Acceptable Means of Compliance and Guidance Material to Regulation (EU) No 923/2012 — Issue 1, Amendment 4

Annex to ED Decision 2021/014/R

‘AMC and GM to SERA — Issue 1, Amendment 4’

This document shows deleted, new or amended text as follows:
— deleted text is struck through;
— new or amended text is highlighted in blue;
— an ellipsis ‘[...]’ indicates that the rest of the text is unchanged.

Note to the reader
In amended, and in particular in existing (that is, unchanged) text, ‘Agency’ is used interchangeably with ‘EASA’. The interchangeable use of these two terms is more apparent in the consolidated versions. Therefore, please note that both terms refer to the ‘European Union Aviation Safety Agency (EASA)’.
The Annex to ED Decision 2013/013/R of the Executive Director of the Agency of 17 July 2013 is amended as follows:

## Appendix 1 to AMC1 SERA.14001 General

### 1. **ATCATS PHRASEOLOGIES**

#### 1.1 General

<table>
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<tr>
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<th>Circumstances</th>
<th>Phraseologies</th>
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<tbody>
<tr>
<td>1.1.1</td>
<td>Description of levels (subsequently referred to as ‘(level)’)</td>
<td>a) FLIGHT LEVEL (number); or b) [HEIGHT] (number) FEET/METRES; or c) [ALTITUDE] (number) FEET/METRES.</td>
<td>✓ ✓</td>
</tr>
<tr>
<td></td>
<td>when passing level information in form of vertical distance from the other traffic</td>
<td>d) (number) FEET/METRES ABOVE (or BELOW)</td>
<td>✓ ✓</td>
</tr>
</tbody>
</table>

#### 1.1.2 Level changes, reports and rates

...instruction that a climb (or descent) to a level within the vertical range defined is to commence

<table>
<thead>
<tr>
<th>Phraseologies</th>
<th>Applicable to</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) CLIMB (or DESCEND);</td>
<td>✓</td>
</tr>
<tr>
<td>followed as necessary by:</td>
<td>✓</td>
</tr>
<tr>
<td>1) TO (level)</td>
<td>✓</td>
</tr>
<tr>
<td>2) TO AND MAINTAIN BLOCK (level) TO (level);</td>
<td>✓</td>
</tr>
<tr>
<td>3) TO REACH (level) AT (or BY) (time or significant point);</td>
<td>✓</td>
</tr>
<tr>
<td>4) REPORT LEAVING (or REACHING, OR PASSING) (level);</td>
<td>✓</td>
</tr>
<tr>
<td>5) AT (number) METRES PER SECOND (or FEET PER MINUTE) (OR GREATER (OR LESS));</td>
<td>✓</td>
</tr>
<tr>
<td>6) REPORT STARTING ACCELERATION (or DECELERATION).</td>
<td>✓</td>
</tr>
<tr>
<td>b) MAINTAIN AT LEAST (number) METRES (or FEET) ABOVE (or BELOW) (aircraft call sign);</td>
<td>✓</td>
</tr>
<tr>
<td>c) REQUEST LEVEL (or FLIGHT LEVEL OR ALTITUDE) CHANGE FROM (name of unit) (AT (time or significant point));</td>
<td>✓</td>
</tr>
<tr>
<td>d) STOP CLIMB (or DESCENT) AT (level);</td>
<td>✓</td>
</tr>
<tr>
<td>e) CONTINUE CLIMB (or DESCENT) TO (level);</td>
<td>✓</td>
</tr>
<tr>
<td>f) EXPEDITE CLIMB (or DESCENT) [UNTIL PASSING (level)];</td>
<td>✓</td>
</tr>
</tbody>
</table>

...for SST aircraft only
g) WHEN READY, CLIMB (or DESCEND) TO (level);

h) EXPECT CLIMB (or DESCENT) AT (time or significant point);

*i) REQUEST DESCENT AT (time);

j) IMMEDIATELY;

k) AFTER PASSING (significant point);

l) AT (time or significant point);

m) WHEN READY (instruction);

n) MAINTAIN OWN SEPARATION AND VMC [FROM (level)] [TO (level)];

o) MAINTAIN OWN SEPARATION AND VMC ABOVE (or BELOW, or TO) (level);

p) IF UNABLE, (alternative instructions) AND ADVISE;

q) UNABLE;

*r) TCAS RA;

s) ROGER;

t) CLEAR OF CONFLICT, RETURNING TO (assigned clearance);

u) ROGER (or alternative instructions);

*v) CLEAR OF CONFLICT (assigned clearance) RESUMED;

w) ROGER (or alternative instructions);

x) UNABLE, TCAS RA;

y) ROGER;

z) CLIMB TO (level) [LEVEL RESTRICTION(S) (SID designator) CANCELLED (or) LEVEL RESTRICTION(S) (SID designator) AT (point) CANCELLED];
...clearance to cancel level restriction(s) of the vertical profile of a STAR during descent

aa) DESCEND TO (level) [LEVEL RESTRICTION(S) (STAR designator) CANCELLED (or) LEVEL RESTRICTION(S) (STAR designator) AT (point) CANCELLED].

“*” denotes pilot transmission.

1.1.3 Minimum fuel

...indication of minimum fuel

Note. — A flight information service (FIS) unit will not provide information on delay.

*a) MINIMUM FUEL:

b) ROGER [NO DELAY EXPECTED or EXPECT (delay information)].

“*” denotes pilot transmission.

1.1.4 Transfer of control and/or frequency change

a) CONTACT (unit call sign) (frequency) [NOW];

b) AT (or OVER) (time or place) [or WHEN] [PASSING/LEAVING/REACHING (level)] CONTACT (unit call sign) (frequency);

c) IF NO CONTACT (instructions);

d) STAND BY FOR (unit call sign) (frequency);

e) REQUEST CHANGE TO (frequency);

f) FREQUENCY CHANGE APPROVED;

g) MONITOR (unit call sign) (frequency);

*h) MONITORING (frequency);

i) WHEN READY, CONTACT (unit call sign) (frequency);

j) REMAIN THIS FREQUENCY.

“*” denotes pilot transmission.

1.1.5 8.33 kHz channel spacing

Note.— In this paragraph, the term ‘point’ is used only in the context of naming the 8.33 kHz channel spacing concept and does not constitute any change to existing ICAO provisions or phraseology regarding the use of the term ‘decimal’.
...to request confirmation of 8.33 kHz capability
...to indicate 8.33 kHz capability
...to indicate lack of 8.33 kHz capability
...to request UHF capability
...to indicate UHF capability
...to indicate lack of UHF capability
...to request status in respect of 8.33 kHz exemption
...to indicate 8.33 kHz exempted status
...to indicate 8.33 kHz non-exempted status
...to indicate that a certain clearance is given because otherwise a non-equipped and/or non-exempted aircraft would enter airspace of mandatory carriage

| a) CONFIRM EIGHT POINT THREE THREE; |
| b) AFFIRM EIGHT POINT THREE THREE; |
| c) NEGATIVE EIGHT POINT THREE THREE; |
| d) CONFIRM UHF; |
| e) AFFIRM UHF; |
| f) NEGATIVE UHF; |
| g) CONFIRM EIGHT POINT THREE THREE EXEMPTED; |
| h) AFFIRM EIGHT POINT THREE THREE EXEMPTED; |
| i) NEGATIVE EIGHT POINT THREE THREE EXEMPTED; |
| j) DUE EIGHT POINT THREE THREE REQUIREMENT. |

** denotes pilot transmission.

1.1.6 Change of call sign
...to instruct an aircraft to change its type of call sign
...to advise an aircraft to revert to the call sign indicated in the flight plan

| a) CHANGE YOUR CALL SIGN TO (new call sign) [UNTIL FURTHER ADVISED]; |
| b) REVERT TO FLIGHT PLAN CALL SIGN (call sign) [AT (significant point)]. |

1.1.7 Traffic information
...to pass traffic information
...to acknowledge traffic information

| a) TRAFFIC (information); |
| b) NO REPORTED TRAFFIC; |
| c) LOOKING OUT; |
| d) TRAFFIC IN SIGHT; |
| e) NEGATIVE CONTACT [reasons]; |
| f) [ADDITIONAL] TRAFFIC (direction) BOUND (type of aircraft) (level) ESTIMATED (or OVER) (significant point) AT (time); |
g) TRAFFIC IS (classification) UNMANNED FREE BALLOON(S) WAS [or ESTIMATED] OVER (place) AT (time) REPORTED level(s) [or LEVEL UNKNOWN] MOVING (direction) (other pertinent information, if any).

