EDDS - Stuttgart Airport

- [Overview](#)
- [Delivery](#)
- [Ground](#)
- [Tower](#)
- [Arrival](#)

Overview

Stuttgart is a medium-sized and very interesting airport, especially when there's a lot of traffic. With only one runway, preplanning is important to run the airport efficiently. Like in reality, the typical traffic at the airport is a mix of VFR and short to medium haul IFR flights.

Stuttgart is an unrestricted airport. DEL and GND are unrestricted and can be staffed by all controllers with an **S1** rating or higher who have passed the **required moodle courses**. TWR can be staffed by all controllers with an **S2** rating or higher. All radar positions can be staffed by all controllers with an **S3** rating or higher.

> Due to the high amount of complexity of the airport, it is highly recommended that **S1-rated controllers** have gained a great deal of experience at other unrestricted airports before staffing positions at Stuttgart.

Training: Controllers with the S1 rating can staff TWR during their training (active EDDS_TWR solo endorsement required). Controllers with the S2 rating can staff APP positions during their training (active EDDS_APP solo endorsement required - sector NOR not included).

Stuttgart ATC Stations

Station	Station ID	Login	Frequency	Remarks	Endorsement
ATIS	ADS	EDDS_ATIS	126.130	--	--
Delivery	DSC	EDDS_DEL	121.915	--	unrestricted: EDDS CBT Delivery
Ground	DSG	EDDS_GND	118.605	--	unrestricted: EDDS CBT Delivery & EDDS CBT Ground
Tower	DST	EDDS_TWR	118.805	--	unrestricted: no course
VFR Tower	DSTV	EDDS_VFR_TWR	119.055	relief station during high amount of inbound VFR traffic	unrestricted: no course

Sector Stuttgart	STG	EDDS_STG_APP	125.050	primary	unrestricted: no course
Sector Reutlingen	REU	EDDS_REU_APP	119.200	relief station during high amount of traffic in the TMA	unrestricted: no course
Arrival (Feeder)	DSAT	EDDS_F_APP	119.850	--	unrestricted: no course

Controlzone Stuttgart
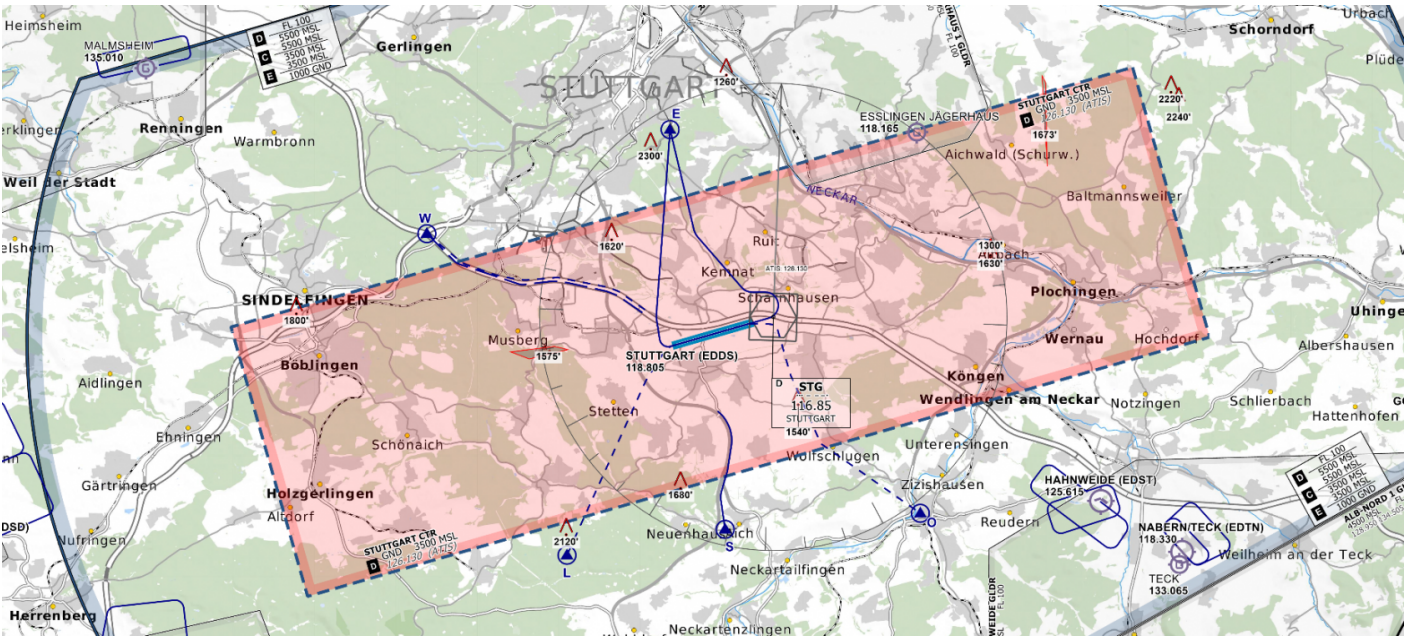
Stuttgart Controlzone (D-CTR) - © openflightmaps.org

Delivery

Stuttgart Delivery is responsible for enroute and startup clearances for all departing IFR aircraft. VFR aircraft have to call Delivery for departure information. **For all departures (IFR and VFR) Stuttgart Delivery is the first station to contact**, except for police helicopters, which may also contact Ground initially.

Enroute Clearance

Delivery shall ensure that the initial climb is set (always 5000ft) and the correct SID is coded into the flightplan. Additionally, Delivery has to make sure that all SID restrictions are adhered to.

Both Arrivals staffed

If both Arrivals are staffed, Delivery needs to inform all south departures (via **ROTWE, SUL, KUNOD, and ABTAL**) to contact 119.200 immediately when airborne as part of the enroute clearance. For all other departures the ATIS remark remains valid and no additional information is required.

> **ATC**: DLH123, revised airborne frequency 119.200.

> Alternatively, to avoid confusion for the pilots, the departure frequency can be completely removed from the ATIS. In this case, Delivery has to **inform all pilots about their respective departure frequency**.

Local IFR

Local IFR flights are possible via **TEDGO** and **STG** but need to be coordinated and **require a startup release by Arrival (STG) or Director (DSAT), if online**. When Director is online, local departures need to be advised with the enroute clearance to contact 119.850 immediately after departure.

> **ATC**: DLH123, revised airborne frequency 119.850.

Departures planning to perform **IFR training at Schwäbisch Hall (EDTY)** also **require a startup release by Arrival (STG)**.

SID Restrictions

To ensure an efficient operation within the upper and lower airspace several restrictions should be met. To solve an invalid route, the pilot usually has to **file a completely new route** (valid routes for many destinations can be found on grd.aero-nav.com).

