Phraseology

- General
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- Approach / Center - Phraseology
- Traffic information
- Efficiency on the Frequency

General

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Below are excerpts from AIP Germany GEN 3.4.

Language

Radio communication is to be conducted in **English** or the language normally used by the ground station. Preferably, English should be used in Germany. **German** may be used if the relevant frequency permits it.

In **emergencies**, **any language** that both pilot and controller can adequately understand is allowed.

Radio Communication Procedures

Standard phraseology is to be used in all situations where it is prescribed. Normal expressions are only to be used if standard phraseology is not suitable for the intended transmission.

Except for safety reasons, no transmission should be made to an aircraft during takeoff, the final part of the approach, or rollout after landing.

Phrases like "SOFORT / IMMEDIATELY" or "BESCHLEUNIGEN SIE / EXPEDITE" are only used by air traffic control when absolutely necessary. If immediate compliance is not possible for safety reasons, the instruction should be followed as much as possible and air traffic control should be informed accordingly.

Abbreviations are not allowed in radio communication except for those commonly used in aviation (e.g., ATC, FIR, IFR, RVR, VFR, VMC, VOR), and Q-groups (e.g., QNH, QFE, QDM).

The callsign shall be transmitted at the beginning of the message. A direct reply to a message can end with the callsign.

Establishing Radio Contact

When establishing radio contact, **full callsigns** must always be used. Aircraft should start their call with the designation of the ground station, followed by their own callsign.

In response to the above calls, the callsign of the calling station followed by the callsign of the responding station should be used, which serves as an invitation to continue transmission by the calling station. When handing over radio communication within an air traffic service unit, the

callsign of the air traffic service unit may be omitted.

If the callsign of the calling station is not understood, the phrase "WIEDERHOLEN SIE IHR RUFZEICHEN / SAY AGAIN YOUR CALL SIGN" shall be used.

Handover of traffic

On every **frequency change**, a pilot on an IFR flight must state the **current altitude** and, **if climbing or descending, also the cleared altitude**. When switching from approach control to aerodrome control, stating the altitude is not required. For approaches to airports with parallel runway systems, the runway being approached should be specified along with the aircraft's callsign.

When a radio communication is handed over from one air traffic service unit to another, the aircraft should be informed of the callsign of the unit to be contacted and the frequency to be used.

"D-EABC, CONTACT LANGEN INFORMATION (frequency/channel)."
"D-EABC MONITOR LANGEN TOWER 119.900"
"D-EABC STANDBY FOR LANGEN TOWER 119.900"

Note: An aircraft can be instructed to:
a) switch to a frequency with the term "STANDBY" and wait for air traffic services to make contact shortly,
b) switch to a frequency where information is broadcast (e.g., ATIS) with the term "MONITOR."

Acknowledging Messages

The reception of messages must be acknowledged unless an exception is permitted below.

An aircraft station must acknowledge the receipt of a message by transmitting its own callsign and, if applicable, the phrase "ROGER."

When air traffic control acknowledges receipt of a message from an aircraft, the acknowledgment must include the aircraft's callsign, followed by the callsign of the air traffic control unit if necessary.

The flight crew must repeat back the safety-relevant parts of air traffic control clearances and instructions that are transmitted by radio. The following points must always be repeated:
a) enroute clearances;
b) clearances and instructions for taxiing, landing, taking off, holding short of, crossing, and backtracking on runways;
c) active runway, altimeter settings, SSR codes, newly assigned radio channels, altitude instructions, course and speed instructions; and
d) transition levels, regardless of whether they were transmitted by a controller or contained in ATIS broadcasts.

Other clearances or instructions, including conditional clearances and taxiing instructions, must be repeated or acknowledged in a manner that shows they have been understood and will be followed.

Corrections and Repetitions

If an error occurs during transmission, the phrase "BERICHTIGUNG / CORRECTION" is to be used, the last correct phrase or group of words is to be repeated, and the correct wording is then transmitted.

If the receiving station doubts the correctness of the received message, it must request a repetition of either the entire message or parts of it.

If a complete repetition of a message is necessary, the phrase "WIEDERHOLEN SIE / SAY AGAIN" should be used.

Radio checks

Radio checks must be made in the following format:
a) designation of the called station;
b) designation of the calling station;
c) the words "RADIO CHECK";
d) the frequency being used.

The response to a radio check must be in the following format:
a) designation of the station requesting the radio check;
b) designation of the responding station;
c) information on the readability of the station requesting the radio check.

The readability of the radio check is to be assessed using the following scale:

1 = unreadable
2 = readable now and then
3 = readable but with difficulty
4 = readable
5 = perfectly readable

Callsigns of ground stations (ATC)

The callsign of a ground station consists of the location or the name of the ground station and one of the following function designations:

For radio communication in English:

a) CONTROL Bezirkskontrolle ohne Radar/ area control service without radar
b) APPROACH An- und Abflugkontrolle ohne Radar/ arrival and departure control service without radar

c) RADAR Flugverkehrskontrolle mit Radar / air traffic control service with radar
d) DEPARTURE Abflugkontrolle mit Radar / departure control service with radar
e) ARRIVAL Anflugkontrolle mit Radar / arrival control service with radar
f) TOWER Flugplatzkontrolle / aerodrome control service
g) GROUND Flugverkehrskontrolle auf dem Rollfeld / air traffic control on the manoeuvring area
h) DELIVERY Übermittlung von Streckenfreigaben / transmission of en-route clearances
i) INFORMATION Fluginformationsdienst durch die DFS / flight information service by DFS
j) APRON Bewegungslenkung auf dem Vorfeld durch den Flughafenunternehmer / aircraft guidance on the apron by the airport operator
k) RADIO Flugplatzinformationen durch den Flugleiter an unkontrollierten Flugplätzen ohne AFIS-Anbieter / aerodrome flight information provided by aerodrome operations management (Flugleiter) at uncontrolled aerodromes without AFIS provider
l) INFORMATION Flugplatz-Fluginformationsdienst an unkontrollierten Flugplätzen mit AFIS-Anbieter / aerodrome flight information service at uncontrolled aerodromes with an AFIS provider