‘*’ denotes pilot transmission.

1.1.8 Meteorological conditions

a) [SURFACE] WIND (number) DEGREES (speed) (units);

b) WIND AT (level) (number) DEGREES (number) KILOMETRES PER HOUR (or KNOTS);

Note. — Wind is always expressed by giving the mean direction and speed and any significant variations thereof.

c) VISIBILITY (distance) (units) [direction];

d) RUNWAY VISUAL RANGE (or RVR) [RUNWAY (number)] (distance) (units);

e) RUNWAY VISUAL RANGE (or RVR) RUNWAY (number) NOT AVAILABLE (or NOT REPORTED);

...for multiple RVR observations

f) RUNWAY VISUAL RANGE (or RVR) [RUNWAY (number)] (first position) (distance) (units), (second position) (distance) (units), (third position) (distance) (units);

Note 1. — Multiple RVR observations are always representative of the touchdown zone, midpoint zone and the roll-out/stop-end zone respectively.

Note 2. — Where reports for three locations are given, the indication of these locations may be omitted, provided that the reports are passed in the order of touchdown zone, followed by the midpoint zone and ending with the roll-out/stop-end zone report.

g) RUNWAY VISUAL RANGE (or RVR) [RUNWAY (number)] (first position) (distance) (units), (second position) NOT AVAILABLE, (third position) (distance) (units);

...in the event that RVR information on any one position is not available, this information will be included in the appropriate sequence

h) PRESENT WEATHER (details);

i) CLOUD (amount, [(type)] and height of base) (units) (or SKY CLEAR);

j) CAVOK;

Note. — ‘CAVOK’ pronounced ‘CAV-O-KAY’.

k) TEMPERATURE [MINUS] (number) (and/or DEWPOINT [MINUS] (number));

l) QNH (number) [units];

m) QFE (number) [(units)];

n) (aircraft type) REPORTED (description) ICING (or TURBULENCE) IN CLOUD (area) (time);
**1.1.9 Position reporting**

- **a)** Next report at *(significant point)*;
- **b)** Omit position reports [until *(specify)*];
- **c)** Resume position reporting.

**1.1.10 Additional reports**

- **a)** Report passing *(significant point)*;
- **b)** Report *(distance)* MILES (GNSS or DME) FROM *(name of DME station)* (or *(significant point)*);
- **c)** *(distance)* MILES (GNSS or DME) FROM *(name of DME station)* (or *(significant point)*);
- **d)** Report passing *(three digits)* radial *(name of VOR)*;
- **e)** Report *(GNSS or DME)* distance FROM *(significant point)* or *(name of DME station)*;
- **f)** *(distance)* MILES (GNSS or DME) FROM *(name of DME station)* (or *(significant point)*).

* denotes pilot transmission.

**1.1.11 Aerodrome information**

*Note* — This information is provided for runway thirds or the full runway, as applicable. *(Applicable from 12 August 2021)*

- **a)** *(location)* RUNWAY *(number)* SURFACE CONDITION [CODE (three-digit number)];
- **b)** followed as necessary by:
  1. Issued at *(date and time UTC)*;
  2. DRY, or WET ICE, or WATER ON TOP OF COMPACTED SNOW, or DRY SNOW, or DRY SNOW ON TOP OF ICE, or WET SNOW ON TOP OF ICE, or ICE, or SLUSH, or STANDING WATER, or COMPACTED SNOW, or WET SNOW, or DRY SNOW ON TOP OF COMPACTED SNOW, or WET SNOW ON TOP OF COMPACTED SNOW, or WET, or SLIPPERY WET, or SPECIALLY PREPARED WINTER RUNWAY, or FROST;
  3. Depth *(depth of deposit)* MILLIMETRES or NOT REPORTED;
  4. Coverage *(number)* PER CENT or NOT REPORTED;
  5. Available width *(number)* METRES;
### Operational status of visual and non-visual aids

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<td>Operational status of visual and non-visual aids</td>
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</tr>
<tr>
<td>a)</td>
<td>(specify visual or non-visual aid) RUNWAY (number) (description of deficiency);</td>
</tr>
<tr>
<td>b)</td>
<td>(type) LIGHTING (unserviceability);</td>
</tr>
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</table>
1.1.13 Reduced vertical separation minimum (RVSM) operations

...to ascertain RVSM approval status of an aircraft

...to report RVSM approved status

...to report RVSM non-approved status followed by supplementary information

...to deny ATC clearance into RVSM airspace

...to report when severe turbulence affects the capability of an aircraft to maintain height-keeping requirements for RVSM

...to report that the equipment of an aircraft has degraded below minimum aviation system performance standards

...to request an aircraft to provide information as soon as RVSM-approved status has been regained or the pilot is ready to resume RVSM operations

...to request confirmation that an aircraft has regained RVSM-approved status or a pilot is ready to resume RVSM operations

...to report ability to resume RVSM operations after an equipment or weather-related contingency

**'** denotes pilot transmission.

1.1.14 GNSS service status

a) GNSS REPORTED UNRELIABLE (or GNSS MAY NOT BE AVAILABLE [DUE TO INTERFERENCE]);
1) IN THE VICINITY OF (location) (radius) [BETWEEN (levels)];

or

2) IN THE AREA OF (description) (or IN (name) FIR) [BETWEEN (levels)];

b) BASIC GNSS (or SBAS, or GBAS) UNAVAILABLE FOR (specify operation) [FROM (time) TO (time) (or UNTIL FURTHER NOTICE)];

* c) BASIC GNSS UNAVAILABLE [DUE TO (reason, e.g. LOSS OF RAIM or RAIM ALERT)];

* d) GBAS (or SBAS) UNAVAILABLE ;

e) CONFIRM GNSS NAVIGATION;

*f) AFFIRM GNSS NAVIGATION.