Waypoint	Restriction	Remark
DKB	only via **N869** or **DEST EDDN, EDTY, EDQ***	
ETASA	only **DEST EDDF, EDFC, ETOU, EDFE**	
GEBNO	only via **Z76** & max. RFL **FL180**	
KRH *Karlsruhe*	max. RFL **FL80 (Mo - Fri)** & only **DEST EDDR, EDRZ, EDSB, ETAR**	**other DEST** via VESID […]
OKIBA	min. RFL **FL200**	
ROTWE	**if via NATOR:** jet only	**reroute props** via SUL Y125 NATOR
STG *Stuttgart*	only **local IFR**	
SUL *Sulz*	**Jet:** only **DEST EDTL, EDNY, LSZH, LSZR**	**reroute jets** via ROTWE Y126 TUBLO N850 NATOR
TAGIK	only **via ABUMO/ASKIK** & max. RFL **FL240**	
TEDGO	only **local IFR** or **DEST ETHL**	

K-SIDs

Departures with designator K require special aircraft navigation capabilities and are **only assigned if specifically requested by the pilot**.

Opposite Departure

If pilots are not able to fulfill the required climb restrictions for their SID or to save taxi time and shorten the departure (especially during 25 operations for outbounds flying to the east), opposite departures against the operating direction are possible. These departures always have to be **coordinated with Tower and Arrival**, need a **startup and departure release by Arrival** and are **only considered upon explicit pilot request**.

An outbound requesting an opposite departure should first be cleared for runway 25 and told to also prepare the appropriate 07 departure.

> **ATC**: Lufthansa 123, cleared to Frankfurt, ETASA4B departure, flight planned route, climb via SID to altitude 5000ft, squawk 1000. **Additionally prepare ETASA2H departure out of runway 07, final runway decision when ready to taxi.**

The final decision on which runway the aircraft will depart out of will be made when the aircraft requests taxi (when it is clearer whether an opposite departure will be possible). This will also not require a startup release by Arrival, but the **decision for the 07 departure has to be coordinated with Tower and Arrival**.

For an opposite departure to be possible, there usually has to be a **gap of at least 10 minutes between two arrivals**. If the outbound will shortly request taxi, but you are unsure whether an opposite departure will be possible, **Arrival can be asked for a "latest airborne time"**, the latest possible time for the aircraft to depart against the operating direction. This information can then be **forwarded to the pilot** and if they are able to depart before this time, a clearance for a 07 departure can be issued.

Datalink Clearance (DCL/PDC)

At Stuttgart Airport we offer Datalink Clearance to the pilots via the **Hoppie System** and the Topsky Plugin. The airport code EDDS should be used.

An example of the DCL message the pilot will receive can be seen below. Due to plugin limitations, the current default setting is "startup approved"; the **Startup option in the DCL window shall be set to "No" for every DCL** as pilots need to request startup separately on frequency. Other DCL messages can be enabled within the Topsky CPDLC settings file manually.

> CLD 2042 230615 EDDS PDC 026 DLH8AL CLRD TO EDDF OFF 25 VIA ETASA4B SQUAWK 1000 ADT MDI NEXT FREQ 121.915 ATIS P REPORT READY ON 121.915

Startup

When startup clearance cannot be given immediately or the pilot is not ready for startup within the next 5 minutes, the pilot needs to stay on Delivery frequency until they receive their startup clearance. To create an efficient startup flow, the **vACDM plugin should be used**. If the vACDM plugin is not used, a startup clearance can be issued roughly every 2-3 minutes.

Runway Capacity

To ensure smooth operations and an acceptable level of workload for following stations, **Delivery has to make sure the startup rate is regulated to the current airport capacity**. The following table shows the maximum capacity of Stuttgart airport.

Normal operations	
max. movements per hour	48
max. departures per hour	40 *(with no arrivals)*
max. arrivals per hour	40 *(with max. 8 departures)*
LVP	
max. movements per hour	14

Maximum capacity **might have to be adjusted downwards** in case of high complexity (e.g. high level of differing aircraft performances for inbound and/or outbound traffic) or a high amount of VFR movements.

> **Maximim active Startup Approvals** at the same time (status SUG until DEP) per runway (use vSID startup counter):
> **RWY 07:** 8 - 10 (due to limited space at the holdingpoint)
> **RWY 25:** 10 - 12

Outbound Taxi Times

The average time between startup approval and takeoff clearance is **5-10 minutes during 07 operations** and **15-20 minutes during 25 operations**. More accurate times are available through use of the vACDM plugin.

Ground

Stuttgart Ground is responsible for all ground movements at the airport (including pushback).

Parking positions

Stands are automatically assigned according to airline and aircraft type. Cargo and US military aircraft (other military aircraft park at an appropriate stand in the North, usually at the GAT if they are small enough) are parked in the Southern part of the airport.

Stands 40 - 56 are **taxi out positions**, so no pushback is required. Stands **61 - 64** are **available for taxi out if the opposite stand is not occupied**. If necessary, aircraft may taxi through stands 40 - 56. Only stands 9 - 16 have jetways.

Relocated stands

During construction works, stands 40 - 48 were relocated. This means that, depending on their scenery, **pilots might take the wrong stand**. The automatic stand assignment is based on the current real world layout.

Pushback

Distance between simultaneous pushbacks

At least two stands have to be between two simultaneously pushing aircraft. This can be reduced to one or even no stand by issuing special pushback instructions. The following example will explains these special pushback instructions.
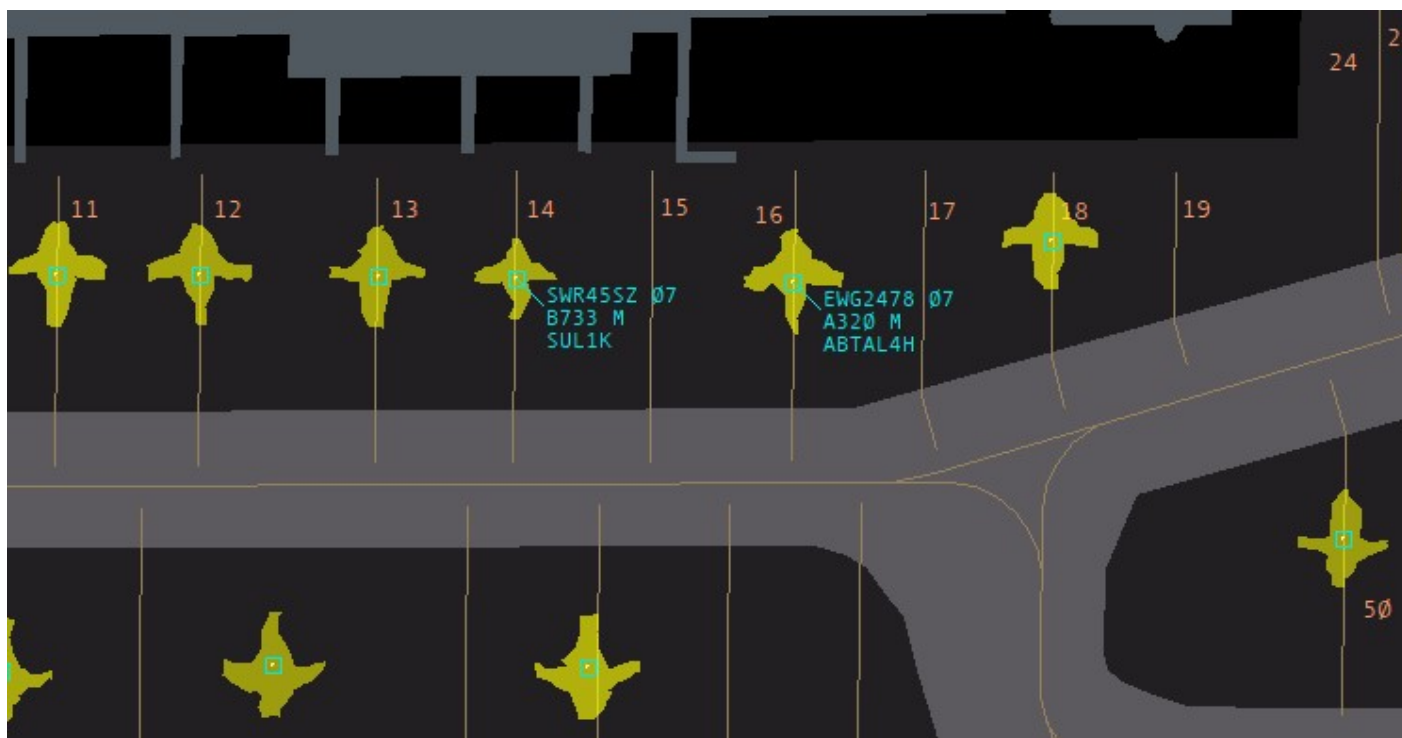
SWR45SZ and EWG2478 have both requested pushback but there is only one stand between them

