Coordination Phrases Approach / Center

Definitions

In the following chapters some terms are used, which will be explained now.

Upstream/downstream sector

UPSTREAM SECTOR is the previous sector.
DOWNSTREAM SECTOR is the following sector.
In the flight profile of a pilot through the sectors A-B-C would be from the view of B: A = UPSTREAM; C = DOWNSTREAM

COP - Coordination Point or Reference Point

In most cases, the COP is a waypoint near the sector boundary where the handoff occurs. The COP acts as a reference point for both coordination partners. In the lists of most RGs, you will find the designation COPN for an Entry COP (i.e., a COP for an inbound flight) and COPX for an Exit COP (for an outbound flight from the sector).
The COP serves as an orientation during coordination, over which point the aircraft flies in or out. In the VATSIM environment, however, it is often advisable to specify the position because preplanning plays less of a role. Select a sensible position that the other party also knows. There is no point in telling a colleague in Munich that he should look in the direction of Aartalsee. Use, for example, VORs, large aerodromes or jointly known waypoints.

Transfer of control

The point at which CONTROL is transferred for a flight. As a controller, I may only issue instructions that change the trajectory of the flight (e.g., heading/directs, altitude instructions, speed instructions) if I have been handed CONTROL. If no other arrangement has been made verbally or in the LoA, the transfer of control takes place as soon as the aircraft has entered the next sector and has reached half the minimum distance to the common sector boundary. If 3NM separation is required, one has to keep 1.5NM to the border at any time - the same value, which the partner also ensures without coordination. Together you thus arrive at 3NM.

Silent transfer of control

In the Letters of Agreement, the SILENT TRANSFER OF CONTROL defines parameters under which flights can be sent to the receiving sector without prior coordination.

Transfer of communication

≠ Transfer of control! The (time) point at which the frequency is changed. Does not affect control or responsibilities.

Initials

Each controller has their own initials in the real center, i.e., two letters consisting of the first letter of the first and last name, if available. Each coordination is terminated by naming the initials. Accordingly, the initials have the meaning of a "contract signature" for the coordination made and signals to the counterpart that one has nothing more to say. If both parties have named their initials, the telephone conversation is ended.

Approval request

For coordination purposes, there are some keywords that give the coordination partner a rough idea of what is involved when the initial contact is made. One of these keywords is the "Approval Request". This can be used in the following cases.

Direct request (downstream)

For various reasons (pilot's request, efficiency, problem solving in the own sector) it is often helpful to deviate from the route given in the flight plan and to enable a direct flight to a waypoint. Within the own sector, this is of course possible without coordination. However, if a waypoint in the next sector is to be cleared, the permission of the following (downstream) sector must be obtained. This can be done either by the function integrated in Euroscope or verbally.

The verbal coordination is done according to the following scheme:

> APPROVAL REQUEST <COP/position> <call sign>
> DCT <WPT>

Example: Munich hands over Frankfurt arrivals via ASPAT

EDMM	APPROVAL REQUEST ASPAT DLH123 APPROVAL REQUEST 20 MILES EAST OF DKB DLH123
EDGG	Go ahead
EDMM	DIRECT SPESA
EDGG	APPROVED *<initials>* UNABLE *<initials>*
EDMM	*<initials>*

or loosely translated "may I clear DLH123 direct SPESA"

After the initial contact, wait for the "go ahead" of the called sector so that the sector can first look in the direction of the COP/reported position and view the aircraft on the radar and/or in the sector list. If he gives his "Go", the request is made and then accepted or rejected accordingly.

Descending/Climbing (Downstream)

Another principle used in air traffic control, unless other agreements (LoA) have been made, is that there must not be vertical movement at the sector border. This means that during lateral entry/exit, the aircraft must be "at level". This means that any vertical movement when crossing the sector boundary (plus half the minimum distance BEFORE the boundary) requires coordination. This explicitly does NOT concern the transfer of communication but only the sector crossing and thus in most cases the transfer of control. Such coordination is not possible via Euroscope and must therefore always be coordinated verbally.

> APPROVAL REQUEST <COP/position> <call sign>
> CLIMBING <level>
> DESCENDING <level>

Example: According to the LoA, departures from EDDN must have reached FL260 at the waypoint GASKA and be transferred to Langen. For the example, we assume a flight that will not make this agreement on a hot summer day due to poor performance. Therefore, we need to coordinate.

Example:
After LoA, departures from EDDN must have reached FL260 at the waypoint GASKA and be transferred to Langen. For the example, we assume a flight that will not make this agreement on a hot summer day due to poor performance. Therefore, we need to coordinate.

