GEN 3 SERVICES

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 2. below.

The AeZWronautical 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 5. 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

2. 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*.

3. AERONAUTICAL PUBLICATIONS

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

- Aeronautical Information Publication (AIP);
- AIP Amendment (AIP AMDT);
- AIP Supplement (AIP SUP);
- Aeronautical Information Circular (AIC);
- Aeronautical charts and
- NOTAM

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.

3.1 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.

3.2 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 Aeronautical Information products 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.

3.3 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.

3.4 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 2 (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.

3.5 AERONAUTICAL CHARTS

Aeronautical charts are made available as specified in GEN-3.2.

3.6 NOTAM AND PRE-FLIGHT INFORMATION BULLETINS (PIB)

3.6.1 NOTAM

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, Mostar, Sarajevo and Tuzla

Series A applies to all subjects regarding international airports in Bosnia and Herzegovina information about RNAV, all en-route informations as well as airspace restrictions and navigation warnings within Sarajevo FIR.

Series B applies to all VFR airfields within Sarajevo FIR.

* 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).

3.6.2 Pre-flight information bulletins (PIB)

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.

3.7 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. 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.

3.8 SALE OF PUBLICATIONS

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

4. 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

5. 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.

5.1 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).

6. ELECTRONIC TERRAIN AND OBSTACLE DATA

6.1 Electronic terrain

Bosnia and Herzegovina is administratively and territorially divided into two entities: the Republic of Srpska, the Federation of Bosnia and Herzegovina, and the Brcko District as shown in the figure below:



In accordance with the above governmental arrangement, each of these administrative units has its own Administration for Geodetic and Property Affairs, which is responsible for data on the digital terrain model (DTM) for its area of territorial jurisdiction.
The electronic terrain data are in accordance with ICAO Area 1 requirements and available in ASCII or Geo TIFF file format.

General DTM specifications are shown in the table below:

Number	Attribute	Description
1	Area of coverage	Bosnia and Herzegovina
2	Data originator	Administration for Geodetic and Property affairs
3	Data source	Digital terrain model of BIH
4	Acquisition method	Aerophotogrametric survey of the territory of Bosnia and Herzegovina within the project "Spatial Information Services for BIH Phase II- Digital orthophoto map"
5	Post spacing	Grid 5m
6	Horizontal accuracy	≤10 m
7	Horizontal confidence level	95%
8	Horizontal position	2D Cartesian (rectangular) coordinate system (Y-axis positive to the east, X-axis positive to the north)
9	Horizontal resolution	1 m
10	Horizontal reference system	MGI 1901 / Balkan zone 6" Coordinate system in the plane (EPSG: 8678)
11	Elevation	System of normal-orthometric heights
12	Elevation reference	Reference point HM1 (BV1) -Trieste defined relative to mean sea level in the epoch of 1875
13	Vertical accuracy	± 1 m in in lowlands, ± 15 m in mountainous and forest vegetation areas
14	Vertical confidence level	95%
15	Vertical resolution	1 m
16	Vertical reference system	Trieste (EPSG:5195)
17	Recorded surface	Terrain/relief
18	Integrity	Original DTM data are stored and available in ASCII and Geo TIFF file format
19	Date	Within the period from 2011-2013
20	Unit of measurement	Metre

Detailed information on the availability of electronic terrain data in electronic form, as well as data specifications may be obtained at the following addresses:

Federal Administration for Geodetic and Real Property Affairs

Post: Federal Administration for Geodetic and Real Property Affairs
Hamdije Kreševljakovića 96
71000 Sarajevo
Bosnia and Herzegovina

Phone: + 387 33 201 784

Fax: +387 33 586 056

E-mail uprava@fgu.com.ba

URL: http://www.fgu.com.ba

Republic Administration for Geodetic and Property Affairs

Post:	Republic Administration for Geodetic and Property Affairs Trg Republike Srpske No. 8 78000 Banja Luka Bosnia and Herzegovina
Phone:	+387 51 338 000
Fax:	+387 51 318 006
E-mail	uprava@rgurs.org
URL:	http://www.rgurs.org/en/

The Government of Brcko District - Public Registry Department

Post:	The Government of Brcko District - Public Registry Department Bulevar Mira 1 76100 Brčko Distrikt BIH Bosnia and Herzegovina
Phone:	+387 49 240 809
Fax:	+387 49 240 605
E-mail	NIL
URL:	http://www.jr.bdcentral.net

6.2 Electronic obstacles

NIL