



## Training material and operational manual for position **EVRA\_GND (Riga Ground)**

### 0 Introduction

#### 0.1 Purpose

This document is an operational manual for the virtual air traffic control position of Riga Ground (EVRA\_GND) on the VATSIM network, the competencies of which are covered by the STUDENT 1 (S1) rating. This document shall NOT be used for any real-life air traffic control operations. All information provided in this document is for flight simulation use ONLY.

#### 0.2 Credits

This document was created by 1433887 for the Virtual Area Control Centre of Latvia (Latvia vACC) on the VATSIM network. The rights to distribute this document belong solely to Latvia vACC.

#### 0.3 Amendment history

<b>Date</b>	<b>Description</b>
3 <sup>rd</sup> of August 2021 (03.08.2021)	Initial Draft
6 <sup>th</sup> of August 2021 (06.08.2021)	3 <sup>rd</sup> chapter amended; various corrections made
11 <sup>th</sup> of February 2023 (11.02.2023)	Formatting corrected
11 <sup>th</sup> of September 2023 (11.09.2023)	Helicopter/FATO procedures added, 2.7

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# 1 General

## 1.1 Abbreviations

**AIP – Aeronautical Information Publication**  
**ATC – Air Traffic Controller**  
**AoR – Area of Responsibility**  
**ATIS – Automatic Terminal Information Service**

**CFL – Cleared Flight Level**  
**CTAF – Common Traffic Advisory Frequency**  
**COPX – Coordination Point Exit**

**FIR – Flight Information Region**

**GA – General Aviation**

**IHP – Intermediate Holding Position**  
**ITHP – Intermediate Taxi-Holding Position**  
**IRL – In Real Life**

**LVP – Low Visibility Procedures**

**METAR – Meteorological Aerodrome Report**

**NIL – None**  
**N/A – Not Applicable**  
**NOTAM – Notice to Airmen**

**RFL – Requested Flight Level**  
**RVR – Runway Visual Range**

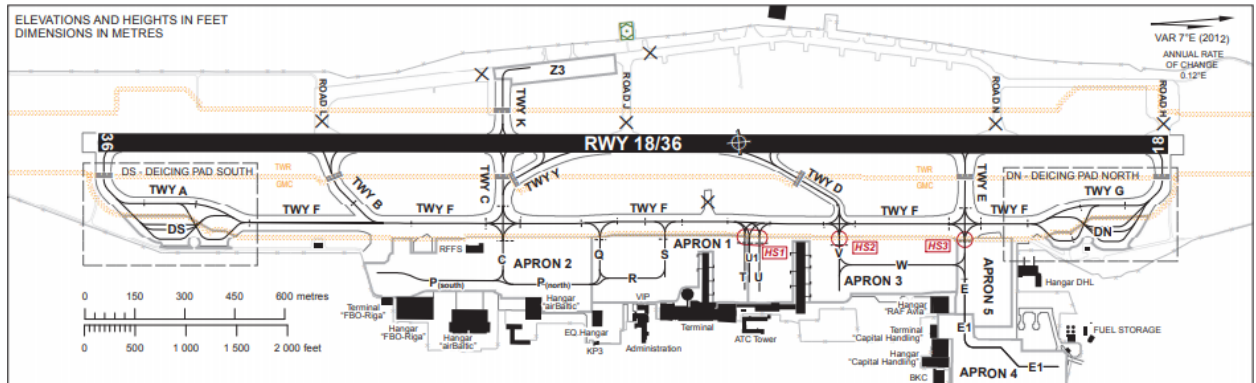
**SNOWTAM – Snow Warning to Airmen**  
**SID – Standard Instrument Departure**  
**S1 – Student 1**

**TAF – Terminal Aerodrome Forecast**

**vACC – Virtual Area Control Centre**

## 1.2 Primary information regarding Riga International Airport (EVRA)

Riga International Airport (EVRA) is located 13 km away from the city centre of Riga. It serves flights to many destinations by a variety of airlines, the largest of which are: airBaltic, SmartLynx, Ryanair, WizzAir, etc.



Our airport has 1 runway that faces north to south (36/18). Its length is 3200 meters, and it has 7 intersection taxiways leading to/from it: A, B, C, Y, D, E and G, as well as taxiway K on the west side of the airport. Above you can see an aerodrome chart (EVRA AD 2.24.3) from the Latvian AIP.

## 1.3 Use of aeronautical charts and the AIP

One of the skills that is essential for controlling is being able to read and understand the AIP of the Republic of Latvia and the aeronautical charts included in it. For controlling Riga Ground you'll be most interested in the following sections of the AIP:

- EVRA AD 2.1 – 2.23 for information about the aerodrome and procedures
- EVRA AD 2.24 for aeronautical charts

It is strongly advised that you also take a look at other sections of the AIP as they'll be helpful in your further training past Riga Ground. The AIP of the Republic of Latvia is available at [ais.lgs.lv](http://ais.lgs.lv). Make sure to always use the current effective edition of the AIP, unless you need to check for new procedures in a newly released edition.

## 2 Controlling Riga Ground (standard operations)

### 2.1 Introduction

This manual will be structured as a walkthrough of your session on Riga Ground from start to finish. This includes everything that you will need to know to operate the position of Riga Ground.

### 2.2 Before you connect

Air Traffic Controllers in Latvia vACC use the EuroScope controller client. The sector file and plugins are configured by Latvia vACC staff and are available at [files.aero-nav.com/EVRR](http://files.aero-nav.com/EVRR). Make sure to always have the latest version installed in your EuroScope client. Once you're ready to connect, make sure that Riga Ground isn't already occupied by someone else, otherwise you won't be able to connect. You can check that using such services as [VAT-SPY](#) or [SimAware](#).

### 2.3 Once you connect

You probably didn't expect that, but there is quite a lot of work to be done before you can start providing service to pilots. You will have to process most of the information below to successfully open the position of Riga Ground.

### 2.3.1 METAR and SNOWTAM

When you connect, the EuroScope controller client conveniently provides you with the Meteorological Aerodrome Report or METAR for Riga Airport. METAR is a codified message that contains all the relevant weather information about the aerodrome and sometimes a SNOWTAM (Snow Warning to Airmen) which will contain relevant runway conditions. A METAR usually looks something like this:

```
EVRA 260000Z 29002KT 7000 TSRA FEW023CB BKN026 03/03 Q1022 TEMPO 2000 +GR
```

You should be able to decode this information and provide it to pilots when needed. Here is what each section of the METAR means:

EVRA – the ICAO code of the aerodrome reported - Riga International Airport

260000Z – the day of the month and time of report (UTC) – 26<sup>th</sup> day of the month, 00:00 UTC

29002KT – surface wind – 290 degrees at 2 knots

7000 – horizontal visibility at runway threshold – 7000 meters

TSRA – weather conditions – thunderstorm and rain

FEW023CB – clouds – few clouds at 2300 feet, cumulonimbus

BKN026 – clouds – broken at 2600 feet

03/03 – temperature and dew point – temperature 3°C, dew point 3°C

Q1022 – barometric pressure (QNH) – 1022 hPa (hectopascals)

Note: if the QNH value is below 1001 hPa, 'hectopascals' should be appended to the QNH value when spoken on frequency.

TEMPO – temporary changes expected. Most of the time this value is NOSIG, which means 'no significant change expected', but in this example we have it as TEMPO to show most of the possible quirks of a METAR

2000 – horizontal visibility – can temporarily reduce to 2000 meters

+GR – weather conditions – heavy hail (+ means 'heavy' and GR means 'hail')

A METAR can contain many other conditions that couldn't be shown in this example. You can find most of them here: [link](#)

If your METAR includes a SNOWTAM, you should be able to decode it too as it contains important information about runway conditions. A SNOWTAM usually looks something like this:

```
R18/699391
```

For simplicity, the SNOWTAM is split into different coloured sections.