EDMM	APPROVAL REQUEST GASKA RYR123 APPROVAL REQUEST 20 MILES NORTH OF NÜRNBERG AERODROME RYR123
EDGG	Go ahead
EDMM	CLIMBING FL260 (OUT OF FL200)
EDGG	APPROVED *<initials>* UNABLE *<initials>*
EDMM	*<initials>*

"May I send DLH123 climbing FL260?"

In brackets in the coordination it says "OUT OF FL200". This means that the flight is already at least in FL200 at the sector boundary (half the minimum separation value before the boundary). This helps the accepting sector enormously in its traffic planning and decision-making. Assuming only "CLIMBING FL260" is coordinated, the accepting sector must keep all levels from ground to FL260 clear in the corner of the entry - somewhere there RYR123 will enter in climb. If you coordinate OUT OF FL200, EDGG only has to keep the levels between 200 and 260 free.
If EDMM wants to coordinate initially without OUT OF, Langen can/should of course ask from which level the flight will come. This will then result in negotiation, which should produce a mutually satisfactory result. Example:

EDMM	APPROVAL REQUEST GASKA RYR123 APPROVAL REQUEST 20 MILES NORTH OF NÜRNBERG AERODROME RYR123
EDGG	Go ahead
EDMM	CLIMBING FL260
EDGG	OUT OF WHICH LEVEL?
EDMM	OUT OFL FL200
EDGG	I CAN ACCEPT HIM CLIMBING FL240 OUT OF F200 <*initials*>
EDMM	CONSIDER <*initials*> WILCO <*initials*>

The answers CONSIDER and WILCO have the same meaning: the result of the negotiations is implemented by the Upstream Sector.
A few words about "CONSIDER", which at first glance seems a bit confusing. In German, people like to say "CONSIDER" instead of WILCO. This does not mean that one thinks about it, but stands for "CONSIDER IT DONE".

Deviation from coordinated level

If I want to hand off a plane in a different level than agreed in the LoA, this must be coordinated. This can be done either via the Euroscope functions or verbally.

> APPROVAL REQUEST <COP/position> <call sign>
> AT <level>

Example: Munich Radar transfers approaches to Frankfurt with an RFL of 240 or higher at FL240. If Munich wishes to deviate from this, they must coordinate with Langen.

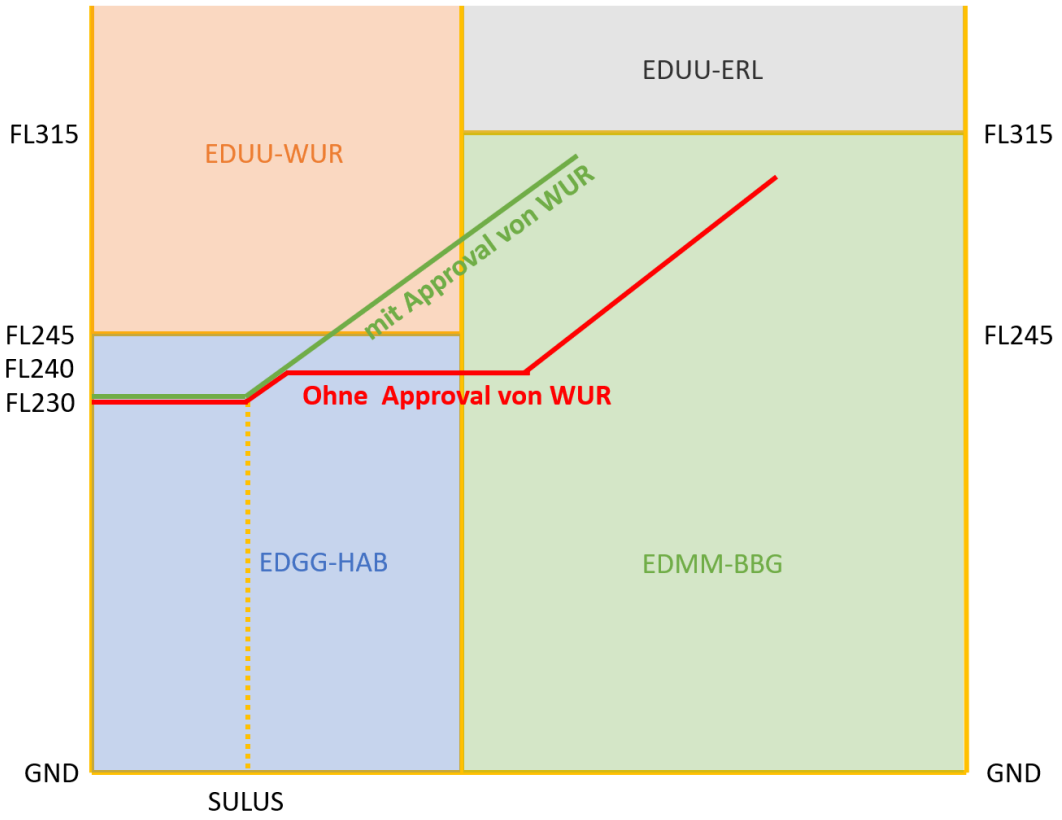
EDMM	APPROVAL REQUEST ASPAT CFG123 APPROVAL REQUEST 20 MILES EAST OF DKB CFG123
EDGG	Go ahead
EDMM	AT FL230
EDUU	APPROVED <*initials*> *UNABLE* <*initials*>
EDMM	<*initials*>