For radio communication in German:

a) TURM aerodrome control service
b) ROLLKONTROLLE air traffic control on the maneuvering area
c) VORFELD aircraft guidance on the apron by the airport operator

Callsigns of air stations (e.g., aircraft)

Aircraft station callsigns must correspond to one of the following types:

Type a): the registration markings of the aircraft;
or
Type b): the aircraft operator's designation used in radio communication, followed by the last four characters of the aircraft's registration markings;
or
Type c): the aircraft operator's designation used in radio communication, followed by the flight number.

Abbreviated Callsigns

Aircraft callsigns in radio communication, except for Type c), can be abbreviated as follows:
Type a): the first character of the registration markings and at least the last two characters of the callsign;
Type b): the aircraft operator's designation used in radio communication and at least the last two characters of the callsign;
Type c): no abbreviated callsign.

Callsign	Type a)	Type b)	Type c)
Full	DENOW	CONDOR ABUC	WALTER 666

Abbreviated	DOW orDNOW	CONDOR UCor CONDOR BUC	no abbreviation

Abbreviated callsigns in radio communication may only be used after radio contact has been successfully established and confusion is unlikely. An aircraft may only use its abbreviated callsign after it has been used by the ground station.

Pilots must append the following additions to their callsign when establishing radio contact with air traffic control and after each frequency/channel change:
a) For aircraft in the HEAVY wake turbulence category, the word "HEAVY," and for Airbus A380 (A388) aircraft, the word "SUPER";
b) for aircraft without the required area navigation equipment, the addition "NON RNAV";
c) for aircraft with priority treatment according to BMVI regulations, the addition "GOVERNMENT FLIGHT" or "PREFERENCE FLIGHT";
d) for formation flights, the word "FORMATION" or "FLIGHT."

Transmission of Letters

In radio communication, the spelling alphabet from the following table is to be used for spelling names, abbreviations, and words whose spelling is unclear:

Letter	Code word	rough pronunciation (emphasis underlined)
A	Alfa	AL FA
B	Bravo	BRA WO
C	Charlie	TSCHAHR LI / SCHAHR LI
D	Delta	DEL TA
E	Echo	ECK O
F	Foxtrot	FOX TROT
G	Golf	GOLF
H	Hotel	HO TELL
I	India	IN DIA
J	Juliett	DSCHU LJETT
K	Kilo	KI LO

L	Lima	LI MA
M	Mike	MAIK
N	November	NO WEMM BA
O	Oscar	OSS KA
P	Papa	PA PA
Q	Quebec	KI BECK
R	Romeo	ROH MIO
S	Sierra	SI ER RA
T	Tango	TÄN GO
U	Uniform	JU NIFORM / U NIFORM
V	Victor	WIK TOR
W	Whiskey	WISS KI
X	X-Ray	EX RE
Y	Yankee	JÄN KI
Z	Zulu	ZU LU

To distinguish between runways, the following terms shall be used:
L: LINKS / LEFT
R: RECHTS / RIGHT
C: CENTER

Transmission of numbers

Numbers or characters shall be transmitted as follows:

Number or Characters	Pronunciation DE	Pronunciation EN
0	null	SI-RO
1	ein(s)	WOAN
2	zwo	TUH
3	drei	TRI

4	vier	FOHR
5	fünf	FEIF
6	sechs	SIX
7	sieben	SEW-en
8	acht	ÄIT
9	neun	NEIN-er
10	zehn	TEN
11	elf	IH-LE-WEN
12	zwölf	TWELF
Hundred	hundert	HAN-red
Thousand	tausend	TAU-SÄND
.	Komma	DES-SI-MEL
,	Komma	DES-SI-MEL
/	Schrägstrich	DEIÄGONEL

All numbers used in the transmission of **aircraft call signs, headings, runways, wind direction, and speed** are to be transmitted by pronouncing each digit separately.

Flight levels are to be transmitted by pronouncing each digit separately, except for values that are whole hundreds.

The **altimeter setting** is to be transmitted by pronouncing each digit separately, except for a setting of 1,000 hPa, which is to be transmitted as "EIN TAUSEND / ONE THOUSAND."

All numbers used in the transmission of **transponder codes** are to be transmitted by pronouncing each digit separately, except that transponder codes that consist of whole thousands are to be transmitted by pronouncing the digit in the thousands place and adding the word "TAUSEND / THOUSAND."

All numbers used for transmitting information other than those mentioned above are to be transmitted by pronouncing each digit separately, except that all numbers that include whole hundreds and thousands are to be transmitted by pronouncing each digit in the number of hundreds or thousands, and adding the words "HUNDRED" or "THOUSAND," respectively. Combinations of thousands and whole hundreds are to be transmitted by pronouncing each digit in the thousands place and adding the word "THOUSAND," followed by the number of hundreds and the word "HUNDRED."

When transmitting information about the **direction to an object** or **traffic by clock positions**, the information is to be transmitted by pronouncing the numbers together, e.g., "ZEHN UHR / TEN O'CLOCK," "ELF UHR / ELEVEN O'CLOCK."

