
Changes to legislation: There are outstanding changes not yet made to Commission Regulation (EU) 2017/2400. Any changes that have already been made to the legislation appear in the content and are referenced with annotations. (See end of Document for details) View outstanding changes

ANNEX III

INPUT INFORMATION RELATING TO THE CHARACTERISTIC OF THE VEHICLE

1. Introduction

This Annex describes the list of parameters to be provided by the vehicle manufacturer as input to the simulation tool. The applicable XML schema as well as example data are available at the dedicated electronic distribution platform.

2. Definitions

(1) ^[F1]‘Parameter ID’: Unique identifier as used in the simulation tool for a specific input parameter or set of input data]

(2) ‘Type’: Data type of the parameter

string	sequence of characters in ISO8859-1 encoding
...	
token	sequence of characters in ISO8859-1 encoding, no leading/trailing whitespace
...	
date ...	date and time in UTC time in the format: YYYY-MM-DDTHH:MM:SSZ with italic letters denoting <i>fixed characters</i> e.g. ‘2002-05-30T09:30:10Z’
integer	value with an integral data type, no leading zeros, e.g. ‘1800’
...	
double, X ...	fractional number with exactly X digits after the decimal sign (‘.’) and no leading zeros e.g. for ‘double, 2’: ‘2345.67’; for ‘double, 4’: ‘45.6780’

(3) ‘Unit’ ... physical unit of the parameter

(4) ‘corrected actual mass of the vehicle’ shall mean the mass as specified under the ‘actual mass of the vehicle’ in accordance with Commission Regulation (EC) No 1230/2012⁽¹⁾ with an exception for the tank(s) which shall be filled to at least 50 % of its or their capacity/ies, without superstructure and corrected by the additional weight of the non-installed standard equipment as specified in point 4.3 and the mass of a standard body, standard semi-trailer or standard trailer to simulate the complete vehicle or complete vehicle-(semi-)trailer combination.

All parts that are mounted on and above the main frame are regarded as superstructure parts if they are only installed for facilitating a superstructure, independent of the necessary parts for in running order conditions.

Textual Amendments

F1 Substituted by [Commission Regulation \(EU\) 2019/318 of 19 February 2019 amending Regulation \(EU\) 2017/2400 and Directive 2007/46/EC of the European Parliament and of the Council as regards the determination of the CO2 emissions and fuel consumption of heavy-duty vehicles \(Text with EEA relevance\).](#)

3. Set of input parameters

Changes to legislation: There are outstanding changes not yet made to Commission Regulation (EU) 2017/2400. Any changes that have already been made to the legislation appear in the content and are referenced with annotations. (See end of Document for details) View outstanding changes

^{F1}TABLE 1

Input parameters ‘Vehicle/General’

Parameter name	Parameter ID	Type	Unit	Description/Reference
Manufacturer	P235	token	[-]	
ManufacturerAddress	P2352	token	[-]	
Model	P236	token	[-]	
VIN	P238	token	[-]	
Date	P239	dateTime	[-]	Date and time when the component-hash is created
LegislativeClass	P251	string	[-]	Allowed values: ‘N2’, ‘N3’
VehicleCategory	P036	string	[-]	Allowed values: ‘Rigid Lorry’, ‘Tractor’
AxleConfiguration	P037	string	[-]	Allowed values: ‘4×2’, ‘6×2’, ‘6×4’, ‘8×4’
CurbMassChassis	P038	int	[kg]	
GrossVehicleMass	P041	int	[kg]	
IdlingSpeed	P198	int	[1/min]	
RetarderType	P052	string	[-]	Allowed values: ‘None’, ‘Losses included in Gearbox’, ‘Engine Retarder’, ‘Transmission Input Retarder’, ‘Transmission Output Retarder’
RetarderRatio	P053	double, 3	[-]	
AngledriveType	P180	string	[-]	Allowed values: ‘None’, ‘Losses included in Gearbox’, ‘Separate Angledrive’
PTOShaftsGearWheels	P247	string	[-]	Allowed values: ‘none’, ‘only

a In case of multiple PTOs mounted to the transmission, only the component with the highest losses according to point 3.6 of Annex IX, for its combination of criteria ‘PTOShaftsGearWheels’ and ‘PTOShaftsOtherElements’, shall be declared.]

