



BOSNIA AND HERZEGOVINA

Establishing a Spatial Data Infrastructure in the Federation of Bosnia and Herzegovina

March 31st, 2022

MA Jasmin Catic, dipl.ing.geod.geoinf.

Outline

- *General information*
- *Framework*
- *SDI Council and Working groups*
- *SDI Geoportal*
- *Activities in 2021*
- *Activities in 2022*
- *Other plans*

General information (1/2)

- Establishment and Strengthening of the SDI is based on INSPIRE directive principles and technical standards
- Other international standards are recognized and applied in the Federation of Bosnia and Herzegovina as well
- Geodetic authority is the central point, followed by other spatial data holders (SDI Entities)
- Mission
 - Define and build legislative framework, bodies, tools and other preconditions for the SDI FBiH establishment.
- Vision
 - The SDI FBiH establishment will enable necessary preconditions for efficient collecting, processing, standardization and using of geospatial data, which will be shown by implementation examples at all levels of entities and users.
- Law on SDI adopted in 2021

General information (2/2)

- Basic objectives of establishing SDI in the FBiH
 - Establishment of the spatial data service and organizing the Spatial Data Infrastructure of Federation of Bosnia and Herzegovina
 - Enabling to the SDI FBiH users simple, efficient and quick access to the spatial data
 - Improvement the basics of good governance
 - Supporting the economic development of Bosnia and Herzegovina
 - Providing the basic spatial data for support the user needs and the EU requirements
- Other objectives and benefits from SDI establishment
 - Data and metadata standards, procedures, and policies are used to promote coordination among data providers and dissemination of geospatial data among users around the FBiH.
 - Exchange of data via web services with different authorities and local governments is raising efficiency of work in land administration and laying the foundations for e-government for user benefits.
 - Prevention of data duplication and issuance of incorrect data from unauthorized sources, helps in clear definition of roles and jurisdictions among public institutions.

Framework

- ▶ The competent institutions in the Federation of BiH approached the adoption of the framework with due seriousness and commitment, especially the Federal Geodetic Administration – FGA
- ▶ SDI Framework in the FBiH:
 - ▶ INSPIRE Directive
 - ▶ Law on SDI in the FBiH (adopted in 2021), previously was Government Regulation on SDI (2014)
 - ▶ Strategy of establishment and maintenance of SDI (2016), planned new one in 2022
 - ▶ Establishment of management and working structure

Legislative Framework

- Main legislative framework is the Law on SDI in the FBiH.
- This law transposes Directive 2007/2 / EC of the European Parliament and of the Council of 14 March 2007 establishing an EU Spatial Data Infrastructure (INSPIRE).
- The law creates the basic rules related to the establishment of the spatial data infrastructure.
- The law also creates a legal framework for the management and exchange of spatial information, which contains rules for achieving technical interoperability in order to share data in electronic form between the competent institutions through network services.
- FGA is recognized as the Coordinating Body of SDI
 - Establishes, maintains and manages the SDI FBiH Geoportal;
 - Maintains a public metadata service and provides entities and users with connection to other services included in the SDI FBiH through the Geoportal SDI FBiH;
 - Ensures finding, access and use of spatial data of the FBiH SDI.
 - Other planning, reporting and standards enforcement roles.
- For this reason, SDI subjects in cooperation with the Coordination Body should provide descriptions of available spatial data sources and services in the form of metadata.
- SDI working bodies according to law are: Council and Working groups

SDI Council

- The SDI FBiH Council consists of eleven members, one of them is the President and they are appointed and dismissed by the Government of Federation of Bosnia and Herzegovina.
- The SDI FBiH members are appointed for a period of five years.
- Determined tasks and activities:
 - Recommends to the FBiH Government the entities, criteria and norms for the SDI FBiH establishment, medium-term work plan, sources and method of financing of SDI FBiH
 - Determines the subject responsible for certain SDI FBiH topic
 - Harmonizes the activities of SDI FBiH entities
 - Controls the establishing and functioning of SDI FBiH
 - Adopts the rules of procedure governing its work
 - Forms working groups of SDI FBiH for performing professional work
 - Reports to the FBiH Government, the SDI FBiH entities and public on activities related to the SDI FBiH establishment and functioning