Assuming both aircraft shall push back facing east, the following pushback instructions will allow for simultaneous pushback.

if SWR45SZ pushes first	SWR45SZ is instructed to make a long pushback once SWR45SZ is aligned with the taxiway, EWG2478 is instructed to make a normal pushback
if EWG2478 pushes first	EWG2478 is instructed to make a short pushback once EWG2478 has finished pushing back, SWR45SZ is instructed to make a normal pushback

If there is no stand between the two aircraft, a simultaneous pushback is **only possible with the scenario in which SWR45SZ pushes first**; EWG2478 then has to also make a short pushback.

Orange line

The orange line at stands 71-75 allows pushback of aircraft with a **maximum wingspan of 36m** to allow simultaneous taxi operations of aircraft with a maximum wingspan of 36m on N. For pushbacks on this orange line, there are **mandatory pushback directions** according to the table below (pushbacks onto N can still face both directions).

- **71 and 72:** facing west
- **73:** facing west or east
- **74 and 75:** facing east

When stands 71A or 74A are occupied, the orange line is not available for pushbacks. Additionally, orange line pushbacks are **not available for stands 71A and 74A**.

Taxi

Taxiway N is always used opposite to the direction of the active runway. In 25 configuration, N is therefore used for departing traffic, in 07 configuration for arriving traffic. Taxiway S is always used opposite to N.

General Aviation aircraft are usually sent to intersection C (25 operations) or G (07 operations).

Vacating Traffic

Tower will give the initial turn onto N or S after vacating according to the current standard taxi direction. The handoff will take place thereafter.

Runway Crossing

Runway crossings can only be conducted between K and Y. Traffic can either be sent to Tower for the crossing or remain on Ground frequency, depending on the traffic situation (during high traffic, it may be easier to send the aircraft to Tower for a more efficient crossing).

If the aircraft remains on Ground frequency, **Tower has to release the crossing** and Ground has to inform Tower once the runway is clear again. The following communication helps to keep Tower informed on the status of the crossing.

> *Traffic is cleared to cross:*
> **Ground (to Tower):** Crossing in progress.
>
> *Traffic is clear of the runway:*
> **Ground (to Tower):** Crossing complete.

Taxiway Z

Taxiway Z west of taxiway Y **should only be used for military aircraft**. Depending on the amount of traffic, deviations are possible. The **extended centerline** may only be crossed on Z under the following circumstances:

| 07 operations	crossings always have to be released by Tower
25 operations (CAT I)	**aircraft < 14m height** (*all Light and Medium aircraft*): Tower informed about crossing **aircraft ≥ 14m height**: crossing released by Tower
25 operations (LVP)	**aircraft < 6m height** (*most smaller business jets*): Tower informed about crossing **aircraft ≥ 6m height**: crossing released by Tower

Code F Aircraft

Due to wingspan restrictions on most parts of the Northern apron, **special taxi procedures are necessary for code F aircraft**.

During **07 operations**, outbound traffic can simply depart via intersection K or Y, but inbound traffic requires a **special routing via S**. Due to wingspan restrictions on other exits, these aircraft will have to vacate via B or A. They can't turn immediately onto S from those intersections, but instead need to first taxi via N and then switch to S at D.
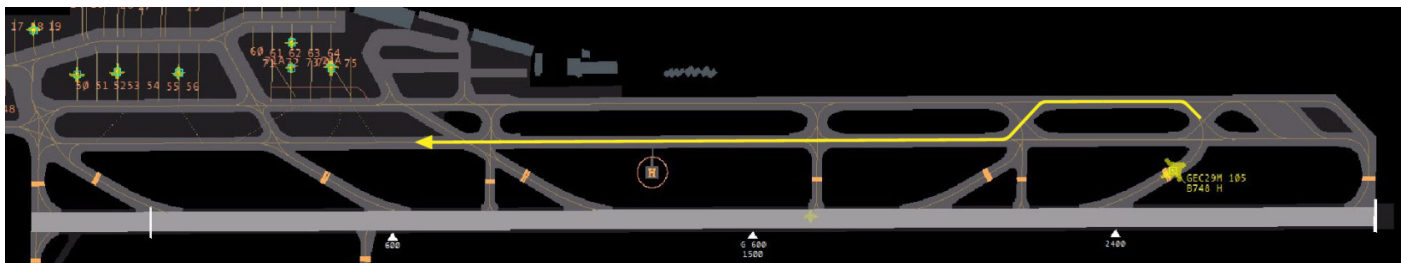
During **25 operations**, outbound traffic has to **taxi via S, opposite to the standard direction** and switch to N at D. This means that inbound traffic can't be sent left onto S by Tower - there are multiple possible solutions to this, but the easiest one is for the Tower controller to hand off inbounds holding short of S if there could be a conflict.
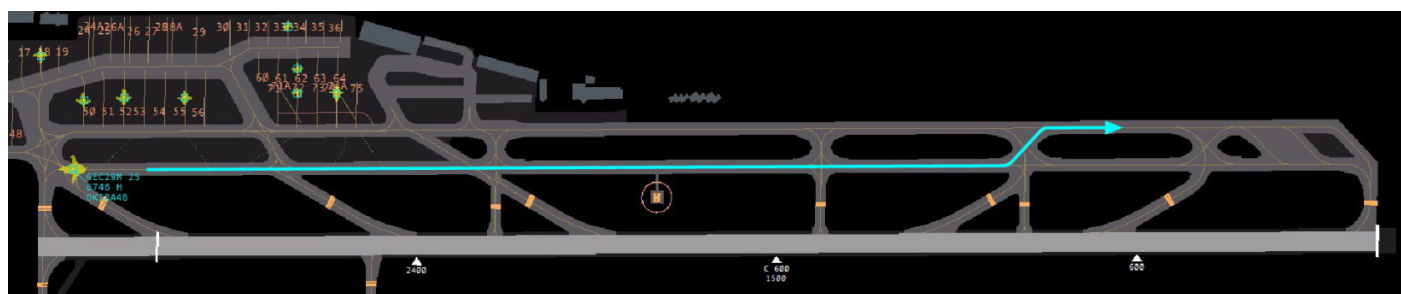
The **handling of an inbound code F aircraft during 25 operations depends on the current traffic**. During periods of low traffic, the aircraft can be allowed to vacate the runway via Y, but during periods of high traffic it might make more sense to instruct the aircraft to vacate to the right via F or H and later cross the runway at K.