Changes to legislation: There are outstanding changes not yet made to Commission Regulation (EU) 2017/2400. Any changes that have already been made to the legislation appear in the content and are referenced with annotations. (See end of Document for details) View outstanding changes

				the drive shaft of the PTO’, ‘drive shaft and/or up to 2 gear wheels’, ‘drive shaft and/or more than 2 gear wheels’, ‘only one engaged gearwheel above oil level’
PTOOtherElements	P248	string	[-]	Allowed values: ‘none’, ‘shift claw, synchronizer, sliding gearwheel’, ‘multi-disc clutch’, ‘multi-disc clutch, oil pump’
CertificationNumber	P261	token	[-]	
CertificationNumber	P262	token	[-]	
CertificationNumber	P263	token	[-]	
CertificationNumber	P264	token	[-]	
CertificationNumber	P265	token	[-]	
CertificationNumber	P266	token	[-]	
CertificationNumber	P267	token	[-]	
CertificationNumber	P268	token	[-]	
ZeroEmissionVehicle	P269	boolean	[-]	
VocationalVehicle	P270	boolean	[-]	
NgTankSystem	P275	string	[-]	Allowed values: ‘Compressed’, ‘Liquefied’ Only relevant for vehicles with engines of fuel type ‘NG PI’ (P193)
Sleeper cab	P276	boolean	[-]	

a In case of multiple PTOs mounted to the transmission, only the component with the highest losses according to point 3.6 of Annex IX, for its combination of criteria ‘PTOShaftsGearWheels’ and ‘PTOShaftsOtherElements’, shall be declared.]

Changes to legislation: There are outstanding changes not yet made to Commission Regulation (EU) 2017/2400. Any changes that have already been made to the legislation appear in the content and are referenced with annotations. (See end of Document for details) View outstanding changes

TABLE 2

Input parameters ‘Vehicle/AxleConfiguration’ per wheel axle

Parameter name	Parameter ID	Type	Unit	Description/Reference
TwinTyres	P045	boolean	[-]	
AxleType	P154	string	[-]	Allowed values: ‘VehicleNonDriven’, ‘VehicleDriven’
Steered	P195	boolean		

TABLE 3

Input parameters ‘Vehicle/Auxiliaries’

Parameter name	Parameter ID	Type	Unit	Description/Reference
Fan/Technology	P181	string	[-]	Allowed values: ‘Crankshaft mounted - Electronically controlled visco clutch’, ‘Crankshaft mounted - Bimetallic controlled visco clutch’, ‘Crankshaft mounted - Discrete step clutch’, ‘Crankshaft mounted - On/off clutch’, ‘Belt driven or driven via transm. - Electronically controlled visco clutch’, ‘Belt driven or driven via transm. - Bimetallic controlled visco clutch’, ‘Belt driven or driven via transm. - Discrete step clutch’, ‘Belt driven or driven via transm. - On/off clutch’,

Changes to legislation: There are outstanding changes not yet made to Commission Regulation (EU) 2017/2400. Any changes that have already been made to the legislation appear in the content and are referenced with annotations. (See end of Document for details) View outstanding changes

				‘Hydraulic driven - Variable displacement pump’, ‘Hydraulic driven - Constant displacement pump’, ‘Electrically driven - Electronically controlled’
SteeringPump/ Technology	P182	string	[-]	Allowed values: ‘Fixed displacement’, ‘Fixed displacement with elec. control’, ‘Dual displacement’, ‘Variable displacement mech. controlled’, ‘Variable displacement elec. controlled’, ‘Electric’ Separate entry for each steered wheel axle required
ElectricSystem/ Technology	P183	string	[-]	Allowed values: ‘Standard technology’, ‘Standard technology - LED headlights, all’
PneumaticSystem/ Technology	P184	string	[-]	Allowed values: ‘Small’, ‘Small + ESS’, ‘Small + visco clutch’, ‘Small + mech. clutch’, ‘Small + ESS + AMS’, ‘Small + visco clutch + AMS’, ‘Small + mech. clutch + AMS’,

Changes to legislation: There are outstanding changes not yet made to Commission Regulation (EU) 2017/2400. Any changes that have already been made to the legislation appear in the content and are referenced with annotations. (See end of Document for details) [View outstanding changes](#)