R18 – this SNOWTAM is valid for runway 18

6 – type of deposit - slush

9 – extent of contamination – 51% to 100% of runway covered

93 – depth of deposit – 150 millimetres

91 – breaking conditions – breaking action poor

Other conditions that can be found in a SNOWTAM can be found here: [link](#)

### 2.3.2 TAF

Terminal Aerodrome Forecast or TAF is another piece of weather information that you would need to know and be able to decode. All abbreviations, codes and values that can be used inside a METAR can be also seen in a TAF and vice-versa. A typical TAF is a 24-hour forecast of weather expected at the aerodrome in question. A TAF usually looks something like this:

```
TAF EVRA 031700Z 0318/0418 32007KT 9999 SCT040 TEMPO 0318/0320 SCT030CB  
PROB40 TEMPO 0321/0403 0700 FG BKN001
```

For simplicity, parts of the TAF were highlighted to identify separate forecasts and the main TAF info.

TAF EVRA 031700Z – this is the first part of the TAF, it tells you that it's actually a TAF and not a METAR or any other meteorological report, the airport that it belongs to (Riga International Airport) and the time when it was issued (3<sup>rd</sup> day of the month, 17:00 UTC)

0318/0418 32007KT 9999 SCT040 – all other parts of the TAF are structured this way and contain the timespan to which the section applies and weather information in the same format as a regular METAR. The timespan in a section of a TAF is structured as follows:

0318/0418 – 03 means that it starts at on the 3<sup>rd</sup> day of the month and 18 means that it starts at 18:00 UTC. Same for the end time – 04 means that it ends on the 4<sup>th</sup> day of the month and 18 means that it ends at 18:00 UTC.

The TAF in the example above can be decoded like this:

TAF for Riga International Airport on the 3<sup>rd</sup> day of the month at 1700Z

FROM 3<sup>rd</sup> at 1800Z TILL 4<sup>th</sup> at 1800Z the following is expected:  
WIND 320 degrees at 7 knots  
VISIBILITY greater than 10 kilometres  
CLOUDS scattered at 4000 feet

CONDITIONS WILL BE TEMPORAIRLY CHANGED UP TO 50% OF THE TIME  
FROM 3<sup>rd</sup> at 1800Z TILL 3<sup>rd</sup> at 2000Z the following is expected:  
CLOUDS scattered at 3000 feet, cumulonimbus

WITH PROBABILITY OF 40%  
CONDITIONS WILL BE TEMPORAIRLY CHANGED UP TO 50% OF THE TIME  
FROM 3<sup>rd</sup> at 2100Z TILL 4<sup>th</sup> at 0300Z the following is expected:  
VISIBILITY 700 meters  
FOG  
CLOUDS broken at 100 feet

If you need additional information on TAFs, you can refer to this: [link](#)

### 2.3.3 NOTAM

Notice to Airmen or NOTAM is a set of information relevant to all pilots flying in the airspace. In our case we're interested in all NOTAMs affecting EVRR FIR. Make sure to check active NOTAMs before your session to be able to provide all the necessary information to pilots. You can check for active NOTAMs here: [link](#) or [link](#)

### 2.3.4 Selection of runway in use

The final step in making sure that you have all the needed information prepared is to select the runway in use. Normally this duty belongs to whoever is operating and executing the duties of Riga Tower (TWR) and/or Riga Approach (APP) and if there is any station online above you, they would have already

selected the runway in use themselves, though if you're the only one online, you'll have to do it yourself.

The main method of determining the runway in use is based on surface wind. The current METAR always contains that information in the following format: 35011KT. This contains the direction of the wind (350 degrees in this case) and its speed (11 knots). If the wind direction is closer to 360 degrees (from 270 degrees to 089 degrees), runway 36 shall be selected; otherwise, if the wind direction is closer to 180 degrees (from 090 degrees to 269 degrees), runway 18 shall be selected.

The following factors can be also taken into consideration when selecting the runway in use:

- approach and landing facilities serviceability;
- meteorological conditions (RVR);
- reported or forecast wind shear, or when thunderstorms are expected to affect the approach or departure;
- air traffic flow/direction;
- preferential runway system.

A runway-in-use direction with a tail wind component, including gusts, not exceeding 5 kt can be assigned, when:

- air traffic flow expected to runway direction
- the crosswind component, including gusts, does not exceed 15 kt and/or
- the runway condition is not worse than "WET" and braking action is not worse than "GOOD" and
- braking action is not adversely affected by runway contaminants such as ice, slush, snow, frost and water.

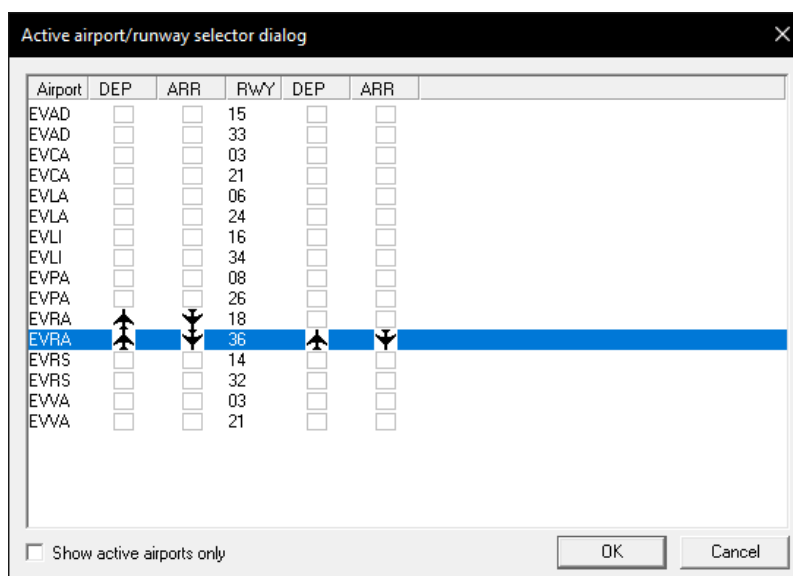
As mentioned before, a preferential runway system may also be used to determine the runway in use.

	00:00 to 17:59	18:00 to 23:59
TAKE OFF	18/36	18/36
LANDING	18/36	36

Finally, once the decision has been made, select the runway in use in the runway selection dialog. The button that opens the dialog is highlighted in red on the screenshot below.



The dialog should look like this:





### 2.3.5 ATIS

Weather information from the current METAR, runway in use and all relevant NOTAMs to Riga Airport shall be compiled into the Automatic Terminal Information Service or ATIS. Riga ATIS (EVRA\_ATIS) is hosted on frequency 120.180 MHz (120.175 MHz). As well as all the information mentioned before an ATIS also contains an 'ATIS letter' – a letter that identifies the edition of the ATIS and the time of its issue. If a pilot reports to you the correct ATIS letter, you'll know that they have the latest information.

