# Düsseldorf (EDDL/DUS)

**Elevation 138 ft**

**Effective: 28 JAN 2021**

**Quelle: DFS GmbH**

### NAV AIDS:

<table>
<thead>
<tr>
<th>Code</th>
<th>Call</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>DUS</td>
<td>115.15</td>
<td>ATIS 123.770</td>
</tr>
<tr>
<td>ILS 05L</td>
<td>109.50° / 052° (IDNE)</td>
<td>Delivery 121.770</td>
</tr>
<tr>
<td>ILS 05R</td>
<td>110.95° / 052° (IDSE)</td>
<td>Ground East 121.600</td>
</tr>
<tr>
<td>ILS 23L</td>
<td>111.501° / 052° (IDSW)</td>
<td>Ground West 121.900</td>
</tr>
<tr>
<td>ILS 23R</td>
<td>109.90° / 233° (IDSW)</td>
<td>Tower 118.300</td>
</tr>
<tr>
<td>DY</td>
<td>284.50</td>
<td>Langen Radar 128.550 (Arrival), 128.500 (Departure North), 121.350 (Departure South), 135.720, 129.170 (HMMM), 135.650 (PADH), 127.620 (TAU), 129.870 (FIS North &amp; West), 130.970 (Special Maastricht Radar 133.800 (Münster), 132.620 (Rur)</td>
</tr>
<tr>
<td>LI</td>
<td>417.00</td>
<td></td>
</tr>
</tbody>
</table>

### GPS / FMS RNAV Transitions

**RWY 05L/05R**

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
</table>

**RWY 05L/05R (CDO) ⇒ ALPHA for RWY05L / BRAVO for RWY05R**

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABIGI 1A</td>
<td>ABIGI-DL505-DL555-DIKMI</td>
</tr>
<tr>
<td>BABUV 1A</td>
<td>BABUV-DL505-DL555-DIKMI</td>
</tr>
<tr>
<td>DISIP 1A</td>
<td>DISIP-DL525-DL556-DIKMI</td>
</tr>
<tr>
<td>EKDU 1A</td>
<td>EKDU-DL525-DL556-DIKMI</td>
</tr>
<tr>
<td>GOGOG 1A</td>
<td>GOGOG-DL510-DL550-DL556-DIKMI</td>
</tr>
</tbody>
</table>

**RWY 23L/23R**

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
</table>

**RWY 23L/23R (CDO) ⇒ ALPHA for RWY23L / BRAVO for RWY23R**

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>IBIXI 1A</td>
<td>IBIXI-DL407-DL456-METMA/REGNO</td>
</tr>
<tr>
<td>LONSO 1A</td>
<td>LONSO-DL456-METMA/REGNO</td>
</tr>
<tr>
<td>NISOX 1A</td>
<td>NISOX-DL456-METMA/REGNO</td>
</tr>
<tr>
<td>OBOAM 1A</td>
<td>OBOA-DL456-METMA/REGNO</td>
</tr>
<tr>
<td>RUGAP 1A</td>
<td>RUGAP-DL456-METMA/REGNO</td>
</tr>
<tr>
<td>TIVIM 1A</td>
<td>TIVIM-DL426-METMA/REGNO</td>
</tr>
<tr>
<td>UNDOG 1A</td>
<td>UNDOG-DL424-DL426-DL456-METMA/REGNO</td>
</tr>
</tbody>
</table>

**1 FS2004/FSX/P3D with default scenery.**

**2 FS2004/FSX/P3D with free addon “EDDL additional ILS05L 1413.zip”**

**3 Payware „Justsim Düsseldorf Airport EDDL v2“ for P3D or X-Plane 11**

*06 FEB 2021 v1.0*
**Standard Instrument Arrival Routes**

Pilots of GPS/FMS RNAV equipped aircraft shall, if possible, use the supplementary GPS/FMS RNAV procedures which are described following the text "GPS / FMS RNAV". When using these supplementary GPS/FMS RNAV procedures, the pilot shall check and ensure that the underlying conventional flight procedures are adhered to by monitoring the information of the ground based navigation aids. The ground based navigation aids required for the use of the respective conventional flight procedure and the associated aircraft equipment shall remain in operation at all times.

**RWY 05L/05R**

<table>
<thead>
<tr>
<th>Airport</th>
<th>Equipment Necessary</th>
</tr>
</thead>
<tbody>
<tr>
<td>NVO 2Y</td>
<td>BRNAV equipment necessary</td>
</tr>
<tr>
<td>GMH 8Y</td>
<td>BRNAV equipment necessary</td>
</tr>
<tr>
<td>TEBRO 1X</td>
<td>BRNAV equipment necessary</td>
</tr>
<tr>
<td>XAMOD 2X</td>
<td>BRNAV equipment necessary</td>
</tr>
</tbody>
</table>

**RWY 23L/23R**

<table>
<thead>
<tr>
<th>Airport</th>
<th>Equipment Necessary</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIKMU1G</td>
<td>BRNAV equipment necessary</td>
</tr>
<tr>
<td>DOMUX 2G</td>
<td>BRNAV equipment necessary</td>
</tr>
<tr>
<td>HALME 1G</td>
<td>BRNAV equipment necessary</td>
</tr>
<tr>
<td>LMA 8G</td>
<td>BRNAV equipment necessary</td>
</tr>
<tr>
<td>PISAP 1G</td>
<td>BRNAV equipment necessary</td>
</tr>
</tbody>
</table>

**Standard Instrument Departure Routes**

**RWY 05L**

(Initial Climb Altitude 5000 ft. Remain on TWR frequency until passing altitude 2000 ft.)

