GEN 3.1 AERONAUTICAL INFORMATION SERVICES

1. RESPONSIBLE SERVICE

The Aeronautical Information Service which forms part of Bosnia and Herzegovina Air Navigation Services Agency ensures the flow of information necessary for the safety, regularity and efficiency of international and national air navigation within the area of its responsibility as indicated under paragraph 1.3 below.

The Aeronautical Information Service consists of AIS BIH, International NOTAM Office of Bosnia and Herzegovina (BHNOF) and AIS functions in ARO established at international aerodromes as listed under paragraph 2.4 below.

1.1 AIS BIH

Post:	Bosnia and Herzegovina Air Navigation Services Agency (*BHANSA) Aeronautical Information Service Ortiješ bb, P.P.133 88000 Mostar Bosnia and Herzegovina
Phone:	+387 36 281 007
Phone:	+387 36 446 254
Phone:	+387 36 446 224
Fax:	+387 36 446 261
AFS:	LQBHYOYX
E-mail	aisbih@bhansa.gov.ba
URL:	http://www.bhansa.gov.ba

Operational hours: Monday-Friday 0700-1500 (0600-1400 Summer time); HOL excluded

1.2 BHNOF

Post:	Bosnia and Herzegovina Air Navigation Services Agency (*BHANSA) International NOTAM Office of Bosnia and Herzegovina (BHNOF) Aleja Bosne Srebrene 64 71000 Sarajevo Bosnia and Herzegovina
Phone:	+387 33 251 395
Phone:	+387 65 727 621
Phone:	+387 33 472 920 (on backup location)
Fax:	+387 33 251 385
Fax:	+387 33 541 746 (on backup location)
AFS:	LQBHYNYX
E-mail	nofbih@bhansa.gov.ba
URL:	http://www.bhansa.gov.ba

1.3 AREA OF RESPONSIBILITY

The Aeronautical Information Service of Bosnia and Herzegovina is responsible for the collection and dissemination of information for the entire territory of Bosnia and Herzegovina (Sarajevo FIR).

The service is provided in accordance with *ICAO Annex 15*.

2. AERONAUTICAL PUBLICATIONS

The aeronautical information is provided in the form of the Integrated Aeronautical Information Package consisting of the following elements:

- Aeronautical Information Publication (AIP);
- AIP Amendment (AIP AMDT);
- AIP Supplement (AIP SUP);
- NOTAM and Pre-flight Information Bulletins (PIB);
- Aeronautical Information Circular (AIC);
- Checklist and List of valid NOTAMs.

NOTAM and the related monthly Checklist are issued via *EAD (European Aeronautical Database), while PIB are made available at Aerodrome Reporting Office (ARO) units. All other elements of the package are distributed by mail.

2.1 AERONAUTICAL INFORMATION PUBLICATION (AIP)

The AIP is the basic aviation document intended primarily to satisfy international requirements for the exchange of permanent aeronautical information and long duration temporary changes essential for air navigation.

The AIP is published in one volume and English language only.

AIP Bosnia and Herzegovina is also available in electronic form as HTML, XML and PDF format.

2.1.1 AMENDMENT SERVICE TO THE AIP (AIP AMDT)

Amendments to the AIP are made by means of replacement sheets. Two types of Amendments are produced:

- Regular AIP Amendment (AIP AMDT) identified by a light blue cover sheet. This type of AMDT incorporates permanent changes, which previously has been published by NOTAM or in certain cases by AIP SUP or AIC, as well as minor editorial changes. Publication date is indicated on the cover sheet;

- AIRAC AIP Amendment (AIRAC AIP AMDT) is identified by a pink cover sheet and the acronym AIRAC. These amendments incorporate operationally significant information of a permanent nature, which will become effective later at a specified date in accordance with the AIRAC system (see paragraph below).

These AIRAC AMDT are therefore to be inserted into the AIP at the specified date (AIRAC EFFECTIVE DATE).

A brief description of the subjects affected by the amendment is given on the AIP Amendment cover sheet. New information included on the reprinted AIP pages is annotated or identified by a vertical line in the left margin of the change/addition.

Each AIP page and each AIP replacement page introduced by an amendment, including the amendment cover sheet, are dated. The date consist of the day, month (by name) and year of the publication date (regular AIP AMDT) or of the AIRAC effective date (AIRAC AIP AMDT) of the information. Each AIP Amendment cover sheet includes references to the serial number of those elements (NOTAM, AIC, AIP SUP), if any, of the Integrated Aeronautical Information Package which have been incorporated in the AIP by the amendment and consequently cancelled.

Each AIP AMDT and each AIRAC AIP AMDT are allocated separate serial numbers which are consecutive and based on the calendar year. The year, indicated by four digits, is a part of the serial number of the amendment, e.g. AIP AMDT 001/2019; AIRAC AIP AMDT 009/2019.

A checklist of AIP pages containing page number/chart title and the publication or effective date (day, month by name and year) of the information is reissued with each amendment and is an integral part of the AIP.

2.1.2 SUPPLEMENT TO THE AIP (AIP SUP)

Temporary changes of long duration (three months and longer) and information of short duration which consist of extensive text and/or graphics, supplementing the permanent information contained in the AIP, are published as AIP Supplements (AIP SUP). Operationally significant temporary changes to the AIP are published in accordance with the AIRAC system and its established effective dates and are identified clearly by the acronym AIRAC AIP SUP and pink cover sheet.

AIP Supplements are separated by information subject (General - GEN, En-route - ENR and Aerodromes - AD) and are placed accordingly at the beginning of each AIP Part. Supplements are published on yellow paper (regular AIP SUP) to be conspicuous and to stand out from the rest of the AIP. Each AIP Supplement (regular or AIRAC) is allocated a serial number which is consecutive and based on the calendar year, i.e. AIP SUP 001/2019; AIRAC AIP SUP 003/2018.

An AIP Supplement is kept in the AIP as long as all or some of its contents remain valid. The period of validity of the information contained in the AIP Supplement will normally be given in the supplement itself. Alternatively, NOTAM may be used to indicate changes to the period of validity or cancellation of the supplement. The checklist of AIP Supplements currently in force is issued in the monthly printed plain-language summary of NOTAM in force.