Code F aircraft can be parked on the Northern apron despite the wingspan restrictions. The available parking positions on the Northern apron for these aircraft types are **71A and 74A**. Inbound aircraft have to taxi into the stand directly from S while outbound aircraft have to be pushed onto S.

Cargo Traffic

Cargo traffic should primary taxi to the cargo positions via Y. **Inbounds from runway 25** can vacate via W (depending on wingspan) or Y, while **inbounds from runway 07** need to taxi via N or S and K to cross runway 07. During **high traffic 07 operations**, a crossing on Z might be more efficient.

Ground Movement Strategies

While the **best strategy always depends on the individual situation**, the following paragraphs give an overview over the most useful strategies which are also regularly used in the real world.

Roundabout

During **07 operations**, inbound traffic usually switches from N to M via H, so that L2 and L3 can be used for outbound traffic. Whether traffic pushing back from stands 9-19 should push back facing east- or westbound depends highly on the traffic situation. However, during high traffic situations it **usually makes more sense make all pushbacks facing west** to keep all traffic on M moving in the same direction.
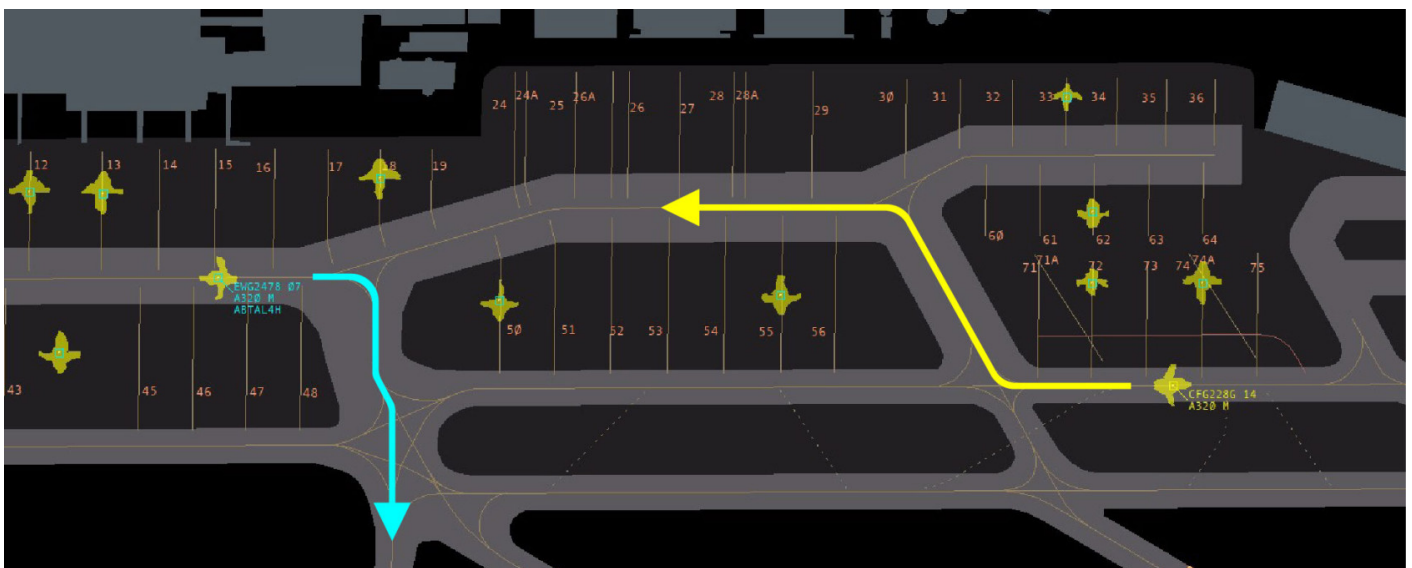
CFG228G (inbound for stand 14) is instructed to taxi via H and M, while EWG2478 (outbound from stand 16) taxis via L2 and K

As the **apron can get crowded really quickly during 07 operations**, it can make sense to move outbounds from the Northern apron to the holding point via Z and Y. Keep in mind that crossings on Z always need a release from Tower during 07 operations!

During **25 operations**, outbound traffic often switches from M to N via H so that L2 and L3 can be used for inbounds. If there is a lot of outbound traffic, it **might make sense to also use L2 for outbounds**; keep in mind that you will then have to merge the traffic streams again at H, though.

Outbound Sequencing at K

During high outbound traffic situations with 07 operations, it is **good practice to only send aircraft through to the holding point once they have reported ready for departure**. A good strategy for ensuring this is to **instruct aircraft to hold short of K** (if coming from O, N, or S) **or of N** (if coming from L2). Then, once a pilot has reported ready, they are instructed to continue to the holding point and to contact Tower.