<table>
<thead>
<tr>
<th>Airport</th>
<th>Equipment Necessary</th>
</tr>
</thead>
<tbody>
<tr>
<td>LMA 6Y</td>
<td>Only for flights to EDLN. PDG due to airspace structure. If unable to comply, advise DEL on start-up request.</td>
</tr>
<tr>
<td>SONEB 5J</td>
<td>Only for flights with RFL140 or above via RKN/TELNI. Other flights proceed via MEVEL. Flights must be able to cross DLO54 at FL140 or above. If unable to comply, advise DEL.</td>
</tr>
<tr>
<td>MEVEL 8J</td>
<td>Only for flights with RFL140 or above. Flights unable to comply, advise DEL.</td>
</tr>
<tr>
<td>GMH 8Y</td>
<td>Only for flights with RFL140 or above below. Flights with RFL 100 and above shall file via MODRU. Additional available for flights via Q760 (between 0500 (0400) and 0700 (0600)).</td>
</tr>
<tr>
<td>NVO 2Y</td>
<td>After 13.5 DME DUS (13.3 DME IDNE) BRNAV equipment necessary.</td>
</tr>
<tr>
<td>DODEN 6J</td>
<td>After passing 3200 BRNAV equipment necessary. If for jet flights with RFL 250 or above. Flights shall cross DODEN at FL250 or above. Flights unable shall file SID KUMIK. Flights unable to cross ELBAL at FL150 or above shall advise DEL on start-up request.</td>
</tr>
</tbody>
</table>

06 FEB 2021 v1.0
**NETEX 3J (NETEX THREE JULIET)**

- **On R053 DUS to 6.0 DME DUS/5.8 DME IDNE** - LT on track 008° to 12.7 DME DUS/12.4 DME IDNE - LT on track 290° to ORSOV (Δ) - LT on track 242° to VEBAK (Δ) - LT on track 199° via NETEX (Δ) to MODRU (Δ).
  - Climb with 7% (425 ft/NM) or more until passing 3000.

  1. PDG due to airspace structure.
  2. For flights with RFL from 100 to 200 or flights via Z282 DIBIR L179 (if available).

**KUMIK 4J (KUMIK FOUR JULIETT)**

- **On R053 DUS to 6.4 DME DUS/6.2 DME IDNE** - RT on track 098° to 13.5 DME DUS/13.3 DME IDNE - LT on track 349° to LUSIX (Δ) - LT on track 346° via DL054 to SONEB (Δ). Climb with 7% (425 ft/NM) or more until passing 3000.

  1. PDG due to airspace structure.
  2. For flights with RFL150 or above.
  3. Normally not available for flights above FL250 via BOMBI, except Prop/Turbo Prop type aircraft. Flights unable to cross DEGOM at FL150 or above shall advise ATC.

**COL 4J (COLA FOUR JULIETT)**

- **On R053 DUS to 6.4 DME DUS/6.2 DME IDNE** - RT on track 078° to 12.7 DME DUS/12.4 DME IDNE - LT on track 210° to BAM (Δ) - LT on track 095° to ANAVI (Δ) - RT on track 327° to LIPMI (Δ) - LT on R327 COL to COL (Δ). Cross LIPMI at FL150 or above.

  1. Only for flights with RFL150 or above.
  2. For flights with RFL140 or above.
  3. Flights unable to cross LIPMI at FL150 or above shall advise Delivery upon startup request.

**MEVEL 9Z (MEVEL NINE ZULU)**

- **On R053 DUS to 6.0 DME DUS/5.8 DME IDNE** - LT on track 008° to 12.7 DME DUS/13.3 DME IDNE - LT on track 349° to LUSIX (Δ) - RT on track 052° to MEVEL(Δ). Climb with 7% (425 ft/NM) or more until passing 3000.

  1. PDG due to airspace structure.
  2. Flights unable to comply, advise DEL on start-up request.

**GMH 5Z (GERMINGHAUSEN FIVE ZULU)**

- **On R053 DUS to 6.4 DME DUS/6.2 DME IDNE** - RT on R278 BAM to BAM (Δ) - RT on R959 BAM to ANAVI (Δ) - RT on R292 GMH to GMH (Δ).

  1. Only for flights with RFL140 or below.

---

**06 FEB 2021 v1.0**
NVO 2Z (NÖRVENICH ONE ZULU)
On R053 DUS to 6.4 DME DUS/6.2 DME IDNE - RT on R278 BAM inbound BAM - at 3.6 DME BAM (crossing R027 NVO) RT on R213 BAM to NVO (Δ). GPS/FMS RNAV:
1. For Flights with RFL90 and below. Flights with RFL100 and above shall file via MODRU.
2. Additional available for flights via Q760 (between 0500 (0400) - 0700 (0600)).

DODEN 6Z (DODEN SIX ZULU)
On R053 DUS to 6.4 DME DUS/6.2 DME IDNE - on track 098° to BAM (Δ) - RT on track 134° to ELBAL (Δ) - RT on track 135° to BETZO (Δ) - RT on track 147° to DODEN (Δ). Climb with 4.3% (260 ft/NM) or more until passing 3200. Cross ELBAL at FL150 or above. Cross DODEN at FL250 or above. GPS/FMS RNAV:
1. After passing DODEN shall file SID KUMIK. Flights unable to cross ELBAL at FL150 or above shall advise DEL.
2. Only for jet flights with RFL 250 or above. Flights shall cross DODEN at FL250 or above. Flights unable shall file SID KUMIK. Flights unable to cross ELBAL at FL150 or above shall advise DEL.
3. PDG due to MVA.

NUDGO4Z (NUDGO FOUR ZULU)
On R053 DUS to 6.4 DME DUS/6.2 DME IDNE - RT on track 098° to BAM (Δ) - on track 095° to ANAVI (Δ) - RT on track 112° to MAMIB (Δ) - LT on track 067° via KULIX (Δ) - LT on track 061° to NUDGO (Δ). Climb with 4.3% (260 ft/NM) or more until passing 3200. GPS/FMS RNAV: [A600+] - DL050[R] - DL058[R] - BAM[L] - ANAVI[R] - MAMIB[L] - KULIX[L] - NUDGO
1. Not available for flights into upper airspace.
2. After passing 3200 RNAV equipment necessary.
3. PDG due to MVA.