2.1.3 AERONAUTICAL INFORMATION CIRCULAR (AIC)

The Aeronautical information Circular (AIC) contain information on the long-term forecast of any major change in legislation, regulations, procedures or facilities; information of a purely explanatory or advisory nature liable to affect flight safety; and information or notification of an explanatory or advisory nature concerning technical, legislative or purely administrative matters. AICs are divided by subject and are issued in two series (A and B):

- Series A contains information affecting international civil aviation and is given international distribution;
- Series B contains information affecting national aviation and is given national distribution.

Each AIC is numbered consecutively within each series on a calendar year basis. The year, indicated by four digits, is a part of the serial number of the AIC, e.g. AIC A 001/2019; AIC B 001/2019. A checklist of AIC currently in force is issued as an AIC at least once a year.

2.1.4 NOTAM AND PRE-FLIGHT INFORMATION BULLETINS (PIB)

NOTAM contain information concerning the establishment, condition or change in any aeronautical facility, service, procedure or hazard, the timely knowledge of which is essential for personnel concerned with flight operations. The text of each NOTAM contains the information in the order shown in the ICAO NOTAM Format and is composed of the significations/uniform abbreviated phraseology assigned to the ICAO NOTAM Code complemented by ICAO abbreviations, indicators, identifiers, designators, call signs, frequencies, figures and plain language. NOTAM are originated and issued for Sarajevo FIR and are distributed in series A to Z except S and T.

Series A	- international distribution
Series B	- domestic distribution or international distribution (on request)
Series S – SNOWTAM*	- international distribution from AD Banja Luka, Sarajevo and Tuzla

* This Series comprises information concerning the presence or removal of hazardous conditions due to snow, ice, slush or standing water associated with these conditions on the movement areas. SNOWTAM are prepared in accordance with ICAO Annex 15, Appendix 2, and are issued by the individual aerodrome directly, with separate serial numbers. Details are given in the Snow Plan in the Aerodrome Part (AD).

Pre-flight Information Bulletins (PIB), which contains a recapitulation of current NOTAMs and other information of urgent character for the operator/flight crews, are available at the aerodrome ARO office. The extent of the information contained in the PIB is indicated under paragraph below.

2.1.5 CHECKLIST AND LIST OF VALID NOTAMS

A Checklist of valid NOTAM is issued monthly via *EAD. The Checklist is followed by a printed List of valid NOTAMs distributed on request via mail or E-mail to recipients of the Integrated Aeronautical Information Package. It contains a plain language (in English) presentation of the valid NOTAM and information about the number of the latest issued AIP AMDT, AIRAC AIP AMDT, AIP SUP, AIRAC AIP SUP and AIC,as well as the numbers of elements issued under AIRAC that will become effective or, if none, the NIL AIRAC notification.

2.2 SALE OF PUBLICATIONS

The Aeronautical Information Publications can be obtained from the Aeronautical Information Service. Purchase prices are published by AIC Series A.

2.3 AIRAC SYSTEM

In order to control and regulate the operationally significant changes implying amendments to charts, route-manuals etc., such changes, whenever possible will be issued at predetermined dates according to the AIRAC System. Whenever possible this type of information will be published as an AIRAC AMDT or an AIRAC SUP. If an AIRAC AMDT or AIRAC SUP cannot be produced due to lack of time NOTAM clearly marked AIRAC will be issued. Such NOTAM will immediately be followed by an AIP AMDT or SUP.

The table below indicates AIRAC effective dates for the coming years.

AIRAC information will be issued so that the information will be received by the user not later than 28 days before the effective date, for major changes not later than 56 days before the effective date. At AIRAC effective date, a Trigger NOTAM will be issued giving a brief description of the contents, effective date and the reference number of the AIRAC AIP AMDT or AIRAC AIP SUP that will become effective on that date. Trigger NOTAM will remain in force as a reminder in the PIB for 14 days after the effective date.

If no information was submitted for publication at the AIRAC date, a NIL notification will be issued by NOTAM not later than one AIRAC cycle before the AIRAC effective date concerned.

2021	2022	2023	2024
28 JAN	27 JAN	26 JAN	25 JAN
25 FEB	24 FEB	23 FEB	22 FEB
25 MAR	24 MAR	23 MAR	21 MAR
22 APR	21 APR	20 APR	18 APR
20 MAY	19 MAY	18 MAY	16 MAY
17 JUN	16 JUN	15 JUN	13 JUN
15 JUL	14 JUL	13 JUL	11 JUL
12 AUG	11 AUG	10 AUG	08 AUG
09 SEP	08 SEP	07 SEP	05 SEP
07 OCT	06 OCT	05 OCT	03 OCT
04 NOV	03 NOV	02 NOV	31 OCT
02 DEC	01 DEC	30 NOV	28 NOV
30 DEC	29 DEC	28 DEC	26 DEC

2.4 PRE-FLIGHT INFORMATION SERVICE AT AERODROMES/HELIPORTS

Pre-flight Information Service is provided by ARO at each of the international airports Banja Luka, Mostar, Sarajevo and Tuzla, with documents from *EAD.

2.4.1 Aerodrome Reporting Offices- ARO

Customers of ARO can obtain EAD products through Aerodrome ARO units of International Airports, connected directly to EAD database as EAD Data Users.

The *ECIT DU allows customers to:
- Retrieve static data;
- Retrieve world-wide validated NOTAM;
- Browse through and download AIP, AIP Amendments, AIP Supplements, AIC and Charts from ECAC states, contained in the EAD AIP / Charts library;
- Retrieve Pre-Flight Information Bulletins (PIB) – world-wide coverage.