** denotes pilot transmission.

1.1.15 RNAV

...RNAV arrival or departure procedure cannot be accepted by the pilot

...pilot is unable to comply with an assigned terminal area procedure

...ATC unable to assign an RNAV arrival or departure procedure requested by the pilot due to the type of on-board RNAV equipment

...ATC unable to assign an arrival or departure procedure requested by the pilot

...confirmation whether a specific RNAV arrival or departure procedure can be accepted

...informing ATC of RNAV degradation or failure

...informing ATC of no RNAV capability

*UNABLE (designator) DEPARTURE [or ARRIVAL] DUE RNAV TYPE;

*UNABLE (designator) DEPARTURE [or ARRIVAL] (reasons);

UNABLE TO ISSUE (designator) DEPARTURE [or ARRIVAL] DUE RNAV TYPE;

UNABLE TO ISSUE (designator) DEPARTURE [or ARRIVAL] (reasons);

ADVISE IF ABLE (designator) DEPARTURE [or ARRIVAL];

*(aircraft call sign) UNABLE RNAV DUE EQUIPMENT;

*(aircraft call sign) NEGATIVE RNAV;

** denotes pilot transmission

1.1.16 Degradation of aircraft navigation performance

** UNABLE RNP (specify type) (or RNAV) [DUE TO (reason, e.g. LOSS OF RAIM or RAIM ALERT)].
### 1.2 Area control En-route air traffic services

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<td>1.2.1</td>
<td>Issuance of a clearance</td>
<td>a) (name of unit) CLEARS (aircraft call sign);</td>
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<tr>
<td></td>
<td></td>
<td>b) (aircraft call sign) CLEARED TO;</td>
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<td></td>
<td></td>
<td>c) RECLEARED (amended clearance details) [REST OF CLEARANCE UNCHANGED];</td>
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<tr>
<td></td>
<td></td>
<td>d) RECLEARED (amended route portion) TO (significant point of original route) [REST OF CLEARANCE UNCHANGED];</td>
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<td></td>
<td>e) ENTER CONTROLLED AIRSPACE (or CONTROL ZONE) [VIA (significant point or route)] AT (level) [AT (time)];</td>
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<td></td>
<td>f) LEAVE CONTROLLED AIRSPACE (or CONTROL ZONE) [VIA (significant point or route)] AT (level) (or CLIMBING, or DESCENDING);</td>
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<td></td>
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<td>g) JOIN (specify) AT (significant point) AT (level) [AT (time)].</td>
</tr>
<tr>
<td>1.2.2</td>
<td>Indication of route and clearance limit</td>
<td>a) FROM (location) TO (location);</td>
</tr>
<tr>
<td></td>
<td></td>
<td>b) TO (location), followed as necessary by:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1) DIRECT;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2) VIA (route and/or significant points);</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3) VIA FLIGHT PLANNED ROUTE;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4) VIA (distance) DME ARC (direction) OF (name of DME station);</td>
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<tr>
<td></td>
<td></td>
<td>c) (route) NOT AVAILABLE DUE (reason) ALTERNATIVE[S] IS/ARE (routes) ADVISE.</td>
</tr>
<tr>
<td>1.2.3</td>
<td>Maintenance of specified levels</td>
<td>a) MAINTAIN (level) [TO (significant point)];</td>
</tr>
<tr>
<td></td>
<td></td>
<td>b) MAINTAIN (level) UNTIL PASSING (significant point);</td>
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<td></td>
<td></td>
<td>c) MAINTAIN (level) UNTIL (minutes) AFTER PASSING (significant point);</td>
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<td></td>
<td></td>
<td>d) MAINTAIN (level) UNTIL (time);</td>
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<td></td>
<td></td>
<td>e) MAINTAIN (level) UNTIL ADVISED BY (name of unit);</td>
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</tbody>
</table>
f) MAINTAIN (level) UNTIL FURTHER ADVISED;

g) MAINTAIN (level) WHILE IN CONTROLLED AIRSPACE;

h) MAINTAIN BLOCK (level) TO (level).

Note. — The term ‘MAINTAIN’ is not to be used in lieu of ‘DESCEND’ or ‘CLIMB’ when instructing an aircraft to change level.

1.2.4 Specification of cruising levels

a) CROSS (significant point) AT (or ABOVE, or BELOW) (level);

b) CROSS (significant point) AT (time) OR LATER (or BEFORE) AT (level);

c) CRUISE CLIMB BETWEEN (levels) (or ABOVE (level));

d) CROSS (distance) MILES, (GNSS or DME) [(direction)] OF (name of DME station) OR (distance) [(direction)] OF (significant point) AT (or ABOVE or BELOW) (level).

1.2.5 Emergency descent

*a) EMERGENCY DESCENT (intentions);

b) ATTENTION ALL AIRCRAFT IN THE VICINITY OF [or AT] (significant point or location) EMERGENCY DESCENT IN PROGRESS FROM (level) (followed as necessary by specific instructions, clearances, traffic information, etc.).

** denotes pilot transmission.

1.2.6 If clearance cannot be issued immediately upon request

EXPECT CLEARANCE (or type of clearance) AT (time).

1.2.7 When clearance for deviation cannot be issued

UNABLE, TRAFFIC (direction) BOUND (type of aircraft) (level) ESTIMATED (or OVER) (significant point) AT (time) CALL SIGN (call sign) ADVISE INTENTIONS.

1.2.8 Separation instructions

a) CROSS (significant point) AT (time) [OR LATER (or OR BEFORE)];

b) ADVISE IF ABLE TO CROSS (significant point) AT (time or level);

c) MAINTAIN MACH (number) [OR GREATER (or OR LESS)] [UNTIL (significant point)];

d) DO NOT EXCEED MACH (number);
1.2.9 Instructions associated with flying a track (offset), parallel to the cleared route

- Advise if able to proceed parallel offset;
- Proceed offset (distance) right/left of (route) (track) [centre line] at (significant point or time) until (significant point or time);
- Cancel offset (instructions to rejoin cleared flight route or other information).

1.2.10 Relaying clearances, instructions, and information

...confirmation or otherwise of the readback of clearance or instruction

- (ATC unit) clears (or instructs) (details of the clearance, instructions, or information);
- [That is] correct (or negative) [I say again (ATC unit) clears (or instructs) (details of the clearance or the instruction)].

1.3 Approach control services

- Arrival and departure air traffic services

### Phraseologies

#### Section

**Circumstances**

- **Departure instructions**
  - [After departure] turn right (or left) heading (three digits) (or continue runway heading) (or track extended centre line) to (level or significant point) (other instructions as required);
  - After reaching (or passing) (level or significant point) (instructions);
  - Turn right (or left) heading (three digits) to (level) to intercept (track, route, airway, etc.).
### 1.3.2 Approach instructions

- **a)** CLEARED (or PROCEED) VIA (designation);
- **b)** CLEARED TO (clearance limit) VIA (designation);
- **c)** CLEARED (or PROCEED) VIA (details of route to be followed);
- **d)** CLEARED (type of approach) APPROACH [RUNWAY (number)];
- **e)** CLEARED (type of approach) RUNWAY (number) FOLLOWED BY CIRCLING TO RUNWAY (number);
- **f)** CLEARED APPROACH [RUNWAY (number)];
- **g)** COMMENCE APPROACH AT (time);
- **h)** REQUEST STRAIGHT-IN [(type of approach)] APPROACH [RUNWAY (number)];
- **i)** CLEARED STRAIGHT-IN [(type of approach)] APPROACH [RUNWAY (number)];
- **j)** REPORT VISUAL;
- **k)** REPORT RUNWAY [LIGHTS] IN SIGHT;
- **l)** REQUEST VISUAL APPROACH;
- **m)** CLEARED VISUAL APPROACH RUNWAY (number);
- **n)** ADVISE ABLE TO ACCEPT VISUAL APPROACH RUNWAY (number);
- **o)** CLEARED VISUAL APPROACH RUNWAY (number), MAINTAIN OWN SEPARATION FROM PRECEDING (aircraft type and wake turbulence category as appropriate) [CAUTION WAKE TURBULENCE];
- **p)** REPORT (significant point); [OUTBOUND, or INBOUND];
- **q)** REPORT COMMENCING PROCEDURE TURN;
- **r)** REQUEST VMC DESCENT;
- **s)** COMMENCE VISUAL APPROACH [

...when a pilot requests a visual approach...

...to request if a pilot is able to accept a visual approach...