If the VHF radio channel spacing is 25 kHz or 8.33 kHz, **three digits after the decimal point** are to be spoken in radio communication. If the second and third digits after the decimal point are zero, it is sufficient to speak only the first digit after the decimal point.

Examples:

118.000 EINS EINS ACHT KOMMA NULL
118.000 ONE ONE EIGHT DECIMAL ZERO
118.005 EINS EINS ACHT KOMMA NULL NULL FÜNF
118.005 ONE ONE EIGHT DECIMAL ZERO ZERO FIVE
118.010 EINS EINS ACHT KOMMA NULL EINS NULL
118.010 ONE ONE EIGHT DECIMAL ZERO ONE ZERO
118.025 EINS EINS ACHT KOMMA NULL ZWO FÜNF
118.025 ONE ONE EIGHT DECIMAL ZERO TWO FIVE
118.050 EINS EINS ACHT KOMMA NULL FÜNF NULL
118.050 ONE ONE EIGHT DECIMAL ZERO FIVE ZERO
118.100 EINS EINS ACHT KOMMA EINS

Transmission of Visibility Values

Values for **flight visibility, ground visibility, and runway visual range** are to be transmitted as follows:

1. in meters for visibility less than 5 km;
2. in kilometers for visibility of 5 km or more, but less than 10 km;
3. as "visibility 10 kilometers" for visibility of 10 km or more.

Phrases

EN	DE	Meaning
AFFIRM	POSITIV	Yes
APPROVED	GENEHMIGT	Permission for proposed action granted
BREAK BREAK	TRENNUNG TRENNUNG	I hereby indicate the separation between messages transmitted to different aircraft in a very busy environment
CLEARED	FREI	Authorised to proceed under the conditions specified
CONFIRM	BESTÄTIGEN SIE	I request verification of (clearance, instruction, action, information
CONTACT	RUFEN SIE	Establish communications with . . .

CORRECT	KORREKT	True or Accurate
CORRECTION	BERICHTIGUNG	An error has been made in this transmission (or message indicated). The correct version is . . .
DISREGARD	IGNORIEREN SIE	Ignore
NEGATIVE	NEGATIV	No / Permission not granted / Not capable
RECLEARED	FREIGABEÄNDERUNG	A change has been made to your last clearance and this new clearance supersedes your previous clearance or part thereof
REPORT	MELDEN SIE	Pass me the following information
REQUEST	ERBITTE	I would like to know/I wish to obtain
ROGER	VERSTANDEN	I have received all of your last transmission. *Note: Under no circumstances to be used in reply to a question requiring READ BACK or a direct answer in the affirmative (AFFIRM) or negative sense (NEGATIVE).*
SAY AGAIN	WIEDERHOLEN SIE	Repeat all, or the following part, of your last transmission
STANDBY	STANDBY	Wait and I will call you *Note: The caller would normally reestablish contact if the delay is lengthy. STANDBY is not an approval or denial.*
UNABLE	NICHT MÖGLICH	I cannot comply with your request, instruction or clearance *Note: UNABLE is normally followed by a reason*
WILCO	WILCO	I understand your message and will comply with it

Tower - Phraseology

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(G: Controller; A:Pilot)

Phrases in *asterisks* may be used additionally

Clearance Delivery
A: München Delivery, DLH414, information A, request startup and enroute clearance.
G: DLH414**,** München Delivery, ***CHECK INFORMATION** B**,*** **STARTUP APPROVED, CLEARED TO** Stuttgart, ***VIA*** RIDAR 4E **DEPARTURE**, **FLIGHT PLANNED ROUTE, CLIMB VIA SID TO FL070**, **squawk** 1000 (Hinweis: Der Pilot wird nur auf die ATIS hingewiesen wenn er keinen oder einen falschen ATIS Buchstaben genannt hat.)
A: DLH414**, STARTUP APPROVED, CLEARED TO** Stuttgart, ***VIA*** RIDAR 4E **DEPARTURE**, **FLIGHT PLANNED ROUTE, CLIMB VIA SID TO FL070**, **squawk** 1000
G: DLH414**, READBACK CORRECT, CONTACT APRON** 121.775
G: DEIPA**, ANLASSEN ERLAUBT, PISTE** 26L 26R**, QNH** 1013
G: DEIPA**, STARTUP APPROVED, RUNWAY** 26L 26R**, QNH** 1013

Pushback	
Phraseology EN	**Comment**
A: DLH414, position 208, request pushback	
G: DLH414**, PUSHBACK APPROVED,** facing north	
G: DLH414, **PUSHBACK APPROVED,** facing north blue line	If no line is mentioned, the yellow center line is meant
G: DLH414**, PUSHBACK APPROVED,** facing north, extend pushback to disconnect abeam position 210	Pilot should extend the pushback until the cockpit is abeam position 210