Several types of PIB can be produced:

Aerodrome PIB: Aerodrome type bulletins consist of NOTAM and SNOWTAM, containing information on facilities, services and procedures related to aerodromes or aerodromes vicinity;

Area PIB: Area or FIR type bulletins consist of NOTAM and SNOWTAM containing information on facilities, services and procedures related to FIRs. The Area PIB can be restricted to special area defined by a Restricted Airspace or Centre Point and radius (TMA, CTR, Prohibited, Restricted and Danger areas, Geographic coordinates, navaids, significant points …);

Route PIB: Route type bulletins consist of NOTAMand SNOWTAM containing information on facilities, services and procedures related to FIRs and aerodromes situated in selected FIR;

Narrow route PIB: The Narrow route type bulletins consist of NOTAM, related only to a narrow path defined by route description, FL and width of the path. Route description consist of aerodromes of departure (ADEP) and destinations (ADES), significant points, coordinates and airways;

Management of Profiles: The system provides the possibility of storing and reusing selection criteria for the creation of PIB. This is useful for PIB that must be retrieved on a regular basis. Profiles are constantly checked (validated) against the SDO database;

Management of Routes: The system provides the possibility of creating and administering routes that can be used for the generation of a narrow route PIB. Routes are checked (validated) against the *SDO database;

Scheduling: It is possible to schedule PIB retrieval. A certain schedule can be stored together with a Profile and can be retrieved via email;

Update Service: The “Update” Service allows receiving update information related to a PIB for an extra period of time after original PIB generation. The “Update” Service type includes only new NOTAMN and NOTAMR/ NOTAMC crossed to the original PIB information. Subscription to the “Update” service is possible only if a full PIB was generated previously. Update service can also be retrieved by email.

The Aerodrome Reporting Offices are prepared to save and manage operators’ preferences and deliver all AIS products to an email Phone.

AIS customers are invited to request scheduled PIB and “Update” service based on specific filters criteria (profile), to be delivered by email or to be picked-up ate the ARO where the request is submitted.

These products are obtained on a prior request basis addressed to the pertinent ARO.

The request shall mention the following data:
- Aircraft Identification;
- Pick-up time;
- Email address (if automatic delivery is required);
- ADEP;
- EOBT;
- ADES;
- ALTN;
- ETA;
- Maximum FL en route (first FIR, other, last FIR);
- FPL route and width path (if Narrow route is requested and width path different than 20 NM);
- Update Service validity (if requested).

GEN 3.2 AERONAUTICAL CHARTS

1. RESPONSIBLE SERVICE

Aeronautical Information Service of Bosnia and Herzegovina (AIS BIH) produces aeronautical charts for the territory of Bosnia and Herzegovina which are part of the AIP.

Aeronautical charts are produced in accordance with the provision contained in the ICAO Annex 4 – Aeronautical Charts, and conform with the provisions set forth in ICAO Aeronautical Charts Manual (Doc 8697).

2. MAINTENANCE OF CHARTS

The aeronautical charts included in the AIP are kept up to date by amendments to the AIP. If incorrect information detected on published charts is of operational significance, it is corrected by NOTAM or AIP SUP.

3. PURCHASE ARRANGEMENTS

The charts may be purchased from the service given in paragraph (contact details are given in GEN 3.1, item 1.1).

4. AERONAUTICAL CHARTS SERIES AVAILABLE

The following series of aeronautical charts are produced:

- En-route Chart – ICAO;
- Free Route Chat - ICAO;
- Aerodrome Chart – ICAO;
- Instrument Approach Chart – ICAO;
- Standard Arrival Chart - Instrument (STAR) – ICAO;
- Standard Departure Chart - Instrument (SID) – ICAO;
- Aerodrome Obstacle Chart - ICAO - Type A (operating limitations);
- Visual Approach Chart – ICAO;
- ATC Surveillance Minimum Altitude Chart – ICAO;
- Aircraft Parking/Docking Chart – ICAO;
- VFR Chart with recommended VFR routes Bosnia and Herzegovina 1: 500 000.
- Navigation warnings - other activities of a dangerous nature - Hail suppression chart

General description of each series:

a. **En-route Chart – ICAO**

The chart covers the entire territory of Bosnia and Herzegovina and shows:

- the ATS routes including bearings, distances, radio navigation aids together with the assigned frequencies and identifications;
- the airspace structure including lower and upper limit;
- restricted, prohibited and danger areas.
- temporary segregated/reserved areas

b. **Free Route Airspace Chart**

The chart describes the airspace portion where cross/border application of Free Route Airspace Concept - SESCI FRA is implemented. The chart shows the *FRA boundary.

c. **Aerodrome Chart – ICAO**

This chart contains detailed aerodrome data to provide flight crews with information that will facilitate the ground movement of aircraft:

- from the aircraft stand to the runway;
- from the runway to the aircraft stand.

d. **Instrument Approach Chart – ICAO**

This chart is produced for all aerodromes used by civil aviation where instrument approach procedures have been established. A separate Instrument Approach Chart - ICAO has been provided for each approach procedure.
The aeronautical data shown include information on aerodromes, prohibited, restricted and danger areas, radio communication facilities and navigation aids, minimum sector altitude, procedure track portrayed in plan and profile view, aerodrome operating minima, etc.
This chart provides the flight crew with information that will enable them to perform an approved instrument approach procedure to the runway of intended landing including the missed approach procedure and where applicable, associated holding patterns.

e. **Standard Arrival Chart - Instrument (STAR) – ICAO**

This chart provides flight crew with information to enable them to comply with designed standard instrument arrival route from en-route phase to the approach phase of flight. Each chart includes the relevant aeronautical information such as radio navigation facilities, significant points, bearings, distances and IFR minimum flight altitudes.

f. **Standard Departure Chart - Instrument (SID) – ICAO**

This chart provides flight crew with information to enable them to comply with designed standard instrument departure route from the take-off to the en-route phase of flight. Each chart includes the relevant aeronautical information such as radio navigation facilities, significant points, bearings, distances and IFR minimum flight altitudes.

g. **Aerodrome Obstacle Chart - ICAO - Type A (operating limitations)**

This chart contains detailed information on obstacles in take-off flight path areas of aerodromes. It is shown in plan and profile view. This obstacles information provides the data necessary to enable an operator to comply with the operating limitations of ICAO Annex 6, Parts I and II, Chapter 5.

h. **Visual Approach Chart – ICAO**

This chart is produced for aerodromes used by civil aviation where:

- only limited navigation facilities are available; or
- radio communication facilities are not available; or
- no adequate aeronautical charts of the aerodrome and its surroundings at 1:500 000 or greater scale are available; or
- visual flight operation procedures have been established.

i. **ATC Surveillance Minimum Altitude Chart – ICAO**

This supplementary chart provides information that will enable flight crews to monitor and cross-check altitudes assigned by a controller using an ATS surveillance system.

j. **Aircraft Parking/Docking Chart - ICAO**

This chart is produced for those aerodromes where, due to the complexity of the terminal facilities, the information to facilitate the ground movement of aircraft between the taxiways and the aircraft stands and the parking/docking of aircraft cannot be shown with sufficient clarity on the Aerodrome Chart.

