mit den Gemeiden Reichshof, Nümbrecht, Morsbach — des Kreises Olpe mit den Städten Drolshagen und Olpe und der Gemeinde Wenden	2.12.2022
DE-HPAI(P)-2022-00084	**Oberbergischer Kreis** 3 km Radius um den Ausbruchsbetrieb (GPS-Koordinaten 7.685763/50.834267) Betroffen sind Teile: — des Oberbergischen Kreises mit der Gemeinde Morsbach	30.11.2022 – 8.12.2022
	Oberbergischer Kreis 10 km Radius um den Ausbruchsbetrieb (GPS-Koordinaten 7.685763/50.834267) Betroffen sind Teile: — des Oberbergischen Kreises mit den Gemeinden Morsbach, Nümbrecht, Reichshof, der Stadt Waldbröl — des Rhein-Sieg-Kreises mit der Gemeinde Windeck — des Landes Rheinland-Pfalz	8.12.2022

DE-HPAI(P)-2022-00079	**(Ausbruch in Niedersachsen)** 10 km Radius um den Ausbruchsbetrieb (GPS-Koordinaten 8.103891/52.330964) Betroffen sind Teile: — des Kreises Steinfurt mit der Gemeinde Lotte	1.12.2022
DE-HPAI(NON-P)-2022-01219	**Rhein-Sieg-Kreis** 3 km Radius um den Ausbruchsbetrieb (GPS-Koordinaten 7.640940/50.800340) Betroffen sind Teile: — des Rhein-Sieg-Kreises mit der Gemeinde Windeck, — des Oberbergischen Kreises mit der Stadt Waldbröhl und der Gemeinde Morsbach	28.11.2022 – 6.12.2022
	Rhein-Sieg-Kreis 10 km Radius um den Ausbruchsbetrieb (GPS-Koordinaten 7.640940/50.800340) Betroffen sind Teile: — des Rhein-Sieg-Kreises mit der Gemeinde Windeck, Ruppichteroth, Eitorf — des Oberbergischen Kreises mit der Stadt Waldbröhl und der Gemeinde Morsbach, Nümbrecht	6.12.2022
DE-HPAI(P)-2022-00087	**Rheinisch Bergischer Kreis** 3 km Radius um den Ausbruchsbetrieb (GPS-Koordinaten 7.111490/50.982802) Betroffen sind Teile: — des Rheinisch Bergischen Kreises mit der Stadt Bergisch Gladbach — der Stadt Köln	26.11.2022 – 4.12.2022
	Rheinisch Bergischer Kreis 10 km Radius um den Ausbruchsbetrieb (GPS-Koordinaten 7.111490/50.982802) Betroffen sind Teile: — des Rheinisch Bergischen Kreises mit den Städten Bergisch Gladbach, Burscheid, Wermelskirchen, den Gemeinden Odenthal, Kürten, Overath, Rösrath — der Stadt Köln — der Stadt Leverkusen	4.12.2022
NL-HPAI(P)-2022-00086	**(Ausbruch in den Niederlanden)** 10 km Radius um den Ausbruchsbetrieb (GPS-Koordinaten 6.043777/51.532737) Betroffen sind Teile: des Kreises Kleve mit den Städten Kevelaer, Goch und der Gemeinde Weeze	22.12.2022

RHEINLAND-PFALZ		
DE-HPAI(NON-P)-2022-01219 DE-HPAI(P)-2022-00080 DE-HPAI(P)-2022-00081 DE-HPAI(P)-2022-00084	**Kreis Altenkirchen** Union der 10 km Radien um die Ausbruchsbetriebe mit den GPS-Koordinaten: 7.685763/50.834267 7.640940/50.800340 7.710063/50.961332 7.980232/50.871116 Betroffen sind Verbandsgemeinden Hamm, Kirchen und Wissen sowie die Stadt Herdorf, außerdem in der Verbandsgemeinde Altenkirchen-Flammersfeld die Ortsgemeinden Werkhausen, Oberirsen, Ölsen, Wölmersen, Busenhausen, Kettenhausen, Obererbach, Heupelzen, Bachenberg, Hilgenroth, Volkerzen, Racksen, Isert, Eichelhardt, Idelberg und Helmeroth	15.12.2022
DE-HPAI(NON-P)-2022-01219	**Westerwaldkreis** 10 km Radius um den Ausbruchsbetrieb mit den GPS-Koordinaten: 7.640940/50.800340 Betroffen sind in der Gemeinde Stein-Wingert die Ortsteile Altburg und Alhausen und in der Gemeinde Mörsbach der nordwestliche Teil des Staatsforstes Hachenburg	16.12.2022
SCHLESWIG-HOLSTEIN		
DE-HPAI(P)-2022-00082	**Hansestadt Lübeck** Ausgehend im Norden von An der Bundesstr. Haus-Nr.12 die Stadtgrenze nach Osten entlang bis zur Schwartauer Landstr., Schwartauer Allee bis zu und weiter auf Bei der Lohmühle, Schönböckener Str., Steinrader Damm bis Hofland, Hofland bis zur Kieler Str., Kieler Str. nach Nordwesten bis zum Kreisverkehr, Steinrader Hauptstr. bis zur Stadtgrenze, die Stadtgrenze entlang nach Norden bis zu An der Bundesstr. Haus-Nr.12	4.12.2022
	Hansesatdt Lübeck Das gesamte Stadtgebiet **mit Ausnahme** der Stadtbezirke: Alt-Kücknitz/Dummersdorf/Roter Hahn; Pöppendorf; Ivendorf; Teutendorf; Alt-Travemünde/Rönnau; Brodten; Priwall; Krummesse; Beidendorf; Blankensee und der südöstlich des Müggenbuschwegs gelegene Teil des Stadtbezirks Strecknitz.	25.11.2022 – 4.12.2022
	Kreis Herzogtum Lauenburg Betroffen sind die nördlichen 150 Meter der Gemeinde Groß Schenkenberg, Gemarkung Rothenhausen, Flur 1, Flurstück 1, Flurstück 73/2 und Flurstück 76/21 angrenzend an die Hansestadt Lübeck. In der Überwachungszone des Kreises Herzogtum Lauenburg befinden sind keine Geflügelhaltungen.	4.12.2022

	Kreis Ostholstein Gemeinden/Stadt: Stockelsdorf, Bad Schwartau, Teil Ratekau, Teil Scharbeutz, Teil Ahrensbök	4.12.2022
	Kreis Ostholstein Gemeinden/Stadt: Stockelsdorf, Bad Schwartau, Teil Ratekau, Teil Scharbeutz, Teil Ahrensbök	25.11.2022 – 4.12.2022
DE-HPAI(P)-2022-00083	**Kreis Rendsburg-Eckernförde** Die Überwachungszone umfasst — die Teile der Gemeinden Emkendorf, Bokel und Groß Vollstedt die nicht in der Schutzzone liegen — die Gemeinde Bredenbek südlich des Straßenzugs Kieler Straße/ Rendsburger Straße (K67) — die Gemeinde Bovenau südlich der Kieler Straße ausgenommen des Bereichs nördlich der gedachten Verbindungslinie zwischen der Koordinate 54.32441; 9.84070 (Einmündung Feldweg) und der Koordinate 54.32054; 9.85893 (Kreuzung Rendsburger Straße/Kronsfelde) — den südlich der Bundesautobahn A210 gelegenen Teil der Gemeinde Felde — den südlich der Landesstraße L255 gelegenen Teil der Gemeinde Schierensee — den westlich der Bundesautobahn A215 gelegenen Teil der Gemeinde Sören — den nördlich des Straßenzuges Dorfstraße/Heinkenborsteler Weg gelegenen Teil der Gemeinde Gnutz — den östlich des Straßenzugs Rüsterbergen-Hasenkrug-Dorfstraße gelegenen Teil der Gemeinde Schülp bei Rendsburg — die Gesamtfläche der Gemeinden Achterwehr, Bargstedt, Borgdorf-Seedorf, Brammer, Dätgen, Ellerdorf, Eisendorf, Groß Vollstedt, Haßmoor, Jevenstedt, Langwedel, Luhnstedt, Nortorf, Oldenhütten, Ostenfeld, Osterrönfeld, Rade bei Rendsburg, Schacht-Audorf, Schülldorf, Schülp bei Nortorf, Stafstedt, Warder, Westerrönfeld, Westensee, und der Stadt Rendsburg	10.12.2022
	Kreis Rendsburg-Eckernförde 3 km Radius um Primär-Ausbruchsbetrieb GPS Koordinaten 9,799269/54,237815 Teile der Gemeinden Emkendorf, Bokel und Groß Vollstedt	2.12.2022 -10.12.2022
DE-HPAI(P)-2022-00082	**Kreis Segeberg** Gemeinden Pronstorf und Strukdorf	4.12.2022
	Kreis Stormarn Betroffen von der Überwachungszone ist jeweils das gesamte Gemeindegebiet der Gemeinden Heilshoop, Mönkhagen, Zarpen, Badendorf, Hamberge, Wesenberg, Heidekamp sowie Teile des Gemeindegebietes der Gemeinden Rehhorst, Reinfeld und Klein Wesenberg	4.12.2022

Member State: Ireland

ADIS reference number of the outbreak	Area comprising:	Date until applicable in accordance with Article 55 of Delegated Regulation (EU) 2020/687
	Monaghan County	
IE-HPAI(P)-2022-00001 IE-HPAI(P)-2022-00003	That part of the County of Monaghan that comprises the Electoral Divisions of Killeevan and Newbliss, the Electoral Division of Clones, except for the townlands of Derryarrit and Skeatry, the Electoral Divisions of Clones Rural, Clones Urban and St. Tierney, apart from the townlands situate in the protection zone, the townlands of Aghareagh, Closdaw, Corkish, Corlougharoe, Correvan, Drumanan, Drumacreeve, Drumary, Drumcrow, Drumgramph, Drumlina, Killyeg, Lislongfield, Tullyard, all in the Electoral Division of Drum, the Electoral Division of Drumhillagh, except for the townlands of Aghaclay, Carn, Corleck, Doosky, Drumhullagh, Drumkirk, Drumleny, Liscumaskey and Latnamard, the townlands of Annaghbrack, Brookvale, Carrowbarra, Carrowbarra Island, Coolatty, Gortmore South, Liscat, Naghill, Mullabrack, Mulladuff, Mullanacross, Skeagh, Skervan, Thornhill, all in the Electoral Division of Drumsnat, the Electoral Division of Drummully except for the townlands of Annaghraw and Clontask, the townlands of Derrins and Lurganboy, all in the Electoral Division of Killynenagh, the townlands of Aghagaw, Allagesh, Annagh, Annyeeb, Aughnahunshin, Corrinshigo, Crenlough, Drumslavog, Formoyle, Gortmore North, Graffagh, Killytur, Killydonnelly and Mullatagorry, all in the Electoral Division of Scotstown, the townlands of Cornacreeve, Cornaguillagh, Derrynahesco, Kilmore West, Lennaght and Sruveel, all in the Electoral Division of Sheskin, the townlands of Carolina, Crover, Drumaghkeel, Drumskelt, Drumgristin, Feagh, and Mullymagaraghan, all in the Electoral Division of Aghabog, and the townlands Aghnahola, Annaveagh, Annies, Carnroe, Cavanreagh, Cavany, Coolnacarte, Corraskea, Drumgarran, Drumreenagh, Dunsrim, Hilton Demense, Killyfargy, Lisarearke, Skerrick East, Lisnalee, all of the Electoral Division of Currin. That part of the County of Monaghan that comprises the Electoral Divisions of Killeevan and Newbliss, the Electoral Division of Clones, except for the townlands of Derryarrit and Skeatry, the Electoral Divisions of Clones Rural, Clones Urban and St. Tierney, apart from the townlands situate in the protection zone, the townlands of Aghareagh, Closdaw, Cornawall, Corkish, Corlougharoe, Correvan, Drumanan, Drumacreeve, Drumary, Drumcrow, Drumgramph, Drumlina, Killyeg, Lislea, Lislongfield, Tullyard, all in the Electoral Division of Drum, the Electoral Division of Drumhillagh, except for the townlands of Aghaclay, Corleck, Drumhullagh, Drumkirk, Drumleny, Liscumaskey and Latnamard, the townlands of Annaghbrack, Brookvale, Carnasoo, Carrowbarra, Carrowbarra Island, Coolatty, Gortmore South, Liscat, Naghill, Mullabrack, Mulladuff, Mullanacross, Mullavannog, Skeagh, Skervan, Thornhill, all in the Electoral Division of Drumsnat, the	22.12.2022

	Electoral Division of Drummully except for the townlands of Annaghraw and Clontask, the townlands of Briscarnagh, Derrins and Lurganboy, all in the Electoral Division of Killynenagh, the townlands of Aghagaw, Allagesh, Annagh, Annyeeb, Aughnahunshin, Corrinshigo, Crenlough, Drumslavog, Formoyle, Gortmore North, Graffagh, Killytur, Killydonnelly, Tirnaskea South and Mullatagorry, all in the Electoral Division of Scotstown, the townlands of Cornacreeve, Cornaguillagh, Derrynahesco, Derryallaghan, Derrynasell West, Kilmore West, Lennaght, Milligan and Sruveel, all in the Electoral Division of Sheskin, the townlands of Carolina, Crover, Drumaghakeel, Drumskelt, Drumgristin, Feagh, and Mullymagaraghan, all in the Electoral Division of Aghabog, and the townlands Aghnahola, Annaveagh, Annies, Carnroe, Cavanreagh, Cavany, Coolnacarte, Corraskea, Drumgarran, Drumreenagh, Dunsrim, Hilton Demense, Killyfargy, Lisarearke, Lisnalee and Skerrick East, all of the Electoral Division of Currin.	
	That part of the County of Monaghan) that comprises the townlands of Largy, lying partly in the Electoral Division of Clones Rural and partly in the Electoral Division of Clones Urban, Aghafin, Atartate Glebe, Burdautien, Carney's Island, Carrivatragh, Cavan, Clonkirk, Clonkee (Cole), Corraghy, Creevaghy, Drumard, Edenaforan, Gortnawhinny, Legnakelly, Leonard's Island, Liseggerton, Lisnaroe Near, Lisoarty, Longfield, Magheramore, Mullanacloy, Shanamullen South, Tanderagee, Tirnahinch Near, Tirnahinch Far, all in the Electoral Division of Clones Rural, and Carrickmore and Drumadagory, all in the Electoral Division of St. Tierney That part of the County of Monaghan) that comprises the townlands of Largy, lying partly in the Electoral Division of Clones Rural and partly in the Electoral Division of Clones Urban, Aghafin, Altartate Glebe, Burdautien, Carney's Island, Carrivatragh, Cavan, Clonkirk, Clonkeen (Cole), Corraghy, Creevaghy, Drumard, Edenaforan, Gortnawhinny, Legnakelly, Leonard's Island, Liseggerton, Lisnaroe Near, Lisoarty, Longfield, Magheranure, Mullanacloy, Shanamullen South, Tanderagee, Tirnahinch Near, Tirnahinch Far, all in the Electoral Division of Clones Rural, and Carrickmore, Drumadagory and Drumaddarainy, all in the Electoral Division of St. Tierney	14.12.2022- 22.12.202

Member State: France

ADIS reference number of the outbreak	Area comprising:	Date until applicable in accordance with Article 55 of Delegated Regulation (EU) 2020/687
	Département: Côtes-d'Armor (22)	
FR-HPAI(P)-2022-01406	GOMENÉ LANRELAS LAURENAN MERDRIGNAC LE MENÉ PLÉNÉE-JUGON ROUILLAC SEVIGNAC TRÉMOREL	2.12.2022
	ÉRÉAC MÉRILLAC MERDRIGNAC LE MENÉ SAINT-VRAN SAINT-LAUNEUC	24.11.2022 – 2.12.2022
FR-HPAI(P)-2022-01413	PLERIN SAINT-BRIEUC PLOUFRAGAN TREGUEUX PLEDRAN YFFINIAC QUESSOY POMMERET LAMBALLE COETMIEUX ANDEL MORIEUX PLANGUENOUAL	7.12.2022
	HILLION LANGUEUX	29.11.2022 – 7.12.2022

FR-HPAI(P)-2022-01419 FR-HPAI(P)-2022-01425	BOBITAL BRUSVILY CAULNES DINAN EVRAN GUENROC GUITTE LANVALLAY LE HINGLE LES CHAMPS-GERAUX PLOUASNE PLUMAUDAN SAINT-CARNE SAINT-JUDOCE TRELIVAN YVIGNAC-LA-TOUR	17.12.2022
	CALORGUEN EVRAN LE QUIOU SAINT-ANDRE-DES-EAUX SAINT-JUVAT SAINT-MADEN TREFUMEL TREVRON	9.12.2022- 17.12.2022
Département: Eure (27)		
FR-HPAI(NON-P)-2022-00354	MESNIL-EN-OUCHE (partie ouest/D49) LES BOTTEREAUX CHAMBLAC CHAMBORD LA GOULAFRIERE JUIGNETTES MONTREUIL-L'ARGILLE SAINT-AGNAN-DE-CERNIERES SAINT-DENIS-D'AUGERONS SAINT-LAURENT-DU-TENCEMENT LA TRINITE-DE-REVILLE VERNEUSSES	16.12.2022
	LA HAYE-SAINT-SYLVESTRE MELICOURT MESNIL-ROUSSET NOTRE-DAME-DU-HAMEL SAINT-PIERRE-DE-CERNIERES	8.12.2022- 16.12.2022

Département:Finistère (29)		
FR-HPAI(P)-2022-01421 FR-HPAI(P)-2022-01429	CARANTEC GUICLAN LOCQUENOLE MESPAUL MORLAIX PLEYBER-CHRIST PLOUENAN PLOUEZOC'H PLOUGASNOU PLOUGOULM PLOUVORN SAINT MARTIN DES CHAMPS SAINT POL DE LEON SAINTE SEVE SAINT THEGONNEC TAULE	16.12.2022
	HENVIC TAULE	8.12.2022- 16.12.2022
Département: Ille-et-Vilaine (35)		
FR-HPAI(P)-2022-01419	LONGAULNAY TREVERIEN SAINT PERN PLESDER SAINT THUAL MEDREAC à l'est de la RD 20 et au nord de la RD 220	3.12.2022
FR-HPAI(P)-2022-01418	LA SELLE GUERCHAISE RANNEE DROUGES FORGES LA FORET CHELUN EANCE MARTIGNE-FERCHAUD	9.12.2022
	RANNEE à l'est de la D95 et au sud des lignes de la belle etoile	1.11.2022-9.12.2022

	Département: Indre (36)	
FR-HPAI(P)-2022-01412	AIZE: Nord de D31 BAUDRES BOUGES-LE-CHATEAU BRETAGNE BUXEUIL: Nord de D960 FONTENAY GUILLY LA CHAPELLE-SAINT- LAURIAN LANGE: Est du Nahon LEVROUX: Nord D8 LINIEZ: Ouest de A20 MOULINS-SUR-CEPHONS: Nord D8 ORVILLE: Ouest de D25 POULAINES SAINT-FLORENTIN VALENCAY: Sud-Est du Nahon VICQ-SUR-NAHON: Est du Nahon	9.12.2022
	AIZE: Sud de D31 et route entre Moulin Bailly et Aize BUXEUIL: Sud de D960 ROUVRES LES BOIS	1.12.2022- 9.12.2022
	Département: Landes (40)	
FR-HPAI(NON-P)-2022-00391	AZUR CASTETS LEON LINXE MAGESCQ MESSANGES MOLIETS-ET-MAA VIELLE-SAINT-GIRONS	25.12.2022
	LEON SAINT-MICHEL-ESCALUS	17.12.2022 - 25.12.2022
	Département: Loiret (45)	
FR-HPAI(P)-2022-01407 FR-HPAI(P)-2022-01420 FR-HPAI(P)-2022-01432	AUVILLIERS-EN-GÂTINAIS BELLEGARDE BOUZY-LA-FORÊT CHÂTENOY CHEVILLON-SUR-HUILLARD COUDROY LA COUR-MARIGNY FRÉVILLE-DU-GÂTINAIS LADON LORRIS MÉZIÈRES-EN-GÂTINAIS MONTLIARD NESPLOY	19.12.2022

	NOYERS OUZOUER-SOUS-BELLEGARDE PRESNOY QUIERS-SUR-BÉZONDE SURY-AUX-BOIS THIMORY VIEILLES-MAISONS-SUR-JOUDRY VILLEMOUTIERS AUVILLIERS-EN-GÂTINAIS BELLEGARDE BOUZY-LA-FORÊT CHÂTENOY CHEVILLON-SUR-HUILLARD COUDROY LA COUR-MARIGNY FRÉVILLE-DU-GÂTINAIS LADON LOMBREUIL LORRIS MÉZIÈRES-EN-GÂTINAIS MONTLIARD NESPLOY MONTEREAU - LE MOULINET-SUR-SOLIN OUSSOY-EN-GÂTINAIS OUZOUER-SOUS-BELLEGARDE PRESNOY QUIERS-SUR-BÉZONDE SAINT MAURICE SUR FRESSARD SURY-AUX-BOIS THIMORY VARENNES-CHANGY VIEILLES-MAISONS-SUR-JOUDRY VILLEMOUTIERS BELLEGARDE BOUZY-LA-FORÊT CHÂTENOY CHEVILLON-SUR-HUILLARD COUDROY LA COUR-MARIGNY FRÉVILLE-DU-GÂTINAIS LADON LOMBREUIL LORCY LORRIS MÉZIÈRES-EN-GÂTINAIS	

	MONTLIARD MOULON NESPLOY MONTEREAU LE MOULINET-SUR-SOLIN OUSSOY-EN-GÂTINAIS OUZOUER-SOUS-BELLEGARDE PRESNOY QUIERS-SUR-BÉZONDE SAINT MAURICE SUR FRESSARD SURY-AUX-BOIS THIMORY VARENNES-CHANGY VIEILLES-MAISONS-SUR-JOUDRY VILLEMOUTIERS	
	AUVILLIERS-EN-GÂTINAIS BEAUCHAMPS-SUR-HUILLARD CHAILLY-EN-GÂTINAIS CHÂTENOY COUDROY AUVILLIERS-EN-GÂTINAIS BEAUCHAMPS-SUR-HUILLARD CHAILLY-EN-GÂTINAIS CHÂTENOY COUDROY NOYERS AUVILLIERS-EN-GÂTINAIS BEAUCHAMPS-SUR-HUILLARD CHAILLY-EN-GÂTINAIS CHÂTENOY COUDROY NOYERS	11.12.2022- 19.12.2022
Departement: Mayenne (53)		
FR-HPAI(P)- 2022-01418	BALLOTS CONGRIER CUILLE GASTINES LA ROE LA SELLE-CRAONNAISE SAINT-ERBLON SAINT-MARTIN-DU-LIMET SAINT-SATURNIN-DU-LIMET SENONNES	9.12.2022

	BRAINS-SUR-LES-MARCHES FONTAINE-COUVERTE LA ROUAUDIERE SAINT-AIGNAN-SUR-ROE SAINT-MICHEL-DE-LA-ROE	1.12.2022 – 9.12.2022
FR-HPAI(P)-2022-01431	BAIS BREE EVRON HAMBERS IZE JUBLAINS LIVET MEZANGERS MONTSURS NEAU SAINT-LEGER SAINTE-SUZANNE-ET-CHAMMES TORCE-VIVIERS-EN-CHARNIE VIMARTIN-SUR-ORTHE VOUTRE	16.12.2022
	ASSE-LE-BERENGER EVRON SAINTE-GEMMES-LE-ROBERT SAINT-GEORGES-SUR-ERVE	08.12.2022 -16.12.2022
Departement: Morbihan (56)		
FR-HPAI(P)-2022-01422 FR-HPAI(P)-2022-01435	BIGNAN – Commune entière BULEON – Commune entière CREDIN – Partie de la commune à l'ouest de la D11 jusqu'à Bellevue puis au sud de la route allant de Bellevue à Le Pont du redressement EVELLYS – Partie de la commune à l'ouest de la D767 jusqu'à Siviac puis au nord-ouest de la route allant à Naizin puis au nord de la D203 KERFOURN – Partie de la commmune au sud de la route allant de Le Guéric à Le Lindreu LANTILLAC – Commune entière LOCMINE – Commune entière MOREAC – Partie de la commune à l'ouest de la D767 jusqu'à Porh Legal puis au sud de la D181 jusqu'à Keranna puis au sud de la route allant de Keranna à Kervalo en passant par Le Petit Kerimars, Bolcalpère et le Faouët d'En Haut MOUSTOIR-AC – Partie de la commune au nord de la route allant de Plumelin à Moustoir-Ac puis au nord de la D318 et à l'ouest de la D767 PLEUGRIFFET – Commune entière	22.12.2022

	PLUMELIAU-BIEUZY – Partie de la commune au sud de la D203 et à l'est de la route allant du bourg à Talhouet Avalec en passant par Kerjegu et Beau Soleil PLUMELIN – Partie de la commune au nord de la D117 jusqu'à Kerfourchec puis à l'est de la route allant à Moustoir-Ac RADENAC – Commune entière REGUINY – Partie de la commune au nord de la D203 jusqu'à Le Pont Saint Fiacre SAINT-ALLOUESTRE – Commune entière GUEGON – Partie de la commune au nord de la N24 entre Caradec et la Pointe puis à l'ouest de la D778 GUEHENNO – Commune entière LANOUEE – Partie de la commune à l'ouest de la D778 jusqu'à la Bourdonnais puis au sud de la D764 LES FORGES – Partie de la commune à l'ouest de la D778 RADENAC -Partie de commune à l'est de la D11	
	EVELLYS -Partie de la commune à l'est de la D767 jusqu'à Siviac puis à l'est de la route allant à Naizin puis au sud de la D203 MOREAC – Partie de la commune à l'est de la D767 jusqu'à Porh Legal puis au nord de la D181 jusqu'à Keranna puis au nord de la route allant de Keranna à Kervalo en passant par Le Petit Kerimars, Bolcalpère et le Faouët d'En Haut REGUINY – Partie de la commune au sud de la D203 jusqu'à Le Pont Saint Fiacre RADENAC -Partie de la commune à l'ouest de la D11	14.12.2022 – 22.12.2022
Département: Nord (59)		
FR-HPAI(P)-2022-01423	BAILLEUL ERQUINGHEM-LYS LA GORGUE MERRIS MERVILLE METEREN NIEPPE STRAZEELE VIEUX-BERQUIN	17.12.2022
	NEUF-BERQUIN STEENWERCK ESTAIRES LE DOULIEU	9.12.2022-17.12.2022

FR-HPAI(P)-2022-01434	ALLENES-LES-MARAIS ANNOEULLIN BAILLEUL BAUVIN BEAUCAMPS-LIGNY BOIS-GRENIER DON ERQUINGHEM-LE-SEC ERQUINGHEM-LYS ESCOBECQUES FOURNES-EN-WEPPES FROMELLES HALLENNE-LES-HAUBOURDIN HANTAY LA BASSEE LA GORGUE LE MAISNIL MARQUILLIES MERRIS MERVILLE METEREN NIEPPE PROVIN RADINGHEM-EN-WEPPES SAINGHIN-EN-WEPPES SALOME STRAZEELE VIEUX-BERQUIN WAVRIN WICRES	20.12.2022
	NEUF-BERQUIN STEENWERCK ESTAIRES LE DOULIEU AUBERS HERLIES ILLIES	12.12.2022-20.12.2022

Département: Orne (61)		
FR-HPAI(NON-P)-2022-00339 FR-HPAI(NON-P)-2022-00342	AVERNES-SAINT-GOURGON CANAPVILLE CHAUMONT COUDEHARD CROISILLES CROUTTES ECORCHES GACE LE BOSC-RENOULT LES CHAMPEAUX LE RENOUARD LA FERTE-EN-OUCHE MENIL-HUBERT-EN-OUCHE MONT-ORMEL NEAUPHE-SUR-DIVE PONTCHARDON RESENLIEU SAINT-EVROULT-DE-MONTFORT SAINT-GERMAIN-D'AUNAY SAINT-LAMBERT-SUR-DIVE VIMOUTIERS	7.12.2022
	AUBRY-LE-PANTHOU CAMEMBERT CHAMPOSOULT LA FRESNAIE-FAYEL FRESNAY-LE-SAMSON GUERQUESALLES MARDILLY NEUVILLE-SUR-TOUQUES ROIVILLE SAP-EN-AUGE GUFFERN-EN-AUGE zone nord au-dessus de la D14, puis D16 entre Le bourg Saint-Léonard et Chambois et D3 jusqu'à la limite de la commune TICHEVILLE	29.11.2022–7.12.2022
FR-HPAI(NON-P)-2022-00354	LA FERTE-EN-OUCHE LA GONFRIERE SAINT-NICOLAS-DE-SOMMAIRE	16.12.2022

	Département: Pas-de-Calais (62)	
FR-HPAI(P)-2022-01427	AMES AMETTES ANNEZIN AUCHEL AUCHY-AU-BOIS AUMERVAL BAILLEUL-LES-PERNES BARLIN BETHUNE BEUGIN BOURECQ BEUVRY BRUAY-LA-BUISSIERE BUSNES CALONNE-RICOUART CALONNE-SUR-LA-LYS CAMBLAIN-CHATELAIN CAUCHY-A-LA-TOUR DIEVAL DIVION DROUVIN-LE-MARAIS ECQUEDECQUES ESSARS FERFAY FLEURBAIX FLORINGHEM FOUQUEREUIL FOUQUIERES-LES-BETHUNES GOSNAY GUARBECQUE HAILLICOURT HAM-EN-ARTOIS HESDIGNEUL-LES-BETHUNE HINGES HOUCHIN HOUDAIN ISBERGUES LA COUTURE LAVENTIE LESPESSES	19.12.2022

	LESTREM LIERES LOCON LORGIES MAISNIL-LES-RUITZ MAREST MARLES-LES-MINES MAZINGHEM MONT-BERNANCHON NEUVE-CHAPELLE NORRENT-FONTES OBLINGHEM OURTON PERNES PRESSY REBREUVE-RANCHICOURT RICHEBOURG ROBECQ RUITZ SAILLY-SUR-LA-LYS SAINT-FLORIS SAINT-HILAIRE-COTTES SAINT -VENANT VAUDRICOURT VENDIN-LES-BETHUNE VERQUIGNEUL VERQUIN VIEILLE-CHAPELLE	
	ALLOUAGNE BURBURE CHOQUES GONNEHEM LABEUVRIERE LAPUGNOY LILLERS LOZINGHEM	11.12.2022 – 19.12.2022

Département: Seine-et-Marne (77)		
FR-HPAI(NON-P)-2022-00304	BAILLY-ROMAINVILLIERS BUSSY-SAINT-GEORGES BUSSY-SAINT-MARTIN CHALIFERT CHANTELOUP-EN-BRIE LES CHAPELLES-BOURBON CHATRES CHESSY CHEVRY-COSSIGNY COLLEGIEN CONCHEN-SUR-GONDOIRE COUPVRAY COUTEVROULT CRECY-LA-CHAPELLE CREVECOEUR-EN-BRIE CROISSY-BEAUBOURG DAMMARTIN-SUR-TIGEAUX FAVIERES FERRIERES-EN-BRIE FONTENAY-TRESIGNY GOUVERNES GRETZ-ARMAINVILLIERS GUERARD GUERMANTES LA HOUSSAYE-EN-BRIE JOSSIGNY LAGNY-SUR-MARNE LIVERDY-EN-BRIE MAGNY-LE-HONGRE MARLES-EN-BRIE MONTEVRAIN MONTRY MORTCERF NEUFMOUTIERS-EN-BRIE OZOIR-LA-FERRIERE PONTCARRE PRESLES-EN-BRIE ROISSY-EN-BRIE SAINT-GERMAIN-SUR-MORIN SERRIS TIGEAUX TOURNAN-EN-BRIE VILLENEUVE-LE-COMTE VILLENEUVE-SAINT-DENIS VILLIERS-SUR-MORIN VOULANGIS	6.12.2022

	FAVIERES JOSSIGNY NEUFMOUTIERS EN BRIE VILLENEUVE LE COMTE VUILLENEUVE EN BRIE	28.11.2022 – 6.12.2022
FR-HPAI(P)-2022-01403	ANDREZEL AUBEPIERRE-OZOUER-LE-REPOS BLANDY BOMBON BREAU CHAMPEAUX LA CHAPELLE-GAUTHIER LA CHAPELLE-RABLAIS LE CHATELET-EN-BRIE CHATILLON-LA-BORDE CLOS-FONTAINE COURPALAY COUTENCON LA CROIX-EN-BRIE ECHOUBOULAINS LES ECRENNES FONTAINS FONTENAILLES GASTINS GRANDPUITS-BAILLY-CARROIS LAVAL-EN-BRIE MACHAULT MORMANT NANGIS PAMFOU QUIERS RAMPILLON SAINT-MERY SAINT-OUEN-EN-BRIE SIVRY-COURTRY VALENCE-EN-BRIE VILLENEUVE-LES-BORDES	1.12.2022
	BOMBON LA CHAPELLE-GAUTHIER LA CHAPELLE-RABLAIS FONTENAILLES GRANDPUITS-BAILLY-CARROIS NANGIS SAINT-OUEN-EN-BRIE	23.11.2022 -1.12.2022

Département: Deux-Sèvres (79)		
FR-HPAI(P)-2022-01397 FR-HPAI(P)-2022-01408 FR-HPAI(P)-2022-01410 FR-HPAI(P)-2022-01411 FR-HPAI(P)-2022-01415 FR-HPAI(P)-2022-01414 FR-HPAI(P)-2022-01417 FR-HPAI(P)-2022-01430 FR-HPAI(P)-2022-01436	ADILLY AMAILLOUX ARDIN BECELEUF LE BEUGNON LE BREUIL-BERNARD CHANTELOUP LA CHAPELLE-SAINT-LAURENT LA CHAPELLE-THIREUIL CHICHE CLESSÉ FÉNERY FENIOUX LA FORÊT-SUR-SÈVRE MONCOUTANT MOUTIERS-SOUS-CHANTEMERLE NEUVY-BOUIN POUGNE-HÉRISSON PUGNY PUIHARDY SAINT-AUBIN-LE-CLOUD SAINT-GERMAIN-DE-LONGUE-CHAUME SAINT-LAURS SAINT-POMPAIN SCILLÉ SECONDIGNY VILLIERS-EN-PLAINE	7.12.2022
FR-HPAI(P)-2022-01428	L'ABSIE LE BUSSEAU LA CHAPELLE-SAINT-ETIENNE COULONGES-SUR-L'AUTIZE LARGEASSE SAINT-MAIXENT-DE-BEUGNE SAINT-PAUL-EN-GATINE TRAYES VERNOUX-EN-GATINE	29.11.2022 – 7.12.2022
FR-HPAI(P)-2022-01397 FR-HPAI(P)-2022-01408	COULONGES-SUR-L'AUTIZE SAINT-MAIXENT-DE-BEUGNE	30.11.2022 – 7.12.2022

Département: Somme (80)		
	BACOUEL-SUR-SELLE BLANGY-TRONVILLE CAMON COTTENCHY DOMMARTIN ESTREES-SUR-NOYE FOSSEMANANT FOUENCAMPS GENTELLES (à l'ouest des rues Faidherbe, Leopold Jouancoux et de la voie communale n°204 de Gentelles à Daours) GLISY GRATTEPANCHE GUYENCOURT-SUR-NOYE HEBECOURT JUMEL LAMOTTE-BREBIERE LONGUEAU NAMPTY ORESMAUX PLACHY-BUYON PONT-DE-METZ PROUZEL REMIENCOURT RIVERY RUMIGNY SAINT-SAUFLIEU SALEUX SALOUEL SAVEUSE THEZY-GLIMONT VERS-SUR-SELLE	21.12.2022
	AMIENS BOVES CAGNY DURY SAINS-EN-AMIENOIS SAINT-FUSCIEN	13.12.2022- 21.12.2022

	Département: Tarn (81)	
FR-HPAI(P)-2022-01433	ARTHES AUSSAC BERNAC BRENS CADALEN CAGNAC-LES-MINES CAMBON CASTANET CESTAYROLS CUNAC DENAT FAYSSAC FENOLS FLORENTIN FREJAIROLLES LE GARRIC LABASTIDE-DE-LEVIS LAGRAVE LAMILLARIE LASGRAISSES LESCURE-D'ALBIGEOIS LOMBERS MAILHOC ORBAN POULAN-POUZOLS PUYGOUZON RIVIERES SAINT-JUERY SALIES SENOUILLAC SIEURAC TAIX VILLENEUVE-SUR-VERE SAINTE-CROIX	20.12.2022
	ALBI CARLUS CASTELNAU-DE-LEVIS MARSSAC-SUR-TARN ROUFFIAC LE SEQUESTRE TERSSAC	12.12.2022-20.12.2022

Département: Vendée (85)		
FR-HPAI(P)-2022-01397	SAINT HILAIRE DES LOGES au sud de la D745 FOUSSAIS PAYRE a l'ouest de la D49 FAYMOREAU MARILLET ANTIGNY BOURNEAU CEZAIS FONTENAY-LE-COMTE L'ORBRIE LA CHATAIGNERAIE LA TARDIERE LOGE-FOUGEREUSE MARSAIS-SAINTE-RADEGONDE SAINT-MARTIN-DE-FRAIGNEAU SAINT-MAURICE-DES-NOUES SAINT-PIERRE-DU-CHEMIN SERIGNE PISSOTTE MARVENT NIEUL-SUR-L'AUTISTE PUY-DE-SERRE SAINT-HILAIRE-DE-VOUST VOUVANT SAINT-MICHEL-LE-CLOUCQ XANTON-CHASSENON	1.12.2022
	SAINT HILAIRE DES LOGES au nord de la D745 FOUSSAIS PAYRE à l'est de la D49	23.11.2022 – 1.12.2022
FR-HPAI(P)-2022-01410	BREUIL-BARRET LA CHAPELLE-AUX-LYS LOGE-FOUGEREUSE SAINT-HILAIRE-DE-VOUST	23.11.2022 – 1.12.2022
FR-HPAI(P)-2022-01409	CHAMPAGNE-LES-MARAIS LUCON MOREILLES PUYRAVAULT SAINTE-DEMME-LA-PLAINE SAINTE-RADEGONDE-DES-NOYERS	19.11.2022 – 9.12.2022

FR-HPAI(P)-2022-01416	BREM-SUR-MER BRETIGNOLLES-SUR-MER COEX GIVRAND LA CHAIZE-GIRAUD LA CHAPELLE-HERMIER L'AIUGUILLON-SUR-VIE LES ACHARDS L'ILE-D'OLONNE MARTINET OLONNE-SUR-MER SAINTE-FOY SAINT-GEORGES-DES-POINTINDOUX SAINT-JULIEN-DES-LANDES SAINT-MATHURIN SAINT-REVEREND	6.12.2022
	BREM-SUR-MER LANDEVIEILLE SAINT-JULIEN-DES-LANDES VAIRE	28.11.2022 – 6.12.2022

Member State: Croatia

ADIS reference number of the outbreak	Area comprising:	Date until applicable in accordance with Article 55 of Delegated Regulation (EU) 2020/687
	Grad Zagreb	
HR-HPAI(P)-2022-00007	— gradske četvrti Podsused-Vrapče i Stenjevec	15.12.2022
	— gradske četvrti Brezovica i Novi Zagreb- zapad	7.12.2022-15.12.2022
	Zagrebačka županija	
HR-HPAI(P)-2022-00007	— općina Jastrebarsko, naselje Stankovo; — općina Klinča Sela, naselja Beter, Donja Purgarija, Donja Zdenčina, Goli Vrh, Gonjeva, Gornja Purgarija, Gornja Zdenčina, Klinča Sela, Kozlikovo, Kupinec, Novo Selo Okičko, Poljanica Okićka, Repišće i Tržić; — općina Pisarovina, naselje Bratina; — općina Samobor, naselja Celine Samoborske, Cerje Samoborsko, Dolec Podokićki, Domaslovec, Drežnik Podokićki, Falašćak, Farkaševec Samoborski, Galgovo, Gradna, Hrastina Samoborska, Kladje, Klake, Konšćica, Mala Rakovica, Medsave, Molvice, Pavučnjak, Petkov Breg, Podgađe Podokićko, Samobor, Savršćak, Slavagora, Sveti Martin pod Okićem, Velika Rakovica i Vrbovec Samoborski;	15.12.2022

	— općina Sveta Nedjelja, naselja Bestovje, Brezje, Jagnjić Dol, Novaki, Orešje, Rakitje, Srebrnjak, Strmec, Sveta Nedjelja i Svetonedeljski Breg; — općina Zaprešić, naselja Šibice, Ivanec Bistranski i Zaprešić.	
	— općina Samobor, naselje Rakov potok; — općina Stupnik, naselja Donji Stupnik, Gornji Stupnik i Stupnički Obrež; — općina Sveta Nedjelja, naselja Kalinovica, Kerestinec, Mala Gorica i Žitarka.	7.12.2022-15.12.2022

Member State: Italy

ADIS reference number of the outbreak	Area comprising:	Date until applicable in accordance with Article 55 of Delegated Regulation (EU) 2020/687
	Region: Veneto	
IT-HPAI(P)-2022-00029	The area of the parts of Veneto Region extending beyond the area described in the protection zone and within the circle of a radius of ten kilometres, centred on WGS84 dec. coordinates N45.753972, E12.149041	4.12.2022
	The area of the parts of Veneto Region contained within a circle of radius of three kilometres, centred on WGS84 dec. coordinates N45.753972, E12.149041	26.11.2022 – 4.12.2022
IT-HPAI(P)-2022-00031	The area of the parts of Veneto Region extending beyond the area described in the protection zone and within the circle of a radius of ten kilometres, centred on WGS84 dec. coordinates N45.9193668, E12.4351595	3.12.2022
	The area of the parts of Veneto Region contained within a circle of radius of three kilometres, centred on WGS84 dec. coordinates N45.9193668, E12.4351595	25.11.2022 – 3.12.2022
IT-HPAI(P)-2022-00033	The area of the parts of Veneto Region extending beyond the area described in the protection zone and within the circle of a radius of ten kilometres, centred on WGS84 dec. coordinates N45.211179, E11.272346	8.12.2022
	The area of the parts of Veneto Region contained within a circle of radius of three kilometres, centred on WGS84 dec. coordinates N45.211179, E11.272346	30.11.2022 – 8.12.2022
IT-HPAI(P)-2022-00034	The area of the parts of Veneto Region extending beyond the area described in the protection zone and within the circle of a radius of ten kilometres, centred on WGS84 dec. coordinates N45.221390806, E11.04331334	11.12.2022
	The area of the parts of Veneto Region contained within a circle of radius of three kilometres, centred on WGS84 dec. coordinates N45.221390806, E11.04331334	3.12.2022 – 11.12.2022

IT-HPAI(P)-2022-00036	The area of the parts of Veneto Region extending beyond the area described in the protection zone and within the circle of a radius of ten kilometres, centred on WGS84 dec. coordinates N45.771464, E12.147417	8.12.2022
	The area of the parts of Veneto Region contained within a circle of radius of three kilometres, centred on WGS84 dec. coordinates N45.771464, E12.147417	30.11.2022-8.12.2022
IT-HPAI(P)-2022-00037	The area of the parts of Veneto Region extending beyond the area described in the protection zone and within the circle of a radius of ten kilometres, centred on WGS84 dec. coordinates N45.741660, E12.452298	7.12.2022
	The area of the parts of Veneto Region contained within a circle of radius of three kilometres, centred on WGS84 dec. coordinates N45.741660, E12.452298	29.11.2022-7.12.2022
IT-HPAI(P)-2022-00039	The area of the parts of Veneto Region extending beyond the area described in the protection zone and within the circle of a radius of ten kilometres, centred on WGS84 dec. coordinates N44.964074644, E12.282057809	15.12.2022
	The area of the parts of Veneto Region contained within a circle of radius of three kilometres, centred on WGS84 dec. coordinates N44.964074644, E12.282057809	7.12.2022-15.12.2022
IT-HPAI(P)-2022-00040	The area of the parts of Veneto Region extending beyond the area described in the protection zone and within the circle of a radius of ten kilometres, centred on WGS84 dec. coordinates N45.233473, E11.657231	10.12.2022
	The area of the parts of Veneto Region contained within a circle of radius of three kilometres, centred on WGS84 dec. coordinates N45.233473, E11.657231	2.12.2022-10.12.2022
IT-HPAI(P)-2022-00042	The area of the parts of Veneto Region extending beyond the area described in the protection zone and within the circle of a radius of ten kilometres, centred on WGS84 dec. coordinates N45.296865835, E10.878880005	13.12.2022
	The area of the parts of Veneto Region contained within a circle of radius of three kilometres, centred on WGS84 dec. coordinates N45.296865835, E10.878880005	5.12.2022 – 13.12.2022
IT-HPAI(P)-2022-00043	The area of the parts of Veneto Region extending beyond the area described in the protection zone and within the circle of a radius of ten kilometres, centred on WGS84 dec. coordinates	12.12.2022
	The area of the parts of Veneto Region contained within a circle of radius of three kilometres, centred on WGS84 dec. coordinates N45.504494974, E12.616275373	4.12.2022 – 12.12.2022

IT-HPAI(P)-2022-00045	The area of the parts of Veneto Region extending beyond the area described in the protection zone and within the circle of a radius of ten kilometres, centred on WGS84 dec. coordinates N45.380764707, E11.07799142	19.12.2022
	The area of the parts of Veneto Region contained within a circle of radius of three kilometres, centred on WGS84 dec. coordinates N45.380764707, E11.07799142	11.12.2022 – 19.12.2022
IT-HPAI(P)-2022-00047	The area of the parts of Veneto Region extending beyond the area described in the protection zone and within the circle of a radius of ten kilometres, centred on WGS84 dec. coordinates N44.966036, E12.305402	22.12.2022
	The area of the parts of Veneto Region contained within a circle of radius of three kilometres, centred on WGS84 dec. coordinates N44.966036, E12.305402	14.12.2022 – 22.12.2022
IT-HPAI(P)-2022-00048	The area of the parts of Veneto Region extending beyond the area described in the protection zone and within the circle of a radius of ten kilometres, centred on WGS84 dec. coordinates N45.393604155, E11.098068838	19.12.2022
	The area of the parts of Veneto Region contained within a circle of radius of three kilometres, centred on WGS84 dec. coordinates N45.393604155, E11.098068838	11.12.2022 – 19.12.2022
IT-HPAI(P)-2022-00050	The area of the parts of Veneto Region extending beyond the area described in the protection zone and within the circle of a radius of ten kilometres, centred on WGS84 dec. coordinates N45.074265, E11.604144	27.12.2022
	The area of the parts of Veneto Region contained within a circle of radius of three kilometres, centred on WGS84 dec. coordinates N45.074265, E11.604144	19.12.2022 – 27.12.2022
	Region: Lombardia	
IT-HPAI(P)-2022-00030	The area of the parts of Lombardia Region extending beyond the area described in the protection zone and within the circle of a radius of ten kilometres, centred on WGS84 dec. coordinates N45.098875, E8.81998199999998	30.11.2022
	The area of the parts of Lombardia Region contained within a circle of radius of three kilometres, centred on WGS84 dec. coordinates N45.098875, E8.81998199999998	22.11.2022 – 30.11.2022