MODRU6Z (MODRU SIX ZULU)
On R053 DUS to 6.0 DME DUS/6.2 DME IDNE - RT on track 098° to 12.7 DME DUS/12.4 DME IDNE - LT on track 290° to ORSOV (Δ) - LT on track 242° to VEBAK (Δ) - LT on track 199° via NETEX (Δ) to MODRU (Δ). Climb with 7% (425 ft/NM) or more until passing 3000. GPS/FMS RNAV:
1. PDG due to airspace structure.
2. Only for flights with RFL 210 and above. Flights have to be able to cross MODRU at FL 210 or above. If unable to comply, advise DEL. on startup req.
3. Flights intending to continue NETEX - FAMEN or NETEX - DELOW shall file SID MODRU - NETEX - DCT FAMEN or SID MODRU - NETEX - DCT DELOM, also in case of COMM FAIL.
4. After 12.7 DME DUS/12.4 DME IDNE BRNAV equipment necessary.

NETEX 3Z (NETEX THREE ZULU)
1. PDG due to airspace structure.
2. For flights with RFL from 100 to 200 or flights via Z282 DIBIR L179 (if available).
3. After 12.7 DME DUS BRNAV equipment necessary.
4. PDG due to MVA.

KUMIK 4Z (KUMIK FOUR ZULU)
On R053 DUS to 6.4 DME DUS/6.2 DME IDNE - RT on track 098° to BAM (Δ) - on track 095° to ANAVI (Δ) - RT on track 128° to DEGOM (Δ) - RT on track 141° to KUMIK (Δ). Climb with 4.3% (260 ft/NM) or more until passing 3200. Cross DEGOM at FL150 or above. GPS/FMS RNAV: [A600+] - DL050[R] - DL058[R] - BAM[R] - ANAVI[R] - DEGOM[F150+·] - KUMIK
1. Only for flights with RFL150 or above.
2. After passing 3200 RNAV equipment necessary.
3. Normally not available for flights above FL250 via BOMBI, except Prop/Turbo Prop type aircraft. Flights unable to cross DEGOM at FL150 or above shall advise DEL.
4. Flights unable shall file SID DELOW.

COL 4Z (COLA FOUR ZULU)
On R053 DUS to 6.4 DME DUS/6.2 DME IDNE - RT on R278 BAM inbound BAM - at 1.6 DME BAM (crossing R030 NVO) RT on R163 BAM to LIPMI (Δ) - LT on R327 COL to COL (Δ). Cross LIPMI at FL150 or above. GPS/FMS RNAV:
1. Flights unable to cross LIPMI at FL150 or above shall advise DEL. Delivery upon startup request.
2. PDG due to MVA.

COL 4Z (COLA FOUR ZULU)
On R053 DUS to 6.4 DME DUS/6.2 DME IDNE - RT on R278 BAM inbound BAM - at 1.6 DME BAM (crossing R030 NVO) RT on R163 BAM to LIPMI (Δ) - LT on R327 COL to COL (Δ). Cross LIPMI at FL150 or above. GPS/FMS RNAV:
1. Only for flights to EDLN.
2. PDG due to airspace structure. If unable to comply, advise DEL on startup request.

06 FEB 2021 v1.0
SONEB 7T (SONEB SEVEN TANGO)

On Rwy track to 1.0 DME DUS/1.2 DME IDNE of 600 ft, whichever is later - RT on R003 NVO to 6.0 DME DUS (5.7 DME IDNE) - LT on track 359° to ERKUM (Δ). RT on track 052° via DL245 to SONEB (Δ).

GPS/FMS RNAV:

1. After 6.0 DME DUS (5.7 DME IDNE) BRNAV equipment necessary.
2. Only for flights with RFL 140 or above via RKN/TENLI. Other Flights proceed via MEVEL. Flights must be able to cross DL245 at FL140 or above. If unable to comply, advise DEL.
3. MAX IAS 190 KT until established on R003 NVO.

MEVEL 3T (MEVEL THREETANGO)

On Rwy track to 1.0 DME DUS/1.2 DME IDNE of 600 ft, whichever is later - RT on R003 NVO to 6.0 DME DUS (5.7 DME IDNE) - LT on track 359° to ERKUM(Δ) - RT on track 052° via LUSIX(Δ) to MEVEL (Δ).

GPS/FMS RNAV:

1. After 6.0 DME DUS (5.7 DME IDNE) BRNAV equipment necessary.
2. MAX IAS 190 KT until established on R003 NVO.

GMH 9T (GERMINGHAUSEN NINE TANGO)

On track 232° DY to 4.5 DME DUS/4.7 DME IDNE - LT on heading 173° until crossing R270 GMH (21.5 DME NVO) - LT on R265 GMH to GMH (Δ).

Climb with 7% (425 ft/NM) or more until passing 3000.

GPS/FMS RNAV:

1. PDG due to airspace structure. If unable to comply, advise DEL.
2. Only for flights with RFL 140 or below.

NVO 1T (NÖRVENICH ONE TANGO)

On track 232° DY to 4.5 DME DUS/4.7 DME IDNE - LT heading 173° to intercept and follow R360 NVO to NVO (Δ)
Climb with 7% (425 ft/NM) or more until passing 3000.

GPS/FMS RNAV:

1. PDG due to airspace structure. If unable to comply, advise DEL.
2. For Flights with RFL 90 and below. Flights with RFL 100 and above shall file via MODRU
3. Additional available for flights via Q760 (between 0500 (0400) – 0700 (0600)).

DODEN 9T (DODEN NINE TANGO)

On track 232° DY to 4.5 DME DUS/4.7 DME IDNE - LT heading 173° until crossing R270 GMH (21.5 DME NVO) - LT on track 085° via DL242 to ELBAL (Δ) - RT on track 135° to BETZO (Δ) - RT on track 147° to DODEN (Δ).
Climb with 7% (425 ft/NM) or more until passing 3000.