> **ATC**: EZY47RJ, taxi via N, hold short of K, report ready for departure.
> **Pilot**: Taxi via N, hold short of K, wilco, EZY47RJ.
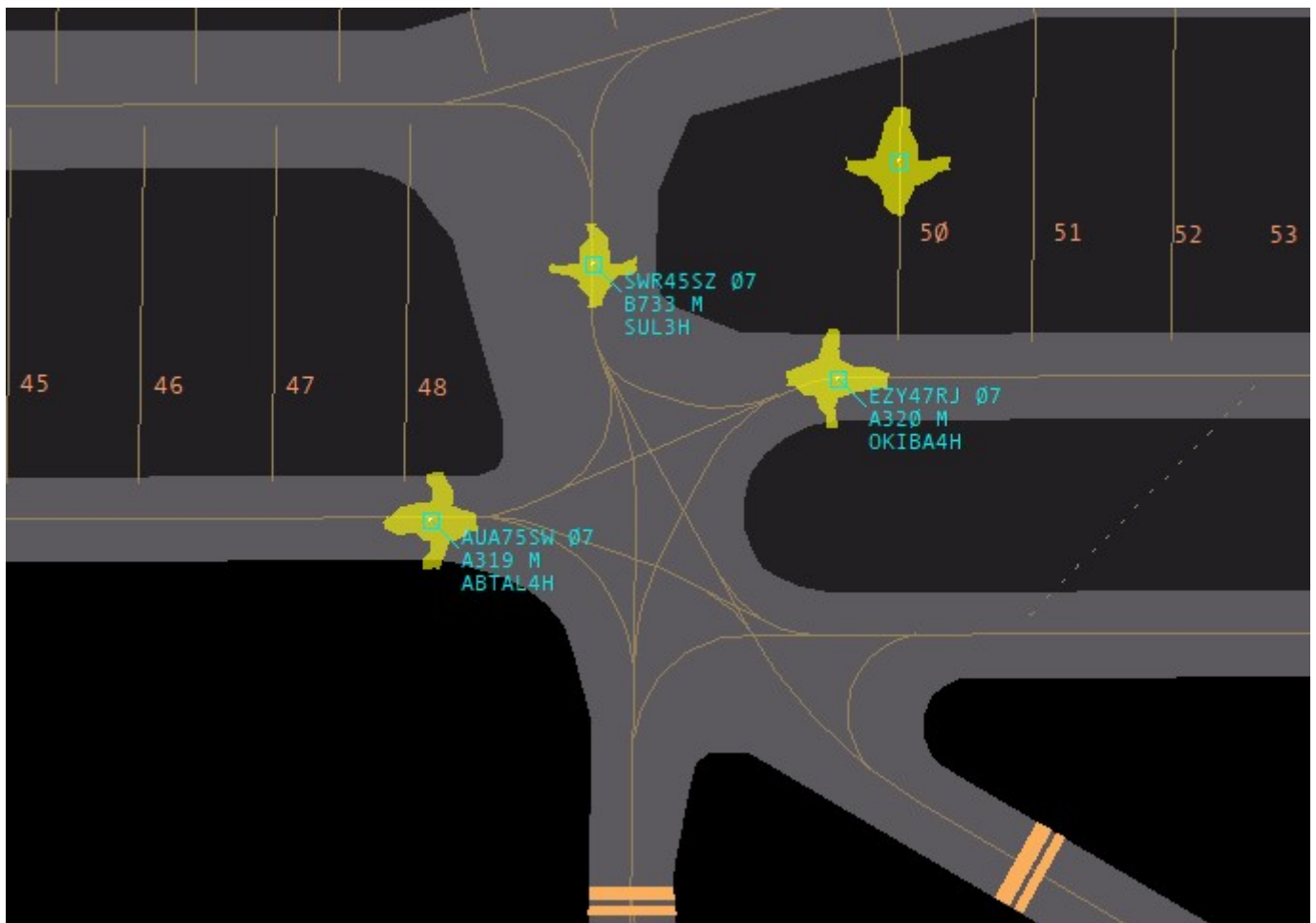
three aircraft holding short of K/N

> **Pilot**: SWR45SZ, ready for departure.
> **ATC**: SWR45SZ, taxi to holding point runway 07 via K and contact Tower 118.805.
> **Pilot**: SWR45SZ, taxi to holding point runway 07 via K and contacting Tower 118.805.
>
> *SWR45SZ taxis forward to the holding point and switches to Tower.*
>
> **Pilot**: EZY47RJ, also ready for departure.
> **ATC**: EZY47RJ, taxi to holding point runway 07 via K and contact Tower 118.805.
> **Pilot**: Taxi to holding point runway 07 via K and contact Tower 118.805, EZY47RJ.
>
> *EZY47RJ taxis forward to the holding point and switches to Tower.*

As there are no further aircraft currently taxiing towards the holding point, there is **no need to wait for AUA75SW to report ready for departure to Ground** once SWR45SZ and EZY47RJ have been moved to the holding point.

De-Icing

Stuttgart has four deicing pads. **Deicing operations are only conducted on those deicing pads**. Aircraft always have to **enter the deicing pad from N**. For exiting the deicing pad, the procedures are as follows:

- **DP1**: westbound via S
- **DP2**: eastbound via S
- **DP3**: westbound via S
- **DP4**: eastbound via S

During 25 operations, it is also possible to allow aircraft that have been deiced on DP2 to make a sharp left turn and join N by crossing H. There are guidance lights for the pilots to follow, but there is **no dedicated taxiway**. If you want to use this procedure, you should give a very detailed instruction on how to leave the deicing pad in order to **make sure pilots understand how the procedure works**.

> **ATC**: DLH123, make a left turn, cross taxiway H to join N, thereafter taxi to holding point runway 25 via N and A.

Restrictions

Each deicing pad has a **maximum wingspan limit** according to the table below.

Deicing Pad	Wingspan limit
DP1	Code E (max. 65 m) except B747 and AN124 *(e.g. A359)*
DP2	Code F (max. 80 m) *(e.g. A388)*

DP3	Code C (max. 36 m) *(e.g. B738)*
DP4	Code C (max. 36 m) *(e.g. B738)*

During deicing operations, the **relevant sections of taxiway S are closed for taxi operations**:

- **DP1/DP2**: between I and H
- **DP3/DP4**: between H and F

Additionally, depending on the length of aircraft on the deicing pads, the **relevant sections of N have different wingspan restrictions** according to the table below.

Length of aircraft on deicing pad	Wingspan restriction on N
< 50 m *(e.g. A310)*	max. 60 m *(e.g. B742)*
50 - 60 m *(e.g. A332)*	Code D (max. 52 m) *(e.g. B788)*
60 - 65 m *(e.g. A339)*	max. 42 m *(e.g. B701)*
65 - 70 m *(e.g. A124)*	Code C (max. 36 m) *(e.g. B738)*
> 70 m *(e.g. B748)*	max. 24 m *(e.g. CRJ7)*

General Aviation Terminal (GAT)

The GAT itself is uncontrolled. Ground only assigns the GAT exits.

Exit 1 can be used for aircraft with a wingspan up to **22 m** while **Exits 2 and 3** can be used for aircraft with a wingspan up to **29 m**. **Multi-engine aircraft and jets** shall always use **Exit 2 or 3**. Aircraft parked at the **Southern stands on Apron GA3** can also taxi directly onto N.

Apron GA2 is only available for aircraft with a **MTOW of 2000 kg** or below (D-Mxxx, D-Exxx and D-Gxxx). **Apron GA3** can be used for every aircraft with a maximum **wingspan of 29 m** and a **length of 30.3 m**.
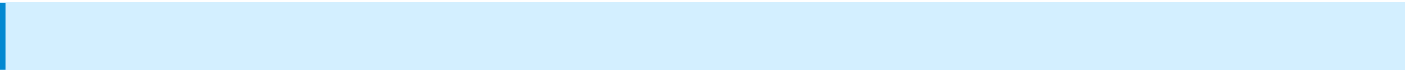
During recent real world construction work in the GAT area, the Exits have been renamed and repositioned. While these changes are now complete and the new names are available in the latest charts, **most pilots will not have up to date sceneries**. Due to this, both Ground ASRs will use the old layout but with updated Exit names.

Keep in mind that **some pilots may not be able to use Exit 3 due to their scenery**, so it is good practice to ask them if they are able before assigning it.