IT-HPAI(P)-2022-00032	The area of the parts of Lombardia Region extending beyond the area described in the protection zone and within the circle of a radius of ten kilometres, centred on WGS84 dec. coordinates N45.049383, E10.35708	8.12.2022
	The area of the parts of Lombardia Region contained within a circle of radius of three kilometres, centred on WGS84 dec. coordinates N45.049383, E10.35708	30.11.2022 – 8.12.2022
IT-HPAI(P)-2022-00041	The area of the parts of Lombardia Region extending beyond the area described in the protection zone and within the circle of a radius of ten kilometres, centred on WGS84 dec. coordinates N45.040236, E10.36325	12.12.2022
	The area of the parts of Lombardia Region contained within a circle of radius of three kilometres, centred on WGS84 dec. coordinates N45.040236, E10.36325	4.12.2022 – 12.12.2022
IT-HPAI(P)-2022-00046	The area of the parts of Lombardia Region extending beyond the area described in the protection zone and within the circle of a radius of ten kilometres, centred on WGS84 dec. coordinates N45.033964, E10.302944	25.12.2022
	The area of the parts of Lombardia Region contained within a circle of radius of three kilometres, centred on WGS84 dec. coordinates N45.033964, E10.302944	17.12.2022 – 25.12.2022
IT-HPAI(P)-2022-00051	The area of the parts of Lombardia Region extending beyond the area described in the protection zone and within the circle of a radius of ten kilometres, centred on WGS84 dec. coordinates N45.073379, E10.367887	8.01.2023
	The area of the parts of Lombardia Region contained within a circle of radius of three kilometres, centred on WGS84 dec. coordinates N45.073379, E10.367887	31.12. 2022 – 8.01.2023
	Region: Emilia Romagna	
IT-HPAI(P)-2022-00028	The area of the parts of Emilia Romagna Region extending beyond the area described in the protection zone and within the circle of a radius of ten kilometres, centred on WGS84 dec. coordinates N44.714462, E11.926653	29.11.2022
	The area of the parts of Emilia Romagna Region contained within a circle of radius of three kilometres, centred on WGS84 dec. coordinates N44.714462, E11.926653	21.11.2022 – 29.11.2022

IT-HPAI(P)-2022-00044	The area of the parts of Emilia Romagna Region extending beyond the area described in the protection zone and within the circle of a radius of ten kilometres, centred on WGS84 dec. coordinates N44.79259, E10. 930896	14.12.2022
	The area of the parts of Emilia Romagna Region contained within a circle of radius of three kilometres, centred on WGS84 dec. coordinates N44.79259, E10. 930896	6.12.2022 – 14.12.2022
IT-HPAI(P)-2022-00049	The area of the parts of Emilia Romagna Region extending beyond the area described in the protection zone and within the circle of a radius of ten kilometres, centred on WGS84 dec. coordinates N44.873686, E11.336651	20.12.2022
	The area of the parts of Emilia Romagna Region contained within a circle of radius of three kilometres, centred on WGS84 dec. coordinates N44.873686, E11.336651	12.12.2022-20.12.2022
	Region: Friuli Venezia Giulia	
IT-HPAI(P)-2022-00035	The area of the parts of Friuli Venezia Giulia Region extending beyond the area described in the protection zone and within the circle of a radius of ten kilometres, centred on WGS84 dec. coordinates N45.962481, E12.606420	5.12.2022
	The area of the parts of Friuli Venezia Giulia Region contained within a circle of radius of three kilometres, centred on WGS84 dec. coordinates N45.962481, E12.606420	27.11.2022-5.12.2022

Member State: Hungary

ADIS reference number of the outbreak	Area comprising:	Date until applicable in accordance with Article 55 of Delegated Regulation (EU) 2020/687
	Bács-Kiskun, Békés és Csongrád-Csanád megye	
HU-HPAI(P)-2022-00211 – 00269	Ágasegyháza, Balotaszállás, Bócsa, Borota, Bugac, Bugacpusztaháza, Csengőd, Csólyospálos, Felsőszentiván, Fülöpjakab, Gátér, Harkakötöny, Helvécia, Imrehegy, Izsák, Jakabszállás, Jánoshalma, Jászszentlászló, Kaskantyú, Kéleshalom, Kiskunfélegyháza, Kiskunhalas, Kiskunmajsa, Kisszállás, Kömpöc, Kunfehértó, Kunszállás, Mélykút, Móricgát, Orgovány, Páhi, Pálmonostora, Petőfiszállás, Pirtó, Soltvadkert, Szank, Tabdi, Tataháza, Tázlár, Tiszaalpár, Városföld, Zsana, Békéssámson, Csanádapáca, Kardoskút, Kaszaper, Mezőhegyes, Mezőkovácsháza, Nagybánhegyes, Orosháza, Pusztaföldvár, Tótkomlós, Végegyháza, Algyő, Ambrózfalva, Árpádhalom, Baks, Balástya, Bordány, Csanytelek, Csengele, Csongrád, Derekegyház, Dóc, Domaszék, Fábiánsebestyén, Felgyő, Forráskút, Hódmezővásárhely, Kistelek, Mártély, Mindszent, Nagyér, Nagymágocs, Nagytőke, Ópusztaszer, Pusztamérges, Pusztaszer, Ruzsa, Sándorfalva, Szatymaz, Szeged, Szegvár, Székkutas, Szentes, Tömörkény, Üllés, Zákányszék és Zsombó települések védőkörzeten kívül eső teljes közigazgatási területe.	3.1.2023

	Kecskemét település közigazgatási területének a 46.686318 és a 19.661755, valamint a 46.695600 és a 19.681280 GPS-koordináták által meghatározott pont körüli 10 km sugarú körön belül eső területe. Kiskőrös település közigazgatási területének 46.56342697 és a 19.47272301 GPS-koordináták által meghatározott pont körüli 10 km sugarú körön belül eső területe.	
HU-HPAI(P)-2022-00211 HU-HPAI(P)-2022-00216 HU-HPAI(P)-2022-00219 HU-HPAI(P)-2022-00225	Bugac, Bugacpusztaháza, Fülöpjakab, Jakabszállás és Móricgát települések települések közigazgatási területeinek a 46.67844 és 19.65301 és a 46.679183 és a 19.663134, 46.686318 és a 19.661755, valamint a 46.695600 és a 19.681280 GPS-koordináták által meghatározott pont körüli 3 km sugarú körön belül eső területe.	8.12.2022 – 3.1.2023
HU-HPAI(P)-2022-00212 HU-HPAI(P)-2022-00217 HU-HPAI(P)-2022-00226 HU-HPAI(P)-2022-00229-00230 HU-HPAI(P)-2022-00233-00235 HU-HPAI(P)-2022-00237-00242 HU-HPAI(P)-2022-00244 HU-HPAI(P)-2022-00247-00251 HU-HPAI(P)-2022-00256-00259 HU-HPAI(P)-2022-00262 HU-HPAI(P)-2022-00265	Csólyospálos, Harkakötöny, Jászszentlászló, Kiskunhalas, Kiskunmajsa, Kömpöc, Móricgát Szank és Zsana települések közigazgatási területeinek a 46.489980 és a 19.772640, a 46.544237 és a 19.741665, a 46.569793 és a 19.692088, a 46.494360 és a 19.781250, a 46.517887 és a 19.678431, a 46.465166 és a 19.753716, a 46.540082 és a 19.646619, a 46.491690 és a 19.689880, a 46.559267 és a 19.683815, a 46.457070 és a 19.620880, 46.511456 és a 19.726186, a 46.493138 és a 19.690420, a 46.485781 és a 19.676447, a 46.499678 és a 19.687294, a 46.484707 és a 19.693469, a 46.537062 és a 19.727489, a 46.520024 és a 19.725265, a 46.532441 és a 19.644402, a 46.545107 és a 19.702540, a 46.543879 és a 19.700779, a 46.556750 és a 19.783380, a 46.460140 és a 19.480575, a 46.469155 és a 19.769960, a 46.525178 és a 19.618940, a 46.566283 és a 19.627354, valamint a 46.497336 és a 19.775280 GPS-koordináták által meghatározott pont körüli 3 km sugarú körön belül eső területe.	22.12.2022 – 3.1.2023

HU-HPAI(P)-2022-00215 HU-HPAI(P)-2022-00218 HU-HPAI(P)-2022-00220-00221 HU-HPAI(P)-2022-00223-00224 HU-HPAI(P)-2022-00227-00228 HU-HPAI(P)-2022-00231-00232 HU-HPAI(P)-2022-00252	Bócsa és Bugac, Bugacpusztaháza, Kakantyú, Orgovány és Szank települések közigazgatási területeinek a 46.627319 és a 19.536083, 46.626416 és a 19.545777, a 46.630891 és a 19.536630, a 46.619573 és a 19.537445, a 46.622916 és a 19.537992, a 46.645837 és a 19.513270, a 46.640484 és a 19.524528, a 46.641252 és a 19.532421, a 46.616930 és a 19.545510, a 46.673759 és a 19.497050, valamint a 46.618622 és a 19.536336 GPS-koordináták által meghatározott pont körüli 3 km sugarú körön belül eső területe.	16.12.2022 – 3.1.2023
HU-HPAI(P)-2022-00236 HU-HPAI(P)-2022-00243 HU-HPAI(P)-2022-00245 HU-HPAI(P)-2022-00253 HU-HPAI(P)-2022-00255 HU-HPAI(P)-2022-00260-00261 HU-HPAI(P)-2022-00263-00264	Csólyospálos és Kömpöc települések közigazgatási területeinek a 46.387300 és a 19.862000, a 46.449825 és a 19.874751, a 46.442671 és a 19.844208, a 46.442530 és a 19.847300, a 46.457047 és a 19.878295, a 46.457105 és a 19.878381, a 46.446674 és a 19.842729, a 46.432070 és a 19.844230, a 46.417660 és a 19.855820, valamint a 46.279380 és a 19.344527 GPS-koordináták által meghatározott pont körüli 3 km sugarú körön belül eső területe.	22.12.2022 – 3.1.2023
HU-HPAI(P)-2022-00238	Harkakötöny, Kiskunhalas és Kiksunmajsa települések közigazgatási területeinek a 46.457070 és a 19.620880 GPS-koordináták által meghatározott pont körüli 3 km sugarú körön belül eső területe.	14.12.2022 – 3.1.2023
HU-HPAI(P)-2022-00246	Kispáhi és Orgovány települések közigazgatási területeinek a 46.735284 és a 19.458263 GPS-koordináták által meghatározott pont körüli 3 km sugarú körön belül eső területe.	16.12.2022 – 3.1.2023
HU-HPAI(P)-2022-00254	Bócsa, Soltvadkert és Tázlár települések közigazgatási területeinek a 46.563426 és a 19.472723 GPS-koordináták által meghatározott pont körüli 3 km sugarú körön belül eső területe.	26.12.2022 – 3.1.2023
HU-HPAI(P)-2022-00257	Kiskunhalas település közigazgatási területének a 46.460140 és a 19.480575 GPS-koordináták által meghatározott pont körüli 3 km sugarú körön belül eső területe.	19.12.2022 – 3.1.2023

HU-HPAI(P)-2022-00267	Kiskunfélegyháza, Pálmonostora és Petőfiszállás települések közigazgatási területeinek a 46.633607 és a 19.891596 GPS-koordináták által meghatározott pont körüli 3 km sugarú körön belül eső területe.	24.12.2022 – 3.1.2023
HU-HPAI(P)-2022-00268	Jánoshalma és Mélykút települések közigazgatási területeinek a 46.279380 és a 19.344527 GPS-koordináták által meghatározott pont körüli 3 km sugarú körön belül eső területe.	24.12.2022 – 3.1.2023
HU-HPAI(P)-2022-00213	Algyő, Sándorfalva és Szeged települések közigazgatási területeinek a 46.353600 és a 20.173300 GPS-koordináták által meghatározott pont körüli 3 km sugarú körön belül eső területe.	4.12.2022 – 3.1.2023
HU-HPAI(P)-2022-00214 HU-HPAI(P)-2022-00222	Szentes település közigazgatási területének 46.647079 és a 20.325001, valamint a 46.664455 és a 20.294252 GPS-koordináták által meghatározott pont körüli 3 km sugarú körön belül eső területe.	4.12.2022 – 3.1.2023
HU-HPAI(P)-2022-00229 HU-HPAI(P)-2022-00256 HU-HPAI(P)-2022-00265	Csengele település közigazgatási területének a 46.494360 és a 19.781250, a 46.556750 és a 19.783380, valamint a 46.497336 és a 19.775280 GPS-koordináták által meghatározott pont körüli 3 km sugarú körön belül eső területe.	22.12.2022 – 3.1.2023
HU-HPAI(P)-2022-00266	Bordány, Forráskút és Üllés Szeged települések közigazgatási területeinek a 46.359048 és a 19.888786 GPS-koordináták által meghatározott pont körüli 3 km sugarú körön belül eső területe.	22.12.2022 – 3.1.2023
HU-HPAI(P)-2022-00269	Kaszaper és Tótkomlós települések közigazgatási területeinek a 46.437833 és a 20.778503 GPS-koordináták által meghatározott pont körüli 3 km sugarú körön belül eső területe.	23.12.2022 – 3.1.2023

Member State: The Netherlands

ADIS reference number of the outbreak	Area comprising:	Date until applicable in accordance with Article 55 of Delegated Regulation (EU) 2020/687
	Municipality Noardeast-Fryslân, province Friesland	
NL-HPAI(P)-2022-00083	1. Via Koaiwei naar Koaisreed 2. Via Koaisreed naar Uterwei 3. Via Uterwei naar C.Schuurmanwei 4. Via C.Schuurmanwei naar It Noard 5. Via It Noard naar Pypkewei 6. Via Pypkewei naar Efterwei 7. Via Efterwei naar Legeloane 8. Via Legeloane naar It West 9. Via It West naar Hamsterpein 10. Via Hamsterpein naar De Kromelle 11. Via De Kromelle naar De Sânnen	30.11.2022

	12. Via De Sânnen naar De Buorren 13. Via De Buorren naar Tillewei 14. Via Tillewei naar Noarderein 15. Via Noarderein naar Lândyk 16. Via Lândyk naar Hege Dyk 17. Via Hege Dyk naar Jisteboerewei 18. Via Jisteboerewei naar Miedwei 19. Via Miedwei naar Tillewei 20. Via Tillewei naar De Meren 21. Via De Meren naar Schoolstraat 22. Via Schoolstraat naar Ieswei 23. Via Ieswei naar Rijksstraatweg 24. Via Rijksstraatweg naar Westersingel 25. Via Westersingel naar Zevenhuisterweg 26. Via Zevenhuisterweg naar De Swette 27. Via De Swette naar Feintensloane 28. Via Feintensloane naar Mûnestrjitte 29. Via Mûnestrjitte naar Ljiploane 30. Via Ljiploane naar Lysterstrjitte 31. Via Lysterstrjitte naar Haadstrjitte 32. Via Haadstrjitte naar Muontsewei 33. Via Muontsewei naar Achterwei 34. Via Achterwei naar Claercamp 35. Via Claercamp naar Johanneswâld 36. Via Johanneswâld naar Eslawâld 37. Via Eslawâld naar Bûtefjild 38. Via Bûtefjild naar Boargemaster Nautawei 39. Via Boargemaster Nautawei naar Schwartzenbergloane 40. Via Schwartzenbergloane naar Singel 41. Via Singel naar Hearewei 42. Via Hearewei naar De Kapelle 43. Via De Kapelle naar Melkemawei 44. Via Melkemawei naar Trekwei 45. Via Trekwei naar Burdaarderstrjitwei 46. Via Burdaarderstrjitwei naar Birdaarderstraatweg 47. Via Birdaarderstraatweg naar Rondweg-West 48. Via Rondweg-West naar Rondweg-Noord 49. Via Rondweg-Noord naar Hantumerweg 50. Via Hantumerweg naar Hantumerwei 51. Via Hantumerwei naar Dokkumerwei 52. Via Dokkumerwei naar Fennewei 53. Via Fennewei naar Bangawei 54. Via Bangawei naar Loubuorren 55. Via Loubuorren naar Wierumerwei 56. Via Wierumerwei naar Dongerawei 57. Via Dongerawei naar Bollingwier 58. Via Bollingwier naar Dongerawei 59. Via Dongerawei naar De Lyts Ein 60. Via De Lyts Ein naar De Buorren 61. Via De Buorren naar Langgrousterwei 62. Via Langgrousterwei naar Grytsjewei 63. Via Grytsjewei naar Doarpsstrjitte 64. Via Doarpsstrjitte naar Siniastrjitte 65. Via Siniastrjitte naar Dyksterwei 66. Via Dyksterwei naar Boltawei 67. Via Boltawei naar Skânserwei 68. Via Skânserwei naar Oostmahorn	

	69. Via Oostmahorn naar Landgrens 70. Via Landgrens naar Steek Door 71. Via Steek Door naar Oude Robbengat 72. Via Oude Robbengat naar Steek Door 73. Via Steek Door naar Landgrens 74. Via Landgrens naar Steek Door 75. Via Steek Door naar Hooge Zuidwal 76. Via Hooge Zuidwal naar Willem Van Der Ploegweg 77. Via Willem Van Der Ploegweg naar Kwelderweg 78. Via Kwelderweg naar Nittersweg 79. Via Nittersweg naar Olde Borchweg 80. Via Olde Borchweg naar Methardusstraat 81. Via Methardusstraat naar Zijlstraat 82. Via Zijlstraat naar Stroomkanaal naar De Friese Sluis Te Zoutkamp 83. Via Stroomkanaal naar De Friese Sluis Te Zoutkamp naar Brugstraat 84. Via Brugstraat naar Pieterzijlsterweg 85. Via Pieterzijlsterweg naar Friesestraatweg 86. Via Friesestraatweg naar Heirweg 87. Via Heirweg naar Stationsweg 88. Via Stationsweg naar Dorpsterweg 89. Via Dorpsterweg naar Miedweg 90. Via Miedweg naar Miedwei 91. Via Miedwei naar Koaiwei	
	Those parts of the municipality Noardeast-Fryslân contained within a circle of a radius of 3 kilometres, centered on WGS84 dec. coordinates long 6.12 lat 53.3	22.11.2022 - 30.11.2022
	Municipality Nederweert province Limburg	
NL-HPAI(P)-2022-00084	1. via Heldensedijk naar Ophoven 2. via Ophoven naar Op de bos 3. via Op de bos naar Roggelseweg 4. via Roggelseweg naar Speckerweg 5. via Speckerweg naar Piet Vossenweg 6. via Piet Vossenweg naar Professor Duboisweg 7. via Professor Duboisweg naar Heythuyserweg 8. via Heythuyserweg naar Beekkant 9. via Beekkant naar Salmenhofweg 10. via Salmenhofweg naar Lozerweg 11. via Lozerweg naar Dorpstraat 12. via Dorpstraat naar Rijksweg 13. via Rijksweg naar Kasteelweg 14. via Kasteelweg naar Abenhofweg 15. via Abenhofweg naar Heiakker 16. via Heiakker naar Hunselerdijk 17. via Hunselerdijk naar Grathemerweg 18. via Grathemerweg naar Velterweg 19. via Velterweg naar Scheidingsweg 20. via Scheidingsweg naar Hoogstraat 21. via Hoogstraat naar Engerstraat 22. via Engerstraat naar Boggelerstraat 23. via Boggelerstraat naar Moosterstraat	1.12.2022

	24. via Moosterstraat naar Roodvenweg 25. via Roodvenweg naar Baldersstraat 26. via Baldersstraat naar Castertstraat 27. via Castertstraat naar Pelmersheideweg 28. via Pelmersheideweg naar Tungeler Dorpsstraat 29. via Tungeler Dorpsstraat naar Castertweg 30. via Castertweg naar Grotehegsteeg 31. via Grotehegsteeg naar Dijkerstraat 32. via Dijkerstraat naar Bocholterweg 33. via Bocholterweg naar Mastenbroekweg 34. via Mastenbroekweg naar Altweerterkapelstraat 35. via Altweerterkapelstraat naar Nelissenhofweg 36. via Nelissenhofweg naar Uilenweg 37. via Uilenweg naar Industriekade 38. via Industriekade naar Beelenhofweg 39. via Beelenhofweg naar Oudesteeg 40. via Oudesteeg naar Beelenhofweg 41. via Beelenhofweg naar Koelebeemdweg 42. via Koelebeemdweg naar Hulsterdijk 43. via Hulsterdijk naar Groothulsterweg 44. via Groothulsterweg naar Eindhovenseweg 45. via Eindhovenseweg naar Philipsweg 46. via Philipsweg naar Fazantlaan 47. via Fazantlaan naar De Hommelberg 48. via De Hommelberg naar Koenraadtweg 49. via Koenraadtweg naar Hugten 50. via Hugten naar fietspad 51. via Fietspad naar Hugterweg 52. via Hugterweg naar Biezervenweg 53. via Biezervenweg naar Panweg 54. via Panweg naar Bosweg 55. via Bosweg naar Bergdijk 56. via Bergdijk naar Reigerstraat 57. via Reigerstraat naar Brandvenstraat 58. via Brandvenstraat naar Kraaiendijk 59. via Kraaiendijk naar Brabantlaan 60. via Brabantlaan naar Smulderslaan 61. via Smulderslaan naar Ploegstraat 62. via Ploegstraat naar Hoeksestraat 63. via Hoeksestraat naar Heikomstraat 64. via Heikomstraat naar Boerenkamplaan 65. via Boerenkamplaan naar Potakkerweg 66. via Potakkerweg naar Broekstraat 67. via Broekstraat naar Steegstraat 68. via Steegstraat naar Kanaaldijk-Noord 69. via Kanaaldijk-Noord naar Akkerweg 70. via Akkerweg naar Lage Akkerweg 71. via Lage Akkerweg naar Mortelweg 72. via Mortelweg naar Beemdstraat 73. via Beemdstraat naar Kanaalstraat 74. via Kanaalstraat naar Witvrouwenbergweg 75. via Witvrouwenbergweg naar Provincialeweg 76. via Provincialeweg naar Heesakkerweg 77. via Heesakkerweg naar Voorste Heusden 78. via Voorste Heusden naar Vlinkert 79. via Vlinkert naar Patrijsweg	

	80. via Patrijsweg naar Pannenhoef 81. via Pannenhoef naar Bleekerweg 82. via Bleekerweg naar Zeilhoekweg 83. via Zeilhoekweg naar Smientweg 84. via Smientweg naar Roerdompweg 85. via Roerdompweg naar Vlosbergweg 86. via Vlosbergweg naar Kleine Heitrak 87. via Kleine Heitrak naar Buizerdweg 88. via Buizerdweg naar Heitrak 89. via Heitrak naar Bospeelweg 90. via Bospeelweg naar Grauwveenweg 91. via Grauwveenweg naar Kanaaldijk Oost 92. via Kanaaldijk Oost naar Kanaaldijk Noord 93. via Kanaaldijk Noord naar Helenastraat 94. via Helenastraat naar Grashoekseweg 95. via Grashoekseweg naar Helenaveenseweg 96. via Helenaveenseweg naar Belgenhoek 97. via Belgenhoek naar Kievit 98. via Kievit naar Marisbaan 99. via Marisbaan naar Kievit 100. via Kievit naar Meijelseweg 101. via Meijelseweg naar Kanaalstraat 102. via Kanaalstraat naar Peelstraat 103. via Peelstraat naar Heibloemseweg 104. via Heibloemseweg naar Hondsheuvelstraat 105. via Hondsheuvelstraat naar Hub 106. via Hub naar Hoekerstraat 107. via Hoekerstraat naar Jacobusstraat 108. via Jacobusstraat naar Huiskensweg 109. via Huiskensweg naar Melkweg 110. via Melkweg naar Roggelseweg 111. via Roggelseweg naar Roggelsedijk 112. via Roggelsedijk naar Heldensedijk	
	Those parts of the municipality Nederweert contained within a circle of a radius of 3 kilometres, centered on WGS84 dec. coordinates long 5.81, lat 51.3	23.11.2022- 1.12.2022
	Municipality Maashorst province Noord-Brabant	
NL-HPAI(P)-2022-00085	1. via Vinkelsestraat naar Ruitersweg-Oost 2. via Ruitersweg-Oost naar Grolderseweg 3. via Grolderseweg naar Wijststraat 4. via Wijststraat naar Leliestraat 5. via Leliestraat naar Binnenweg 6. via Binnenweg naar Schoonstraat 7. via Schoonstraat naar fietspad 8. via fietspad volgend in oostelijke richting overgaand in noordelijke richting naar de Kropaar 9. via de Kropaar naar de Ploeg 10. via de Ploeg naar Nistelrodeseweg 11. via Nistelrodeseweg naar Landerstraat 12. via Landerstraat naar Bosstraat 13. via Bosstraat naar Graafsebaan 14. via Graafsebaan naar Rijksweg 15. via Rijksweg naar Postiljonstraat 16. via Postiljonstraat naar Hoevestraat 17. via Hoevestraat naar Rogstraat	11.12.2022

	18. via Rogstraat naar Udensedreef 19. via Udensedreef naar Dokter Langendijklaan 20. via Dokter Langendijklaan naar Zeelandsedreef 21. via Zeelandsedreef naar Duifhuisstraat 22. via Duifhuisstraat naar Heihorst 23. via Heihorst naar Kreitsberg 24. via Kreitsberg naar Reekseweg 25. via Reekseweg naar Heihorst 26. via Heihorst naar Langenboomseweg 27. via Langenboomseweg naar Peelweg 28. via Peelweg naar Middenpeelweg 29. via Middenpeelweg naar Oudedijk 30. via Oudedijk naar Staartjespeelweg 31. via Staartjespeelweg naar Daandelendennen 32. via Daandelendennen naar Wanroijseweg 33. via Wanroijseweg naar Voskuilenweg 34. via Voskuilenweg naar Telefoonstraat 35. via Telefoonstraat naar Statenweg 36. via Statenweg naar Gagelstraat 37. via Gagelstraat naar Hoekstraat 38. via Hoekstraat naar Dennenmark 39. via Dennenmark naar de Bunders 40. via de Bunders naar Kluisstraat 41. via Kluisstraat naar Daniël de Brouwerstraat 42. via Daniël de Brouwerstraat naar Pater Petrusstraat 43. via Pater Petrusstraat naar Strijbosscheweg 44. via Strijbosscheweg naar Boslaan 45. via Boslaan naar Verreheide 46. via Verreheide naar Boekelseweg 47. via Boekelseweg naar Deel 48. via Deel naar Kopperegang 49. via Kopperegang naar Bloemerdgang 50. via Bloemerdgang naar de Bloemerd 51. via de Bloemerd naar de Haag 52. via de Haag naar Wijnboomlaan 53. via Wijnboomlaan naar Walgraafseweg 54. via Walgraafseweg naar Vonderweg-Oost 55. via Vonderweg-Oost naar Leekbeemdweg 56. via Leekbeemdweg naar Middenweg 57. via Middenweg naar Bosscheweg 58. via Bosscheweg naar Kapelstraat 59. via Kapelstraat naar Pater de Leeuwstraat 60. via Pater de Leeuwstraat naar de Hei 61. via de Hei naar Mortelven 62. via Mortelven naar Rooijseweg 63. via Rooijseweg naar Lieshoutseweg 64. via Lieshoutseweg naar Oude-Lieshoutsedijk 65. via Oude-Lieshoutsedijk naar Lieshoutsedijk 66. via Lieshoutsedijk naar Everse Akkerpad 67. via Everse Akkerpad naar Achterstesteeg 68. via Achterstesteeg naar Eversestraat 69. via Eversestraat naar Noordelijke Randweg 70. via Noordelijke Randweg naar Kampenweg 71. via Kampenweg naar Kleine Heisteeg	

	72. via Kleine Heisteeg naar Sterrebos 73. via Sterrebos naar de Leijerweg 74. via de Leijerweg naar Schijndelseweg 75. via Schijndelseweg naar Rooiseweg 76. via Rooiseweg naar Europalaan 77. via Europalaan naar Sterrenlaan 78. via Sterrenlaan naar Betelgeuze 79. via Betelgeuze naar Poolster 80. via Poolster naar Bernhardstraat 81. via Bernhardstraat naar Hoevenbraaksestraat 82. via Hoevenbraaksestraat naar van Berghenstraat 83. via van Berghenstraat naar Kerkendijk 84. via Kerkendijk naar Smaldonkstraat 85. via Smaldonkstraat naar Structuurweg 86. via Structuurweg naar Steeg 87. via Steeg naar Heuvelstraat 88. via Heuvelstraat naar Houterdsedijk 89. via Houterdsedijk naar Vossenberg 90. via Vossenberg naar Leemweg 91. via Leemweg naar Dungensesteeg 92. via Dungensesteeg naar Schutskooi 93. via Schutskooi naar Kanaaldijk-Zuid 94. via Kanaaldijk-Zuid naar Kanaaldijk Zuid 95. via Kanaaldijk Zuid naar Molendijk 96. via Molendijk naar Zuid-Willemsvaart 97. via Zuid-Willemsvaart naar Kapelstraat 98. via Kapelstraat naar Brugstraat 99. via Brugstraat naar Pastoor Verlindenstraat 100. via Pastoor Verlindenstraat naar Haffertsestraat 101. via Haffertsestraat naar Gouverneursweg 102. via Gouverneursweg naar Kersouwelaan 103. via Kersouwelaan naar Fietspad 104. via Fietspad volgend naar Kaathovensedijk 105. via Kaathovensedijk naar Kaathoven 106. via Kaathoven naar Brugstraat 107. via Brugstraat naar Lindenlaan 108. via Lindenlaan naar Vinkelsestraat	
	Those parts of the municipality Nederweert contained within a circle of a radius of 3 kilometres, centered on WGS84 dec. coordinates long 5.59, lat 51.65	3.12.2022 -11.12.2022
	Municipality Woerden province Utrecht	
NL-HPAI(NON-P)-2022-00736	Bewakingszone (10 kilometer) Zegveld 1. via A.H. Kooistrastraat naar Dorpsstraat 2. via Dorpsstraat naar Uiterbuurtweg 3. via Uiterbuurtweg naar Blokland 4. via Blokland naar Achterweg 5. via Achterweg naar Oude Spoorbaan 6. via Oude Spoorbaan naar Ringdijk 2e bedijking 7. via Ringdijk 2e bedijking naar A.C. Verhoefweg 8. via A.C. Verhoefweg naar Tweede Zijweg 9. via Tweede Zijweg naar Dukaton 10. via Dukaton naar Hofland 11. via Hofland naar Mijdrechtse Zuwe 12. via Mijdrechtse Zuwe naar Provincialeweg 13. via Provincialeweg naar Veenweg 14. via Veenweg naar Vermogenweg	11.12.2022

	15. via Vermogenweg naar Veenweg 16. via Veenweg naar Mijdrechtse Dwarsweg 17. via Mijdrechtse Dwarsweg naar ir. Enschedéweg 18. via ir. Enschedéweg naar Oudhuijzerweg 19. via Oudhuijzerweg naar Korenmolenweg 20. via Korenmolenweg naar Portengen 21. via Portengen naar Gieltjesdorp 22. via Gieltjesdorp naar Rijndijk 23. via Rijndijk naar Breudijk 24. via Breudijk naar Breudijktunnel 25. via Breudijktunnel naar Breudijk 26. via Breudijk naar Appellaan 27. via Appellaan naar de Joncheerelaan 28. via de Joncheerelaan naar Dorpsstraat 29. via Dorpsstraat naar Acacialaan 30. via Acacialaan naar Raadhuislaan 31. via Raadhuislaan naar Reijerscopse Overgang 32. via Reijerscopse Overgang naar Reijerscop 33. via Reijerscop naar Blindeweg 34. via Blindeweg naar Mastwijkerdijk 35. via Mastwijkerdijk naar Lindeboomsweg 36. via Lindeboomsweg naar IJsselveld 37. via IJsselveld naar Waardsedijk 38. via Waardsedijk naar Laan van Snelrewaard 39. via Laan van Snelrewaard naar Zuid-Linschoterkade 40. via Zuid-Linschoterkade naar Linschoterpoort 41. via Linschoterpoort naar Vinkenbuurt 42. via Vinkenbuurt naar Biezenpoortstraat 43. via Biezenpoortstraat naar Oude Singel 44. via Oude Singel naar Johan J. Vierbergenweg 45. via Johan J. Vierbergenweg naar Tappersheul 46. via Tappersheul naar Ruige Weide 47. via Ruige Weide naar Poppelendam 48. via Poppelendam naar Lange Weidsche Boezem 49. via Lange Weidsche Boezem naar Hogebrug 50. via Hogebrug naar Hoogeind 51. via Hoogeind naar Wierickepad 52. via Wierickepad naar Oukoopsedijk 53. via Oukoopsedijk naar Nieuwenbroeksedijk 54. via Nieuwenbroeksedijk naar Lecksdijk 55. via Lecksdijk naar Bosmankade 56. via Bosmankade naar Zoetendijk 57. via Zoetendijk naar Oudeweg 58. via Oudeweg naar Raadhuisweg 59. via Raadhuisweg naar Goudsestraatweg 60. via Goudsestraatweg naar Reeuwijkse Randweg 61. via Reeuwijkse Randweg naar Oud Reeuwijkseweg 62. via Oud Reeuwijkseweg naar Schinkeldijk 63. via Schinkeldijk naar Zijdeweg 64. via Zijdeweg naar Warmoeskade 65. via Warmoeskade naar Wonnepad 66. via Wonnepad naar Wijkdijk	

	67. via Wijkdijk naar Voshol 68. via Voshol naar Insteek 69. via Insteek naar Goudse Rijweg 70. via Goudse Rijweg naar Goudse Rijpad 71. via Goudse Rijpad naar Spoorbaan 72. via Spoorbaan naar Boskoopseweg 73. via Boskoopseweg naar Oostkanaalweg 74. via Oostkanaalweg naar Steekterbrug 75. via Steekterbrug naar Oostkanaalweg 76. via Oostkanaalweg naar Zegerbaan 77. via Zegerbaan naar Veldhuizenpad 78. via Veldhuizenpad naar Windepad 79. via Windepad naar Ringdijk 80. via Ringdijk naar Aardamseweg 81. via Aardamseweg naar Ringdijk 82. via Ringdijk naar Hertog van Beijerenstraat 83. via Hertog van Beijerenstraat naar Westkanaalweg 84. via Westkanaalweg naar Oude Nieuwveenseweg 85. via Oude Nieuwveenseweg naar A.H. Kooistrastraat	
	Those parts of the municipality Woerden contained within a circle of a radius of 3 kilometres, centered on WGS84 dec. coordinates long 4.84, lat 52.13	3.12.2022 -11.12.2022
	Municipality Venray province Limburg	
NL-HPAI(P)-2022-00086	1. via Kuulenweg naar Vredepeelweg 2. via Vredepeelweg naar Crooijmansweg 3. via Crooijmansweg naar Rieterdreef 4. via Rieterdreef naar Oplosedijk 5. via Oplosedijk naar Groeningsedijk 6. via Groeningsedijk naar Kievelaarsedijk 7. via Kievelaarsedijk naar Mullemsedijk 8. via Mullemsedijk naar Luinbeekweg 9. via Luinbeekweg naar Sint Cornelisstraat 10. via Sint Cornelisstraat naar Veerweg 11. via Veerweg naar Maasstraat 12. via Maasstraat naar Pierre ii 13. via Pierre ii naar Veerweg 14. via Veerweg naar Hengeland 15. via Hengeland naar Gening 16. via Gening naar Heukelom 17. via Heukelom naar Berkenkamp 18. via Berkenkamp naar Spitsbrug 19. via Spitsbrug naar Bleijenbeeksebosweg 20. via Bleijenbeeksebosweg naar Siebengewaldseweg 21. via Siebengewaldseweg naar Gochsedijk 22. via Gochsedijk naar Baalsedijk 23. via Baalsedijk naar Landgrens 24. via Landgrens naar Twistedenerweg 25. via Twistedenerweg naar Heerenvenweg 26. via Heerenvenweg naar Moerasweg 27. via Moerasweg naar Walbeckerweg	22.12.2022

	28. via Walbeckerweg naar Hamert 29. via Hamert naar Provincialeweg 30. via Provincialeweg naar Maasstraat 31. via Maasstraat naar Kruisweg 32. via Kruisweg naar Veerdienst 33. via Veerdienst naar Veerweg 34. via Veerweg naar Lottumseweg 35. via Lottumseweg naar Looweg 36. via Looweg naar Bronskuilweg 37. via Bronskuilweg naar Hilkensbergweg 38. via Hilkensbergweg naar Hoogveldweg 39. via Hoogveldweg naar Vonkelseweg 40. via Vonkelseweg naar Hombergerweg 41. via Hombergerweg naar Horsterdijk 42. via Horsterdijk naar Hoogheide 43. via Hoogheide naar Losbaan 44. via Losbaan naar Laagheide 45. via Laagheide naar Witveldweg 46. via Witveldweg naar Venloseweg 47. via Venloseweg naar Hamweg 48. via Hamweg naar Reulsweg 49. via Reulsweg naar Vrouwboomweg 50. via Vrouwboomweg naar St. Annaweg 51. via St. Annaweg naar Expeditiestraat 52. via Expeditiestraat naar Energiestraat 53. via Energiestraat naar Nijverheidsstraat 54. via Nijverheidsstraat naar Industriestraat 55. via Industriestraat naar Westsingel 56. via Westsingel naar Bemmelstraat 57. via Bemmelstraat naar Kogelstraat 58. via Kogelstraat naar Hillenweg 59. via Hillenweg naar Speulhofsbaan 60. via Speulhofsbaan naar Campagneweg 61. via Campagneweg naar Americaanseweg 62. via Americaanseweg naar Kannegietweg 63. via Kannegietweg naar Hofweg 64. via Hofweg naar Nusseleinstraat 65. via Nusseleinstraat naar Kabroekstraat 66. via Kabroekstraat naar Gerard Smuldersstraat 67. via Gerard Smuldersstraat naar Lorbaan 68. via Lorbaan naar Laagheideweg 69. via Laagheideweg naar Midden Peelweg 70. via Midden Peelweg naar Puttenweg 71. via Puttenweg naar Lovinckplein 72. via Lovinckplein naar Jan Poelsweg 73. via Jan Poelsweg naar Peelweg 74. via Peelweg naar Beekweg 75. via Beekweg naar Kuulenweg	
	Those parts of the municipality Venray contained within a circle of a radius of 3 kilometres, centered on WGS84 dec. coordinates long 6.05, lat 51.54	14.12.2022 - 22.12.2022

	Municipality Krimpenerwaard province Zuidholland	
NL-HPAI(P)-2022-00087	1. Vanaf de kruising Cornelis Gerardus Roosweg/Kerkweg, Kerkweg volgen in noordelijke richting tot aan Burgermeester Neetstraat. 2. Burgermeester neetstraat volgen in noordelijke richting tot aan Hollandsche IJssel. 3. Hollandsche IJssel volgen in oostelijke richting tot aan Gemaal Abraham Kroes. 4. Gemaal Abraham kroes via Water volgen tot aan Spoorlijn Utrecht-Rotterdam. 5. Spoorlijn volgen in westelijke richting tot aan Goudse Poort. 6. Goudse Poort volgen in noordelijke richting tot aan A12. 7. A12 volgen in westelijke richting tot aan Tuurluur. 8. Tuurluur volgen in zuidelijke richting overgaand in Johan.J. Vierbergenweg tot aan Lijnbaan. 9. Lijnbaan volgen in oostelijke richting tot aan Kabelslag. 10. Kabelslag volgen in zuidelijke richting tot aan Lange Linschoten. 11. Lange Linschoten volgen in westelijke richting tot aan Laan van Snelrewaard. 12. Laan van Snelrewaard volgen in zuidelijke richting tot aan Hollandsche IJssel. 13. Hollandsche IJssel volgen in oostelijke richting tot aan N204. 14. N204 volgen in zuidelijke richting overgaand in N210 tot aan Rolafweg Zuid. 15. Rolafweg Zuid volgen in zuidelijke richting de Lekdijk overstekend tot aan Lekdijk. 16. Lekdijk volgen in westelijke richting tot aan Lagewaard. 17. Lagewaard volgen in zuidelijke richting tot aan Tiendweg. 18. Tiendweg volgen in westelijke richting tot aan Kleine Vliet. 19. Kleine Vliet volgen in zuidelijke richting overgaand in grens Zuid-Holland-Utrecht tot aan Tiendweg. 20. Tiendweg volgen in westelijke richting tot aan Gorissenweg. 21. Gorissenweg volgen in zuidelijke richting tot aan N214. 22. N214 volgen in westelijke richting tot aan Wervenkampweg. 23. Wervenkampweg volgen in noordelijke richting tot aan Graafstroom. 24. Graafstroom volgen westelijke richting tot aan N481. 25. N481 volgen in noordelijke richting tot aan Groot Achterwaterschap. 26. Groot Achterwaterschap volgen in westelijke richting overgaand in Nieuwe Waterschp de Lek overstekend tot aan Breekade. 27. Breekade volgen in noordelijke richting tot aan N210. 28. Cornelis Gerardus Roosweg volgen in oostelijke richting tot aan Kerkweg.	22.12.2022

	Those parts of the municipality Krimpenerwaard contained within a circle of a radius of 3 kilometres, centered on WGS84 dec. coordinates long 4.8, lat 51.97	14.12.2022 – 22.12.2022
	Municipality Súdwest-Fryslân province Friesland	
NL-HPAI(P)-2022-00088	1. via Doniaburen naar Scharnebuursterweg 2. via Scharnebuursterweg naar Buren 3. via Buren naar Aaltjemeerweg 4. via Aaltjemeerweg naar Trekweg 5. via Trekweg naar Horstweg 6. via Horstweg naar Ysgumerweg 7. via Ysgumerweg naar Krabbedijk 8. via Krabbedijk naar Hemdijk 9. via Hemdijk naar Vitusdyk 10. via Vitusdyk naar de Kat 11. via de Kat naar Westerskatting 12. via Westerskatting naar Stasjonsleane 13. via Stasjonsleane naar Breksdyk 14. via Breksdyk naar Hagenadyk 15. via Hagenadyk naar Rigedyk 16. via Rigedyk naar Lytshuzen 17. via Lytshuzen naar de Skatting 18. via de Skatting naar Tollewei 19. via Tollewei naar Molefinne 20. via Molefinne naar de Draei 21. via de Draei naar Heeger Var 22. via Heeger Var naar Graft 23. via Graft naar Vaargeul van de Graft naar het Johan Frisokanaal 24. via Vaargeul van de Graft naar het Johan Frisokanaal naar Vaargeul aanloop Woudsenderrakken 25. via Vaargeul aanloop Woudsenderrakken naar Woudsenderrakken 26. via Woudsenderrakken naar Noorder-Ee 27. via Noorder-Ee naar de Dyk 28. via de Dyk naar op ‘e Romte 29. via op ‘e Romte naar Nr 30. via Nr naar Ee 31. via Ee naar Slotermeer 32. via Slotermeer naar Slotergat 33. via Slotergat naar Oostelijke Stadsgracht 34. via Oostelijke Stadsgracht naar Rûnwei 35. via Rûnwei naar Wijckelerweg 36. via Wijckelerweg naar Jeen Hornstraweg 37. via Jeen Hornstraweg naar Heerenhoogweg 38. via Heerenhoogweg naar de Vinkebuorren 39. via de Vinkebuorren naar Jacobus Boomsmastraat 40. via Jacobus Boomsmastraat naar Beuckenswijkstraat	23.12.2022

	41. via Beuckenswijkstraat naar Lyklamawei 42. via Lyklamawei naar Hoitebuorren 43. via Hoitebuorren naar Steek Door 44. via Steek Door naar landgrens 45. via landgrens naar Steek Door 46. via Steek Door naar Vrouwezand 47. via Vrouwezand naar Vaarwater naar Stavoren 48. via Vaarwater naar Stavoren naar Vaarwater over het Lacon 49. via Vaarwater over het Lacon naar Vaarwater langs de Friese kust 50. via Vaarwater langs de Friese kust naar Steek Door 51. via Steek Door naar Zeedijk 52. via Zeedijk naar Doniaburen	
	Those parts of the municipality Súdwest-Fryslân contained within a circle of a radius of 3 kilometres, centered on WGS84 dec. coordinates long 5.47 lat 52.92	15.12.2022 - 23.12.2022

Member State: Austria

ADIS reference number of the outbreak	Area comprising:	Date until applicable in accordance with Article 55 of Delegated Regulation (EU) 2020/687
	STEIERMARK	
AT-HPAI(NON-P)-2022- 00021	Magistrat Graz die Katastralgemeinden Graz-Stadt-Fälling, Ragnitz, Stifting, Graz Stadt-Weinitzen, Wenisbuch; im Bezirk Graz-Umgebung: in der Gemeinde Kainbach bei Graz die Katastralgemeinden Hönigthal, Kainbach, Schafthal; in der Gemeinde Sankt Radegund bei Graz die Katastralgemeinden St. Radegund, Rinnegg und Schöckl, in der Gemeinde Stattegg die Katastralgemeinde Stattegg, in der Gemeinde Weinitzen die Katastralgemeinden Fälling, Niederschöckl und Weinitzen, in der Gemeinde Eggersdorf bei Graz die Katastralgemeinden Affenberg, Brodersdorf, Edelsbach, Eggersdorf, Höf und Präbach; im Bezirk Weiz in der Gemeinde Ludersdorf-Wilfersdorf die Katastralgemeinden Pircha und Wilfersdorf; in der Gemeinde Mitterdorf an der Raab die Katastralgemeinden Dörfl, Hohenkogl, Mitterdorf, Oberdorf bei Stadl, Obergreith, Pichl, Untergreith; in der Gemeinde Mortantsch die Katastralgemeinden Göttelsberg, Hafning, Haselbach, Leska, Mortantsch, Steinberg; in der Gemeinde Naas die Katastralgemeinde Birchbaum, in der Gemeinde Gutenberg-Stenzengreith die Katrastralgemeinden Garrach, Kleinsemmering, Stenzengreith, Stockheim; in der Gemeinde St. Ruprecht an der Raab die Katastralgemeinden Arndorf, Dietmanndorf, Fünfing bei St. Ruprecht, Grub, Neudorf bei St. Ruprecht, St. Ruprecht an der Raab, Unterfladnitz und Wolfsgruben bei St. Ruprecht; in der Gemeinde Weiz die Katastralgemeinden Farcha, Krottendorf, Preding, Reggerstätten und Weiz	12.12.2022

	Bezirk Graz-Umgebung: in der Gemeinde Kumberg die Katastralgemeinden Gschwendt, Hofstätten, Kumberg und Rabnitz und in der Gemeinde Eggersdorf bei Graz die Katastralgemeinden Hart bei Eggersdorf, Haselbach und Purgstall	4.12.2022- 12.12.2022

United Kingdom (Northern Ireland)

ADIS reference number of the outbreak	Area comprising:	Date until applicable in accordance with Article 55 of Delegated Regulation (EU) 2020/687
IE-HPAI(P)-2022-00001	The area of the parts of County Fermanagh extending beyond the area described in the protection zone and within the circle of a radius of 10 kilometres, centred on GPS coordinates N 54,2073 and E -7,2153	16.12.2022
	Those parts of County Fermanagh contained within a circle of a radius of three kilometres, centred on GPS coordinates N 54,2073 and E -7,2153	8.12.2022- 16.12.2022
IE-HPAI(P)-2022-00003	The area of the parts of County Fermanagh extending beyond the area described in the protection zone and within the circle of a radius of 10 kilometres, centred on GPS coordinates N 54,2093 and E -7,2219	22.12.2022
	Those parts of County Fermanagh contained within a circle of a radius of three kilometres, centred on GPS coordinates N 54,2093 and E -7,2219	14.12.2022 – 22.12.2022