...in case of successive visual approaches when the pilot of a succeeding aircraft has reported having the preceding aircraft in sight...
1.3.3 Holding clearances

...visual

a) HOLD VISUAL [OVER] (position), (or BETWEEN (two prominent landmarks));

...published holding procedure over a facility or fix

b) CLEARED (or PROCEED) TO (significant point, name of facility or fix) [MAINTAIN (or CLIMB or DESCEND TO) (level)] HOLD [(direction)] AS PUBLISHED EXPECT APPROACH CLEARANCE (or FURTHER CLEARANCE) AT (time);

c) REQUEST HOLDING INSTRUCTIONS;

...when a detailed holding clearance is required

d) CLEARED (or PROCEED) TO (significant point, name of facility or fix) [MAINTAIN (or CLIMB or DESCEND TO) (level)] HOLD [(direction)] [(specified) RADIAL, COURSE, INBOUND TRACK (three digits) DEGREES] [RIGHT (or LEFT) HAND PATTERN] [OUTBOUND TIME (number) MINUTES] EXPECT APPROACH CLEARANCE (or FURTHER CLEARANCE) AT (time) (additional instructions, if necessary);

e) CLEARED TO THE (three digits) RADIAL OF THE (name) VOR AT (distance) DME FIX [MAINTAIN (or CLIMB or DESCEND TO) (level)] HOLD [(direction)] [RIGHT (or LEFT) HAND PATTERN] [OUTBOUND TIME (number) MINUTES] EXPECT APPROACH CLEARANCE (or FURTHER CLEARANCE) AT (time) (additional instructions, if necessary);

f) CLEARED TO THE (three digits) RADIAL OF THE (name) VOR AT (distance) DME FIX [MAINTAIN (or CLIMB or DESCEND TO) (level)] HOLD BETWEEN (distance) AND (distance) DME [RIGHT (or LEFT) HAND PATTERN] EXPECT APPROACH CLEARANCE (or FURTHER CLEARANCE) AT (time) (additional instructions, if necessary).

'*' denotes pilot transmission.
1.3.4 Expected approach time

a) NO DELAY EXPECTED;

b) EXPECTED APPROACH TIME (time);

c) REVISED EXPECTED APPROACH TIME (time);

d) DELAY NOT DETERMINED (reasons).
1.4 Phraseologies for use on and in the vicinity of the aerodrome

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<td>Identification of aircraft</td>
<td>SHOW LANDING LIGHTS.</td>
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| 1.4.2  | Acknowledgement by visual means | a) ACKNOWLEDGE BY MOVING AILERONS (or RUDDER);  
b) ACKNOWLEDGE BY ROCKING WINGS;  
c) ACKNOWLEDGE BY FLASHING LANDING LIGHTS. |
| 1.4.3  | Starting procedures | *a) [aircraft location] REQUEST START-UP;  
b) [aircraft location] REQUEST START-UP, INFORMATION (ATIS identification);  
c) START-UP APPROVED;  
d) START-UP AT (time);  
e) EXPECT START-UP AT (time);  
f) START-UP AT OWN DISCRETION;  
g) EXPECT DEPARTURE (time) START-UP AT OWN DISCRETION. |
| 1.4.4  | Pushback procedures | *a) [aircraft location] REQUEST PUSHBACK;  
b) PUSHBACK APPROVED;  
c) STAND BY;  
d) PUSHBACK AT OWN DISCRETION;  
e) EXPECT (number) MINUTES DELAY DUE (reason). |
| 1.4.5  | Towing procedures | †a) REQUEST TOW [company name] (aircraft type) FROM (location) TO (location);  
b) TOW APPROVED VIA (specific routing to be followed); |

'**' denotes pilot transmission.

† denotes ATC requirement.
1.4.6 To request time check and/or aerodrome data for departure

1.4.7 Taxi procedures

...when no ATIS broadcast is available

...where detailed taxi instructions are required

...where aerodrome information is not available from an alternative source such as ATIS
...for helicopter operations

- **k) REQUEST AIR-TAXIING FROM (or VIA) TO (location or routing as appropriate);**

- **l) AIR-TAXI TO (or VIA) (location or routing as appropriate) [CAUTION (dust, blowing snow, loose debris, taxying light aircraft, personnel, etc.)];**

- **m) AIR-TAXI VIA (direct, as requested, or specified route) TO (location, heliport, operating or movement area, active or inactive runway). AVOID (aircraft or vehicles or personnel);**

...after landing

- **n) REQUEST BACKTRACK;**

- **o) BACKTRACK APPROVED;**

- **p) BACKTRACK RUNWAY (number);**

...general

- **q) [aircraft location] REQUEST TAXI TO (destination on aerodrome);**

- **r) TAXI STRAIGHT AHEAD;**

- **s) TAXI WITH CAUTION;**

- **t) GIVE WAY TO (description and position of other aircraft);**

- **u) GIVING WAY TO (traffic);**

- **v) TRAFFIC (or type of aircraft) IN SIGHT;**

- **w) TAXI INTO HOLDING BAY;**

- **x) FOLLOW (description of other aircraft or vehicle);**

- **y) VACATE RUNWAY;**

- **z) RUNWAY VACATED;**

- **aa) EXPEDITE TAXI [(reason)];**

- **bb) EXPEDITING;**

- **cc) [CAUTION] TAXI SLOWER [(reason)];**

- **dd) SLOWING DOWN.**

'*' denotes pilot transmission.

1.4.8 Holding

- **a) HOLD (direction) OF (position, runway number, etc.);**

- **b) HOLD POSITION;**

- **c) HOLD (distance) FROM (position);**
...to hold not closer to a runway than specified

‡d) HOLD SHORT OF (position);

*e) HOLDING;

*f) HOLDING SHORT.

‘‡’ requires specific acknowledgement from the pilot.

‘*’ denotes pilot transmission. The procedure words ‘ROGER’ and ‘WILCO’ are insufficient acknowledgement of the instructions ‘HOLD, HOLD POSITION and HOLD SHORT OF (position)’. In each case, the acknowledgement is to be by the phraseology ‘HOLDING’ or ‘HOLDING SHORT’, as appropriate.

1.4.9 To cross a runway

*a) REQUEST CROSS RUNWAY (number);

Note. — If the control tower is unable to see the crossing aircraft (e.g. night, low visibility), the instruction should always be accompanied by a request to report when the aircraft has vacated the runway.

b) CROSS RUNWAY (number) [REPORT VACATED];

c) EXPEDITE CROSSING RUNWAY (number) TRAFFIC (aircraft type) (distance) KILOMETRES OR MILES) FINAL;

d) TAXI TO HOLDING POINT [number] [RUNWAY (number)] VIA (specific route to be followed), [HOLD SHORT OF RUNWAY (number)] or [CROSS RUNWAY (number)];

e) REPORT RUNWAY (number) VACATED;

Note. — The pilot will, when requested, report ‘RUNWAY VACATED’ when the entire aircraft is beyond the relevant runway-holding position.

*f) RUNWAY VACATED.

‘*’ denotes pilot transmission.

1.4.10 Preparation for take-off

a) UNABLE TO ISSUE (designator) DEPARTURE (reasons);

b) REPORT WHEN READY [FOR DEPARTURE];

c) ARE YOU READY [FOR DEPARTURE]?

d) ARE YOU READY FOR IMMEDIATE DEPARTURE?