Taxi	
Phraseology EN	**Phraseology DE**
A: DLH414, request taxi	**A:** DEIPA, erbitte Rollen
G: DLH414**, TAXI TO** entry N3 **VIA** W2	**G:** DEIPA, **ROLLEN SIE ZUM** entry N3 **ÜBER** W2
G: DLH414, **ADVISE ABLE TO DEPART FROM RUNWAY** 26L, **INTERSECTION** B12	**G:** DLH414, **IST ABFLUG VON PISTE** 26L, **ROLLBAHNEINMÜNDUG** B12 **MÖGLICH**
G: DLH414**, TAXI TO HOLDING POINT RUNWAY** 26R **VIA** N A13	**G:** DEIPA, **ROLLEN SIE ZUM ROLLHALT PISTE** 26R **ÜBER** N A13
G: DLH414, **TAXI TO HOLDING POINT RUNWAY** 26R **VIA** N A13, **HOLD AT** CAT II/III **HOLDING POINT**	**G: DEIPA, ROLLEN SIE ZUM ROLLHALT PISTE** 26R **ÜBER** N A13, **HALTEN SIE AM** CAT II/III **ROLLHALT**
G: DLH414**, TAXI TO** gate 224A**, VIA** CENTER 2	**G:** DEIPA, **ROLLEN SIE ZUR** Position 224A **ÜBER** CENTER 2
G: DLH414, **TAXI TO** Genearal Aviation Terminal, **VIA** CENTER 2	**G:** DEIPA, **ROLLEN SIE ZUR** Abstellfläche der Allgemeinen Luftfahrt **ÜBER** CENTER 2
G: DLH414**, TAXI VIA** W2**, HOLD SHORT OF** D1	**G:** DEIPA, **ROLLEN SIE ÜBER** W2, **HALTEN SIE VOR** D1
G: DLH414, **HOLD POSITION**	**G:** DEIPA, **HALTEN SIE POSITION**
G: DLH414, **GIVE WAY TO** Lufthansa A320 crossing right to left on D1, **BEHIND TAXI TO** entry N3 **VIA** W2	**G:** DEIPA, **WEICHEN SIE/LASSEN SIE** Lufthansa A320 kreuzend von rechts nach links auf D1 **AUS/VORBEI, DAHINTER ROLLEN SIE ZUM** entry N3 **über** W2

Note on taxi clearance: By definition, the phrase TAXI never exists without a directly following VIA or TO.

- **TAXI VIA** means "taxi via....". However, an instruction must ALWAYS contain a clearance limit. So if you start your instruction with TAXI VIA, there must always be a HOLD SHORT in the same instruction that describes the clearance limit.
- **TAXI TO** describes the clearance limit up to which the pilot may taxi. If you start your instruction with TAXI TO, there must always be a VIA in the same instruction that describes the route to the pilot.

So don't forget the little words TO and VIA and be aware of their meaning.

Tower	
Phraseology EN	**Phraseology DE**
A: DLH414, ready for departure	**A:** DEIPA, abflugbereit
G: DLH414**, LINE UP RUNWAY** 26R	**G:** DEIPA, **ROLLEN SIE ZUM ABFLUGPUNKT PISTE** 26R

G: DLH414**, WIND** 230 **DEGREES** 4 **KNOTS, RUNWAY** 26R **CLEARED FOR TAKEOFF**	**G:** DEIPA, **WIND** 230 **GRAD** 4 **KNOTEN, PISTE** 26R **START FREI**
G: DLH414**, WIND** 230 **DEGREES** 4 **KNOTS, RUNWAY** 26R **CLEARED TO LAND**	**G:** DEIPA, **WIND** 230 **GRAD** 4 **KNOTEN, PISTE** 26R **LANDUNG FREI**
G: DLH414**, WIND** 230 **DEGREES** 4 **KNOTS, RUNWAY** 26R **CLEARED TOUCH AND GO**	**G:** DEIPA, **WIND** 230 **GRAD** 4 **KNOTEN, PISTE** 26R **FREI ZUM AUFSETZEN UND DURCHSTARTEN**
G: DLH414**, WIND** 230 **DEGREES** 4 **KNOTS, CLEARED LOW APPROACH RUNWAY** 26R	**G:** DEIPA, **WIND** 230 **GRAD** 4 **KNOTEN, FREI ZUM TIEFANFLUG PISTE** 26R
G: DLH414, **BEHIND LANDING/AFTER DEPARTING** Lufthansa A320 2 miles final, **LINEUP RUNWAY** 26L **BEHIND**	**G:** DEIPA, **HINTER LANDENDEM/ABFLIEGENDEN** Lufthansa A320 2 Meilen Endanflug **ROLLEN SIE ZUM ABFLUGPUNKT PISTE** 26L **DAHINTER**
G: DLH414, **REPORT LANDING/DEPARTING** Lufthansa A320 2 miles final **IN SIGHT**	**G:** DEIPA, **MELDEN SIE LANDENDEM/ABFLIEGENDEN** Lufthansa A320 2 Meilen Endanflug **IN SICHT**
G: DLH414, **GO AROUND**	**G:** DEIPA, **STARTEN SIE DURCH**

Tower VFR

Phraseology EN	Phraseology DE	Comment
G: DEIPA**, ENTER CONTROLLZONE VIA** H1 H2**, RUNWAY** 26R 26L, **QNH** 1013	G: **DEIPA**, **FLIEGEN SIE IN DIE KONTROLLZONE ÜBER** H1 H2, **PISTE** 26R 26L, **QNH** 1013	The pilot is not yet cleared for the traffic circuit. If he receives no further clearance, he flies the published holding procedure.
G: DEIPA, **JOIN** *RIGHT* **TRAFFIC CIRCUIT RUNWAY** 26L	**G:** DEIPA, **FLIEGEN SIE IN DIE** *RECHTS*__PLATZRUNDE PISTE__ 26L	Clearance to enter the (right) traffic circuit.
G: DEIPA, **JOIN** *RIGHT* **DOWNWIND RUNWAY** 26L	**G:** DEIPA, **FLIEGEN SIE IN DEN** *RECHTEN* **GEGENANFLUG PISTE** 26L	Clearance to enter the (right) downwind. The pilot is now automatically cleared for the remaining parts of the traffic circuit.
G: DEIPA, **JOIN FINAL RUNWAY** 26L	**G:** DEIPA, **FLIEGEN SIE IN DEN ENDANFLUG PISTE** 26L	
G: DEIPA, **EXTEND DOWNWIND, STANDBY FOR BASE**	**G:** DEIPA, **VERLÄNGERN SIE GEGENANFLUG, WARTEN SIE AUF QUERANFLUG**	The pilot must remain on the downwind until he receives a further instruction from the controller.
G: DEIPA**, NUMBER TWO FOLLOW** B737 2 MILES FINAL **TRAFFIC IN FINAL** RWY26L**,** CAUTION WAKE TURBULENCE	G: DEIPA, **NUMMER ZWO FOLGEN SIE** B738 IM 2 MEILEN ENDANFLUG **IN DEN ENDANFLUG PISTE** 26L, VORSICHT WIRBELSCHLEPPEN	If an extended downwind is instructed, this phrase can be used to request the pilot to turn into the final approach by himself after approaching traffic. The addition CAUTION WAKE TURBULENCE shall be used if the two flights needed to be separated by wake turbulence separation