Cross DL242 at FL150 or above.

Cross DODEN at FL250 or above.

GPS/FMS RNAV:

1. PDG due to airspace structure. If unable to comply, advise DEL on start-up request.
2. After crossing R270 GMH (21.5 DME NVO) BRNAV equipment necessary.
3. Only for jet flights with RFL 140 or above. Flights shall cross DODEN at FL250 or above. Flights unable shall file SID KUMIK. Flights unable to cross DL242 at FL150 or above shall advise clearance Delivery upon start-up request.

NUDGO 5T (NUDGO FIVE TANGO)

On track 232° DY to 4.5 DME DUS/4.7 DME IDNE - LT heading 173° until crossing R270 GMH (21.5 DME NVO) - LT on track 085° to ELBAL (Δ) - LT on track 067° via MAMIB (Δ) to KULIX (Δ) - LT on track 061° to NUDGO(Δ).
Climb with 7% (425 ft/NM) or more until passing 3000.

GPS/FMS RNAV:

1. PDG due to airspace structure. If unable to comply, advise DEL.
2. Not available for flights into upper airspace.
3. After crossing R270 GMH (21.5 DME NVO) BRNAV equipment necessary.
MODRU 1T (MODRU ONE TANGO)
On track 232° DY to 3.4 DME DUS/3.6 DME IDNE - RT on track 320° to UBORO (Δ) - LT via NETEX (Δ) on track 199° to MODRU (Δ).
Climb with 7% (425 ft/NM) or more until passing 3000.
GPS/FMS RNAV:
1. PDG due to airspace structure. If unable to comply, advise DEL.
2. Only for flights with RFL 210 and above. Flights have to be able to cross MODRU at FL 210 or above. If unable to comply, advise DEL on start-up request.
3. Flights intending to continue NETEX DCT FAMEN or NETEX DCT DELOW shall file SID MODRU - NETEX - DCT FAMEN or SID MODRU - NETEX - DCT - DELOM. These flights shall leave SID MODRU at NETEX to proceed NETEX DCT FAMEN or NETEX DCT DELOW, also in case of COMM FAIL.
4. After passing 3.4 DME DUS (3.6 DME IDNE) BRNAV equipment necessary.
5. MAX IAS 210 KT until established on track 320°.
6. MAX IAS 250 KT until established on track 199°.

NETEX 5T (NETEX FIVE TANGO)
On Rwy track to 1.0 DME DUS/1.2 DME IDNE or 600 ft, whichever is later - RT on track 297° LMA to 13.4 DME DUS/13.3 DME IDNE - LT on track 240° LMA to NETEX(Δ).
Climb with 7% (425 ft/NM) or more until passing 3000.
GPS/FMS RNAV:
DL236[A600+;R] - LMA[L] - NETEX
1. PDG due to airspace structure. If unable to comply, advise DEL.
2. For flights with RFL from 100 to 200 or flights via Z282 DIBIR L179 (if available).
3. Not available for flights with further routing via NETEX DCT FAMEN or NETEX DCT DELOW.

KUMIK 6T (KUMIK SIX TANGO)
On track 232° DY to 4.5 DME DUS/4.7 DME IDNE - LT on heading 173° until crossing R270 GMH (21.5 DME NVO) - LT on track 085° to DEGOM (Δ) - RT on track 141° to KUMIK (Δ).
Climb with 7% (425 ft/NM) or more until passing 3000. Cross DEGOM at FL150 or above.
GPS/FMS RNAV:
1. PDG due to airspace structure. If unable to comply, advise DEL.
2. Only for flights with RFL150 or above.
3. After crossing R270 GMH (21.5 DME NVO) BRNAV equipment necessary.
4. Normally not available for flights above FL250 via BOMBI, except Prop/Turbo Prop type aircraft. Flights unable to cross DEGOM at FL150 or above shall advise DEL.

COL 5T (COLA FIVE TANGO)
On track 232° DY to 4.5 DME DUS/4.7 DME IDNE - LT on heading 173° until crossing R270 GMH (21.5 DME NVO) - LT on R265 GMH to 32.0 DME GMH (crossing R203 BAM) - RT on track 103° to intercept and follow R327 COL to COL (Δ).
Climb with 7% (425 ft/NM) or more until passing 3000. Intercept R327 COL (LIPMI) at FL150 or above
GPS/FMS RNAV:
1. PDG due to airspace structure. If unable to comply, advise DEL.
2. Flights unable to cross LIPMI at FL150 or above shall advise DEL.
**RWY 23R**

**LMA 2H** *(LIMA TWO HOTEL)*

On Rwy track to 1.1 DME DUS/1.3 DME IDME or 600 ft, whichever is later - RT on track 297° LMA to LMA (Δ).

Climb with 7% (425 ft/NM) or more until passing 3000.

**GPS/FMS RNAV:** DL237 - [A600+] - LMA

1. Only for flights to EDLN.
2. PDG due to airspace structure. If unable to comply, advise DEL on start-up request.

**SONEB 3H** *(SONEB THREE HOTEL)*

On Rwy track to 1.0 DME DUS/1.2 DME IDME or 600 ft, whichever is later - RT on R003 NVO to 6.0 DME DUS (5.7 DME IDME) - LT on track 359° to ERKUM (Δ) - RT on track 005° via DL243 to SONEB (Δ).


1. After 6.0 DME DUS (5.7 DME IDME) BRNAV equipment necessary.
2. Only for flights with RFL 140 or above via RKN/TENLI. Other flights proceed via MEVEL. Flights must be able to cross DL245 at FL140 or above. If unable to comply, advise DEL.
3. MAX IAS 190 KT until established on R003 NVO.

**MEVEL 3H** *(MEVEL THREE HOTEL)*

On Rwy track to 1.0 DME DUS/1.2 DME IDME or 600 ft, whichever is later - RT on R003 NVO to 6.0 DME DUS (5.7 DME IDME) - LT on track 359° to ERKUM (Δ) - RT on track 052° via LUSIX (Δ) to MEVEL (Δ).