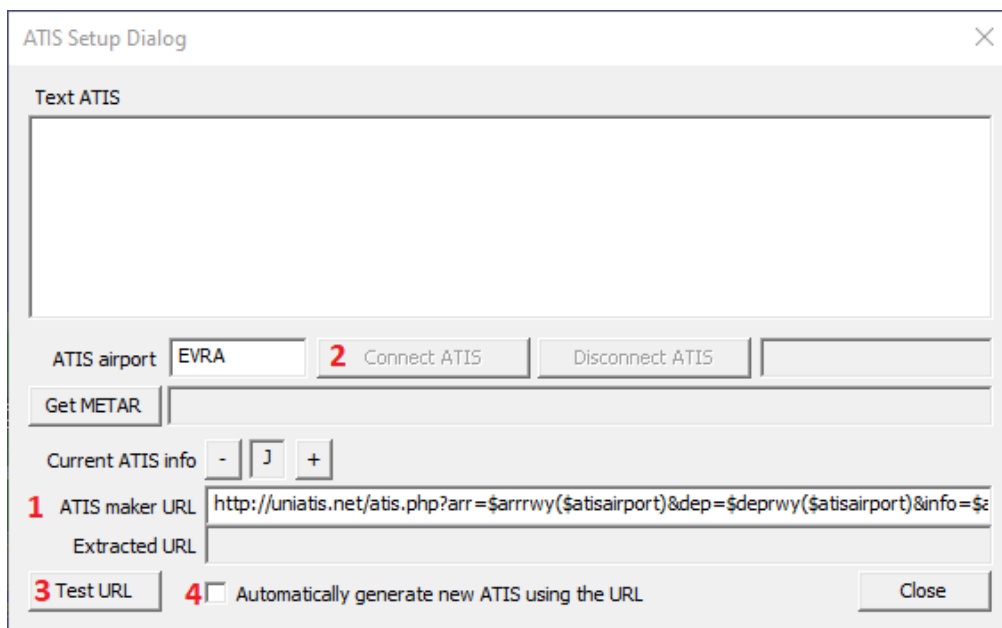
Hosting the ATIS.

If there is any station above you, they would already have the ATIS online and they would just update it for you, otherwise you'd have to host the ATIS yourself. To do that, open the dialog by pressing the ATIS letter in the top:



To host the ATIS correctly, you shall do the following:

1. Acquire the correct ATIS URL from [Latvia vACC ATIS maker](#) that includes all the taxiway closures and conditions relevant to pilots. Paste the URL into the 'ATIS maker URL' input field
2. Select the ATIS letter (normally A at the start of the session) and connect the ATIS
3. Test the URL
4. Enable automatic generation of the new ATIS



### 2.3.6 Initial coordination with other controllers

Most often you won't be the only one online, there may be some stations above you. It is important to notify the station directly above you that you're online and get all relevant information from them – usually it will be the runway in use and the ATIS letter. It is also recommended to notify all other stations in the ATC chat in the EuroScope client. To do that simply type a forward slash ( / ) and your message. Below you can see a list of all other positions in EVRR FIR that you may encounter.

### 2.3.7 Position list for EVRR FIR

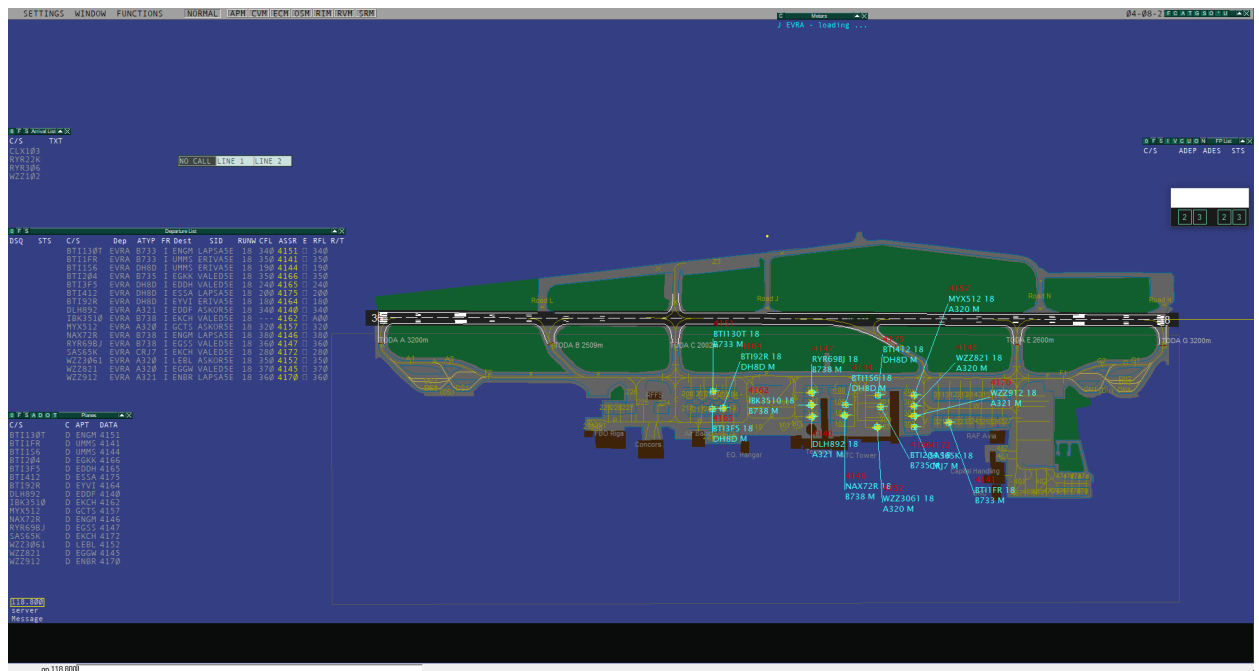
Identifier	Radio callsign	Frequency (MHz)	Remarks and/or Airspace Covered
Stations that you'll encounter most frequently			
EVRA_ATIS	Riga ATIS	120.180* (120.175)	NIL
EVRA_GND	Riga Ground	118.805* (118.800)	IRL station isn't open 24/7, sometimes is combined with TWR
EVRA_TWR	Riga Tower	118.105* (118.100)	Covers Riga CTR SFC – 2500FT
EVRA_B_APP	Riga Approach	134.850	Covers Riga TMA B 1500FT – FL95  IRL station isn't open 24/7, most of the time is combined with APP on 129.925
EVRA_APP	Riga Approach	129.925	Covers Riga TMA A and C (and most of the time B sector too) C sect. 3000FT – 5500FT B sect. 1500FT – FL285 A sect. 3000FT – FL285
EVRR_CTR	Riga Control	135.100	Covers Riga FIR Primary Riga Control freq. FL95 – FL660
EVRR_N_CTR	Riga Control	135.100	Covers Riga FIR NORTH FL95 – FL660
EVRR_E_CTR	Riga Control	133.200	Covers Riga FIR EAST FL95 – FL660
EVRR_S_CTR	Riga Control	134.750	Covers Riga FIR SOUTH FL95 – FL660
EVRR_W_CTR	Riga Control	134.125	Covers Riga FIR SOUTH and NORTH FL95 – FL660
Other stations			
EVLA_I_TWR	Liepāja Information	129.400	Covers Liepāja TMA GND – FL95
EVRR_I_CTR	Riga Information	120.225	Covers Riga FIR GND – FL660 Only services VFR traffic
EVVA_ATIS	Ventspils ATIS	126.800	NIL

\*These frequencies belong to an 8.33 kHz channel, advise the frequency in brackets to aircraft unable to tune into 8.33 kHz frequencies.

For frequencies that end with 5, the number 5 gets substituted with 0 due to VATSIM limitations. The actual frequency with number 5 at the end must be used in instructions to pilots.

## 2.4 Your controller client and area of responsibility

This is an example of what you might see when logging onto Riga Ground.



You have quite a lot of things in front of you, but most importantly, the map of Riga Airport with all current aircraft online and your departure list. We'll go over the departure list in a bit more detail now.