*e) READY;

...clearance to enter runway and await take-off clearance

†g) LINE UP [AND WAIT];

†) LINE UP RUNWAY (number);

h) LINE UP. BE READY FOR IMMEDIATE DEPARTURE;

...conditional clearances

*i) (condition) LINE UP (brief reiteration of the condition);
<table>
<thead>
<tr>
<th>Section</th>
<th>Description</th>
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<tbody>
<tr>
<td>1.4.11</td>
<td>Take-off clearance</td>
</tr>
<tr>
<td></td>
<td>a) RUNWAY (number) CLEARED FOR TAKE-OFF [REPORT AIRBORNE];</td>
</tr>
<tr>
<td></td>
<td>b) (traffic information) RUNWAY (number) CLEARED FOR TAKE-OFF;</td>
</tr>
</tbody>
</table>
...when take-off clearance has not been complied with

| c) TAKE OFF IMMEDIATELY OR VACATE RUNWAY (instructions); |
| d) TAKE OFF IMMEDIATELY OR HOLD SHORT OF RUNWAY; |

...to cancel a take-off clearance

| e) HOLD POSITION, CANCEL TAKE-OFF I SAY AGAIN CANCEL TAKE-OFF (reasons); |
| f) HOLDING; |

...to stop a take-off after an aircraft has commenced take-off roll

| g) STOP IMMEDIATELY [(repeat aircraft call sign) STOP IMMEDIATELY]; |
| h) STOPPING; |

...for helicopter operations

| i) CLEARED FOR TAKE-OFF [FROM (location)] (present position, taxiway, final approach and take-off area, runway and number); |
| j) REQUEST DEPARTURE INSTRUCTIONS; |
| k) AFTER DEPARTURE TURN RIGHT (or LEFT, or CLIMB) (instructions as appropriate). |

`*` denotes pilot transmission. `HOLDING` and `STOPPING` are the procedural responses to e) and g) respectively.

### 1.4.12 Turn or climb instructions after take-off

| *a) REQUEST RIGHT (or LEFT) TURN; |
| b) RIGHT (or LEFT) TURN APPROVED; |
| c) WILL ADVISE LATER FOR RIGHT (or LEFT) TURN; |

...to request airborne time

| d) REPORT AIRBORNE; |
| e) AIRBORNE (time); |
| f) AFTER PASSING (level) (instructions); |

...heading to be followed

| g) CONTINUE RUNWAY HEADING (instructions); |
| h) TRACK EXTENDED CENTRE LINE (instructions); |

...when a specific track is to be followed

| i) CLIMB STRAIGHT AHEAD (instructions). |

`*` denotes pilot transmission.

### 1.4.13 Entering an aerodrome traffic circuit

| *a) [aircraft type] (position) (level) FOR LANDING; |
| b) JOIN [(direction of circuit)] (position in circuit) RUNWAY (runway number) [SURFACE] WIND (direction and speed) |
AMC and GM to SERA
Issue 1, Amendment 4

..., when ATIS information is available

1.4.14 In the circuit

*a) (position in circuit, e.g. DOWNWIND/FINAL);

b) NUMBER ... FOLLOW (aircraft type and position) [additional instructions if required];

c) TRAFFIC (detail) [additional information if required];

d) REPORT (position in circuit).

**’ denotes pilot transmission.

1.4.15 Approach instructions

Note. — The report ‘LONG FINAL’ is made when an aircraft turns on to final approach at a distance greater than 7 km (4 NM) from touchdown or when an aircraft on a straight-in approach is 15 km (8 NM) from touchdown. In both cases, a report ‘FINAL’ is required at 7 km (4 NM) from touchdown.

a) MAKE SHORT APPROACH;

b) MAKE LONG APPROACH (or EXTEND DOWNWIND);

c) REPORT BASE (or FINAL, or LONG FINAL);

d) CONTINUE APPROACH [PREPARE FOR POSSIBLE GO-AROUND].

1.4.16 Landing clearance

...when reduced runway separation is used

...special operations

a) RUNWAY (number) CLEARED TO LAND;

b) (traffic information) RUNWAY (number) CLEARED TO LAND;

c) CLEARED TOUCH AND GO;

d) MAKE FULL STOP;
...to make an approach along, or parallel to, a runway, descending to an agreed minimum level

| e) REQUEST LOW APPROACH (reasons); |
| f) CLEARED LOW APPROACH [RUNWAY (number)] [altitude restriction if required] (go-around instructions); |

...to fly past the control tower or other observation point for the purpose of visual inspection by persons on the ground

| g) REQUEST LOW PASS (reasons); |
| h) CLEARED LOW PASS [as in f]]; |

...for helicopter operations

| i) REQUEST STRAIGHT-IN (or CIRCLING APPROACH, LEFT or RIGHT) TURN TO (location)); |
| j) MAKE STRAIGHT-IN (or CIRCLING APPROACH, LEFT (or RIGHT) TURN TO (location, runway, taxiway, final approach and take-off area)) [ARRIVAL or ARRIVAL ROUTE] (number, name, or code): [HOLD SHORT OF (active runway, extended runway centre line, other)]. [REMAIN (direction or distance) FROM (runway, runway centre line, other helicopter or aircraft)]. [CAUTION (power lines, unlighted obstructions, wake turbulence, etc.)]. CLEARED TO LAND. |

"*" denotes pilot transmission.

| 1.4.17 Delaying aircraft |
| a) CIRCLE THE AERODROME; |
| b) ORBIT (RIGHT, or LEFT) [FROM PRESENT POSITION]; |
| c) MAKE ANOTHER CIRCUIT. |

| 1.4.18 Missed approach |
| a) GO AROUND; |
| *b) GOING AROUND. |

"*" denotes pilot transmission.

| 1.4.19 Information to aircraft |
| ...when pilot requested visual inspection of landing gear |
| a) LANDING GEAR APPEARS DOWN; |
| b) RIGHT (or LEFT, or NOSE) WHEEL APPEARS UP (or DOWN); |
| c) WHEELS APPEAR UP; |
| d) RIGHT (or LEFT, or NOSE) WHEEL DOES NOT APPEAR UP (or DOWN); |
| e) CAUTION WAKE TURBULENCE [FROM ARRIVING (or DEPARTING) (type of aircraft)] [additional information as required]; |

...wake turbulence
...jet blast on apron or taxiway

...propeller-driven aircraft slipstream

...other traffic

Information on the actual use of the runway

Note. — Information on the actual use of the runway in points i) and j) may be provided to aircraft at any phase of the flight, in particular in the circuit and during the preparation for departure.

1.4.20 Runway vacating and communications after landing

a) CONTACT GROUND (frequency);

b) WHEN VACATED CONTACT GROUND (frequency);

c) EXPEDITE VACATING;

d) YOUR STAND (or GATE) (designation);

e) TAKE (or TURN) FIRST (or SECOND, or CONVENIENT) LEFT (or RIGHT) AND CONTACT GROUND (frequency);

...for helicopter operations

f) AIR-TAXI TO HELICOPTER STAND / HELICOPTER PARKING POSITION (area);

g) AIR-TAXI TO (or VIA) (location or routing as appropriate) [CAUTION (dust, blowing snow, loose debris, taxiing light aircraft, personnel, etc.)];

h) AIR-TAXI VIA (direct, as requested, or specified route) TO (location, heliport, operating or movement area, active or inactive runway). AVOID (aircraft or vehicles or personnel).
1.5 Phraseologies to be used related to controller–pilot data link communications (CPDLC)

<table>
<thead>
<tr>
<th>Section</th>
<th>Circumstances</th>
<th>Phraseologies</th>
</tr>
</thead>
</table>
| 1.5.1    | Operational status | a) [ALL STATIONS] CPDLC FAILURE (instructions);  
           |                | b) CPDLC MESSAGE FAILURE (appropriate clearance,  
           |                | instruction, information or request);  
           |                | c) DISREGARD CPDLC (message type) MESSAGE, BREAK  
           |                | (correct clearance, instruction, information or request);  
           |                | d) [ALL STATIONS] STOP SENDING CPDLC REQUESTS  
           |                | (UNTIL ADVISED) [(reason)];  
           |                | e) [ALL STATIONS] RESUME NORMAL CPDLC OPERATIONS. |

2. ATS SURVEILLANCE SERVICE PHRASEOLOGIES

Note. The following comprise phraseologies specifically applicable when an ATS surveillance system is used in the provision of air traffic services. The phraseologies detailed in the sections above for use in the provision of air traffic services are also applicable, as appropriate, when an ATS surveillance system is used.

