ANNEX

Annex IV (Part-CAT) to Commission Regulation (EU) No 965/2012 is amended as follows:

- 1. Subparagraph (a)(10) of paragraph CAT.GEN.MPA.105 is replaced by the following: '(10) ensure that:
 - (i) flight recorders are not disabled or switched off during flight;
 - (ii) in the event of an occurrence other than an accident or a serious incident that shall be reported according to ORO.GEN.160(a), flight recorders' recordings are not intentionally erased; and
 - (iii) in the event of an accident or a serious incident, or if preservation of recordings of flight recorders is directed by the investigating authority:
 - (A) flight recorders' recordings are not intentionally erased;
 - (B) flight recorders are deactivated immediately after the flight is completed; and
 - (C) precautionary measures to preserve the recordings of flight recorders are taken before leaving the flight crew compartment.'
- 2. Subparagraph (a) of paragraph CAT.GEN.MPA.195 is replaced by the following:
 - '(a) Following an accident or a serious incident, or if directed by the investigating authority, the operator of an aircraft shall preserve the original recorded data for a period of 60 days or until otherwise directed by the investigating authority.'
- 3. Subparagraph (f)(1) of paragraph CAT.GEN.MPA.195 is replaced by the following:
 - '(1) CVR recordings shall not be used for purposes other than the investigation by a safety investigating authority, by the competent authority or by the administration of justice, or for ensuring the CVR serviceability, unless:
 - (i) a procedure related to the handling of CVR recordings and of their transcript is in place; and
 - (ii) all crew members and maintenance personnel concerned have given their prior consent.'
- 4. Subparagraphs (b) to (f) of CAT.IDE.A.185 are replaced by the following:
 - '(b) Until 31 December 2018, the CVR shall be capable of retaining the data recorded during at least:
 - (1) the preceding 2 hours in the case of aeroplanes referred to in (a)(1) when the individual CofA has been issued on or after 1 April 1998;

- (2) the preceding 30 minutes for aeroplanes referred to in (a)(1) when the individual CofA has been issued before 1 April 1998; or
- (3) the preceding 30 minutes, in the case of aeroplanes referred to in (a)(2).
- (c) On or after 1 January 2019, the CVR shall be capable of retaining the data recorded during at least:
 - (1) the preceding 20 hours for aeroplanes with an MCTOM of more than 27 000 kg and first issued with an individual CofA on or after 1 January 2020; or
 - (2) the preceding 2 hours for aeroplanes with an MCTOM of up to 27 000 kg or that were first issued with an individual CofA before 1 January 2020.
- (d) On or after 1 January 2019, the CVR shall record on means other than magnetic tape or a magnetic wire.
- (e) The CVR shall record with reference to a timescale:
 - (1) voice communications transmitted from or received in the flight crew compartment by radio;
 - (2) flight crew members' voice communications using the interphone system and the public address system, if installed;
 - (3) the aural environment of the flight crew compartment, including without interruption:
 - (i) for aeroplanes first issued with an individual CofA on or after 1 April 1998, the audio signals received from each boom and mask microphone in use;
 - (ii) for aeroplanes referred to in (a)(2) and first issued with an individual CofA before 1 April 1998, the audio signals received from each boom and mask microphone, where practicable;
 - (4) voice or audio signals identifying navigation or approach aids introduced into a headset or speaker.
- (f) The CVR shall start to record prior to the aeroplane moving under its own power and shall continue to record until the termination of the flight when the aeroplane is no longer capable of moving under its own power. In addition, in the case of aeroplanes issued with an individual CofA on or after 1 April 1998, the CVR shall start automatically to record prior to the aeroplane moving under its own power and continue to record until the termination of the flight when the aeroplane is no longer capable of moving under its own power.
- (g) In addition to (f), depending on the availability of electrical power, the CVR shall start to record as early as possible during the cockpit checks prior to engine start at the beginning of the flight until the cockpit checks immediately following engine shutdown at the end of the flight, in the case of:
 - (1) aeroplanes referred to in (a)(1) and issued with an individual CofA after 1 April 1998; or
 - (2) aeroplanes referred to in (a)(2).