			<p>‘Medium Supply 1-stage’, ‘Medium Supply 1-stage + ESS’, ‘Medium Supply 1-stage + visco clutch’, ‘Medium Supply 1-stage + mech. clutch’, ‘Medium Supply 1-stage + ESS + AMS’, ‘Medium Supply 1-stage + visco clutch + AMS’, ‘Medium Supply 1-stage + mech. clutch + AMS’, ‘Medium Supply 2-stage’, ‘Medium Supply 2-stage + ESS’, ‘Medium Supply 2-stage + visco clutch’, ‘Medium Supply 2-stage + mech. clutch’, ‘Medium Supply 2-stage + ESS + AMS’, ‘Medium Supply 2-stage + visco clutch + AMS’, ‘Medium Supply 2-stage + mech. clutch + AMS’, ‘Large Supply’, ‘Large Supply + ESS’, ‘Large Supply + visco clutch’, ‘Large Supply + mech. clutch’, ‘Large Supply + ESS + AMS’, ‘Large Supply + visco clutch + AMS’, ‘Large Supply + mech. clutch + AMS’, ‘Vacuum pump’</p>
--	--	--	--

Changes to legislation: There are outstanding changes not yet made to Commission Regulation (EU) 2017/2400. Any changes that have already been made to the legislation appear in the content and are referenced with annotations. (See end of Document for details) View outstanding changes

[^{F1} HVAC/ Technology	P185	string	[-]	Allowed values: 'None', 'Default']
-------------------------------------	------	--------	-----	------------------------------------

TABLE 4

Input parameters 'Vehicle/EngineTorqueLimits' per gear (optional)

Parameter name	Parameter ID	Type	Unit	Description/Reference
Gear	P196	integer	[-]	only gear numbers need to be specified where vehicle related engine torque limits according to point 6 are applicable
MaxTorque	P197	integer	[Nm]	

^{F2}TABLE 5**Input parameters for ZE-HDVs, He-HDVs and dual-fuel vehicles**

Parameter name	Parameter ID	Type	Unit	Description/Reference
Manufacturer	P235	token	[-]	
ManufacturerAddress	P2352	token	[-]	
Model	P236	token	[-]	
VIN	P238	token	[-]	
Date	P239	dateTime	[-]	Date and time when the component-hash is created
LegislativeClass	P251	string	[-]	Allowed values: 'N2', 'N3'
VehicleCategory	P036	string	[-]	Allowed values: 'Rigid Lorry', 'Tractor'
CurbMassChassis	P038	int	[kg]	
GrossVehicleMass	P041	int	[kg]	
MaxNetPower1	P277	int	[W]	If He-HDV = Y: highest maximum net power of all energy converters,

Changes to legislation: There are outstanding changes not yet made to Commission Regulation (EU) 2017/2400. Any changes that have already been made to the legislation appear in the content and are referenced with annotations. (See end of Document for details) View outstanding changes

				which are linked to the vehicle driveline or the wheels
MaxNetPower2	P278	int	[W]	If He-HDV = Y: second highest maximum net power of all energy converters, which are linked to the vehicle driveline or the wheels
ZE-HDV	P269	boolean	[-]	
He-HDV	P279	boolean	[-]	
DualFuelVehicle	P280	boolean	[-]]

Textual Amendments

F2 Inserted by Commission Regulation (EU) 2019/318 of 19 February 2019 amending Regulation (EU) 2017/2400 and Directive 2007/46/EC of the European Parliament and of the Council as regards the determination of the CO₂ emissions and fuel consumption of heavy-duty vehicles (Text with EEA relevance).

F2 TABLE 6

Input parameters ‘Advanced driver assistance systems’

Parameter name	Parameter ID	Type	Unit	Description/Reference
EngineStopStart	P271	boolean	[-]	In accordance with point 8.1.1
EcoRollWithoutEngineStop	P272	boolean	[-]	In accordance with point 8.1.2
EcoRollWithEngineStop	P273	boolean	[-]	In accordance with point 8.1.3
PredictiveCruiseControl	P274	string	[-]	In accordance with point 8.1.4, allowed values: ‘1,2’, ‘1,2,3’]

4. Vehicle mass

- 4.1 The vehicle mass used as input for the simulation tool shall be the corrected actual mass of the vehicle.