Part C

Further restricted zones in the concerned Member States* as referred to in Articles 1 and 3a:

Member State: France

Area comprising:	Date until measures are to remain applicable in accordance with Article 3a
Les communes suivantes dans le département: Calvados (14)	
CERNAY LA FOLLETIÈRE-ABENON ORBEC SAINT-MARTIN-DE-BIENFAITE-LA-CRESSONNIÈRE LA VESPIÈRE-FRIARDEL MEULLES* PREAUX-SAINT-SEBASTIEN* FAMILLY* CERQUEUX* LIVAROT-PAYS-D'AUGE	16.12.2022

Les communes suivantes dans le département: Charente-Maritime (17)	
ANDILLY CHARRON ESNANDES MARANS MARSILLY SAINT-JEAN-DE-LIVERSAY SAINT-OUEN-D'AUNIS VILLEDOUX	30.11.2022
Les communes suivantes dans le département: Cher (18)	
GENOUILLY GRACAY NOHANT-EN-GRACAY SAINT-OUTRILLE	3.12.2022
Les communes suivantes dans le département: Eure (27)	
AMBENAY LES BAUX-DE-BRETEUIL BOIS-ANZERAY BOIS-ARNAULT BOIS-NORMAND-PRES-LYRE BROGLIE CAORCHES-SAINT-NICOLAS CAPELLE-LES-GRANDS CHAMPIGNOLLES LA CHAPELLE-GAUTHIER FERRIERES-SAINT-HILAIRE LA FERRIERE-SUR-RISLE LE FIDELAIRE GRAND-CAMP MESNIL-EN-OUCHE (partie est/D49) NEAUFLES-AUVERGNY LA NEUVE-LYRE LE NOYER-EN-OUCHE RUGLES SAINT-ANTONIN-DE-SOMMAIRE SAINT-AUBIN-DU-THENNEY SAINT-AUBIN-LE-VERTUEUX SAINT-GERMAIN-LA-CAMPAGNE SAINT-JEAN-DU-THENNEY SAINT-MARDS-DE-FRESNE SAINT-QUENTIN-DES-ISLES SAINT-VICTOR-DE-CHRETIENVILLE LA VIEILLE-LYRE	16.12.2022

Les communes suivantes dans le département: Indre (36)	
ANJOUIN ARGY BAGNEUX BRION CHABRIS LA CHAMPENOISE DUN-LE-POELIER FRANCILLON FREDILLE GEHEE GIROUX HEUGNES JEU-MALOCHES LANGE: Ouest du Nahon LEVROUX: Sud de la D8 LIZERAY LUCAY-LE-LIBRE LUCAY-LE-MALE MENETOU-SUR-NAHON MENETREOLS-SOUS-VATAN MEUNET-SUR-VATAN MOULINS-SUR-CEPHONS: Sud de la D8 ORVILLE: A l'est de la D25 PAUDY PELLEVOISIN REBOURSIN SAINT-CHRISTOPHE-EN-BAZELLE SAINT-VALENTIN SELLES-SUR-NAHON SEMBLECAY SOUGE VALENCAY: Nord-Ouest du Nahon VAL-FOUZON VATAN VEUIL VICQ-SUR-NAHON: A l'ouest du Nahon VILLEGONGIS VINEUIL	9.12.2022
Les communes suivantes dans le département: Loiret (45)	
AUXY BATILLY-EN-GÂTINAIS BEAUNE-LA-ROLANDE BOISCOMMUN BONNÉE	19.12.2022

BORDEAUX-EN-GÂTINAIS	
BRAY-SAINT AIGNAN	
CHAMBON-LA-FORÊT	
CHAPELON	
CHÂTEAUNEUF-SUR-LOIRE	
COMBREUX	
CORBEILLES	
CORQUILLEROY	
ÉGRY	
GAUBERTIN	
GERMIGNY-DES-PRÉS	
GONDREVILLE	
INGRANNES	
JURANVILLE	
LANGESSE	
LE MOULINET-SUR-SOLIN	
LES BORDES	
LOMBREUIL	
LORCY	
MIGNÈRES	
MIGNERETTE	
MONTBARROIS	
MONTEREAU	
MORMANT-SUR-VERNISSON	
MOULON	
NANCRAY-SUR-RIMARDE	
NIBELLE	
OUSSOY-EN-GÂTINAIS	
OUZOUER-DES-CHAMPS	
OUZOUER-SUR-LOIRE	
PANNES	
SAINT-BENOÎT-SUR-LOIRE	
SAINT-HILAIRE-SUR-PUISEAUX	
SAINT-LOUP-DES-VIGNES	
SAINT-MARTIN-D'ABBAT	
SAINT-MAURICE-SUR-FESSARD	
SAINT-MICHEL	
SAINT-PÈRE-SUR-LOIRE	
SEICHEBRIÈRES	
SOLTERRE	
VARENNES-CHANGY	
VILLEMANDEUR	
VILLEVOQUES	
VIMORY	
VITRY-AUX-LOGES	

AMILLY	
AUXY	
BATILLY-EN-GÂTINAIS	
BEAUNE-LA-ROLANDE	
BOISCOMMUN	
BOISMORAND	
BONNÉE	
BORDEAUX-EN-GÂTINAIS	
LES BORDES	
BRAY-SAINT AIGNAN	
CHÂLETTE-SUR-LOING	
CHAMBON-LA-FORÊT	
CHAPELON	
CHÂTEAUNEUF-SUR-LOIRE	
LES CHOUX	
COMBREUX	
CONFLANS-SUR-LOING	
CORBEILLES	
CORQUILLEROY	
CORTRAT	
DAMPIERRE-EN-BURLY	
ÉGRY	
GAUBERTIN	
GERMIGNY-DES-PRÉS	19.12.2022
GONDREVILLE	
INGRANNES	
JURANVILLE	
LANGESSE	
LES BORDES	
LORCY	
MIGNÈRES	
MIGNERETTE	
MONTARGIS	
MONTBARROIS	
MONTCRESSON	
MORMANT-SUR-VERNISSON	
MOULON	
NANCRAY-SUR-RIMARDE	
NEVOY	
NIBELLE	
NOGENT-SUR-VERNISSON	
OUZOUER-DES-CHAMPS	
OUZOUER-SUR-LOIRE	
PANNES	
PRESSIGNY-LES-PINS	
SAINT-BENOÎT-SUR-LOIRE	
SAINT-HILAIRE-SUR-PUISEAUX	

SAINT-LOUP-DES-VIGNES	
SAINT-MARTIN-D'ABBAT	
SAINT-MICHEL	
SAINT-PÈRE-SUR-LOIRE	
SEICHEBRIÈRES	
SOLTERRE	
VILLEMANDEUR	
VILLEVOQUES	
VIMORY	
VITRY-AUX-LOGES	
Les communes suivantes dans le département: Nord (59)	
ARMENTIERES	
AUBERS	
BEAUCAMPS-LIGNY	
BERTHEN	
BLARINGHEM	
BOESCHEPE	
BOESEGHEM	
BOIS-GRENIER	
BORRE	
CAESTRE	
CAPINGHEM	
CASSEL	
DEULEMONT	
EECKE	
ENGLOS	17.12.2022
ENNETIERES-EN-WEPPES	
ERQUINGHEM-LE-SEC	
ESCOBECQUES	
FOURNES-EN-WEPPES	
FRELINGHIEN	
FROMELLES	
GODEWAERSVELDE	
HALLENNES-LEZ-HAUBOURDIN	
HANTAY	
HAVERSKERQUE	
HAZEBROUCK	
HERLIES	
HONDEGHEM	
HOUPLINES	

ILLIES	
LA BASSEE	
LA CHAPELLE-D'ARMENTIERES	
LE MAISNIL	
LYNDE	
MARQUILLIES	
MORBECQUE	
OXELAERE	
PERENCHIES	
PRADELLES	
PREMESQUES	
QUESNOY-SUR-DEULE	
RADINGHEM-EN-WEPPES	
SAINGHIN-EN-WEPPES	
SAINT-JANS-CAPPEL	
SAINT-SYLVESTRE-CAPPEL	
SAINTE-MARIE-CAPPEL	
SALOME	
SANTES	
SEQUEDIN	
SERCUS	
STEENBECQUE	
STEENVOORDE	
TERDEGHEM	
THIENNES	
VERLINGHEM	
WALLON-CAPPEL	
WARNETON	
WAVRIN	
WICRES	
FLETRE	
Les communes suivantes dans le département: Orne (61)	
AUBE	
AVERNES-SAINT-GOURGON	
BEAUFAI	
LE BOSC-RENOULT	
BRETHEL	
CHAUMONT	
CISAI-SAINT-AUBIN	16.12.2022
ECORCEI	
LA FERTE-EN-OUCHE	
LA GONFRIERE	
L'AIGLE	
NEUVILLE-SUR-TOUQUES	
RAI	

SAINT-AUBIN-DE-BONNEVAL	
SAINT-EVROULT-DE-MONTFORT	
SAINT-EVROULT-NOTRE-DAME-DU-BOIS	
SAINT-GERMAIN-D'AUNAY	
SAINT-HILAIRE-SUR-RISLE	
SAINT-MARTIN-D'ECUBLEI	
SAINT-NICOLAS-DE-SOMMAIRE	
SAINT-PIERRE-DES-LOGES	
SAINT-SULPICE-SUR-RISLE	
SAINT-SYMPHORIEN-DES-BRUYERES	
SAP-EN-AUGE	
LE SAP-ANDRE	
TOUQUETTES	
LA TRINITE-DES-LAITIERS	
Les communes suivantes dans le département: Pas-de-Calais (62)	
ABLAIN-SAINT-NAZAIRE	19.12.2022
AGNIERES	
AIRE-SUR-LA-LYS	
AIX-NOULETTE	
ANGRES	
ANNEQUIN	
ANVIN	
AUBIGNY-EN-ARTOIS	
AUCHY-LES-MINES	
AVERDOINGT	
BAILLEUL-AUX-CORNAILLES	
BAJUS	
BARLIN	
BERGUENEUSE	
BERLES-MONCHEL	
BETHONSART	
BILLY-BERCLAU	
BLESSY	
BOMY	
BOURS	
BOVIGNY-BOYEFFLES	
BOYAVAL	
BRIAS	
BULLY-LES-MINES	
CAMBLAIN-L'ABBE	
CAMBLIGNEUL	

CAMBRIN	
CARENCY	
CAUCOURT	
CHELERS	
CONTEVILLE-EN-TERNOIS	
CUINCHY	
DOUVRINS	
EPS	
ERNY-SAINT-JULIEN	
ESTREE-BLANCHE	
ESTREE-CAUCHY	
FEBVIN-PALFART	
FESTUBERT	
FIEFS	
FLECHIN	
FONTAINE-LES-BOULANS	
FONTAINE-LES-HERMANS	
FRESNICOURT-LE-DOLMEN	
FREVILLERS	
GAUCHIN-LEGAL	
GAUCHIN-VERLOINGT	
GIVENCHY-LES-LA-BASSEE	
GOUY-SERVINS	
GRENAY	
HAISNES	
HERNICOURT	
HERSIN-COUPIGNY	
HESTRUS	
HEUCHIN	
HUCLIER	
HULLUCH	
LA COMTE	
LA THEULOYE	
LABOURSE	
LAIRES	
LAMBRES	
LIETTRES	
LIEVIN	
LIGNY-LES-AIRE	
LIGNY-SAINT-FLOCHEL	
LINGHEM	
LISBOURG	
LOOS-EN-GOHELLE	

MAGNICOURT-EN-COMTE	
MAMETZ	
MARQUAY	
MAZINGARBE	
MINGOVAL	
MONCHY-BRETON	
MONCHY-CAYEUX	
NEDON	
NEDONCHEL	
NOEUX-LES-MINES	
NOYELLES-LES-VERMELLES	
OSTREVILLE	
PREDEFIN	
QUERNES	
RELY	
ROELLECOURT	
ROMBLY	
ROQUETOIRE	
SACHIN	
SAILLY-LABOURSE	
SAINS-EN-GOHELLE	
SAINS-LES-PERNES	
SAINT-AUGUSTIN	
SAINT-MICHEL-SUR-TERNOISE	
SAINT-POL-SUR-TERNOISE	
SAVY-BERLETTE	
SERVINS	
TANGRY	
TINCQUES	
TROISVAUX	
VALHUON	
VERMELLES	
VILLERS-AU-BOIS	
VILLERS-BRULIN	
VILLERS-CHATEL	
VIOLAINES	
WESTREHEM	
WITTERNESSE	
WITTES	

Les communes suivantes dans le département: Seine-et-Marne (77)	
ANDREZEL	
ARGENTIERES	
AUBEPIERRE-OZOUER-LE-REPOS	
AVON	
BEAUVOIR	
BERNAY-VILBERT	
BLANDY	
BOIS-LE-ROI	
BOMBON	
BREAU	
CANNES-ECLUSE	
CESSOY-EN-MONTOIS	
CHAMPAGNE-SUR-SEINE	
CHAMPDEUIL	
CHAMPEAUX	
LA CHAPELLE-GAUTHIER	
LA CHAPELLE-IGER	
LA CHAPELLE-RABLAIS	
LA CHAPELLE-SAINT-SULPICE	
CHARTRETTES	
CHATEAUBLEAU	1.12.2022
LE CHATELET-EN-BRIE	
CHATENAY-SUR-SEINE	
CHATILLON-LA-BORDE	
CHATRES	
CHAUMES-EN-BRIE	
CHENOISE	
CLOS-FONTAINE	
COURCELLES-EN-BASSEE	
COURPALAY	
COURQUETAINE	
COURTOMER	
COUTENCON	
CRISENOY	
LA CROIX-EN-BRIE	
CUCHARMOY	
DONNEMARIE-DONTILLY	
ECHOUBOULAINS	
LES ECRENNES	
EGLIGNY	
ESMANS	

QUIERS	
FERICY	
FONTAINEBLEAU	
FONTAINE-LE-PORT	
FONTAINS	
FONTENAILLES	
FONTENAY-TRESIGNY	
FORGES	
FOUJU	
GASTINS	
LA GRANDE-PAROISSE	
GRANDPUITS-BAILLY-CARROIS	
GUIGNES	
GURCY-LE-CHATEL	
HERICY	
JOUY-LE-CHATEL	
LAVAL-EN-BRIE	
LIMOGES-FOURCHES	
LISSY	
LIVERDY-EN-BRIE	
LIVRY-SUR-SEINE	
LIZINES	
LUISETAINES	
LUMIGNY-NESLES-ORMEAUX	
MACHAULT	
MAINCY	
MAISON-ROUGE	
MARLES-EN-BRIE	
MAROLLES-SUR-SEINE	
MEIGNEUX	
MELUN	
MOISENAY	
MONS-EN-MONTOIS	
MONTEREAU-FAULT-YONNE	
MONTEREAU-SUR-LE-JARD	
MONTIGNY-LENCOUP	
MORET-LOING-ET-ORVANNE	
MORMANT	
NANGIS	

OZOUER-LE-VOULGIS	
PAMFOU	
PECY	
LE PLESSIS-FEU-AUSSOUX	
THENISY	
RAMPILLON	
LA ROCHETTE	
ROZAY-EN-BRIE	
RUBELLES	
SAINT-GERMAIN-LAVAL	
SAINT-GERMAIN-LAXIS	
SAINT-JUST-EN-BRIE	
SAINT-LOUP-DE-NAUD	
SAINT-MAMMES	
SAINT-MERY	
SAINT-OUEN-EN-BRIE	
SALINS	
SAMOIS-SUR-SEINE	
SAMOREAU	
SAVINS	
SIGY	
SIVRY-COURTRY	
SOGNOLLES-EN-MONTOIS	
SOIGNOLLES-EN-BRIE	
THOMERY	
LA TOMBE	
TOUQUIN	
VALENCE-EN-BRIE	
VANVILLE	
VARENNES-SUR-SEINE	
VAUDOY-EN-BRIE	
VAUX-LE-PENIL	
VERNEUIL-L'ETANG	
VERNOU-LA-CELLE-SUR-SEINE	
VIEUX-CHAMPAGNE	
VILLENEUVE-LES-BORDES	
VIMPELLES	
VOINSLES	
VOISENON	
VULAINES-LES-PROVINS	
VULAINES-SUR-SEINE	
YEBLES	
SOLERS	

Les communes suivantes dans le département: Somme (80)	
AILLY-SUR-NOYE	
AILLY-SUR-SOMME	
ALLONVILLE	
ARGOEUVES	
AUBERCOURT	
AUBIGNY	
AUBVILLERS	
BEAUCOURT-EN-SANTERRE	
BEAUCOURT-SUR-L'HALLUE	
BEHENCOURT	
BERTANGLES	
BERTEAUCOURT-LES-THENNES	
BONNAY	
BOSQUEL	
BOUGAINVILLE	
BOVELLES	
BRACHES	
BREILLY	
BRIQUEMESNIL-FLOXICOURT	21.12.2022
BUSSY-LES-DAOURS	
CACHY	
CARDONNETTE	
CAVILLON	
CHAUSSOY-EPAGNY	
CHIRMONT	
CLAIRY-SAULCHOIX	
COISY	
CONTRE	
CONTY	
CORBIE	
CREUSE	
DAOURS	
DEMUIN	
DOMART-SUR-LA-LUCE	
DREUIL-LES-AMIENS	
ESCLAINVILLERS	
ESSERTAUX	

FERRIERES	
FLERS-SUR-NOYE	
FLESSELLES	
FLEURY	
FLUY	
FOLLEVILLE	
FOUILLOY	
FOURDRINOY	
FRANSURES	
FRANVILLERS	
FRECHENCOURT	
FREMONTIERS	
FRESNOY-AU-VAL	
GENTELLES (à l'est des rues Faidherbe, Leopold Jouancoux et de la voie communale n°204 de Gentelles à Daours)	
GRIVESNES	
GUIGNEMICOURT	
HAILLES	
HALLIVILLERS	
HAMELET	
HANGARD	
IGNAUCOURT	
LA CHAUSSEE-TIRANCOURT	
LA FALOISE	
LA NEUVILLE-SIRE-BERNARD	
LAHOUSSOYE	
LAWARDE-MAUGER-L'HORTOY	
LE HAMEL	
LE PLESSIER-ROZAINVILLERS	
LOEUILLY	
LOUVRECHY	
MAILLY-RAINEVAL	
MARCELCAVE	
MEZIERES-EN-SANTERRE	
MIRVAUX	
MOLLIENS-AU-BOIS	
MONSURES	
MONTIGNY-SUR-L'HALLUE	
MONTONVILLERS	
MOREUIL	
MORISEL	

NAMPS-MAISNIL	
NEUVILLE-LES-LOEUILLY	
OISSY	
PICQUIGNY	
PIERREGOT	
PISSY	
PONT-NOYELLES	
POULAINVILLE	
QUERRIEU	
QUEVAUVILLERS	
QUIRY-LE-SEC	
RAINNEVILLE	
REVELLES	
ROGY	
ROUVREL	
SAINT-GRATIEN	
SAINT-SAUVEUR	
SAINT-VAAST-EN-CHAUSSEE	
SAISSEVAL	
SAUVILLERS-MONGIVAL	
SEUX	
SOURDON	
THENNES	
THORY	
TILLOY-LES-CONTY	
VAIRE-SOUS-CORBIE	
VAUX-EN-AMIENOIS	
VAUX-SUR-SOMME	
VECQUEMONT	
VELENNES	
VILLERS-AUX-ERABLES	
VILLERS-BOCAGE	
VILLERS-BRETONNEUX	

Les communes suivantes dans le département: Tarn (81)	
ALOS	20.12.2022
ALMAYRAC	
AMARENS	
AMBIALET	
ANDILLAC	
ANDOUQUE	
BELLEGARDE-MARSAL	
BLAYE-LES-MINES	
BRIATEXTE	
BROUSSE	
BROZE	
BUSQUE	
LES CABANNES	
CAHUZAC-SUR-VERE	
CARMAUX	
CASTELNAU-DE-MONTMIRAL	
COMBEFA	
CORDES-SUR-CIEL	
CRESPIN	
CRESPINET	
DONNAZAC	
FAUCH	
FRAUSSEILLES	
GAILLAC	
GRAULHET	
LABASTIDE-GABAUSSE	
LABESSIERE-CANDEIL	
LABOUTARIE	
LAUTREC	
LISLE-SUR-TARN	
LIVERS-CAZELLES	
LOUBERS	
MILHAVET	
MONESTIES	
MONTANS	
MONTDRAGON	

MONTELS	
MOULARES	
MOUZIEYS-TEULET	
NOAILLES	
PAMPELONNE	
PARISOT	
PAULINET	
PEYROLE	
PUYBEGON	
REALMONT	
ROSIERES	
TERRE-DE-BANCALIE	
SAINT-BENOIT-DE-CARMAUX	
SAINT-CIRGUE	
SAINTE-GEMME	
SAINT-GENEST-DE-CONTEST	
SAINT-GREGOIRE	
SAINT-JEAN-DE-MARCEL	
SAINT-JULIEN-DU-PUY	
SAINT-JULIEN-GAULENE	
SAINT-MARCEL-CAMPES	
SALLES	
SAUSSENAC	
LE SEGUR	
SERENAC	
SOUEL	
TECOU	
TEILLET	
TREVIEN	
VALDERIES	
VALENCE-D'ALBIGEOIS	
VENES	
LE VERDIER	
VIEUX	
VILLEFRANCHE-D'ALBIGEOIS	
VIRAC	

Member State: Italy

Area comprising:	Date until measures are to remain applicable in accordance with Article 3a
Region: Lombardia	
— Municipality of Acquafredda (Brescia) — Municipality of Alfianello (Brescia) — Municipality of Bassano Bresciano (Brescia) — Municipality of Borgo San Giacomo (Brescia) — Municipality of Calvisano (Brescia) — Municipality of Carpenedolo (Brescia) — Municipality of Cigole (Brescia) — Municipality of Desenzano del Garda (Brescia) South of A4 — Municipality of Fiesse (Brescia) — Municipality of Gambara (Brescia) — Municipality of Ghedi (Brescia) — Municipality of Gottolengo (Brescia) — Municipality of Isorella (Brescia) — Municipality of Leno (Brescia) East of A21 — Municipality of Lonato del Garda (Brescia) South of A4 — Municipality of Manerbio (Brescia) — Municipality of Milzano (Brescia) — Municipality of Montichiari (Brescia) — Municipality of Offlaga (Brescia) — Municipality of Orzinuovi (Brescia) — Municipality of Pavone del Mella (Brescia) — Municipality of Pontevico (Brescia) — Municipality of Pozzolengo (Brescia) South of A4 — Municipality of Pralboino (Brescia) — Municipality of Quinzano d'Oglio (Brescia) — Municipality of Remedello (Brescia) — Municipality of San Gervasio Bresciano (Brescia) — Municipality of San Paolo (Brescia) — Municipality of Seniga (Brescia) — Municipality of Verolanuova (Brescia) — Municipality of Verolavecchia (Brescia) — Municipality of Villachiara (Brescia) — Municipality of Visano (Brescia) — Municipality of Annicco (Cremona) — Municipality of Azzanello (Cremona) — Municipality of Bordolano (Cremona) — Municipality of Casalbuttano ed Uniti (Cremona) — Municipality of Casalmorano (Cremona) — Municipality of Castelverde (Cremona) — Municipality of Castelvisconti (Cremona) — Municipality of Corte de' Cortesi con Cignone (Cremona) — Municipality of Corte de' Frati (Cremona) — Municipality of Genivolta (Cremona) — Municipality of Olmeneta (Cremona) — Municipality of Paderno Ponchielli (Cremona) — Municipality of Pozzaglio ed Uniti (Cremona) — Municipality of Robecco d'Oglio (Cremona) — Municipality of Soresina (Cremona)	31.1.2023

— Municipality of Acquanegra sul Chiese (Mantova) — Municipality of Asola (Mantova) — Municipality of Canneto sull'Oglio (Mantova) — Municipality of Casalmoro (Mantova) — Municipality of Casaloldo (Mantova) — Municipality of Casalromano (Mantova) — Municipality of Castel Goffredo (Mantova) — Municipality of Castelbelforte (Mantova) — Municipality of Castellucchio (Mantova) North of SP64 ex SS10 — Municipality of Castiglione delle Stiviere (Mantova) — Municipality of Cavriana (Mantova) — Municipality of Ceresara (Mantova) — Municipality of Curtatone (Mantova) North of SP64 ex SS10 — Municipality of Gazoldo degli Ippoliti (Mantova) — Municipality of Goito (Mantova) — Municipality of Guidizzolo (Mantova) — Municipality of Mantova (Mantova) North of SP64 ex SS10 — Municipality of Marcaria (Mantova) North of SP64 ex SS10 — Municipality of Mariana Mantovana (Mantova) — Municipality of Marmirolo (Mantova) — Municipality of Medole (Mantova) — Municipality of Monzambano (Mantova) — Municipality of Piubega (Mantova) — Municipality of Ponti sul Mincio (Mantova) — Municipality of Porto Mantovano (Mantova) — Municipality of Redondesco (Mantova) — Municipality of Rodigo (Mantova) — Municipality of Roverbella (Mantova) — Municipality of San Giorgio Bigarello (Mantova) North of SP64 ex SS10 — Municipality of Solferino (Mantova) — Municipality of Volta Mantovana (Mantova)	
Region: Veneto	
— Municipality of Arquà Petrarca (Padova) — Municipality of Baone (Padova) — Municipality of Barbona (Padova) — Municipality of Borgo Veneto (Padova) — Municipality of Carceri (Padova) — Municipality of Casale di Scodosia (Padova) — Municipality of Castelbaldo (Padova) — Municipality of Cervarese Santa Croce (Padova) — Municipality of Cinto Euganeo (Padova) — Municipality of Este (Padova) — Municipality of Galzignano Terme (Padova) — Municipality of Granze (Padova) — Municipality of Lozzo Atestino (Padova) — Municipality of Masi (Padova) — Municipality of Megliadino San Vitale (Padova) — Municipality of Merlara (Padova) — Municipality of Mestrino (Padova) South of A4 — Municipality of Monselice (Padova) West of A13 — Municipality of Montagnana (Padova) — Municipality of Ospedaletto Euganeo (Padova) — Municipality of Piacenza d'Adige (Padova)	31.1.2023

— Municipality of Ponso (Padova) — Municipality of Pozzonovo (Padova) West of A13 — Municipality of Rovolon (Padova) — Municipality of Rubano (Padova) South of A4 — Municipality of Saccolongo (Padova) — Municipality of Sant'Elena (Padova) — Municipality of Sant'Urbano (Padova) — Municipality of Solesino (Padova) West of A13 — Municipality of Stanghella (Padova) West of A13 — Municipality of Teolo (Padova) — Municipality of Torreglia (Padova) — Municipality of Urbana (Padova) — Municipality of Veggiano (Padova) — Municipality of Vescovana (Padova) West of A13 — Municipality of Vighizzolo d'Este (Padova) — Municipality of Villa Estense (Padova) — Municipality of Villafranca Padovana (Padova) South of A4 — Municipality of Vo' (Padova) — Municipality of Albaredo d'Adige (Verona) — Municipality of Angiari (Verona) — Municipality of Arcole (Verona) — Municipality of Belfiore (Verona) — Municipality of Bevilacqua (Verona) — Municipality of Bonavigo (Verona) — Municipality of Boschi Sant'Anna (Verona) — Municipality of Bovolone (Verona) — Municipality of Buttapietra (Verona) — Municipality of Caldiero (Verona) South of A4 — Municipality of Casaleone (Verona) — Municipality of Castagnaro (Verona) — Municipality of Castel d'Azzano (Verona) — Municipality of Castelnuovo del Garda (Verona) South of A4 — Municipality of Cerea (Verona) — Municipality of Cologna Veneta (Verona) — Municipality of Colognola ai Colli (Verona) South of A4 — Municipality of Concamarise (Verona) — Municipality of Erbè (Verona) — Municipality of Gazzo Veronese (Verona) — Municipality of Isola della Scala (Verona) — Municipality of Isola Rizza (Verona) — Municipality of Lavagno (Verona) South of A4 — Municipality of Legnago (Verona) — Municipality of Minerbe (Verona) — Municipality of Monteforte d'Alpone (Verona) South of A4 — Municipality of Mozzecane (Verona) — Municipality of Nogara (Verona) — Municipality of Nogarole Rocca (Verona) — Municipality of Oppeano (Verona) — Municipality of Palù (Verona) — Municipality of Peschiera del Garda (Verona) South of A4 — Municipality of Povegliano Veronese (Verona) — Municipality of Pressana (Verona)	

— Municipality of Ronco all'Adige (Verona) — Municipality of Roverchiara (Verona) — Municipality of Roveredo di Guá (Verona) — Municipality of Salizzole (Verona) — Municipality of San Bonifacio (Verona) South of A4 — Municipality of San Giovanni Lupatoto (Verona) South of A4 — Municipality of San Martino Buon Albergo (Verona) South of A4 — Municipality of San Pietro di Morubio (Verona) — Municipality of Sanguinetto (Verona) — Municipality of Soave (Verona) South of A4 — Municipality of Sommacampagna (Verona) South of A4 — Municipality of Sona (Verona) South of A4 — Municipality of Sorgá (Verona) — Municipality of Terrazzo (Verona) — Municipality of Trevenzuolo (Verona) — Municipality of Valeggio sul Mincio (Verona) — Municipality of Verona (Verona) South of A4 — Municipality of Veronella (Verona) — Municipality of Vigasio (Verona) — Municipality of Villa Bartolomea (Verona) — Municipality of Villafranca di Verona (Verona) — Municipality of Zevio (Verona) — Municipality of Zimella (Verona) — Municipality of Agugliaro (Vicenza) — Municipality of Albettone (Vicenza) — Municipality of Alonte (Vicenza) — Municipality of Altavilla Vicentina (Vicenza) South of A4 — Municipality of Arcugnano (Vicenza) South of A4 — Municipality of Asigliano Veneto (Vicenza) — Municipality of Barbarano Mossano (Vicenza) — Municipality of Brendola (Vicenza) East of A4 — Municipality of Campiglia dei Berici (Vicenza) — Municipality of Castegnero (Vicenza) — Municipality of Gambellara (Vicenza) South of A4 — Municipality of Grisignano di Zocco (Vicenza) South of A4 — Municipality of Grumolo delle Abbadesse (Vicenza) South of A4 — Municipality of Longare (Vicenza) — Municipality of Lonigo (Vicenza) — Municipality of Montebello Vicentino (Vicenza) East of A4 — Municipality of Montecchio Maggiore (Vicenza) East of A4 — Municipality of Montegalda (Vicenza) — Municipality of Montegaldella (Vicenza) — Municipality of Nanto (Vicenza) — Municipality of Noventa Vicentina (Vicenza) — Municipality of Orgiano (Vicenza) — Municipality of Pojana Maggiore (Vicenza) — Municipality of Sarego (Vicenza) — Municipality of Sossano (Vicenza) — Municipality of Torri di Quartesolo (Vicenza) South of A4 — Municipality of Val Liona (Vicenza) — Municipality of Vicenza (Vicenza) South of A4 — Municipality of Villaga (Vicenza) — Municipality of Zovencedo (Vicenza)	

* In accordance with the Agreement on the withdrawal of the United Kingdom of Great Britain and Northern Ireland from the European Union and the European Atomic Energy Community, and in particular Article 5(4) of the Protocol on Ireland/Northern Ireland in conjunction with Annex 2 to that Protocol, for the purposes of this Annex, references to Member State include the United Kingdom in respect of Northern Ireland.'

COMMISSION DECISION (EU) 2022/2421

of 5 December 2022

on the consistency of the performance targets contained in the revised draft performance plan submitted by Greece pursuant to Regulation (EC) No 549/2004 of the European Parliament and of the Council with the Union-wide performance targets for the third reference period

(notified under document C(2022) 8733)

(Only the Greek text is authentic)

(Text with EEA relevance)

THE EUROPEAN COMMISSION,

Having regard to the Treaty on the Functioning of the European Union,

Having regard to Regulation (EC) No 549/2004 of the European Parliament and of the Council of 10 March 2004 laying down the framework for the creation of the single European sky (the framework Regulation) ([1]), and in particular Article 11(3) point (c), thereof,

Having regard to Commission Implementing Regulation (EU) 2019/317 of 11 February 2019 laying down a performance and charging scheme in the single European sky and repealing Implementing Regulations (EU) No 390/2013 and (EU) No 391/2013 ([2]), and in particular Article 15(2) thereof,

Whereas:

GENERAL CONSIDERATIONS

(1) Pursuant to Article 10 of Implementing Regulation (EU) 2019/317, Member States are to draw up performance plans, either at national level or at the level of functional airspace blocks ('FABs'), which have to include binding performance targets for each reference period of the performance scheme for air navigation services and network functions. Those performance targets have to be consistent with the Union-wide targets adopted by the Commission for the reference period concerned.

(2) Union-wide performance targets for the third reference period ('RP3') were originally set out in Commission Implementing Decision (EU) 2019/903 ([3]). Since those Union-wide performance targets and the draft RP3 performance plans subsequently submitted in October 2019 by Member States were drawn up before the outbreak of the COVID-19 pandemic in March 2020, they did not take account of the considerable reduction in air traffic due to the measures taken by the Member States and third countries to contain the pandemic.

(3) In response to the impact of the COVID-19 pandemic on the provision of air navigation services, exceptional measures for RP3, which derogate from the provisions of Implementing Regulation (EU) 2019/317, were set out in Commission Implementing Regulation (EU) 2020/1627 ([4]). The Commission adopted, on 2 June 2021, Commission Implementing Decision (EU) 2021/891 ([5]) setting revised Union-wide performance targets for RP3. On that basis, in October 2021, Member States submitted to the Commission draft performance plans containing revised local performance targets for RP3.

([1]) OJ L 96, 31.3.2004, p. 1.

([2]) OJ L 56, 25.2.2019, p. 1.

([3]) Commission Implementing Decision (EU) 2019/903 of 29 May 2019 setting the Union-wide performance targets for the air traffic management network for the third reference period starting on 1 January 2020 and ending on 31 December 2024 (OJ L 144, 3.6.2019, p. 49).

([4]) Commission Implementing Regulation (EU) 2020/1627 of 3 November 2020 on exceptional measures for the third reference period (2020-2024) of the single European sky performance and charging scheme due to COVID-19 pandemic (OJ L 366, 4.11.2020, p. 7).

([5]) Commission Implementing Decision (EU) 2021/891 of 2 June 2021 setting revised Union-wide performance targets for the air traffic management network for the third reference period (2020-2024) and repealing Implementing Decision (EU) 2019/903 (OJ L 195, 3.6.2021, p. 3).

(4) Commission Implementing Decision (EU) 2022/728 ([6]) was addressed to Belgium, Germany, Greece, France, Cyprus, Latvia, Luxembourg, Malta, the Netherlands, Romania, and Sweden. In that Decision, the Commission found that the *en route* cost-efficiency and capacity performance targets included in the draft performance plan for RP3 of the Hellenic Republic ('Greece') are not consistent with the Union-wide performance targets and issued recommendations for the revision of those targets.

(5) In response to Russia's war of aggression against Ukraine, which started on 24 February 2022, the Union has imposed restrictive measures which prohibit Russian air carriers, any Russian-registered aircraft and any non-Russian-registered aircraft which is owned or chartered, or otherwise controlled by any Russian natural or legal person, entity or body, from landing in and taking off from, or overflying the territory of the Union. Those restrictive measures and the counter-measures adopted by Russia have led to changes in air traffic in European airspace. Certain Member States have been severely affected by a significant reduction in the number of overflights in the airspace under their responsibility. However, at Union-wide level, the observed impact on the number of flights has been limited in contrast with the sharp reduction of air traffic across Europe which resulted from the outbreak of the COVID-19 pandemic.

(6) On 13 July 2022, Greece submitted a revised draft performance plan for RP3 (the 'revised draft performance plan').

(7) The performance review body, assisting the Commission in the implementation of the performance scheme pursuant to Article 11(2) of Regulation (EC) No 549/2004, has submitted to the Commission a report containing its advice on the assessment of the revised draft performance plan of Greece.

(8) In accordance with Article 15(1) of Implementing Regulation (EU) 2019/317, the Commission has assessed the consistency of the local performance targets included in the revised draft performance plan of Greece on the basis of the assessment criteria laid down in point 1 of Annex IV to that Regulation, and taking account of local circumstances. In respect of each key performance area and the related performance targets, the Commission has complemented its assessment by reviewing the elements set out in point 2 of Annex IV to Implementing Regulation (EU) 2019/317.

(9) The Eurocontrol Statistics and Forecast Service ('STATFOR') base traffic forecast published in June 2022 takes account of the change in circumstances with respect to air traffic in European airspace. On the basis of that forecast, the Commission notes that Greece is not foreseen to experience adverse changes in traffic over RP3 as a result of Russia's war in Ukraine.

COMMISSION ASSESSMENT

Assessment of performance targets in the key performance area of safety

(10) Concerning the key performance area of safety, the Commission has assessed the consistency of the targets submitted by Greece regarding the effectiveness of safety management of air navigation service providers ('ANSPs') in accordance with point 1.1 of Annex IV to Implementing Regulation (EU) 2019/317.

([6]) Commission Implementing Decision (EU) 2022/728 of 13 April 2022 on the inconsistency of certain performance targets contained in the draft national and functional airspace block performance plans submitted by Belgium, Germany, Greece, France, Cyprus, Latvia, Luxembourg, Malta, the Netherlands, Romania, and Sweden pursuant to Regulation (EC) No 549/2004 of the European Parliament and of the Council with the Union-wide performance targets for the third reference period and setting out recommendations for the revision of those targets (OJ L 135, 12.5.2022, p. 4).

(11) The local safety performance targets proposed by Greece in respect of the effectiveness of safety management, broken down per safety management objective and expressed as a level of implementation, are as follows:

Greece	**Targets on the effectiveness of safety management**, expressed as a level of implementation, ranging from European Union Aviation Safety Agency level A to D				
Air navigation service provider concerned	**Safety management objective**	**2022**	**2023**	**2024**	***Union-wide targets (2024)***
HASP	Safety policy and objectives	C	C	**C**	***C***
	Safety risk management	C	C	**D**	***D***
	Safety assurance	C	C	**C**	***C***
	Safety promotion	C	C	**C**	***C***
	Safety culture	C	C	**C**	***C***

(12) The safety performance targets proposed by Greece for the air navigation service provider, namely Hellenic Aviation Service Provider ('HASP'), are consistent with the Union-wide performance target.

(13) The Commission notes that the revised draft performance plan submitted by Greece sets out measures for HASP for the achievement of the local safety targets, including measures relating to the training of staff, the reporting and investigation of occurrences, the conduct of safety management system audits, safety surveys, and change management.

(14) Therefore, in the light of what has been said in recitals 11, 12 and 13 and considering that the Union-wide safety performance targets set in Implementing Decision (EU) 2021/891 are to be achieved by the final year of RP3, namely 2024, the targets in the key performance area of safety included in the revised draft performance plan of Greece should be considered consistent with the Union-wide performance targets.

Assessment of performance targets in the key performance area of environment

(15) Concerning the key performance area of environment, the consistency of the targets submitted by Greece regarding the average horizontal *en route* flight efficiency of the actual trajectory has been assessed in accordance with point 1.2 of Annex IV to Implementing Regulation (EU) 2019/317. Accordingly, the proposed targets included in the revised draft performance plan of Greece have been compared with the relevant *en route* horizontal flight efficiency reference values set out in the European Route Network Improvement Plan ('ERNIP') available on 2 June 2021, the date of adoption of the revised Union-wide performance targets for RP3.

(16) In respect of the year 2020, the Union-wide performance target for RP3 in the key performance area of environment, which was initially set out in Implementing Decision (EU) 2019/903, before the outbreak of the COVID-19 pandemic, was not revised by Implementing Decision (EU) 2021/891, in so far as the period for the application of that target had expired and that its implementation had thus become definitive leaving no possibility for retroactive adjustments. Similarly, it is not possible to modify retroactively, in the revised draft performance plans, the local environment performance targets for year 2021 set by Member States in the draft performance plans submitted in October 2021. Therefore, the consistency of the local environment performance targets with the corresponding Union-wide performance targets should be assessed with regard to the years 2022, 2023 and 2024.

(17) The performance targets in the key performance area of environment proposed by Greece and the corresponding national reference values for RP3 from the ERNIP, expressed as the average horizontal *en route* flight efficiency of the actual trajectory, are as follows:

Greece	2022	2023	2024
Targets in the key performance area of environment, expressed as the average horizontal *en route* flight efficiency of the actual trajectory	**1,92 %**	**1,92 %**	**1,92 %**
Reference values	1,92 %	1,92 %	1,92 %

(18) The Commission observes that the environment targets proposed by Greece are equal to the corresponding national reference values for each of the years 2022, 2023 and 2024.

(19) The Commission notes that, in its revised draft performance plan, Greece has presented measures for the achievement of the local environment targets which mainly fulfil already existing legal requirements under Union law and include a performance-based navigation transition plan, air traffic service route improvements and the implementation of a 24-hour free route airspace.

(20) Therefore, in the light of what has been said in recitals 17, 18 and 19, the targets the key performance area of environment included in the revised draft performance plan of Greece should be considered consistent with the Union-wide performance targets.

Assessment of revised performance targets in the key performance area of capacity

(21) In Implementing Decision (EU) 2022/728 the Commission concluded that the proposed *en route* capacity targets included in the draft performance plan of Greece submitted in 2021, regarding the average *en route* air traffic flow management ('ATFM') delay per flight, were inconsistent with the Union-wide performance targets. Greece has proposed revised *en route* capacity targets as part of its revised draft performance plan.

(22) In respect of the year 2020, the Union-wide performance target for RP3 in the key performance area of capacity, which was initially set out in Implementing Decision (EU) 2019/903, before the outbreak of the COVID-19 pandemic, was not revised by Implementing Decision (EU) 2021/891, in so far as the period for the application of that target had expired and its implementation had thus become definitive leaving no possibility for retroactive adjustments. Similarly, it is not possible to modify retroactively, in the revised draft performance plans, the local capacity performance targets for the year 2021 set by Member States in the draft performance plans submitted in October 2021. Therefore, the consistency of the local capacity performance targets with the corresponding Union-wide performance targets should be assessed with regard to the years 2022, 2023 and 2024.

(23) The following table sets out the initial RP3 draft *en route* capacity performance targets for the charging zone of Greece, as contained in the draft performance plan submitted in 2021, the revised performance targets included in the revised draft performance plan, and the corresponding reference values from the Network Operations Plan available on 2 June 2021, the time of adopting the revised Union-wide performance targets for RP3.

Greece	2022	2023	2024
Initial en route capacity targets (contained in the draft performance plan submitted in 2021), expressed in minutes of ATFM delay per flight	0,26	0,20	0,20
Revised *en route* capacity targets (contained in the revised draft performance plan), expressed in minutes of ATFM delay per flight	**0,14**	**0,15**	**0,15**
Reference values	0,14	0,15	0,15

(24) The consistency of the revised *en route* capacity targets submitted by Greece has been assessed in accordance with point 1.3 of Annex IV to Implementing Regulation (EU) 2019/317, by comparing those targets with the relevant reference values set out in the Network Operations Plan available on 2 June 2021. The Commission observes that the capacity targets proposed by Greece are equal to the corresponding national reference values for each of the years 2022, 2023 and 2024.

(25) The Commission notes that Greece has presented measures for the achievement of the local *en route* capacity targets in its revised draft performance plan. Those measures include an increase in the number of air traffic controller full time equivalents by the end of RP3, the introduction of a new ATM system and the implementation of 24-hour free route airspace.

(26) The Commission considers that Greece has adequately addressed the recommendations set out in Article 2 of Implementing Decision (EU) 2022/728 with regard to the revision of its capacity performance targets.

(27) Therefore, in the light of what has been said in recitals 23 to 26, the targets in the key performance area of capacity included in the revised draft performance plan of Greece should be considered consistent with the Union-wide performance targets.

Review of capacity targets for terminal air navigation services

(28) With regard to airports which fall within the scope of Implementing Regulation (EU) 2019/317, the Commission has complemented its assessment of *en route* capacity targets by reviewing the capacity targets for terminal air navigation services in accordance with point 2.1.(b) of Annex IV to Implementing Regulation (EU) 2019/317.

(29) In Implementing Decision (EU) 2022/728, the Commission raised concerns regarding the terminal capacity targets proposed by Greece in the draft performance plan submitted in 2021, and considered that Greece should further justify those targets or revise them downwards.

(30) The Commission found that the terminal capacity targets of Greece remain unchanged in the revised draft performance plan. However, the Commission notes that Greece has duly justified and substantiated those performance targets, including by providing additional information on capacity enhancement measures to improve arrival ATFM delay performance during RP3. Furthermore, Greece reports that it has initiated a close collaboration with the Network Manager to improve arrival ATFM performance at several airports, including the airport of Athens. Having regard to the justifications provided by Greece, the Commission does not have any further observations on the terminal capacity targets contained in its revised draft performance plan.

Assessment of revised performance targets in the key performance area of cost-efficiency

(31) By Implementing Decision (EU) 2022/728 the Commission concluded that the proposed *en route* cost-efficiency targets included in the draft performance plan of Greece submitted in 2021 were inconsistent with the Union-wide performance targets. Greece has proposed revised *en route* cost-efficiency targets as part of its revised draft performance plan.

(32) The following table sets out the initial RP3 *en route* cost-efficiency performance targets for the charging zone of Greece, as contained in the draft performance plan submitted in 2021, and the corresponding revised performance targets included in the revised draft performance plan submitted in 2022:

***En route* charging zone of Greece**	**2014 baseline value**	**2019 baseline value**	**2020 -2021**	**2022**	**2023**	**2024**
Initial en route cost-efficiency targets (contained in the draft performance plan submitted in 2021), expressed as determined en route unit cost (in real terms in 2017 prices)	*31,37 EUR*	*23,20 EUR*	*40,71 EUR*	*32,60 EUR*	*33,12 EUR*	*32,93 EUR*
Revised *en route* cost-efficiency targets (included in the revised draft performance plan), expressed as determined *en route* unit cost (in real terms in 2017 prices)	**31,37 EUR**	**23,20 EUR**	**40,71 EUR**	**27,86 EUR**	**26,96 EUR**	**27,98 EUR**

(33) The Commission observes that Greece has revised its local cost-efficiency targets for the years 2022, 2023 and 2024. Those targets result, when compared to the draft performance plan submitted in 2021, in an overall determined unit cost ('DUC') which is 16,1 % lower over 2022, 2023 and 2024 and 11,6 % lower over RP3 as a whole. Those DUC reductions result both from the updated traffic assumptions used in the revised draft performance plan for the years 2022, 2023 and 2024 and from the downward revision of the determined costs, expressed in real terms in 2017 prices, for the years 2022, 2023 and 2024.