Clearing through third party sectors

If you want to clear an aicraft through a sector that was not involved before, you must of course ask. Here, no COP is applicable, as the flight would not fly through this sector in the normal flight profile. Therefore, the sector concerned has "no details" of the flight, i.e. no information in Eurocope lists and the tag is not classified as concerned. Consequently, there is no standard coordination between the two sectors and no COP exists.

> APPROVAL REQUEST FOR AIRSPACE CROSSING <call sign> <position>
> CLIMB UP TO FLxxx (routing)
> DESCEND DOWN TO FLxxx (routing)

Example: Langen hands over departures from Frankfurt at waypoint SULUS at FL230 to Munich ACC, released for climb to FL240. Munich can initially only allow flights to climb to FL240 and would then have to wait until they are 2.5NM in their own sector. If Munich wants to allow the flight to climb before then, it must be coordinated with Rhein. The whole situation is illustrated again with the sector structure:



To make the green flight path possible, the following must be coordinated:

EDMM	APPROVAL REQUEST FOR AIRSPACE CROSSING CSA123 10 MILES WEST SULUS
EDUU	Go ahead

EDMM	CLIMBING THROUGH YOUR SECTOR (on course to OKG) CLIMBING (UP TO FL 270) (on course to OKG)
EDUU	APPROVED *(*restrictions) *<initials>*
EDMM	*<initials>*

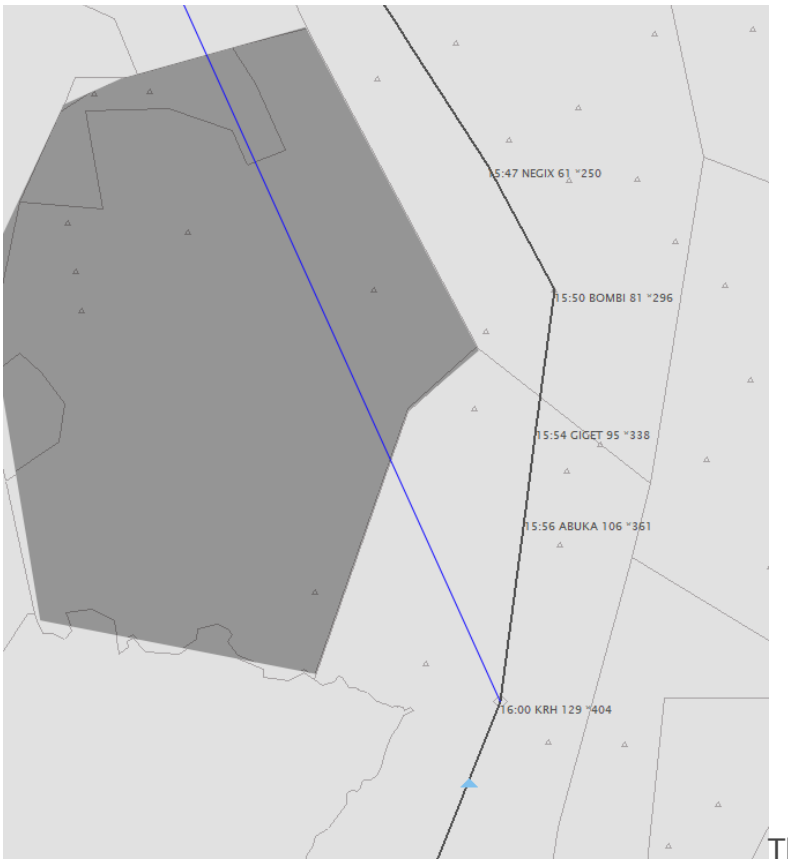
or "may the CSA123 fly through your sector, climbing to FL270 to OKG?