2.1 General ATS surveillance service phraseologies

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<thead>
<tr>
<th>Section</th>
<th>Circumstances</th>
<th>Phraseologies</th>
</tr>
</thead>
</table>
| 2.1.1    | Identification of aircraft | a) REPORT HEADING [AND FLIGHT LEVEL (or ALTITUDE)];  
           |                | b) FOR IDENTIFICATION TURN LEFT (or RIGHT) HEADING  
           |                | (three digits);  
           |                | c) TRANSMIT FOR IDENTIFICATION AND REPORT  
           |                | HEADING;  
           |                | d) RADAR CONTACT [position];  
           |                | e) IDENTIFIED [position];  
           |                | f) NOT IDENTIFIED [reason], [RESUME (or CONTINUE)  
           |                | OWN NAVIGATION];  
           |                | g) NOT IDENTIFIED [reason]; |
| 2.1.2    | Position information | POSITION (distance) (direction) OF (significant point) (or  
           |                | OVER or ABEAM (significant point)). |
| 2.1.3    | Vectoring instructions | a) LEAVE (significant point) HEADING (three digits);  
           |                | b) CONTINUE HEADING (three digits); |
c) CONTINUE PRESENT HEADING;


d) FLY HEADING (three digits);


e) TURN LEFT (or RIGHT) HEADING (three digits) [reason];


f) TURN LEFT (or RIGHT) (number of degrees) DEGREES [reason];


g) STOP TURN HEADING (three digits);


h) FLY HEADING (three digits), WHENABLE PROCEED DIRECT (name) (significant point);


i) HEADING IS GOOD.


2.1.4 Termination of vectoring

a) RESUME OWN NAVIGATION (position of aircraft) (specific instructions);


b) RESUME OWN NAVIGATION [DIRECT] (significant point) [MAGNETIC TRACK (three digits) DISTANCE (number) KILOMETRES (or MILES)].


2.1.5 Manoeuvres

a) MAKE A THREE SIXTY TURN LEFT (or RIGHT) [reason];


b) ORBIT LEFT (or RIGHT) [reason];

...(in case of unreliable directional instruments on board aircraft)

c) MAKE ALL TURNS RATE ONE (or RATE HALF, or (number) DEGREES PER SECOND) START AND STOP ALL TURNS ON THE COMMAND ‘NOW’;


d) TURN LEFT (or RIGHT) NOW;


e) STOP TURN NOW.

Note.—When it is necessary to specify a reason for vectoring or for the above-mentioned manoeuvres, the following phraseologies should be used:

a) DUE TRAFFIC;

b) FOR SPACING;

c) FOR DELAY;

d) FOR DOWNWIND (or BASE, or FINAL).

2.1.6 Speed control

a) REPORT SPEED;


* b) SPEED (number) KILOMETRES PER HOUR (or KNOTS);


c) MAINTAIN (number) KILOMETRES PER HOUR (or KNOTS) [OR GREATER (or OR LESS)] [UNTIL (significant point)];
<table>
<thead>
<tr>
<th>Number</th>
<th>Text</th>
</tr>
</thead>
<tbody>
<tr>
<td>d)</td>
<td>DO NOT EXCEED <em>(number)</em> KILOMETRES PER HOUR <em>(or KNOTS)</em>;</td>
</tr>
<tr>
<td>e)</td>
<td>MAINTAIN PRESENT SPEED;</td>
</tr>
<tr>
<td>f)</td>
<td>INCREASE *(or REDUCE) SPEED TO <em>(number)</em> KILOMETRES PER HOUR <em>(or KNOTS)</em> [OR GREATER <em>(or OR LESS)</em>];</td>
</tr>
<tr>
<td>g)</td>
<td>INCREASE *(or REDUCE) SPEED BY <em>(number)</em> KILOMETRES PER HOUR <em>(or KNOTS)</em>;</td>
</tr>
<tr>
<td>h)</td>
<td>RESUME NORMAL SPEED;</td>
</tr>
<tr>
<td>i)</td>
<td>REDUCE TO MINIMUM APPROACH SPEED;</td>
</tr>
<tr>
<td>j)</td>
<td>REDUCE TO MINIMUM CLEAN SPEED;</td>
</tr>
<tr>
<td>k)</td>
<td>NO [ATC] SPEED RESTRICTIONS.</td>
</tr>
</tbody>
</table>

**'*** denotes pilot transmission.

Note. An arriving aircraft may be instructed to maintain its 'maximum speed', 'minimum clean speed', 'minimum speed', or a specified speed. 'Minimum clean speed' signifies the minimum speed at which an aircraft can be flown in a clean configuration, i.e. without deployment of lift-augmentation devices, speed brakes or landing gear.

2.1.7 Position reporting

...to omit position reports

<table>
<thead>
<tr>
<th>Number</th>
<th>Text</th>
</tr>
</thead>
<tbody>
<tr>
<td>a)</td>
<td>OMIT POSITION REPORTS <em>(UNTIL (specify))</em>;</td>
</tr>
<tr>
<td>b)</td>
<td>NEXT REPORT AT <em>(significant point)</em>;</td>
</tr>
<tr>
<td>c)</td>
<td>REPORTS REQUIRED ONLY AT <em>(significant point(s))</em>;</td>
</tr>
<tr>
<td>d)</td>
<td>RESUME POSITION REPORTING.</td>
</tr>
</tbody>
</table>

2.1.8 Traffic information and avoiding action

a) TRAFFIC *(number)* O’CLOCK *(distance)* *(direction of flight)* [any other pertinent information]:

1) UNKNOWN;
2) SLOW MOVING;
3) FAST MOVING;
4) CLOSING;
5) OPPOSITE *(or SAME) DIRECTION*;
6) OVERTAKING;
7) CROSSING LEFT TO RIGHT *(or RIGHT TO LEFT)*;
When passing level information to aircraft climbing or descending, in the form of vertical distance from the other traffic:

- **8)** (aircraft type);
- **9)** (level);
- **10)** [YOUR CLEARED LEVEL]
- **11)** CLIMBING (or DESCENDING);

To request avoiding action:

- **b)** REQUEST VECTORS;
- **c)** DO YOU WANT VECTORS?

When passing unknown traffic:

- **d)** CLEAR OF TRAFFIC [appropriate instructions];

For avoiding action:

- **e)** TURN LEFT (or RIGHT) IMMEDIATELY HEADING (three digits) TO AVOID [UNIDENTIFIED] TRAFFIC (bearing by clock-reference and distance);
- **f)** TURN LEFT (or RIGHT) (number of degrees) IMMEDIATELY TO AVOID [UNIDENTIFIED] TRAFFIC AT (bearing by clock-reference and distance).

**“*” denotes pilot transmission.**

### 2.1.9 Communications and loss of communications

- **a)** [IF] RADIO CONTACT LOST (instructions);
- **b)** IF NO TRANSMISSIONS RECEIVED FOR (number) MINUTES (or SECONDS) (instructions);
- **c)** REPLY NOT RECEIVED (instructions);

If loss of communications suspected:

- **d)** IF YOU READ [(manoeuvre instructions or SQUAWK code or IDENT)];
- **e)** IF YOU READ [SQUAWK (code) or IDENT];
- **f)** (manoeuvre, SQUAWK or IDENT) OBSERVED. POSITION (position of aircraft). [(instructions)].