(34) The Commission notes that the traffic forecast used in the revised draft performance plan is based on the Eurocontrol STATFOR June 2022 base traffic forecast. The changes to the traffic forecast for the years 2022, 2023 and 2024 are presented in the following table:

***En route* charging zone of Greece**	**2022**	**2023**	**2024**
Initial traffic forecast (contained in the draft performance plan submitted in 2021), expressed in thousands of en route service units	*5 445*	*5 888*	*6 140*
Updated traffic forecast (included in the revised draft performance plan), expressed in thousands of *en route* service units	**5 861**	**6 584**	**6 781**
Difference	**+ 7,6 %**	**+ 11,8 %**	**+ 10,4 %**

(35) The revised determined costs for the years 2022, 2023 and 2024, expressed in real terms in 2017 prices, are set out in the following table:

***En route* charging zone of Greece**	**2022**	**2023**	**2024**
Initial determined costs in real terms in 2017 prices (contained in the draft performance plan submitted in 2021)	*178 M EUR*	*195 M EUR*	*202 M EUR*
Revised determined costs in real terms in 2017 prices (included in the revised draft performance plan)	**163 M EUR**	**178 M EUR**	**190 M EUR**
Difference	**- 8,0 %**	**- 9,0 %**	**- 6,1 %**

(36) The revised draft performance plan comprises an updated inflation forecast for Greece for the years 2022, 2023 and 2024, as laid down in the following table:

***En route* charging zone of Greece**	**2022**	**2023**	**2024**
Initial inflation index, with forecasted year-on-year change in inflation in parenthesis (data contained in the draft performance plan submitted in 2021)	*102,3 (0,8 %)*	*103,3 (1,0 %)*	*104,9 (1,6 %)*
Revised inflation index, with year-on-year change in inflation in parenthesis (data included in the revised draft performance plan)	**106,5 (4,5 %)**	**107,9 (1,3 %)**	**109,7 (1,6 %)**

(37) Even though the updated inflation forecast is higher, the Commission observes that Greece revised downwards the nominal determined costs for the years 2022, 2023 and 2024, as follows;

***En route* charging zone of Greece**	**2022**	**2023**	**2024**
Initial determined costs in nominal terms (contained in the draft performance plan submitted in 2021)	*181 M EUR*	*200 M EUR*	*210 M EUR*
Revised determined costs in nominal terms (included in the revised draft performance plan)	**172 M EUR**	**189 M EUR**	**204 M EUR**
Difference	**- 4,8 %**	**- 5,5 %**	**- 2,6 %**

(38) The Commission has assessed the consistency of the revised cost-efficiency targets proposed by Greece in accordance with points 1.4(a), (b) and (c) of Annex IV to Implementing Regulation (EU) 2019/317.

(39) As regards point 1.4(a) of Annex IV to Implementing Regulation (EU) 2019/317, the Commission observes that the *en route* DUC trend at charging zone level of +4,8 % over RP3 underperforms the Union-wide trend of +1,0 % over the same period. The Commission notes that this, however, constitutes an improvement from the DUC trend of +9,1 % calculated on the basis of the draft performance plan of Greece submitted in 2021.

(40) As regards point 1.4(b) of Annex IV to Implementing Regulation (EU) 2019/317, the Commission observes that the long-term *en route* DUC trend at charging zone level over the second reference period ('RP2') and RP3 of -1,3 % meets the long-term Union-wide trend of -1,3 % over the same period. The Commission notes that this constitutes an improvement from the DUC trend of +0,5 % calculated on the basis of the draft performance plans submitted in 2021.

(41) As regards point 1.4(c) of Annex IV to Implementing Regulation (EU) 2019/317, the Commission observes that the EUR 23,20 baseline value for the DUC of Greece expressed in 2017 prices is 18,9 % lower than the EUR 28,59 average baseline value in EUR2017 of the relevant comparator group.

(42) As specified in recital 40, it is clear that Greece's revised cost-efficiency targets result in a long-term DUC trend over RP2 and RP3 which meets the corresponding Union-wide trend. Furthermore, the 2019 Greek baseline value is lower than the corresponding comparator group average by a considerable margin. Finally, the Commission notes that Greece has revised downwards the determined costs for RP3 both in real and nominal terms, whilst planning to serve additional traffic on the basis of the updated traffic forecast for RP3. Therefore, the Commission considers that, in respect of Greece, the deviation from the Union-wide RP3 DUC trend does not preclude the cost-efficiency performance targets from being consistent with the Union-wide cost-efficiency performance targets.

(43) The Commission therefore notes that Greece has adequately addressed the recommendations set out in Article 3 of Implementing Decision (EU) 2022/728.

(44) Therefore, in the light of what has been said in recitals 32 to 43, the targets in the key performance area of cost-efficiency included in the revised draft performance plan of Greece should be considered consistent with the Union-wide performance targets.

Review of revised cost-efficiency targets for terminal air navigation services

(45) With regard to airports which fall within the scope of Implementing Regulation (EU) 2019/317 as set out in Articles 1(3) and (4) of that Regulation, the Commission has complemented its assessment of the *en route* cost-efficiency targets by reviewing the cost-efficiency targets for terminal air navigation services in accordance with point 2.1(c) of Annex IV to Implementing Regulation (EU) 2019/317.

(46) In Implementing Decision (EU) 2022/728, the Commission raised concerns regarding the terminal cost-efficiency targets proposed by Greece in the draft performance plan submitted in 2021, and considered that Greece was to further justify those targets or revise them downwards. The Commission notes that Greece has revised those targets downwards for the years 2022 and 2023 and upwards for the year 2024, without providing due justifications.

(47) The Commission observes that the terminal DUC trend of Greece of +7,7 % over RP3 remains higher than the actual terminal DUC trend of -3,9 % observed over RP2. Furthermore, the terminal RP3 DUC trend has worsened and is higher than the terminal DUC trend of +6,8 % observed in the draft performance plan of Greece submitted in 2021.

(48) Therefore, in the light of what has been said in recitals 46 and 47, the Commission concludes that the revised terminal cost-efficiency performance targets of Greece continue to give rise to concerns. The Commission therefore reiterates its view that Greece should revise downwards those targets or provide adequate justifications for those targets, including for the additional cost increases applied in the year 2024. The Commission invites Greece to address those concerns in connection with the adoption of its final performance plan in accordance with Article 16, point (a) of Implementing Regulation (EU) 2019/317.

Review of the incentive schemes referred to in Article 11 of Implementing Regulation (EU) 2019/317 complementing the Commission's assessment of capacity targets

(49) In accordance with point 2.1(f) of Annex IV to Implementing Regulation (EU) 2019/317, the Commission has complemented its assessment of capacity targets by reviewing the incentive schemes referred to in Article 11 of Implementing Regulation (EU) 2019/317. In that respect, the Commission has examined whether the proposed incentive schemes fulfil the substantive requirements set out in Article 11(1) and (3) of Implementing Regulation (EU) 2019/317.

(50) In Implementing Decision (EU) 2022/728, the Commission concluded that Greece is to revise its incentive schemes for achieving *en route* and terminal capacity targets in such a way that the maximum financial disadvantage stemming from those incentive schemes is set at a level having a material impact on the revenue at risk. The Commission notes that Greece has revised its incentive schemes for achieving *en route* and terminal capacity targets by setting the resulting maximum financial disadvantage at a level equal to 2 % and 1,5 % of determined costs respectively. That revision duly addresses the findings raised by the Commission in Implementing Decision (EU) 2022/728. The Commission does not have any further observations on the incentive schemes included in the revised draft performance plan of Greece.

CONCLUSIONS

(51) In the light of all the foregoing, the Commission finds that the performance targets included in the revised draft performance plan submitted by Greece are consistent with the Union-wide performance targets,

HAS ADOPTED THIS DECISION:

Article 1

The performance targets included in the revised draft performance plan submitted by Greece pursuant to Regulation (EC) No 549/2004, and listed in the Annex to this Decision, are consistent with the Union-wide performance targets for the third reference period set out in Implementing Decision (EU) 2021/891.

Article 2

This Decision is addressed to the Hellenic Republic.

Done at Brussels, 5 December 2022.

For the Commission
Adina VĂLEAN
Member of the Commission

ANNEX

Performance targets included in the revised draft performance plan submitted by Greece pursuant to Regulation (EC) No 549/2004, found to be consistent with the Union-wide performance targets for the third reference period

KEY PERFORMANCE AREA OF SAFETY

Effectiveness of safety management

Greece	**Targets on the effectiveness of safety management, expressed as a level of implementation**, ranging from EASA level A to D			
Air navigation service provider concerned	**Safety management objective**	**2022**	**2023**	**2024**
HASP	Safety policy and objectives	C	C	**C**
	Safety risk management	C	C	**D**
	Safety assurance	C	C	**C**
	Safety promotion	C	C	**C**
	Safety culture	C	C	**C**

KEY PERFORMANCE AREA OF ENVIRONMENT

Average horizontal *en route* flight efficiency of the actual trajectory

Greece	**2022**	**2023**	**2024**
Targets in the key performance area of environment, expressed as the average horizontal *en route* flight efficiency of the actual trajectory	**1,92 %**	**1,92 %**	**1,92 %**

KEY PERFORMANCE AREA OF CAPACITY

Average *en route* ATFM delay in minutes per flight

Greece	**2022**	**2023**	**2024**
Revised *en route* capacity targets, expressed in minutes of ATFM delay per flight	**0,14**	**0,15**	**0,15**

KEY PERFORMANCE AREA OF COST-EFFICIENCY

Determined unit cost for *en route* air navigation services

***En route* charging zone of Greece**	**2014 baseline value**	**2019 baseline value**	**2020-2021**	**2022**	**2023**	**2024**
Revised *en route* cost-efficiency targets, expressed as determined *en route* unit cost (in real terms in 2017 prices)	**31,37 EUR**	**23,20 EUR**	**40,71 EUR**	**27,86 EUR**	**26,96 EUR**	**27,98 EUR**

COMMISSION DECISION (EU) 2022/2422

of 5 December 2022

on the consistency of the performance targets contained in the revised draft performance plan submitted by Cyprus pursuant to Regulation (EC) No 549/2004 of the European Parliament and of the Council with the Union-wide performance targets for the third reference period

(notified under document C(2022) 8719)

(Only the Greek text is authentic)

(Text with EEA relevance)

THE EUROPEAN COMMISSION,

Having regard to the Treaty on the Functioning of the European Union,

Having regard to Regulation (EC) No 549/2004 of the European Parliament and of the Council of 10 March 2004 laying down the framework for the creation of the single European sky (the framework Regulation) ([1]), and in particular Article 11(3) point (c), thereof,

Having regard to Commission Implementing Regulation (EU) 2019/317 of 11 February 2019 laying down a performance and charging scheme in the single European sky and repealing Implementing Regulations (EU) No 390/2013 and (EU) No 391/2013 ([2]), and in particular Article 15(2) thereof,

Whereas:

GENERAL CONSIDERATIONS

(1) Pursuant to Article 10 of Implementing Regulation (EU) 2019/317, Member States are to draw up performance plans, either at national level or at the level of functional airspace blocks ('FABs'), which have to include binding performance targets for each reference period of the performance scheme for air navigation services and network functions. Those performance targets have to be consistent with the Union-wide targets adopted by the Commission for the reference period concerned.

(2) Union-wide performance targets for the third reference period ('RP3') were originally set out in Commission Implementing Decision (EU) 2019/903 ([3]). As those Union-wide performance targets and the draft RP3 performance plans subsequently submitted in October 2019 by Member States were drawn up before the outbreak of the COVID-19 pandemic in March 2020, they did not take account of the considerable reduction in air traffic due to the measures taken by the Member States and third countries to contain the pandemic.

(3) In response to the impact of the COVID-19 pandemic on the provision of air navigation services, exceptional measures for RP3, which derogate from the provisions of Implementing Regulation (EU) 2019/317, were set out in Commission Implementing Regulation (EU) 2020/1627 ([4]). The Commission adopted, on 2 June 2021, Implementing Decision (EU) 2021/891 ([5]) setting revised Union-wide performance targets for RP3. On this basis, Member States submitted to the Commission, in October 2021, draft performance plans containing revised local performance targets for RP3.

([1]) OJ L 96, 31.3.2004, p. 1.

([2]) OJ L 56, 25.2.2019, p. 1.

([3]) Commission Implementing Decision (EU) 2019/903 of 29 May 2019 setting the Union-wide performance targets for the air traffic management network for the third reference period starting on 1 January 2020 and ending on 31 December 2024 (OJ L 144, 3.6.2019, p. 49).

([4]) Commission Implementing Regulation (EU) 2020/1627 of 3 November 2020 on exceptional measures for the third reference period (2020-2024) of the single European sky performance and charging scheme due to COVID-19 pandemic (OJ L 366, 4.11.2020, p. 7).

([5]) Commission Implementing Decision (EU) 2021/891 of 2 June 2021 setting revised Union-wide performance targets for the air traffic management network for the third reference period (2020-2024) and repealing Implementing Decision (EU) 2019/903 (OJ L 195, 3.6.2021, p. 3).

(4) Commission Implementing Decision (EU) 2022/728 ([6]) was addressed to Belgium, Germany, Greece, France, Cyprus, Latvia, Luxembourg, Malta, the Netherlands, Romania, and Sweden. In respect of the draft performance plan for RP3 of Cyprus, the Commission found that the *en route* capacity and cost-efficiency performance targets are not consistent with the Union-wide performance targets and issued recommendations for the revision of those targets.

(5) In response to Russia's war of aggression against Ukraine, which started on 24 February 2022, the Union has imposed restrictive measures which prohibit Russian air carriers, any Russian-registered aircraft and any non-Russian-registered aircraft which is owned or chartered, or otherwise controlled by any Russian natural or legal person, entity or body, from landing in and taking off from, or overflying the territory of the Union. Those restrictive measures and the counter-measures adopted by Russia have led to changes in air traffic in European airspace. Certain Member States have been severely affected by a significant reduction in the number of overflights in the airspace under their responsibility. However, at Union-wide level, the observed impact on the number of flights has been limited in contrast with the sharp reduction of air traffic across Europe which resulted from the outbreak of the COVID-19 pandemic.

(6) Cyprus submitted, on 13 July 2022, a revised draft performance plan for RP3 (the 'revised draft performance plan') for assessment to the Commission.

(7) The performance review body, assisting the Commission in the implementation of the performance scheme pursuant to Article 11(2) of Regulation (EC) No 549/2004, has submitted to the Commission a report containing its advice on the assessment of the revised draft performance plan.

(8) Pursuant to Article 15(1) of Implementing Regulation (EU) 2019/317, the Commission has assessed the consistency of the local performance targets contained in the revised performance plan on the basis of the assessment criteria laid down in point 1 of Annex IV to Implementing Regulation (EU) 2019/317, and taking account of local circumstances. In respect of each key performance area and the related performance targets, the Commission has complemented its assessment by reviewing the elements set out in point 2 of Annex IV to Implementing Regulation (EU) 2019/317.

(9) The Eurocontrol Statistics and Forecast Service ('STATFOR') base traffic forecast published in June 2022 takes account of the changed circumstances referred to in recital (5). Based on that forecast, the Commission notes that Cyprus is not foreseen to experience adverse changes in traffic over RP3 as a result of Russia's war in Ukraine.

(10) As Cyprus does not have any airport falling within the scope of Implementing Regulation (EU) 2019/317 in respect of RP3, there are no local performance targets for terminal air navigation services as part of its revised draft performance plan. Therefore, the findings contained in this Decision relate solely to *en route* air navigation services.

COMMISSION ASSESSMENT

Assessment of performance targets in the key performance area of safety

(11) Concerning the key performance area of safety, the Commission has assessed the consistency of the targets submitted by Cyprus regarding the effectiveness of safety management of air navigation service providers ('ANSPs') based on the criterion laid down in point 1.1 of Annex IV to Implementing Regulation (EU) 2019/317.

([6]) Commission Implementing Decision (EU) 2022/728 of 13 April 2022 on the inconsistency of certain performance targets contained in the draft national and functional airspace block performance plans submitted by Belgium, Germany, Greece, France, Cyprus, Latvia, Luxembourg, Malta, the Netherlands, Romania, and Sweden pursuant to Regulation (EC) No 549/2004 of the European Parliament and of the Council with the Union-wide performance targets for the third reference period and setting out recommendations for the revision of those targets (OJ L 135, 12.5.2022, p. 4).

(12) The local safety performance targets proposed by Cyprus in respect of the effectiveness of safety management, broken down per safety management objective and expressed as a level of implementation, are as follows:

Cyprus	**Targets on the effectiveness of safety management, expressed as a level of implementation**, ranging from European Union Aviation Safety Agency level A to D				
Air navigation service provider concerned	**Safety management objective**	**2022**	**2023**	**2024**	***Union-wide targets (2024)***
CYATS	Safety policy and objectives	C	C	**C**	***C***
	Safety risk management	D	D	**D**	***D***
	Safety assurance	C	C	**C**	***C***
	Safety promotion	C	C	**C**	***C***
	Safety culture	C	C	**C**	***C***

(13) The safety performance targets proposed by Cyprus for the air navigation service provider, namely CYPRUS Air Navigation Services ('CYATS'), are in line with the Union-wide performance targets for each year of the reference period.

(14) The Commission notes that the revised draft performance sets out measures for CYATS for the achievement of the local safety targets, such as the review and update of change management processes, guidelines on just culture policies, and additional staff for the purpose of supporting the realisation of safety objectives.

(15) On the basis of the findings set out in recitals (12) to (14), and considering that the Union-wide safety performance targets set in Implementing Decision (EU) 2021/891 must be achieved by the final year of RP3, namely 2024, the targets included in the revised draft performance plan should be considered consistent with the Union-wide performance targets in the key performance area of safety.

Assessment of performance targets in the key performance area of environment

(16) Concerning the key performance area of environment, the consistency of the targets submitted by Cyprus regarding the average horizontal *en route* flight efficiency of the actual trajectory has been assessed based on the criterion laid down in point 1.2 of Annex IV to Implementing Regulation (EU) 2019/317. Accordingly, the proposed targets contained in the revised draft performance plan have been compared with the relevant *en route* horizontal flight efficiency reference values set out in the European Route Network Improvement Plan ('ERNIP') available at the time of adopting the revised Union-wide performance targets for RP3, that is on 2 June 2021.

(17) In respect of the 2020 calendar year, the Union-wide performance target for RP3 in the key performance area of environment, which was initially set out in Implementing Decision (EU) 2019/903, before the outbreak of the COVID-19 pandemic, was not revised by Implementing Decision (EU) 2021/891, considering that the period for the application of that target had expired and that its implementation had thus become definitive leaving no possibility for retroactive adjustments. Similarly, the local environment performance targets for 2021 set by Member States in the draft performance plans submitted in October 2021 could not be retroactively modified in the revised draft performance plans. Therefore, the consistency of the local environment performance targets with the corresponding Union-wide performance targets should be assessed with regard to the 2022, 2023 and 2024 calendar years.

(18) The performance targets in the key performance area of environment proposed by Cyprus and the corresponding national reference values for RP3 from the ERNIP, expressed as the average horizontal *en route* flight efficiency of the actual trajectory, are as follows:

Cyprus	2022	2023	2024
Targets in the key performance area of environment, expressed as the average horizontal *en route* flight efficiency of the actual trajectory	**3,84 %**	**3,84 %**	**3,84 %**
Reference values	3,84 %	3,84 %	3,84 %

(19) The Commission observes that the environment targets proposed by Cyprus are equal to the corresponding national reference values for the 2022, 2023 and 2024 calendar years.

(20) The Commission notes that Cyprus has presented, in the revised draft performance plan, measures for the achievement of the local environment performance targets, which mainly fulfil already existing legal requirements under Union law and include a performance-based navigation transition plan by 2024, the implementation of Free Route Airspace Cyprus ('NICFRA') Phase 1 in March 2023 between flight levels 205 and 660, as well as continued improvements of the route network within the Nicosia flight information region.

(21) On the basis of the findings set out in recitals (18), (19) and (20), the targets included in the revised draft performance plan should be considered consistent with the Union-wide performance targets in the key performance area of environment.

Assessment of revised performance targets in the key performance area of capacity

(22) The Commission concluded in Implementing Decision (EU) 2022/728 that the proposed *en route* capacity targets included in the draft performance plan submitted in 2021, regarding the average *en route* air traffic flow management ('ATFM') delay per flight, were inconsistent with the Union-wide performance targets. Cyprus has proposed revised *en route* capacity targets as part of its revised draft performance plan.

(23) In respect of the 2020 calendar year, the Union-wide performance target for RP3 in the key performance area of capacity, which was initially set out in Implementing Decision (EU) 2019/903, before the outbreak of the COVID-19 pandemic, was not revised by Implementing Decision (EU) 2021/891, considering that the period for the application of that target had expired and that its implementation had thus become definitive leaving no possibility for retroactive adjustments. Similarly, the local capacity performance targets for 2021 set by Member States in the draft performance plans submitted in October 2021 could not be retroactively modified in the revised draft performance plans. Therefore, the consistency of the local capacity performance targets with the corresponding Union-wide performance targets should be assessed with regard to the 2022, 2023 and 2024 calendar years.

(24) The table below shows the initial RP3 draft *en route* capacity performance targets for the charging zone of Cyprus, as contained in the draft performance plan submitted in 2021, the revised performance targets contained in the revised draft performance plan, and the corresponding reference values from the Network Operations Plan available at the time of adopting the revised Union-wide performance targets for RP3, that is on 2 June 2021.

Cyprus	2022	2023	2024
Initial en route capacity targets (contained in the draft performance plan submitted in 2021), expressed in minutes of ATFM delay per flight	*0,30*	*0,40*	*0,30*
Revised *en route* capacity targets (contained in the revised draft performance plan), expressed in minutes of ATFM delay per flight	**0,16**	**0,15**	**0,15**
Reference values	0,16	0,15	0,15

(25) The consistency of the revised *en route* capacity targets submitted by Cyprus has been assessed based on the criterion laid down in point 1.3 of Annex IV to Implementing Regulation (EU) 2019/317, by comparing those targets with the relevant reference values set out in the Network Operations Plan available on 2 June 2021. The Commission observes that the capacity targets proposed by Cyprus are equal to the corresponding national reference values for the 2022, 2023 and 2024 calendar years.

(26) The Commission notes that Cyprus has presented in the revised draft performance plan measures for the achievement of the local *en route* capacity targets. Those measures include the recruitment of new air traffic controllers ('ATCOs') enabling an increase of the number of ATCO full-time equivalents in service at the area control centre. In particular, Cyprus reports in the revised draft performance plan that an agreement with staff representative bodies was reached in December 2021 in order to improve ATCO training and increase flexibility of ATCO working time. The Commission also observes that Cyprus has revised its initial planning of ATCOs in operations for the 2022 and 2023 calendar years, resulting in an additional 4 FTEs planned for those two calendar years. In addition, the revised draft performance plan foresees major investments in the upgrade of ATM infrastructure to enable the operation of additional air traffic control sectors, the implementation of an operational excellence program in cooperation with the Network Manager, airspace restructuring measures and measures to improve air traffic flow and capacity management.

(27) The Commission observes that, in comparison with the draft performance plan submitted in 2021, Cyprus has presented additional relevant capacity enhancement measures which are also recommended in the Network Operations Plan of September 2021.

(28) Having regard to the foregoing observations, the Commission considers that Cyprus has adequately addressed the recommendations set out in Article 2 of Implementing Decision (EU) 2022/728 with regard to the revision of its capacity performance targets.

(29) On the basis of the findings set out in recitals (24) to (28), the targets included in the revised draft performance plan should be considered consistent with the Union-wide performance targets in the key performance area of capacity.

Assessment of revised performance targets in the key performance area of cost-efficiency

(30) The Commission concluded in Implementing Decision (EU) 2022/728 that the proposed *en route* cost-efficiency targets included in the draft performance plan submitted in 2021 were inconsistent with the Union-wide performance targets. Cyprus has proposed revised *en route* cost-efficiency targets as part of its revised draft performance plan.

(31) The table below shows the initial RP3 *en route* cost-efficiency performance targets for the charging zone of Cyprus, as contained in the draft performance plan submitted in 2021, and the corresponding revised performance targets contained in the revised draft performance plan submitted in 2022.

***En route* charging zone of Cyprus**	**2014 baseline value**	**2019 baseline value**	**2020 - 2021**	**2022**	**2023**	**2024**
Initial en route cost-efficiency targets (contained in the draft performance plan submitted in 2021), expressed as determined en route unit cost (in real terms in 2017 prices)	*32,94 EUR*	*26,61 EUR*	*49,85 EUR*	*34,14 EUR*	*32,52 EUR*	*32,26 EUR*
Revised *en route* cost-efficiency targets (contained in the revised draft performance plan), expressed as determined *en route* unit cost (in real terms in 2017 prices)	**32,94 EUR**	**26,61 EUR**	**49,85 EUR**	**30,92 EUR**	**29,35 EUR**	**29,11 EUR**

(32) The Commission observes that Cyprus has revised its local cost-efficiency targets for the time period from 2022 to 2024, which results, in comparison with the draft performance plan submitted in 2021, in an overall determined unit cost ('DUC') lower by 9,7 % over those calendar years and lower by 6,6 % over RP3 as a whole. Those DUC reductions result both from the higher traffic forecast used in the revised draft performance plan for the 2022, 2023 and 2024 calendar years and from the downward revision of the determined costs expressed in real terms in 2017 prices for those calendar years.

(33) The changes to the traffic forecast for the 2022, 2023 and 2024 calendar years are presented in the table below. The Commission notes that the traffic forecast used in the revised draft performance plan is based on the Eurocontrol STATFOR June 2022 base traffic forecast.

***En route* charging zone of Cyprus**	**2022**	**2023**	**2024**
Initial traffic forecast (contained in the draft performance plan submitted in 2021), expressed in thousands of en route service units	*1 789*	*2 083*	*2 169*
Updated traffic forecast (contained in the revised draft performance plan), expressed in thousands of *en route* service units	**1 837**	**2 129**	**2 235**
Difference	**+ 2,7 %**	**+ 2,2 %**	**+ 3,0 %**

(34) The revised determined costs for the 2022, 2023 and 2024 calendar years, expressed in real terms in 2017 prices, are shown in the table below.

***En route* charging zone of Cyprus**	**2022**	**2023**	**2024**
Initial determined costs in real terms in 2017 prices (contained in the draft performance plan submitted in 2021)	*61 M EUR*	*68 M EUR*	*70 M EUR*
Revised determined costs in real terms in 2017 prices (contained in the revised draft performance plan)	**57 M EUR**	**62 M EUR**	**65 M EUR**
Difference	**- 7,0 %**	**- 7,8 %**	**- 7,0 %**

(35) The revised draft performance plan comprises an updated inflation forecast for Cyprus for the 2022, 2023 and 2024 calendar years , as outlined in the following table.

***En route* charging zone of Cyprus**	**2022**	**2023**	**2024**
Initial inflation index, with forecasted year-on-year change in inflation in parenthesis (data contained in the draft performance plan submitted in 2021)	*102,6 (0,8 %)*	*103,8 (1,2 %)*	*105,3 (1,4 %)*
Revised inflation index, with year-on-year change in inflation in parenthesis (data contained in the revised draft performance plan)	**109,1 (5,3 %)**	**111,6 (2,3 %)**	**113,9 (2,0 %)**

(36) The Commission observes that the determined costs in nominal terms of Cyprus for the 2022, 2023 and 2024 calendar years are lower than in the draft performance plan submitted in 2021, despite an upward revision of the inflation forecast.

***En route* charging zone of Cyprus**	**2022**	**2023**	**2024**
Initial determined costs in nominal terms (contained in the draft performance plan submitted in 2021)	*62 M EUR*	*69 M EUR*	*72 M EUR*
Revised determined costs in nominal terms (contained in the revised draft performance plan)	**60 M EUR**	**67 M EUR**	**71 M EUR**
Difference	**- 3,1 %**	**- 3,2 %**	**- 2,1 %**

(37) The Commission has assessed the consistency of the revised cost-efficiency targets proposed by Cyprus based on the criteria laid down in points 1.4(a), (b) and (c) of Annex IV to Implementing Regulation (EU) 2019/317.

(38) Concerning the criterion laid down in point 1.4(a) of Annex IV to Implementing Regulation (EU) 2019/317, the Commission observes that the *en route* DUC trend at charging zone level of +2,3 % over RP3 underperforms the Union-wide trend of +1,0 % over the same period. The Commission notes that this however constitutes an improvement from the DUC trend of +4,9 % calculated on the basis of the draft performance plans submitted in 2021.

(39) Concerning the criterion laid down in point 1.4(b) of Annex IV to Implementing Regulation (EU) 2019/317, the Commission observes that the long-term *en route* DUC trend at charging zone level over RP2 and RP3 of -1,4 % outperforms the long-term Union-wide trend of -1,3 % over the same period. The Commission notes that this constitutes an improvement from the long-term DUC trend of -0,2 % calculated on the basis of the draft performance plan submitted in 2021.

(40) Concerning the criterion laid down in point 1.4(c) of Annex IV to Implementing Regulation (EU) 2019/317, the Commission observes that the baseline value for the DUC of EUR 26,61 of Cyprus, expressed in 2017 prices, is 4,7 % lower than the average baseline value of EUR 27,91, expressed in 2017 prices, of the relevant comparator group.

(41) As specified in recital (39), Cyprus's revised cost-efficiency targets result in a long-term DUC trend which outperforms the corresponding Union-wide trend. Furthermore, Cyprus's revised DUC for 2024 is lower than the baseline value for 2014, which demonstrates a reduction of the DUC over RP2 and RP3. With reference to recital (40), Cyprus demonstrates a good cost-efficiency performance in respect of the baseline value for 2019, which is lower than the corresponding comparator group average. Finally, the Commission notes that Cyprus has reduced, in its revised draft performance plan, the determined costs for RP3 both in real and nominal terms, whilst planning to serve additional traffic on the basis of the updated traffic forecast for RP3. Therefore, the Commission considers that the deviation from the Union-wide RP3 DUC trend referred to in recital (38) does not preclude the establishment of consistency with the Union-wide cost-efficiency performance targets in respect of Cyprus.

(42) The Commission therefore considers that Cyprus has adequately addressed the recommendations set out in Article 3 of Implementing Decision (EU) 2022/728 with regard to the revision of its cost-efficiency performance targets.

(43) On the basis of the findings set out in recitals (31) to (42), the targets included in the revised draft performance plan should be considered consistent with the Union-wide performance targets in the key performance area of cost-efficiency.

CONCLUSIONS

(44) In the light of all the foregoing, the Commission has found that the performance targets contained in the revised draft performance plan are consistent with the Union-wide performance targets,

HAS ADOPTED THIS DECISION:

Article 1

The performance targets contained in the revised draft performance plan submitted by Cyprus, pursuant to Regulation (EC) No 549/2004, and listed in the Annex to this Decision, are consistent with the Union-wide performance targets for the third reference period set out in Implementing Decision (EU) 2021/891.

Article 2

This Decision is addressed to the Republic of Cyprus.

Done at Brussels, 5 December 2022.

For the Commission
Adina-Ioana VĂLEAN
Member of the Commission

ANNEX

Performance targets included in the revised draft performance plan submitted by Cyprus pursuant to Regulation (EC) No 549/2004, found to be consistent with the Union-wide performance targets for the third reference period

KEY PERFORMANCE AREA OF SAFETY

Effectiveness of safety management

Cyprus	**Targets on the effectiveness of safety management, expressed as a level of implementation**, ranging from EASA level A to D			
Air navigation service provider concerned	**Safety management objective**	**2022**	**2023**	**2024**
CYATS	Safety policy and objectives	C	C	**C**
	Safety risk management	D	D	**D**
	Safety assurance	C	C	**C**
	Safety promotion	C	C	**C**
	Safety culture	C	C	**C**

KEY PERFORMANCE AREA OF ENVIRONMENT

Average horizontal *en route* flight efficiency of the actual trajectory

Cyprus	**2022**	**2023**	**2024**
Targets in the key performance area of environment, expressed as the average horizontal *en route* flight efficiency of the actual trajectory	**3,84 %**	**3,84 %**	**3,84 %**

KEY PERFORMANCE AREA OF CAPACITY

Average *en route* ATFM delay in minutes per flight

Cyprus	**2022**	**2023**	**2024**
Revised *en route* capacity targets, expressed in minutes of ATFM delay per flight	**0,16**	**0,15**	**0,15**

KEY PERFORMANCE AREA OF COST-EFFICIENCY

Determined unit cost for *en route* air navigation services

***En route* charging zone of Cyprus**	**2014 baseline value**	**2019 baseline value**	**2020 -2021**	**2022**	**2023**	**2024**
Revised *en route* cost-efficiency targets, expressed as determined *en route* unit cost (in real terms in 2017 prices)	**32,94 EUR**	**26,61 EUR**	**49,85 EUR**	**30,92 EUR**	**29,35 EUR**	**29,11 EUR**

COMMISSION DECISION (EU) 2022/2423

of 5 December 2022

on the consistency of the performance targets contained in the revised draft performance plan submitted by Sweden pursuant to Regulation (EC) No 549/2004 of the European Parliament and of the Council with the Union-wide performance targets for the third reference period

(notified under document C(2022) 8716)

(Only the Swedish text is authentic)

(Text with EEA relevance)

THE EUROPEAN COMMISSION,

Having regard to the Treaty on the Functioning of the European Union,

Having regard to Regulation (EC) No 549/2004 of the European Parliament and of the Council of 10 March 2004 laying down the framework for the creation of the single European sky (the framework Regulation) ([1]), and in particular Article 11(3), point (c) thereof,

Having regard to Commission Implementing Regulation (EU) 2019/317 of 11 February 2019 laying down a performance and charging scheme in the single European sky and repealing Implementing Regulations (EU) No 390/2013 and (EU) No 391/2013 ([2]), and in particular Article 15(2) thereof,

Whereas:

GENERAL CONSIDERATIONS

(1) Pursuant to Article 10 of Implementing Regulation (EU) 2019/317, Member States are to draw up performance plans, either at national level or at the level of functional airspace blocks ('FABs') which have to include binding performance targets for each reference period of the performance scheme for air navigation services and network functions. Those performance targets have to be consistent with the Union-wide targets adopted by the Commission for the reference period concerned.

(2) Union-wide performance targets for the third reference period ('RP3') were originally set out in Commission Implementing Decision (EU) 2019/903 ([3]). Since those Union-wide performance targets and the draft RP3 performance plans subsequently submitted in October 2019 by Member States were drawn up before the outbreak of the COVID-19 pandemic in March 2020, they did not take account of the considerable reduction in air traffic due to the measures taken by the Member States and third countries to contain the pandemic.

(3) In response to the impact of the COVID-19 pandemic on the provision of air navigation services, exceptional measures for RP3, which derogate from the provisions of Implementing Regulation (EU) 2019/317, were set out in Commission Implementing Regulation (EU) 2020/1627 ([4]). The Commission adopted, on 2 June 2021, Implementing Decision (EU) 2021/891 ([5]) setting revised Union-wide performance targets for RP3. On that basis, in October 2021, Member States submitted to the Commission draft performance plans containing revised local performance targets for RP3.

([1]) OJ L 96, 31.3.2004, p. 1.
([2]) OJ L 56, 25.2.2019, p. 1.
([3]) Commission Implementing Decision (EU) 2019/903 of 29 May 2019 setting the Union-wide performance targets for the air traffic management network for the third reference period starting on 1 January 2020 and ending on 31 December 2024 (OJ L 144, 3.6.2019, p. 49).
([4]) Commission Implementing Regulation (EU) 2020/1627 of 3 November 2020 on exceptional measures for the third reference period (2020-2024) of the single European sky performance and charging scheme due to the COVID-19 pandemic (OJ L 366, 4.11.2020, p. 7).
([5]) Commission Implementing Decision (EU) 2021/891 of 2 June 2021 setting revised Union-wide performance targets for the air traffic management network for the third reference period (2020-2024) and repealing Implementing Decision (EU) 2019/903 (OJ L 195, 3.6.2021, p. 3).

(4) Commission Implementing Decision (EU) 2022/728 ([6]) was addressed to Belgium, Germany, Greece, France, Cyprus, Latvia, Luxembourg, Malta, the Netherlands, Romania, and Sweden. In that Decision, the Commission found that the *en route* cost-efficiency performance targets included in the draft performance plan for RP3 of Sweden are not consistent with the Union-wide performance targets, and issued recommendations for the revision of those targets.

(5) In response to Russia's war of aggression against Ukraine, which started on 24 February 2022, the Union has imposed restrictive measures which prohibit Russian air carriers, any Russian-registered aircraft and any non-Russian-registered aircraft which is owned or chartered, or otherwise controlled by any Russian natural or legal person, entity or body, from landing in and taking off from, or overflying the territory of the Union. Those restrictive measures and the counter-measures adopted by Russia have led to changes in air traffic in European airspace. Certain Member States, including Sweden, have been severely affected by a significant reduction in the number of overflights in the airspace under their responsibility. However, at Union-wide level, the observed impact on the number of flights has been limited in contrast with the sharp reduction of air traffic across Europe which resulted from the outbreak of the COVID-19 pandemic.

(6) On 13 July 2022, Sweden submitted a revised draft performance plan for RP3 (the 'revised draft performance plan') for assessment to the Commission.

(7) The performance review body, assisting the Commission in the implementation of the performance scheme pursuant to Article 11(2) of Regulation (EC) No 549/2004, has submitted to the Commission a report containing its advice on the assessment of the revised draft performance plan.

(8) In accordance with Article 15(1) of Implementing Regulation (EU) 2019/317, the Commission has assessed the consistency of the local performance targets included in the revised draft performance plan on the basis of the assessment criteria laid down in point 1 of Annex IV to that Implementing Regulation, and taking account of local circumstances. In respect of each key performance area and the related performance targets, the Commission has complemented its assessment by reviewing the elements set out in point 2 of Annex IV to that Implementing Regulation.

(9) The Eurocontrol Statistics and Forecast Service ('STATFOR') base traffic forecast, published in June 2022, takes account of the change in circumstances referred to in recital 5. On the basis of that forecast, the Commission notes that Sweden continues to face a significantly deteriorated traffic outlook for the remainder of RP3 as a consequence of Russia's war of aggression against Ukraine. As those changes in circumstances considerably impact the performance targets included in the revised draft performance plan, they should be taken into account in the assessment of the local performance targets included therein.

COMMISSION ASSESSMENT

Assessment of performance targets in the key performance area of safety

(10) Concerning the key performance area of safety, the Commission has assessed the consistency of the targets submitted by Sweden regarding the effectiveness of safety management of air navigation service providers ('ANSPs') based on the criterion laid down in point 1.1 of Annex IV to Implementing Regulation (EU) 2019/317.

(11) The local safety performance targets proposed by Sweden for the main air navigation service provider, namely LFV, in respect of the effectiveness of safety management, broken down per safety management objective and expressed as a level of implementation, are as follows:

([6]) Commission Implementing Decision (EU) 2022/728 of 13 April 2022 on the inconsistency of certain performance targets contained in the draft national and functional airspace block performance plans submitted by Belgium, Germany, Greece, France, Cyprus, Latvia, Luxembourg, Malta, the Netherlands, Romania, and Sweden pursuant to Regulation (EC) No 549/2004 of the European Parliament and of the Council with the Union-wide performance targets for the third reference period and setting out recommendations for the revision of those targets (OJ L 135, 12.5.2022, p. 4).

Sweden	**Targets on the effectiveness of safety management, expressed as a level of implementation**, ranging from European Union Aviation Safety Agency level A to D				
Air navigation service provider concerned	**Safety management objective**	**2022**	**2023**	**2024**	***Union-wide targets (2024)***
LFV	Safety policy and objectives	C	C	**C**	***C***
	Safety risk management	D	D	**D**	***D***
	Safety assurance	C	C	**C**	***C***
	Safety promotion	C	C	**C**	***C***
	Safety culture	C	C	**C**	***C***

(12) The safety performance targets proposed by Sweden for LFV are in line with the Union-wide performance targets.

(13) The Commission notes that the revised draft performance plan does not set out specific measures for LFV for the achievement of the local safety targets. However, the plan presents general measures such as the monitoring and application of mitigating measures to manage specific risks, and the assessment via the safety management system of changes made to the functional system. Having regard to the assessment of the performance review body, the Commission notes that LFV is reported to have already achieved the level of the Union-wide targets and therefore Sweden has not set out additional measures for LFV for the achievement of those targets.

(14) The safety targets proposed by Sweden for the providers of terminal air navigation services in the scope of the revised draft performance plan, namely ACR, SDATS, and AFAB, are also in line with the Union-wide performance targets. The Commission further notes that Sweden has set out measures for those ANSPs for the achievement of their safety performance targets.

(15) On the basis of the findings set out in recitals 11, 12, 13 and 14, and considering that the Union-wide safety performance targets set in Implementing Decision (EU) 2021/891 must be achieved by the final year of RP3, namely 2024, the targets included in the revised draft performance plan should be considered consistent with the Union-wide performance targets in the key performance area of safety.

Assessment of performance targets in the key performance area of environment

(16) Concerning the key performance area of environment, the consistency of the targets submitted by Sweden regarding the average horizontal *en route* flight efficiency of the actual trajectory has been assessed based on the criterion laid down in point 1.2 of Annex IV to Implementing Regulation (EU) 2019/317. Accordingly, the proposed targets included in the revised draft performance plan have been compared with the relevant *en route* horizontal flight efficiency reference values set out in the European Route Network Improvement Plan ('ERNIP') available at the time of adopting the revised Union-wide performance targets for RP3, that is on 2 June 2021.

(17) In respect of the 2020 calendar year, the Union-wide performance target for RP3 in the key performance area of environment, which was initially set out in Implementing Decision (EU) 2019/903, before the outbreak of the COVID-19 pandemic, was not revised by Implementing Decision (EU) 2021/891, considering that the period for the application of that target had expired and that its implementation had thus become definitive leaving no possibility for retroactive adjustments. Similarly, the local environment performance targets for 2021 set by Member States in the draft performance plans submitted in October 2021 could not be retroactively modified in their revised draft performance plans. Therefore, the consistency of the local environment performance targets with the corresponding Union-wide performance targets should be assessed with regard to the 2022, 2023 and 2024 calendar years.

(18) The performance targets in the key performance area of environment proposed by Sweden and the corresponding national reference values for RP3 from the ERNIP, expressed as the average horizontal *en route* flight efficiency of the actual trajectory, are as follows:

Sweden	2022	2023	2024
Targets in the key performance area of environment, expressed as the average horizontal *en route* flight efficiency of the actual trajectory	**1,05 %**	**1,05 %**	**1,05 %**
Reference values	1,05 %	1,05 %	1,05 %

(19) The Commission observes that the environment targets proposed by Sweden are equal to the corresponding national reference values for the 2022, 2023 and 2024 calendar years.

(20) The Commission notes that Sweden has presented in the revised draft performance plan measures for the achievement of the local environment performance targets, which include the planned implementation of cross-border free route airspace with Poland.

(21) On the basis of the findings set out in recitals 18, 19 and 20, the targets included in the revised draft performance plan should be considered consistent with the Union-wide performance targets in the key performance area of environment.

Assessment of performance targets in the key performance area of capacity

(22) Concerning the key performance area of capacity, the consistency of the targets submitted by Sweden regarding the average *en route* air traffic flow management ('ATFM') delay per flight has been assessed based on the criterion laid down in point 1.3 of Annex IV to Implementing Regulation (EU) 2019/317. Accordingly, the proposed targets included in the revised draft performance plan have been compared with the relevant reference values set out in the Network Operations Plan available at the time of adopting the revised Union-wide performance targets for RP3, that is on 2 June 2021.

(23) In respect of the 2020 calendar year, the Union-wide performance target for RP3 in the key performance area of capacity, which was initially set out in Implementing Decision (EU) 2019/903, before the outbreak of the COVID-19 pandemic, was not revised by Implementing Decision (EU) 2021/891, considering that the period for the application of that target had expired and that its implementation had thus become definitive leaving no possibility for retroactive adjustments. Similarly, the local capacity performance targets for 2021 set by Member States in the draft performance plans submitted in October 2021 could not be retroactively modified in their revised draft performance plans. Therefore, the consistency of the local capacity performance targets with the corresponding Union-wide performance targets should be assessed with regard to the 2022, 2023 and 2024 calendar years.

(24) The *en route* capacity targets proposed by Sweden for RP3, expressed in minutes of ATFM delay per flight, as well as the corresponding reference values from the Network Operations Plan, are as follows:

Sweden	2022	2023	2024
Targets in the key performance area of capacity, expressed in minutes of ATFM delay per flight	**0,07**	**0,08**	**0,08**
Reference values	0,07	0,08	0,08

(25) The Commission observes that the capacity targets proposed by Sweden are equal to the corresponding national reference values for the 2022, 2023 and 2024 calendar years.

(26) The Commission notes that Sweden has presented, in the revised draft performance plan, measures for the achievement of the local *en route* capacity targets. Those measures include the implementation of the Swedish Airspace Project ('SWEA') and an increase in air traffic controller ('ATCO') full-time equivalents in RP3 and beyond to accommodate future traffic demand, including for the purpose of anticipating planned ATCO retirements. The Commission notes that, in comparison with the draft performance plan submitted in 2021, the planned number of ATCO full-time equivalents in operations in the area control centres of Stockholm and Malmö has been revised downwards due to the change in circumstances outlined in recitals 5 and 9.

(27) On the basis of the findings set out in recitals 24, 25 and 26, the targets included in the revised draft performance plan should be considered consistent with the Union-wide performance targets in the key performance area of capacity.

Review of capacity targets for terminal air navigation services

(28) With regard to airports which fall within the scope of Implementing Regulation (EU) 2019/317 as set out in Article 1(3) and (4) of that Implementing Regulation, the Commission has complemented its assessment of *en route* capacity targets by reviewing the capacity targets for terminal air navigation services in accordance with point 2.1(b) of Annex IV to that Implementing Regulation. Those targets were not found to raise concerns in respect of Sweden.

Assessment of performance targets in the key performance area of cost-efficiency

(29) The Commission concluded in Implementing Decision (EU) 2022/728 that the proposed *en route* cost-efficiency targets included in the draft performance plan of Sweden submitted in 2021 were inconsistent with the Union-wide performance targets. Sweden has proposed revised *en route* cost-efficiency targets in its revised draft performance plan.

(30) The table below sets out the initial RP3 *en route* cost-efficiency performance targets for the charging zone of Sweden, as included in the draft performance plan submitted in 2021, and the corresponding revised draft performance targets included in the revised draft performance plan.

***En route* charging zone of Sweden**	**2014 baseline value**	**2019 baseline value**	**2020 -2021**	**2022**	**2023**	**2024**
Initial en route cost-efficiency targets (included in the draft performance plan submitted in 2021), expressed as determined en route unit cost (in real terms in 2017 prices)	*522,30 SEK*	*567,11 SEK*	*1 361,88 SEK*	*676,24 SEK*	*605,51 SEK*	*570,87 SEK*
	54,22 EUR	*58,87 EUR*	*141,38 EUR*	*70,20 EUR*	*62,86 EUR*	*59,26 EUR*
Revised *en route* cost-efficiency targets (included in the revised draft performance plan), expressed as determined *en route* unit cost (in real terms in 2017 prices)	**604,02 SEK**	**537,87 SEK**	**1 361,88 SEK**	**774,65 SEK**	**650,98 SEK**	**587,62 SEK**
	62,70 EUR	55,84 EUR	141,38 EUR	80,42 EUR	67,58 EUR	61,00 EUR

(31) The Commission observes that Sweden has revised its local cost-efficiency targets for 2022, 2023 and 2024, which results, in comparison with the draft performance plan submitted in 2021, in an overall determined unit cost ('DUC') higher by 8,2 % over those calendar years and higher by 7,1 % over RP3 as a whole. Those DUC increases result from the significant deterioration in the traffic forecast, which has been caused by the reduction of air traffic in Sweden's airspace as a consequence of Russia's war of aggression against Ukraine, as referred to in recitals 5 and 9. The lower number of forecasted service units for the 2022, 2023 and 2024 calendar years has however been partly offset by Sweden through a reduction of determined costs.