k. **VFR Chart with recommended VFR routes Bosnia and Herzegovina 1 : 500 000**

This chart is designed to serve as a basic aeronautical chart for aircraft flying in accordance with visual fight rules and for preflight planning of operation. The aeronautical data includes the structure of airspace, recommended VFR routes, aerodromes, airfields, radio navigation facilities with names, frequencies and identification, prohibited, restricted and danger areas and known obstructions. The “VFR Chart with recommended VFR routes Bosnia and Herzegovina 1 : 500 000” is not part of the Bosnia and Herzegovina AIP and will be amended by a new edition only.

l. **Navigation warnings - other activities of a dangerous nature - Hail suppression chart 1:500.000**

This chart shows quadrants which are under the responsibility of rocket launching locations which perform hail suppression activities in Bosnia and Herzegovina. The chart also shows location and symbol of aerodromes, TMA with lateral, vertical limits and frequencies and state border.

GEN 3.3 AIR TRAFFIC SERVICES

1. RESPONSIBLE SERVICE

The Bosnia and Herzegovina Air Navigation Services Agency is the responsible authority for the provision of the Air Traffic Services within Sarajevo FIR which encompasses all the airspace over the main land and territorial waters of Bosnia and Herzegovina from ground up to the state boundary (approximately 80 KM).

Post:	Bosnia and Herzegovina Air Navigation Services Agency (BHANSA) Ortiješ bb, P.P.133 88000 Mostar Bosnia and Herzegovina
Phone:	+387 36 281 000
Fax:	+387 36 281 010
AFS:	NIL
E-mail	info@bhansa.gov.ba
URL:	http://www.bhansa.gov.ba

The services are provided in accordance with the provisions contained in the following ICAO documents:

- Annex 2 - Rules of the Air;
- Annex 11 - Air Traffic Services;
- Doc 4444 - Procedures for Air Navigation services – Rules of the Air and Air Traffic Services PANS-OPS;
- Doc 8168 - Procedures for Air Navigation services – Aircraft Operations PANS-OPS;
- Doc 7030 - Regional Supplementary Procedures.

2. AREA OF RESPONSIBILITY

Air Traffic Services are provided for the entire territory of Bosnia and Herzegovina, with the exception of the airspace within which air traffic services are delegated to another state in accordance with the international agreements in air traffic and operational needs.

Details of such services are provided in section ENR 2.1 and ENR 2.2.

The area of responsibility covers additionally the parts of adjacent foreign airspace, within which the provision of the air traffic services has been delegated to BHANSA on the basis of agreement with the appropriate foreign units.On the other hand, the provision of the ATS was delegated for specific parts of the FIR Sarajevo like manner to foreign air traffic service units.

The areas of responsibility are indicated by their co-ordinates in ENR 2.1 and ENR 2.2. and depicted on aeronautical charts. Excluding Banja Luka TMA.

3. TYPES OF SERVICES

3.1 AIR TRAFFIC SERVICES (ATS)

The following types of services are provided:

- Air Traffic Control Service (ATC);
- Flight Information Service (FIS);
- Alerting Service (ALRS).

The Air Traffic Control Service is subdivided in:

- Area Control Service (ACC);
- Approach Control Service (APP);
- Aerodrome Control Service (TWR).

3.2 CO-ORDINATION BETWEEN THE OPERATOR AND THE ATS

Coordination between Air Traffic Services and the operator is effected in accordance with ICAO Annex 11, 2.14 and PANS-RAC Doc 4444-RAC/501/12, Part VIII 2.1.1.4 and 2.1.1.5.

3.3 MINIMUM FLIGHT ALTITUDES

The minimum flight altitudes pertaining to ATS routes (ENR 3.3) are established by *BHDCA, in accordance with the following requirements:

- Aerodrome Control Service (TWR);
- Vertical Obstacle Clearance;
- Lower Limit of the Controlled Airspace.

3.4 ATS UNITS ADDRESS LIST

Unit name	Postal address	Phone, Fax, E-mail, AFS
1	2	3
BHACC/ATCU I Sarajevo	Bosnia and Herzegovina Air Navigation Services Agency (BHANSA) Area Control Centre of Bosnia and Herzegovina (BHACC) Air Traffic Control Unit (ATCU I) Sarajevo Aleja Bosne Srebrene 64 71000 Sarajevo BOSNIA AND HERZEGOVINA	Phone: +387 33 251 375 Fax: +387 33 251 351 Email: NIL AFS: LQSBZQZX AFS: LQSBZFZX
BHACC/ATCU II Banja Luka	Bosnia and Herzegovina Air Navigation Services Agency (BHANSA) Area Control Centre of Bosnia and Herzegovina (BHACC) Air Traffic Control Unit (ATCU II) Banja Luka Airport Banja Luka, Mahovljani bb 78250 Laktaši BOSNIA AND HERZEGOVINA	Phone: +387 51 337 540 Fax: +387 51 337 503 Email: NIL AFS: LQSBZQZX AFS: LQSBZFZX

Unit name	Postal address	Phone, Fax, E-mail, AFS
1	2	3
BANJA LUKA APP/TWR	Jedinica prilazne i aerodromske kontrole letenja Banja Luka Airport Banja Luka Mahovljani bb 78250 Laktaši BOSNIA AND HERZEGOVINA	Phone: +387 51 337 533 Phone: +387 51 337 534 Phone: +387 63 353 972 Phone: +387 61 260 497 Fax: +387 51 337 538 Email: banjaluka.atc@bhansa.gov.ba Email: jpakl.banjaluka@bhansa.gov.ba AFS: LQBKZAZX AFS: LQBKZTZX
FIS BIH (FIC Banja Luka)	Bosnia and Herzegovina Air Navigation Services Agency (BHANSA) Flight Information Service BiH Airport Banja Luka Mahovljani bb 78250 Laktaši BOSNIA AND HERZEGOVINA	Phone: +387 51 337 561 Phone: +387 63 352 950 Fax: N/A Email: fisbih@bhansa.gov.ba AFS: LQSBZIZX AFS: LQSBZFZX AFS: LQSBZEZX
MOSTAR APP/TWR	Jedinica prilazne i aerodromske kontrole letenja Mostar Zračna luka - Aerodrom Mostar Ortiješ bb 88000 Mostar BOSNIA AND HERZEGOVINA	Phone: +387 36 352 206 Phone: +387 36 445 222 Phone: +387 65 727 602 Phone: +387 61 260 355 Phone: +387 36 352 209 (ARO) Phone: +387 61 260 176 (ARO) Fax: +387 36 352 208 Email: NIL AFS: LQMOZGZX AFS: LQMOZAZX AFS: LQMOZTZX