### 2.1.10 Termination of radar and/or ADS-B service

- **a)** RADAR SERVICE (or IDENTIFICATION) TERMINATED [DUE (reason)] (instructions);
- **b)** WILL SHORTLY LOSE IDENTIFICATION (appropriate instructions or information);
- **c)** IDENTIFICATION LOST [reasons] (instructions).
2.1.11 Radar and/or ADS-B equipment degradation

| a) | SECONDARY RADAR OUT OF SERVICE *(appropriate information as necessary)* |
| b) | PRIMARY RADAR OUT OF SERVICE *(appropriate information as necessary)* |
| c) | ADS-B OUT OF SERVICE *(appropriate information as necessary)* |

2.2 Radar in approach control service

<table>
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<th>Section</th>
<th>Circumstances</th>
<th>Phraseologies</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.2.1 Vectoring for approach</td>
<td>a) VECTORING FOR <em>(type of pilot-interpreted aid)</em> APPROACH RUNWAY <em>(number)</em>;</td>
<td>☑ ☐</td>
</tr>
<tr>
<td></td>
<td>b) VECTORING FOR VISUAL APPROACH RUNWAY <em>(number)</em> REPORT FIELD <em>(or RUNWAY) IN SIGHT</em>;</td>
<td>☑ ☐</td>
</tr>
<tr>
<td></td>
<td>c) VECTORING FOR <em>(positioning in the circuit)</em>;</td>
<td>☑ ☐</td>
</tr>
<tr>
<td></td>
<td>d) VECTORING FOR SURVEILLANCE RADAR APPROACH RUNWAY <em>(number)</em>;</td>
<td>☑ ☐</td>
</tr>
<tr>
<td></td>
<td>e) VECTORING FOR PRECISION APPROACH RUNWAY <em>(number)</em>;</td>
<td>☑ ☐</td>
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<tr>
<td></td>
<td>f) <em>(type)</em> APPROACH NOT AVAILABLE DUE <em>(reason) (alternative instructions)</em>.</td>
<td>☑ ☐</td>
</tr>
</tbody>
</table>

| 2.2.2 Vectoring for ILS and other pilot-interpreted aids | a) POSITION *(number)* KILOMETRES *(or MILES)* from x). TURN LEFT *(or RIGHT) HEADING *(three digits)*; | ☑ ☐ |
| | b) YOU WILL INTERCEPT *(radio aid or track) (distance)* FROM *(significant point or TOUCHDOWN)*; | ☑ ☐ |
| | *c) REQUEST *(distance)* FINAL; | ☑ ☐ |
| | d) CLEARED FOR *(type of approach) APPROACH RUNWAY *(number)*; | ☑ ☐ |
| ...when a pilot wishes to be positioned at a specific distance from touchdown | e) REPORT ESTABLISHED ON *(ILS) LOCALISER *(or ON GBAS/SBAS/MLS APPROACH COURSE)*; | ☑ ☐ |
| ...instructions and information | f) CLOSING FROM LEFT *(or RIGHT) [REPORT ESTABLISHED]; | ☑ ☐ |
| | g) TURN LEFT *(or RIGHT) HEADING *(three digits) [TO INTERCEPT] or [REPORT ESTABLISHED]*; | ☑ ☐ |
h) EXPECT VECTOR ACROSS (localiser course or radio aid) (reason);

i) THIS TURN WILL TAKE YOU THROUGH (localiser course or radio aid) [reason];

j) TAKING YOU THROUGH (localiser course or radio aid) [reason];

k) MAINTAIN (altitude) UNTIL GLIDE PATH INTERCEPTION;

l) REPORT ESTABLISHED ON GLIDE PATH;

m) INTERCEPT (localiser course or radio aid) [REPORT ESTABLISHED].

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2.2.4.2 Elevation
a) COMMENCE DESCENT NOW [TO MAINTAIN A (number) DEGREE GLIDE PATH];

b) (distance) FROM TOUCHDOWN ALTITUDE (or HEIGHT) SHOULD BE (numbers and units).

2.2.4.3 Position
(distance) FROM TOUCHDOWN.

2.2.4.4 Checks
a) CHECK GEAR DOWN [AND LOCKED];

b) OVER THRESHOLD.

2.2.4.5 Completion of approach
a) REPORT VISUAL;

b) REPORT RUNWAY [LIGHTS] IN SIGHT;

c) APPROACH COMPLETED [CONTACT (unit)].

2.2.5 PAR-approach
2.2.5.1 Provision of service
a) THIS WILL BE A PRECISION RADAR APPROACH RUNWAY (number);

b) PRECISION APPROACH NOT AVAILABLE DUE (reason) (alternative instructions);

c) IN CASE OF GO AROUND (instructions).

2.2.5.2 Communications
a) DO NOT ACKNOWLEDGE FURTHER TRANSMISSIONS;

b) REPLY NOT RECEIVED. WILL CONTINUE INSTRUCTIONS.

2.2.5.3 Azimuth
a) CLOSING [SLOWLY (or QUICKLY)] [FROM THE LEFT (or FROM THE RIGHT)];

b) HEADING IS GOOD;

c) ON TRACK;

d) SLIGHTLY (or WELL, or GOING) LEFT (or RIGHT) OF TRACK;

e) (number) METRES LEFT (or RIGHT) OF TRACK.

2.2.5.4 Elevation
a) APPROACHING GLIDE PATH;

b) COMMENCE DESCENT NOW [AT (number) METRES PER SECOND OR (number) FEET PER MINUTE (or ESTABLISH A (number) DEGREE GLIDE PATH)];

c) RATE OF DESCENT IS GOOD;

d) ON GLIDE PATH;
e) SLIGHTLY (or WELL, or GOING) ABOVE (or BELOW) GLIDE PATH;

f) [STILL] (number) METRES (or FEET) TOO HIGH (or TOO LOW);

g) ADJUST RATE OF DESCENT;

h) COMING BACK [SLOWLY (or QUICKLY)] TO THE GLIDE PATH;

i) RESUME NORMAL RATE OF DESCENT;

j) ELEVATION ELEMENT UNSERVICEABLE (to be followed by appropriate instructions);

k) (distance) FROM TOUCHDOWN, ALTITUDE (or HEIGHT) SHOULD BE (numbers and units).

2.2.5.5 Position

a) (distance) FROM TOUCHDOWN;

b) OVER APPROACH LIGHTS;

c) OVER THRESHOLD.

2.2.5.6 Checks

a) CHECK GEAR DOWN AND LOCKED;

b) CHECK DECISION ALTITUDE (or HEIGHT).

2.2.5.7 Completion of approach

a) REPORT VISUAL;

b) REPORT RUNWAY [LIGHTS] IN SIGHT;

c) APPROACH COMPLETED [CONTACT (unit)].

2.2.5.8 Missed approach

a) CONTINUE VISUALLY OR GO AROUND [missed approach instructions];

b) GO AROUND IMMEDIATELY [missed approach instructions] [reason];

c) ARE YOU GOING AROUND?

d) IF GOING AROUND [appropriate instructions];

e) GOING AROUND.