(32) Furthermore, Sweden has applied an upward adjustment to the baseline value for 2014, whilst the baseline value for 2019 has been adjusted downwards. Sweden explains in the revised draft performance plan that the baseline values for 2014 and 2019 have been adjusted mainly in order to account for the impact of significant one-off amounts related to the actual pension costs recorded for those calendar years and which affect comparability with the determined costs of RP3. Furthermore, Sweden has applied two further adjustments to the baseline value for 2019, which have been justified by changes in the scope of the *en route* charging zone between the second reference period ('RP2') and RP3 and by a change in the method applied by Sweden for deducting public funding received by the ANSP from the route charges paid by users.

(33) The Commission notes that the traffic assumptions used in the revised draft performance plan are based on the Eurocontrol STATFOR June 2022 base traffic forecast. The *en route* service units forecasted for the charging zone for the 2022, 2023 and 2024 calendar years, in comparison with the figures included in the draft performance plan, are presented in the table below.

***En route* charging zone of Sweden**	**2022**	**2023**	**2024**
Initial traffic forecast (included in the draft performance plan submitted in 2021), expressed in thousands of en route service units	*3 173*	*3 637*	*3 906*
Updated traffic forecast (included in the revised draft performance plan), expressed in thousands of *en route* service units	**2 724**	**3 248**	**3 367**
Difference	**- 14,2 %**	**- 10,7 %**	**- 13,8 %**

(34) Compared to the draft performance plan submitted in 2021, the annual reductions in the number of service units for the 2022, 2023 and 2024 calendar years are in the approximate range of -11 % to -14 %. Accordingly, the *en route* service units for Sweden are expected to remain, in 2024, 11,1 % below their pre-pandemic level (calendar year 2019), whereas they were previously foreseen to exceed the pre-pandemic level by 3,1 % in the STATFOR base traffic forecast of October 2021.

(35) However, as displayed in the table below, the flight movements in Swedish airspace operated under instrument flight rules (IFR) are not foreseen to decrease at the same rate as the *en route* service units. This discrepancy is due to the significant reduction of overflights, which on average generate proportionally higher numbers of *en route* service units than flights landing and departing from airports in Sweden.

***En route* charging zone of Sweden**	**2022**	**2023**	**2024**
Initial traffic forecast (included in the draft performance plan submitted in 2021), expressed in thousands of IFR movements	*685*	*771*	*824*
Updated traffic forecast (included in the revised draft performance plan), expressed in *thousands of IFR movements*	**626**	**751**	**773**
Difference	**- 8,6 %**	**- 2,6 %**	**- 6,2 %**

(36) The Commission hence notes that the workload of the ANSP, which is driven by the controlled flight movements, is not foreseen to diminish in correlation with the revenue reduction which stems from the lower number of *en route* service units.

(37) The revised determined costs for the 2022, 2023 and 2024 calendar years, expressed in real terms in 2017 prices, are shown in the table below. The Commission notes that Sweden has revised downwards the determined costs in real terms for each of those calendar years.

***En route* charging zone of Sweden**	**2022**	**2023**	**2024**
Initial determined costs in real terms in 2017 prices (included in the draft performance plan submitted in 2021)	*2 146 M SEK*	*2 202 M SEK*	*2 230 M SEK*
Revised determined costs in real terms in 2017 prices (included in the revised draft performance plan)	**2 110 M SEK**	**2 114 M SEK**	**1 979 M SEK**
Difference	**- 1,7 %**	**- 4,0 %**	**- 11,3 %**

(38) The revised draft performance plan comprises an updated inflation forecast for Sweden for the 2022, 2023 and 2024 calendar years, as outlined in the following table.

***En route* charging zone of Sweden**	**2022**	**2023**	**2024**
Initial inflation index, with forecasted year-on-year change in inflation in parenthesis (data included in the draft performance plan submitted in 2021)	*107,4 (1,3 %)*	*109,1 (1,6 %)*	*111,1 (1,8 %)*
Revised inflation index, with year-on-year change in inflation in parenthesis (data included in the revised draft performance plan)	**112,4 (4,8 %)**	**114,9 (2,2 %)**	**116,9 (1,7 %)**

(39) Due to the update of the inflation forecast, the revised determined costs in nominal terms for the 2022 calendar year have increased while those for 2023 have remained unchanged. For the 2024 calendar year, the nominal determined costs are lower than in the draft performance plan submitted in 2021.

***En route* charging zone of Sweden**	**2022**	**2023**	**2024**
Initial determined costs in nominal terms (included in the draft performance plan submitted in 2021)	*2 269 M SEK*	*2 359 M SEK*	*2 424 M SEK*
Revised determined costs in nominal terms (included in the revised draft performance plan)	**2 310 M SEK**	**2 359 M SEK**	**2 234 M SEK**
Difference	**+ 1,8 %**	**0,0 %**	**- 7,8 %**

(40) The Commission has assessed the consistency of the revised cost-efficiency targets proposed by Sweden based on the criteria laid down in points 1.4(a), (b) and (c) of Annex IV to Implementing Regulation (EU) 2019/317.

(41) Concerning the criterion laid down in point 1.4(a) of Annex IV to Implementing Regulation (EU) 2019/317, the Commission observes that the *en route* DUC trend at charging zone level of +2,2 % over RP3 underperforms the Union-wide trend of +1,0 % over the same period. The adjusted baseline value for 2019 set by Sweden, referred to in recital 32, impacts negatively the calculated DUC trend. The DUC trend of Sweden has deteriorated compared with the DUC trend of +0,2 % calculated on the basis of the draft performance plan submitted in 2021.

(42) Concerning the criterion laid down in point 1.4(b) of Annex IV to Implementing Regulation (EU) 2019/317, the Commission observes that the long-term *en route* DUC trend at charging zone level over RP2 and RP3 of -0,3 % underperforms the long-term Union-wide trend of -1,3 % over the same period. The adjusted baseline value for 2014 set by Sweden, referred to in recital 32, impacts positively the calculated long-term DUC trend. The long-term DUC trend of Sweden has improved compared with the long-term DUC trend of +1,0 % calculated on the basis of the draft performance plan submitted in 2021.

(43) As noted in recitals 33 and 34, the Commission recalls that Sweden's service unit forecast for RP3 has been revised significantly downwards as a consequence of the traffic changes resulting from Russia's war of aggression against Ukraine. It is therefore necessary and appropriate to examine, for the purpose of the assessment criteria examined in recitals 41 and 42, whether Sweden would meet the Union-wide cost-efficiency trends in the absence of the severe traffic reduction for the 2022, 2023 and 2024 calendar years which is due to the changed circumstances.

(44) The Commission has therefore recalculated Sweden's DUC trend over RP3 and Sweden's long-term DUC trend over RP2 and RP3 by making use of the Eurocontrol STATFOR base traffic forecast of October 2021. This recalculation results, for the *en route* charging zone of Sweden, in an adjusted DUC trend of -1,5 % over RP3 and in an adjusted long-term DUC trend of -1,9 %. Both of these adjusted trends are below the corresponding Union-wide DUC trends of +1,0 % and -1,3 % respectively. Hence, the Commission concludes that Sweden fulfils the assessment criteria examined in recitals 41 and 42 in the absence of the changes in traffic caused by Russia's war of aggression against Ukraine.

(45) Concerning the criterion laid down in point 1.4(c) of Annex IV to Implementing Regulation (EU) 2019/317, the Commission observes that the baseline value for the DUC at the level of the charging zone of Sweden of EUR 55,84 (expressed in 2017 prices) is 24,8 % higher than the average baseline value of 44,74 EUR2017 of the relevant comparator group.

(46) The Commission acknowledges that the revised cost-efficiency targets for the charging zone of Sweden are higher than the initial targets included in the draft performance plan submitted in 2021. However, this deterioration is entirely due to the significantly lower traffic assumptions. When excluding the negative impact of the traffic changes resulting from Russia's war of aggression against Ukraine, it is clear that Sweden meets both the Union-wide DUC trend and the Union-wide long-term DUC trend.

(47) Furthermore, as noted in recital 37, the Commission recalls that Sweden has reduced its determined costs in real terms for the remainder of RP3 in response to the deteriorated traffic assumptions. The Commission observes that those cost containment measures are, overall, commensurate with the lower number of IFR movements forecasted for the 2022, 2023 and 2024 calendar years, as presented in recital 35.

(48) On balance, the Commission therefore considers that Sweden has adequately addressed the recommendations set out in Article 3 of Implementing Decision (EU) 2022/728 with regard to the revision of its local cost-efficiency performance targets.

(49) On the basis of the findings in recitals 30 to 48, the targets included in the revised draft performance plan should be considered consistent with the Union-wide performance targets in the key performance area of cost-efficiency.

Review of revised cost-efficiency targets for terminal air navigation services

(50) With regard to airports which fall within the scope of Implementing Regulation (EU) 2019/317 as set out in Article 1(3) and (4) of that Implementing Regulation, the Commission has complemented its assessment of *en route* cost-efficiency targets by reviewing the cost-efficiency targets for terminal air navigation services in accordance with point 2.1(c) of Annex IV to that Implementing Regulation.

(51) In of Implementing Decision (EU) 2022/728, the Commission raised concerns regarding the terminal cost-efficiency targets proposed by Sweden in the draft performance plan submitted in 2021, and considered that Sweden should further justify those targets or revise them downwards.

(52) The Commission notes that Sweden has duly justified and substantiated, in the revised draft performance plan, its terminal cost efficiency targets, including by referring to the reduced number of flights in the terminal charging zone as compared to RP2 and the strong impact of air traffic controller retirements on the terminal cost base during RP3. The Commission does not have any further observations on the terminal cost-efficiency targets included in the revised draft performance plan.

CONCLUSIONS

(53) In the light of all the foregoing, the Commission has found that the performance targets included in the revised draft performance plan are consistent with the Union-wide performance targets,

HAS ADOPTED THIS DECISION:

Article 1

The performance targets, included in the revised draft performance plan submitted by Sweden pursuant to Regulation (EC) No 549/2004, and listed in the Annex to this Decision, are consistent with the Union-wide performance targets for the third reference period set out in Implementing Decision (EU) 2021/891.

Article 2

This Decision is addressed to the Kingdom of Sweden.

Done at Brussels, 5 December 2022.

For the Commission
Adina VĂLEAN
Member of the Commission

ANNEX

Performance targets included in the revised draft performance plan submitted by Sweden pursuant to Regulation (EC) No 549/2004, found to be consistent with the Union-wide performance targets for the third reference period

KEY PERFORMANCE AREA OF SAFETY

Effectiveness of safety management

Sweden	**Targets on the effectiveness of safety management, expressed as a level of implementation**, ranging from EASA level A to D			
Air navigation service provider concerned	**Safety management objective**	**2022**	**2023**	**2024**
LFV	Safety policy and objectives	C	C	**C**
	Safety risk management	D	D	**D**
	Safety assurance	C	C	**C**
	Safety promotion	C	C	**C**
	Safety culture	C	C	**C**

KEY PERFORMANCE AREA OF ENVIRONMENT

Average horizontal *en route* flight efficiency of the actual trajectory

Sweden	**2022**	**2023**	**2024**
Targets in the key performance area of environment, expressed as the average horizontal *en route* flight efficiency of the actual trajectory	**1,05 %**	**1,05 %**	**1,05 %**

KEY PERFORMANCE AREA OF CAPACITY

Average *en route* ATFM delay in minutes per flight

Sweden	**2022**	**2023**	**2024**
Targets in the key performance area of capacity, expressed in minutes of ATFM delay per flight	**0,07**	**0,08**	**0,08**

KEY PERFORMANCE AREA OF COST-EFFICIENCY

Determined unit cost for *en route* air navigation services

***En route* charging zone of Sweden**	**2014 baseline value**	**2019 baseline value**	**2020 -2021**	**2022**	**2023**	**2024**
Revised *en route* cost-efficiency targets, expressed as determined *en route* unit cost (in real terms in 2017 prices)	**604,02 SEK**	**537,87 SEK**	**1 361,88 SEK**	**774,65 SEK**	**650,98 SEK**	**587,62 SEK**
	62,70 EUR	55,84 EUR	141,38 EUR	80,42 EUR	67,58 EUR	61,00 EUR

COMMISSION DECISION (EU) 2022/2424

of 5 December 2022

on the consistency of the performance targets contained in the revised draft performance plan submitted by Romania pursuant to Regulation (EC) No 549/2004 of the European Parliament and of the Council with the Union-wide performance targets for the third reference period

(notified under document C(2022) 8740)

(Only the Romanian text is authentic)

(Text with EEA relevance)

THE EUROPEAN COMMISSION,

Having regard to the Treaty on the Functioning of the European Union,

Having regard to Regulation (EC) No 549/2004 of the European Parliament and of the Council of 10 March 2004 laying down the framework for the creation of the single European sky (the 'Framework Regulation) ([1]), and in particular Article 11(3) point (c), thereof,

Having regard to Commission Implementing Regulation (EU) 2019/317 of 11 February 2019 laying down a performance and charging scheme in the single European sky and repealing Implementing Regulations (EU) No 390/2013 and (EU) No 391/2013 ([2]), and in particular Article 15(2) thereof,

Whereas:

GENERAL CONSIDERATIONS

(1) Pursuant to Article 10 of Implementing Regulation (EU) 2019/317, Member States are to draw up performance plans, either at national level or at functional airspace blocks level ('FAB'), which have to include binding performance targets for each reference period of the performance scheme for air navigation services and network functions. Those performance targets are to be consistent with the Union-wide targets adopted by the Commission for the reference period concerned.

(2) Union-wide performance targets for the third reference period ('RP3') were originally set out in Commission Implementing Decision (EU) 2019/903 ([3]). Since those Union-wide performance targets and the draft RP3 performance plans subsequently submitted in October 2019 by Member States were drawn up before the outbreak of the COVID-19 pandemic in March 2020, they did not take account of the considerable reduction in air traffic due to the measures taken by the Member States and third countries to contain the pandemic.

(3) In response to the impact of the COVID-19 pandemic on the provision of air navigation services, exceptional measures for RP3, which derogate from the provisions of Implementing Regulation (EU) 2019/317, were set out in Commission Implementing Regulation (EU) 2020/1627 ([4]). The Commission adopted, on 2 June 2021, Commission Implementing Decision (EU) 2021/891 ([5]) setting revised Union-wide performance targets for RP3. On that basis, in October 2021, Member States submitted to the Commission draft performance plans containing revised local performance targets for RP3.

([1]) OJ L 96, 31.3.2004, p. 1.
([2]) OJ L 56, 25.2.2019, p. 1.
([3]) Commission Implementing Decision (EU) 2019/903 of 29 May 2019 setting the Union-wide performance targets for the air traffic management network for the third reference period starting on 1 January 2020 and ending on 31 December 2024 (OJ L 144, 3.6.2019, p. 49).
([4]) Commission Implementing Regulation (EU) 2020/1627 of 3 November 2020 on exceptional measures for the third reference period (2020-2024) of the single European sky performance and charging scheme due to COVID-19 pandemic (OJ L 366, 4.11.2020, p. 7).
([5]) Commission Implementing Decision (EU) 2021/891 of 2 June 2021 setting revised Union-wide performance targets for the air traffic management network for the third reference period (2020-2024) and repealing Implementing Decision (EU) 2019/903 (OJ L 195, 3.6.2021, p. 3).

(4) Commission Implementing Decision (EU) 2022/728 ([6]) was addressed to Belgium, Germany, Greece, France, Cyprus, Latvia, Luxembourg, Malta, the Netherlands, Romania, and Sweden. In that Decision, the Commission found that the *en route* cost-efficiency performance targets included in the draft performance plan for RP3 of Romania are not consistent with the Union-wide performance targets, and issued recommendations for the revision of those targets.

(5) In response to Russia's war of aggression against Ukraine, which started on 24 February 2022, the Union has imposed restrictive measures which prohibit Russian air carriers, any Russian-registered aircraft and any non-Russian-registered aircraft which is owned or chartered, or otherwise controlled by any Russian natural or legal person, entity or body, from landing in and taking off from, or overflying the territory of the Union. Those restrictive measures and the counter-measures adopted by Russia have led to changes in air traffic in European airspace. Certain Member States have been severely affected by a significant reduction in the number of overflights in the airspace under their responsibility. However, at Union-wide level, the observed impact on the number of flights has been limited in contrast with the sharp reduction of air traffic across Europe which resulted from the outbreak of the COVID-19 pandemic.

(6) On 13 July 2022, Romania submitted to the Commission a revised draft performance plan for RP3 (the 'revised draft performance plan').

(7) The performance review body, assisting the Commission in the implementation of the performance scheme pursuant to Article 11(2) of Regulation (EC) No 549/2004, has submitted to the Commission a report containing its assessment of the revised draft performance plan.

(8) In accordance with Article 15(1) of Implementing Regulation (EU) 2019/317, the Commission, taking account of local circumstances, has assessed the consistency of the local performance targets included in the revised draft performance plan of Romania on the basis of the assessment criteria laid down in point 1 of Annex IV to that Regulation. In respect of each key performance area and the related performance targets, the Commission has complemented its assessment by reviewing the elements set out in point 2 of Annex IV to Implementing Regulation (EU) 2019/317.

(9) The Eurocontrol Statistics and Forecast Service ('STATFOR') base traffic forecast published in June 2022 takes account of the change in circumstances with respect to air traffic in European airspace. On the basis of that forecast, the Commission notes that Romania is expected to have additional flight movements in its airspace during the rest of RP3 because of shifts in air traffic flows resulting from Russia's war in Ukraine. However, that situation does not significantly change the operational conditions for air navigation services in Romania and does not have a detrimental impact on its revised draft performance plan.

COMMISSION ASSESSMENT

Assessment of performance targets in the key performance area of safety

(10) Concerning the key performance area of safety, the Commission has assessed the consistency of the targets submitted by Romania regarding the effectiveness of safety management of air navigation service providers ('ANSPs') in accordance with point 1.1 of Annex IV to Implementing Regulation (EU) 2019/317.

([6]) Commission Implementing Decision (EU) 2022/728 of 13 April 2022 on the inconsistency of certain performance targets contained in the draft national and functional airspace block performance plans submitted by Belgium, Germany, Greece, France, Cyprus, Latvia, Luxembourg, Malta, the Netherlands, Romania, and Sweden pursuant to Regulation (EC) No 549/2004 of the European Parliament and of the Council with the Union-wide performance targets for the third reference period and setting out recommendations for the revision of those targets (OJ L 135, 12.5.2022, p. 4).

(11) The local safety performance targets proposed by Romania in respect of the effectiveness of safety management, broken down per safety management objective and expressed as a level of implementation, are as follows:

Romania	**Targets on the effectiveness of safety management, expressed as a level of implementation,** ranging from European Union Aviation Safety Agency level A to D				
Air navigation service provider concerned	**Safety management objective**	**2022**	**2023**	**2024**	***Union-wide targets (2024)***
ROMATSA	Safety policy and objectives	C	C	**C**	***C***
	Safety risk management	C	C	**D**	***D***
	Safety assurance	C	C	**C**	***C***
	Safety promotion	C	C	**C**	***C***
	Safety culture	C	C	**C**	***C***

(12) The safety performance targets proposed by Romania for the air navigation service provider, namely ROMATSA, are consistent with the Union-wide performance targets.

(13) The Commission notes that the revised draft performance plan submitted by Romania sets out measures for ROMATSA for the achievement of the local safety targets, including the implementation of internal safety monitoring procedures and processes for continuous improvement of the effectiveness of safety management.

(14) Therefore, in the light of what has been said in recitals 11, 12 and 13 and considering that the Union-wide safety performance targets set in Implementing Decision (EU) 2021/891 are to be achieved by the final year of RP3, namely 2024, the targets in the key performance area of safety included in the revised draft performance plan of Romania should be considered consistent with the Union-wide performance targets.

Assessment of performance targets in the key performance area of environment

(15) Concerning the key performance area of environment, the consistency of the targets submitted by Romania regarding the average horizontal *en route* flight efficiency of the actual trajectory has been assessed in accordance with point 1.2 of Annex IV to Implementing Regulation (EU) 2019/317. Accordingly, the proposed targets included in the revised draft performance plan of Romania have been compared with the relevant *en route* horizontal flight efficiency reference values set out in the European Route Network Improvement Plan ('ERNIP') available on 2 June 2021, the date of adoption of the revised Union-wide performance targets for RP3.

(16) In respect of the year 2020, the Union-wide performance target for RP3 in the key performance area of environment, which was initially set out in Implementing Decision (EU) 2019/903, before the outbreak of the COVID-19 pandemic, was not revised by Implementing Decision (EU) 2021/891, in so far as the period for the application of that target had expired and its implementation had thus become definitive leaving no possibility for retroactive adjustments. Similarly, it is not possible to modify retroactively, in the revised draft performance plans, the local environment performance targets for the year 2021 set by Member States in the draft performance plans submitted in October 2021. Therefore, the consistency of the local environment performance targets with the corresponding Union-wide performance targets should be assessed with regard to the years 2022, 2023 and 2024.

(17) The performance targets in the key performance area of environment proposed by Romania and the corresponding national reference values for RP3 from the ERNIP, expressed as the average horizontal *en route* flight efficiency of the actual trajectory, are as follows:

Romania	2022	2023	2024
Targets in the key performance area of environment, expressed as the average horizontal *en route* flight efficiency of the actual trajectory	**2,05 %**	**2,05 %**	**2,05 %**
Reference values	2,05 %	2,05 %	2,05 %

(18) The Commission observes that the environment targets proposed by Romania are equal to the corresponding national reference values for each of the years 2022, 2023 and 2024.

(19) The Commission notes that, in its revised draft performance plan, Romania has presented measures for the achievement of the local environment targets which include its participation in the South East Europe Free Route Airspace initiative, increased cross-border cooperation, a transition plan for the implementation of performance-based navigation, and changes in the configuration of operational sectors to improve airspace utilisation.

(20) Therefore, in the light of what has been said in recitals 17, 18 and 19, the targets in the key performance area of environment included in the revised draft performance plan of Romania should be considered consistent with the Union-wide performance targets.

Assessment of performance targets in the key performance area of capacity

(21) Concerning the key performance area of capacity, the consistency of the targets submitted by Romania regarding the average *en route* air traffic flow management ('ATFM') delay per flight has been assessed in accordance with point 1.3 of Annex IV to Implementing Regulation (EU) 2019/317. Accordingly, the proposed targets included in the revised draft performance plan of Romania have been compared with the relevant reference values set out in the Network Operations Plan available on 2 June 2021, the time of adopting the revised Union-wide performance targets for RP3.

(22) In respect of the year 2020, the Union-wide performance target for RP3 in the key performance area of capacity, which was initially set out in Implementing Decision (EU) 2019/903, before the outbreak of the COVID-19 pandemic, was not revised by Implementing Decision (EU) 2021/891 in so far as the period for the application of that target had expired and its implementation had thus become definitive leaving no possibility for retroactive adjustments. Similarly, it is not possible to modify retroactively, in the revised draft performance plans, the local capacity performance targets for the year 2021 set by Member States in the draft performance plans submitted in October 2021. Therefore, the consistency of the local capacity performance targets with the corresponding Union-wide performance targets should be assessed with regard to the years 2022, 2023 and 2024.

(23) The *en route* capacity targets proposed by Romania for RP3, expressed in minutes of ATFM delay per flight, as well as the corresponding reference values from the Network Operations Plan, are as follows:

Romania	2022	2023	2024
Targets in the key performance area of capacity, expressed in minutes of ATFM delay per flight	**0,04**	**0,04**	**0,04**
Reference values	0,04	0,04	0,04

(24) The Commission observes that the capacity targets proposed by Romania are equal to the corresponding national reference values for each of the years 2022, 2023 and 2024.

(25) The Commission notes that Romania has presented measures for the achievement of the local *en route* capacity targets in the revised draft performance plan. Those measures include the implementation of a new air traffic management system, airspace configuration focusing on the implementation of free route airspace and flexible use of airspace concepts, and the recruitment and training of new air traffic controllers.

(26) Therefore, in the light of what has been said in recitals 23, 24 and 25, the targets in the key performance area of capacity included in the revised draft performance plan of Romania should be considered consistent with the Union-wide performance targets.

Review of capacity targets for terminal air navigation services

(27) With regard to airports which fall within the scope of Implementing Regulation (EU) 2019/317 as set out in Article 1(3) and (4) of that Regulation, the Commission has complemented its assessment of *en route* capacity targets by reviewing the capacity targets for terminal air navigation services in accordance with point 2.1.(b) of Annex IV to Implementing Regulation (EU) 2019/317. Those targets were not found to raise concerns in respect of Romania.

Assessment of revised performance targets in the key performance area of cost-efficiency

(28) By Implementing Decision (EU) 2022/728, the Commission concluded that the proposed *en route* cost-efficiency targets included in the draft performance plan of Romania submitted in 2021 are inconsistent with the Union-wide performance targets. Romania has proposed revised *en route* cost-efficiency targets in its revised draft performance plan.

(29) The following table sets out the initial RP3 *en route* cost-efficiency performance targets for the charging zone of Romania, as laid down in the draft performance plan submitted in 2021, and the corresponding revised performance targets included in the revised draft performance plan submitted in 2022:

***En route* charging zone of Romania**	**2014 baseline value**	**2019 baseline value**	**2020-2021**	**2022**	**2023**	**2024**
Initial en route cost-efficiency targets (included in the draft performance plan submitted in 2021), expressed as determined en route unit cost (in real terms in 2017 prices)	*165,00 RON*	*155,38 RON*	*298,87 RON*	*191,50 RON*	*174,25 RON*	*174,33 RON*
	36,13 EUR	*34,03 EUR*	*65,45 EUR*	*41,94 EUR*	*38,16 EUR*	*38,18 EUR*
Revised *en route* cost-efficiency targets (included in the revised draft performance plan), expressed as determined *en route* unit cost (in real terms in 2017 prices)	**165,00 RON**	**155,38 RON**	**298,87 RON**	**179,53 RON**	**163,47 RON**	**160,39 RON**
	36,13 EUR	34,03 EUR	65,45 EUR	39,32 EUR	35,80 EUR	35,13 EUR

(30) The Commission observes that Romania has revised its local cost-efficiency targets for the years 2022, 2023 and 2024. Those targets result, when compared to the draft performance plan submitted in 2021, in an overall determined unit cost ('DUC') which is 6,9 % lower over 2022, 2023 and 2024 and 5,4 % lower over RP3 as a whole. Those DUC reductions result from the upward revision of the traffic assumptions used in the revised draft performance plan for the years 2022, 2023 and 2024, which are partly counterbalanced by an increase of the determined costs for the years 2023 and 2024.

(31) The Commission notes that the traffic assumptions used in the revised draft performance plan are based on the Eurocontrol STATFOR June 2022 base traffic forecast. The following table compares the *en route* service units forecasted for the charging zone for the years 2022, 2023 and 2024, to the figures included in the draft performance plan:

***En route* charging zone of Romania**	**2022**	**2023**	**2024**
Initial traffic forecast (included in the draft performance plan submitted in 2021), expressed in thousands of en route service units	*4 360*	*5 022*	*5 269*
Updated traffic forecast (included in the revised draft performance plan), expressed in thousands of *en route* service units	**4 583**	**5 531**	**5 825**
Difference	**+ 5,1 %**	**+ 10,1 %**	**+ 10,6 %**

(32) When compared to the draft performance plan submitted in 2021, the annual increases in the number of service units for the years 2022, 2023 and 2024 are in the range of 5 % to % 11 %.

(33) The revised determined costs for the years 2022, 2023 and 2024, expressed in real terms in 2017 prices, are set out in the following table:

***En route* charging zone of Romania**	**2022**	**2023**	**2024**
Initial determined costs in real terms in 2017 prices (contained in the draft performance plan submitted in 2021)	*835 M RON*	*875 M RON*	*919 M RON*
Revised determined costs in real terms in 2017 prices (included in the revised draft performance plan)	**823 M RON**	**904 M RON**	**934 M RON**
Difference	**- 1,5 %**	**+ 3,3 %**	**+ 1,7 %**

(34) The revised draft performance plan comprises an updated inflation forecast for Romania for the years 2022, 2023 and 2024, as set out in the following table:

***En route* charging zone of Romania**	**2022**	**2023**	**2024**
Initial inflation index, with forecasted year-on-year change in inflation in parenthesis (data included in the draft performance plan submitted in 2021)	*116,1 (2,1 %)*	*119,1 (2,6 %)*	*122,2 (2,6 %)*
Revised inflation index, with year-on-year change in inflation in parenthesis (data included in the revised draft performance plan)	**125,9 (9,3 %)**	**130,9 (4,0 %)**	**134,8 (3,0 %)**

(35) Due to the update of the inflation forecast, the revised determined costs in nominal terms are planned to increase substantially in particular for the years 2023 and 2024, as follows:

***En route* charging zone of Romania**	**2022**	**2023**	**2024**
Initial determined costs in nominal terms (included in the draft performance plan submitted in 2021)	*946 M RON*	*1 013 M RON*	*1 088 M RON*
Revised determined costs in nominal terms (included in the revised draft performance plan)	**1 000 M RON**	**1 138 M RON**	**1 209 M RON**
Difference	**+ 5,7 %**	**+ 12,3 %**	**+ 11,0 %**

(36) The Commission has assessed the consistency of the revised cost-efficiency targets proposed by Romania in accordance with the criteria laid down in points 1.4(a), (b) and (c) of Annex IV to Implementing Regulation (EU) 2019/317.

(37) As regards point 1.4(a) of Annex IV to Implementing Regulation (EU) 2019/317, the Commission observes that the *en route* DUC trend at charging zone level of +0,8 % over RP3 outperforms the Union-wide trend of +1,0 % over the same period. The Commission notes that this constitutes an improvement from the DUC trend of +2,9 % calculated on the basis of the draft performance plan submitted in 2021.

(38) As regards point 1.4(b) of Annex IV to Implementing Regulation (EU) 2019/317, the Commission observes that the long-term *en route* DUC trend at charging zone level over the second reference period ('RP2') and RP3 of -0,3 % is way below the long-term Union-wide trend of -1,3 % over the same period. The Commission notes that this, however, constitutes an improvement from the long-term DUC trend of +0,6 % calculated on the basis of the draft performance plan submitted in 2021.

(39) As regards point 1.4(c) of Annex IV to Implementing Regulation (EU) 2019/317, the Commission observes that the EUR 34,03 baseline value for the DUC of Romania expressed in 2017 prices is 14,6 % lower than the EUR 39,84 average baseline value in EUR2017 of the relevant comparator group.

(40) It is clear that Romania's revised cost-efficiency targets result in a DUC trend over RP3 which outperforms the corresponding Union-wide trend. Furthermore, Romania's revised DUC for 2024 is lower than the baseline value for 2014, which demonstrates a reduction of the DUC over RP2 and RP3, even though the long-term Union-wide DUC trend is not met. Finally, Romania demonstrates a good cost-efficiency performance in respect of the baseline value for 2019 which is significantly lower than the corresponding comparator group average. Therefore, the Commission considers that, in respect of Romania, the deviation from the Union-wide long-term DUC trend, referred to in recital 38, does not preclude the cost-efficiency performance targets from being consistent with the Union-wide cost-efficiency performance targets.

(41) On balance, the Commission therefore considers that Romania has adequately addressed the recommendations set out in Article 3 of Implementing Decision (EU) 2022/728 with regard to the revision of its local cost-efficiency performance targets.

(42) In the light of what has been said in recitals 29 to 41, the targets in the key performance area of cost-efficiency included in the revised draft performance plan of Romania should be considered consistent with the Union-wide performance targets.

Review of the revised cost-efficiency targets for terminal air navigation services

(43) With regard to airports which fall within the scope of Implementing Regulation (EU) 2019/317, as set out in Articles 1(3) and (4) of that Regulation, the Commission has complemented its assessment of *en route* cost-efficiency targets by reviewing the cost-efficiency targets for terminal air navigation services in accordance with point 2.1(c) of Annex IV to Implementing Regulation (EU) 2019/317.

(44) In Implementing Decision (EU) 2022/728, the Commission raised concerns regarding the terminal cost-efficiency targets proposed by Romania in the draft performance plan submitted in 2021, and considered that Romania was to further justify those targets or revise them downwards. The Commission notes, however, that Romania has, on the contrary, revised those targets upwards for the years 2022 and 2023, including an increase of the determined costs in real terms for the year 2023.

(45) The Commission observes that the terminal DUC trend of Romania of +4,2 % over RP3 remains higher than the *en route* DUC trend of +0,8 % over RP3, and remains higher than the actual terminal DUC trend of -3,1 % observed over RP2. Furthermore, the terminal RP3 DUC trend has only marginally improved in comparison with the draft performance plan of Romania submitted in 2021, in which a terminal DUC trend of +4,3 % was observed.

(46) Therefore, in the light of what has been said in recitals 44 and 45, the Commission concludes that the revised terminal cost-efficiency performance targets of Romania continue to give rise to concerns. The Commission therefore reiterates its view that Romania should revise downwards those targets or provide adequate justifications for those targets, including for the increased determined costs of the year 2023. Romania should address those concerns in connection with the adoption of its final performance plan pursuant to Article 16, point (a) of Implementing Regulation (EU) 2019/317.

Review of the incentive schemes referred to in Article 11 of Implementing Regulation (EU) 2019/317 complementing the Commission's assessment of capacity targets

(47) In accordance with point 2.1(f) of Annex IV to Implementing Regulation (EU) 2019/317, the Commission has complemented its assessment of capacity targets by reviewing the incentive schemes referred to in Article 11 of Implementing Regulation (EU) 2019/317. In that respect, the Commission has examined whether the proposed incentive schemes fulfil the substantive requirements set out in Article 11(1) and (3) of Implementing Regulation (EU) 2019/317.

(48) In Implementing Decision (EU) 2022/728, the Commission concluded that Romania is to revise its incentive scheme for achieving terminal capacity targets in such a way that the maximum financial disadvantage stemming from that incentive scheme is set at a level having a material impact on the revenue at risk. The Commission notes that Romania has revised its incentive scheme for achieving terminal capacity targets by setting the resulting maximum financial disadvantage at a level equal to 1 % of determined costs. The revision addresses the concerns raised by the Commission in Implementing Decision (EU) 2022/728. The Commission does not have any further observations on the incentive schemes set out in the revised draft performance plan of Romania.

CONCLUSION

(49) In the light of all the foregoing, the Commission finds that the performance targets included in the revised draft performance plan submitted by Romania are consistent with the Union-wide performance targets,

HAS ADOPTED THIS DECISION:

Article 1

The performance targets included in the revised draft performance plan submitted by Romania pursuant to Regulation (EC) No 549/2004, and listed in the Annex to this Decision, are consistent with the Union-wide performance targets for the third reference period set out in Implementing Decision (EU) 2021/891.

Article 2

This Decision is addressed to Romania.

Done at Brussels, 5 December 2022.

For the Commission
Adina VĂLEAN
Member of the Commission

ANNEX

Performance targets included in the revised draft performance plan submitted by Romania pursuant to Regulation (EC) No 549/2004, found to be consistent with the Union-wide performance targets for the third reference period

KEY PERFORMANCE AREA OF SAFETY

Effectiveness of safety management

Romania	**Targets on the effectiveness of safety management, expressed as a level of implementation**, ranging from EASA level A to D			
Air navigation service provider concerned	**Safety management objective**	**2022**	**2023**	**2024**
ROMATSA	Safety policy and objectives	C	C	**C**
	Safety risk management	C	C	**D**
	Safety assurance	C	C	**C**
	Safety promotion	C	C	**C**
	Safety culture	C	C	**C**

KEY PERFORMANCE AREA OF ENVIRONMENT

Average horizontal *en route* flight efficiency of the actual trajectory

Romania	**2022**	**2023**	**2024**
Targets in the key performance area of environment, expressed as the average horizontal *en route* flight efficiency of the actual trajectory	**2,05 %**	**2,05 %**	**2,05 %**

KEY PERFORMANCE AREA OF CAPACITY

Average *en route* ATFM delay in minutes per flight

Romania	**2022**	**2023**	**2024**
Targets in the key performance area of capacity, expressed in minutes of ATFM delay per flight	**0,04**	**0,04**	**0,04**

KEY PERFORMANCE AREA OF COST-EFFICIENCY

Determined unit cost for *en route* air navigation services

***En route* charging zone of Romania**	**2014 baseline value**	**2019 baseline value**	**2020 -2021**	**2022**	**2023**	**2024**
Revised *en route* cost-efficiency targets, expressed as determined *en route* unit cost (in real terms in 2017 prices)	**165,00 RON**	**155,38 RON**	**298,87 RON**	**179,53 RON**	**163,47 RON**	**160,39 RON**
	36,13 EUR	34,03 EUR	65,45 EUR	39,32 EUR	35,80 EUR	35,13 EUR

COMMISSION DECISION (EU) 2022/2425

of 5 December 2022

on the consistency of the performance targets contained in the revised draft performance plan submitted by Malta pursuant to Regulation (EC) No 549/2004 of the European Parliament and of the Council with the Union-wide performance targets for the third reference period

(notified under document C(2022) 8743)

(Only the English and Maltese texts are authentic)

(Text with EEA relevance)

THE EUROPEAN COMMISSION,

Having regard to the Treaty on the Functioning of the European Union,

Having regard to Regulation (EC) No 549/2004 of the European Parliament and of the Council of 10 March 2004 laying down the framework for the creation of the single European sky (the framework Regulation) ([1]), and in particular Article 11(3), point (c), thereof,

Having regard to Commission Implementing Regulation (EU) 2019/317 of 11 February 2019 laying down a performance and charging scheme in the single European sky and repealing Implementing Regulations (EU) No 390/2013 and (EU) No 391/2013 ([2]), and in particular Article 15(2) thereof,

Whereas:

GENERAL CONSIDERATIONS

(1) Pursuant to Article 10 of Implementing Regulation (EU) 2019/317, Member States are to draw up performance plans, either at national level or at the level of functional airspace blocks ('FABs'), which have to include binding performance targets for each reference period of the performance scheme for air navigation services and network functions. Those performance targets have to be consistent with the Union-wide targets adopted by the Commission for the reference period concerned.

(2) Union-wide performance targets for the third reference period ('RP3') were originally set out in Commission Implementing Decision (EU) 2019/903 ([3]). Since those Union-wide performance targets and the draft RP3 performance plans subsequently submitted in October 2019 by Member States were drawn up before the outbreak of the COVID-19 pandemic in March 2020, they did not take account of the considerable reduction in air traffic due to the measures taken by the Member States and third countries to contain the pandemic.

(3) In response to the impact of the COVID-19 pandemic on the provision of air navigation services, exceptional measures for RP3, which derogate from the provisions of Implementing Regulation (EU) 2019/317, were set out in Commission Implementing Regulation (EU) 2020/1627 ([4]). The Commission adopted, on 2 June 2021, Implementing Decision (EU) 2021/891 ([5]) setting revised Union-wide performance targets for RP3. On this basis, Member States submitted to the Commission, in October 2021, draft performance plans containing revised local performance targets for RP3.

([1]) OJ L 96, 31.3.2004, p. 1.
([2]) OJ L 56, 25.2.2019, p. 1.
([3]) Commission Implementing Decision (EU) 2019/903 of 29 May 2019 setting the Union-wide performance targets for the air traffic management network for the third reference period starting on 1 January 2020 and ending on 31 December 2024 (OJ L 144, 3.6.2019, p. 49).
([4]) Commission Implementing Regulation (EU) 2020/1627 of 3 November 2020 on exceptional measures for the third reference period (2020-2024) of the single European sky performance and charging scheme due to COVID-19 pandemic (OJ L 366, 4.11.2020, p. 7).
([5]) Commission Implementing Decision (EU) 2021/891 of 2 June 2021 setting revised Union-wide performance targets for the air traffic management network for the third reference period (2020-2024) and repealing Implementing Decision (EU) 2019/903 (OJ L 195, 3.6.2021, p. 3).

(4) Commission Implementing Decision (EU) 2022/728 ([6]) was addressed to Belgium, Germany, Greece, France, Cyprus, Latvia, Luxembourg, Malta, the Netherlands, Romania, and Sweden. In that Decision, the Commission found that the *en route* cost-efficiency performance targets included in the draft performance plan for RP3 of Malta are not consistent with the Union-wide performance targets and issued recommendations for the revision of those targets.

(5) In response to Russia's war of aggression against Ukraine, which started on 24 February 2022, the Union has imposed restrictive measures which prohibit Russian air carriers, any Russian-registered aircraft and any non-Russian-registered aircraft which is owned or chartered, or otherwise controlled by any Russian natural or legal person, entity or body, from landing in and taking off from, or overflying the territory of the Union. Those restrictive measures and the counter-measures adopted by Russia have led to changes in air traffic in European airspace. Certain Member States have been severely affected by a significant reduction in the number of overflights in the airspace under their responsibility. However, at Union-wide level, the observed impact on the number of flights has been limited in contrast with the sharp reduction of air traffic across Europe which resulted from the outbreak of the COVID-19 pandemic.

(6) On 13 July 2022, Malta submitted a revised draft performance plan for RP3 (the 'revised draft performance plan') for assessment to the Commission.

(7) The performance review body, assisting the Commission in the implementation of the performance scheme pursuant to Article 11(2) of Regulation (EC) No 549/2004, has submitted to the Commission a report containing its advice on the assessment of the revised draft performance plan of Malta.

(8) In accordance with Article 15(1) of Implementing Regulation (EU) 2019/317, the Commission has assessed the consistency of the local performance targets contained in the revised draft performance plan of Malta on the basis of the assessment criteria laid down in point 1 of Annex IV to that Implementing Regulation, and taking account of local circumstances. In respect of each key performance area and the related performance targets, the Commission has complemented its assessment by reviewing the elements set out in point 2 of Annex IV to that Implementing Regulation.

(9) The Eurocontrol Statistics and Forecast Service ('STATFOR') base traffic forecast published in June 2022 takes account of the changed circumstances referred to in recital 5. Based on that forecast, the Commission notes that Malta is not foreseen to experience adverse changes in traffic over RP3 as a result of Russia's war in Ukraine.

COMMISSION ASSESSMENT

Assessment of performance targets in the key performance area of safety

(10) Concerning the key performance area of safety, the Commission has assessed the consistency of the targets submitted by Malta regarding the effectiveness of safety management of air navigation service providers ('ANSPs') based on the criterion laid down in point 1.1 of Annex IV to Implementing Regulation (EU) 2019/317.

(11) The local safety performance targets proposed by Malta in respect of the effectiveness of safety management, broken down per safety management objective and expressed as a level of implementation, are as follows:

([6]) Commission Implementing Decision (EU) 2022/728 of 13 April 2022 on the inconsistency of certain performance targets contained in the draft national and functional airspace block performance plans submitted by Belgium, Germany, Greece, France, Cyprus, Latvia, Luxembourg, Malta, the Netherlands, Romania, and Sweden pursuant to Regulation (EC) No 549/2004 of the European Parliament and of the Council with the Union-wide performance targets for the third reference period and setting out recommendations for the revision of those targets (OJ L 135, 12.5.2022, p. 4).

Malta	**Targets on the effectiveness of safety management, expressed as a level of implementation**, ranging from EASA level A to D				
Air navigation service provider concerned	**Safety management objective**	**2022**	**2023**	**2024**	***Union-wide targets (2024)***
MATS	Safety policy and objectives	C	C	**D**	***C***
	Safety risk management	C	C	**D**	***D***
	Safety assurance	C	C	**D**	***C***
	Safety promotion	C	C	**D**	***C***
	Safety culture	C	C	**C**	***C***

(12) The safety targets proposed by Malta for MATS are consistent with the Union-wide performance targets and even outperform, for 2024, the Union-wide performance targets in the areas of 'safety policy and objectives', 'safety assurance', and 'safety promotion'.

(13) The Commission notes that the revised draft performance plan submitted by Malta sets out measures for MATS for the achievement of the local safety targets, such as the introduction of a security operations centre and a network operations centre, the implementation of new safety software, the hiring of cyber security specialists to improve risk management, and the training of staff to comply with the change management requirements set out in Implementing Regulation (EU) 2017/373.

(14) On the basis of the findings set out in recitals 11 and 13, and considering that the Union-wide safety performance targets set in Implementing Decision (EU) 2021/891 are to be achieved by the final year of RP3, namely 2024, the targets included in the revised draft performance plan of Malta should be considered consistent with the Union-wide performance targets in the key performance area of safety.

Assessment of performance targets in the key performance area of environment

(15) Concerning the key performance area of environment, the consistency of the targets submitted by Malta regarding the average horizontal *en route* flight efficiency of the actual trajectory has been assessed based on the criterion laid down in point 1.2 of Annex IV to Implementing Regulation (EU) 2019/317. Accordingly, the proposed targets contained in the revised draft performance plan of Malta have been compared with the relevant *en route* horizontal flight efficiency reference values set out in the European Route Network Improvement Plan ('ERNIP') available at the time of adopting the revised Union-wide performance targets for RP3, on 2 June 2021.

(16) Concerning the year 2020, the Union-wide performance target for RP3 in the key performance area of environment, which was initially set out in Implementing Decision (EU) 2019/903, before the outbreak of the COVID-19 pandemic, was not revised by Implementing Decision (EU) 2021/891, considering that the period for the application of that target had expired and that its implementation had thus become definitive leaving no possibility for retroactive adjustments. Similarly, the local environment performance targets for the year 2021 set by Member States in the draft performance plans submitted in October 2021 could not be retroactively modified in the revised draft performance plans. Therefore, the consistency of the local environment performance targets with the corresponding Union-wide performance targets should be assessed with regard to the years 2022, 2023 and 2024.

(17) The performance targets in the key performance area of environment proposed by Malta and the corresponding national reference values for RP3 from the ERNIP, expressed as the average horizontal *en route* flight efficiency of the actual trajectory, are as follows:

Malta	2022	2023	2024
Targets in the key performance area of environment, expressed as the average horizontal *en route* flight efficiency of the actual trajectory	**1,80 %**	**1,80 %**	**1,80 %**
Reference values	1,80 %	1,80 %	1,80 %

(18) The Commission observes that the environment targets proposed by Malta are equal to the corresponding national reference values for each of the years from 2022 to 2024.

(19) The Commission notes that Malta has presented, in the revised draft performance plan, measures for the achievement of the local environment targets which include the implementation of free route airspace above flight level 195, the design of a new terminal manoeuvring area, and new arrival and departure procedures.

(20) On the basis of the findings set out in recitals 17 to 19, the targets included in the revised draft performance plan of Malta should be considered consistent with the Union-wide performance targets in the key performance area of environment.

Assessment of performance targets in the key performance area of capacity

(21) Concerning the key performance area of capacity, the consistency of the targets submitted by Malta regarding the average *en route* air traffic flow management ('ATFM') delay per flight has been assessed based on the criterion laid down in point 1.3 of Annex IV to Implementing Regulation (EU) 2019/317. Accordingly, the proposed targets contained in the revised draft performance plan of Malta have been compared with the relevant reference values set out in the Network Operations Plan available at the time of adopting the revised Union-wide performance targets for RP3, on 2 June 2021.

(22) Concerning the year 2020, the Union-wide performance target for RP3 in the key performance area of capacity, which was initially set out in Implementing Decision (EU) 2019/903, before the outbreak of the COVID-19 pandemic, was not revised by Implementing Decision (EU) 2021/891, considering that the period for the application of that target had expired and that its implementation had thus become definitive leaving no possibility for retroactive adjustments. Similarly, the local capacity performance targets for the year 2021 set by Member States in the draft performance plans submitted in October 2021 could not be retroactively modified in the revised draft performance plans. Therefore, the consistency of the local capacity performance targets with the corresponding Union-wide performance targets should be assessed with regard to the years 2022, 2023 and 2024.