G: DEIPA, **ORBIT** left/right	**G:** DEIPA, **KREISEN SIE** links/rechts	The pilot shall orbit at the current position until he receives a further instruction.
G: DEIPA, **MAKE A left/right THREE SIXTY**	**G:** DEIPA, **MACHEN SIE EINEN VOLLKREIS links/rechts**	The pilot should make one orbit at the current position and then continue with the previous clearance.
G: DEIPA, **AFTER TOUCH AND GO** leave controllzone via H2 H1	G: **DEIPA, NACH DEM AUFSETZEN UND DURCHSTARTEN** verlassen sie die Kontrollzone über H2 H1	
G: DEIPA, **LEAVE CONTROLZONE VIA** H2 H1	G: **DEIPA, VERLASSEN SIE DIE KONTROLLZONE ÜBER** H2 H1	
G: DEIPA, **RIGHT TURN APPROVED**	G: **DEIPA, RECHTSKURVE GEHMNEMIGT**	Right turns must be instructed, otherwise the pilot will only fly left turns

Approach / Center - Phraseology

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G: Controller

Level instructions	
Phraseology EN	**Phraseology DE / Comment**
G: CLIMB/DESCEND TO (level)	
G: CLIMB/DESCEND TO (level) **TO REACH** (level) **AT** (or BY) (time or significant point)	
G: CLIMB/DESCEND TO (level) **AT** (number) **FEET PER MINUTE** [OR GREATER (or OR LESS)]	
G: *CONTINUE* **CLIMB VIA SID TO** (level)	*This requires the aircraft to:* *1. Climb to the cleared level in accordance with published level restrictions;* *2. Follow the lateral profile of the procedure; and* *3. Comply with the published speed restrictions or ATC-issued speed control Instructions as applicable.* *A clearance containing rates of climb cancels all published level and speed restrictions of the SID. If there are no remaining published level and/or speed restrictions on the SID, the phrase CLIMB (level) shall be used.*

G: CLIMB VIA SID TO (level), **CANCEL LEVEL RESTRICTION(S) AT** (point(s))	*This phraseology means that:* *1. The lateral profile of the procedure continue to apply and* *2. Speed or level restrictions which have not been referred to will continue to apply* *Phraseologies for variations to lateral profile of the SID:* *a) PROCEED DIRECT (waypoint), or* *b) further vectoring instructions* *These phraseologies mean that:* *Speed and level restrictions associated with the bypassed waypoints are cancelled.* *A clearance containing rates of climb cancels all published level and speed restrictions of the SID. If there are no remaining published level and/or speed restrictions on the SID, the phrase CLIMB (level) shall be used.*
G: CLIMB UNRESTRICTED TO (level)	*The clearance UNRESTRICTED means that the pilot is not obliged to comply with the level and speed restrictions of the SID* *up to the cleared level. A speed limit due to the airspace class is not cancelled.* *A clearance containing rates of climb cancels all published level and speed restrictions of the SID. If there are no remaining published level and/or speed restrictions on the SID, the phrase CLIMB (level) shall be used.*
G: DESCEND VIA STAR (or TRANSITION) **TO** (level)	*This requires the aicraft to:* *1. Descend to the cleared level in accordance with published level restrictions;* *2. Follow the lateral profile of the procedure; and* *3. Comply with published speed restrictions or ATC-issued speed control instructions as applicable* *A clearance containing rates of descend cancels all published level and speed restrictions of the STAR. If there are no remaining published level and/or speed restrictions on the STAR/TRANSITION, the phrase DESCEND (level) shall be used.*

G: DESCEND VIA STAR (or TRANSITION) **TO** (level) **CANCEL LEVEL** (or SPEED RESTRICTION(S)) [**AT** (waypoint)]	*This phraseology means that:* *1. The lateral profile of the procedure continues to apply and* *2. Speed or level restrictions which have not been referred to will continue to apply.* *Phraseologies for variations to lateral profile of the STAR:* *a) PROCEED DIRECT (waypoint), or* *b) VECTORING* *These phraseologies mean that:* *Speed and level restrictions associated with the bypassed waypoints are cancelled.* *A clearance containing rates of descend cancels all published level and speed restrictions of the STAR. If there are no remaining published level and/or speed restrictions on the STAR/TRANSITION, the phrase DESCEND (level) shall be used.*
G: DESCEND UNRESTRICTED TO (level)	*The clearance 'UNRESTRICTED' means that the pilot is not obliged to apply to the level and speed restrictions of the STAR/* *TRANSITION down to the cleared level. Speed restrictions due to the airspace class are not cancelled.* *A clearance containing rates of descend cancels all published level and speed restrictions of the STAR. If there are no remaining published level and/or speed restrictions on the STAR/TRANSITION, the phrase DESCEND (level) shall be used.*
G: WHEN READY, CLIMB (or DESCEND) **TO** (level), **REPORT LEAVING** (or REACHING or PASSING) (level)	
G: WHEN READY, CLIMB (or DESCEND) **TO** (level) **TO REACH** (level) **AT** (or BY) (time or significant point)	
G: RESUME NORMAL RATE OF DESCENT / CLIMB	
G: STOP CLIMB (or DESCENT) **AT** (level)	
G: CONTINUE CLIMB (or DESCENT) **TO** (level)	
G: MAINTAIN (number) **FEET** (or FLIGHT LEVEL (level))	**G: HALTEN SIE** (Zahl) **FUSS** (oder FLUGFLÄCHE (Flughöhe))