Changes to legislation: There are outstanding changes not yet made to Commission Regulation (EU) 2017/2400. Any changes that have already been made to the legislation appear in the content and are referenced with annotations. (See end of Document for details) View outstanding changes

This corrected actual mass shall be based on vehicles equipped in such a way that they are compliant to all regulatory acts of Annex IV and Annex XI to Directive 2007/46/EC applicable to the particular vehicle class.

4.2 If not all the standard equipment is installed, the manufacturer shall add the weight of the following construction elements to the corrected actual mass of the vehicle:

- (a) Front under-run protection in accordance with Regulation (EC) No 661/2009 of the European Parliament and of the Council⁽²⁾
- (b) Rear under-run protection in accordance with Regulation (EC) No 661/2009 of the European Parliament and of the Council
- (c) Lateral protection in accordance with Regulation (EC) No 661/2009 of the European Parliament and of the Council
- (d) Fifth wheel in accordance with Regulation (EC) No 661/2009 of the European Parliament and of the Council

4.3 The weight of the construction elements referred to in point 4.2 shall be the following:
For vehicles of groups 1, 2 and 3

- (a) 45 kg
Front under-ride protection
- (b) 40 kg
Rear under-ride protection
- (c) $8,5 \text{ kg/m} \times \text{wheel base [m]} - 2,5 \text{ kg}$
Lateral protection

For vehicles of groups 4, 5, 9 to 12 and 16

- (a) 50 kg
Front under-ride protection
- (b) 45 kg
Rear under-ride protection
- (c) $14 \text{ kg/m} \times \text{wheel base [m]} - 17 \text{ kg}$
Lateral protection
- (d) 210 kg
Fifth wheel

Changes to legislation: There are outstanding changes not yet made to Commission Regulation (EU) 2017/2400. Any changes that have already been made to the legislation appear in the content and are referenced with annotations. (See end of Document for details) View outstanding changes

Textual Amendments

- F3** Deleted by [Commission Regulation \(EU\) 2019/318 of 19 February 2019 amending Regulation \(EU\) 2017/2400 and Directive 2007/46/EC of the European Parliament and of the Council as regards the determination of the CO₂ emissions and fuel consumption of heavy-duty vehicles \(Text with EEA relevance\)](#).

5. Hydraulically and mechanically driven axles

In case of vehicles equipped with:

- (a) a hydraulically driven axles, the axle shall be treated as a non-drivable one and the manufacturer shall not take it into consideration for establishing an axle configuration of a vehicle;
- (b) a mechanically driven axles, the axle shall be treated as a drivable one and the manufacturer shall take it into consideration for establishing an axle configuration of a vehicle;

6. Gear dependent engine torque limits set by vehicle control

For the highest 50 % of the gears (e.g. for gears 7 to 12 of a 12 gear transmission) the vehicle manufacturer may declare a gear dependent maximum engine torque limit which is not higher than 95 % of the maximum engine torque.

7. Vehicle specific engine idling speed

- 7.1. The engine idling speed has to be declared in VECTO for each individual vehicle. This declared vehicle engine idling shall be equal or higher than specified in the engine input data approval.

[^{F28}8. Advanced driver assistance systems

- 8.1. The following types of advanced driver assistance systems, which are primarily aiming for reduction of fuel consumption and CO₂ emissions, shall be declared in the input to the simulation tool:
 - 8.1.1. Engine stop-start during vehicle stops: system which automatically shuts down and restarts the internal combustion engine during vehicle stops to reduce engine idling time. For automatic engine shut down the maximum time delay after the vehicle stop shall be not longer than 3 seconds.
 - 8.1.2. Eco-roll without engine stop-start: system which automatically decouples the internal combustion engine from the drivetrain during specific downhill driving conditions with low negative gradients. During these phases the internal combustion engine is operated in engine idling. The system shall be active at least at all cruise control set speeds above 60 km/h.
 - 8.1.3. Eco-roll with engine stop-start: system which automatically decouples the internal combustion engine from the drivetrain during specific downhill driving conditions with low negative slopes. During these phases the internal combustion engine is shut down after a short time delay and keeps shut down during the main share of the eco-roll phase. The system shall be active at least at all cruise control set speeds of above 60 km/h.