(23) The *en route* capacity targets proposed by Malta for RP3, expressed in minutes of ATFM delay per flight, as well as the corresponding reference values from the Network Operations Plan, are as follows:

Malta	2022	2023	2024
Targets in the key performance area of capacity, expressed in minutes of ATFM delay per flight	**0,01**	**0,01**	**0,01**
Reference values	0,01	0,01	0,01

(24) The Commission observes that the capacity targets proposed by Malta are equal to the corresponding national reference values for each year from 2022 to 2024.

(25) The Commission notes that Malta has presented in the draft performance plan measures for the achievement of the local *en route* capacity targets. Those measures include an increase in the number of air traffic controller full time equivalents by the end of RP3 and the implementation of free route airspace.

(26) On the basis of the findings set out in recitals 23 to 25, the targets included in the revised draft performance plan of Malta should be considered consistent with the Union-wide performance targets in the key performance area of capacity.

Review of draft capacity targets for terminal air navigation services

(27) With regard to airports which fall within the scope of Implementing Regulation (EU) 2019/317 as set out in Article 1(3) and (4) of that Regulation, the Commission has complemented its assessment of *en route* capacity targets by reviewing the capacity targets for terminal air navigation services in accordance with point 2.1.(b) of Annex IV to Implementing Regulation (EU) 2019/317. Those targets were not found to raise concerns in respect of Malta.

Assessment of revised performance targets in the key performance area of cost-efficiency

(28) The Commission concluded in Implementing Decision (EU) 2022/728 that the *en route* cost-efficiency targets included in the draft performance plan of Malta submitted in 2021 were inconsistent with the Union-wide performance targets. Malta has proposed revised *en route* cost-efficiency targets as part of its revised draft performance plan.

(29) The table below shows the initial RP3 *en route* cost-efficiency performance targets for the charging zone of Malta, as contained in the draft performance plan submitted in 2021, and the corresponding revised performance targets contained in the revised draft performance plan submitted in 2022.

***En route* charging zone of Malta**	**2014 baseline value**	**2019 baseline value**	**2020 -2021**	**2022**	**2023**	**2024**
Initial en route cost-efficiency targets (contained in the draft performance plan submitted in 2021), expressed as determined en route unit cost (in real terms in 2017 prices)	*21,50 EUR*	*22,98 EUR*	*44,08 EUR*	*31,85 EUR*	*24,83 EUR*	*24,85 EUR*
Revised *en route* cost-efficiency targets (contained in the revised draft performance plan), expressed as determined *en route* unit cost (in real terms in 2017 prices)	**21,50 EUR**	**22,98 EUR**	**44,08 EUR**	**27,44 EUR**	**21,61 EUR**	**22,09 EUR**

(30) The Commission observes that Malta has revised its local cost-efficiency targets for the time period from 2022 to 2024, which results, in comparison with the draft performance plan submitted in 2021, in an overall determined unit cost ('DUC') lower by 12,3 % over those three years and lower by 8,7 % over RP3 as a whole. Those DUC reductions result both from the updated traffic assumptions used in the revised draft performance plan for each of the years from 2022 to 2024 and from the downward revision of the determined costs expressed in real terms in 2017 prices for those years.

(31) The changes to the traffic forecast for each of the years from 2022 to 2024 are presented in the table below. The Commission notes that the traffic forecast used in the revised draft performance plan is based on the Eurocontrol STATFOR June 2022 base traffic forecast.

***En route* charging zone of Malta**	**2022**	**2023**	**2024**
Initial traffic forecast (contained in the draft performance plan submitted in 2021), expressed in thousands of en route service units	*714*	*957*	*1 002*
Updated traffic forecast (contained in the revised draft performance plan), expressed in thousands of *en route* service units	**811**	**1 006**	**1 044**
Difference	**+ 13,6 %**	**+ 5,1 %**	**+ 4,3 %**

(32) The revised determined costs for each of the years from 2022 to 2024, expressed in real terms in 2017 prices, are shown in the table below.

***En route* charging zone of Malta**	**2022**	**2023**	**2024**
Initial determined costs in real terms in 2017 prices (contained in the draft performance plan submitted in 2021)	*23 M EUR*	*24 M EUR*	*25 M EUR*
Revised determined costs in real terms in 2017 prices (contained in the revised draft performance plan)	**22 M EUR**	**22 M EUR**	**23 M EUR**
Difference	**- 2,2 %**	**- 8,5 %**	**- 7,4 %**

(33) The revised draft performance plan comprises an updated inflation forecast for Malta for each of the calendar years from 2022 to 2024, as outlined in the table below.

***En route* charging zone of Malta**	**2022**	**2023**	**2024**
Initial inflation index, with forecasted year-on-year change in inflation in parenthesis (data contained in the draft performance plan submitted in 2021)	*106,7 (1,8 %)*	*108,8 (2,0 %)*	*111,0 (2,0 %)*
Revised inflation index, with year-on-year change in inflation in parenthesis (data contained in the revised draft performance plan)	**109,7 (4,7 %)**	**112,8 (2,8 %)**	**115,1 (2,1 %)**

(34) Due to the update of the inflation forecast, the revised determined costs in nominal terms for year 2022 remain largely unchanged. However, the Commission observes that Malta revised downwards the nominal determined costs for years 2023 and 2024.

***En route* charging zone of Malta**	**2022**	**2023**	**2024**
Initial determined costs in nominal terms (contained in the draft performance plan submitted in 2021)	*24 M EUR*	*25 M EUR*	*27 M EUR*
Revised determined costs in nominal terms (contained in the revised draft performance plan)	**24 M EUR**	**24 M EUR**	**26 M EUR**
Difference	**- 0,2 %**	**- 5,8 %**	**- 4,5 %**

(35) The Commission has assessed the consistency of the revised cost-efficiency targets proposed for the Malta *en route* charging zone based on the criteria laid down in points 1.4(a), (b) and (c) of Annex IV to Implementing Regulation (EU) 2019/317.

(36) Concerning the criterion laid down in point 1.4(a) of Annex IV to Implementing Regulation (EU) 2019/317, the Commission observes that the *en route* DUC trend at charging zone level of -1,0 % over RP3 outperforms the Union-wide trend of +1,0 % over the same period. The Commission notes that this constitutes an improvement from the DUC trend of +2,0 % calculated on the basis of the draft performance plan submitted in 2021.

(37) Concerning the criterion laid down in point 1.4(b) of Annex IV to Implementing Regulation (EU) 2019/317, the Commission observes that the long-term *en route* DUC trend at charging zone level over the second reference period ('RP2') and RP3 of +0,3 % underperforms the long-term Union-wide trend of -1,3 % over the same period. The Commission notes that this, however, constitutes an improvement from the long-term DUC trend of +1,6 % calculated on the basis of the draft performance plan submitted in 2021.

(38) Concerning the criterion laid down in point 1.4(c) of Annex IV to Implementing Regulation (EU) 2019/317, the Commission observes that the baseline value for the DUC of EUR 22,98 of Malta in EUR2017 is 19,7 % lower than the average baseline value of 28,64 in EUR2017 of the relevant comparator group.

(39) As specified in recital 36, Malta's revised cost-efficiency targets result in a DUC trend over RP3 which significantly outperforms the corresponding Union-wide trend and shows a reduction of the DUC over the reference period. Furthermore, referring to recital 38, Malta demonstrates a good cost-efficiency performance in respect of its baseline value for 2019, which is significantly lower than the corresponding comparator group average. Finally, the Commission notes that Malta has revised downwards the determined costs for RP3 both in real and nominal terms, whilst planning to serve additional traffic on the basis of the updated traffic forecast for RP3. Therefore, the Commission considers that the deviation from the Union-wide long-term DUC trend observed in recital 37 does not preclude the establishment of consistency with the Union-wide cost-efficiency performance targets in respect of Malta.

(40) Having regard to the foregoing observations, the Commission notes that Malta has adequately addressed the recommendations set out in Article 3 of Implementing Decision (EU) 2022/728.

(41) On the basis of the findings set out in recitals 29 to 40, the targets included in the revised draft performance plan of Malta should be considered consistent with the Union-wide performance targets in the key performance area of cost-efficiency.

Review of revised cost-efficiency targets for terminal air navigation services

(42) With regard to airports which fall within the scope of Implementing Regulation (EU) 2019/317 as set out in Article 1(3) and (4) of that Regulation, the Commission has complemented its assessment of the *en route* cost-efficiency targets by reviewing the cost-efficiency targets for terminal air navigation services in accordance with point 2.1(c) of Annex IV to Implementing Regulation (EU) 2019/317.

(43) In Implementing Decision (EU) 2022/728, the Commission raised concerns regarding the terminal cost-efficiency targets proposed by Malta in the draft performance plan submitted in 2021, and considered that Malta should further justify those targets or revise them downwards. The Commission notes, however, that Malta has, on the contrary, revised those targets upwards, except for year 2023, without providing related justifications.

(44) The Commission observes that the terminal DUC trend of Malta of +5,0 % over RP3 remains higher than the *en route* DUC trend of -1,0 % over RP3 and remains higher than the actual terminal DUC trend of +0,6 % observed over RP2. Furthermore, the terminal RP3 DUC trend has worsened in comparison with the draft performance plan submitted in 2021, in which a terminal DUC trend of +4,3 % was observed.

(45) On the basis of the findings in recitals 43 and 44, the Commission concludes that the revised terminal cost-efficiency performance targets of Malta continue to give rise to concerns. The Commission therefore reiterates its view, as set out in Implementing Decision (EU) 2022/728, that Malta should revise downwards those targets or provide adequate justifications for those targets, including for the additional cost increases applied in years 2022 and 2024. The Commission invites Malta to address this observation in connection with the adoption of its final performance plan in accordance with Article 16, point (a) of Implementing Regulation (EU) 2019/317.

Review of the incentive schemes referred to in Article 11 of Implementing Regulation (EU) 2019/317 complementing the Commission's assessment of capacity targets

(46) In accordance with point 2.1(f) of Annex IV to Implementing Regulation (EU) 2019/317, in relation to the assessment of the local capacity targets, the Commission has reviewed the incentive schemes contained in the revised draft performance plan of Malta. The Commission has examined, in particular, whether those incentive schemes fulfil the substantive requirements set out in in Article 11(1) and (3) of Implementing Regulation (EU) 2019/317. The Commission notes that Malta has not made any changes to those incentive schemes in comparison with the draft performance plan submitted in 2021.

(47) In respect of the *en route* and terminal capacity schemes proposed by Malta, the Commission, on the basis of expert advice provided by the performance review body, has strong doubts whether the proposed maximum financial disadvantages, which amount to 0,5 % and 0,25 % of determined costs respectively, would have any material impact on the revenue at risk, as required pursuant to point (a) of Article 11(3) of Implementing Regulation (EU) 2019/317.

(48) Therefore, Malta should revise, in connection with the adoption of its final performance plan in accordance with Article 16, point (a) of Implementing Regulation (EU) 2019/317, its incentive schemes for achieving *en route* and terminal capacity targets so that the maximum financial disadvantages stemming from those incentive schemes are set at a level having a material impact on the revenue at risk, as expressly required under Article 11(3), point (a) of Implementing Regulation (EU) 2019/317, which in the Commission's view should lead to a maximum financial disadvantage equal to or higher than 1 % of determined costs.

CONCLUSIONS

(49) In the light of all the foregoing, the Commission finds that the performance targets contained in the revised draft performance plan submitted by Malta are consistent with the Union-wide performance targets,

HAS ADOPTED THIS DECISION:

Article 1

The performance targets contained in the revised draft performance plan submitted by Malta, pursuant to Regulation (EC) No 549/2004, and listed in the Annex to this Decision, are consistent with the Union-wide performance targets for the third reference period set out in Implementing Decision (EU) 2021/891.

Article 2

This Decision is addressed to the Republic of Malta.

Done at Brussels, 5 December 2022.

For the Commission
Adina VĂLEAN
Member of the Commission

ANNEX

Performance targets included in the revised draft performance plan submitted by Malta pursuant to Regulation (EC) No 549/2004, found to be consistent with the Union-wide performance targets for the third reference period

KEY PERFORMANCE AREA OF SAFETY

Effectiveness of safety management

Malta	**Targets on the effectiveness of safety management, expressed as a level of implementation**, ranging from EASA level A to D			
Air navigation service provider concerned	**Safety management objective**	**2022**	**2023**	**2024**
MATS	Safety policy and objectives	C	C	**D**
	Safety risk management	C	C	**D**
	Safety assurance	C	C	**D**
	Safety promotion	C	C	**D**
	Safety culture	C	C	**C**

KEY PERFORMANCE AREA OF ENVIRONMENT

Average horizontal *en route* flight efficiency of the actual trajectory

Malta	**2022**	**2023**	**2024**
Targets in the key performance area of environment, expressed as the average horizontal *en route* flight efficiency of the actual trajectory	**1,80 %**	**1,80 %**	**1,80 %**

KEY PERFORMANCE AREA OF CAPACITY

Average *en route* ATFM delay in minutes per flight

Malta	**2022**	**2023**	**2024**
Targets in the key performance area of capacity, expressed in minutes of ATFM delay per flight	**0,01**	**0,01**	**0,01**

KEY PERFORMANCE AREA OF COST-EFFICIENCY

Determined unit cost for *en route* air navigation services

***En route* charging zone of Malta**	**2014 baseline value**	**2019 baseline value**	**2020 -2021**	**2022**	**2023**	**2024**
Revised *en route* cost-efficiency targets, expressed as determined *en route* unit cost (in real terms in 2017 prices)	**21,50 EUR**	**22,98 EUR**	**44,08 EUR**	**27,44 EUR**	**21,61 EUR**	**22,09 EUR**

COMMISSION DECISION (EU) 2022/2426

of 5 December 2022

on the consistency of the performance targets contained in the revised draft performance plan submitted by Latvia pursuant to Regulation (EC) No 549/2004 of the European Parliament and of the Council with the Union-wide performance targets for the third reference period

(notified under document C(2022) 8718)

(Only the Latvian text is authentic)

(Text with EEA relevance)

THE EUROPEAN COMMISSION,

Having regard to the Treaty on the Functioning of the European Union,

Having regard to Regulation (EC) No 549/2004 of the European Parliament and of the Council of 10 March 2004 laying down the framework for the creation of the single European sky (the framework Regulation) ([1]), and in particular Article 11(3) point (c), thereof,

Having regard to Commission Implementing Regulation (EU) 2019/317 of 11 February 2019 laying down a performance and charging scheme in the single European sky and repealing Implementing Regulations (EU) No 390/2013 and (EU) No 391/2013 ([2]), and in particular Article 15(2) thereof,

Whereas:

GENERAL CONSIDERATIONS

(1) Pursuant to Article 10 of Implementing Regulation (EU) 2019/317, Member States are to draw up, either at national level or at the level of functional airspace blocks ('FABs'), binding performance targets for each reference period of the performance scheme for air navigation services and network functions. Those performance targets have to be consistent with the Union-wide targets adopted by the Commission for the reference period concerned.

(2) Union-wide performance targets for the third reference period ('RP3') were originally set out in Commission Implementing Decision (EU) 2019/903 ([3]). As those Union-wide performance targets and the draft RP3 performance plans subsequently submitted in October 2019 by Member States were drawn up before the outbreak of the COVID-19 pandemic in March 2020, they did not take account of the considerable reduction in air traffic due to the measures taken by the Member States and third countries to contain the pandemic.

(3) In response to the impact of the COVID-19 pandemic on the provision of air navigation services, exceptional measures for RP3, which derogate from the provisions of Implementing Regulation (EU) 2019/317, were set out in Commission Implementing Regulation (EU) 2020/1627 ([4]). The Commission adopted, on 2 June 2021, Implementing Decision (EU) 2021/891 ([5]) setting revised Union-wide performance targets for RP3. On this basis, Member States submitted to the Commission, in October 2021, draft performance plans containing revised local performance targets for RP3.

([1]) OJ L 96, 31.3.2004, p. 1.

([2]) Commission Implementing Regulation (EU) 2019/317 of 11 February 2019 laying down a performance and charging scheme in the single European sky and repealing Implementing Regulations (EU) No 390/2013 and (EU) No 391/2013 (OJ L 56, 25.2.2019, p. 1).

([3]) Commission Implementing Decision (EU) 2019/903 of 29 May 2019 setting the Union-wide performance targets for the air traffic management network for the third reference period starting on 1 January 2020 and ending on 31 December 2024 (OJ L 144, 3.6.2019, p. 49).

([4]) Commission Implementing Regulation (EU) 2020/1627 of 3 November 2020 on exceptional measures for the third reference period (2020-2024) of the single European sky performance and charging scheme due to COVID-19 pandemic (OJ L 366, 4.11.2020, p. 7).

([5]) Commission Implementing Decision (EU) 2021/891 of 2 June 2021 setting revised Union-wide performance targets for the air traffic management network for the third reference period (2020-2024) and repealing Implementing Decision (EU) 2019/903 (OJ L 195, 3.6.2021, p. 3).

(4) Commission Implementing Decision (EU) 2022/728 ([6]) was addressed to Belgium, Germany, Greece, France, Cyprus, Latvia, Luxembourg, Malta, the Netherlands, Romania, and Sweden. In that Decision, the Commission found that the *en route* cost-efficiency performance targets included in the draft performance plan for RP3 of Latvia are not consistent with the Union-wide performance targets and issued recommendations for the revision of those targets.

(5) In response to Russia's war of aggression against Ukraine, which started on 24 February 2022, the Union has imposed restrictive measures which prohibit Russian air carriers, any Russian-registered aircraft and any non-Russian-registered aircraft which is owned or chartered, or otherwise controlled by any Russian natural or legal person, entity or body, from landing in and taking off from, or overflying the territory of the Union. Those restrictive measures and the counter-measures adopted by Russia have led to changes in air traffic in European airspace. Certain Member States, including Latvia, have been severely affected by a significant reduction in the number of overflights in the airspace under their responsibility. However, at Union-wide level, the observed impact on the number of flights has been limited in contrast with the sharp reduction of air traffic across Europe which resulted from the outbreak of the COVID-19 pandemic.

(6) On 13 July 2022, Latvia submitted a revised draft performance plan for RP3 (the 'revised draft performance plan').

(7) The performance review body, assisting the Commission in the implementation of the performance scheme pursuant to Article 11(2) of Regulation (EC) No 549/2004, has submitted to the Commission a report containing its advice on the assessment of the revised draft performance plan of Latvia.

(8) In accordance with Article 15(1) of Implementing Regulation (EU) 2019/317, the Commission has assessed the consistency of the local performance targets contained in the revised draft performance plan of Latvia on the basis of the assessment criteria laid down in point 1 of Annex IV to that Implementing Regulation, and taking account of local circumstances. In respect of each key performance area and the related performance targets, the Commission has complemented its assessment by reviewing the elements set out in point 2 of Annex IV to that Implementing Regulation.

(9) The Eurocontrol Statistics and Forecast Service ('STATFOR') base traffic forecast, published in June 2022, takes account of the change in circumstances with respect to air traffic in European airspace. Based on that forecast, the Commission notes that Latvia continues to face a significantly deteriorated traffic outlook for the remainder of RP3 as a consequence of Russia's war of aggression against Ukraine. As those changed circumstances considerably impact the performance targets contained in the revised draft performance plan of Latvia, they should be taken into account in the assessment of the local performance targets contained therein.

COMMISSION ASSESSMENT

Assessment of performance targets in the key performance area of safety

(10) Concerning the key performance area of safety, the Commission has assessed the consistency of the targets submitted by Latvia regarding the effectiveness of safety management of air navigation service providers ('ANSPs') based on the criterion laid down in point 1.1 of Annex IV to Implementing Regulation (EU) 2019/317.

(11) The local safety performance targets proposed by Latvia in respect of the effectiveness of safety management, broken down per safety management objective and expressed as a level of implementation, are as follows:

([6]) Commission Implementing Decision (EU) 2022/728 of 13 April 2022 on the inconsistency of certain performance targets contained in the draft national and functional airspace block performance plans submitted by Belgium, Germany, Greece, France, Cyprus, Latvia, Luxembourg, Malta, the Netherlands, Romania, and Sweden pursuant to Regulation (EC) No 549/2004 of the European Parliament and of the Council with the Union-wide performance targets for the third reference period and setting out recommendations for the revision of those targets (OJ L 135, 12.5.2022, p. 4).

Latvia	**Targets on the effectiveness of safety management, expressed as a level of implementation, ranging from EASA level A to D**				
Air navigation service provider concerned	**Safety management objective**	**2022**	**2023**	**2024**	***Union-wide targets (2024)***
LGS	Safety policy and objectives	C	D	**D**	***C***
	Safety risk management	C	D	**D**	***D***
	Safety assurance	C	D	**D**	***C***
	Safety promotion	C	D	**D**	***C***
	Safety culture	C	D	**D**	***C***

(12) The safety targets proposed by Latvia for LGS are consistent with the Union-wide performance targets and even outperform, for 2023 and 2024, the Union-wide performance targets in the areas of 'safety policy and objectives', 'safety assurance', 'safety promotion', and 'safety culture'.

(13) The Commission notes that the revised draft performance plan submitted by Latvia sets out measures for LGS for the achievement of the local safety targets, such as regular staff training, the revision of the safety management system procedures, evaluations of safety processes and just culture, simulated exercises, dissemination of safety data, and integration of safety management principles in business planning and decision-making.

(14) On the basis of the findings set out in recitals 11 to 13, and considering that the Union-wide safety performance targets set in Implementing Decision (EU) 2021/891 are to be achieved by the final year of RP3, namely 2024, the targets included in the revised draft performance plan of Latvia should be considered consistent with the Union-wide performance targets in the key performance area of safety.

Assessment of performance targets in the key performance area of environment

(15) Concerning the key performance area of environment, the consistency of the targets submitted by Latvia regarding the average horizontal *en route* flight efficiency of the actual trajectory has been assessed based on the criterion laid down in point 1.2 of Annex IV to Implementing Regulation (EU) 2019/317. Accordingly, the proposed targets contained in the revised draft performance plan of Latvia have been compared with the relevant *en route* horizontal flight efficiency reference values set out in the European Route Network Improvement Plan ('ERNIP') available at the time of adopting the revised Union-wide performance targets for RP3, on 2 June 2021.

(16) Concerning the year 2020, the Union-wide performance target for RP3 in the key performance area of environment, which was initially set out in Implementing Decision (EU) 2019/903, before the outbreak of the COVID-19 pandemic, was not revised by Implementing Decision (EU) 2021/891, considering that the period for the application of that target had expired and that its implementation had thus become definitive leaving no possibility for retroactive adjustments. Similarly, the local environment performance targets for the year 2021 set by Member States in the draft performance plans submitted in October 2021 could not be retroactively modified in the revised draft performance plans. Therefore, the consistency of the local environment performance targets with the corresponding Union-wide performance targets should be assessed with regard to years 2022, 2023 and 2024.

(17) The performance targets in the key performance area of environment proposed by Latvia and the corresponding national reference values for RP3 from the ERNIP, expressed as the average horizontal *en route* flight efficiency of the actual trajectory, are as follows:

Latvia	2022	2023	2024
Targets in the key performance area of environment, expressed as the average horizontal *en route* flight efficiency of the actual trajectory	**1,25 %**	**1,25 %**	**1,25 %**
Reference values	1,25 %	1,25 %	1,25 %

(18) The Commission observes that the environment targets proposed by Latvia are equal to the corresponding national reference values for each year from 2022 to 2024.

(19) The Commission notes that Latvia has presented in the revised draft performance plan measures for the achievement of the local environment targets which mainly fulfil already existing legal requirements under Union law and include the deployment of airport collaborative decision making, the adoption of performance-based navigation flight procedures, as well as the implementation of free route airspace.

(20) On the basis of the findings set out in recitals 17 to 19, the targets included in the revised draft performance plan of Latvia should be considered consistent with the Union-wide performance targets in the key performance area of environment.

Assessment of performance targets in the key performance area of capacity

(21) Concerning the key performance area of capacity, the consistency of the targets submitted by Latvia regarding the average *en route* air traffic flow management ('ATFM') delay per flight has been assessed based on the criterion laid down in point 1.3 of Annex IV to Implementing Regulation (EU) 2019/317. Accordingly, the proposed targets contained in the revised draft performance plan of Latvia have been compared with the relevant reference values set out in the Network Operations Plan available at the time of adopting the revised Union-wide performance targets for RP3, on 2 June 2021.

(22) Concerning the year 2020, the Union-wide performance target for RP3 in the key performance area of capacity, which was initially set out in Implementing Decision (EU) 2019/903, before the outbreak of the COVID-19 pandemic, was not revised by Implementing Decision (EU) 2021/891, considering that the period for the application of that target had expired and that its implementation had thus become definitive leaving no possibility for retroactive adjustments. Similarly, the local capacity performance targets for the year 2021 set by Member States in the draft performance plans submitted in October 2021 could not be retroactively modified in the revised draft performance plans. Therefore, the consistency of the local capacity performance targets with the corresponding Union-wide performance targets should be assessed with regard to years 2022, 2023 and 2024.

(23) The *en route* capacity targets proposed by Latvia for RP3, expressed in minutes of ATFM delay per flight, as well as the corresponding reference values from the Network Operations Plan, are as follows:

Latvia	2022	2023	2024
Targets in the key performance area of capacity, expressed in minutes of ATFM delay per flight	**0,03**	**0,03**	**0,03**
Reference values	0,03	0,03	0,03

(24) The Commission observes that the capacity targets proposed by Latvia are equal to the corresponding national reference values for each year from 2022 to 2024.

(25) The Commission observes that Latvia has presented in the revised draft performance plan measures for the achievement of the local *en route* capacity targets. Those measures relate to air traffic controllers and include a new training programme as well as improved staffing in different sectorization scenarios. The Commission notes that in respect of the draft performance plan of Latvia submitted in 2021, the air navigation service provider LGS has reduced the planned number of air traffic controller full-time equivalents in operations for the years 2022 to 2024, due to the change in circumstances outlined in recitals 5 and 9.

(26) On the basis of the findings set out in recitals 23 to 25, the targets included in the revised draft performance plan of Latvia should be considered consistent with the Union-wide performance targets in the key performance area of capacity.

Review of capacity targets for terminal air navigation services

(27) With regard to airports which fall within the scope of Implementing Regulation (EU) 2019/317 as set out in Article 1(3) and (4) of that Regulation, the Commission has complemented its assessment of *en route* capacity targets by reviewing the capacity targets for terminal air navigation services in accordance with point 2.1.(b) of Annex IV to Implementing Regulation (EU) 2019/317. Those targets were not found to raise any concerns in respect of Latvia.

Assessment of revised performance targets in the key performance area of cost-efficiency

(28) With reference to in recital 4, the Commission concluded in Implementing Decision (EU) 2022/728 that the proposed *en route* cost-efficiency targets included in the draft performance plan of Latvia submitted in 2021 were inconsistent with the Union-wide performance targets. Latvia has proposed revised *en route* cost-efficiency targets in its revised draft performance plan.

(29) The table below shows the initial RP3 *en route* cost-efficiency performance targets for the charging zone of Latvia, as contained in the draft performance plan submitted in 2021, and the corresponding revised performance targets contained in the revised draft performance plan submitted in 2022.

***En route* charging zone of Latvia**	**2014 baseline value**	**2019 baseline value**	**2020-2021**	**2022**	**2023**	**2024**
Initial en route cost-efficiency targets (contained in the draft performance plan submitted in 2021), expressed as determined en route unit cost (in real terms in 2017 prices)	*27,90 EUR*	*23,61 EUR*	*40,07 EUR*	*31,28 EUR*	*29,14 EUR*	*26,83 EUR*
Revised *en route* cost-efficiency targets (contained in the revised draft performance plan), expressed as determined *en route* unit cost (in real terms in 2017 prices)	**27,90 EUR**	**23,61 EUR**	**40,07 EUR**	**38,04 EUR**	**35,62 EUR**	**33,59 EUR**

(30) The Commission observes that Latvia has revised its local cost-efficiency targets for the time period from 2022 to 2024, which results, in comparison with the draft performance plan submitted in 2021, in an overall determined unit cost ('DUC') higher by 23,0 % over those three years and higher by 16,4 % over RP3 as a whole. Those DUC increases result from the significant deterioration in the traffic forecast, which has been caused by the reduction of air traffic in Latvia's airspace as a consequence of Russia's war of aggression against Ukraine, as referred to in recitals 5 and 9. The lower number of forecasted service units for each year from 2022 to 2024 has however been partly offset by Latvia through a reduction of determined costs.

(31) The Commission notes that the traffic assumptions used in the revised draft performance plan are based on the Eurocontrol STATFOR June 2022 base traffic forecast. The *en route* service units forecasted for the charging zone for each year from 2022 to 2024, in comparison with the figures contained in the draft performance plan, are presented in the table below.

***En route* charging zone of Latvia**	**2022**	**2023**	**2024**
Initial traffic forecast (contained in the draft performance plan submitted in 2021), expressed in thousands of en route service units	*736*	*842*	*906*
Updated traffic forecast (contained in the revised draft performance plan), expressed in thousands of *en route* service units	**466**	**548**	**570**
Difference	**- 36,7 %**	**- 34,9 %**	**- 37,1 %**

(32) Compared to the draft performance plan submitted in 2021, the annual reductions in the number of service units for each year from 2022 to 2024 are in the approximate range of -35 % to -37 %. Accordingly, the *en route* service units for Latvia are expected to remain, in 2024, 40,1 % below their pre-pandemic level (year 2019), whereas they were previously foreseen to exceed the pre-pandemic level by 11,4 % in the STATFOR base traffic forecast of October 2021.

(33) However, as shown in the table below, the flight movements in Latvian airspace operated under instrument flight rules (IFR) are not foreseen to decrease at the same rate as the *en route* service units. This discrepancy is due to the significant reduction of overflights, which on average generates proportionally higher numbers of *en route* service units than flights landing and departing from airports in Latvia.

***En route* charging zone of Latvia**	**2022**	**2023**	**2024**
Initial traffic forecast (contained in the draft performance plan submitted in 2021), expressed in thousands of IFR movements	*229*	*262*	*282*
Updated traffic forecast (contained in the revised draft performance plan), expressed in *thousands of IFR movements*	**177**	**213**	**221**
Difference	**- 22,8 %**	**- 18,8 %**	**- 21,7 %**

(34) The Commission hence notes that the workload of the ANSP, which is driven by the controlled flight movements, is not foreseen to diminish in correlation with the revenue reduction which stems from the lower number of *en route* service units.

(35) The revised determined costs for years 2022 to 2024, expressed in real terms in 2017 prices, are shown in the table below. The Commission notes that Latvia has revised downwards the determined costs in real terms for each of those years.

***En route* charging zone of Latvia**	**2022**	**2023**	**2024**
Initial determined costs in real terms in 2017 prices (contained in the draft performance plan submitted in 2021)	*23 M EUR*	*24,5 M EUR*	*24,3 M EUR*

Revised determined costs in real terms in 2017 prices (contained in the revised draft performance plan)	18 M EUR	**20 M EUR**	**19 M EUR**
Difference	**- 23,0 %**	**- 20,4 %**	**- 21,3 %**

(36) The revised draft performance plan comprises an updated inflation forecast for Latvia for each year from 2022 to 2024, as outlined in the following table.

***En route* charging zone of Latvia**	**2022**	**2023**	**2024**
Initial inflation index, with forecasted year-on-year change in inflation in parenthesis (data contained in the draft performance plan submitted in 2021)	*110,0 (2,2 %)*	*112,1 (1,9 %)*	*114,5 (2,1 %)*
Revised inflation index, with year-on-year change in inflation in parenthesis (data contained in the revised draft performance plan)	**119,7 (10,0 %)**	**124,3 (3,9 %)**	**128,1 (3,1 %)**

(37) The table below displays the determined costs in nominal terms for each year from 2022 to 2024. The Commission observes that Latvia revised downwards the nominal determined costs for years 2023 and 2024, despite the upward revision of the inflation forecast.

***En route* charging zone of Latvia**	**2022**	**2023**	**2024**
Initial determined costs in nominal terms (contained in the draft performance plan submitted in 2021)	*24,7 M EUR*	*26,7 M EUR*	*26,9 M EUR*
Revised determined costs in nominal terms (contained in the revised draft performance plan)	**20 M EUR**	**23 M EUR**	**23 M EUR**
Difference	**- 18,9 %**	**- 14,9 %**	**- 15,2 %**

(38) The Commission has assessed the consistency of the revised cost-efficiency targets proposed by Latvia based on the criteria laid down in points 1.4(a), (b) and (c) of Annex IV to Implementing Regulation (EU) 2019/317.

(39) Concerning the criterion laid down in point 1.4(a) of Annex IV to Implementing Regulation (EU) 2019/317, the Commission observes that the *en route* DUC trend at charging zone level of +9,2 % over RP3 underperforms the Union-wide trend of +1,0 % over the same period. The Commission notes that this constitutes a deterioration from the DUC trend of +3,3 % calculated on the basis of the draft performance plan submitted in 2021.

(40) Concerning the criterion laid down in point 1.4(b) of Annex IV to Implementing Regulation (EU) 2019/317, the Commission observes that the long-term *en route* DUC trend at charging zone level over the second reference period ('RP2') and RP3 of +2,1 % underperforms the long-term Union-wide trend of -1,3 % over the same period. The Commission notes that this constitutes a deterioration from the long-term DUC trend of -0,4 % calculated on the basis of the draft performance plan submitted in 2021.

(41) With reference to recitals 31 and 32, the Commission recalls that Latvia's service unit forecast for RP3 has been revised significantly downwards as a consequence of the traffic changes resulting from Russia's war of aggression against Ukraine. It is therefore necessary and appropriate to examine, for the purpose of the assessment criteria examined in recitals 39 and 40, whether Latvia would meet the Union-wide cost-efficiency trends in the absence of the severe traffic reduction for each year from 2022 to 2024 which is due to the changed circumstances.

(42) To this end, the Commission has recalculated Latvia's DUC trend over RP3 and Latvia's long-term DUC trend over RP2 and RP3 by making use of the Eurocontrol STATFOR base traffic forecast of October 2021. This recalculation results in an adjusted DUC trend for Latvia of -6,5 % over RP3 and in an adjusted long-term *en route* DUC trend for Latvia of -4,7 % over RP2 and RP3. Both of those adjusted trends are significantly below the corresponding Union-wide DUC trends of +1,0 % and -1,3 % respectively. Hence, Latvia fulfils the assessment criteria examined in recitals 39 and 40 in the absence of the changes in traffic caused by Russia's war of aggression against Ukraine.

(43) Concerning the criterion laid down in point 1.4(c) of Annex IV to Implementing Regulation (EU) 2019/317, the Commission observes that the baseline value for the DUC of EUR 23,61 of Latvia in EUR2017 is 17,2 % lower than the average baseline value of 28,51 EUR2017 of the relevant comparator group.

(44) The Commission acknowledges that the revised cost-efficiency targets for the charging zone of Latvia are higher than the initial targets included in the draft performance plan submitted in 2021. However, this deterioration is entirely due to the significantly lower traffic assumptions. When excluding the negative impact of the traffic changes resulting from Russia's war of aggression against Ukraine, it is clear that Latvia meets both the Union-wide DUC trend and the Union-wide long-term DUC trend. In addition, Latvia's baseline value for 2019 is lower by a notable margin than the corresponding average value of its comparator group, which indicates that it has maintained a historically good level of cost-efficiency in relative terms.

(45) Furthermore, with reference to recital 35, the Commission notes that Latvia has taken measures to mitigate the exceptional traffic circumstances by considerably reducing its determined costs for the remainder of RP3. The Commission observes that those cost containment measures are, overall, commensurate with the lower number of IFR movements forecasted for each year from 2022 to 2024, as presented in recital 32.

(46) On balance, the Commission therefore considers that Latvia has adequately addressed the recommendations set out in Article 3 of Implementing Decision (EU) 2022/728 with regard to the revision of its local cost-efficiency performance targets.

(47) On the basis of the findings in recitals 29 to 46, the targets included in the revised draft performance plan of Latvia should be considered consistent with the Union-wide performance targets in the key performance area of cost-efficiency.

Review of cost-efficiency targets for terminal air navigation services

(48) With regard to airports which fall within the scope of Implementing Regulation (EU) 2019/317 as set out in Articles 1(3) and (4) of that Regulation, the Commission has complemented its assessment of *en route* cost-efficiency targets by reviewing the cost-efficiency targets for terminal air navigation services in accordance with point 2.1(c) of Annex IV to Implementing Regulation (EU) 2019/317. Those targets were not found to raise any concerns in respect of Latvia.

CONCLUSIONS

(49) In the light of all the foregoing, the Commission has found that the performance targets contained in the revised draft performance plan submitted by Latvia are consistent with the Union-wide performance targets,

HAS ADOPTED THIS DECISION:

Article 1

The performance targets contained in the revised draft performance plan submitted by Latvia, pursuant to Regulation (EC) No 549/2004, and listed in the Annex to this Decision, are consistent with the Union-wide performance targets for the third reference period set out in Implementing Decision (EU) 2021/891.

Article 2

This Decision is addressed to the Republic of Latvia.

Done at Brussels, 5 December 2022.

For the Commission
Adina-Ioana VĂLEAN
Member of the Commission

ANNEX

Performance targets included in the revised draft performance plan submitted by Latvia pursuant to Regulation (EC) No 549/2004, found to be consistent with the Union-wide performance targets for the third reference period

KEY PERFORMANCE AREA OF SAFETY

Effectiveness of safety management

Latvia	**Targets on the effectiveness of safety management, expressed as a level of implementation**, ranging from EASA level A to D			
Air navigation service provider concerned	**Safety management objective**	**2022**	**2023**	**2024**
LGS	Safety policy and objectives	C	D	**D**
	Safety risk management	C	D	**D**
	Safety assurance	C	D	**D**
	Safety promotion	C	D	**D**
	Safety culture	C	D	**D**

KEY PERFORMANCE AREA OF ENVIRONMENT

Average horizontal *en route* flight efficiency of the actual trajectory

Latvia	**2022**	**2023**	**2024**
Targets in the key performance area of environment, expressed as the average horizontal *en route* flight efficiency of the actual trajectory	**1,25 %**	**1,25 %**	**1,25 %**

KEY PERFORMANCE AREA OF CAPACITY

Average *en route* ATFM delay in minutes per flight

Latvia	**2022**	**2023**	**2024**
Targets in the key performance area of capacity, expressed in minutes of ATFM delay per flight	**0,03**	**0,03**	**0,03**

KEY PERFORMANCE AREA OF COST-EFFICIENCY

Determined unit cost for *en route* air navigation services

***En route* charging zone of Latvia**	**2014 baseline value**	**2019 baseline value**	**2020 -2021**	**2022**	**2023**	**2024**
Revised *en route* cost-efficiency targets, expressed as determined *en route* unit cost (in real terms in 2017 prices)	**27,90 EUR**	**23,61 EUR**	**40,07 EUR**	**38,04 EUR**	**35,62 EUR**	**33,59 EUR**

COMMISSION IMPLEMENTING DECISION (EU) 2022/2427

of 6 December 2022

establishing the best available techniques (BAT) conclusions, under Directive 2010/75/EU of the European Parliament and of the Council on industrial emissions, for common waste gas management and treatment systems in the chemical sector

(notified under document C(2022) 8788)

(Text with EEA relevance)

THE EUROPEAN COMMISSION,

Having regard to the Treaty on the Functioning of the European Union,

Having regard to Directive 2010/75/EU of the European Parliament and of the Council of 24 November 2010 on industrial emissions (integrated pollution prevention and control) ([1]), and in particular Article 13(5) thereof,

Whereas:

(1) Best available techniques (BAT) conclusions are the reference for setting permit conditions for installations covered by Chapter II of Directive 2010/75/EU and competent authorities should set emission limit values which ensure that, under normal operating conditions, emissions do not exceed the emission levels associated with the best available techniques as laid down in the BAT conclusions.

(2) In accordance with Article 13(4) of Directive 2010/75/EU, the forum composed of representatives of Member States, the industries concerned and non-governmental organisations promoting environmental protection, established by Commission Decision of 16 May 2011 ([2]), provided the Commission on 11 May 2022 with its opinion on the proposed content of the BAT reference document for common waste gas management and treatment systems in the chemical sector. That opinion is publicly available ([3]).

(3) The BAT conclusions set out in the Annex to this Decision take into account the opinion of the forum on the proposed content of the BAT reference document. They contain the key elements of the BAT reference document.

(4) The measures provided for in this Decision are in accordance with the opinion of the Committee established by Article 75(1) of Directive 2010/75/EU,

HAS ADOPTED THIS DECISION:

Article 1

The best available techniques (BAT) conclusions for the common waste gas management and treatment systems in the chemical sector, as set out in the Annex, are adopted.

Article 2

This Decision is addressed to the Member States.

([1]) OJ L 334, 17.12.2010, p. 17.

([2]) Commission Decision of 16 May 2011 establishing a forum for the exchange of information pursuant to Article 13 of Directive 2010/75/EU on industrial emissions (OJ C 146, 17.5.2011, p. 3).

([3]) https://circabc.europa.eu/ui/group/06f33a94-9829-4eee-b187-21bb783a0fbf/library/acce74d3-4314-43f8-937b-9bbc594a16ef?p=1&n=10&sort=modified_DESC

Done at Brussels, 6 December 2022.

For the Commission
Virginijus SINKEVIČIUS
Member of the Commission

ANNEX

1. Best Available Techniques (BAT) conclusions for Common Waste Gas Management and Treatment Systems in the Chemical Sector

SCOPE

These BAT conclusions concern the following activity specified in Annex I to Directive 2010/75/EU: 4. Chemical industry (i.e. all production processes included in the categories of activities listed in points 4.1 to 4.6 of Annex I, unless specified otherwise).

More specifically, these BAT conclusions focus on emissions to air from the aforementioned activity.

These BAT conclusions do not address the following:

1. Emissions to air from the production of chlorine, hydrogen, and sodium/potassium hydroxide by the electrolysis of brine. This is covered by the BAT conclusions for the Production of Chlor-alkali (CAK).
2. Channelled emissions to air from the production of the following chemicals in continuous processes where the total production capacity of those chemicals exceeds 20 kt/yr:
   - lower olefins using the steam cracking process;
   - formaldehyde;
   - ethylene oxide and ethylene glycols;
   - phenol from cumene;
   - dinitrotoluene from toluene, toluene diamine from dinitrotoluene, toluene diisocyanate from toluene diamine, methylene diphenyl diamine from aniline, methylene diphenyl diisocyanate from methylene diphenyl diamine;
   - ethylene dichloride (EDC) and vinyl chloride monomer (VCM);
   - hydrogen peroxide.

   This is covered by the BAT conclusions for the Production of Large Volume Organic Chemicals (LVOC).

   However, channelled emissions to air of nitrogen oxides (NO_x) and carbon monoxide (CO) from thermal treatment of waste gases originating from the aforementioned production processes are included in the scope of these BAT conclusions.
3. Emissions to air from the production of the following inorganic chemicals:
   - ammonia;
   - ammonium nitrate;
   - calcium ammonium nitrate;
   - calcium carbide;
   - calcium chloride;
   - calcium nitrate;
   - carbon black;
   - ferrous chloride;
   - ferrous sulphate (i.e. copperas and related products, such as chloro-sulphates);
   - hydrofluoric acid;
   - inorganic phosphates;
   - nitric acid;
   - nitrogen-, phosphorus- or potassium-based fertilisers (simple or compound fertilisers);
   - phosphoric acid;
   - precipitated calcium carbonate;
   - sodium carbonate (i.e. soda ash);
   - sodium chlorate;

— sodium silicate;

— sulphuric acid;

— synthetic amorphous silica;

— titanium dioxide and related products;

— urea;

— urea-ammonium nitrate.

This may be covered by the BAT conclusions for the Production of Large Volume Inorganic Chemicals (LVIC).

4. Emissions to air from steam reforming as well as from the physical purification and reconcentration of spent sulphuric acid, provided that these processes are directly associated with a production process listed under the aforementioned points 2 or 3.

5. Emissions to air from the production of magnesium oxide using the dry process route. This may be covered by the BAT conclusions for the Production of Cement, Lime and Magnesium Oxide (CLM).

6. Emissions to air from the following:

— Combustion units other than process furnaces/heaters. This may be covered by the BAT conclusions for Large Combustion Plants (LCP), the BAT conclusions for the Refining of Mineral Oil and Gas (REF) and/or by Directive (EU) 2015/2193 of the European Parliament and of the Council ([1]).

— Process furnaces/heaters with a total rated thermal input below 1 MW.

— Process furnaces/heaters used in lower olefins, ethylene dichloride and/or vinyl chloride monomer production referred to in point 2 above. This is covered by the BAT conclusions for the production of Large Volume Organic Chemicals (LVOC).

7. Emissions to air from waste incineration plants. This may be covered by the BAT conclusions for Waste Incineration (WI).

8. Emissions to air from the storage, transfer and handling of liquids, liquefied gases and solids, where these are not directly associated with the activity specified in Annex I to Directive 2010/75/EU: 4. Chemical industry. This may be covered by the BAT conclusions for Emissions from Storage (EFS).

However, emissions to air from the storage, transfer and handling of liquids, liquefied gases and solids are included in the scope of these BAT conclusions provided that these processes are directly associated with the chemical production process specified in the scope of these BAT conclusions.

9. Emissions to air from indirect cooling systems. This may be covered by the BAT conclusions for Industrial Cooling Systems (ICS).

Other BAT conclusions which are complementary for the activities covered by these BAT conclusions include Common Waste Water and Waste Gas Treatment/Management Systems in the Chemical Sector (CWW).

Other BAT conclusions and reference documents which could be relevant for the activities covered by these BAT conclusions are the following:

— Production of Chlor-alkali (CAK);

— Manufacture of Large Volume Inorganic Chemicals – Ammonia, Acids and Fertilisers (LVIC-AAF);

— Manufacture of Large Volume Inorganic Chemicals – Solids and Others Industry (LVIC-S);

— Production of Large Volume Organic Chemicals (LVOC);

— Manufacture of Organic Fine Chemicals (OFC);

— Production of Polymers (POL);

— Production of Speciality Inorganic Chemicals (SIC);

([1]) Directive (EU) 2015/2193 of the European Parliament and of the Council of 25 November 2015 on the limitation of emissions of certain pollutants into the air from medium combustion plants (OJ L 313, 28.11.2015, p. 1).

— Refining of Mineral Oil and Gas (REF);

— Economics and Cross-media Effects (ECM);

— Emissions from Storage (EFS);

— Energy Efficiency (ENE);

— Industrial Cooling Systems (ICS);

— Large Combustion Plants (LCP);

— Monitoring of Emissions to Air and Water from IED installations (ROM);

— Waste Incineration (WI);

— Waste Treatment (WT).

These BAT conclusions apply without prejudice to other relevant legislation, e.g. on the registration, evaluation, authorisation and restriction of chemicals (REACH) or on classification, labelling and packaging of substances and mixtures (CLP).

