# General - LBSR FIR

# Standard Operating Procedures

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# Exclusion of Liability

Everything contained herein is for use on the VATSIM Network only and should never be adopted for real-world use.

Any use outside Bulgaria vACC including real-world aviation or application on other networks, is strictly forbidden unless prior written permission is granted by the vACC Director (BUL001), vACC Deputy Director (BUL002), and vACC Training Director (BUL003).

# Airspace organization and classification

Airspace within LBSR FIR is defined and classified as follows:

> **Class C**: from 10500 ft altitude up to FL 660.
>
> **Class C**: from lower limit of the relevant sector of terminal control area up to the upper limit of the terminal control area.
>
> **Class C**: control zones.

> **Class G:** from ground/sea level up to 10500 ft altitude except defined ATS routes, and control zones and terminal control areas.
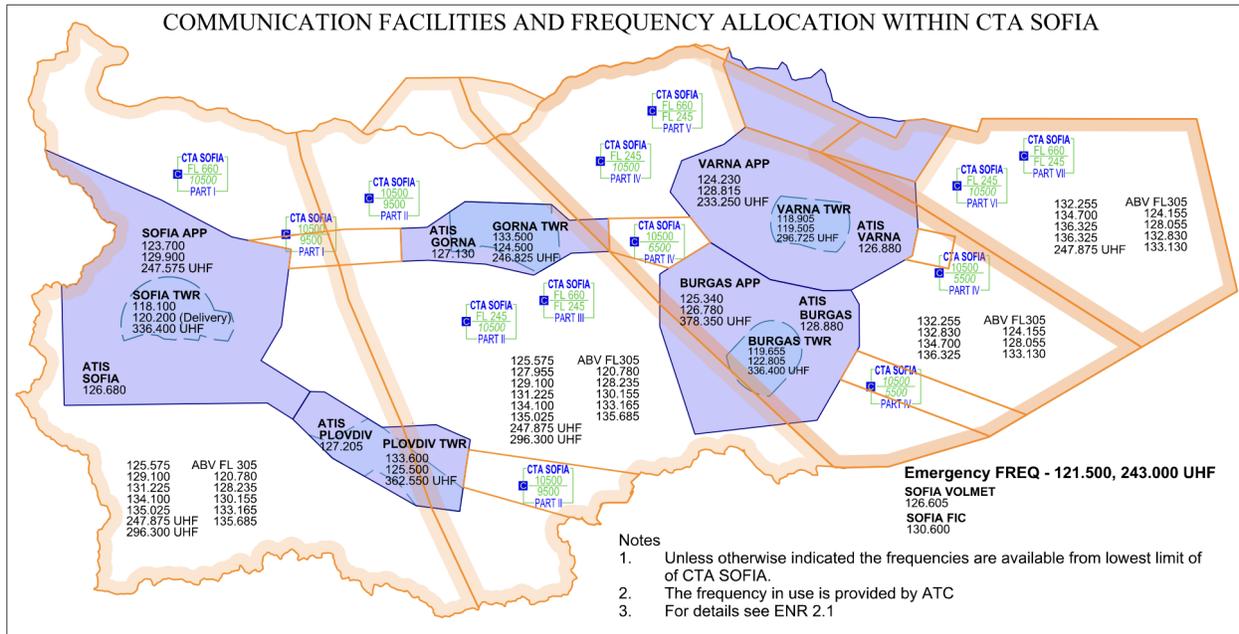>
> **Class G**: from ground level up to the lower limit of the relevant sector of the terminal control area, outside the controlled zones.

> Airspace above FL 660 is **unclassified**.

# ACC sectors

Sofia ACC is split horizontally into four sectors. On VATSIM, LBSR_CTR is the main bandbox and covers all other sectors unless they are online.

| Callsign | Sector name | Frequency | Area of responsibility |
|---|---|---|---|
| LBSR_CTR | Sofia Control | 131.225 MHz | Sofia FIR (unless covered by another online sector) |
| LBSR_E_CTR | Sofia Control | 129.100 MHz | Sofia East Sector |
| LBSR_V_CTR | Sofia Control | 134.700 MHz | Whole Varna Sector (unless covered by another online sector) |
| LBSR_B_CTR | Sofia Control | 132.950 MHz | Black Sea Sector |

COMMUNICATION FACILITIES AND FREQUENCY ALLOCATION WITHIN CTA SOFIA

CTA SOFIA FL 660 FL 245 PART V

CTA SOFIA FL 660 10500 PART I

CTA SOFIA 10500 9500 PART II

CTA SOFIA FL 660 10500 PART IV

CTA SOFIA FL 245 10500 PART VI

CTA SOFIA FL 660 FL 245 PART VII

VARNA APP
124.230
128.815
233.250 UHF

VARNA TWR
118.905
119.505
296.725 UHF

ATIS VARNA
126.880

132.255      ABV FL305
134.700      124.155
136.325      128.055
136.325      132.830
247.875 UHF  133.130

CTA SOFIA 10500 9500 PART I

SOFIA APP
123.700
129.900
247.575 UHF

GORNA TWR
133.500
124.500
246.825 UHF

ATIS GORNA
127.130

CTA SOFIA 10500 6500 PART IV

CTA SOFIA 10500 PART IV

SOFIA TWR
118.100
120.200 (Delivery)
336.400 UHF

CTA SOFIA FL 660 FL 245 PART II

CTA SOFIA FL 245 10500 PART III

BURGAS APP
125.340
126.780
378.350 UHF

ATIS BURGAS
128.880

BURGAS TWR
119.655
122.805
336.400 UHF

CTA SOFIA 10500 5500 PART IV

ATIS SOFIA
126.680

125.575   ABV FL305
127.955   120.780
129.100   128.235
131.225   130.155
134.100   133.165
135.025   135.685
247.875 UHF
296.300 UHF