Tower

Stuttgart Tower is responsible for the runway and traffic within the Stuttgart CTR.

> Please also **check the [EDDS Arrival SOP](#)** to familiarize yourself with Arrival procedures relevant for Tower operations to enable the necessary coordination with Approach.

General

Operating direction

Runway in use is based on the direction of the wind (METAR and TAF) and general weather conditions. While there is technically **no preferred runway direction** at Stuttgart, 25 is normally used whenever conditions allow.

Taxiway Z

Taxiway Z is **controlled by Ground**. To avoid low altitude overflights on short final during 07 operations and ILS interference during 25 operations, crossings of some high aircraft **on Z between O and R** require **approval by Tower** to cross the extended centerline according to the rules below. Ground has to inform Tower of crossings that don't require approval as well. If the restrictions are not met, the **aircraft on final has to go around**.

Height	Restriction
07 operations	
any	sensitive area has to be clear when traffic is within 2 NM final
25 operations	
> 14 m (CAT1)	traffic must be able to proceed without ILS guidance within 4 NM final
> 6 m (LVP)	sensitive area has to be clear when traffic is within 4 NM final
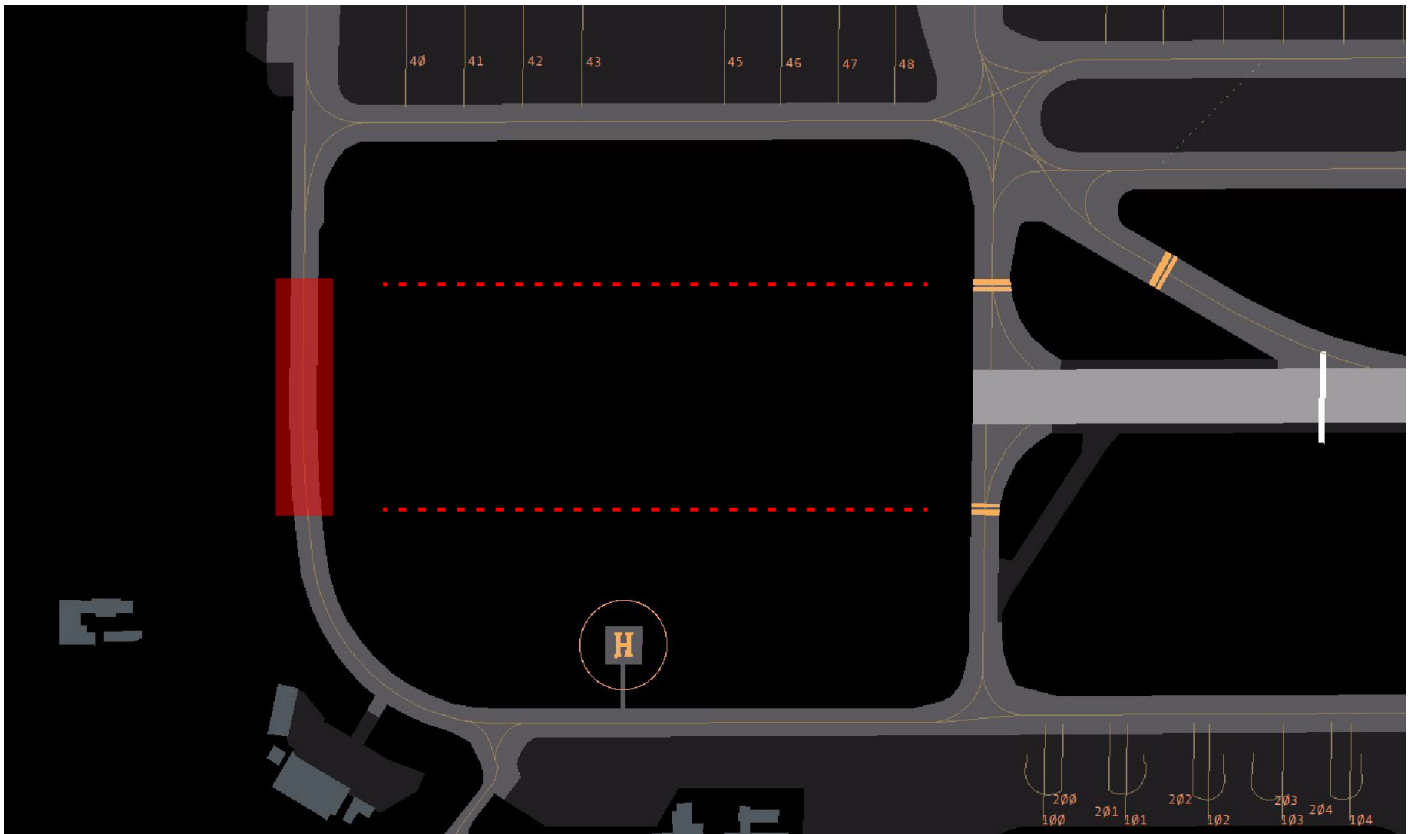
Additionally, during 25 operations, Tower shall **inform aircraft on final about potential ILS interference** from crossings on Z that require approval.

> **ATC:** Lufthansa 123, expect short term ILS interference by Airbus A320 crossing on Z.

Outbound Traffic

Intersection Departures

Pilots always need to be asked if they are able for any intersection except full length. **Smaller aircraft** are usually sent to intersection C (25 operations) or G (07 operations).

Bypass Area

If outbound traffic is not ready for departure, it can wait at bypass area P1 or P2 **(max. B739/A321)**. The bypass area also makes it possible to change the departure sequence when the preceding traffic is instructed to hold short of S and the succeeding traffic to taxi to the holding point via P1 or P2 and S.

Separation

Stuttgart Tower is responsible for separation until the aircraft reaches the initial climb altitude.

During 07 operations, special attention must be paid to aircraft on **K-SIDs departing after traffic on a H-SID that also makes a right turn to the West after takeoff (ROTWE, STG, SUL, and TEDGO)**. To ensure separation, Tower has two options:

- departure release by the appropriate Langen Radar sector
- guaranteed minimum 1000ft vertical separation (e.g. due to climb rate or if the H-SID reaches FL60 before the K-SID reaches 4000ft)

Opposite Departures

Departures against the current operating direction always require a **departure release** by Stuttgart Director (DSAT), if online, and otherwise by Langen Radar (STG).

A rule of thumb for when such a release can usually be expected is when the next inbound is **at least 20 NM from touchdown**. Due to other factors, a release might still be granted later or not anymore, though.

Visual Departures

To increase efficiency, Tower can utilize visual departures for **prop and turboprop aircraft up to 5.7t MTOM**. These have to be **coordinated with Arrival and accepted by the pilot**. Separation always has to be ensured.

> **ATC:** DEABC, advise able to accept visual departure.
>
> **ATC:** DEABC, when airborne turn right heading 340, maintain visual reference to the terrain until passing 3500ft, climb 5000ft, remain on tower frequency.