DSQ	STS	C/S	Dep	ATYP	FR	Dest	SID	RUNW	CFL	ASSR	E	RFL	R/T
BTI130T		EVRA	B733	I	ENGM	LAPSA5E	18	340	2000			340	
BTI1FR		EVRA	B733	I	UMMS	ERIVA5E	18	350	2000			350	
BTI1S6		EVRA	DH8D	I	UMMS	ERIVA5E	18	190	2000			190	
BTI204		EVRA	B735	I	EGKK	VALED5E	18	350	2000			350	
BTI3F5		EVRA	DH8D	I	EDDH	VALED5E	18	240	2000			240	
BTI412		EVRA	DH8D	I	ESSA	LAPSA5E	18	200	2000			200	
BTI92R		EVRA	DH8D	I	EYVI	ERIVA5E	18	180	2000			180	
DLH892		EVRA	A321	I	EDDF	ASKOR5E	18	340	2000			340	
IBK3510		EVRA	B738	I	EKCH	VALED5E	18	- - -	2000			A00	
MYX512		EVRA	A320	I	GCTS	ASKOR5E	18	320	2000			320	
NAX72R		EVRA	B738	I	ENGM	LAPSA5E	18	380	2000			380	
RYR69BJ		EVRA	B738	I	EGSS	VALED5E	18	360	2000			360	
SAS65K		EVRA	CRJ7	I	EKCH	VALED5E	18	280	2000			280	
WZZ3061		EVRA	A320	I	LEBL	ASKOR5E	18	350	2000			350	
WZZ821		EVRA	A320	I	EGGW	VALED5E	18	370	2000			370	
WZZ912		EVRA	A321	I	ENBR	LAPSA5E	18	360	2000			360	

This is your departure list. It contains several columns. Aircraft number in sequence (DSQ), status (STS), callsign (C/S), departure airfield (Dep), aircraft type (ATYP), flight rule (FR), destination airfield (Dest), assigned standard instrument departure (SID), runway (RUNW), cleared flight level (CFL), assigned SSR squawk code (ASSR), clearance received flag (E), requested flight level (RFL), and communication rule (R/T). If later in the manual it is said that you need to do something in the departure list, you now know where to go.

### 2.4.1 Your area of responsibility

An Aerodrome Movement Area consists of all parts of the aerodrome that an aircraft can move on (aprons, taxiways, the runway). While operating Riga Ground, you're responsible for the Aerodrome Movement Area ONLY on the EAST side of the airport. This means that you're NOT responsible for the runway, the remote apron Z3 and taxiway K.

## 2.5 Handling departing aircraft

### 2.5.1 Squawk codes

All aircraft must be assigned a valid squawk code. In Riga FIR, the following squawk ranges apply:

- **4140 – 4177** for all international departures
- **0060 – 0077** for all domestic departures (including domestic VFR)

If you see an aircraft in your departure list that doesn't have an appropriate squawk set, you have to press on their assigned squawk code and press 'auto-assign' to assign an international squawk or manually type it in to assign a domestic squawk.

### 2.5.2 SIDs and initial climb altitudes

All IFR departures must depart via a Standard Instrument Departure (SID) unless otherwise coordinated. All SIDs at Riga have the initial climb altitude of 4000 feet, thus the said altitude must be set as the cleared flight level (CFL) in the departure list for all applicable aircraft as the initial climb altitude is the vertical clearance limit for any departing aircraft.

CFL for VFR departures must be coordinated with Riga Tower.

*A list of waypoints that a SID can lead to at Riga*

- AMOLI
- ASKOR
- BERIL
- ERIVA
- LAPSA
- SAKTA
- SOKVA
- TENSI
- TUSAS
- VALED
- VANAG

### 2.5.3 Flight level allocation

In Riga FIR the following rule applies to all outbound, transiting, and inbound flights:

- EASTBOUND flights must fly on ODD flight levels
- WESTBOUND flights must fly on EVEN flight levels

### 2.5.4 Flight plan validation

It is your duty to validate all outbound flight routes and flight plans.

A flight route is considered valid if all the following conditions are met:

- The route starts with one of the waypoints that a SID leads to
- It has a Coordination Point Exit (COPX) with one of the FIRs that neighbour the Riga FIR
- It has COPX points on all FIR borders that it passes through

A flight plan is considered valid if all the following conditions are met:

- The flight route is valid
- The Requested Flight Level (RFL) is appropriate for the direction of flight

### 2.5.5 Issuing an IFR clearance

Pilot's communication with ATC usually starts with a radio check. It would be carried out like so:

BTI123: "Riga Ground, good day, Air Baltic 123, radio check"

Riga Ground: "Air Baltic 123, Riga Ground, hello, read you 5"

After that the pilot shall request their IFR clearance. It would happen like so:

BTI123: "Riga Ground, Air Baltic 123, Airbus A220 on stand 107 with information A on board, QNH1013, requesting IFR clearance to Tallinn."

Riga Ground: "Air Baltic 123, Riga Ground, information A is correct, QNH1013, cleared to destination Tallinn via SOKVA1H departure, squawk 4140"

BTI123: "Cleared to destination Tallinn via SOKVA1H departure, squawk 4140, Air Baltic 123"

Riga Ground: "Air Baltic 123, read back correct"

When issuing an IFR clearance, you need to make sure that the filed flight plan is valid and that the pilot has the latest ATIS information and QNH.

### **Making sure an IFR flight has a filed flight plan**

Sometimes it happens that a pilot forgets to file their flight plan, in that case, the pilot in question shall be prompted to do so. You can do it like this:

Air Baltic 123, unfortunately, I don't see a filed flight plan from you, please file one

### **Providing the pilot with information that they haven't reported**

If the pilot didn't report the correct ATIS letter and QNH, the clearance shall contain that information, not as a confirmation, but as new information:

Information A is current, QNH1013

### **Correcting flight plan mistakes**

If there are mistakes in the flight route you can either offer a reroute to the pilot if you can or ask them to refile their flight plan.

If the RFL is incorrect for the direction of flight, you should prompt the pilot to select a correct flight level like so (in this example, a pilot filed an even flight level 340, while flying east):

Riga Ground: "Air Baltic 123, Riga Ground, your requested flight level is invalid for your direction of flight. Would you like flight level 350 or flight level 330?"

BTI123: "Flight level 350 please, Air Baltic 123"

Riga Ground: "Air Baltic 123, copy final flight level 350. Report ready to copy your IFR clearance"

Once the clearance has been issued and the read back was confirmed to be correct, tick the clearance received flag (E) in your departure list for the aircraft in question.

Note: ALL pieces of information issued in an IFR clearance must be fully read back for the read back to be considered correct.

### **2.5.6 Issuing a VFR clearance**

As a Riga Ground controller, you're not the one issuing the clearance for VFR traffic, it is the duty of Riga Tower. Thus, once a pilot requests any type of VFR clearance, let it be visual circuits or exiting the

controlled airspace, you will ask the pilot to stand by and pass their request to the controller that is executing the duties of Riga Tower. Here is an example:

YLBTI: "Riga Ground, YLBTI, good day, Diamond DA40 at stand 479, information A on board, QNH1013, requesting visual circuits"

Riga Ground: "YLBTI, Riga Ground, hello, standby"

Now you should send the request to the controller that is executing the duties of Riga Tower. Once you have received an appropriate clearance, you shall prompt the pilot if they're ready and then issue the clearance. Here is an example:

Riga Ground: "YLBTI, are you ready to copy your clearance?"

YLBTI: "Affirm, YLBTI"

Riga Ground: "YLBTI, you are cleared for right hand visual circuit, runway 36, not below 1500 feet, QNH1013, squawk 0060"

YLBTI: "Cleared for right hand visual circuit, runway 36, above 1500 feet, QNH1013, squawk 0060, YLBTI"

Riga Ground: "YLBTI, read back correct, start-up approved"

Once the clearance has been issued and the read back was confirmed to be correct, tick the clearance received flag (E) in your departure list for the aircraft in question.

Note: ALL pieces of information issued in a VFR clearance must be fully read back for the read back to be considered correct.

Different to an IFR flight, a VFR flight doesn't need to have a filed valid flight plan. It is encouraged that pilots file a flight plan with their intentions, but it is not mandatory. If a pilot didn't file a flight plan, you can create it yourself using the EuroScope flight plan dialog. After that you'll see the aircraft in your departure list. For a VFR flight, the CFL shall be set to the altitude restriction issued by Riga Tower.

Same as for an IFR pilot, a VFR pilot needs to have the latest ATIS information and QNH on board. You should always provide the QNH after the altitude restriction. You should provide the ATIS letter as well if the pilot hasn't reported it on initial request.