Changes to legislation: *There are outstanding changes not yet made to Commission Regulation (EU) 2017/2400. Any changes that have already been made to the legislation appear in the content and are referenced with annotations. (See end of Document for details) View outstanding changes*

8.1.4. Predictive cruise control (PCC): systems which optimise the usage of potential energy during a driving cycle based on an available preview of road gradient data and the use of a GPS system. A PCC system declared in the input to the simulation tool shall have a gradient preview distance longer than 1 000 metres and cover all following functionalities:

(1) Crest coasting

Approaching a crest the vehicle velocity is reduced before the point where the vehicle starts accelerating by gravity alone compared to the set speed of the cruise control so that the braking during the following downhill phase can be reduced.

(2) Acceleration without engine power

During downhill driving with a low vehicle velocity and a high negative slope the vehicle acceleration is performed without any engine power usage so that the downhill braking can be reduced.

(3) Dip coasting

During downhill driving when the vehicle is braking at the overspeed velocity, PCC increases the overspeed for a short period of time to end the downhill event with a higher vehicle velocity. Overspeed is a higher vehicle speed than the set speed of the cruise control system.

A PCC system can be declared as input to the simulation tool if either the functionalities set out in points (1) and (2) or points (1), (2) and (3) are covered.

8.2. The eleven combinations of the advanced driver assistance systems as set out in Table 7 are input parameters into the simulation tool:

Table 7

Combinations of advanced driver assistance systems as input parameters into the simulation tool

Combination No	Engine stop-start during vehicle stops	Eco-roll without engine stop-start	Eco-roll with engine stop-start	Predictive cruise control
1	yes	no	no	no
2	no	yes	no	no
3	no	no	yes	no
4	no	no	no	yes
5	yes	yes	no	no
6	yes	no	yes	no
7	yes	no	no	yes
8	no	yes	no	yes
9	no	no	yes	yes
10	yes	yes	no	yes

Changes to legislation: There are outstanding changes not yet made to Commission Regulation (EU) 2017/2400. Any changes that have already been made to the legislation appear in the content and are referenced with annotations. (See end of Document for details) [View outstanding changes](#)

Table 7

Combinations of advanced driver assistance systems as input parameters into the simulation tool

11	yes	no	yes	yes
----	-----	----	-----	-----

- 8.3. Any advanced driver assistance system declared in the input into the simulation tool shall by default be set to fuel economy mode after each key-off/key-on cycle.
- 8.4. If an advanced driver assistance system is declared in the input into the simulation tool, it shall be possible to verify the presence of such a system based on real world driving and the system definitions as set out in point 8.1. If a certain combination of systems is declared, also the interaction of functionalities (e.g. predictive cruise control plus eco-roll with engine stop-start) shall be demonstrated. In the verification procedure it shall be taken into consideration, that the systems need certain boundary conditions to be 'active' (e.g. engine at operation temperature for engine stop-start, certain vehicle speed ranges for PCC, certain ratios of road gradients with vehicle mass for eco-roll). The vehicle manufacturer needs to submit a functional description of boundary conditions when the systems are 'inactive' or their efficiency is reduced. The approval authority may request the technical justifications of these boundary conditions from the applicant for approval and assess them for compliance.]

Changes to legislation: *There are outstanding changes not yet made to Commission Regulation (EU) 2017/2400. Any changes that have already been made to the legislation appear in the content and are referenced with annotations. (See end of Document for details) [View outstanding changes](#)*

- (1) Commission Regulation (EU) No 1230/2012 of 12 December 2012 implementing Regulation (EC) No 661/2009 of the European Parliament and of the Council with regard to type-approval requirements for masses and dimensions of motor vehicles and their trailers and amending Directive 2007/46/EC of the European Parliament and of the Council ([OJ L 353, 21.12.2012, p. 31](#)).
- (2) Regulation (EC) No 661/2009 of the European Parliament and of the Council of 13 July 2009 concerning type-approval requirements for the general safety of motor vehicles, their trailers and systems, components and separate technical units intended therefor ([OJ L 200 31.7.2009, p. 1](#))

Changes to legislation:

There are outstanding changes not yet made to Commission Regulation (EU) 2017/2400. Any changes that have already been made to the legislation appear in the content and are referenced with annotations.