G: CROSS (significant point) **AT** (number) **FEET** (or FLIGHT LEVEL (level)) [OR ABOVE (or BELOW)]	**G: ÜBERFLIEGEN SIE** (markanter Punkt) **IN** (Zahl) **FUSS** (oder **FLUGFLÄCHE** (Flughöhe)) [ODER HÖHER (oder TIEFER)]

Course instructions

Phraseology EN	Phraseology DE / Comment
G: TURN LEFT (or RIGHT) **HEADING** (three digits) [reason]	
G: TURN LEFT (or RIGHT) (number of degrees) **DEGREES** [reason]	This instruction is used for turn BY a certain amount of degrees. For example: Aircraft is on HDG 040, controller instructs TURN LEFT 10 DEGREES, new HDG is then 030.
G: FLY HEADING (three digits), **WHEN ABLE PROCEED DIRECT** (name) (significant point)	
G: STOP TURN HEADING (three digits);	
G: LEAVE (significant point) **HEADING** (three digits)	
G: CONTINUE PRESENT HEADING	
G: - DUE TRAFFIC - FOR SPACING - FOR DELAY - FOR DOWNWIND (or BASE, or FINAL)	*When it is necessary to specify a reason for the above instructions, the following phraseologies should be used. In Germany a reason should be given with the initial vectoring instruction.*
G: PROCEED TO (significant point)	
G: PROCEED DIRECT (significant point)	
G: PROCEED VIA (route and / or significant point(s))	
G: PROCEED VIA FLIGHT PLANNED ROUTE	

G: PROCEED VIA (distance) DME ARC direction) **OF** (name of DME station)	
G: CLEARED (designator) **ARRIVAL** (or TRANSITION)	

Speed instructions

Phraseology EN	Phraseology DE / Comment
G: REPORT SPEED	
G: MAINTAIN (number) **KNOTS** [OR GREATER (or OR LESS)] [UNTIL (significant point)];	
G: MAINTAIN MACH (number) [OR GREATER (or OR LESS)] [UNTIL (significant point)]	
G: MAINTAIN PRESENT SPEED	
G: FLY SPEED MACH (number) / (figures) **KNOTS**	
G: INCREASE (or REDUCE) **SPEED TO** (number) **KNOTS** [OR GREATER (or OR LESS)]	
G: INCREASE (or REDUCE) **SPEED BY** (number) **KNOTS**	
G: RESUME NORMAL / PUBLISHED SPEED	
G: NO *ATC* SPEED RESTRICTIONS	

Identifikation / Squawk

Phraseology EN	Phraseology DE / Comment
G: IDENTIFIED / RADAR CONTACT	**G: IDENTIFIZIERT / RADARKONTAKT**
G: SQUAWK [(code)]	
G: RESET SQUAWK [(mode)] (code);	**G: SETZEN SIE NEU SQUAWK** [(Modus)] (Code)
G: CONFIRM SQUAWK (code)	**G: BESTÄTIGEN SIE SQUAWK** (Code)
G: SQUAWK (followed as necessary by) **–** *(code)* *AND* **IDENT**; **– CHARLIE** **– STANDBY** **– VFR** **– MILITARY VFR**	**G: SQUAWK** (followed as necessary by) – *(Code)* *UND* **IDENT** **– CHARLIE** **– STANDBY** **– VFR** **– MILITARY VFR**

Approach instructions General

Phraseology EN	Phraseology DE / Comment
G: EXPECT / VECTORING *FOR* (type of approach) **RUNWAY** (designator)	Not necessary when broadcasted via ATIS
G: CLEARED ILS APPROACH RUNWAY (number) **G: CLEARED GLS** APPROACH RUNWAY (number) **G: CLEARED RNP** APPROACH RUNWAY (number) **G: CLEARED VOR** APPROACH RUNWAY (number) **G: CLEARED NDB** APPROACH RUNWAY (number)	These instructions allow the pilot to descend to the final approach altitude published in the charts and then follow the approach
G: MAINTAIN (altitude) **UNTIL GLIDE PATH INTERCEPTION**	With this addition to the approach clearance, the pilot must maintain his cleared altitude until he can follow the glide path. In other words, he may not descend to the final approach altitude on his own.
G: INTERCEPT (LOCALISER or [GLS/RNP/MLS] [FINAL] APPROACH [COURSE] or radio aid) [RUNWAY (number)] [REPORT ESTABLISHED]	This instruction allows the pilot to follow the localizer. However, he must not descend any further than previously cleared.
G: TURN LEFT (or RIGHT) **HEADING** (three digits) [TO INTERCEPT] or [REPORT ESTABLISHED]	