Most aircraft that would be requesting a VFR flight plan can't last much time without their engine being on and charging their batteries, so it is good practice to approve their start-up in the read back confirmation.

### **In case there is no station above you**

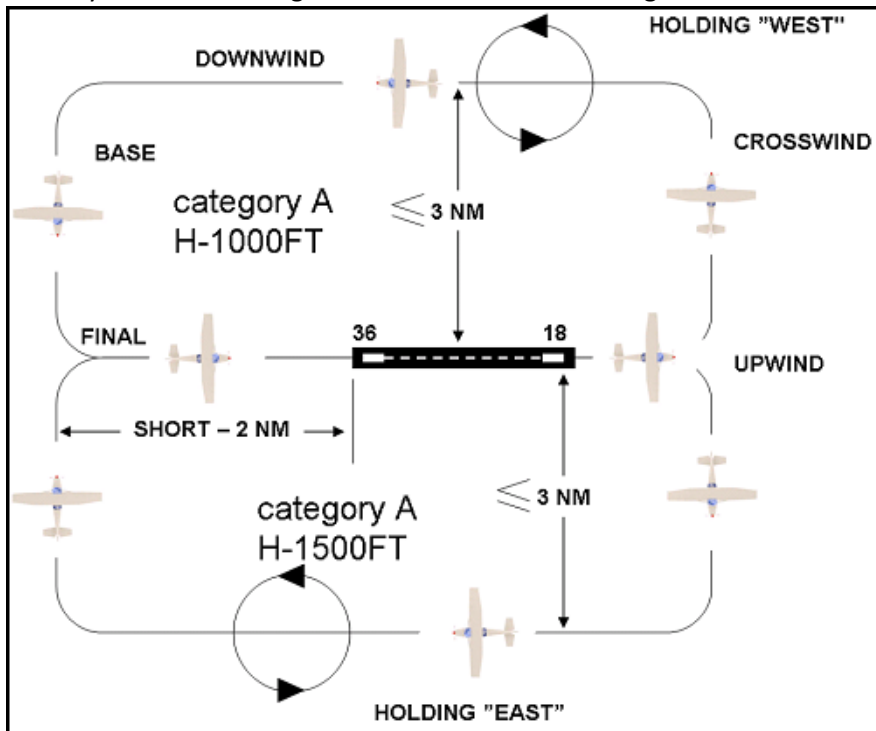
In that case it is your duty to issue a VFR clearance. All VFR clearances should be issued in accordance with Latvian AIP EVRA AD 2.22 points 2 and 3.2.1.

As a rule of thumb, when visual circuits are requested and runway 36 is in use, the pilot shall be cleared for RIGHT hand visual circuits NOT BELOW altitude 1500 feet with a domestic squawk.

When runway 18 is in use it shall be LEFT hand visual circuits NOT BELOW altitude 1500 feet with a domestic squawk. If for any reason, you clear the pilot for circuits on the west side of the aerodrome, the altitude restriction shall be AT OR BELOW altitude 1000 feet.

Clearances to Spilve Airport and to exit Riga CTR shall be issued in accordance with Latvian AIP EVRA AD 2.22 point 2 with an altitude restriction of AT OR BELOW 1500 feet unless there is a reason to give a different restriction.

Below you can see a diagram of the visual circuit at Riga and how it works.



#### 2.5.7 Pushback and start-up

The next step of the flight is pushback and start-up. Normally, the procedure is carried out like this:

BTI123: "Air Baltic 123, stand 107, request pushback and start-up"

Riga Ground: "Air Baltic 123, stand 107, pushback and start-up approved"

BTI123: "Pushback and start-up approved, Air Baltic 123"

Note: at Riga the direction of pushback shall NOT be provided in the clearance.

The pushback clearance may only be issued if there are no obstacles behind the aircraft that would make pushback dangerous or even impossible, otherwise the aircraft shall be instructed to hold position. The reason can also be provided, but it is not mandatory. Here is an example:

BTI123: "Air Baltic 123, stand 107, request pushback and start-up"

Riga Ground: "Air Baltic 123, hold position due to traffic behind you"

BTI123: "Hold position, Air Baltic 123"

There are some cases when pushback is not required at all, or the pilot should be asked to make the pushback straight. A list of stands that fall under the exceptions above will be provided later in this paragraph. Note: the pushback instruction must be read back fully and correctly.

Here is an example when pushback is not required:

BTI123: "Air Baltic 123, stand 108, request pushback and start-up"

Riga Ground: "Air Baltic 123, stand 108, pushback is not required, start-up approved"

BTI123: "Start-up approved, Air Baltic 123"

If a pilot is familiar with the procedure and requests just start-up on a taxi-out stand, you should just approve their start-up without notifying them of pushback being not required.

Here is an example when a straight pushback is required:

BTI123: "Air Baltic 123, stand 105, request pushback and start-up"

Riga Ground: "Air Baltic 123, stand 105, straight pushback and start-up approved"

BTI123: "Pushback and start-up approved, Air Baltic 123"

Another way to issue a straight pushback clearance is like so:

Air Baltic 123, stand 105, pushback and start-up approved, straight pushback

Below you can see a list of stands that do not require pushback:

- 100
- 101
- 103
- 108
- 109
- 112 – 115
- 204 – 208
- 224\*
- 226
- 229
- 290 – 292\*
- 308
- 309
- 311 – 317
- 461 – 462
- 471 – 479\*\*

\*pushback still may be requested by the pilot in case their wingspan is too large

\*\*pushback is not possible from these stands under any circumstances, these stands are intended for GA aircraft only

Below you can see a list of stands that require the pushback to be straight:

- 102
- 105
- 302
- 303

### 2.5.8 Taxi to the active runway

When issuing a taxi clearance, your goal is to get the aircraft from its current position to the runway holding point in the most efficient, but at the same time safest way possible. In our example, the aircraft in question (A220) just pushed back from stand 107 and is on taxiway S facing west. They were cleared via SOKVA1H departure; thus, departure runway is 36. You can see the aircraft's position on the screenshot below marked with a red arrow.





Based on the aircraft type, you can offer the pilots an intersection departure. From runway 36 you can depart from the following intersections: A, B and C. From runway 18 departing aircraft can choose between intersections E and G. Here is a table of take-off distances from all intersections:

Runway	Intersection	Take off distance (m)
36	A	3200
36	B	2509
36	C	2002
18	G	3200
18	E	2600

As a rule of thumb, small turboprop aircraft and small jets should be expected to depart via intersections B or C. Medium jets should be expected to depart via A or B. And heavy aircraft should only depart via A. It is good practice to notify Riga Tower if an aircraft decides to take an intersection departure.

The aircraft in our example is an Airbus A220, so they can be offered an intersection departure, you can do it like so:

BTI123: "Air Baltic 123, ready for taxi"

Riga Ground: "Air Baltic 123, are you able for intersection B for departure?"

BTI123: "Affirm, Air Baltic 123"

Riga Ground: "Air Baltic 123, taxi to holding point runway 36 via F and B"

BTI123: "Taxi to holding point runway 36 via F and B, Air Baltic 123"

Note: the taxiway that the aircraft is currently standing on shall NOT be mentioned in the taxi clearance.

Note: the taxi instruction must be read back fully and correctly.

Note: all taxiing aircraft shall observe the ground speed limit of 30 knots.

There is a way to make the phraseology more concise. The default intersection for departure for all aircraft is the one that provides you the full length of the runway. Due to that, you can clear the aircraft to taxi via A, but notify the pilot that intersection B is available. You can do it like so:

Air Baltic 123, taxi to holding point runway 36 via F and A, intersection B is available.

Here is a diagram of how the aircraft was cleared in our example. It is up to the pilot to select intersection B (highlighted in green) if aircraft performance permits or otherwise use the full runway length via A (highlighted in red).