*' denotes pilot transmission.
### 2.3 Secondary surveillance radar (SSR) and ADS-B phraseologies

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<thead>
<tr>
<th>Section</th>
<th>Circumstances</th>
<th>Phraseologies</th>
</tr>
</thead>
</table>
| 2.3.1   | To request the capability of the SSR equipment | a) ADVISE TRANSPONDER CAPABILITY;  
* b) TRANSPONDER *(as shown in the flight plan)*;  
* c) NEGATIVE TRANSPONDER.  
**"" denotes pilot transmission. |
| 2.3.2   | To request the capability of the ADS-B equipment | a) ADVISE ADS-B CAPABILITY;  
* b) ADS-B TRANSMITTER *(data link)*;  
* c) ADS-B RECEIVER *(data link)*;  
* d) NEGATIVE ADS-B.  
**"" denotes pilot transmission. |
| 2.3.3   | To instruct setting of transponder | a) FOR DEPARTURE SQUAWK *(code)*;  
b) SQUAWK *(code).* |
| 2.3.4   | To request the pilot to reselect the assigned mode and code | a) RESET SQUAWK *(mode) (code)*;  
* b) RESETTING *(mode) (code).*  
**"" denotes pilot transmission. |
| 2.3.5   | To request reselection of aircraft identification | RE-ENTER [ADS-B or MODE S] AIRCRAFT IDENTIFICATION. |
| 2.3.6   | To request the pilot to confirm the code selected on the aircraft’s transponder | a) CONFIRM SQUAWK *(code)*;  
* b) SQUAWKING *(code).*  
**"" denotes pilot transmission. |
| 2.3.7   | To request the operation of the IDENT feature | a) SQUAWK *(code) [AND] IDENT;  
b) SQUAWK LOW;  
**"" denotes pilot transmission. |
### 2.3.8 To request temporary suspension of transponder operation

- **SQUAWK STANDBY.**

### 2.3.9 To request emergency code

- **SQUAWK MAYDAY [CODE SEVEN-SEVEN-ZERO-ZERO].**

### 2.3.10 To request termination of transponder and/or ADS-B transmitter operation

- **a) STOP SQUAWK [TRANSMIT ADS-B ONLY];**
- **b) STOP ADS-B TRANSMISSION [SQUAWK (code) ONLY].**

**Note:** Independent operations of Mode S transponder and ADS-B may not be possible in all aircraft (e.g., where ADS-B is solely provided by 1090 MHz extended squitter emitted from the transponder). In such cases, aircraft may not be able to comply with ATC instructions related to ADS-B operation.

### 2.3.11 To request transmission of pressure-altitude

- **a) SQUAWK CHARLIE;**
- **b) TRANSMIT ADS-B ALTITUDE.**

### 2.3.12 To request pressure setting check and confirmation of level

- **a) CHECK ALTIMETER SETTING AND CONFIRM (level).**

### 2.3.13 To request termination of pressure-altitude transmission because of faulty operation

- **a) STOP SQUAWK CHARLIE WRONG INDICATION;**
- **b) STOP ADS-B ALTITUDE TRANSMISSION [(WRONG INDICATION, or reason)].**

### 2.3.14 To request level check

- **CONFIRM (level).**

### 2.3.15 Controller queries a discrepancy between the displayed ‘Selected Level’ and the cleared level

- **CHECK SELECTED LEVEL. CLEARED LEVEL IS (level);**
- **CHECK SELECTED LEVEL. CONFIRM CLIMBING (or DESCENDING) TO (or MAINTAINING) (level);**

*CLIMBING (or DESCENDING) TO (or MAINTAINING) (level) (appropriate information on selected level).*

**Note:** The controller will not state on radiotelephony the value of the ‘Selected Level’ observed on the situation display.

**Note:** ‘*’ denotes pilot transmission.
3. AUTOMATIC DEPENDENT SURVEILLANCE — CONTRACT (ADS-C) PHRASEOLOGIES

3.1 General ADS-C phraseologies

Section Circumstances Phraseologies
3.1.1 ADS-C degradation ADS-C (or ADS-CONTRACT) OUT OF SERVICE (appropriate information as necessary).

4. ALERTING PHRASEOLOGIES

4.1 Alerting phraseologies

Section Circumstances Phraseologies
4.1.1 Low altitude warning (aircraft call sign) LOW ALTITUDE WARNING, CHECK YOUR ALTITUDE IMMEDIATELY, QNH IS (number) [(units)]. [THE MINIMUM FLIGHT ALTITUDE IS (altitude)].

5. GROUND CREW/FLIGHT CREW PHRASEOLOGIES

5.1 Ground crew/flight crew phraseologies

Section Circumstances Phraseologies
5.1.1 Starting procedures (ground crew/cockpit) a) [ARE YOU] READY TO START UP?

*b) STARTING NUMBER (engine number(s)).

Note 1. — The ground crew should follow this exchange by either a reply on the intercom or a distinct visual signal to indicate that all is clear and that the start-up as indicated may proceed.

Note 2. — Unambiguous identification of the parties concerned is essential in any communications between ground crew and pilots.

** denotes pilot transmission.

5.1.2 Pushback procedures ...(ground crew/cockpit) a) ARE YOU READY FOR PUSHBACK?

*b) READY FOR PUSHBACK;

c) CONFIRM BRAKES RELEASED;
*d) BRAKES RELEASED;  
e) COMMENCING PUSHBACK;  
f) PUSHBACK COMPLETED;  
*g) STOP PUSHBACK;  
h) CONFIRM BRAKES SET;  
*i) BRAKES SET;  
*j) DISCONNECT;  
k) DISCONNECTING STAND BY FOR VISUAL AT YOUR LEFT (or RIGHT).

Note. — This exchange is followed by a visual signal to the pilot to indicate that disconnect is completed and all is clear for taxiing.  

'*' denotes pilot transmission.

6. AIR TRAFFIC FLOW MANAGEMENT (ATFM)

6.1 ATFM

Calculated take-off time (CTOT) delivery resulting from a slot allocation message (SAM).

Change to CTOT resulting from a slot revision message (SRM).

CTOT cancellation resulting from a slot cancellation message (SLC).

Flight suspension until further notice (resulting from flight suspension message (FLS)).

Flight de-suspension resulting from a de-suspension message (DES).

Denial of start-up when requested too late to comply with the given CTOT.

Denial of start-up when requested too early to comply with the given CTOT.

a) SLOT (time);  
b) REVISED SLOT (time);  
c) SLOT CANCELLED, REPORT READY;  
d) FLIGHT SUSPENDED UNTIL FURTHER NOTICE, DUE (reason);  
e) SUSPENSION CANCELLED, REPORT READY;  
f) UNABLE TO APPROVE START-UP CLEARANCE DUE SLOT EXPIRED, REQUEST A NEW SLOT;  
g) UNABLE TO APPROVE START-UP CLEARANCE DUE SLOT (time), REQUEST START-UP AT (time).
GM1 Appendix 1 to SERA.14001 for Appendix 1 General

The phraseology in AMC1 SERA.14001 does not include phrases and regular radiotelephony procedure words contained in SERA Section 14.

Words in parentheses indicate that specific information, such as a level, a place or a time, etc., must be inserted to complete the phrase, or alternatively that optional phrases may be used. Words in square parentheses indicate optional additional words or information that may be necessary in specific instances.

GM2 Appendix 1 to AMC1 SERA.14001 General

The phraseologies listed in Appendix 1 to AMC1 SERA.14001 are organised per phases of flight or per use of specific communication, navigation and surveillance technologies that require the exchange of specific communication between ATS personnel or ground crew and flight crews.

With regard to the communications between flight crews and ATS personnel, the tables specify the ATS phraseologies to be used to perform ATC service or FIS functions respectively. Consequently, the two rightmost columns indicate which of the ATS phraseologies are to be used for ATC functions, for FIS functions, or for both ATC and FIS functions.

In general, the subject SERA phraseologies constitute a standardised core content of identified phrases for usual situations; they do not constitute an exhaustive list. When circumstances differ, pilots, ATS personnel and other ground crew will be expected to use plain language which should be as clear and concise as possible and, when applicable, in the level specified in the relevant rules on language proficiency.