View outstanding changes

Changes and effects yet to be applied to :

- Annex 3 point 4.1 words substituted by [S.I. 2022/1273 reg. 83\(3\)](#)

Changes and effects yet to be applied to the whole legislation item and associated provisions

- Signature words omitted by [S.I. 2022/1273 reg. 82\(18\)](#)
- Annex 5 Appendix 6 point 1.3 substituted by [S.I. 2022/1273 reg. 83\(4\)\(b\)\(i\)](#)
- Annex 5 Appendix 6 point 1.4.1 image substituted by [S.I. 2022/1273 reg. 83\(4\)\(b\)\(iii\)\(aa\)](#)
- Annex 5 Appendix 6 point 1.5.1 image substituted by [S.I. 2022/1273 reg. 83\(4\)\(b\)\(iv\)\(aa\)](#)
- Annex 5 Appendix 4 point 7.4 word substituted by [S.I. 2022/1273 reg. 83\(4\)\(a\)](#)
- Annex 5 Appendix 6 point 2.1 word substituted by [S.I. 2022/1273 reg. 83\(4\)\(b\)\(v\)](#)
- Annex 5 Appendix 6 point 1.4.1 words omitted by [S.I. 2022/1273 reg. 83\(4\)\(b\)\(iii\)\(bb\)](#)
- Annex 5 Appendix 6 point 1.5.1 words omitted by [S.I. 2022/1273 reg. 83\(4\)\(b\)\(iv\)\(bb\)](#)
- Annex 5 Appendix 6 point 1.4 words substituted by [S.I. 2022/1273 reg. 83\(4\)\(b\)\(ii\)](#)
- Annex 5 Appendix 6 point 2.1 table words substituted by [S.I. 2022/1273 reg. 83\(4\)\(b\)\(vi\)](#)
- Annex 10 Appendix 4 point 1.1 word substituted by [S.I. 2022/1273 reg. 83\(8\)\(d\)\(i\)](#)
- Annex 10 Appendix 1 words substituted by [S.I. 2022/1273 reg. 83\(8\)\(c\)](#)
- Annex 10 Appendix 4 point 1.1 table words substituted by [S.I. 2022/1273 reg. 83\(8\)\(d\)\(ii\)](#)
- Annex 7 Appendix 5 point 1.3 substituted by [S.I. 2022/1273 reg. 83\(6\)\(c\)\(i\)](#)
- Annex 7 Appendix 5 point 1.4.1 image substituted by [S.I. 2022/1273 reg. 83\(6\)\(c\)\(iii\)\(aa\)](#)
- Annex 7 Appendix 1s. 1 point 000.5 word substituted by [S.I. 2022/1273 reg. 83\(6\)\(b\)\(ii\)](#)
- Annex 7 Appendix 1 words inserted by [S.I. 2022/1273 reg. 83\(6\)\(b\)\(i\)\(aa\)](#)
- Annex 7 Appendix 1 words omitted by [S.I. 2022/1273 reg. 83\(6\)\(b\)\(i\)\(bb\)](#)
- Annex 7 Appendix 5 point 1.4.1 words omitted by [S.I. 2022/1273 reg. 83\(6\)\(c\)\(iii\)\(bb\)](#)
- Annex 7 Appendix 5 point 1.4 words substituted by [S.I. 2022/1273 reg. 83\(6\)\(c\)\(ii\)](#)
- Annex 7 Appendix 5 point 2.1 words substituted by [S.I. 2022/1273 reg. 83\(6\)\(c\)\(iv\)](#)
- Annex 7 Appendix 5 point 2.1 table words substituted by [S.I. 2022/1273 reg. 83\(6\)\(c\)\(v\)](#)
- Annex 8 Appendix 8 point 1.3 substituted by [S.I. 2022/1273 reg. 83\(7\)\(d\)\(i\)](#)
- Annex 8 Appendix 8 point 1.4.1 image substituted by [S.I. 2022/1273 reg. 83\(7\)\(d\)\(iii\)\(aa\)](#)
- Annex 8 Appendix 4 table 11 word omitted by [S.I. 2022/1273 reg. 83\(7\)\(c\)\(i\)](#)
- Annex 8 Appendix 4 table 13 word omitted by [S.I. 2022/1273 reg. 83\(7\)\(c\)\(i\)](#)
- Annex 8 Appendix 4 table 15 word omitted by [S.I. 2022/1273 reg. 83\(7\)\(c\)\(ii\)\(aa\)](#)
- Annex 8 Appendix 4 table 15 word omitted by [S.I. 2022/1273 reg. 83\(7\)\(c\)\(ii\)\(bb\)](#)
- Annex 8 Appendix 1s. 1 point 000.6 word substituted by [S.I. 2022/1273 reg. 83\(7\)\(b\)\(ii\)](#)
- Annex 8 Appendix 8 point 2.1 word substituted by [S.I. 2022/1273 reg. 83\(7\)\(d\)\(iv\)](#)
- Annex 8 Appendix 1 words inserted by [S.I. 2022/1273 reg. 83\(7\)\(b\)\(i\)\(aa\)](#)
- Annex 8 Appendix 1 words omitted by [S.I. 2022/1273 reg. 83\(7\)\(b\)\(i\)\(bb\)](#)