DEFINITIONS

For the purposes of these BAT conclusions, the following definitions apply:

General terms	
Term used	Definition
Channelled emissions to air	Emissions of pollutants to air through an emission point such as a stack.
Combustion unit	Any technical apparatus in which fuels are oxidised in order to use the heat thus generated. Combustion units include boilers, engines, turbines and process furnaces/heaters, but do not include thermal or catalytic oxidisers.
Complex inorganic pigments	A stable crystal lattice of different metal cations. The most important host-lattices are rutile, spinel, zircon, and haematite/corundum, but other stable structures exist.
Continuous measurement	Measurement using an automated measuring system permanently installed on site.
Continuous process	A process in which the raw materials are fed continuously into the reactor with the reaction products then fed into connected downstream separation and/or recovery units.
Diffuse emissions	Non-channelled emissions to air. Diffuse emissions include fugitive and non-fugitive emissions.
Emissions to air	Generic term for emissions of pollutants to air including both channelled and diffuse emissions.
Ethanolamines	Collective term for monoethanolamine, diethanolamine and triethanolamine, or mixtures thereof.
Ethylene glycols	Collective term for monoethylene glycol, diethylene glycol and triethylene glycol, or mixtures thereof.
Existing plant	A plant that is not a new plant.
Existing process furnace/heater	A process furnace/heater that is not a new process furnace/heater.
Flue-gas	The exhaust gas exiting a combustion unit.

General terms	
Term used	Definition
Fugitive emissions	Non-channelled emissions to air caused by loss of tightness of equipment which is designed or assembled to be tight. Fugitive emissions can arise from: — moving equipment, such as agitators, compressors, pumps, valves (manual and automatic); — static equipment, such as flanges and other connections, open-ended lines, sampling points.
Lower olefins	Collective term for ethylene, propylene, butylene and butadiene, or mixtures thereof.
Major plant upgrade	A major change in the design or technology of a plant with major adjustments or replacements of the process and/or abatement units and associated equipment.
Mass flow	The mass of a given substance or parameter which is emitted over a defined period of time.
New plant	A plant first permitted on the site of the installation following the publication of these BAT conclusions or a complete replacement of a plant following the publication of these BAT conclusions.
New process furnace/heater	A process furnace/heater in a plant first permitted following the publication of these BAT conclusions or a complete replacement of a process furnace/heater following the publication of these BAT conclusions.
Non-fugitive emissions	Diffuse emissions other than fugitive emissions. Non-fugitive emissions may arise from, for example, atmospheric vents, bulk storage, loading/unloading systems, vessels and tanks (on opening), open gutters, sampling systems, tank venting, waste, sewers and water treatment plants.
NO_X precursors	Nitrogen-containing compounds (e.g. acrylonitrile, ammonia, nitrous gases, nitrogen-containing organic compounds) in the input to thermal or catalytic oxidation that lead to NO_X emissions. Elemental nitrogen is not included.
Operational constraint	Limitation or restriction connected, for example, to: — substances used (e.g. substances that cannot be substituted, very corrosive substances); — operating conditions (e.g. very high temperature or pressure); — the functioning of the plant; — resource availability (e.g. availability of spare parts when replacing a piece of equipment, availability of qualified manpower); — expected environmental benefits (e.g. giving priority to maintenance, repair or replacement actions with the highest environmental benefit).
Periodic measurement	Measurement at specified time intervals using manual or automated methods.
Polymer grade	For each type of polymer, there are different product qualities (i.e. grades) which vary in structure and molecular mass, and are optimised for specific applications. In the case of polyolefins, these may vary regarding the use of co-polymers such as EVA. In the case of PVC, they may vary in the average length of the polymer chain and in the porosity of the particles.

General terms	
Term used	Definition
Process furnace/heater	Process furnaces or heaters are: — combustion units used for the treatment of objects or feed material through direct contact, e.g. in drying processes or chemical reactors; or — combustion units whose radiant and/or conductive heat is transferred to objects or feed material through a solid wall without using an intermediary heat transfer fluid, e.g. furnaces or reactors heating a process stream used in the (petro-)chemical industry. As a consequence of the application of good energy recovery practices, some of the process furnaces/heaters may have an associated steam/electricity generation system. This is an integral design feature of the process furnace/heater that cannot be considered in isolation.
Process off-gas	The gas leaving a process which is further treated for recovery and/or abatement.
Solvent	Organic solvent as defined in Article 3(46) of Directive 2010/75/EU.
Solvent consumption	Consumption of solvent as defined in Article 57(9) of Directive 2010/75/EU.
Solvent input	The total quantity of organic solvents used as defined in Part 7 of Annex VII to Directive 2010/75/EU.
Solvent mass balance	A mass balance exercise conducted at least on an annual basis according to Part 7 of Annex VII to Directive 2010/75/EU.
Thermal treatment	Treatment of waste gases using thermal or catalytic oxidation.
Total emissions	The sum of channelled and diffuse emissions.
Valid hourly (or half-hourly) average	An hourly (or half-hourly) average is considered valid when there is no maintenance or malfunction of the automated measuring system.

Substances/Parameters	
Term used	Definition
Cl_2	Elemental chlorine.
CO	Carbon monoxide.
CS_2	Carbon disulphide.
Dust	Total particulate matter (in air). Unless specified otherwise, dust includes $PM_{2,5}$ and PM_{10}.
EDC	Ethylene dichloride (1,2-Dichloroethane).
HCl	Hydrogen chloride.
HCN	Hydrogen cyanide.
HF	Hydrogen fluoride.
H_2S	Hydrogen sulphide.
NH_3	Ammonia.
Ni	Nickel.

Substances/Parameters	
Term used	Definition
N_2O	Dinitrogen oxide (also referred to as nitrous oxide).
NO_X	The sum of nitrogen monoxide (NO) and nitrogen dioxide (NO_2), expressed as NO_2.
Pb	Lead.
PCDD/F	Polychlorinated dibenzo-*p*-dioxins and -furans.
$PM_{2,5}$	Particulate matter which passes through a size-selective inlet with a 50 % efficiency cut-off at 2,5 μm aerodynamic diameter as defined in Directive 2008/50/EC of the European Parliament and of the Council ([1]).
PM_{10}	Particulate matter which passes through a size-selective inlet with a 50 % efficiency cut-off at 10 μm aerodynamic diameter as defined in Directive 2008/50/EC.
SO_2	Sulphur dioxide.
SO_X	The sum of sulphur dioxide (SO_2), sulphur trioxide (SO_3), and sulphuric acid aerosols, expressed as SO_2.
TVOC	Total volatile organic carbon, expressed as C.
VCM	Vinyl chloride monomer.
VOC	Volatile organic compound as defined in Article 3(45) of Directive 2010/75/EU.

([1]) Directive 2008/50/EC of the European Parliament and of the Council of 21 May 2008 on ambient air quality and cleaner air for Europe (OJ L 152, 11.6.2008, p. 1).

ACRONYMS

For the purposes of these BAT conclusions, the following acronyms apply:

Acronym	Definition
CLP	Regulation (EC) No 1272/2008 of the European Parliament and of the Council ([1]) on classification, labelling and packaging of substances and mixtures.
CMR	Carcinogenic, mutagenic or toxic for reproduction.
CMR 1A	CMR substance of category 1A as defined in Regulation (EC) No 1272/2008 as amended, i. e. carrying the hazard statements H340, H350, H360.
CMR 1B	CMR substance of category 1B as defined in Regulation (EC) No 1272/2008 as amended, i. e. carrying the hazard statements H340, H350, H360.
CMR 2	CMR substance of category 2 as defined in Regulation (EC) No 1272/2008 as amended, i.e. carrying the hazard statements H341, H351, H361.
DIAL	Differential absorption LIDAR.
EMS	Environmental Management System.
EPS	Expandable polystyrene.
E-PVC	PVC produced by emulsion polymerisation.
EVA	Ethylene-vinyl acetate.
GPPS	General-purpose polystyrene.
HDPE	High-density polyethylene.

Acronym	Definition
HEAF	High-efficiency air filter.
HEPA	High-efficiency particle air.
HIPS	High-impact polystyrene.
IED	Directive 2010/75/EU on industrial emissions.
I-TEQ	International toxic equivalent – derived by using the equivalence factors in Part 2 of Annex VI to Directive 2010/75/EU.
LDAR	Leak detection and repair.
LDPE	Low-density polyethylene.
LIDAR	Light detection and ranging.
LLDPE	Linear low-density polyethylene.
OGI	Optical gas imaging.
OTNOC	Other than normal operating conditions.
PP	Polypropylene.
PVC	Polyvinyl chloride.
REACH	Regulation (EC) No 1907/2006 of the European Parliament and of the Council ([2]) concerning the registration, evaluation, authorisation and restriction of chemicals.
SCR	Selective catalytic reduction.
SNCR	Selective non-catalytic reduction.
SOF	Solar occultation flux.
S-PVC	PVC produced by suspension polymerisation.
ULPA	Ultra-low penetration air.

([1]) Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 (OJ L 353, 31.12.2008, p. 1).

([2]) Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC (OJ L 396, 30.12.2006, p. 1).

GENERAL CONSIDERATIONS

Best Available Techniques

The techniques listed and described in these BAT conclusions are neither prescriptive nor exhaustive. Other techniques may be used that ensure at least an equivalent level of environmental protection.

Unless otherwise stated, the BAT conclusions are generally applicable.

Emission levels associated with the best available techniques (BAT-AELs) and indicative emission levels for channelled emissions to air

The BAT-AELs and the indicative emission levels for channelled emissions to air given in these BAT conclusions refer to values of concentration, expressed as mass of emitted substance per volume of waste gas under standard conditions (dry gas at a temperature of 273,15 K, and a pressure of 101,3 kPa) and expressed in the unit mg/Nm^3, µg/Nm^3 or ng I-TEQ/Nm^3.

The reference oxygen levels used to express BAT-AELs and indicative emission levels in these BAT conclusions are shown in the table below.

Source of emissions	Reference oxygen level (O_R)
Process furnace/heater using indirect heating	3 dry vol-%
All other sources	No correction for the oxygen level

For the cases where a reference oxygen level is given, the equation for calculating the emission concentration at the reference oxygen level is:

$$E_R = \frac{21 - O_R}{21 - O_M} \times E_M$$

where:

E_R: emission concentration at the reference oxygen level O_R;

O_R: reference oxygen level in vol-%;

E_M: measured emission concentration;

O_M: measured oxygen level in vol-%.

The equation above does not apply if the process furnace(s)/heater(s) use(s) oxygen-enriched air or pure oxygen or when additional air intake for safety reasons brings the oxygen level in the waste gas very close to 21 vol-%. In this case, the emission concentration at the reference oxygen level of 3 dry vol-% is calculated differently.

For averaging periods of BAT-AELs and indicative emission levels for channelled emissions to air, the following definitions apply.

Type of measurement	Averaging period	Definition
Continuous	Daily average	Average over a period of 1 day based on valid hourly or half-hourly averages.
Periodic	Average over the sampling period	Average value of three consecutive samplings/measurements of at least 30 minutes each ([1]).

([1]) For any parameter where, due to sampling or analytical limitations and/or due to operational conditions (e.g. batch processes), a 30-minute sampling/measurement and/or an average of three consecutive samplings/measurements is inappropriate, a more representative sampling/measurement procedure may be employed. For PCDD/F, one sampling period of 6 to 8 hours is used.

For the purpose of calculating the mass flows in relation to BAT 11 (Table 1.1), BAT 14 (Table 1.3), BAT 18 (Table 1.6), BAT 29 (Table 1.9) and BAT 36 (Table 1.15), where waste gases with similar characteristics, e.g. containing the same (type of) substances/parameters, and discharged through two or more separate stacks could, in the judgement of the competent authority, be discharged through a common stack, these stacks shall be considered as a single stack.

BAT-AELs for diffuse VOC emissions to air

For diffuse VOC emissions from the use of solvents or the reuse of recovered solvents, the BAT-AELs in these BAT conclusions are given as a percentage of the solvent input, calculated on an annual basis according to Part 7 of Annex VII to Directive 2010/75/EU.

BAT-AELs for total emissions to air for the production of polymers or synthetic rubbers

Production of polyolefins or synthetic rubbers

For total emissions to air of VOCs from the production of polyolefins or synthetic rubbers, the BAT-AELs in these BAT conclusions are given as specific emission loads calculated on an annual basis by dividing the total VOC emissions by a sector-dependent production rate, expressed in the unit g C/kg of product.

Production of PVC

For total emissions to air of VCM from the production of PVC, the BAT-AELs in these BAT conclusions are given as specific emission loads calculated on an annual basis by dividing the total VCM emissions by a sector-dependent production rate, expressed in the unit g/kg of product.

For the purpose of calculating specific emission loads, total emissions include the VCM concentration in the PVC.

Production of viscose

For the production of viscose, the BAT-AEL in these BAT conclusions is given as a specific emission load calculated on an annual basis by dividing the total S emissions by the production rate of staple fibres or casing, expressed in the unit g S/kg of product.

1.1. *General BAT conclusions*

1.1.1. Environmental management systems

BAT 1. In order to improve the overall environmental performance, BAT is to elaborate and implement an environmental management system (EMS) that incorporates all of the following features:

i. commitment, leadership, and accountability of the management, including senior management, for the implementation of an effective EMS;

ii. an analysis that includes the determination of the organisation's context, the identification of the needs and expectations of interested parties, the identification of characteristics of the installation that are associated with possible risks for the environment (or human health) as well as of the applicable legal requirements relating to the environment;

iii. development of an environmental policy that includes the continuous improvement of the environmental performance of the installation;

iv. establishing objectives and performance indicators in relation to significant environmental aspects, including safeguarding compliance with applicable legal requirements;

v. planning and implementing the necessary procedures and actions (including corrective and preventive actions where needed), to achieve the environmental objectives and avoid environmental risks;

vi. determination of structures, roles and responsibilities in relation to environmental aspects and objectives and provision of the financial and human resources needed;

vii. ensuring the necessary competence and awareness of staff whose work may affect the environmental performance of the installation (e.g. by providing information and training);

viii. internal and external communication;

ix. fostering employee involvement in good environmental management practices;

x. establishing and maintaining a management manual and written procedures to control activities with significant environmental impact as well as relevant records;

xi. effective operational planning and process control;

xii. implementation of appropriate maintenance programmes;

xiii. emergency preparedness and response protocols, including the prevention and/or mitigation of the adverse (environmental) impacts of emergency situations;

xiv. when (re)designing a (new) installation or a part thereof, consideration of its environmental impacts throughout its life, which includes construction, maintenance, operation and decommissioning;

xv. implementation of a monitoring and measurement programme; if necessary, information can be found in the Reference Report on Monitoring of Emissions to Air and Water from IED Installations;

xvi. application of sectoral benchmarking on a regular basis;

xvii. periodic independent (as far as practicable) internal auditing and periodic independent external auditing in order to assess the environmental performance and to determine whether or not the EMS conforms to planned arrangements and has been properly implemented and maintained;

xviii. evaluation of causes of nonconformities, implementation of corrective actions in response to nonconformities, review of the effectiveness of corrective actions, and determination of whether similar nonconformities exist or could potentially occur;

xix. periodic review, by senior management, of the EMS and its continuing suitability, adequacy and effectiveness;

xx. following and taking into account the development of cleaner techniques.

Specifically for the chemical sector, BAT is also to incorporate the following features in the EMS:

xxi. an inventory of channelled and diffuse emissions to air (see BAT 2);

xxii. an OTNOC management plan for emissions to air (see BAT 3);

xxiii. an integrated waste gas management and treatment strategy for channelled emissions to air (see BAT 4);

xxiv. a management system for diffuse VOC emissions to air (see BAT 19);

xxv. a chemicals management system that includes an inventory of the hazardous substances and substances of very high concern used in the process(es); the potential for substitution of the substances that are listed in this inventory, focusing on those substances other than raw materials, is analysed periodically (e. g. annually) in order to identify possible new available and safer alternatives, with no or lower environmental impacts.

Note

Regulation (EC) No 1221/2009 of the European Parliament and of the Council ([2]) establishes the European Union eco-management and audit scheme (EMAS), which is an example of an EMS consistent with this BAT.

Applicability

The level of detail and the degree of formalisation of the EMS will generally be related to the nature, scale and complexity of the installation, and the range of environmental impacts it may have.

([2]) Regulation (EC) No 1221/2009 of the European Parliament and of the Council of 25 November 2009 on the voluntary participation by organisations in a Community eco-management and audit scheme (EMAS), repealing Regulation (EC) No 761/2001 and Commission Decisions 2001/681/EC and 2006/193/EC (OJ L 342, 22.12.2009, p. 1).

BAT 2. In order to facilitate the reduction of emissions to air, BAT is to establish, maintain and regularly review (including when a substantial change occurs) an inventory of channelled and diffuse emissions to air, as part of the environmental management system (see BAT 1), that incorporates all of the following features:

i. information, as comprehensive as is reasonably possible, about the chemical production process(es), including:

   a. chemical reaction equations, also showing side products;

   b. simplified process flow sheets that show the origin of the emissions;

ii. information, as comprehensive as is reasonably possible, about channelled emissions to air, such as:

   a. emission point(s);

   b. average values and variability of flow and temperature;

   c. average concentration and mass flow values of relevant substances/parameters and their variability (e.g. TVOC, CO, NO_X, SO_X, Cl_2, HCl);

   d. presence of other substances that may affect the waste gas treatment system(s) or plant safety (e.g. oxygen, nitrogen, water vapour, dust);

   e. techniques used to prevent and/or reduce channelled emissions to air;

   f. flammability, lower and higher explosive limits, reactivity;

   g. monitoring methods (see BAT 8);

   h. presence of substances classified as CMR 1A, CMR 1B or CMR 2; the presence of such substances may for example be assessed according to the criteria of Regulation (EC) No 1272/2008 on classification, labelling and packaging (CLP).

iii. information, as comprehensive as is reasonably possible, about diffuse emissions to air, such as:

   a. identification of the emission source(s);

   b. characteristics of each emission source (e.g. fugitive or non-fugitive; static or moving; accessibility of the emission source; included in an LDAR programme or not);

   c. the characteristics of the gas or liquid in contact with the emission source(s), including:

      1. physical state;

      2. vapour pressure of the substance(s) in the liquid, pressure of the gas;

      3. temperature;

      4. composition (by weight for liquids or by volume for gases);

      5. hazardous properties of the substance(s) or mixtures, including substances or mixtures classified as CMR 1A, CMR 1B or CMR 2;

   d. techniques used to prevent and/or reduce diffuse emissions to air;

   e. monitoring (see BAT 20, BAT 21 and BAT 22).

Note for diffuse emissions

The information about diffuse emissions to air is particularly relevant for activities using large amounts of organic substances or mixtures (e.g. production of pharmaceuticals, production of large volumes of organic chemicals or of polymers).

The information about fugitive emissions covers all emission sources in contact with organic substances with a vapour pressure greater than 0,3 kPa at 293,15 K.

Sources of fugitive emissions connected to pipes whose diameter is small (e.g. smaller than 12,7 mm, i.e. 0,5 inch) may be excluded from the inventory.

Equipment operated under subatmospheric pressure may be excluded from the inventory.

Applicability

The level of detail and the degree of formalisation of the inventory will generally be related to the nature, scale and complexity of the installation, and the range of environmental impacts it may have.

1.1.2. **Other than normal operating conditions (OTNOC)**

BAT 3. In order to reduce the frequency of the occurrence of OTNOC and to reduce emissions to air during OTNOC, BAT is to set up and implement a risk-based OTNOC management plan as part of the environmental management system (see BAT 1) that includes all of the following features:

i. identification of potential OTNOC (e.g. failure of equipment critical to the control of channelled emissions to air, or equipment critical to the prevention of accidents or incidents that could lead to emissions to air ('critical equipment')), of their root causes and of their potential consequences;

ii. appropriate design of critical equipment (e.g. equipment modularity and compartmentalisation, backup systems, techniques to obviate the need to bypass waste gas treatment during start-up and shutdown, high-integrity equipment, etc.);

iii. set-up and implementation of a preventive maintenance plan for critical equipment (see BAT 1 xii.);

iv. monitoring (i.e. estimating or, where this is possible, measuring) and recording of emissions and associated circumstances during OTNOC;

v. periodic assessment of the emissions occurring during OTNOC (e.g. frequency of events, duration, amount of pollutants emitted as recorded in point iv.) and implementation of corrective actions if necessary;

vi. regular review and update of the list of identified OTNOC under point i. following the periodic assessment of point v.;

vii. regular testing of backup systems.

1.1.3. **Channelled emissions to air**

1.1.3.1. *General techniques*

BAT 4. In order to reduce channelled emissions to air, BAT is to use an integrated waste gas management and treatment strategy that includes, in order of priority, process-integrated recovery and abatement techniques.

Description

The integrated waste gas management and treatment strategy is based on the inventory in BAT 2. It takes into account factors such as greenhouse gas emissions and the consumption or reuse of energy, water and materials associated with the use of the different techniques.

BAT 5. In order to facilitate the recovery of materials and the reduction of channelled emissions to air, as well as to increase energy efficiency, BAT is to combine waste gas streams with similar characteristics, thus minimising the number of emission points.

Description

The combined treatment of waste gases with similar characteristics ensures more effective and efficient treatment compared to the separate treatment of individual waste gas streams. The combination of waste gases is carried out considering plant safety (e.g. avoiding concentrations close to the lower/upper explosive limit), technical (e.g. compatibility of the individual waste gas streams, concentration of the substances concerned), environmental (e.g. maximising recovery of materials or pollutant abatement) and economic factors (e.g. distance between different production units).

Care is taken that the combination of waste gases does not lead to the dilution of emissions.

BAT 6. In order to reduce channelled emissions to air, BAT is to ensure that the waste gas treatment systems are appropriately designed (e.g. considering the maximum flow rate and pollutant concentrations), operated within their design ranges, and maintained (through preventive, corrective, regular and unplanned maintenance) so as to ensure optimal availability, effectiveness and efficiency of the equipment.

1.1.3.2. *Monitoring*

BAT 7. BAT is to continuously monitor key process parameters (e.g. waste gas flow and temperature) of waste gas streams being sent to pretreatment and/or final treatment.

BAT 8. BAT is to monitor channelled emissions to air with at least the frequency given below and in accordance with EN standards. If EN standards are not available, BAT is to use ISO, national or other international standards that ensure the provision of data of an equivalent scientific quality.

Substance/ Parameter [1]	Process(es)/ Source(s)	Emission points	Standard(s) [2]	Minimum monitoring frequency	Monitoring associated with
Ammonia (NH_3)	Use of SCR/SNCR	Any stack	EN 21877	Once every 6 months [3] [4]	BAT 17
	All other processes/ sources				BAT 18
Benzene	All processes/ sources	Any stack	No EN standard available	Once every 6 months [3]	BAT 11
1,3-Butadiene	All processes/ sources	Any stack	No EN standard available	Once every 6 months [3]	BAT 11

Substance/ Parameter ([1])	Process(es)/ Source(s)	Emission points	Standard(s) ([2])	Minimum monitoring frequency	Monitoring associated with
Carbon monoxide (CO)	Thermal treatment	Any stack with a CO mass flow of ≥ 2 kg/h	Generic EN standards ([5])	Continuous	BAT 16
		Any stack with a CO mass flow of < 2 kg/h	EN 15058	Once every 6 months ([3]) ([4])	
	Process furnaces/ heaters	Any stack with a CO mass flow of ≥ 2 kg/h	Generic EN standards ([5])	Continuous ([6])	BAT 36
		Any stack with a CO mass flow of < 2 kg/h	EN 15058	Once every 6 months ([3]) ([4])	
	All other processes/ sources	Any stack with a CO mass flow of ≥ 2 kg/h	Generic EN standards ([5])	Continuous	BAT 18
		Any stack with a CO mass flow of < 2 kg/h	EN 15058	Once every year ([3]) ([7])	
Chloromethane	All processes/ sources	Any stack	No EN standard available	Once every 6 months ([3])	BAT 11
CMR substances other than CMR substances covered elsewhere in this table ([12])	All other processes/ sources	Any stack	No EN standard available	Once every 6 months ([3])	BAT 11
Dichloromethane	All processes/ sources	Any stack	No EN standard available	Once every 6 months ([3])	BAT 11

Substance/ Parameter ([1])	Process(es)/ Source(s)	Emission points	Standard(s) ([2])	Minimum monitoring frequency	Monitoring associated with
Dust	All processes/ sources	Any stack with dust mass flow ≥ 3 kg/h	Generic EN standards ([5]), EN 13284-1 and EN 13284-2	Continuous ([8])	BAT 14
		Any stack with dust mass flow < 3 kg/h	EN 13284-1	Once every year ([3]) ([7])	
Elemental chlorine (Cl_2)	All processes/ sources	Any stack	No EN standard available	Once every year ([3]) ([7])	BAT 18
Ethylene dichloride (EDC)	All processes/ sources	Any stack	No EN standard available	Once every 6 months ([3])	BAT 11
Ethylene oxide	All processes/ sources	Any stack	No EN standard available	Once every 6 months ([3])	BAT 11
Formaldehyde	All processes/ sources	Any stack	EN standard under development	Once every 6 months ([3])	BAT 11
Gaseous chlorides	All processes/ sources	Any stack	EN 1911	Once every year ([3]) ([7])	BAT 18
Gaseous fluorides	All processes/ sources	Any stack	No EN standard available	Once every year ([3]) ([7])	BAT 18
Hydrogen cyanide (HCN)	All processes/ sources	Any stack	No EN standard available	Once every year ([3]) ([7])	BAT 18
Lead and its compounds	All processes/ sources	Any stack	EN 14385	Once every 6 months ([3]) ([9])	BAT 14

Substance/ Parameter (1)	Process(es)/ Source(s)	Emission points	Standard(s) (2)	Minimum monitoring frequency	Monitoring associated with
Nickel and its compounds	All processes/ sources	Any stack	EN 14385	Once every 6 months (3) (9)	BAT 14
Nitrous oxide (N_2O)	All processes/ sources	Any stack	EN ISO 21258	Once every year (3) (7)	–
Nitrogen oxides (NO_X)	Thermal treatment	Any stack with a NO_X mass flow of ≥ 2,5 kg/h	Generic EN standards (5)	Continuous	BAT 16
		Any stack with a NO_X mass flow of < 2,5 kg/h	EN 14792	Once every 6 months (3) (4)	
	Process furnaces/ heaters	Any stack with a NO_X mass flow of ≥ 2,5 kg/h	Generic EN standards (5)	Continuous (6)	BAT 36
		Any stack with a NO_X mass flow of < 2,5 kg/h	EN 14792	Once every 6 months (3) (4)	
	All other processes/ sources	Any stack with a NO_X mass flow of ≥ 2,5 kg/h	Generic EN standards (5)	Continuous	BAT 18
		Any stack with a NO_X mass flow of < 2,5 kg/h	EN 14792	Once every 6 months (3) (4)	
PCDD/F	Thermal treatment	Any stack	EN 1948-1, EN 1948-2, EN 1948-3	Once every 6 months (3) (9)	BAT 12
$PM_{2,5}$ and PM_{10}	All processes/ sources	Any stack	EN ISO 23210	Once every year (3) (7)	BAT 14
Propylene oxide	All processes/ sources	Any stack	No EN standard available	Once every 6 months (3)	BAT 11

Substance/ Parameter (1)	Process(es)/ Source(s)	Emission points	Standard(s) (2)	Minimum monitoring frequency	Monitoring associated with
Sulphur dioxide (SO_2)	Thermal treatment	Any stack with a SO_2 mass flow of ≥ 2,5 kg/h	Generic EN standards (5)	Continuous	BAT 16
		Any stack with a SO_2 mass flow of < 2,5 kg/h	EN 14791	Once every 6 months (3) (4)	
	Process furnaces/ heaters	Any stack with a SO_2 mass flow of ≥ 2,5 kg/h	Generic EN standards (5)	Continuous (6)	BAT 18, BAT 36
		Any stack with a SO_2 mass flow of < 2,5 kg/h	EN 14791	Once every 6 months (3) (4)	
	All other processes/ sources	Any stack with a SO_2 mass flow of ≥ 2,5 kg/h	Generic EN standards (5)	Continuous	BAT 18
		Any stack with a SO_2 mass flow of < 2,5 kg/h	EN 14791	Once every 6 months (3) (4)	
Tetrachloromethane	All processes/ sources	Any stack	No EN standard available	Once every 6 months (3)	BAT 11
Toluene	All processes/ sources	Any stack	No EN standard available	Once every 6 months (3)	BAT 11
Trichloromethane	All processes/ sources	Any stack	No EN standard available	Once every 6 months (3)	BAT 11

Substance/ Parameter ([1])	Process(es)/ Source(s)	Emission points	Standard(s) ([2])	Minimum monitoring frequency	Monitoring associated with
Total volatile organic carbon (TVOC)	Production of polyolefins ([10])	Any stack with a TVOC mass flow of ≥ 2 kg C/h	Generic EN standards ([5])	Continuous	BAT 11, BAT 25
		Any stack with a TVOC mass flow of < 2 kg C/h	EN 12619	Once every 6 months ([3]) ([4])	
	Production of synthetic rubbers ([11])	Any stack with a TVOC mass flow of ≥ 2 kg C/h	Generic EN standards ([5])	Continuous	BAT 11, BAT 32
		Any stack with a TVOC mass flow of < 2 kg C/h	EN 12619	Once every 6 months ([3]) ([4])	
	All other processes/ sources	Any stack with a TVOC mass flow of ≥ 2 kg C/h	Generic EN standards ([5])	Continuous	BAT 11
		Any stack with a TVOC mass flow of < 2 kg C/h	EN 12619	Once every 6 months ([3]) ([4])	

([1]) The monitoring only applies when the substance/parameter concerned is identified as relevant in the waste gas stream based on the inventory given in BAT 2.

([2]) Measurements are carried out according to EN 15259.

([3]) To the extent possible, the measurements are carried out at the highest expected emission state under normal operating conditions.

([4]) The minimum monitoring frequency may be reduced to once every year or once every 3 years if the emission levels are proven to be sufficiently stable.

([5]) Generic EN standards for continuous measurements are EN 14181, EN 15267-1, EN 15267-2 and EN 15267-3.

([6]) In the case of process furnaces/heaters with a total rated thermal input of less than 100 MW operated less than 500 hours per year, the minimum monitoring frequency may be reduced to once every year.

([7]) The minimum monitoring frequency may be reduced to once every 3 years if the emission levels are proven to be sufficiently stable.

([8]) The minimum monitoring frequency may be reduced to once every 6 months if the emission levels are proven to be sufficiently stable.

([9]) The minimum monitoring frequency may be reduced to once every year if the emission levels are proven to be sufficiently stable.

([10]) In the case of the production of polyolefins, the monitoring of TVOC emissions from finishing steps (e.g. drying, blending) and from polymer storage may be complemented by the monitoring in BAT 24 if it provides a better representation of the TVOC emissions.

([11]) In the case of the production of synthetic rubbers, the monitoring of TVOC emissions from finishing steps (e.g. extrusion, drying, blending) and from synthetic rubber storage may be complemented by the monitoring in BAT 31 if it provides a better representation of the TVOC emissions.

([12]) i.e. other than benzene, 1,3-butadiene, chloromethane, dichloromethane, ethylene dichloride, ethylene oxide, formaldehyde, propylene oxide, tetrachloromethane, toluene, trichloromethane.

1.1.3.3. *Organic compounds*

BAT 9. In order to increase resource efficiency and to reduce the mass flow of organic compounds sent to the final waste gas treatment, BAT is to recover organic compounds from process off-gases by using one or a combination of the techniques given below and to reuse them.

Technique		Description
a.	Absorption (regenerative)	See Section 1.4.1.
b.	Adsorption (regenerative)	See Section 1.4.1.
c.	Condensation	See Section 1.4.1.

Applicability

Recovery may be restricted where the energy demand is excessive due to the low concentration of the compound(s) concerned in the process off-gas(es). Reuse may be restricted due to product quality specifications.

BAT 10. In order to increase energy efficiency and to reduce the mass flow of organic compounds sent to the final waste gas treatment, BAT is to send process off-gases with a sufficient calorific value to a combustion unit that is, if technically possible, combined with heat recovery. BAT 9 has priority over sending process off-gases to a combustion unit.

Description

Process off-gases with a high calorific value are burnt as a fuel in a combustion unit (gas engine, boiler, process heater or furnace) and the heat is recovered as steam or for electricity generation, or to provide heat to the process.

For process off-gases with low VOC concentrations (e.g. < 1 g/Nm^3), pre-concentration steps may be applied using adsorption (rotor or fixed bed, with activated carbon or zeolites), in order to increase the calorific value of the process off-gases.

Molecular sieves ('smoothers'), typically composed of zeolites, may be used to level down high variations (e.g. concentration peaks) of VOC concentrations in the process off-gases.

Applicability

Sending process off-gases to a combustion unit may be restricted due to the presence of contaminants or due to safety considerations.

BAT 11. In order to reduce channelled emissions to air of organic compounds, BAT is to use one or a combination of the techniques given below.

Technique		Description	Applicability
a.	Adsorption	See Section 1.4.1.	Generally applicable.
b.	Absorption	See Section 1.4.1.	Generally applicable.
c.	Catalytic oxidation	See Section 1.4.1.	Applicability may be restricted by the presence of catalyst poisons in the waste gases.
d.	Condensation	See Section 1.4.1.	Generally applicable.

e.	Thermal oxidation	See Section 1.4.1.	Applicability of recuperative and regenerative thermal oxidation to existing plants may be restricted by design and/or operational constraints. Applicability may be restricted where the energy demand is excessive due to the low concentration of the compound(s) concerned in the process off-gases.
f.	Bioprocesses	See Section 1.4.1.	Only applicable to the treatment of biodegradable compounds.

Table 1.1

BAT-associated emission levels (BAT-AELs) for channelled emissions to air of organic compounds

Substance/Parameter	BAT-AEL (mg/Nm³) (Daily average or average over the sampling period) (1)
Total volatile organic carbon (TVOC)	< 1-20 (2) (3) (4) (5)
Sum of VOCs classified as CMR 1A or 1B	< 1-5 (6)
Sum of VOCs classified as CMR 2	< 1-10 (7)
Benzene	< 0,5-1 (8)
1,3-Butadiene	< 0,5-1 (8)
Ethylene dichloride	< 0,5-1 (8)
Ethylene oxide	< 0,5-1 (8)
Propylene oxide	< 0,5-1 (8)
Formaldehyde	1-5 (8)
Chloromethane	< 0,5-1 (9) (10)
Dichloromethane	< 0,5-1 (9) (10)
Tetrachloromethane	< 0,5-1 (9) (10)
Toluene	< 0,5-1 (9) (11)
Trichloromethane	< 0,5-1 (9) (10)

(1) For activities listed under points 8 and 10, Part 1 of Annex VII of the IED, the BAT-AEL ranges apply to the extent that they lead to lower emission levels than the emission limit values in part 2 and 4 of Annex VII to the IED.
(2) TVOC is expressed in mg C/Nm³.
(3) In the case of polymer production, the BAT-AEL may not apply to emissions from the finishing steps (e.g. extrusion, drying, blending) and from polymer storage.
(4) The BAT-AEL does not apply to minor emissions (i.e. when the TVOC mass flow is below e.g. 100 g C/h) if no CMR substances are identified as relevant in the waste gas stream based on the inventory given in BAT 2.
(5) The upper end of the BAT-AEL range may be higher and up to 30 mg C/Nm³ when using techniques to recover materials (e.g. solvents, see BAT 9), if both of the following conditions are fulfilled:

— the presence of substances classified as CMR 1A/1B or CMR 2 is identified as not relevant (see BAT 2);
— the TVOC abatement efficiency of the waste gas treatment system is ≥ 95 %.

(6) The BAT-AEL does not apply to minor emissions (i.e. when the mass flow of the sum of the VOCs classified as CMR 1A or 1B is below e.g. 1 g/h).
(7) The BAT-AEL does not apply to minor emissions (i.e. when the mass flow of the sum of the VOCs classified as CMR 2 is below e.g. 50 g/h).
(8) The BAT-AEL does not apply to minor emissions (i.e. when the mass flow of the substance concerned is below e.g. 1 g/h).
(9) The BAT-AEL does not apply to minor emissions (i.e. when the mass flow of the substance concerned is below e.g. 50 g/h).
(10) The upper end of the BAT-AEL range may be higher and up to 15 mg/Nm³ when using techniques to recover materials (e.g. solvents, see BAT 9), if the abatement efficiency of the waste gas treatment system is ≥ 95 %.
(11) The upper end of the BAT-AEL range may be higher and up to 20 mg/Nm³ when using techniques to recover toluene (see BAT 9), if the abatement efficiency of the waste gas treatment system is ≥ 95 %.

The associated monitoring is given in BAT 8.

BAT 12. In order to reduce channelled emissions to air of PCDD/F from thermal treatment of waste gases containing chlorine and/or chlorinated compounds, BAT is to use techniques a. and b., and one or a combination of techniques c. to e., given below.

Technique		Description	Applicability
Specific techniques to reduce PCDD/F emissions			
a.	Optimised catalytic or thermal oxidation	See Section 1.4.1.	Generally applicable.
b.	Rapid waste-gas cooling	Rapid cooling of waste gases from temperatures above 400 °C to below 250 °C to prevent the *de novo* synthesis of PCDD/F.	Generally applicable.
c.	Adsorption using activated carbon	See Section 1.4.1.	Generally applicable.
d.	Absorption	See Section 1.4.1.	Generally applicable.
Other techniques not primarily used to reduce PCDD/F emissions			
e.	Selective catalytic reduction (SCR)	See Section 1.4.1. When SCR is used for NO_X abatement, an adequate catalyst surface of the SCR system also provides for the partial reduction of the emissions of PCDD/F.	Applicability to existing plants may be restricted by space availability and/or by the presence of catalyst poisons in the waste gases.

Table 1.2

BAT-associated emission level (BAT-AEL) for channelled emissions to air of PCDD/F from thermal treatment of waste gases containing chlorine and/or chlorinated compounds

Substance/Parameter	BAT-AEL (ng I-TEQ/Nm³) (Average over the sampling period)
PCDD/F	< 0,01-0,05

The associated monitoring is given in BAT 8.

1.1.3.4. *Dust (including PM_{10} and $PM_{2,5}$) and particulate-bound metals*

BAT 13. In order to increase resource efficiency and to reduce the mass flow of dust and particulate-bound metals sent to the final waste gas treatment, BAT is to recover materials from process off-gases by using one or a combination of the techniques given below and to reuse them.

Technique		Description
a.	Cyclone	See Section 1.4.1.
b.	Fabric filter	See Section 1.4.1.
c.	Absorption	See Section 1.4.1.

Applicability

Recovery may be restricted where the energy demand for dust purification or decontamination is excessive. Reuse may be restricted due to product quality specifications.

BAT 14. In order to reduce channelled emissions to air of dust and particulate-bound metals, BAT is to use one or a combination of the techniques given below.

Technique		Description	Applicability
a.	Absolute filter	See Section 1.4.1.	Applicability may be limited in the case of sticky dust or when the temperature of the waste gases is below the dew point.
b.	Absorption	See Section 1.4.1.	Generally applicable.
c.	Fabric filter	See Section 1.4.1.	Applicability may be limited in the case of sticky dust or when the temperature of the waste gases is below the dew point.
d.	High-efficiency air filter	See Section 1.4.1.	Generally applicable.
e.	Cyclone	See Section 1.4.1.	Generally applicable.
f.	Electrostatic precipitator	See Section 1.4.1.	Generally applicable.

Table 1.3

BAT-associated emission levels (BAT-AELs) for channelled emissions to air of dust, lead and nickel

Substance/Parameter	BAT-AEL (mg/Nm^3) (Daily average or average over the sampling period)
Dust	< 1-5 ([1]) ([2]) ([3]) ([4])
Lead and its compounds, expressed as Pb	< 0,01-0,1 ([5])
Nickel and its compounds, expressed as Ni	< 0,02-0,1 ([6])

(1) The upper end of the range is 20 mg/Nm³ when neither an absolute nor a fabric filter is applicable.
(2) The BAT-AEL does not apply to minor emissions (i.e. when the dust mass flow is below e.g. 50 g/h) if no CMR substances are identified as relevant in the dust based on the inventory given in BAT 2.
(3) In the case of the production of complex inorganic pigments using direct heating, and in the case of the drying step in the production of E-PVC, the upper end of the BAT-AEL range may be higher and up to 10 mg/Nm³.
(4) Dust emissions are expected to be towards the lower end of the BAT-AEL range (e.g. below 2,5 mg/Nm³) when the presence of substances classified as CMR 1A or 1B, or CMR 2 in the dust is identified as relevant (see BAT 2).
(5) The BAT-AEL does not apply to minor emissions (i.e. when the lead mass flow is below e.g. 0,1 g/h).
(6) The BAT-AEL does not apply to minor emissions (i.e. when the Ni mass flow is below e.g. 0,15 g/h).

The associated monitoring is given in BAT 8.

1.1.3.5. *Inorganic compounds*

BAT 15. In order to increase resource efficiency and to reduce the mass flow of inorganic compounds sent to the final waste gas treatment, BAT is to recover inorganic compounds from process off-gases by using absorption and to reuse them.

Description

See Section 1.4.1.

Applicability

Recovery may be restricted where the energy demand is excessive due to the low concentration of the compound(s) concerned in the process off-gas(es). Reuse may be restricted due to product quality specifications.

BAT 16. In order to reduce channelled emissions to air of CO, NO_X and SO_X from thermal treatment, BAT is to use technique c. and one or a combination of the other techniques given below.

Technique		Description	Main inorganic compounds targeted	Applicability
a.	Choice of fuel	See Section 1.4.1.	NO_X, SO_X	Generally applicable.
b.	Low-NO_X burner	See Section 1.4.1.	NO_X	Applicability to existing plants may be restricted by design and/or operational constraints.
c.	Optimisation of catalytic or thermal oxidation	See Section 1.4.1.	CO, NO_X	Generally applicable.
d.	Removal of high levels of NO_X precursors	Remove (if possible, for reuse) high levels of NO_X precursors prior to thermal or catalytic oxidation, e.g. by absorption, adsorption or condensation.	NO_X	Generally applicable.

e.	Absorption	See Section 1.4.1.	SO_X	Generally applicable.
f.	Selective catalytic reduction (SCR)	See Section 1.4.1.	NO_X	Applicability to existing plants may be restricted by space availability.
g.	Selective non-catalytic reduction (SNCR)	See Section 1.4.1.	NO_X	Applicability to existing plants may be restricted by the residence time needed for the reaction.

Table 1.4

BAT-associated emission levels (BAT-AELs) for channelled emissions to air of NO_X and indicative emission level for channelled emissions to air of CO from thermal treatment

Substance/Parameter	BAT-AEL (mg/Nm³) (Daily average or average over the sampling period)
Nitrogen oxides (NO_X) from catalytic oxidation	5-30 ([1])
Nitrogen oxides (NO_X) from thermal oxidation	5-130 ([2])
Carbon monoxide (CO)	No BAT-AEL ([3])

([1]) The upper end of the BAT-AEL range may be higher and up to 80 mg/Nm³ if the process off-gas(es) contain(s) high levels of NO_X precursors.
([2]) The upper end of the BAT-AEL range may be higher and up to 200 mg/Nm³ if the process off-gas(es) contain(s) high levels of NO_X precursors.
([3]) As an indication, the emission levels for carbon monoxide are 4-50 mg/Nm³, as a daily average or average over the sampling period.

The associated monitoring is given in BAT 8.

The BAT-AEL for channelled emissions to air of SO_2 is given in Table 1.6.

BAT 17. In order to reduce channelled emissions to air of ammonia from the use of selective catalytic reduction (SCR) or selective non-catalytic reduction (SNCR) for the abatement of NO_X emissions (ammonia slip), BAT is to optimise the design and/or operation of SCR or SNCR (e.g. optimised reagent to NO_X ratio, homogeneous reagent distribution and optimum size of the reagent drops).

Table 1.5

BAT-associated emission level (BAT-AEL) for channelled emissions to air of ammonia from the use of SCR or SNCR (ammonia slip)

Substance/Parameter	BAT-AEL (mg/Nm³) (Average over the sampling period)
Ammonia (NH_3) from SCR/SNCR	< 0,5-8 ([1])

([1]) The upper end of the BAT-AEL range may be higher and up to 40 mg/Nm³ in the case of process off-gases containing very high levels of NO_X (e.g. above 5 000 mg/Nm³) prior to treatment with SCR or SNCR.

The associated monitoring is given in BAT 8.

BAT 18. In order to reduce channelled emissions to air of inorganic compounds other than channelled emissions to air of ammonia from the use of selective catalytic reduction (SCR) or selective non-catalytic reduction (SNCR) for the abatement of NO_X emissions), channelled emissions to air of CO, NO_X and SO_X from the use of thermal treatment, and channelled emissions to air of NO_X from process furnaces/heaters, BAT is to use one or a combination of the techniques given below.

	Technique	Description	Main inorganic compounds targeted	Applicability
Specific techniques to reduce emissions to air of inorganic compounds				
a.	Absorption	See Section 1.4.1.	Cl_2, HCl, HCN, HF, NH_3, NO_X, SO_X	Generally applicable.
b.	Adsorption	See Section 1.4.1. For the removal of inorganic substances, the technique is often used in combination with a dust abatement technique (see BAT 14).	HCl, HF, NH_3, SO_X	Generally applicable.
c.	Selective catalytic reduction (SCR)	See Section 1.4.1.	NO_X	Applicability to existing plants may be restricted by space availability.
d.	Selective non-catalytic reduction (SNCR)	See Section 1.4.1.	NO_X	Applicability to existing plants may be restricted by the residence time needed for the reaction.
Other techniques not primarily used to reduce emissions to air of inorganic compounds				
e.	Catalytic oxidation	See Section 1.4.1.	NH_3	Applicability may be restricted by the presence of catalyst poisons in the waste gases.
f.	Thermal oxidation	See Section 1.4.1.	NH_3, HCN	Applicability of recuperative and regenerative thermal oxidation to existing plants may be restricted by design and/or operational constraints. The applicability may be restricted where the energy demand is excessive due to the low concentration of the compound(s) concerned in the process off-gases.

Table 1.6

BAT-associated emission levels (BAT-AELs) for channelled emissions to air of inorganic compounds

Substance/Parameter	BAT-AEL (mg/Nm^3) (Daily average or average over the sampling period)
Ammonia (NH_3)	2-10 (1) (2) (3)
Elemental chlorine (Cl_2)	< 0,5-2 (4) (5)
Gaseous fluorides, expressed as HF	≤ 1 (4)
Hydrogen cyanide (HCN)	< 0,1-1 (4)
Gaseous chlorides, expressed as HCl	1-10 (6)
Nitrogen oxides (NO_X)	10-150 (7) (8) (9) (10)
Sulphur oxides (SO_2)	< 3-150 (9) (11)

(1) The BAT-AEL does not apply to channelled emissions to air of ammonia from the use of SCR or SNCR (ammonia slip). This is covered by BAT 17.
(2) The BAT-AEL does not apply to minor emissions (i.e. when the NH_3 mass flow is below e.g. 50 g/h).
(3) In the case of the drying step in the production of E-PVC, the upper end of the BAT-AEL range may be higher and up to 20 mg/Nm^3, when the substitution of ammonium salts is not possible due to product quality specifications.
(4) The BAT-AEL does not apply to minor emissions (i.e. when the mass flow of the substance concerned is below e.g. 5 g/h).
(5) In the case of NO_X concentrations above 100 mg/Nm^3, the upper end of the BAT-AEL range may be higher and up to 3 mg/Nm^3 due to analytical interference
(6) The BAT-AEL does not apply to minor emissions (i.e. when the HCl mass flow is below e.g. 30 g/h).
(7) In the case of the production of explosives, the upper end of the BAT-AEL range may be higher and up to 220 mg/Nm^3 when regenerating or recovering nitric acid from the production process.
(8) The BAT-AEL does not apply to channelled emissions to air of NO_X from the use of catalytic or thermal oxidation (see BAT 16) or from process furnaces/heaters (see BAT 36).
(9) The BAT-AEL does not apply to minor emissions (i.e. when the mass flow of the substance concerned is below e.g. 500 g/h.
(10) In the case of the production of caprolactam, the upper end of the BAT-AEL range may be higher and up to 200 mg/Nm^3 in the case of process off-gases containing very high levels of NO_X (e.g. above 10 000 mg/Nm^3) prior to treatment with SCR or SNCR, when the abatement efficiency of the SCR or SNCR is ≥ 99 %.
(11) The BAT-AEL does not apply in the case of physical purification or reconcentration of spent sulphuric acid.