G: EXPECT VECTOR ACROSS THE (LOCALISER or [GLS/RNP/MLS] FINAL APPROACH COURSE or radio aid) (reason) **G: THIS TURN WILL TAKE YOU THROUGH** THE (LOCALISER or [GLS/RNP/MLS] FINAL APPROACH COURSE or radio aid) (reason) **G: TAKING YOU THROUGH** THE (LOCALISER or [GLS/RNP/MLS] FINAL APPROACH COURSE or radio aid) (reason)	

Approach instructions for parallel runway operations

Phraseology EN	Phraseology DE / Comment
G: CLEARED ILS APPROACH **RUNWAY** (number) LEFT (or RIGHT) **G: CLEARED GL**S APPROACH **RUNWAY** (number) LEFT (or RIGHT) **G: CLEARED RNP** APPROACH **RUNWAY** (number) LEFT (or RIGHT) **G: CLEARED VOR** APPROACH **RUNWAY** (number) LEFT (or RIGHT) **G: CLEARED NDB** APPROACH **RUNWAY** (number) LEFT (or RIGHT)	These instructions allow the pilot to descend to the final approach altitude published in the charts and then follow the approach
G: YOU HAVE CROSSED THE LOCALISER (or GLS/RNP/MLS FINAL APPROACH COURSE). TURN LEFT (or RIGHT) **IMMEDIATELY AND RETURN TO THE LOCALISER** (or GLS/RNP/ MLS FINAL APPROACH COURSE) [RUNWAY (number)]	
G: TURN LEFT (or RIGHT) (number) **DEGREES** (or HEADING) three digits) IMMEDIATELY TO AVOID TRAFFIC [DEVIATING FROM ADJACENT APPROACH], **CLIMB TO** (altitude)	When an aircraft enters the NTZ (No transgression zone)

Approach instructions SRA

Phraseology EN	Phraseology DE / Comment
G: THIS WILL BE A SURVEILLANCE RADAR APPROACH RUNWAY (number) **TERMINATING AT** (distance) **FROM TOUCHDOWN, OBSTACLE CLEARANCE ALTITUDE** (or HEIGHT) (number) **FEET CHECK YOUR MINIMA** [IN CASE OF GOAROUND (instructions)]	

G: COMMENCE DESCENT NOW [TO MAINTAIN A (number) DEGREE GLIDE PATH]	
G: (distance) **FROM TOUCHDOWN ALTITUDE** (or HEIGHT) **SHOULD BE** (numbers and units)	
G: CHECK GEAR DOWN [AND LOCKED]	At 4 NM
G: APPROACH COMPLETED [CONTACT (unit)]	

VFR in C und D(non-CTR)

Phraseology EN	Phraseology DE / Comment
G: CROSSING [OF AIRSPACE CHARLIE (or DELTA)] **APPROVED VIA** (route) (number) **FEET** (or FLIGHT LEVEL (level))	**G: DURCHFLUG** [VON LUFTRAUM CHARLIE (oder DELTA)] **GENEHMIGT ÜBER** (Flugstrecke) (Zahl) **FUSS** (oder FLUGFLÄCHE (Flughöhe))
G: YOU ARE ENTERING AIRSPACE CHARLIE (or DELTA)	**G: SIE FLIEGEN IN LUFTRAUM CHARLIE** (oder DELTA) **EIN**
G: PROCEED ON RADIAL (three digits) **OF** (name of VOR) **TO** (significant point)	**G: FLIEGEN SIE AUF RADIAL** (drei Ziffern) **VON** (Name der VOR) **BIS** (markanter Punkt)
G: MAINTAIN (number) **FEET** (or FLIGHT LEVEL (level))	**G: HALTEN SIE** (Zahl) **FUSS** (oder FLUGFLÄCHE (Flughöhe))
G: [AFTER PASSING (significant point)] **CLIMB** (or DESCEND) **TO** (level) **AND MAINTAIN BLOCK** (level) **UNTIL** (level)	**G:** [NACH ÜBERFLIEGEN VON (markanter Punkt)] **STEIGEN** (oder SINKEN) **SIE AUF** (Zahl) **FUSS** (oder FLUGFLÄCHE (Flughöhe)) **UND HALTEN SIE HÖHENBLOCK** (Flughöhe) **BIS** (Flughöhe)
G: LEAVE AIRSPACE CHARLIE (or DELTA) **DIRECTION** (or HEADING (three digits), or **AT** (number) **FEET** (or FLIGHT LEVEL (level)) [(reason)]	**G: VERLASSEN SIE LUFTRAUM CHARLIE** (oder DELTA) **RICHTUNG** (oder STEUERKURS (drei Ziffern), oder **IN** (Zahl) **FUSS** (oder FLUGFLÄCHE (Flughöhe)) [(Begründung)]
G: YOU ARE LEAVING AIRSPACE CHARLIE (or DELTA)	**G: SIE VERLASSEN LUFTRAUM CHARLIE** (oder DELTA)

Holding

Phraseology EN
G: CLEARED (or PROCEED) **TO** (significant point, name of facility or fix) [**MAINTAIN** (or CLIMB or DESCEND TO) (level)] **HOLD** [(direction)] **AS PUBLISHED**
G: EXPECT APPROACH CLEARANCE (or FURTHER CLEARANCE) **AT** (time) **G: NO DELAY EXPECTED** **G: EXPECTED APPROACH TIME** (time) **G: REVISED APPROACH TIME** (time) **G: DELAY NOT DETERMINED** (resons)
G: 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]

Traffic information

Traffic information is needed whenever air traffic control wants or needs to inform a pilot about other traffic. Traffic information should contain precise information to make it as easy as possible for the pilot to identify the mentioned traffic.