1. After 6.0 DME DUS (5.7 DME IDME) BRNAV equipment necessary.
2. MAX IAS 190 KT until established on R003 NVO.

**GMH 3H** *(GERMINGHAUSEN THREE HOTEL)*

On track 229° DY to 4.5 DME DUS/4.7 DME IDME - LT on heading 173° until crossing R270 GMH (21.5 DME NVO) - LT on R265 GMH to GMH (Δ).

Climb with 7% (425 ft/NM) or more until passing 3000.


1. PDG due to airspace structure. If unable to comply, advise DEL.
2. Only for flights with RFL140 or below.
3. For Flights with RFL 90 and below. Flights with RFL 100 and above shall file via MODRU.
4. PDG due to airspace structure. If unable to comply, advise DEL on start-up request.
5. Additional available for flights via Q760 (between 0500 (0400) – 0700 (0600)).
6. Flights unable to cross DODEN at FL250 or above. Flights with RFL140 or below.
7. Flights unable to cross DODEN at FL250 or above. Flights shall file SID KUMIK.
8. Flights unable to cross DL242 at FL150 or above(MODRU).

**NVO 1U** *(NÖRVENICH ONE UNIFORM)*

On track 229° DY to 4.5 DME DUS/4.7 DME IDME - LT on heading 173° to intercept and follow R360 NVO to NVO (Δ).

Climb with 7% (425 ft/NM) or more until passing 3000.


1. For Flights with FL400 and below. Flights with FL350 shall file via MODRU.
2. PDG due to airspace structure. If unable to comply, advise DEL on start-up request.
3. Additional available for flights via Q760 (between 0500 (0400) – 0700 (0600)).
4. Flights unable to cross DL242 at FL150 or above shall file SID KUMIK.
5. Flights unable to cross DL242 at FL150 or above.

**DODEN 3H** *(DODEN THREE HOTEL)*

On track 229° DY to 4.5 DME DUS/4.7 DME IDME - LT on heading 173° until crossing R270 GMH (21.5 DME NVO) - LT on track 085° via DL242 to ELBAL (Δ) - RT on track 135° to BETZO (Δ) - RT on track 147° to DODEN (Δ).

Climb with 7% (425 ft/NM) or more until passing 3000. Cross DL242 at FL150 or above. Cross DODEN at FL250 or above.


1. PDG due to airspace structure. If unable to comply, advise DEL on start-up request.
2. After crossing R270 GMH (21.5 DME NVO) BRNAV equipment necessary.
3. Only for jet flights with RFL100 and above. Flights with RFL 100 and above shall file SID KUMIK.
4. Flights unable to cross DL242 at FL150 or above shall file SID KUMIK.
5. Flights unable to cross DL242 at FL150 or above.
MODRU 1H (MODRU ONE HOTEL)

On track 229° to 3.3 DME DUS/3.5 DME IDNE - RT on track 320° to UBORO (Δ) - LT via NETEX (Δ) on track 199° to MODRU (Δ).

Climb with 7% (425 ft/NM) or more until passing 3000.

GPS/FMS RNAV:

1. PDG due to airspace structure. If unable to comply, advise DEL.
2. Only for flights with RFL 210 and above. Flights have to be able to cross MODRU at FL 210 or above. If unable to comply advise DEL on start-up request.
3. Flights intending to continue NETEX DCT FAMEN or NETEX DCT DELOW shall file SID MODRU - NETEX - DCT - FAMEN or SID MODRU - NETEX - DCT - DELOW. These flights shall leave SID MODRU at NETEX to proceed NETEX DCT FAMEN or NETEX DCT DELOW, also in case of COMM FAIL.
4. After passing 3.3 DME DUS/3.5 DME IDNE BRNAV equipment necessary.
5. MAX IAS 210 KT until established on track 320°.
6. MAX IAS 250 KT until established on track 199°.

NETEX 2H (NETEX TWO HOTEL)

On Rwy track to 1.1 DME DUS/1.3 DME IDNE or 600 ft, whichever is later - RT on track 297° LMA to 13.4 DME DUS/13.3 DME IDNE - LT on track 240° LMA to NETEX(Δ).

Climb with 7% (425 ft/NM) or more until passing 3000.

GPS/FMS RNAV: DL237 - [A600+;R] - LMA[L] - NETEX

1. PDG due to airspace structure. If unable to comply, advise DEL.
2. For flights with RFL from 100 to 200 or flights via Z282 DIBIR L179 (if avail.).
3. Not available for flights with further routing via NETEX DCT FAMEN or NETEX DCT DELOM.

KUMIK 3H (KUMIK THREE HOTEL)

On track 229° DY to 4.5 DME DUS/4.7 DME IDNE - LT on heading 173° until crossing R270 GMH (21.5 DME NVO) - LT on track 085° to DEGOM (Δ) - RT on track 141° to KUMIK (Δ).

Climb with 7% (425 ft/NM) or more until passing 3000.

Cross DEGOM at FL150 or above.


1. PDG due to airspace structure. If unable to comply, advise DEL.
2. Only for flights with RFL150 or above.
3. After crossing R270 GMH (21.5 DME NVO) BRNAV equipment necessary.
4. Normally not available for flights above FL250 via BOMBI, except Prop/Turbo Prop type aircraft. Flights unable to cross DEGOM at FL150 or above shall advise DEL.

COL 3H (COLA THREE HOTEL)

On track 229° DY to 4.5 DME DUS/4.7 DME IDNE - LT on heading 173° until crossing R270 GMH (21.5 DME NVO) - LT on R265 GMH to 32.0 DME GMH (crossing R203 BAM) - RT on track 103 to intercept and follow R327 COL to COL (Δ).

Climb with 7% (425 ft/NM) or more until passing 3000.

Intercept R232 COL (LIPMI) at FL150 or above.