SID	Heading
07 North	350
07 South	160
25 North	340
25 South	200

The handoff to Arrival takes place when the **aircraft has passed the MVA**.

Inbound Traffic

Vacating Traffic

Tower shall give the initial turn onto taxiway N or S when vacating. This will ensure an efficient traffic flow and prevent blocking the runway exits with traffic holding during the frequency change. The handoff should take place after the instruction to turn on N or S.

Missed Approaches

By default missed approaches are flown as published, deviations are only possible if necessary to ensure separation and Arrival has to be informed as soon as possible. Once separation is ensured the aircraft is handed off to Stuttgart Director (DSAT) if online, and otherwise to Langen Radar (STG).

After a missed approach, the next IFR departure requires a **departure release**.

VFR Traffic
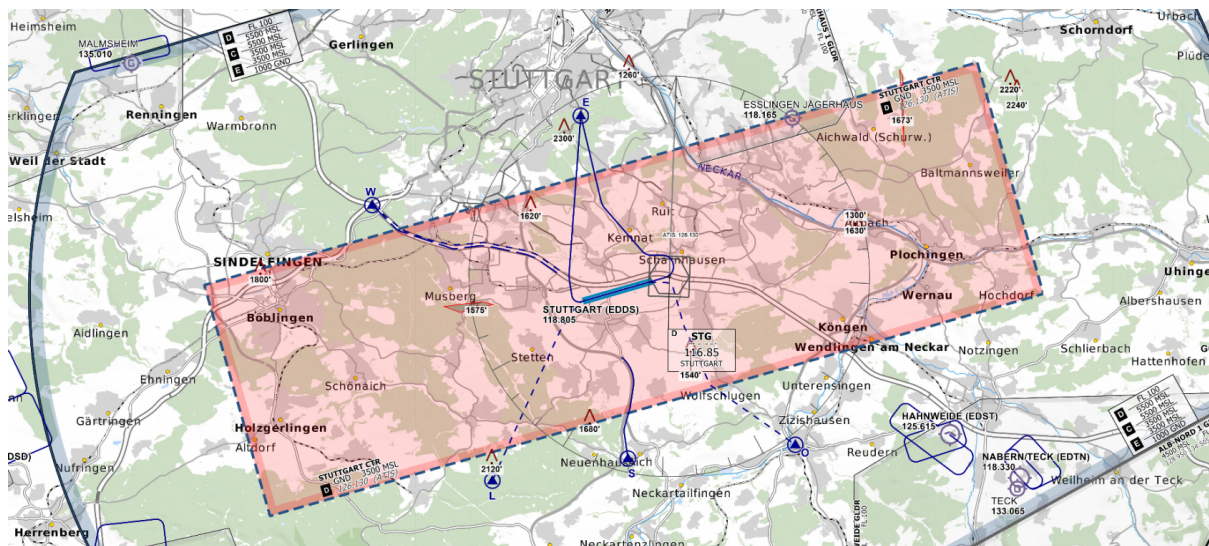
Stuttgart Controlzone (D-CTR) - © openflightmaps.org

Stuttgart has a D-CTR from GND to 3500 feet AMSL. VFR traffic circuits can be flown North and South of the airport.

Reporting points

The following mandatory reporting points exist around the airport:

Reporting point	Use	Location
W	**Entry/Exit** from/to the NW	highway intersection A8 and A81
E	**Entry/Exit** from/to the NE	between Fernsehturm Stuttgart and Fernmeldeturm Stuttgart

L	**Exit** to the SW *25 operations*	Fernmeldeturm Waldenbuch/Dettenhausen
S	**Entry** from the S	Aichtalviadukt (B27)
O	**Exit** to the SE *07 operations*	Neckarbrücke Nürtingen

VFR Tower

Stuttgart has a VFR Tower that is **responsible for incoming VFR traffic**. If this position is staffed, VFR pilots entering the CTR initially contact this controller. The VFR Tower will then give instructions on how to enter the CTR as well as inform the pilot about the QNH and the active runway. The pilots are then handed off and instructed to report the mandatory reporting point to Stuttgart Tower (DST) who is then responsible for all further instructions.

After coordination with Tower, traffic only crossing the CTR may remain on the VFR Tower frequency.

> VFR Tower has to **keep a close eye on the general traffic situation** to gauge which VFR requests can be accommodated and when VFR inbounds have to be delayed.

SVFR

The **maximum altitude for SVFR** traffic within the CTR is 3000ft AMSL.

Helicopter Operation

Stuttgart has two helipads. Helipad North is located south of taxiway S, between taxiway F and taxiway E. Helipad South is located west of the threshold of runway 07 and north of the military apron. **Helicopters must use the helipads or the runway for takeoff/landing**.

Auto-Handoff

Stuttgart utilizes an auto-handoff procedure for IFR departures where **Tower will not hand off outbounds to the approach controller**. Make sure to set the correct departure frequency in the ATIS.

> Outbounds should contact APP **immediately when airborne** unless explicitly told to remain on Tower frequency.

Arrival

Stuttgart Arrival covers not only Stuttgart (EDDS) but also Karlsruhe/Baden-Baden (EDSB) and Lahr (EDTL) when Strasbourg Approach (LFST_APP) is offline, as well as the uncontrolled airfield Schwäbisch Hall (EDTY), which has instrument procedures.

> Please also **check the EDDS Tower, Ground, and Delivery SOPs** to familiarize yourself with Tower procedures relevant for Arrival operations to enable the necessary coordination with the ground stations.

Sector Splits

Stuttgart Tower shall be informed immediately about **any changes in sector configuration** (e.g. DSAT is opening or closing).

Arrival

Sector Stuttgart (STG) is the Northern arrival and the **primary station**. It is responsible for the Northern half of the sector. This means it covers EDTY as well.

Sector Reutlingen (REU) is the Southern sector and responsible for the Southern half. This means it covers EDSB and EDTL as well when LFST_APP is offline.

**Before REU can be staffed, Stuttgart Director (DSAT) has to be online.**

Director

Stuttgart Director does not have a separate sector. The handover from the respective Arrival to Director should take place at the latest on downwind. The **handover altitudes between Arrival and Director have to be coordinated**, e.g. 5000ft in the South and FL60/FL70 (depending on the transition level) in the North.

During a constant arrival stream on both downwinds, Arrival should hand over traffic with **16 NM or greater spacing per downwind** to enable Director to create an efficient final.