The associated monitoring is given in BAT 8.

1.1.4. Diffuse VOC emissions to air

1.1.4.1. *Management system for diffuse VOC emissions*

BAT 19. In order to prevent or, where that is not practicable, to reduce diffuse VOC emissions to air, BAT is to elaborate and implement a management system for diffuse VOC emissions, as part of the environmental management system (see BAT 1), that includes all of the following features:

i. Estimating the annual quantity of diffuse VOC emissions (see BAT 20).

ii. Monitoring diffuse VOC emissions from the use of solvents by compiling a solvent mass balance, if applicable (see BAT 21).

iii. Establishing and implementing a leak detection and repair (LDAR) programme for fugitive VOC emissions. The LDAR programme typically lasts from 1 to 5 years depending on the nature, scale and complexity of the plant (5 years may correspond to large plants with a high number of emission sources).

The LDAR programme includes all of the following features:

a. Listing of equipment identified as relevant fugitive VOC emission sources in the inventory of diffuse VOC emissions (see BAT 2).

b. Definition of criteria associated with the following:

— Leaky equipment. Typical criteria could be a leak threshold, above which equipment is considered leaky, and/or the visualisation of a leak with OGI cameras. This depends on the characteristics of the emission source (e.g. accessibility) and the hazardous properties of the emitted substance(s).

— Maintenance and/or repair actions to be carried out. A typical criterion could be a VOC concentration threshold triggering the maintenance or repair action (maintenance/repair threshold). The maintenance/repair threshold is generally equal to or higher than the leak threshold. This depends on the characteristics of the emission source (e.g. accessibility) and the hazardous properties of the emitted substance(s). For the first LDAR programme, it is generally not higher than 5 000 ppmv for VOCs other than VOCs classified as CMR 1A or 1B, and 1 000 ppmv for VOCs classified as CMR 1A or 1B. For subsequent LDAR programmes, the maintenance/repair threshold is lowered (see point vi. a.) and not higher than 1 000 ppmv for VOCs other than VOCs classified as CMR 1A or 1B, and 500 ppmv for VOCs classified as CMR 1A or 1B, targeting 100 ppmv.

c. Measuring fugitive VOC emissions from equipment listed under point iii. a. (see BAT 22).

d. Carrying out maintenance and/or repair actions (see BAT 23, techniques e. and f.), as soon as possible and where necessary according to the criteria defined in point iii. b. Maintenance and repair actions are prioritised according to the hazardous properties of the emitted substance(s), the significance of the emissions and/or operational constraints. The effectiveness of the maintenance and/or repair actions is verified according to point iii. c., leaving enough time after the intervention (e.g. 2 months).

e. Filling in the database mentioned in point v.

iv. Establishing and implementing a detection and reduction programme for non-fugitive VOC emissions that includes all of the following features:

a. Listing of equipment identified as relevant non-fugitive VOC emission sources in the inventory of diffuse VOC emissions (see BAT 2).

b. Monitoring non-fugitive VOC emissions from equipment listed under point iv. a. (see BAT 22).

c. Planning and implementing techniques to reduce non-fugitive VOC emissions (see BAT 23, techniques a., c. and g. to j.). The planning and implementation of the techniques are prioritised according to the hazardous properties of the emitted substance(s), the significance of the emissions and/or operational constraints.

d. Filling in the database mentioned in point v.

v. Establishing and maintaining a database, for diffuse VOC emissions sources that are identified in the inventory mentioned in BAT 2, for keeping record of:

a. equipment design specifications (including the date and description of any design changes);

b. the equipment maintenance, repair, upgrade, or replacement actions, performed or planned, and their date of implementation;

c. the equipment that could not be maintained, repaired, upgraded or replaced due to operational constraints;

d. the results of the measurements or monitoring, including the concentration(s) of the emitted substance(s), the calculated leak rate (as kg/year), the recording from OGI cameras (e.g. from the last LDAR programme) and the date of the measurements or monitoring;

e. the annual quantity of diffuse VOC emissions (as fugitive and non-fugitive emissions), including information on non-accessible sources and accessible sources not monitored during the year.

vi. Reviewing and updating the LDAR programme periodically. This may include the following:

a. lowering the leak and/or maintenance/repair thresholds (see point iii. b.);

b. reviewing the prioritisation of equipment to be monitored, giving higher priority to (the type of) equipment identified as leaky during the previous LDAR programme;

c. planning the maintenance, repair, upgrade or replacement of equipment that could not be performed during the previous LDAR programme due to operational constraints.

vii. Reviewing and updating the detection and reduction programme for non-fugitive VOC emissions. This may include the following:

a. monitoring non-fugitive VOC emissions from equipment where maintenance, repair, upgrade or replacement actions were implemented, in order to determine if those actions were successful;

b. planning the maintenance, repair, upgrade or replacement actions that could not be performed due to operational constraints.

Applicability

The features points iii., iv., vi., and vii. are only applicable to sources of diffuse VOC emissions for which monitoring according to BAT 22 is applicable.

The level of detail of the management system for diffuse VOC emissions will be proportionate to the nature, scale and complexity of the plant, and the range of environmental impacts it may have.

1.1.4.2. *Monitoring*

BAT 20. BAT is to estimate fugitive and non-fugitive VOC emissions to air separately at least once every year by using one or a combination of the techniques given below, as well as to determine the uncertainty of this estimation. The estimation distinguishes between VOCs classified as CMR 1A or 1B and VOCs that are not classified as CMR 1A or 1B.

Note

The estimation of the diffuse VOC emissions to air takes into account the results of the monitoring carried out according to BAT 21 and/or to BAT 22.

For the purpose of the estimation, channelled emissions may be counted as non-fugitive emissions when the inherent characteristics of the waste gas stream (e.g. low velocities, variability of the flow rate and concentration) do not allow an accurate measurement according to BAT 8.

The main sources of uncertainty of the estimation are identified, and corrective actions are implemented to reduce the uncertainty.

Technique		Description	Type of emissions
a.	Use of emission factors	See Section 1.4.2.	Fugitive and/or non-fugitive
b.	Use of a mass balance	Estimation based on the difference in the mass of the substance inputs to and outputs from the plant/production unit, taking into account the generation and destruction of the substance in the plant/production unit. A mass balance may also consist of measuring the concentration of VOCs in the product (e.g. raw material or solvent).	
c.	Use of thermodynamic models	Estimation using the laws of thermodynamics applied to equipment (e.g. tanks) or particular steps of a production process. The following data are generally used as input for the model: — chemical properties of the substance (e.g. vapour pressure, molecular mass); — process operating data (e.g. operating time, product quantity, ventilation); — characteristics of the emission source (e.g. tank diameter, colour, shape).	

BAT 21. BAT is to monitor diffuse VOC emissions from the use of solvents by compiling, at least once every year, a solvent mass balance of the solvent inputs and outputs of the plant, as defined in Part 7 of Annex VII to Directive 2010/75/EU and to minimise the uncertainty of the solvent mass balance data by using all of the techniques given below.

Technique		Description
a.	Full identification and quantification of the relevant solvent inputs and outputs, including the associated uncertainty	This includes: — identification and documentation of solvent inputs and outputs (e.g. channelled and diffuse emissions to air, emissions to water, solvent output in waste); — substantiated quantification of each relevant solvent input and output and recording of the methodology used (e.g. measurement, estimation by using emission factors, estimation based on operational parameters); — identification of the main sources of uncertainty of the aforementioned quantification, and implementation of corrective actions to reduce the uncertainty; — regular update of solvent input and output data.
b.	Implementation of a solvent tracking system	A solvent tracking system aims to keep control of both the used and unused quantities of solvents (e.g. by weighing unused quantities returned to storage from the application area).

c.	Monitoring of changes that may influence the uncertainty of the solvent mass balance data	Any change that could influence the uncertainty of the solvent mass balance data is recorded, such as: — malfunctions of the waste gas treatment system: the date and period of time are recorded; — changes that may influence air/gas flow rates (e.g. replacement of fans): the date and type of change are recorded.

Applicability

This BAT may not apply to the production of polyolefins, PVC or synthetic rubbers.

This BAT may not be applicable to plants whose total annual consumption of solvents is lower than 50 tonnes. The level of detail of the solvent mass balance will be proportionate to the nature, scale and complexity of the plant, and the range of environmental impacts it may have, as well as to the type and quantity of solvents used.

BAT 22. BAT is to monitor diffuse VOC emissions to air with at least the frequency given below and in accordance with EN standards. If EN standards are not available, BAT is to use ISO, national or other international standards that ensure the provision of data of an equivalent scientific quality.

Type of sources of diffuse VOC emissions ([1]) ([2])	Type of VOCs	Standard(s)	Minimum monitoring frequency
Sources of fugitive emissions	VOCs classified as CMR 1A or 1B	EN 15446 ([8])	Once every year ([3]) ([4]) ([5])
	VOCs not classified as CMR 1A or 1B		Once during the period covered by each LDAR programme (see BAT 19 point iii.) ([6])
Sources of non-fugitive emissions	VOCs classified as CMR 1A or 1B	EN 17628	Once every year
	VOCs not classified as CMR 1A or 1B		Once every year ([7])

([1]) The monitoring only applies to emission sources that are identified as relevant in the inventory given in BAT 2.
([2]) The monitoring does not apply to equipment operated under subatmospheric pressure.
([3]) In the case of inaccessible sources of fugitive VOC emissions (e.g. if the monitoring requires the removal of insulation or the use of scaffolding), the monitoring frequency may be reduced to once during the period covered by each LDAR programme (see BAT 19 point iii.).
([4]) For the production of PVC, the minimum monitoring frequency may be reduced to once every 5 years if the plant uses VCM gas detectors to continuously monitor VCM emissions in a way that allows an equivalent level of detection of VCM leaks.
([5]) In the case of high-integrity equipment (see BAT 23 b.) in contact with VOCs classified as CMR 1A or 1B, a lower minimum monitoring frequency may be adopted, but in any case at least once every 5 years.
([6]) In the case of high-integrity equipment (see BAT 23 b.) in contact with VOCs other than VOCs classified as CMR 1A or 1B, a lower minimum monitoring frequency may be adopted, but in any case at least once every 8 years.
([7]) The minimum monitoring frequency may be reduced to once every 5 years if non-fugitive emissions are quantified by using measurements.
([8]) This standard may be complemented by EN 17628.

Note

Optical gas imaging (OGI) is a useful complementary technique to the method EN 15446 ('sniffing') in order to identify sources of fugitive VOC emissions and is particularly relevant in the case of inaccessible sources (see Section 1.4.2.). This technique is described in EN 17628.

In the case of non-fugitive emissions, measurements may be complemented by the use of thermodynamic models.

Where large amounts (e.g. above 80 t/yr) of VOCs are used/consumed, the quantification of VOC emissions from the plant with tracer correlation (TC) or with optical absorption-based techniques, such as differential absorption light detection and ranging (DIAL) or solar occultation flux (SOF), is a useful complementary technique (see Section 1.4.2.). These techniques are described in EN 17628.

Applicability

BAT 22 only applies when the annual quantity of diffuse VOC emissions from the plant estimated according to BAT 20 is greater than the following:

For fugitive emissions:

— 1 tonne of VOCs per year in the case of VOCs classified as CMR 1A or 1B; or

— 5 tonnes of VOCs per year in the case of other VOCs.

For non-fugitive emissions:

— 1 tonne of VOCs per year in the case of VOCs classified as CMR 1A or 1B; or

— 5 tonnes of VOCs per year in the case of other VOCs.

1.1.4.3. *Prevention or reduction of diffuse VOC emissions*

BAT 23. In order to prevent or, where that is not practicable, to reduce diffuse VOC emissions to air, BAT is to use a combination of the techniques given below with the following order of priority.

Note

The use of techniques to prevent or, where that is not practicable, to reduce diffuse VOC emissions to air is prioritised according to the hazardous properties of the emitted substance(s) and/or the significance of the emissions.

Technique		Description	Type of emissions	Applicability
1. Prevention techniques				
a.	Limiting the number of emission sources	This includes: — minimising pipe lengths; — reducing the number of pipe connectors (e.g. flanges) and valves; — using welded fittings and connections; — using compressed air or gravity for material transfer.	Fugitive and non-fugitive emissions	Applicability may be restricted by operational constraints in the case of existing plants.

Technique		Description	Type of emissions	Applicability
b.	Use of high-integrity equipment	High-integrity equipment includes, but is not limited to: — bellow valves or double packing seals or equally effective equipment; — magnetically driven or canned pumps/compressors/agitators, or pumps/compressors/agitators using double seals and a liquid barrier; — certified high-quality gaskets (e.g. according to EN 13555) that are tightened according to technique e.; — closed sampling system. The use of high-integrity equipment is especially relevant to prevent or minimise: — emissions of CMR substances or substances with acute toxicity; and/or — emissions from equipment with high-leaking potential; and/or — leaks from processes operated at high pressures (e.g. between 300 bar and 2 000 bar). High-integrity equipment is selected, installed and maintained according to the type of process and the process operating conditions.	Fugitive emissions	Applicability may be restricted by operational constraints in the case of existing plants. Generally applicable to new plants and major plant upgrades.
c.	Collecting diffuse emissions and treating off-gases	Collecting diffuse VOC emissions (e.g. from compressor seals, vents and purge lines) and sending them to recovery (see BAT 9 and BAT 10) and/or abatement (see BAT 11).	Fugitive and non-fugitive emissions	Applicability may be restricted: — for existing plants; and/or — by safety concerns (e.g. avoiding concentrations close to the lower explosive limit).
2. Other techniques				
d.	Facilitating access and/or monitoring activities	To ease maintenance and/or monitoring activities, the access to potentially leaky equipment is facilitated, e.g. by installing platforms, and/or drones are used for monitoring.	Fugitive emissions	Applicability may be restricted by operational constraints in the case of existing plants.

Technique		Description	Type of emissions	Applicability
e.	Tightening	This includes: — tightening of gaskets by personnel that is qualified according to EN 1591-4 and using the designed gasket stress (e.g. calculated according to EN 1591-1); — installing tight caps on open ends; — using flanges selected and assembled according to EN 13555.	Fugitive emissions	Generally applicable.
f.	Replacement of leaky equipment and/or parts	This includes the replacement of: — gaskets; — sealing elements (e.g. tank lid); — packing material (e.g. valve stem packing material).	Fugitive emissions	Generally applicable.
g.	Reviewing and updating process design	This includes: — reducing the use of solvents and/or using solvents with lower volatility; — reducing the formation of side products containing VOCs; — lowering the operating temperature; — lowering the VOC content in the final product.	Non-fugitive emissions	Applicability may be restricted in the case of existing plants due to operational constraints.
h.	Reviewing and updating operating conditions	This includes: — reducing the frequency and duration of reactor and vessel openings; — preventing corrosion by lining or coating of equipment, by painting pipes (for external corrosion) and by using corrosion inhibitors for materials in contact with equipment.	Non-fugitive emissions	Generally applicable.

Technique		Description	Type of emissions	Applicability
i.	Using closed systems	This includes: — vapour balancing (see Section 1.4.3); — closed systems for solid/liquid and liquid/liquid phase separations; — closed systems for cleaning operations; — closed sewers and/or waste water treatment plants; — closed sampling systems; — closed storage areas. Off-gases from closed systems are sent to recovery (see BAT 9 and BAT 10) and/or abatement (see BAT 11).	Non-fugitive emissions	Applicability may be restricted by operational constraints in the case of existing plants and/or by safety concerns.
j.	Using techniques to minimise emissions from surfaces	This includes: — installing oil creaming systems on open surfaces; — periodically skimming open surfaces (e.g. removing floating matter); — installing anti-evaporation floating elements on open surfaces; — treating waste water streams to remove VOCs and send the VOCs to recovery (see BAT 9 and BAT 10) and/or abatement (see BAT 11); — installing floating roofs on tanks; — using fixed-roof tanks connected to a waste gas treatment.	Non-fugitive emissions	Applicability may be restricted by operational constraints in the case of existing plants.

1.1.4.4. *BAT conclusions for the use of solvents or the reuse of recovered solvents*

The emission levels for the use of solvents or the reuse of recovered solvents given below are associated with the general BAT conclusions given in Section 1.1 and Section 1.1.4.3.

Table 1.7

BAT-associated emission level (BAT-AEL) for diffuse VOC emissions to air from the use of solvents or the reuse of recovered solvents

Parameter	BAT-AEL (percentage of the solvent inputs) (yearly average) [1]
Diffuse VOC emissions	≤ 5 %

[1] The BAT-AEL does not apply to plants whose total annual consumption of solvents is lower than 50 tonnes.

The associated monitoring is given in BAT 20, BAT 21 and BAT 22.

1.2. ***Polymers and synthetic rubbers***

The BAT conclusions presented in this section apply to the production of certain polymers. They apply in addition to the general BAT conclusions given in Section 1.1.

1.2.1. **BAT conclusions for the production of polyolefins**

BAT 24. BAT is to monitor the TVOC concentration in polyolefin products, at least once every year for each representative polyolefin grade produced during the same year, in accordance with EN standards. If EN standards are not available, BAT is to use ISO, national or other international standards that ensure the provision of data of an equivalent scientific quality.

Polyolefin product	Standard(s)	Monitoring associated with
HDPE, LDPE, LLDPE	No EN standard available	BAT 20, BAT 25
PP		
EPS, GPPS, HIPS		

Note

The measurement samples are taken at the point of transition from the closed to the open system where the polyolefin comes into contact with the atmosphere.

The closed system refers to the part of the production process where the materials (e.g. reactants, solvents, suspension agents) are not in contact with the atmosphere. It includes the polymerisation steps, the reuse and recovery of materials.

The open system refers to the part of the production process where the polyolefins come into contact with the atmosphere. It includes the finishing steps (e.g. drying, blending) as well as the transfer, handling and storage of polyolefins.

When the transition point between the open and the closed system cannot be clearly identified, the measurement samples are taken at an appropriate point.

Applicability

Measurements do not apply to production processes only made up of a closed system.

BAT 25. In order to increase resource efficiency and to reduce emissions to air of organic compounds, BAT is to use all of the techniques given below, as far as applicable.

Technique		Description	Applicability
a.	Chemical agents with low boiling points	Solvents and suspension agents with low boiling points are used.	Applicability may be restricted by operational constraints.

Technique		Description	Applicability
b.	Lowering the VOC content in the polymer	The VOC content in the polymer is lowered, e.g. by using low-pressure separation, stripping or closed-loop nitrogen purge systems, devolatilisation extrusion (see Section 1.4.3). The techniques for lowering the VOC content depend on the type of polymer product and production process.	Devolatilisation extrusion may be restricted by product specifications for the production of HDPE, LDPE and LLDPE.
c.	Collection and treatment of process off-gases	Process off-gases arising from the use of technique b. as well as from the finishing step, e.g. extrusion and degassing silos, are collected and sent to recovery (see BAT 9 and BAT 10) and/or abatement (see BAT 11).	Applicability may be restricted by operational constraints and/or due to safety concerns (e.g. avoiding concentrations close to the lower/upper explosive limit).

Table 1.8

BAT-associated emission levels (BAT-AELs) for total emissions to air of VOCs from the production of polyolefins expressed as specific emission loads

Polyolefin product	Unit	BAT-AEL (Yearly average)
HDPE	g C per kg of polyolefins produced	0,3-1,0 ([1])
LDPE		0,1-1,4 ([2]) ([3])
LLDPE		0,1-0,8
PP		0,1-0,9 ([1])
GPPS and HIPS		< 0,1
EPS		< 0,6

([1]) The lower end of the BAT-AEL range is typically associated with the gas-phase polymerisation process.
([2]) The upper end of the BAT-AEL range may be higher and up to 2,7 g C/kg in the case of the production of EVA or other copolymers (e.g. ethyl acrylate copolymers).
([3]) The upper end of the BAT-AEL range may be higher and up to 4,7 g C/kg if both of the following conditions are met:

— thermal oxidation is not applicable;
— EVA or other copolymers (e.g. ethyl acrylate copolymers) are produced.

The associated monitoring is given in BAT 8, BAT 20, BAT 22 and BAT 24. The monitoring of TVOC emissions to air includes all emissions from the following process steps, where the emissions are identified as relevant in the inventory given in BAT 2: storage and handling of raw materials, polymerisation, recovery of materials and pollutant abatement, finishing of the polymer (e.g. extrusion, drying, blending) as well as the transfer, handling and storage of polymers.

1.2.2. BAT conclusions for the production of polyvinyl chloride (PVC)

BAT 26. BAT is to monitor channelled emissions to air with at least the frequency given below and in accordance with EN standards. If EN standards are not available, BAT is to use ISO, national or other international standards that ensure the provision of data of an equivalent scientific quality.

Substance	Emission points	Standard(s)	Minimum monitoring frequency ([1])	Monitoring associated with
VCM	Any stack with a VCM mass flow of ≥ 25 g/h	Generic EN standards ([2])	Continuous ([3])	BAT 29
	Any stack with a VCM mass flow of < 25 g/h	No EN standard available	Once every 6 months ([4]) ([5])	

([1]) The monitoring of VCM emissions from finishing steps (e.g. drying, blending) as well as from the transfer, handling and storage of PVC may be replaced by the monitoring in BAT 27.
([2]) Generic EN standards for continuous measurements are EN 14181, EN 15267-1, EN 15267-2 and EN 15267-3.
([3]) The minimum monitoring frequency may be reduced to once every 6 months if the emission levels are proven to be sufficiently stable.
([4]) To the extent possible, the measurements are carried out at the highest expected emission state under normal operating conditions.
([5]) The minimum monitoring frequency may be reduced to once every year if the emission levels are proven to be sufficiently stable.

BAT 27. BAT is to monitor the residual vinyl chloride monomer concentration in PVC slurry/latex, at least once every year for each representative PVC grade produced during the same year, in accordance with EN standards.

Substance	Standard(s)	Monitoring associated with
VCM	EN ISO 6401	BAT 30

Note

The samples of the PVC slurry/latex are taken at the point of transition from the closed to the open system where the PVC slurry/latex comes into contact with the atmosphere.

The closed system refers to the part of the production process where the PVC slurry/latex is not in contact with the atmosphere. It generally includes the polymerisation steps, the reuse and recovery of VCM.

The open system is the part of the system where the PVC slurry/latex comes into contact with the atmosphere. It includes the finishing steps (e.g. drying and blending) as well as the transfer, handling and storage of PVC.

BAT 28. In order to increase resource efficiency and to reduce the mass flow of organic compounds sent to the final waste gas treatment, BAT is to recover the vinyl chloride monomer from process off-gases by using one or a combination of the techniques given below, and to reuse the recovered monomer.

Technique		Description
a.	Absorption (regenerative)	See Section 1.4.1.
b.	Adsorption (regenerative)	See Section 1.4.1.
c.	Condensation	See Section 1.4.1.

Applicability

Recovery may be restricted where the energy demand is excessive due to the low concentration of the compound(s) concerned in the process off-gas(es).

BAT 29. In order to reduce channelled emissions to air of vinyl chloride monomer from the recovery of vinyl chloride monomer, BAT is to use one or a combination of the techniques given below.

	Technique	Description	Applicability
a.	Absorption	See Section 1.4.1.	Generally applicable
b.	Adsorption	See Section 1.4.1.	
c.	Condensation	See Section 1.4.1.	
d.	Thermal oxidation	See Section 1.4.1.	Applicability of recuperative and regenerative thermal oxidation to existing plants may be restricted by design and/or operational constraints. Applicability may be restricted where the energy demand is excessive due to the low concentration of the compound(s) concerned in the process off-gases.

Table 1.9

BAT-associated emission level (BAT-AEL) for channelled emissions to air of VCM from the recovery of VCM

Substance	BAT-AEL (mg/Nm^3) (Daily average or average over the sampling period)
VCM	< 0,5-1 ([1]) ([2])

([1]) The BAT-AEL does not apply to minor emissions (i.e. when the VCM mass flow is below e.g. 1 g/h).
([2]) The upper end of the BAT-AEL range may be higher and up to 5 mg/Nm^3 if both of the following conditions are met:

— thermal oxidation is not applicable;
— the plant is not directly associated to the production of EDC and VCM.

The associated monitoring is given in BAT 26.

BAT 30. In order to reduce emissions to air of vinyl chloride monomer, BAT is to use all of the techniques given below.

Technique		Description
a.	Appropriate VCM storage facilities	This includes: — storing VCM in refrigerated tanks at atmospheric pressure or in pressurised tanks at ambient temperature; — using refrigerated reflux condensers or connecting tanks for VCM recovery (see BAT 28) and/or abatement (see BAT 29).
b.	Vapour balancing	See Section 1.4.3.
c.	Minimisation of emissions of residual VCM from equipment	This includes: — reducing the frequency and duration of reactor openings; — venting off-gases from latex storage tanks and from connections to VCM recovery (see BAT 28) and/or abatement (see BAT 29) prior to opening the reactor; — flushing the reactor with inert gas prior to opening and venting off-gases to VCM recovery (see BAT 28) and/or abatement (see BAT 29); — draining the liquid content of the reactor to closed vessels prior to opening the reactor; — cleaning the reactor with water prior to opening and draining the water to the stripping system.
d.	Lowering the VCM content in the polymer by stripping	See Section 1.4.3.
e.	Collection and treatment of process off-gases	Process off-gases from the use of technique d. are collected and sent to VCM recovery (see BAT 28) and/or abatement (see BAT 29).

Table 1.10

BAT-associated emission levels (BAT-AELs) for total emissions to air of VCM from the production of PVC expressed as specific emission loads

PVC type	Unit	BAT-AEL (Yearly average)
S-PVC	g VCM per kg of PVC produced	0,01-0,045
E-PVC		0,25-0,3 ([1])

([1]) The upper end of the BAT-AEL range may be higher and up to 0,5 g VCM per kg of PVC produced if both of the following conditions are met:

— thermal oxidation is not applicable;
— the plant is not directly associated to the production of EDC and VCM.

The associated monitoring is given in BAT 20, BAT 22, BAT 26 and BAT 27. The monitoring of VCM emissions to air includes all emissions from the following process steps or equipment, where the emissions are identified as relevant in the inventory given in BAT 2: finishing, e.g. drying and blending; transfer, handling and storage; reactor openings; gasholders; waste water treatment plants; recovery and/or abatement of VCM.

Table 1.11

BAT-associated emission levels (BAT-AELs) for the VCM concentration in the PVC slurry/latex

PVC type	Unit	BAT-AEL (Yearly average)
S-PVC	g VCM per kg of PVC produced	0,01-0,03
E-PVC		0,2-0,4

The associated monitoring is given in BAT 27.

1.2.3. **BAT conclusions for the production of synthetic rubbers**

BAT 31. BAT is to monitor the TVOC concentration in synthetic rubbers, at least once every year for each representative synthetic rubber grade produced during the same year, in accordance with EN standards. If EN standards are not available, BAT is to use ISO, national or other international standards that ensure the provision of data of an equivalent scientific quality.

Substance/Parameter	Standard(s)	Monitoring associated with
VOCs	No EN standard available	BAT 32

Note

The samples are taken after lowering the VOC content in the polymer (see BAT 32 a.) where the synthetic rubber comes into contact with the atmosphere.

Applicability

Measurements do not apply to production processes only made up of a closed system.

BAT 32. In order to reduce emissions to air of organic compounds, BAT is to use one or a combination of the techniques given below.

	Technique	Description
a.	Lowering the VOC content in the polymer	The VOC content in the polymer is lowered by using stripping or devolatilisation extrusion (see Section 1.4.3).
b.	Collection and treatment of process off-gases	Process off-gases are collected and sent to recovery (see BAT 9 and BAT 10) and/or abatement (see BAT 11).

Table 1.12

BAT-associated emission level (BAT-AEL) for total emissions to air of VOC from the production of synthetic rubbers expressed as specific emission load

Substance/Parameter	Unit	BAT-AEL (Yearly average)
TVOC	g C per kg of synthetic rubber produced	0,2-4,2

The associated monitoring is given in BAT 8, BAT 20, BAT 22 and BAT 31. The monitoring of TVOC emissions to air includes all emissions from the following process steps, where the emissions are identified as relevant in the inventory given in BAT 2: storage of raw materials, polymerisation, recovery of materials and abatement techniques, finishing of the polymer (e.g. extrusion, drying, blending) as well as the transfer, handling and storage of synthetic rubbers.

1.2.4. BAT conclusions for the production of viscose using CS_2

BAT 33. BAT is to monitor channelled emissions to air with at least the frequency given below and in accordance with EN standards. If EN standards are not available, BAT is to use ISO, national or other international standards that ensure the provision of data of an equivalent scientific quality.

Substance ([1])	Emission points	Standard(s)	Minimum monitoring frequency	Monitoring associated with
Carbon disulphide (CS_2)	Any stack with a mass flow of ≥ 1 kg/h	Generic EN standards ([2])	Continuous ([3])	BAT 35
	Any stack with a mass flow of < 1 kg/h	No EN standard available	Once every year ([4])	
Hydrogen sulphide (H_2S)	Any stack with a mass flow of ≥ 50 g/h	Generic EN standards ([2])	Continuous ([3])	
	Any stack with a mass flow of < 50 g/h	No EN standard available	Once every year ([4])	

([1]) The monitoring only applies when the substance concerned is identified as relevant in the waste gas stream based on the inventory given in BAT 2.
([2]) Generic EN standards for continuous measurements are EN 14181, EN 15267-1, EN 15267-2 and EN 15267-3.
([3]) In the case of the production of casing, the minimum monitoring frequency may be reduced to once every month when continuous monitoring is not possible due to analytical interference.
([4]) To the extent possible, the measurements are carried out at the highest expected emission state under normal operating conditions.

BAT 34. In order to increase resource efficiency and to reduce the mass flow of CS_2 and H_2S sent to the final waste gas treatment, BAT is to recover CS_2 by using technique a. and/or technique b. or a combination of technique c. with technique(s) a. and/or b., given below and to reuse the CS_2, or, alternatively, to use technique d.

Technique		Main substance targeted	Description	Applicability
a.	Absorption (regenerative)	H_2S	See Section 1.4.1.	Generally applicable for the production of casing. For other products, applicability may be restricted where the energy demand is excessive due to high waste gas volume flows (above e.g. 120 000 Nm^3/h) or low H_2S concentration in the waste gas (below e.g. 0,5 g/Nm^3).

Technique		Main substance targeted	Description	Applicability
b.	Adsorption (regenerative)	H_2S, CS_2	See Section 1.4.1.	Applicability may be restricted where the energy demand for recovery is excessive if the concentration of CS_2 in the waste gas is below e.g. 5 g/Nm³.
c.	Condensation	H_2S, CS_2	See Section 1.4.1.	
d.	Production of sulphuric acid	H_2S, CS_2	Process off-gases containing CS_2 and H_2S are used to produce sulphuric acid.	Applicability may be restricted if the concentration of CS_2 and/or H_2S in the waste gas is below 5 g/Nm³.

BAT 35. In order to reduce channelled emissions to air of CS_2 and H_2S, BAT is to use one or a combination of the techniques given below.

Technique		Main substance targeted	Description	Applicability
a.	Absorption	H_2S	See Section 1.4.1.	Generally applicable.
b.	Bioprocesses	CS_2, H_2S	See Section 1.4.1.	Applicability may be restricted where the energy demand is excessive due to high waste gas volume flows (e.g. above 60 000 Nm³/h) or high CS_2 concentration in the waste gas (e.g. above 1 000 mg/Nm³) or too low H_2S concentration.
c.	Thermal oxidation	CS_2, H_2S	See Section 1.4.1.	Applicability of recuperative and regenerative thermal oxidation to existing plants may be restricted by design and/or operational constraints. Applicability may be restricted where the energy demand is excessive due to the low concentration of the compound(s) concerned in the process off-gases.

Table 1.13

BAT-associated emission levels (BAT-AELs) for channelled emissions to air of CS_2 and H_2S from the production of viscose using CS_2

Substance	BAT-AEL (mg/Nm³) (Daily average or average over the sampling period) ([1])
CS_2	5-400 ([2]) ([3])
H_2S	1-10 ([4])

(1) The BAT-AEL does not apply to the production of filament yarn.
(2) The upper end of the BAT-AEL range may be higher and up to 500 mg CS_2/Nm^3 if:
a) both of the following conditions are fulfilled:
— bioprocesses (see BAT 35 b) are not applicable;
— the CS_2 recovery efficiency (see BAT 34) is ≥ 97 %; or
b) CS_2 recovery is not applicable.
(3) The lower end of the BAT-AEL range can be achieved by using thermal oxidation or technique d. in BAT 34.
(4) The upper end of the BAT-AEL range may be higher and up to 30 mg/Nm^3, when the sum of H_2S and CS_2 (expressed as Total S) is close to the lower end of the BAT-AEL range in Table 1.14.

The associated monitoring is given in BAT 33.

Table 1.14

BAT-associated emission levels (BAT-AELs) for emissions to air of H_2S and CS_2 from the production of staple fibres and casing expressed as specific emission loads

Parameter	Process	Unit	BAT-AEL (Yearly average)
Sum of H_2S and CS_2 (expressed as Total S) (1)	Production of staple fibres	g Total S per kg of product	6-9
	Casing		120-250

(1) Emissions to air refer to channelled emissions only.

The associated monitoring is given in BAT 33.

1.3. ***Process furnaces/heaters***

The BAT conclusions presented in this section apply when process furnaces/heaters with a total rated thermal input equal to or greater than 1 MW are used in the production processes included in the scope of these BAT conclusions. They apply in addition to the general BAT conclusions given in Section 1.1.

Where the waste gases of two or more separate process furnaces/heaters are, or could, in the judgement of the competent authority, be discharged through a common stack, the capacities of all individual furnaces/heaters shall be added together for the purpose of calculating the total rated thermal input.

BAT 36. In order to prevent or, where that is not practicable, to reduce channelled emissions to air of CO, dust, NO_X and SO_X, BAT is to use technique c. and one or a combination of the other techniques given below.

Technique		Description	Main inorganic compounds targeted	Applicability
Primary techniques				
a.	Choice of fuel	See Section 1.4.1. This includes switching from liquid to gaseous fuels, taking into account the overall hydrocarbon balance.	NO_X, SO_X, dust	The switch from liquid to gaseous fuels may be restricted by the design of the burners in the case of existing process furnaces/heaters.

Technique		Description	Main inorganic compounds targeted	Applicability
b.	Low-NO_X burner	See Section 1.4.1.	NO_X	For existing process furnaces/ heaters, the applicability may be restricted by their design.
c.	Optimised combustion	See Section 1.4.1.	CO, NO_X	Generally applicable.
Secondary techniques				
d.	Absorption	See Section 1.4.1.	SO_X, dust	Applicability may be restricted for existing process furnaces/heaters by space availability.
e.	Fabric filter or absolute filter	See Section 1.4.1.	Dust	Not applicable when only combusting gaseous fuels.
f.	Selective catalytic reduction (SCR)	See Section 1.4.1.	NO_X	Applicability to existing process furnaces/heaters may be restricted by space availability.
g.	Selective non-catalytic reduction (SNCR)	See Section 1.4.1.	NO_X	Applicability to existing process furnaces/heaters may be restricted by the temperature window (800-1 100 °C) and the residence time needed for the reaction.

Table 1.15

BAT-associated emission level (BAT-AEL) for channelled NO_X emissions to air and indicative emission level for channelled CO emissions to air from process furnaces/heaters

Parameter	BAT-AEL (mg/Nm^3) (Daily average or average over the sampling period)
Nitrogen oxides (NO_X)	30-150 ([1]) ([2]) ([3])
Carbon monoxide (CO)	No BAT-AEL ([4])

([1]) In the case of the production of complex inorganic pigments, the upper end of the BAT-AEL range may be higher and up to 400 mg/Nm^3 when condition b) below is met, and up to 1 000 mg/Nm^3 when conditions a) and b) below are met:

a) the combustion temperature is higher than 1 000 C;
b) oxygen-enriched air or pure oxygen is used.

([2]) The BAT-AEL does not apply to minor emissions (i.e. when the NO_X mass flow is below e.g. 500 g/h).

([3]) The upper end of the BAT-AEL range may be higher and up to 200 mg/Nm^3 when direct heating is used.

([4]) As an indication, the emission levels for carbon monoxide are 4-50 mg/Nm^3, as a daily average or average over the sampling period.

The associated monitoring is given in BAT 8.

1.4. ***Description of techniques***

1.4.1. **Techniques to reduce channelled emissions to air**

Technique	Description
Absorption	The removal of gaseous or particulate pollutants from a process off-gas or waste gas stream via mass transfer to a suitable liquid, often water or an aqueous solution. It may involve a chemical reaction (e.g. in an acid or alkaline scrubber). In the case of regenerative absorption, the compounds may be recovered from the liquid.
Adsorption	The removal of pollutants from a process off-gas or waste gas stream by retention on a solid surface (activated carbon is typically used as the adsorbent). Adsorption may be regenerative or non-regenerative. In non-regenerative adsorption, the spent adsorbent is not regenerated but disposed of. In the case of regenerative adsorption, the adsorbate is subsequently desorbed, e.g. with steam (often on site), for reuse or disposal and the adsorbent is reused. For continuous operation, typically more than two adsorbers are operated in parallel, one of them in desorption mode.
Bioprocesses	Bioprocesses include the following: — Biofiltration: the waste gas stream is passed through a bed of organic material (such as peat, heather, compost, root wood, tree bark, peat, compost, softwood and different kinds of combinations) or some inert material (such as clay, activated carbon, and polyurethane), where it is biologically oxidised by naturally occurring microorganisms into carbon dioxide, water, inorganic salts and biomass. — Bioscrubbing: the removal of the pollutant compounds from a waste gas stream using a combination of wet scrubbing (absorption) and biodegradation under aerobic conditions. The scrubbing water contains a population of microorganisms suitable to oxidise biodegradable gaseous compounds. The absorbed pollutants are degraded in aerated sludge tanks. — Biotrickling: the removal of the pollutant compounds from a waste gas stream in a biological trickle-bed reactor. The pollutants are absorbed by the water phase and transported to the biofilm, where the biological transformation takes place.
Choice of fuel	The use of fuel (including support/auxiliary fuel) with a low content of potential pollution-generating compounds (e.g. low sulphur, ash, nitrogen, fluorine or chlorine content in the fuel).
Condensation	The removal of vapours of organic and inorganic compounds from a process off-gas or waste gas stream by reducing its temperature below its dew point so that the vapours liquefy. Depending on the operating temperature range required, different cooling media are used, e.g. water or brine. In cryogenic condensation, liquid nitrogen is used as a cooling medium.
Cyclone	Equipment for the removal of dust from a process off-gas or waste gas stream based on imparting centrifugal forces, usually within a conical chamber.

Technique	Description
Electrostatic precipitator	An electrostatic precipitator (ESP) is a particulate control device that uses electrical forces to move particles entrained within a waste gas stream onto collector plates. The entrained particles are given an electrical charge when they pass through a corona where gaseous ions flow. Electrodes in the centre of the flow lane are maintained at a high voltage and generate the electrical field that forces the particles to the collector walls. The pulsating DC voltage required is in the range of 20-100 kV.
Absolute filter	Absolute filters, also referred to as high-efficiency particle air (HEPA) filters or ultra-low penetration air (ULPA) filters, are constructed from glass cloth or fabrics of synthetic fibres through which gases are passed to remove particles. Absolute filters show higher efficiencies than fabric filters. The classification of HEPA and ULPA filters according to their performance is given in EN 1822-1.
High-efficiency air filter (HEAF)	A flat-bed filter in which aerosols combine into droplets. Highly viscous droplets remain on the filter fabric which contains the residues to be disposed of and separated into droplets, aerosols and dust. HEAFs are particularly suitable for treating highly viscous droplets.
Fabric filter	Fabric filters, often referred to as bag filters, are constructed from porous woven or felted fabric through which gases are passed to remove particles. The use of a fabric filter requires the selection of a fabric suitable for the characteristics of the waste gas and the maximum operating temperature.
Low-NO_X burner	The technique (including ultra-low-NO_X burner) is based on the principles of reducing peak flame temperatures. The air/fuel mixing reduces the availability of oxygen and reduces the peak flame temperature, thus retarding the conversion of fuel-bound nitrogen to NO_X and the formation of thermal NO_X, while maintaining high combustion efficiency. The design of ultra-low-NO_X burners includes (air/)fuel staging and exhaust/flue-gas recirculation.
Optimised combustion	Good design of the combustion chambers, burners and associated equipment/devices is combined with optimisation of combustion conditions (e.g. the temperature and residence time in the combustion zone, efficient mixing of the fuel and combustion air) and the regular planned maintenance of the combustion system according to suppliers' recommendations. Combustion conditions control is based on the continuous monitoring and automated control of appropriate combustion parameters (e.g. O_2, CO, fuel to air ratio, and unburnt substances).
Optimisation of catalytic or thermal oxidation	Optimisation of design and operation of catalytic or thermal oxidation to promote the oxidation of organic compounds including PCDD/F present in the waste gases, to prevent PCDD/F and the (re)formation of their precursors, as well as to reduce the generation of pollutants such as NO_X and CO.

Technique	Description
Catalytic oxidation	Abatement technique which oxidises combustible compounds in a waste gas stream with air or oxygen in a catalyst bed. The catalyst enables oxidation at lower temperatures and in smaller equipment compared to thermal oxidation. The typical oxidation temperature is between 200 °C and 600 °C. For process off-gases with low VOC concentrations (e.g. < 1 g/Nm^3), pre-concentration steps may be applied using adsorption (rotor or fixed bed, with activated carbon or zeolites). VOCs adsorbed in the concentrator are desorbed by using heated ambient air or heated waste gas, and the resulting volume flow with higher VOC concentration is directed to the oxidiser. Molecular sieves ('smoothers'), typically composed of zeolites, may be used before the concentrators or the oxidiser to level down high variations of VOC concentrations in the process off-gases.
Thermal oxidation	Abatement technique which oxidises combustible compounds in a waste gas stream by heating it with air or oxygen to above its auto-ignition point in a combustion chamber and maintaining it at a high temperature long enough to complete its combustion to carbon dioxide and water. The typical combustion temperature is between 800 °C and 1 000 °C. Several types of thermal oxidation are operated: — Straight thermal oxidation: thermal oxidation without energy recovery from the combustion. — Recuperative thermal oxidation: thermal oxidation using the heat of the waste gases by indirect heat transfer. — Regenerative thermal oxidation: thermal oxidation where the incoming waste gas stream is heated when passing through a ceramic-packed bed before entering the combustion chamber. The purified hot gases exit this chamber by passing through one (or more) ceramic-packed bed(s) (cooled by an incoming waste gas stream in an earlier combustion cycle). This reheated packed bed then begins a new combustion cycle by preheating a new incoming waste gas stream. For process off-gases with low VOC concentrations (e.g. < 1 g/Nm^3), pre-concentration steps may be applied using adsorption (rotor or fixed bed, with activated carbon or zeolites). VOCs adsorbed in the concentrator are desorbed by using heated ambient air or heated waste gas, and the resulting volume flow with higher VOC concentration is directed to the oxidiser. Molecular sieves ('smoothers'), typically composed of zeolites, may be used before the concentrators or the oxidiser to level down high variations of VOC concentrations in the process off-gases.
Selective catalytic reduction (SCR)	Selective reduction of nitrogen oxides with ammonia or urea in the presence of a catalyst. The technique is based on the reduction of NO_X to nitrogen in a catalytic bed by reaction with ammonia at an optimum operating temperature that is typically around 200– 450 °C. In general, ammonia is injected as an aqueous solution; the ammonia source can also be anhydrous ammonia or a urea solution. Several layers of catalyst may be applied. A higher NO_X reduction is achieved with the use of a larger catalyst surface, installed as one or more layers. 'In-duct' or 'slip' SCR combines SNCR with downstream SCR which reduces the ammonia slip from SNCR.
Selective non-catalytic reduction (SNCR)	Selective reduction of nitrogen oxides to nitrogen with ammonia or urea at high temperatures and without catalyst. The operating temperature window is maintained between 800 °C and 1 000 °C for optimal reaction.

1.4.2. **Techniques to monitor diffuse emissions to air**

Technique	Description
Differential absorption LIDAR (DIAL)	A laser-based technique using differential absorption LIDAR (light detection and ranging), which is the optical analogue of radio-wave-based RADAR. The technique relies on the back-scattering of laser beam pulses by atmospheric aerosols, and the analysis of the spectral properties of the returned light collected with a telescope.
Emission factor	Emission factors are numbers that can be multiplied by an activity rate (e.g. the production output), in order to estimate the emissions from the installation. Emission factors are generally derived through the testing of a population of similar process equipment or process steps. This information can be used to relate the quantity of material emitted to some general measure of the scale of activity. In the absence of other information, default emission factors (e.g. literature values) can be used to provide an estimate of the emissions. Emission factors are usually expressed as the mass of a substance emitted divided by the throughput of the process emitting the substance.
Leak Detection and Repair (LDAR) programme	A structured approach to reduce fugitive VOC emissions by detection and subsequent repair or replacement of leaking components. The LDAR programme consists of one or more campaigns. A campaign is usually conducted over 1 year, where a certain percentage of the pieces of equipment is monitored.
Optical gas imaging (OGI) methods	Optical gas imaging uses small lightweight hand-held or fixed cameras which enable the visualisation of gas leaks in real time, so that they appear as 'smoke' on a video recorder together with the image of the equipment concerned, to easily and rapidly locate significant VOC leaks. Active systems produce an image with a back-scattered infrared laser light reflected on the equipment and its surroundings. Passive systems are based on the natural infrared radiation of the equipment and its surroundings.
Solar occultation flux (SOF)	The technique is based on the recording and spectrometric Fourier Transform analysis of a broadband infrared or ultraviolet/visible sunlight spectrum along a given geographical itinerary, crossing the wind direction and cutting through VOC plumes.

1.4.3. **Techniques to reduce diffuse emissions**

Technique	Description
Devolatilisation extrusion	When the concentrated rubber solution is further processed by extrusion, the solvent vapours (commonly cyclohexane, hexane, heptane, toluene, cyclopentane, isopentane or mixtures thereof) coming from the vent hole of the extruder are compressed and sent to recovery.
Stripping	VOCs contained in the polymer are transferred to the gaseous phase (e.g. by using steam). The removal efficiency may be optimised by a suitable combination of temperature, pressure and residence time and by maximising the ratio of free polymer surface to total polymer volume.
Vapour balancing	The vapour from a piece of receiving equipment (e.g. a tank) that is displaced during the transfer of a liquid and is returned to the delivery equipment from which the liquid is delivered.

ISSN 1977-0677 (electronic edition)
ISSN 1725-2555 (paper edition)

Publications Office
of the European Union
L-2985 Luxembourg
LUXEMBOURG

EN