1. PDG due to airspace structure. If unable to comply, advise DEL.
2. Flights unable to cross LIPMI at FL150 or above shall advise DEL.

Remark: Underlined RNAV-Waypoints are fly-over waypoints (Δ)

VFR Entry / Exit Points

NOVEMBER north of airport: MAX 2500 MSL - track 175° to / track 355° from airport

(N 51° 24.3′ E006° 44.8′)

ECHO east of airport: MAX 2500 MSL - track 315° to / track 135° from airport

(N 51° 11.4′ E006° 56.5′)

SIERRA south of airport: MAX 2500 MSL - track 335°→303° to / track 210°→155° from airport

(N 51° 08.4′ E006° 47.2′)
Düsseldorf
Germany
EDDL
Airport layout

INTERSECTION TAKE-OFF

<table>
<thead>
<tr>
<th>RWY</th>
<th>TWY</th>
<th>TORA</th>
<th>TODA</th>
<th>ASDA</th>
</tr>
</thead>
<tbody>
<tr>
<td>05R</td>
<td>A</td>
<td>2475</td>
<td>2535</td>
<td>2775</td>
</tr>
<tr>
<td>05R</td>
<td>B</td>
<td>2031</td>
<td>2091</td>
<td>2331</td>
</tr>
<tr>
<td>23L</td>
<td>E</td>
<td>2235</td>
<td>2295</td>
<td>2535</td>
</tr>
<tr>
<td>23L</td>
<td></td>
<td>2700</td>
<td>2760</td>
<td>3000</td>
</tr>
<tr>
<td>05L</td>
<td>Y</td>
<td>2065</td>
<td>2125</td>
<td>2365</td>
</tr>
<tr>
<td>05L</td>
<td>B</td>
<td>1720</td>
<td>1780</td>
<td>2020</td>
</tr>
<tr>
<td>23R</td>
<td>E</td>
<td>2062</td>
<td>2122</td>
<td>2362</td>
</tr>
<tr>
<td>23L</td>
<td>L</td>
<td>2500</td>
<td>2560</td>
<td>2800</td>
</tr>
<tr>
<td>23L</td>
<td>M</td>
<td>2645</td>
<td>2705</td>
<td>2945</td>
</tr>
</tbody>
</table>

Note:
Current Airport layout. To be used with FSX freeware scenery by Thomas Ruth available at avsim.net.

FREQUENCIES:

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>ATIS</td>
<td>123.77</td>
</tr>
<tr>
<td>Delivery</td>
<td>121.77</td>
</tr>
<tr>
<td>Ground East</td>
<td>121.60</td>
</tr>
<tr>
<td>Ground West</td>
<td>121.90</td>
</tr>
<tr>
<td>Tower</td>
<td>118.30</td>
</tr>
</tbody>
</table>

Elevations:
THL RWY 05L - 116 ft
THL RWY 05R - 121 ft
THL RWY 23L - 138 ft
THL RWY 23R - 124 ft

RWY dim. (mtrs.):
05L/23R - 2700 x 45
05R/23L - 3000 x 45
Düsseldorf
Germany
EDDL / DUS
Parkingpositions

(used with sceneries:
- P3D5+
- JustSim Duesseldorf v.2)

FREQUENCIES:

- ATIS 123.77
- Delivery 121.77
- Ground East 121.60
- Ground West 121.90
- Tower 118.30

Corrections: Layout

For flight simulator use only. Not to be used for real world flight.
Corrections: New Taxiway-Layout

Note: Current Airport Layout. To be used with FSX freeware scenery by Thomas Ruth available at avsim.net.

FREQUENCIES:

<table>
<thead>
<tr>
<th>FREQUENCY</th>
<th>Service</th>
</tr>
</thead>
<tbody>
<tr>
<td>118.30</td>
<td>Tower</td>
</tr>
<tr>
<td>121.80</td>
<td>Ground West</td>
</tr>
<tr>
<td>121.60</td>
<td>Ground East</td>
</tr>
<tr>
<td>121.77</td>
<td>Delivery</td>
</tr>
<tr>
<td>123.77</td>
<td>ATIS</td>
</tr>
</tbody>
</table>

For flight simulator use only. Not to be used for real world flight.

© VATSIM Germany / U. Karp / nav@vatsim-germany.org

www.vatsim-germany.org

Quelle: DFS GmbH

Düsseldorf Germany
EDDL
Parkingpositions
Düsseldorf
Germany
EDDL
Parkingpositions

Note:
Current Airport layout.
To be used with FSX freeware scenery by Thomas Ruth available at avsim.net.

FREQUENCIES:

<table>
<thead>
<tr>
<th>Service</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATIS</td>
<td>123.77</td>
</tr>
<tr>
<td>Delivery</td>
<td>121.77</td>
</tr>
<tr>
<td>Ground</td>
<td>121.90</td>
</tr>
<tr>
<td>Tower</td>
<td>118.30</td>
</tr>
</tbody>
</table>

For flight simulator use only. Not to be used for real world flight.
**Remarks:**

1. Use of transition procedures only when cleared by ATC.
2. On downwind expect vectors to final.
3. Maintain the transition track beyond the end point, if no succeeding instruction (vector) is received.
4. Speed limits are mandatory from the respective waypoint throughout the entire transition route, unless cancelled by ATC.
5. Altitude assignments will be issued by ATC.

For operational regulations refer to AIP ENR 1.5.
FLY THE TRANSITION AS CONTINUOUS DESCENT OPERATION (CDO).

TRANSITIONS WITH DESIGNATOR ALPHA FOR RWY 05L.
TRANSITIONS WITH DESIGNATOR BRAVO FOR RWY 05R.

Remarks:
1. Use of Transition Procedures only when cleared by ATC.
2. When cleared for "Transition And Profile" aim for a Low Noise Continuous Descent Operation (CDO) within the constraints as laid down in the procedure description.