The described case of an airspace crossing is often confused with a release. However, this is clearly an approval request. The release is discussed in one of the following subchapters.

In the event that the previously uninvolved sector could take over an aircraft completely or, in the case of successful coordination, the original downstream sector would be replaced by the third sector, a further addition can be used.

> “ APPROVAL REQUEST FOR ADDITIONAL TRAFFIC AIRBORNE KÖLN <call sign>
> DCT KRH FL250

or "will you take over DLH123A to KRH FL250?"



This also implies that the further coordination downstream lies with the accepting sector.

Less spacing than agreed upon

In the LoAs within Germany, a spacing of 10 miles at the same speed is almost without exception required for a silent transfer of control, as can be seen from the following extract of the LoA between EDGG and EDMM.

> *The following values for silent transfer of control strictly apply for aircraft on same flight level. If possible, they should also be met between aircraft on different flight levels, but with same destination:*
>
> *- If preceding aircraft is on same speed or faster: 10nm*
> *- If succeeding aircraft is faster by 20kts/M0.05 or less: 20nm*
> *- If succeeding aircraft is faster by 40kts/M0.10 or less: 30nm*

For example, if I want to hand over two aircraft at 15 miles, with the following aircraft 30 knots faster, none of the three conditions in the quote are met. I must therefore either apply speed control and hand over the two aircraft at the same speed or coordinate.

> APPROVAL REQUEST <COP/position> <callsign>
> <distance> <speed difference>

Example:

EDMM	APPROVAL REQUEST ASPAT UAE123 AND ETD123 APPROVAL REQUEST 30 MILES WEST DKB UAE123 AND ETD123
EDGG	Go ahead
EDMM	15 MILES SPACING, ETD123 30 KNOTS FASTER
EDUU	APPROVED *(*restrictions) *<initials>* UNABLE *<initials>*
EDMM	*<initials>*

Release

As defined earlier, the TRANSFER OF CONTROL takes place when crossing the sector boundary plus half the radar separation value, unless otherwise specified. If the receiving sector wishes to give instructions changing the trajectory of the flight before the actual TRANSFER OF CONTROL, they require a RELEASE.

A release is a permission from the transferring sector to the receiving sector for the premature assumption of control of a flight.

There are the following types of release:

- RELEASE FOR (RIGHT/LEFT) TURN
  A release for turns allows the receiving sector to turn the aircraft a maximum of 45 degrees prior to the actual transfer of control. The release can be restricted for left or right turns.
- RELEASE FOR CLIMB
  A release for climb allows the receiving sector to instruct a climb or adjust the rate of climb prior to the actual transfer of control.
- RELEASE FOR DESCENT
  A release for descent allows the receiving sector to instruct a descent or adjust the rate of descent before the actual transfer of control.
- (FULL) RELEASE
  A "general release" includes turn, climb and descent release.

A release can be sent directly with the transfer via Euroscope using the Topsky plug-in. If this has not been done and the receiving sector wishes to control the flight before the actual TRANSFER OF CONTROL, the release must be obtained verbally. This is done with the following phraseology:

> “ REQUEST RELEASE <callsign>

EDMM	REQUEST RELEASE (FOR (RIGHT/LEFT) TURNS / FOR CLIMB / FOR DESCENT) DLH123
EDGG	DLH123 RELEASED (FOR (RIGHT/LEFT) TURNS / FOR CLIMB / FOR DESCENT) <initals>
EDMM	<initials>

It is not necessary to name a COP here.

Sometimes the releasing sector still has one or more aircraft, for example 1000ft above, and therefore cannot give a release per se. One possibility, however, is a so-called Release Subject Your Discretion or in short: Release SYD (ES WEI DI). This means that the aircraft is released, but the receiving sector must seperate to a named traffic.

Example:

EDMM	REQUEST RELEASE DLH123
EDGG	DLH123 RELEASED SYD RYR123 overhead Dinkelsbühl on N869, FL200 <initals>
EDMM	<initials>

In the case described, Munich already wants to let DLH123 descend. However, Langen has crossing traffic at FL200 on N869. With this release, Munich can first allow DLH123 to descend to FL210 and as soon as the two aircraft are laterally clear, allow it to descend further.
The important thing with a SYD release is that both coordination partners know who is separating to whom after coordination and, above all, that the receiving sector knows where the restricting traffic is and what they are doing.