132.255   ABV FL305
132.830   124.155
134.700   128.055
136.325   133.130

CTA SOFIA 10500 5500 PART IV

ATIS PLOVDIV
127.205

PLOVDIV TWR
133.600
125.500
362.550 UHF

125.575   ABV FL 305
129.100   120.780
131.225   128.235
134.100   130.155
135.025   133.165
247.875 UHF  135.685
296.300 UHF

CTA SOFIA 10500 9500 PART II

Emergency FREQ - 121.500, 243.000 UHF
SOFIA VOLMET
126.605
SOFIA FIC
130.600

Notes
1.   Unless otherwise indicated the frequencies are available from lowest limit of CTA SOFIA.
2.   The frequency in use is provided by ATC
3.   For details see ENR 2.1

*Note: Part of Bucharest FIR is permanently delegated to Sofia ACC. See Letter of Agreement for details.*

Handoff to the next ACC sector should happen at least 2 minutes from the border. Make sure that current LoA altitude and horizontal restrictions are adhered to.

All Letter of Agreements are published on our website and new versions are always announced through official channels. It is the controller's responsibility to keep up to date.

## Transition altitudes and levels

The transition altitude in LBSR FIR is always **10500 ft**.

Transition level varies depending on QNH. For controlled airports, the transition level should always be included in the ATIS. On VATSIM, we use a transition level of **FL 120**.

Aircraft should be given the local QNH with the **first instruction** which gives them a descent **below the transition layer**.

# Runway in use

The runway in use should be determined by considering both the wind component and local SOP. Within LBSR FIR, the maximum allowable tailwind component for the runway in use is **5 knots**. If the tailwind component increases any higher than this, the runway must be changed.

Runway in use is decided by the Tower controller. If there is no Tower online, then it is decided by any station covering TWR top-down. As a last resort, DEL/GND may set a runway and connect an ATIS, but only if no other stations are online.

# Squawk Assignment

The following discrete squawk code ranges are used within LBSR FIR:

| IFR Traffic | 4701 - 4777 |
|---|---|

| VFR Traffic | 0201 - 0277 |
|---|---|

The Eastern half of LBSR FIR is also equipped for and utilizes Mode S identification. Only aircraft that are equipped with Mode S transponders and who will conduct the full length of their remaining flight within Mode S airspace may be assigned squawk code 1000.

These two requirements are automatically checked by the squawk assignment plugin, therefore aircraft must *never* be manually assigned squawk code 1000.

# VFR Flight Procedures

VFR flights within LBSR FIR must be aware of airspace classifications and obtain a clearance before entering controlled airspace. When within controlled airspace, VFR flights must follow published routes unless other authorization is obtained from the relevant ATS unit.

VFR traffic patterns within controlled airspace are always conducted at no higher than 500 ft AGL. Check each aerodrome elevation for the exact altitude value.

VFR traffic patterns are also usually allowed only on one side of the airport, so check the local aerodrome charts before flying and/or controlling.

This direction is shown on the charts as such: (in this case patterns are allowed only to the north of the airport, at a maximum altitude of 2300 ft)



# Controller-Pilot Data Link Communications

CPDLC services are available within the airspace of Sofia FIR above FL215, except in terminal control areas. No PDC service is available for aircraft on the ground.

The use of CPDLC is not mandatory and is conducted at the discretion of ATC and the pilots concerned. Each station's logon code is available in the profile info line. Only the provided logon codes may be used.

If CPDLC is not working or not available, the controller shall edit their info line to make this clear to pilots.

# Letters of Agreement

Bulgaria vACC has a number of Letters of Agreement with our neighbouring vACCs with the purpose of outlining procedures for transferring of aircraft between the two ACCs. All of the documents can be found on our website, and new versions are always announced on Discord.

Controllers are required to follow all current LoAs, irrespective of whether or not the adjacent sector is online.

# Low visibility procedures

Low visibility procedures are in force when RVR is equal to or below **550 m** and/or height of the cloud base is at **200 ft** or lower.

Intersection departures are **not available** when LVP are in force.

The runway with the highest level of precision approach available should be selected as runway in use if winds are favourable.

- Runways with an available ILS approach should be used if possible.
- RWY 27 at LBSF is equipped and approved for ILS Category II/IIIA/IIIB operations.

If low visibility procedures are in use, this should be entered into the ATIS and also reported to arriving aircraft on first contact with the APP controller.

# Airport-specific SOPs

Each of the five controlled aerodromes in LBSR FIR has its own SOP document.

Controllers are reminded that they must familiarize themselves with the local SOP before controlling at each airport for the first time.

Links to each of the above mentioned documents can be found on our website.