Structure of a traffic information

Traffic information is always structured according to the same principle.

> [Unknown] Traffic, [type of traffic], [aircraft type], [position of traffic], [distance to traffic], [direction of movement of traffic], [level of traffic], [any other information].

Type of Traffic

In this component, you can state the flight rule of the traffic. If you have no precise knowledge about the traffic, i.e., only a primary radar target on the radar screen, "Unknown traffic" is used. If you have knowledge of the aircraft type of the traffic, [Type of traffic] is usually omitted.

> IFR traffic / VFR traffic

Aircraft type

In this part, you provide information about the aircraft type of the traffic. The common abbreviation (e.g., EM DI ELEVEN for an MD11, AIRBUS THREE-TWENTY for an A320) should be used, alternatively, the ICAO code (PAPA ALPHA THREE FOUR for a PA34) can be used. For helicopters, the term "Helicopter" suffices.

> Airbus A320 / Boeing 777 / Cessna 172 / ...

Position of Traffic

In this part, you provide information about the position of the traffic relative to the addressed pilot using clock positions. If the traffic is currently in a turn, it is recommended to state the position using a cardinal direction or its location (e.g., east, on final approach).

> 12 o'clock / 3 o'clock / 6 o'clock / North-west of your position / ...

Distance to Traffic

In this part, you provide information about the distance of the traffic relative to the addressed pilot in nautical miles.

> 3 miles / x miles / ...

Direction of movement of Traffic

In this part, you optionally provide information about the direction of movement of the traffic relative to the addressed pilot.

> Same direction / opposite / crossing XXX to XXX / ...

Level of Traffic

In this component, you optionally provide information about the vertical level of the traffic. To prevent IFR traffic from interpreting this information as a clearance, it is recommended to state the altitude relative to the addressed pilot instead of the true altitude. If the Mode C readout is not confirmed, the addition "indicating" or "not confirmed" is used.

> (indicating) 1000ft below / 2000ft above / same level/altitude / ...

Any other Information

In this part, you optionally provide other information about the traffic, for example, if the traffic is descending/climbing or is in a traffic circuit. In principle, anything that could be helpful to the addressed pilot can be mentioned here, but it should be limited to relevant information.

Examples

Station	Phraseology
ATC	DLH123, traffic, Boeing 738, 1 o'clock, 10 miles, same level, crossing right to left, you will pass 6 miles behind.
ATC	DLH123, VFR traffic, 12 o'clock, 7 miles, opposite, indicating 100ft below (not confirmed), report in sight.

ATC	DLH123, unknown traffic, 10 o'clock, 5 miles, crossing left to right, type and level unknown.
ATC	DEHHH, IFR Verkehr, Airbus 320 im 4 Meilen Endanflug, Flughöhe 2700ft
ATC	DEIPA, VFR traffic, Piper Seneca, 2 o´clock 3 miles, crossing left to right, Altitude 2000ft
ATC	DEXXX, IFR traffic, Airbus 359 departing runway 26R, turning left after departure.

Efficiency on the Frequency

The controller is responsible for the frequency, as only they know who needs to receive which instruction next. For this reason, the controller must be calm, friendly, but also assertive / self-confident on the frequency.

Use Standard Phraseology

For all radio communications, the rule is: as short as necessary and as precise as possible. This is exactly what this phraseology is designed for. Avoid filling words and your own creations that the pilot does not understand.

Speak clearly, distinctly, and slowly

Every controller and pilot has their own pronunciation and dialect. Therefore, it is even more important to speak clearly, distinctly, and slowly so that the other side can understand. Otherwise, it may lead to radio communications having to be repeated multiple times until the other side understands. This significantly increases the frequency load, leaving less time for other important instructions.

Standby

The use of "standby" should be done with caution, as this often has further implications. The more pilots that are waiting, the more pilots will eventually need to be called back, while more and more pilots will be contacting you during high traffic situations. Thus, while "standby" initially helps, it only postpones the problem depending on the traffic situation. Eventually, you will be working reactively rather than proactively, just to clear the queue.

If it is foreseeable that the pilot will have to wait longer than 2 minutes for a response, they should always be informed of the reason (e.g., pushing traffic behind) or an approximate waiting time (e.g., standby, call you in 5 minutes or standby, number 5 for clearance). This avoids additional frequency load due to potential inquiries by impatient pilots. Additionally, it is advisable to note which pilots have received a standby (e.g., using ground states or additional plugins) to prevent forgetting them.

Keep Frequency Clear for Time-Critical Instructions

This often requires pre-planning, sometimes beyond one's own area of responsibility, and involves setting of priorities. If you see that a pilot will soon contact you and must immediately receive an instruction (e.g., after crossing a runway or for a turn onto the

ILS), long instructions should not be given at that moment (e.g., IFR Pickup).

Blocked Frequency

On busy frequencies, it often happens that two transmissions are sent simultaneously and block each other. If neither sender can be identified, pilots should be informed with a "blocked." If one pilot can be identified, they can be addressed directly. The same applies to the second pilot.
Tip: Keep the Audio for Vatsim window always on top and look at it to determine both pilots that blocked out each other.

Use of "BREAK BREAK"

Instead of separating two radio transmissions with a "break break" (which is often unnecessary), it is usually easier for the pilot if there is a short pause between transmissions, or if the transmit button is briefly released. In a continuous speech flow, as with the use of this phraseology, one's own callsign can be easily missed because the pilot does not initially feel addressed.

Under no circumstances should a "break break" be used routinely between two transmissions that both require a readback. The risk is too high that the pilots will block each other.