Unit name	Postal address	Phone, Fax, E-mail, AFS
1	2	3
SARAJEVO APP/TWR	Jedinica prilazne i aerodromske kontrole letenja Sarajevo Aerodrom Sarajevo Kurta Schorka 36 71000 Sarajevo BOSNIA AND HERZEGOVINA	Phone: +387 33 471 170 Phone: +387 33 467 140 Phone: +387 33 779 198 Phone: +387 33 779 186 Phone: +387 65 727 605 Phone: +387 63 354 739 Fax: +387 33 546 743 Email: NIL AFS: LQSAZGZX AFS: LQSAZAZX AFS: LQSAZTZX AFS: LQSAZPZX
TUZLA APP/TWR	Jedinica prilazne i aerodromske kontrole letenja Tuzla Aerodrom Tuzla Dubrave bb 75270 Živinice BOSNIA AND HERZEGOVINA	Phone: +387 35 745 745 Phone: +387 65 727 597 Phone: +387 63 353 969 Phone: +387 35 745 530 (ARO) Phone: +387 63 351 665 (ARO) Fax: +387 35 745 532 Email: NIL AFS: LQTZZGZX AFS: LQTZZAZX AFS: LQTZZTZX

GEN 3.4 COMMUNICATION SERVICES

1. RESPONSIBLE SERVICE

The Aeronautical Communication Service is provided by the Bosnia and Herzegovina Air Navigation Services Agency (BHANSA).

Post:	Bosnia and Herzegovina Air Navigation Services Agency (BHANSA) Ortiješ bb, P.P.133 88000 Mostar Bosnia and Herzegovina
Phone:	+387 36 281 000
Fax:	+387 33 281 010
AFS:	LQBHYATS
E-mail	info@bhansa.gov.ba
URL:	http://www.bhansa.gov.ba

The services are provided in accordance with the provisions contained in the following ICAO documents:

- *Annex 10 - Aeronautical Communications*;
- *Doc 8400 - Procedures for Air Navigation Services - ICAO Abbreviations and Codes (PANS-ABC)*;
- *Doc 8585 - Designators for Aircraft Operating Agencies, Aeronautical Authorities and Services*;
- *Doc 7030 - Regional Supplementary Procedures*;
- *Doc 7910 - Location Indicators.*

2. AREA OF RESPONSIBILITY

Communication Services are provided for the entire territory of Bosnia and Herzegovina.

The Bosnia and Herzegovina Air Navigation Services Agency (BHANSA) is responsible for the installation, operation and maintenance of the Radio Communication and Navigation Facilities as well as for the continuous operation of all communications of the Aeronautical Fixed Services used in ATS in collaboration with the Telecom enterprises in Bosnia and Herzegovina.

3. TYPES OF SERVICES

3.1 RADIO NAVIGATION SERVICES

The following types of Radio Navigation Facilities are available:

- LOCATOR BEACON (L);
- NON-DIRECTIONAL BEACON (NDB);
- VHF DIRECTION-FINDING STATION (VDF);
- VHF-OMNIDIRECTIONAL RADIO RANGE (VOR);
- INSTRUMENT LANDING SYSTEM (ILS);
- DISTANCE MEASURING EQUIPEMENT (DME);
- VHF-MARKER RADIO BEACON (MKR).

The tolerances of Radio Navigation Facilities are in accordance with the provisions of ICAO Annex 10.

Radio Navigation Facilities are regularly flight-checked and calibrated by the Civil Aviation Authority of Bosnia and Herzegovina.

3.2 MOBILE/FIXED SERVICE

3.2.1 Mobile Service

The stations of the Aeronautical Mobile Service shall maintain a continuous communication with the stations on board of the aircraft during the hours of service of the ATS Units. An aircraft shall not abandon listening watch of the frequency, except in emergency, without permission of the competent ATS Unit.

3.2.2 Fixed Service

The messages to be transmitted over the Aeronautical Fixed Service will be accepted only if they are in compliance with the following requirements:

- ICAO Annex 10, Vol. II item 3.3;
- the messages shall be prepared in format as specified in ICAO Annex 10;
- the length of an individual message does not exceed 1800 characters.

The transmission of teletype messages in the Aeronautical Telecommunication Service is performed by the Aeronautical Telecommunication Stations at the international airports.

In general Class “B” messages are transmitted only to countries with which Bosnia and Herzegovina has an appropriate agreement.

3.3 BROADCASTING SERVICE

The public broadcasting stations in Bosnia and Herzegovina are not usable for navigational or direction finding purposes and are therefore not published in this section.

3.4 LANGUAGE USED

Radio-telephony communication in the Aeronautical Mobile Service is performed in the English language, Bosnian language, Croatian language and Serbian language.

3.5 REQUIREMENTS AND CONDITIONS

The requirements of the Communication Regulatory Agency of Bosnia and Herzegovina and general conditions under which the communication services are available for the international use, as well as the requirements for the carriage of radio equipment, are contained in the Communication Low and regulations of Bosnia and Herzegovina.

3.6 MISCELLANEOUS

NIL

GEN 3.5 METEOROLOGICAL SERVICES

1. RESPONSIBLE SERVICE

The meteorological services for civil aviation in Bosnia and Herzegovina are provided by the:

Post:	Bosnia and Herzegovina Air Navigation Services Agency (BHANSA) Ortiješ bb, P.P.133 88000 Mostar Bosnia and Herzegovina
Phone:	+387 36 281 011
Fax:	+387 33 281 010
AFS:	NIL
E-mail	info@bhansa.gov.ba
URL:	http://www.bhansa.gov.ba

Operational Unit:

Post:	Bosnia and Herzegovina Air Navigation Services Agency (BHANSA) Meteorological Watch Office of B&H Aerodrom Banja Luka Mahovljani bb 78250 Laktaši Bosnia and Herzegovina
Phone:	+387 51 337 570
Phone:	+387 51 337 573[1]
Phone:	+387 61 260 631
Phone:	+387 63 353 224
Fax:	+387 51 337 571[1]
AFS:	LQSBYMYX
E-mail	mwo.banjaluka@bhansa.gov.ba
URL:	http://www.bhansa.gov.ba

1. H24

The service is provided in accordance with the provisions contained in the following ICAO documents:

- *ICAO Annex 3 - Meteorological Service for International Air Navigation*;
- *Doc 7754 - Air Navigation Plan / European Region*;
- *Doc 8400 - PANS-ICAO Abbreviations and Codes*;
- *Doc 7030 - Regional Supplementary Procedures*;
- *Doc 8896 - Manual of Aeronautical Meteorological Practices*;
- *Doc 9328 - Manual of Runway Visual Range Observing and Reporting Practices.*

2. AREA OF RESPONSIBILITY

Meteorological service is provided within Sarajevo FIR.