Reference

Anything that cannot be handled with an approval request or a release falls under the coordination type "Reference".

The most popular application for this is a request to the upstream sector. Whenever I want a flight to fly into my sector that deviates from the standard, a reference call is made.

EDMM	REFERENCE DKB DLH123 REFERENCE 20 MILES WEST OF DKB DLH123
EDGG	Go ahead
EDMM	REQUEST HIM DIRECT LANDU REQUEST HIM DCT DM424, DESCENDING FL150 REQUEST HIM AT FL210 REQUEST HIM AT SPEED 250 KNOTS
EDGG	CONSIDER *<initials>* WILCO*<initials>* UNABLE *<initials>*
EDMM	*<initials>*

The responses CONSIDER and WILCO have the same meaning: The request is fulfilled by the upstream. Since the Recieving Unit decides on the conditions for entry, a request should only be rejected or renegotiated in exceptional cases. Here, too, common sense should be used to find a solution that suits both partners.
A few words about the "CONSIDER", which at first glance seems somewhat confusing. In German, people like to say "CONSIDER" instead of WILCO. This does not mean to think about it, but stands for "CONSIDER IT DONE".

In some situations, it also makes sense as the sending sector to make a request with the help of a reference call. You then make an open request instead of an approval request:

> Reference <COP/position> <callsign>
> Request higher/lower level

Typically, this is used for a crossover from APP to CTR or from Lower CTR to Upper CTR (or vice versa). Such calls are useful when, due to traffic, the departure/arrivalmust arrive at its actual exit level before a handoff can take place because a crossing over/under has not been made until the appropriate level has been reached. Over a higher/lower level, continuous climb and/or one-stop problem solving is possible.

Departure release

At some airports it is necessary to obtain a so-called Departure Release from the radar station above before each departure, as they are responsible for the separation between IFR arrivals and departures. Whether a release is required can be found in the corresponding tower SOP of the airport.
If a release is required, coordination should proceed as follows:

EDFH TWR	REQUEST RELEASE DLH123
EDGG	DLH123 RELEASED *<initials>* DLH123 RELEASED AFTER LANDING RYR123 *<initials>* DLH123 RELEASED, CLEARANCES EXPIRES AT 1530 *<initials>* DLH123 RELEASED AT 1520 *<initials>* UNABLE, CALL YOU BACK *<initials>*
EDFH TWR	*<initials>*

The release can accordingly either be given with or without restriction, or rejected.

Addendum (not relevant for VATSIM)

In addition to Approval Request, Release and Reference, there are other types of coordination. However, for various reasons, these are neglected on VATSIM. Nevertheless, they will be presented briefly.

Estimate

During an estimate call, squawk, handover level and (entry) time are exchanged. Nowadays, most estimates are automatically exchanged between sectors via flight data systems. However, in the event of a system failure and in some other cases, it is still necessary to verbally phone through this Estimate. As an example, let's take a flight from Frankfurt to Munich and assume that the automatic system is not available and therefore all estimates have to be coordinated verbally: As soon as the flight takes off, the tower calls Departure and reports the departure time. The departure controller and all other controllers along the planned flight path already have flight plan data and a corresponding flight strip (but without times, as the exact departure cannot be predicted). The departure controller then calculates the time of the flight at the COP between departure and centre and passes this on in an estimate conversation:

DFDS	ESTIMATE CINDY DLH123
KNG	A320 to EDDM
DFDS	SQUAWKING 1000, ESTIMATED CINDY 1023 CLIMBING FL130 *<initials>*
KNG	*<initials>*

The matching of aircraft type and destination is used to ensure that you are talking about the same flight and have the same flight plan. Now the centre controller can calculate the time and level at the COP to the next centre and pass this through accordingly.
On VATSIM ESTIMATES are obviously not necessary, as the times are hardly relevant and the data exchange via Euroscope is always ensured.

Estimate - no details

An "Estimate - no details" is a modified form of an estimate where the receiving sector has no flight plan data. This is necessary, for example, in bad weather when a flight has to enter a sector that is not originally on its route. In addition to squawk, time and level, aircraft type, speed, requested level, departure, destination and route are exchanged.

Expedite clearance

An expedite clearance is a "short-term estimate" and has the character of an approval request. If the flight time to the sector boundary is less than a value specified in the agreements, an Expedite Clearance must be coordinated instead of an Estimate.

Revision

A revision is sent if there is an early change in time, level or other parameters.