## Limiting or cancelling the taxi clearance

If there is an aircraft crossing the taxi path of another aircraft, you can ask one of the aircraft to hold position and give way to another aircraft. Most of the time such situations may occur between a departing and an arriving aircraft, in this case the departing aircraft has priority over the arriving one. In case there are 2 departing aircraft crossing paths, the one that is closer to their assigned holding point shall be prioritised. IFR aircraft shall always have priority over VFR aircraft.

If you need for the aircraft to stop where it is right now, an instruction to hold position shall be issued:

Riga Ground: "Air Baltic 123, hold position"

BTI123: "Hold position, Air Baltic 123"

If you need to prioritise an aircraft, an instruction to give way shall be issued. This instruction must contain the aircraft type that the way shall be given to, the airline, the direction of their taxi and the name of the taxiway. Do it like so:

Riga Ground: "Air Baltic 123, give way to the Lufthansa Airbus A320 passing from right to left on taxiway F"

BTI123: "Give way to the Lufthansa A320 passing from right to left on taxiway F, Air Baltic 123"

If you're not yet sure about the order of taxiing aircraft, you can issue an incomplete taxi instruction that asks the aircraft to hold short of a certain taxiway. Note: sometimes this instruction can be combined with the give way instruction. You can do it like so:

Riga Ground: "Air Baltic 123, taxi via F, hold short of taxiway C"

BTI123: "Taxi via F, hold short of C, Air Baltic 123"

When taxiing can be resumed safely, the instruction to continue taxi shall be issued:

Riga Ground: "Air Baltic 123, continue taxi"

BTI123: "Continue taxi, Air Baltic 123"

Note: if the aircraft in question was given an incomplete taxi instruction that doesn't lead to a runway holding point, taxi instructions shall be added to the continue taxi instruction.

For additional information on optimal taxi routes and taxiing in general at Riga Airport, refer to the Latvian AIP EVRA AD 2.24.2 Aircraft Parking/Docking Chart.

### 2.5.9 Transfer of control and transfer of communications to Riga Tower

Your area of responsibility when controlling Riga Ground extends exactly to the holding point of the runway. Thus, the clearance limit for each departing aircraft under your control is the holding point. It is your duty to ensure an uninterrupted flow of traffic to the runway, so the aircraft approaching the holding point should be handed off in time before they reach the holding point so that they can depart without stopping (when possible). As a rule of thumb, you should hand the aircraft off when they leave taxiway F and join one of the intersection taxiways (A, B, C, E, G).

Note: as Riga Ground does not assume aircraft TAGs, transfer of control and transfer of communications happens simultaneously.

Note: if there is no station above you, the pilot shall be instructed to monitor UNICOM on frequency 122.800. This frequency operates as a Common Traffic Advisory Frequency (CTAF) on VATSIM when there are no controllers online.

## Transfer to Riga Tower:

Riga Ground: "Air Baltic 123, contact Riga Tower on 118 decimal 105, bye-bye"

BTI123: "Contact Riga Tower on 118 decimal 105, Air Baltic 123, thanks for your service, bye-bye"

## Transfer to UNICOM:

Riga Ground: "Air Baltic 123, unfortunately there is no further ATC available, monitor UNICOM on 122 decimal 8, bye-bye"

BTI123: "Monitor UNICOM on 122 decimal 8, Air Baltic 123, thanks for your service, bye-bye"

Note: all handoffs must include the name of the next station and their frequency.

Note: the frequency must be read back fully and correctly.

## 2.6 Handling arriving aircraft

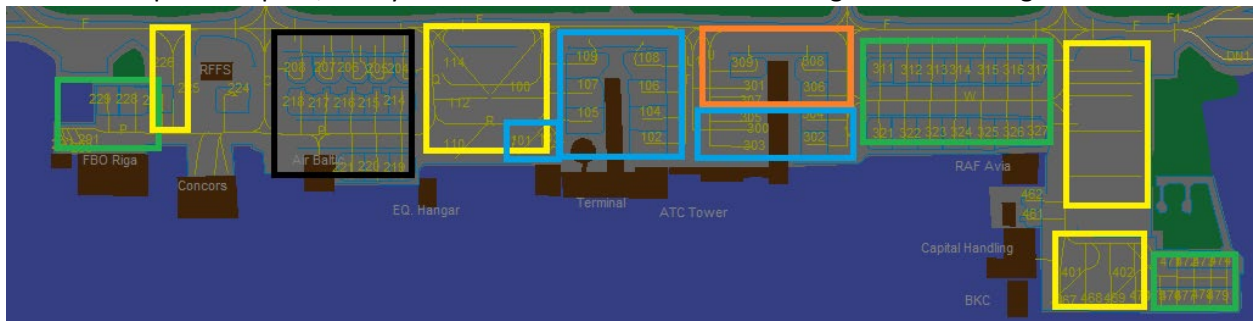
### 2.6.1 Transfer of control and transfer of communications from Riga Tower

In accordance with Latvian AIP EVRA AD 2.20 5.2.2.4, the aircraft shall immediately contact Riga Ground after vacating the runway after landing unless otherwise instructed. This means that all aircraft will contact you right after they vacated the runway.

Note: as Riga Ground does not assume aircraft TAGs, transfer of control and transfer of communications happens simultaneously.

### 2.6.2 Stand allocation for arriving aircraft

Here is a map that depicts, how you should allocate stands for arriving aircraft into Riga.



- Zones highlighted in green are mostly used by small turboprops and GA aircraft
- Zones highlighted in yellow are used for cargo aircraft and heavy aircraft
- Zones highlighted in blue are intended for arrivals from the Schengen countries
- Zones highlighted in orange are intended for arrival from non-Schengen countries
- Zone highlighted in black is used both for Schengen countries and non-Schengen countries

Here is some more precise information with specific stand numbers and what they're expected to be used for:

- 100 is a cargo/heavy stand
- 101 – 109 are used for Schengen arrivals
- 110, 112 – 115 are rarely used, but mostly for Schengen arrivals and/or cargo aircraft
- 204 – 208 and 214 – 221 are used for both Schengen and non-Schengen arrivals
- 224 and 225 are very rarely used, mostly for GA aircraft
- 226 is a cargo/heavy stand

- 227 – 227 are mostly used for GA aircraft or storing unused aircraft
- 291 – 291 are for GA aircraft
- 300 is a Schengen stand that allows for wider wingspan
- 301 is a non-Schengen stand that allows for wider wingspan
- 302 – 305 are used for Schengen arrivals
- 306 – 309 are used for non-Schengen arrivals
- 311 – 317 and 321 – 327 are mostly used for GA aircraft, though they are capable of parking a medium jet
- 401, 402, 467, 468, 469 and 470 are cargo/heavy stands
- 461, 462 and 471 – 479 are GA stands

### 2.6.3 Taxi to stand

Same as when issuing an instruction to taxi to the holding point, this instruction is aimed at getting the aircraft from the runway to its stand in the most efficient, but also the safest way possible. For this example, the aircraft in question vacated runway 36 via D, is an Airbus A220 and arrived from Copenhagen. This situation should be handled like so:

BTI123: "Riga Ground, Air Baltic 123"

Riga Ground: "Air Baltic 123, Riga Ground, good day, welcome to Riga, taxi to stand 109 via F and T"

BTI123: "Taxi to stand 109 via F and T, thank you, Air Baltic 123"

Note: the taxiway that the aircraft is currently standing on shall NOT be mentioned in the taxi clearance.

Note: the taxi instruction must be read back fully and correctly.

Note: all methods of making taxiing safe outlined in [Paragraph 2.5.8 of this document](#), 'Limiting or cancelling the taxi clearance' clause apply to arriving aircraft as well.

It is good practice to send arriving VFR aircraft to apron 4 without specifying the specific stand.