3. METEOROLOGICAL OBSERVATIONS AND REPORTS

Name of station / Location indicator	Type and frequency of observation/ automatic observing equipment	Types of MET reports & Availability of trend forecasts	Observation System & Site(s)	Hours of operation	Climatological information
1	2	3	4	5	6
SARAJEVO LQSA	Half hourly[1] /hourly plus special observations. Automatic observation of: surface wind, temperature, humidity, pressure, height of cloud base and RVR.	METAR MET REPORT /SPECIAL TREND[2]	RWY 11/29 - 2 cup anemometers (TDZ 11 & TDZ 29) -1 transmissiometer (TDZ 11) -1 scatter meter (TDZ 29) -1 ceilometer (MM 11) -1 sensor for temperature and humidity (TDZ 11) -1 pressure sensor (TDZ 11)	H24	Aerodrome climatological tables and summaries AVBL
BANJA LUKA LQBK	Half hourly plus special observations. Automatic observation of: surface wind, temperature, humidity, pressure, height of cloud base and RVR.	METAR MET REPORT /SPECIAL TREND	RWY 16/34 -2 cup anemometers (TDZ 16 & TDZ 34) -2 scatter meters (TDZ 16 &TDZ 34) -1 ceilometer (MM 16) -1 sensor for temperature and humidity (TDZ 16) -1pressure sensor (TDZ 16)	H24	Aerodrome climatological tables and summaries AVBL
MOSTAR LQMO	Half hourly[3]/Half hourly plus special observations. Automatic observation of: surface wind, temperature, humidity, pressure, height of cloud base and RVR.	METAR MET REPORT /SPECIAL	RWY 15/33 -2 ultrasonic anemometers (TDZ 15 & TDZ 33) -2 scatter meters (TDZ 33 & MID) -2 ceilometers (RWY 33 & DVOR/DME MSR) -1 sensor for temperature and humidity (MET garden) -1 pressure sensor (TECH room)	H24	Aerodrome climatological tables and summaries AVBL
TUZLA LQTZ	Half hourly plus special observations. Automatic observation of: surface wind, temperature, humidity, pressure, height of cloud base and RVR.	METAR MET REPORT /SPECIAL	RWY 09/27 -2 cup anemometers (TDZ 09 & TDZ 27) -2 scatter meters (TDZ 09 & TDZ 27) -1 ceilometer (near MM 09) -1 sensor for temperature and humidity (TDZ 09) -1 pressure sensor (TDZ 09)	During ATS operating hours. 05:00 local time – until AD closing hours.	Aerodrome climatological tables and summaries AVBL

1. During AD opening hours
2. Only during the hours of service of the local MET office
3. 2 HR before and during AD opening hours

4. TYPES OF SERVICES

4.1 General

Issuance of documentation for flight crew members are provided at Sarajevo, Banja Luka, Mostar and Tuzla International airports during the airports opening hours.

Meteorological information for General aviation is provided at the following aerodromes:

Meteorological office	Phone	Fax	E-mail
1	2	3	4
SARAJEVO[1]	+387 33 779 153 +387 63 352 586	+387 33 546 743	sarajevo.met@bhansa.gov.ba
BANJA LUKA[2]	+387 51 337 573 +387 61 260 631 +387 63 353 224	+387 51 337 571	banjaluka.met@bhansa.gov.ba
MOSTAR[1]	+387 36 352 207 +387 61 260 176	+387 36 352 208	mostar.met@bhansa.gov.ba
TUZLA[1]	+387 35 745 746 +387 63 351 665	+387 35 745 532	tuzla.met@bhansa.gov.ba
1. In the opening airport hours 2. H24			

Personal briefing and consultation for flight crew members are provided at Banja Luka (H24) and at Sarajevo during the airports opening hours. Briefing and consultation for flight crew members for Mostar and Tuzla are provided from Banja Luka.

4.2 Meteorological Information for flights above FL 150

Meteorological information includes flight documentation and briefing and consultation.

Meteorological flight documentation consists of:

- METAR/SPECI for aerodrome of departure, destination and alternate aerodromes;
- TAF for aerodrome of departure, destination and alternate aerodromes;
- SIGWX charts and upper-wind/temperature charts;
- SIGMET and SPECIAL AIREP en route.

The documentation issuing time should be as close as possible to the time of departure.

Briefing and/or consultation to flight crew members and/or other flight operations personnel are provided on request.

4.3 Meteorological Information for flights below FL 150

Meteorological information consists of documentation and/or briefing and consultation. The pilot shall state category of flight rules (VFR/IFR), destination, route and flying time and altitude.

Meteorological flight documentation consists of:

- METAR/SPECI for aerodrome of departure, destination and alternate aerodromes;
- TAF for aerodrome of departure, destination and alternate aerodromes;
- SIGWX charts and upper-wind/temperature charts;
- GAMET (area forecast for low level flights);
- SIGMET and SPECIAL AIREP en route;
- AIRMET en route.

Briefing consists of oral explanation of the actual and forecasted meteorological conditions for the area/route to be flown, supplemented by available satellite and radar pictures as follows:

- meteorological synopsis;
- surface wind;
- surface visibility;
- upper wind and temperature;
- clouds (amount, type and height);
- weather;
- freezing level;
- turbulence;
- icing;
- landing/aerodrome forecast.

5. NOTIFICATION REQUIRED FROM OPERATORS

An operator requiring meteorological service or changes in existing meteorological service shall notify sufficiently in advance when:

a. new routes or new types of operations are planned;

b. changes of a lasting character are to be made in scheduled operations and;

c. other changes, affecting the provision of meteorological service, are planned.