For operational regulations refer to AIP ENR 1.5.
Remarks:
1. Use of transition procedures only when cleared by ATC.
2. On downwind expect vectors to final.
3. Maintain the transition track beyond the end point, if no succeeding instruction (vector) is received.
4. Speed limits are mandatory from the respective waypoint throughout the entire transition route, unless cancelled by ATC.
5. Altitude assignments will be issued by ATC.

For operational regulations refer to AIP ENR 1.5.
For flight simulator use only. Not to be used for real world flight.

VATSIM Germany
GPS / FMS RNAV Arrival Chart

Transition Altitude: 5000 ft
VAR: 1° E

Transition to Final Approach (CDO)
RWY 23L/R

FLY THE TRANSITION AS CONTINUOUS DESCENT OPERATION (CDO).

TRANSITIONS WITH DESIGNATOR ALPHA FOR RWY 23R.
TRANSITIONS WITH DESIGNATOR BRAVO FOR RWY 23L.

Remarks:
1. Use of Transition Procedures only when cleared by ATC.
2. When cleared for "Transition And Profile" aim for a Low Noise Continuous Descent Operation (CDO) within the contraints as laid down in the procedure description.

For operational regulations refer to AIP ENR 1.5.

Bearings and tracks are magnetic.
Altitudes in feet MSL.

© VATSIM Germany / U. Karp / nav@vatsim-germany.org
Effective 30 JAN 2020, released 28.12.2020
Quelle: DFS GmbH www.vatsim-germany.org
VATSIM Germany
Instrument Approach Chart

Elevation: THR05L 116 ft.
VAR: 1° E

ATIS 123.775
Langen Radar 128.550
Director 128.650
Tower 118.300
Ground (West) 121.900
Ground (East) 121.600

DÜSSELDORF
EDDL

ILS or LOC
RWY 05L

MÖNCHENGLADBACH
109.80 MHV

DIKMI
9.1 DME IDNE 8.9 DME DUS

IMA RONAD
H51°17'20" E09°33'40"
24 DME BAM

DÜSSELDORF
115.15 DUS
CH 98 Y

2.8 DME IDNE
3.0 DME DUS

Lima
311.00 LMA

Grefrath-Niershorst

Krefeld-Egelsberg

DIEPZ
114.00° BAM
CH 87X

essence/Mühlheim

Meiersberg

Düsseldorf-Wolfsaap

BARMEN
114.00° BAM
CH 87X

Simulator: 113.60

ILS/DME
110.95 IDNE
CH 46 Y

DME required

Bearings and tracks are magnetic.
Altitudes in feet MSL.

MISSED APPROACH:
Climb straight ahead to 3 DME DUS/2.8 DME IDNE; LT on track 267°
LMA to LMA, climbing to 4000.

DME IDNE
8 7 6 5 4 3 2

GS
80 100 120 140 160 180

DME THR
7.8 6.6 5.8 4.8 3.8 2.8 1.8

Rate of descent (5.2%)
fl/Min 420 530 640 740 850 960

© VATSIM Germany / U. Karp
EFFECTIVE 30 JAN 2020, released 26.12.2020
Quelle: DFS GmbH www.vatsim-germany.org
MISSION APPROACH:
Climb straight ahead to 3.0 DME DUS/2.8 DME IDNE; LT on track 267° LMA to LMA, climbing to 4000.

Bearings and tracks are magnetic. Altitudes in feet MSL.

For flight simulator use only. Not to be used for real world flight.
**VATSIM Germany Instrument Approach Chart**

**DÜSSELDORF EDDL**

- **Tower**: 118.300
- **Ground (West)**: 121.900
- **Ground (East)**: 121.600
- **ALS CAT II & III or LOC RWY 05R**

**MÖNCHENGLADBACH**

- **ILS 110.15° IDSE**
- **LOCA DME required**

- **LIMA 311.00 LMA**

- **Greffath-Niershorst**

- **NatOS 109.80 MHV**

- **DÜSSELDORF CH 46 Y IDNE (110.95)**

- **Simulator: 113.60**

**BARMEN 114.00° BAM CH 87 X**

- **Bearings and tracks are magnetic. Altitudes in feet MSL.**

**MISSED APPROACH:** Climb straight ahead to 5.8 IDNE (6.0 DME DUS); LT on track 259° to LMA, climbing to 4000.

**CAT IIIa/b (MNM RVR 75m) approved.**

---

**Table: Approach Parameters**

<table>
<thead>
<tr>
<th>DME VOR DUS</th>
<th>8</th>
<th>7</th>
<th>6</th>
<th>5</th>
<th>4</th>
<th>3</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>DME THR</td>
<td>8.0</td>
<td>7.0</td>
<td>6.0</td>
<td>5.0</td>
<td>4.0</td>
<td>3.0</td>
<td>2.0</td>
</tr>
<tr>
<td>ALTITUDE</td>
<td>2720</td>
<td>2400</td>
<td>2090</td>
<td>1770</td>
<td>1450</td>
<td>1130</td>
<td>810</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>GS</th>
<th>80</th>
<th>100</th>
<th>120</th>
<th>140</th>
<th>160</th>
<th>180</th>
</tr>
</thead>
<tbody>
<tr>
<td>OM - T/R (4.1 NM)</td>
<td>3.05</td>
<td>2.28</td>
<td>2.03</td>
<td>1.45</td>
<td>1.32</td>
<td>1.22</td>
</tr>
<tr>
<td>Rate of descent (5.2%)</td>
<td>420</td>
<td>530</td>
<td>640</td>
<td>740</td>
<td>850</td>
<td>960</td>
</tr>
</tbody>
</table>

**LOC-DME:** Timing not authorized for defining the MAPL.

© VATSIM Germany / U. Karp

**Effective**: 30 Jan 2020, released 26.12.2020

Quelle: DFS GmbH  www.vatsim-germany.org
**MISSED APPROACH:** Climb straight ahead to 6 DME DUS / 5.8 DME IDNE; LT on track 259° to LMA, climbing to 4000.