### 2.7 Helicopter procedures

Helicopter movement at Riga is regulated by Latvian AIP EVRA AD 2.16 and 2.20.10. Helicopters may take off both from the runway and from the helipad (next to stand 230). Special helicopter stands are available at Riga – H01 and H02. **ALL** helicopter movement must be coordinated between Riga Ground and Riga Tower. The following are mandatory rules for helicopter handling:

- Any helicopter vacating the helipad must report "helipad vacated" or be asked to confirm this.
- Helicopters with skid undercarriage are to use all ground taxiways as air taxiways.
- All helicopters intending to air taxi should include the term "air taxi" in the taxi requests. If it is unclear, which type of taxi the pilot is requesting it is better to ask them to report said type of taxi.
- Wheeled helicopters shall not use helicopter stands for turning on the ground and may ground taxi for departure when pre-aligned on the respective lead-out line. Wheeled helicopters shall not touch down or lift off on aircraft stands 313, 314, 315, and 316.
- Helicopters landing on the helipad shall avoid, as far as practicable, overflying any other aircraft, de-icing pads, and all aprons except Apron 2. It is a joint duty of Riga Ground and Riga Tower to prevent them from doing so.
- Simultaneous movement on the helipad and H01/H02 stands is NOT allowed.
- Simultaneous movement on the helipad and the runway is NOT allowed.
- Any traffic overflying Riga Airport at or below 1500 ft is considered to be an obstruction to runway movements (this includes both helicopters and winged aircraft).

## 2.8 Conditional clearances

A conditional clearance is an ATC clearance that only becomes active after a certain condition is met, hence the name conditional clearance. While controlling Riga Ground, conditional clearances will most often be used for pushback clearances and taxi clearances. A good example of this would be when an aircraft pushed back from stand 106 and requested taxi, but didn't start taxiing yet, and an aircraft on stand 104 requests pushback and start-up. In this case you can approve the pushback conditionally.

BTI123: "Air Baltic 123, stand 104, request pushback and start-up"

Riga Ground: "Air Baltic 123, after a company Airbus A220 passes from left to right behind you, pushback and start-up is approved"

BTI123: "After the company A220 passes from left to right, pushback and start-up approved, Air Baltic 123"

The same type of clearance can be issued for taxiing as well.

Note: conditional clearances are quite long and under high traffic loads are likely to cause frequency congestion, use them with caution.

## 2.9 Workload management and safety

While providing Air Traffic Control services, our top priority is always safety. Thus, you should always know to what consequences your actions can lead. There is a wide variety of negative outcomes due to safety violations, stress, and other factors.

Sometimes, especially during events, traffic levels may be quite high, and you need to be prepared for this. Here is what you should do to help yourself manage your workload efficiently, while maintaining an appropriate level of safety:

- Always make it clear for yourself, what is the departure sequence, who goes 1<sup>st</sup>, who goes 2<sup>nd</sup>, etc.
- Know and apply proper priority for aircraft for efficient and safe operations
- Never clear an aircraft for something that you're unsure about or that may delay the departure/arrival of other aircraft

Always remember the following priority rules:

- Handing off aircraft that are approaching the holding point has the highest priority
- Departing aircraft are prioritised over arriving aircraft
- An aircraft that has already pushed back and/or started their engines has priority over an aircraft with no engines running, because the aircraft with engines running is wasting fuel by standing still
- An IFR aircraft always has priority over VFR aircraft

If there is a situation when the frequency gets too busy, and many aircraft are calling at once, you can solve this situation by doing the following:

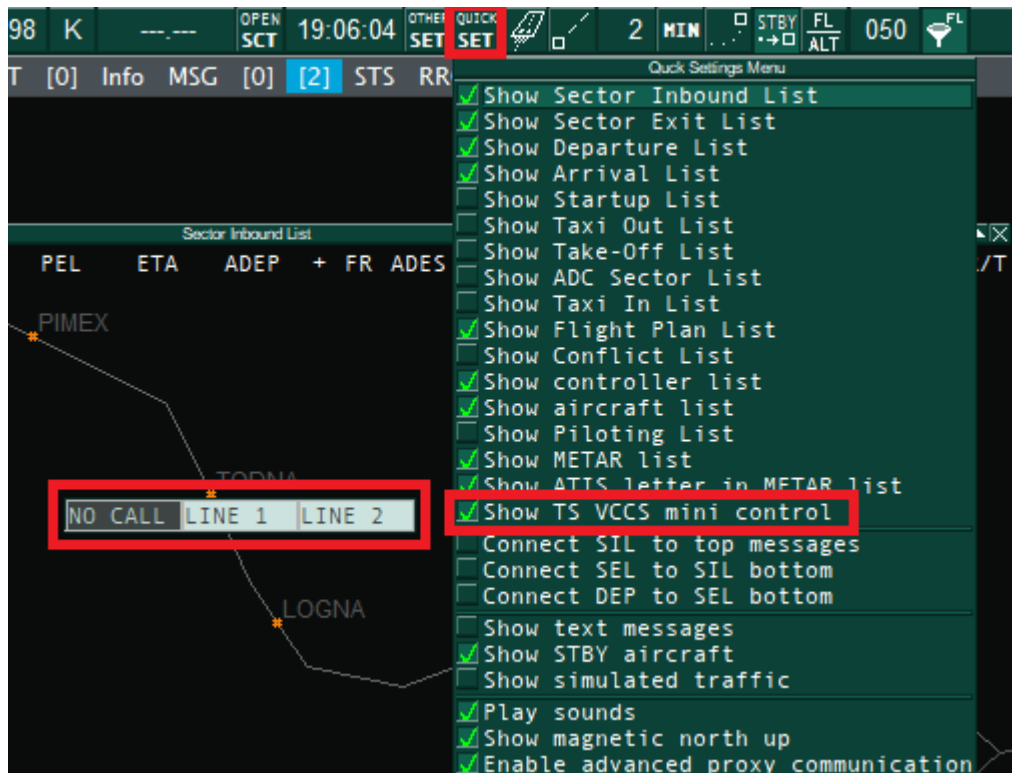
- Remember the number of stations that called you and either the callsign or the request of one of the stations
- Use the following phraseology (modify it appropriately to your situation):  
"All stations, standby. That was 3 stations at once. Station calling for pushback, go ahead"

In terms of safety, it is always to be safe than sorry. You need to always be sure about what will happen after each of your instructions.

## 2.10 Coordination with other Air Traffic Controllers

Any mean of conveying relevant information about aircraft, their requests, etc. to other ATCs is considered to be a form of coordination. Here is a list of situations when you'll most likely find yourself coordinating with other ATCs:

- A VFR departure requesting clearance – it is the responsibility of Riga Tower to issue that



clearance, not yours

- An IFR departure requesting a departure with no SID for any reason (e.g., local IFR training, lack of up-to-date AIRAC data on board, etc.)

In Latvia vACC we primarily use 3 means of coordination: text messages, VCCS and Discord. To send a text message to a controller, enter '.msg {callsign of the controller}' into your EuroScope terminal and then your message. If you'd like to just open your private messages with a controller, enter '.chat {callsign of the controller}' into your EuroScope terminal.

In order to make a VCCS call to a controller, open QUICK SET on the top and tick 'Show TS VCCS mini control' and the control will pop up as seen on the screenshot below.

Now, right click on the VCCS control that popped up, press EDIT, enter yourself a nickname, select a Ground-to-Ground Push-to-talk button (G2G PTT) for yourself and press OK. Now you can select the station in the list that you'd like to call. You can see an example on the screenshot below.

And the last method – Discord. That is pretty much self-explanatory. Just join a voice channel together with the controller that you're interested in coordinating with.

## 2.11 Ending your session

When you're intending to finish controlling, you should notify other controllers and traffic on your frequency (if there is any) about you closing.

You can notify adjacent controllers by using the '.break' command and sending a message into the ATC chat.