The aerodrome meteorological office shall be notified about:

a. Scheduled flights:
- within Europe: 24 hours prior to departure;
- outside Europe:1 month prior to departure.

b. Non-scheduled flights:
- within Europe: 1.5 hour prior to departure;
- outside Europe: 24 hours prior to departure.

c. Delayed, advanced or cancelled flights as soon as operators are aware of.

The notification required for individual flights, needed by aerodrome meteorological office for the planning of appropriate arrangements, should contain the following:

a. aerodrome of departure and estimated time of departure;

b. destination and estimated time of arrival;

c. route to be flown and estimated times of arrival at, and departure from, any intermediate aerodrome(s);

d. alternate aerodromes needed to complete the operational flight plan and taken from the relevant list contained in the regional air navigation plan;

e. cruising level;

f. type of flight, whether under the visual or the instrumental flight rules;

g. type of meteorological information requested for a flight crew member, whether flight documentation and/ or briefing or consultation; and

h. time(s) at which briefing, consultation and/or flight documentation are required.

In case of scheduled flights, when information from 5.3 was provided once, the requirement for some or all of listed information may be waived by agreement between the meteorological office and the operator.

6. AIRCRAFT REPORTS

Routine Aircraft reports are not required within Sarajevo FIR.

Special Aircraft reports are required within Sarajevo FIR whenever one or more of the following conditions is encountered or observed:

a. severe turbulence or;

b. severe icing or;

c. severe mountain waves or;

d. thunderstorms, with or without hail, that are obscured, embedded, widespread or in squall lines or;

e. heavy dust storm or heavy sandstorm or;

f. volcanic ash clouds or;

g. other meteorological conditions which, upon the opinion of the pilot, may affect the safety of air traffic.

7. VOLMET SERVICE

Name of station	Call Sign/ IDENT (EM)	FREQ	Broadcast period	Hours of service	FIR, Aerodromes included	REP, FCST SIGMET and Remarks
1	2	3	4	5	6	7
BANJA LUKA	VHF VOLMET BROADCAST BANJA LUKA	135.775 MHZ	CONS	H24	SARAJEVO FIR (LQSB)	SIGMET
					BANJA LUKA (LQBK)	METAR, TREND, TAF
					SARAJEVO (LQSA)	METAR, TREND[1], TAF
					MOSTAR (LQMO)	METAR, TAF
					TUZLA (LQTZ)	METAR, TAF

1. If available

8. SIGMET AND AIRMET SERVICE

For the safety of air traffic, the meteorological service maintains an area meteorological watch and warning service. The service of a continuous weather watch within the FIR and the issuance of appropriate information (SIGMET, AIRMET) are provided by Meteorological Watch Office.

The area meteorological watch service is provided by Meteorological Watch Office Banja Luka.

8.1 SIGMET

SIGMET information gives a concise description in abbreviated plain language concerning the occurrence and/ or expected occurrence of specified en-route weather phenomena, which may affect the safety of aircraft operations.

Name of MWO/ location indicators	Hours	FIR or CTA served	Type of SIGMET validity	Specific procedures	ATS unit served	Additional information
1	2	3	4	5	6	7
BANJA LUKA LQBK	H24	SARAJEVO FIR	SIGMET 4 HR	NIL	BHACC: ATCU I SARAJEVO ATCU II BANJA LUKA	NIL

8.2 AIRMET

AIRMET information gives a concise description in abbreviated plain language, concerning the occurrence or expected occurrence of specified en-route weather phenomena which have not been included in the GAMET.

Name of MWO/ location indicators	Hours	FIR or CTA served	Type of SIGMET/ AIRMET validity	Specific procedures	ATS unit served	Additional information
1	2	3	4	5	6	7
BANJA LUKA LQBK	H24	SARAJEVO FIR	AIRMET 4 HR	NIL	FIS BIH (FIC BANJA LUKA)	NIL

AIRMET information are provided by MWO Banja Luka and refer to the portion of Sarajevo FIR from the ground up to FL 150.

8.3 AIRPORT WARNINGS

Airport warnings are provided at Banja Luka and Sarajevo airport during AD operating hours, when one or more of the following phenomena is observed or expected to occur at the airport:

- thunderstorms;
- hail;
- snow (including the expected or observed snow accumulation);
- freezing precipitation;
- hoarfrost or rime;
- strong surface wind gusts;
- squall;
- frost;
- volcanic ash;
- other phenomena as agreed locally.

Quantitative criteria, language on which warnings are issued, means by which warnings are supplied and distribution list are subject to local agreement.

9. OTHER AUTOMATED METEOROLOGICAL SERVICES

NIL

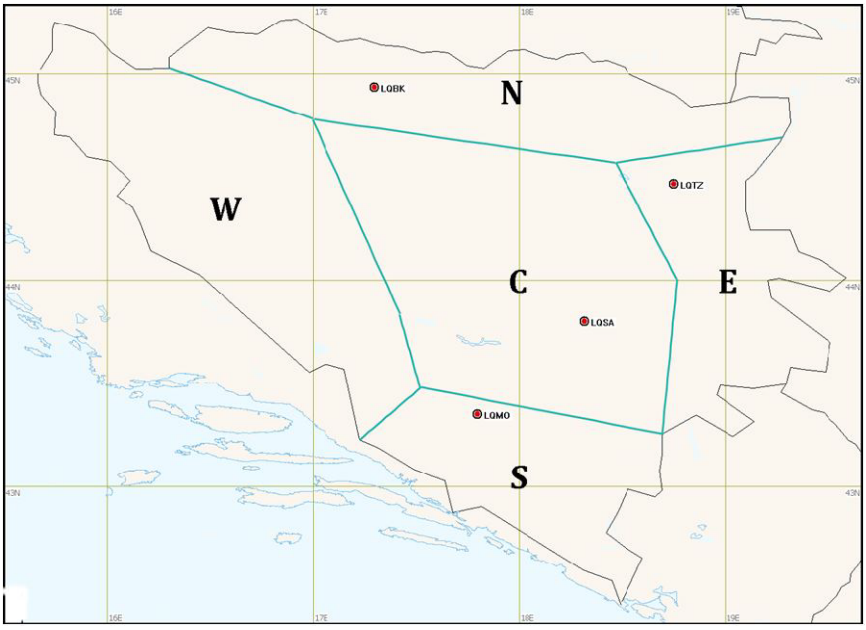
9.1 AREA FORECAST

MWO Banja Luka issues GAMET area forecasts for low-level flights, up to FL 150, every 6 hours for a validity period of 6 hours.