Departure

Stuttgart does not have a Departure position. If both approach sectors are staffed, REU gets all departures to the South (ROTWE, SUL, KUNOD, and ABTAL), while STG gets all departures to the North (KRH, VESID, TAGIK, ETASA, OKIBA, GEBNO, and DKB).
Traffic departing via TEDGO and STG is handed off directly to Director by Tower.
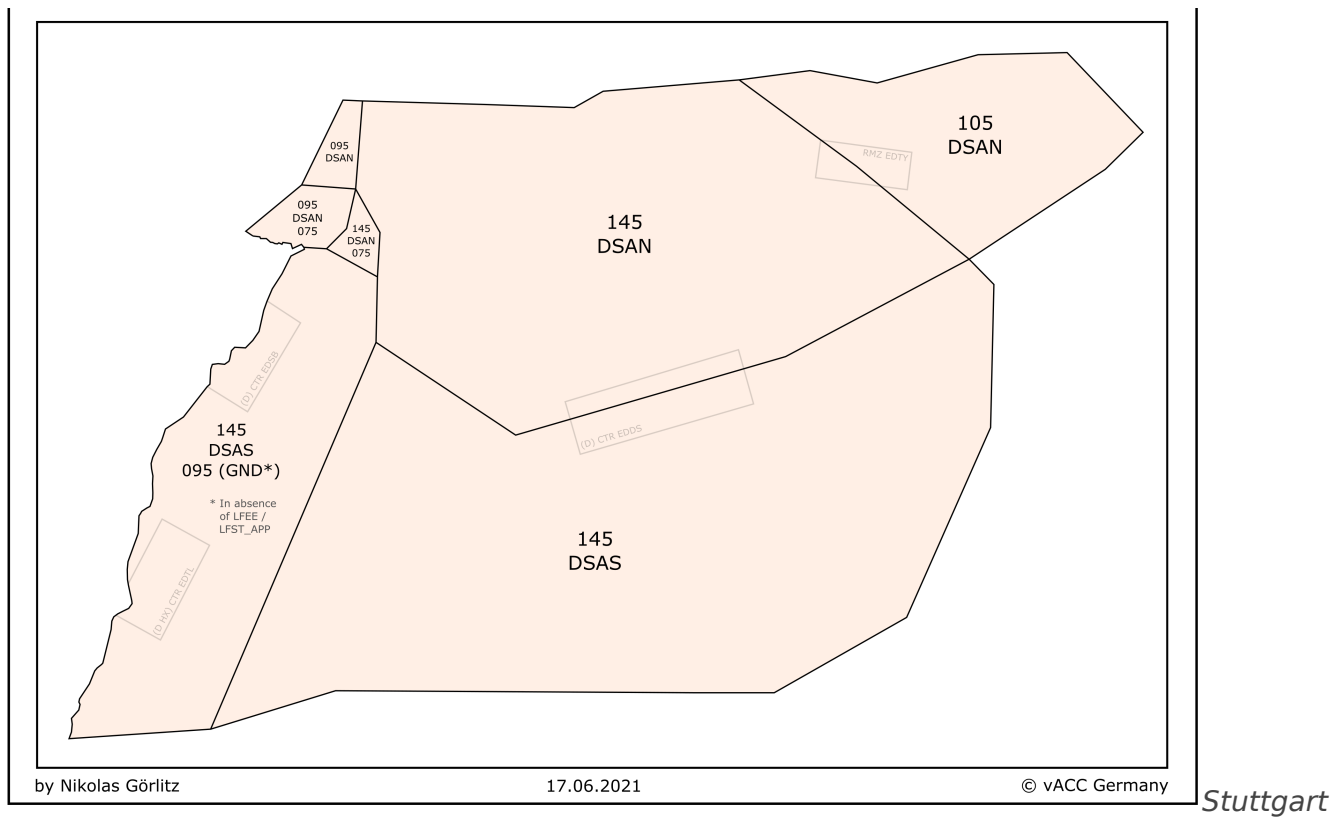
Stuttgart

Arrival Sector

Airspace

Around Stuttgart there is primarily airspace D, which makes it easier to handle VFR transits. However, there is also a larger area above the control zone of Stuttgart with airspace C between 3500 ft and 5500 ft AMSL.

A detailed representation of the airspace structure is available at openflightmaps.org.

Arrival Procedures

Releases by Center

On handoff from Center to Arrival aircraft are released for turns but not for climb/descend as long as they are inside center's sector. Flights via **TEKSI** and **REUTL** are released for turns passing DODIL – LUPOL line.

STAR Assignment

Stuttgart Arrival needs to clear the desired STAR/Transition unless other arrangements have been made with Center. Out of BADSO, TEKSI, and REUTL, there are STARs that lead directly to an IAF (LBU or STG).

Approach Procedures

During approaches to runway 07, **aircraft up to 5.7t MTOM** may use all published approaches. For all other aircraft, the **ILS approach is mandatory** and exceptions are only possible in rare cases (e.g. after a runway change). However, the RNP approach may also be used by heavier aircraft if the **visibility is at least 4000m and the ceiling at least 1000ft AGL**.
During approaches to runway 25, all aircraft may use all published approaches.

Arrival - or Director if staffed - shall **inform Stuttgart Tower about every aircraft not flying the standard approach broadcast in the ATIS**.

Short Approaches

Approaches that intercept the localizer after VATER or UNSER have to be **approved by Stuttgart Tower**.

Visual Approaches

Non-jet aircraft up to 5.7t MTOM can be cleared for a visual approach after coordination with Tower.

07 inbounds from the North	traffic shall fly via reporting point W and the adjacent forest area and avoid built-up area
07 inbounds from the South	traffic shall avoid built-up area
25 inbounds from the North	traffic shall avoid built-up area
25 inbounds from the South	traffic shall follow highway A8 and avoid built up area

10 NM check

Approach shall **inform Tower once an inbound reaches 10 NM final** (10 NM check) under any of the following circumstances:

- approaches with intentions other than full stop landing
- first approach after a runway change
- opposite landings

Departure Procedures

As far as possible, a continuous climb should be made possible and the transfer to Center should take place early and without conflict. On handoff all departures are full released for further climb and turns.

Check Langen ACC (internal) for all procedures of coordination.

Stuttgart Tower has to be informed immediately of any traffic being turned off the SID below 5000ft.

MVA

Due to high terrain around Stuttgart, special care must be taken here. The MVA for the entire sector can be found in the Topsky maps for Euroscope. Due to the MVA, it is not possible to, e.g., let approaches via TEKSI descend directly to 4000ft; instead, at least one intermediate altitude must be used.

For users of a chart service such as Navigraph, an MVA chart for EDSB and EDTL is available through the charts for LFST.

VFR Transits

VFR flights above 5500ft AMSL will fly through airspace D around Stuttgart. Between 3500ft and 5500ft AMSL the controller need to **take care of airspace C**! Flights through C airspace are not recommended but possible with the CVFR clearance.

Holdings

The following holdings are published around Stuttgart:

- **BADSO** (MHA 5000)
- **TEKSI** (MHA 5000)
- **REUTL** (MHA 6000)
- **LBU** (MHA 6000)
- **STG** (MHA 7000)

holdings within Stuttgart Arrival

Possible Conflicts

- For descending flights, the existing MVA must always be considered, especially below 5000 ft AMSL and west of the airport!
- The potential for conflict between intersecting approaches and departures must be taken into account.
- Even in the case of different departure routes, attention must be paid to the necessary separation of departures due to the fact that they follow the same track in some places.
- Due to the Black Forest (elevated terrain) between EDSB/EDTL and EDDS, the MVA in this area is 6300 ft AMSL, so IFR flights must be at least at FL70 there.