**GS**

<table>
<thead>
<tr>
<th>ft</th>
<th>80</th>
<th>100</th>
<th>120</th>
<th>140</th>
<th>160</th>
<th>180</th>
</tr>
</thead>
<tbody>
<tr>
<td>7.0 DME DUS/7.2 DME IDNE - MAPI (6.5 NM)</td>
<td>MIN:SEC</td>
<td>ft / MIN</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rate of descent (5.2%)</td>
<td>4.53</td>
<td>3.54</td>
<td>3.15</td>
<td>2.47</td>
<td>2.26</td>
<td>2.10</td>
</tr>
</tbody>
</table>

**DME VOR DUS**

<table>
<thead>
<tr>
<th>DME</th>
<th>8</th>
<th>7</th>
<th>6</th>
<th>5</th>
<th>4</th>
<th>3</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>DME THR</td>
<td>8.0</td>
<td>7.0</td>
<td>6.0</td>
<td>5.0</td>
<td>4.0</td>
<td>3.0</td>
<td>2.0</td>
</tr>
</tbody>
</table>

**ALTITUDE**

| 2720 | 2400 | 2080 | 1760 | 1440 | 1130 | 810 |

**DME required**

**Bearings and tracks are magnetic. Altitudes in feet MSL.**

© VATSIM Germany / U. Karp

**EFFECTIVE 30 JAN 2020, released 26.12.2020**

Quelle: DFS GmbH www.vatsim-germany.org

**For flight simulator use only. Not to be used for real world flight.**
MISSED APPROACH:
Climb straight ahead to 2.6 DME DUS / 2.8 DME IDNE; RT on track 309° inbd LMA until crossing R009 MHV / R279 DUS; RT on track 060° outbd LMA to BOT climbing to 4000.

Do not mistake Essen/Mülheim 9 NM NNE of Düsseldorf when approaching RWY 23L.

ILS/DME
109.90
IDSW
110.1 DME DUS
5.4 DME IDSW
6.5 DME DUS
2.9 DME IDSW
5.4 DME IDSW
10.1 DME DUS

Orange text information is not to be used for real world flight.

For flight simulator use only. Not to be used for real world flight.

© VATSIM Germany / U. Karp
EFFECTIVE 30 JAN 2020, released 26.12.2020
Quelle: DFS GmbH
Do not mistake Essen/Mülheim 9 NM NNE of Düsseldorf when approaching RWY 23L.

Bearsings and tracks are magnetic.
Altitudes in feet MSL.

**MISSED APPROACH:**
Climb straight ahead to 2.7 DME DUS / 2.9 DME IDNE; RT on track 309° inbd LMA until crossing R009 MHV / R279 DUS; RT on track 060° outbd LMA to BOT climbing to 4000.
Missed Approach: Climb straight ahead to 2.7 DME DUS / 2.9 DME IDNE; RT on track 309° inbd LMA until crossing R009 MHV / R279 DUS; RT on track 060° outbd LMA to BOT climbing to 4000.

GS

<table>
<thead>
<tr>
<th>ft/min</th>
<th>80</th>
<th>100</th>
<th>120</th>
<th>140</th>
<th>160</th>
<th>180</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rate of descent (5.2%)</td>
<td>3.59</td>
<td>3.11</td>
<td>2.39</td>
<td>2.16</td>
<td>1.59</td>
<td>1.46</td>
</tr>
</tbody>
</table>

CAT IIIa/b (MNM RVR 75m) approved.
Bottrop 406.50 BOT

MISSED APPROACH: Climb straight ahead to 2.6 DME DUS / 2.8 DME IDNE; RT on track 309° inbd LMA until crossing R009 MHV / R279 DUS; RT on track 060° outbd LMA to BOT climbing to 4000.

© VATSIM Germany / U. Karp
EFFECTIVE 30 JAN 2020, released 26.12.2020
Quelle: DFS GmbH www.vatsim-germany.org
Departures via LMA, MEVEL, MODRU, NETEX, SONEB: Contact Langen Radar on 128.500
Departures via COL, DODEN, GMH, KUMIK, NVO, NUDGO: Contact Langen Radar on 121.350

Initial climb altitude 5000 ft.

Remain on TWR frequency until passing 2000, then contact Langen Radar.

For procedure details consult “EDDL Airportinfo”
VATSIM Germany
Standard Instrument Departure Chart

Transition Altitude: 5000 ft.

For flight simulator use only. Not to be used for real world flight.

Departures via LMA, MEVEL, MODRU, NETEX, SONEB: Contact Langen Radar on 128.500
Departures via COL, DODEN, GMH, KUMIK, NVO, NUDGO: Contact Langen Radar on 121.350

**Initial climb altitude 5000 ft.**

*Simulator: 113.60

Remain on TWR frequency until passing 2000, then contact Langen Radar.

For procedure details consult "EDDL Airportinfo"
Departures via LMA, MEVEL, MODRU, NETEX, SONEB:
Contact Langen Radar on 128.500
Departures via COL, DODEN, GMH, KUMIK, NVO, NUDGO:
Contact Langen Radar on 121.350

Initial climb altitude 5000 ft.

*Simulator: 113.60
Remain on TWR frequency until passing 2000, then contact Langen Radar.
For flight simulator use only. Not to be used for real world flight.

For procedure details consult "EDDL Airportinfo"

Initial climb altitude 5000 ft.

RNP-1/A-RNP, RF-LEG required.
GPS required.

By ATC only.

Remain on TWR frequency until passing 2000, then contact Langen Radar.

Transition Altitude: 5000 ft.
Departures via LMA, MEVEL, MODRU, NETEX, SONEB: Contact Langen Radar on 128.500
Departures via COL, DODEN, GMH, KUMIK, NVO, NUDGO: Contact Langen Radar on 121.350

Initial climb altitude 5000 ft.

Remain on TWR frequency until passing 2000, then contact Langen Radar.

*Simulator: 113.60

For flight simulator use only. Not to be used for real world flight.