- Annex 8 Appendix 8 point 1.4.1 words omitted by [S.I. 2022/1273 reg. 83\(7\)\(d\)\(iii\)\(bb\)](#)
- Annex 8 Appendix 8 point 1.4 words substituted by [S.I. 2022/1273 reg. 83\(7\)\(d\)\(ii\)](#)
- Annex 8 Appendix 8 point 2.1 table words substituted by [S.I. 2022/1273 reg. 83\(7\)\(d\)\(v\)](#)
- Annex 2 Appendix 2s. 2 point 2 omitted by [S.I. 2022/1273 reg. 83\(2\)\(b\)\(ii\)](#)
- Annex 2 Appendix 2 words inserted by [S.I. 2022/1273 reg. 83\(2\)\(b\)\(i\)](#)
- Annex 6 Appendix 7 point 1.3 substituted by [S.I. 2022/1273 reg. 83\(5\)\(e\)\(i\)](#)
- Annex 6 Appendix 7 point 1.5 image substituted by [S.I. 2022/1273 reg. 83\(5\)\(e\)\(iii\)\(aa\)](#)
- Annex 6 Appendix 7 point 2.1 word substituted by [S.I. 2022/1273 reg. 83\(5\)\(e\)\(iv\)](#)
- Annex 6 Appendix 1 words omitted by [S.I. 2022/1273 reg. 83\(5\)\(c\)](#)
- Annex 6 Appendix 7 point 1.5 words omitted by [S.I. 2022/1273 reg. 83\(5\)\(e\)\(iii\)\(bb\)](#)
- Annex 6 Appendix 2 point 8 words substituted by [S.I. 2022/1273 reg. 83\(5\)\(d\)](#)
- Annex 6 Appendix 3 point 8 words substituted by [S.I. 2022/1273 reg. 83\(5\)\(d\)](#)
- Annex 6 Appendix 4 point 8 words substituted by [S.I. 2022/1273 reg. 83\(5\)\(d\)](#)
- Annex 6 Appendix 5 point 8 words substituted by [S.I. 2022/1273 reg. 83\(5\)\(d\)](#)
- Annex 6 Appendix 7 point 1.4 words substituted by [S.I. 2022/1273 reg. 83\(5\)\(e\)\(ii\)](#)
- Annex 6 Appendix 7 point 2.1 table words substituted by [S.I. 2022/1273 reg. 83\(5\)\(e\)\(v\)](#)
- Art. 3(5) omitted by [S.I. 2022/1273 reg. 82\(4\)\(a\)](#)
- Art. 3(16) words substituted by [S.I. 2022/1273 reg. 82\(4\)\(b\)](#)
- Art. 3(20) words substituted by [S.I. 2022/1273 reg. 82\(4\)\(c\)](#)
- Art. 10(1a) inserted by [S.I. 2022/1273 reg. 82\(8\)\(b\)](#)
- Annex 10a para. 3(f) words inserted by [S.I. 2022/1273 reg. 83\(9\)\(a\)](#)
- Annex 10a para. 3(f) table words substituted by [S.I. 2022/1273 reg. 83\(9\)\(b\)\(c\)](#)
- Art. 12(8) inserted by [S.I. 2022/1273 reg. 82\(10\)](#)