You can notify the pilots by announcing it on your frequency and asking all stations to monitor whatever frequency is relevant. If there is a station above you, specify their frequency, otherwise ask pilots to monitor UNICOM. You can do it like so:

All stations, all stations, Riga Ground is now closing. Monitor Riga Tower on 118 decimal 105

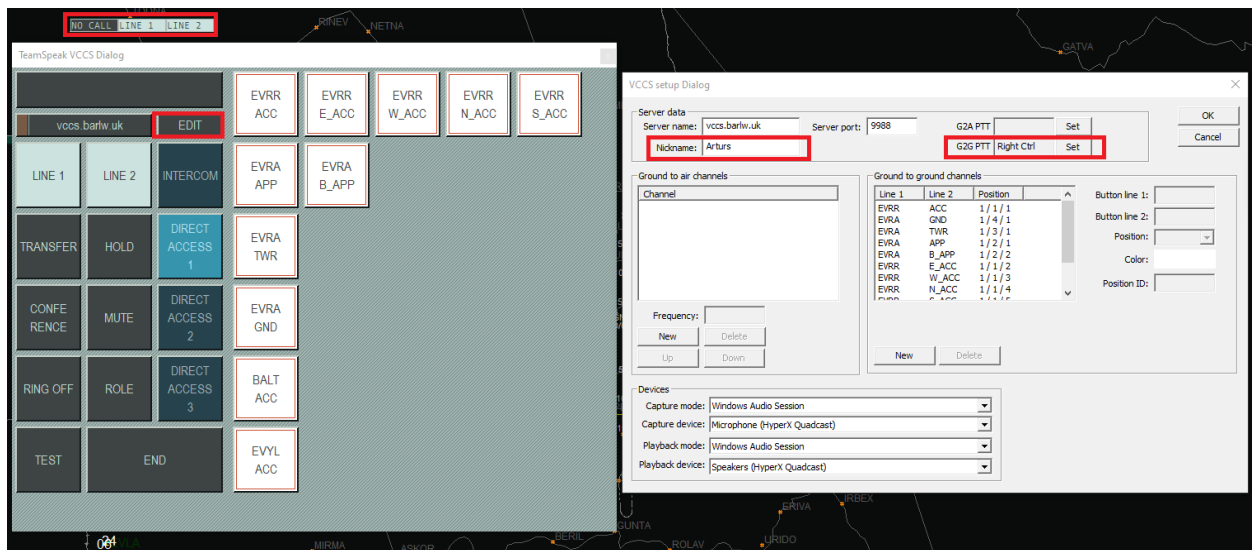
## 3 Additional information and procedures

### 3.1 Low Visibility Procedures (LVP)

Low Visibility Procedures shall be applied at Riga in accordance with Latvian AIP EVRA AD 2.22, 4. Here is a quick summary of how LVP work and shall be applied.

The criteria for instantiating and cancelling LVP are as follows:

- Standby for low visibility procedures is prompted by ATC when RVR is 700 m or less or the ceiling is 200 FT or less.
- Low visibility procedures are effected by ATC when RVR is 550 m or less or the ceiling is 150 FT or less.



- Low visibility procedures are cancelled by ATC when RVR is greater than 700 m and a continuing improvement in RVR conditions is anticipated, and the ceiling is greater than 250 FT.

Pilots will be informed when low visibility procedures are in operation by ATIS or radio. Pilots will be informed over radio when LVP are cancelled. Low visibility operations will be suspended as a result of certain equipment failure/degradation modes or procedure breaches. ATC procedures do not allow for

snow clearing on the manoeuvring area when LVP are effected but do allow for limited snow clearing on the manoeuvring area when standby for LVP is prompted.

When LVP are effected, the following taxiways may be used to vacate the runway: A, B, C, Y, D, E and G. Backtrack procedures are NOT allowed unless that is the only safe way to vacate the runway. When LVP are in force runway entries are limited to:

- Taxiway A for runway 36 (or taxiway B if A is not available)
- Taxiway G for runway 18 (or taxiway E if G is not available)

ONLY taxiways with centre line lights shall be used for taxiing. A list of them can be found in the Latvian AIP EVRA AD 2.24.1 Aerodrome Chart. Otherwise, presence of a “follow me” vehicle is required.

When LVP are in force, all taxiing aircraft shall resort to using Intermediate Holding Positions (IHP) equipped with yellow IHP lights. Such IHP are located on the following positions:

- on taxiway F at intersections with taxiways E, D, C, A, B, de-icing pad DS (south), de-icing pad DN (north), as well as IHP F1 and F2
- on taxiway G; IHP G1 and G2
- on taxiway A; IHP A1 and A2
- on taxiways E, D, C and B: IHP before intersection with taxiway F

All aircraft taxiing to the active runway shall be instructed to hold short of one of the IHP on taxiways A or G listed above. (IHP listed for taxiway F at intersections with taxiways B and E may be used when taxiways A and G respectively aren't available)

Taxiing aircraft shall observe the ground speed limit of 15 knots.

### 3.2 Types of communication

VATSIM offers all pilots 3 types of communication: full voice communications, voice-receiving communications, text communications. It is your duty to provide all 3 types of communication. Here are the definitions of each type of communication:

- VOICE – the pilot both receives voice instructions and speaks on frequency themselves
- RECEIVE – the pilot receives voice instructions, but speaks on frequency using text
- TEXT – the pilot receives instructions in text and speaks on frequency using text

In case you encounter a text pilot, you should issue them the same instructions as you would issue to a voice pilot, though you need to do that in text. To do that, click on the TAG of the aircraft in question and enter your message into the EuroScope terminal (no need to enter their callsign).

As a rule of thumb, you should issue instructions to text pilots a bit earlier than you would to a voice pilot, as pulling up their pilot client and reading it takes a bit more time than listening to an instruction.

Note: aircraft shall NOT be prioritised based on their type of communication. Text pilots shall get the same priority as voice pilots and vice versa.

If a pilot is using a different type of communication than what is set in their TAG, it is good practice to prompt the pilot for their preferred communication type and set the correct one in their TAG afterwards.

#### 3.2.1 Use of aliases for communication with text pilots

You don't need to actually type out every single instruction by hand. There are several aliases that can help you out. The most common ones that you'll use while controlling Riga Ground are:

- `.clr` – issues an IFR clearance



- `.rc` – read back correct
- `.sq` – prompts the aircraft to set the correct squawk code
- `.ps` – pushback and start-up approved
- `.su` – start-up approved
- `.taxi36` or `.taxi18` – taxi instructions to the respective runway
- `.cont` – hands the aircraft off to the next station. Type in the EuroScope alias of the controller and press TAB
- `.v?` – asks the aircraft if they're able to receive voice instructions

You can find a list of all the aliases in the 'EVRR/Alias' folder, where you installed your sector file.

### 3.2.2 Use of the '`.contactme`' alias

This is a default alias that exists in all sector files. The use of it is very simple, it prompts the pilot to contact you. You can either type it out or press the HOME button (that automatically brings the alias in your terminal) and click on the TAG of the aircraft in question. That's it!

### 3.2.3 Use of the '`.wallop`' command

You've probably already heard of this command, though in case you didn't, here is why would you want to use it and how to do it.

In short, the '`.wallop`' command notifies all online network Supervisors that you need some form of assistance. There are many situations when you would want to use it:

- When a pilot does not come onto your frequency after several uses of the '`.contactme`' alias
- When a pilot violates their clearance limit and/or does something that they weren't cleared for and doesn't stop doing that after you ask them to follow your instructions
- When someone violates the VATSIM Code of Conduct, Code of Regulations, User Agreement, Global Air Traffic Administration Policy or any other network or division policy that they were supposed to follow
- When someone disrupts the frequency

Always remember that network Supervisors are there to help you. Never hesitate to call one if you feel like that is what needs to be done.