- (h) If the CVR is not deployable, it shall have a device to assist in locating it in water. On or after 1 January 2018, this device shall have a minimum underwater transmission time of 90 days.'
- 5. Subparagraph (e) of CAT.IDE.A.190 is replaced by the following:
 - '(e) If the FDR is not deployable, it shall have a device to assist in locating it in water. On or after 1 January 2018, this device shall have a minimum underwater transmission time of 90 days.'
- 6. Subparagraph (d) of CAT.IDE.A.195 is replaced by the following:
 - '(d) If the recorder is not deployable, it shall have a device to assist in locating it in water. On or after 1 January 2018, this device shall have a minimum underwater transmission time of 90 days.'
- 7. The following subparagraph is inserted in CAT.IDE.A.285:
 - '(f) On or after 1 January 2019, aeroplanes with an MCTOM of more than 27 000 kg shall be fitted with a securely attached underwater locating device that operates at a frequency of 8.8 kHz ± 1 kHz, unless:
 - (1) the aeroplane is operated over routes on which it is at no point at a distance of more than 180 NM from the shore; or
 - (2) the aeroplane is equipped with an automatic means to determine, following an accident where the aeroplane is severely damaged, the location of the point of end of flight within 6 NM accuracy.'
- 8. Subparagraphs (c) to (f) of CAT.IDE.H.185 are replaced by the following:
 - '(c) On or after 1 January 2019, the CVR shall record on means other than magnetic tape or a magnetic wire.
 - (d) The CVR shall record with reference to a timescale:
 - (1) voice communications transmitted from or received in the flight crew compartment by radio;
 - (2) flight crew members' voice communications using the interphone system and the public address system, if installed;
 - (3) the aural environment of the flight crew compartment, including without interruption:
 - (i) for helicopters first issued with an individual CofA on or after 1 August 1999, the audio signals received from each crew microphone;
 - (ii) for helicopters first issued with an individual CofA before 1 August 1999, the audio signals received from each crew microphone, where practicable;
 - (4) voice or audio signals identifying navigation or approach aids introduced into a headset or speaker.

- (e) The CVR shall start to record prior to the helicopter moving under its own power and shall continue to record until the termination of the flight when the helicopter is no longer capable of moving under its own power.
- (f) In addition to (e), for helicopters referred to in (a)(2) issued with an individual CofA on or after 1 August 1999:
 - (1) the CVR shall start automatically to record prior to the helicopter moving under its own power and continue to record until the termination of the flight when the helicopter is no longer capable of moving under its own power; and
 - (2) depending on the availability of electrical power, the CVR shall start to record as early as possible during the cockpit checks prior to engine start at the beginning of the flight until the cockpit checks immediately following engine shutdown at the end of the flight.
- (g) If the CVR is not deployable, it shall have a device to assist in locating it in water. On or after 1 January 2020, this device shall have a minimum underwater transmission time of 90 days.'
- 9. Subparagraph (e) of CAT.IDE.H.190 is replaced by the following:
 - '(e) If the FDR is not deployable, it shall have a device to assist in locating it in water. On or after 1 January 2020, this device shall have a minimum underwater transmission time of 90 days.'
- 10. Subparagraph (d) of CAT.IDE.H.195 is replaced by the following:
 - '(d) If the recorder is not deployable, it shall have a device to assist in locating it in water. On or after 1 January 2020, this device shall have a minimum underwater transmission time of 90 days.'

Annex VI (Part-NCC) to Commission Regulation (EU) No 965/2012 is amended as follows:

- 11. Subparagraph (a)(9) of paragraph NCC.GEN.106 is replaced by the following:
 - '(9) ensuring that:
 - (i) flight recorders are not disabled or switched off during flight;
 - (ii) in the event of an occurrence other than an accident or a serious incident that shall be reported according to ORO.GEN.160(a), flight recorders' recordings are not intentionally erased; and
 - (iii) in the event of an accident or a serious incident, or if preservation of recordings of flight recorders is directed by the investigating authority:
 - (A) flight recorders' recordings are not intentionally erased;
 - (B) flight recorders are deactivated immediately after the flight is completed; and

- (C) precautionary measures to preserve the recordings of flight recorders are taken before leaving the flight crew compartment.'
- 12. Subparagraph (a) of paragraph NCC.GEN.145 is replaced by the following:
 - '(a) Following an accident or a serious incident, or if directed by the investigating authority, the operator of an aircraft shall preserve the original recorded data for a period of 60 days or until otherwise directed by the investigating authority.'
- 13. Subparagraph (f)(1) of paragraph NCC.GEN.145 is replaced by the following:
 - '(1) CVR recordings shall not be used for purposes other than the investigation by a safety investigating authority, by the competent authority or by the administration of justice, or for ensuring the CVR serviceability, unless:
 - (i) a procedure related to the handling of CVR recordings and of their transcript is in place; and
 - (ii) all crew members and maintenance personnel concerned have given their prior consent.'
- 14. Subparagraph (b) of NCC.IDE.A.160 is replaced by the following:
 - '(b) The CVR shall be capable of retaining data recorded during at least:
 - (1) the preceding 20 hours for aeroplanes with an MCTOM of more than 27 000 kg and first issued with an individual CofA on or after 1 January 2020; or
 - (2) the preceding 2 hours for aeroplanes with an MCTOM of up to 27 000 kg or that were first issued with an individual CofA before 1 January 2020.'
- 15. Subparagraph (f) of NCC.IDE.A.160 is replaced by the following:
 - '(f) If the CVR is not deployable, it shall have a device to assist in locating it in water. On or after 1 January 2020, this device shall have a minimum underwater transmission time of 90 days.'
- 16. Subparagraph (e) of NCC.IDE.A.165 is replaced by the following:
 - '(e) If the FDR is not deployable, it shall have a device to assist in locating it in water. On or after 1 January 2020, this device shall have a minimum underwater transmission time of 90 days.'
- 17. Subparagraph (d) of NCC.IDE.A.170 is replaced by the following:

- '(d) If the recorder is not deployable, it shall have a device to assist in locating it in water. On or after 1 January 2020, this device shall have a minimum underwater transmission time of 90 days.'
- 18. Subparagraph (f) of NCC.IDE.H.160 is replaced by the following:
 - '(f) If the CVR is not deployable, it shall have a device to assist in locating it in water. On or after 1 January 2020, this device shall have a minimum underwater transmission time of 90 days.'
- 19. Subparagraph (e) of NCC.IDE.H.165 is replaced by the following:
 - '(e) If the FDR is not deployable, it shall have a device to assist in locating it in water. On or after 1 January 2020, this device shall have a minimum underwater transmission time of 90 days.'
- 20. Subparagraph (d) of NCC.IDE.H.170 is replaced by the following:
 - '(d) If the recorder is not deployable, it shall have a device to assist in locating it in water. On or after 1 January 2020, this device shall have a minimum underwater transmission time of 90 days.'

Annex VIII (Part-SPO) to Commission Regulation (EU) No 965/2012 is amended as follows:

- 21. Subparagraph (a)(9) of paragraph SPO.GEN.107 is replaced by the following:
 - '(9) ensuring that:
 - (i) flight recorders are not disabled or switched off during flight;
 - (ii) in the event of an occurrence other than an accident or a serious incident that shall be reported according to ORO.GEN.160(a), flight recorders' recordings are not intentionally erased; and
 - (iii) in the event of an accident or a serious incident, or if preservation of recordings of flight recorders is directed by the investigating authority:
 - (A) flight recorders' recordings are not intentionally erased;
 - (B) flight recorders are deactivated immediately after the flight is completed; and
 - (C) precautionary measures to preserve the recordings of flight recorders are taken before leaving the flight crew compartment.'
- 22. Subparagraph (a) of paragraph SPO.GEN.145 is replaced by the following:
 - '(a) Following an accident or a serious incident, or if directed by the investigating authority, the operator of an aircraft shall preserve the original recorded data for a period of 60 days or until otherwise directed by the investigating authority.'

- 23. Subparagraph (f)(1) of paragraph SPO.GEN.145 is replaced by the following:
 - '(1) CVR recordings shall not be used for purposes other than the investigation by a safety investigating authority, by the competent authority or by the administration of justice, or for ensuring the CVR serviceability, unless:
 - (a) a procedure related to the handling of CVR recordings and of their transcript is in place; and
 - (b) all crew members and maintenance personnel concerned have given their prior consent.'
- 24. Subparagraph (b) of SPO.IDE.A.140 is replaced by the following:
 - '(b) The CVR shall be capable of retaining data recorded during at least:
 - (1) the preceding 20 hours for aeroplanes with an MCTOM of more than 27 000 kg and first issued with an individual CofA on or after 1 January 2020; or
 - (2) the preceding 2 hours for aeroplanes with an MCTOM of up to 27 000 kg or that were first issued with an individual CofA before 1 January 2020.'
- 25. Subparagraph (f) of SPO.IDE.A.140 is replaced by the following:
 - '(f) If the CVR is not deployable, it shall have a device to assist in locating it in water. On or after 1 January 2020, this device shall have a minimum underwater transmission time of 90 days.'
- 26. Subparagraph (e) of SPO.IDE.A.145 is replaced by the following:
 - '(e) If the FDR is not deployable, it shall have a device to assist in locating it in water. On or after 1 January 2020, this device shall have a minimum underwater transmission time of 90 days.'
- 27. Subparagraph (d) of SPO.IDE.A.150 is replaced by the following:
 - '(d) If the recorder is not deployable, it shall have a device to assist in locating it in water. On or after 1 January 2020, this device shall have a minimum underwater transmission time of 90 days.'
- 28. Subparagraph (f) of SPO.IDE.H.140 is replaced by the following:
 - '(f) If the CVR is not deployable, it shall have a device to assist in locating it in water. On or after 1 January 2020, this device shall have a minimum underwater transmission time of 90 days.'
- 29. Subparagraph (e) of SPO.IDE.H.145 is replaced by the following:

- '(e) If the FDR is not deployable, it shall have a device to assist in locating it in water. On or after 1 January 2020, this device shall have a minimum underwater transmission time of 90 days.'
- 30. Subparagraph (d) of SPO.IDE.H.150 is replaced by the following:
 - '(d) If the recorder is not deployable, it shall have a device to assist in locating it in water. On or after 1 January 2020, this device shall have a minimum underwater transmission time of 90 days.'