GAMET area forecasts are available at all aerodrome meteorological offices in accordance with following table:

Time of issue (UTC)	Validity period (UTC)
0000	0100 - 0700
0600	0700 - 1300
1200	1300 - 1900
1800	1900 - 0100

Sarajevo FIR is divided into five areas: W, C, N, E and S.



9.2 eGAFOR FORECAST

MWO Banja Luka issues eGAFOR forecasts with impact on VFR routes, for low level flights, up to FL 100 for Sarajevo FIR. eGAFOR include forecast following hazardous MET elements: Turbulence, CB distribution, Cloudiness (BKN/OVC), Visibility and Freezing precipitation.

eGAFOR products are available at web page www.egafor.eu

Validity time of eGAFOR forecast is 6 hours and it is divided into three 2-hourly intervals.

Issuance time, validity time and 2-hourly intervals, are in the following table.

Issuance time (UTC)	Validity time (UTC)		
	1. time interval	2. time interval	3. time interval
0200	03-05	05-07	07-09
0600	07-09	09-11	11-13
1000	11-13	13-15	15-17
1400	15-17	17-19	19-21

GEN 3.6 SEARCH AND RESCUE

1. RESPONSIBLE SERVICES

ACC Zagreb, ACC Belgrade and Air Traffic Control Units in Bosnia and Herzegovina shall initiate the Search and Rescue procedure, by alerting the Rescue Coordination Centre of Bosnia and Herzegovina (RCC B&H).

Search and Rescue actions shall include all aircraft pursuant to air traffic control, other aircraft that have submitted flight plan or aircraft that are in a way known to be authorities for the provision of services in air navigation, and aircraft that are threatened or are subjected to an act of unlawful interference.

Search and Rescue in Sarajevo FIR are coordinated and conducted by the RCC B&H.

Authority – Address for coordination:

Post	Ministry of Communications and Transport Directorate of Civil Aviation of B&H V kozarske brigade 18 78000 Banja Luka Bosnia and Herzegovina	Ministry of Communications and Transport Directorate of Civil Aviation of B&H – Regional Office Sarajevo Aleja Bosne Srebrene 64 71000 Sarajevo Bosnia and Herzegovina
Phone:	+387 51 921 222	+387 33 881 314
Fax:	+387 51 921 520	+387 33 881 306
Fax:	NIL	+387 51 921 520
AFS:	NIL	LQBHYAYX (SAR LQBHYCYX)
E-mail	bhdca@bhdca.gov.ba	bhdca@bhdca.gov.ba
URL:	http://www.bhdca.gov.ba	http://www.bhdca.gov.ba

Operational Hours: Monday – Friday 09.00 – 17.00

Address of Rescue Coordination Centre of Bosnia and Herzegovina:

Post:	BH Air Navigation Services Agency (BHANSA) Rescue Coordination Centre of Bosnia and Herzegovina (RCC B&H) Airport Banja Luka - Mahovljani Mahovljani bb 78250 Laktaši Bosnia and Herzegovina
Phone:	+387 1262
Phone:	+387 51 337 563
Phone:	+387 51 337 564
Phone:	+387 51 337 565
Phone:	+387 61 260 831
Fax:	+387 51 337 566
AFS:	LQBKYCYX
E-mail	rccbih@bhansa.gov.ba
URL:	http://www.bhansa.gov.ba

Operational Hours: H24

The service is provided in accordance with the provisions contained in ICAO Annex 12 – Search and Rescue.

2. AREA OF RESPONSIBILITY

The Search and Rescue service is responsible for SAR operations within the Sarajevo FIR. RCC B&H has been designated as SAR Point of Contact (SPOC) for the receipt of COSPASSARSAT data.

3. TYPES OF SERVICE

In conducting Search and Rescue operations the following institutions are involved: Armed Forces in Bosnia and Herzegovina, Police, Civil Protection, Medical organizations, State Border Service, Mine Action Centre, Flying Clubs as well as corporate legal persons and individual persons.

Ground/air visual signal codes for use by survivors

No	Message	Code symbol
1	Require assistance	V
2	Require medical assistance	X
3	No or Negative	N
4	Yes or Affirmative	Y
5	Proceeding in this direction	↑

Instructions for use:

1. Make signals not less than 8 FT (2.5 M).
2. Take care to lay out signals exactly as shown.
3. Provide as much colour contrast as possible between signals and background.
4. Make every effort to attract attention by other means such as radio, flares, smoke, reflected light.

4. SAR AGREEMENTS

NIL

5. CONDITIONS OF AVAILABILITY

NIL

6. PROCEDURES AND SIGNALS USED

Procedures and signals used by aircraft

Procedures for pilots-in-command observing an accident or intercepting a distress call and/or message are outlined in ICAO Annex 12, Chapter 5.

Communications

Transmission and reception of distress messages within the Sarajevo Search and Rescue Area are handled in accordance with ICAO Annex 10, Volume II, Chapter 5, paragraph 5.3.

For communications during search and rescue operations, the codes and abbreviations published in ICAO

Abbreviations and codes (Doc. 8400) are used.

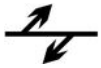
The frequency 121.5 MHZ is guarded continuously in RCC B&H, ACC Zagreb and ACC Belgrade. In addition, the aerodrome control towers serving international aerodromes will, on request, guard the frequency 121.5 MHZ.

Rescue helicopters belonging to permanent search and rescue units use booth the call sign RESCUE and additional identification marks (ALFA, BRAVO, CHARLIE etc.) during Rescue operations.

Search and Rescue signals

The search and rescue signals to be used are those prescribed in ICAO Annex 12, Chapter 5, paragraph 5.10.

Ground/air visual signal codes for use by SAR service

No	Message	Code symbol
1	Operation completed	
2	All persons found	
3	Some persons found only	
4	Not able to continue. Returning to base	
5	Divided in two groups. Each proceeding in direction indicated	
6	Information received, aircraft is in this direction	
7	Nothing found. Will continue to search	