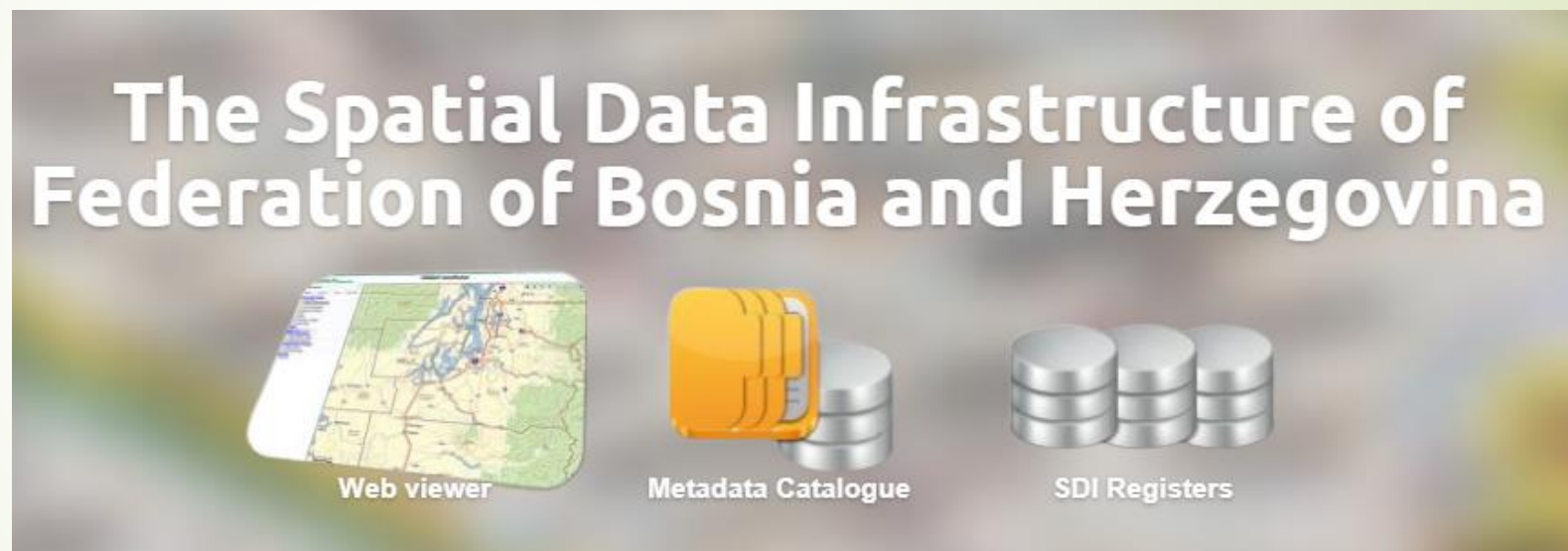
SDI Working groups

- According to the Law, the SDI FBiH Council forms the working groups.
- Four working groups are mainly established (two are active)
 - **The working group for institutional and legal issues (active)**
 - **The working group for technical standards (active)**
 - The working group for communication and capacity building
 - The working group for business model
- The working group for institutional and legal issues – tasks and activities
- The working group for technical standards – tasks and activities

SDI Geoportal

- SDI Geoportal (web site) is planned and established as modular platform which will be upgraded and updated through many phases of SDI FBiH Geoportal establishment with following elements:

- Registers of SDI
- Metadata Catalogue
- Web GIS Viewer
- Web services



- Access to Geoportal through link: <https://ippfbih.gov.ba/>
- Access to all applications through the Geoportal

SDI Registers and Metadata Catalogue

54

SDI entities

109

SDI sources

Access to the SDI FBiH Register of entities and SDI FBiH Register of sources

SDI Registers

Public Registers

SDI Registers

Authorized users

Metadata Catalogue

Access to the SDI FBiH Metadata Catalogue

Manual

Enter keywords for finding the spatial data:

Enter a term

Advanced search

21

Metadata

20

Web services

7

SDI FBiH entities

13

SDI FBiH data sources

SUBJEKTI IZVORI PRAVNI AKTI IZVJEŠTAJI ADMINISTRACIJA

Subjekti

Broj subjekata: 56

Administrativna razina Zakonski akt Izvor Učit po nazivu

Novi

Naziv	Sjedište	Sažetak	Broj izvora		
Agencija za vodno područje rijeke Save www.voda.ba	Sarajevo Hamdije Cemerica 39a	Agencija za vodno područje rijeke Save u Sarajevu upravlja vodnim područjem koje...	3		Učit
Agencija za vodno područje Jadranskog mora https://www.jadran.ba/	Mostar Ante Starčevića bb	Agencija za vodno područje Jadranskog mora	5		Učit
Centar za uklanjanje mina		CUM	0		Učit

Katalog Metapodataka Search Map

Sign in English

Search ...

21 results

Sorted by relevancy

Categories: Map deposits, occurrence and potential area for exploration of mineral raw...

the position of deposits and occurrences of metallic, energy and non-metallic minerals - contours of brown coal basin Kamengrad (western and eastern syndina) - boundaries of approved exploration of space and exploitation fields of mineral resource deposits - the status of the deposit relative to the exploitation (the deposit in exploitation, the place

Categories: Addresses

Your address is the number of houses, flats or apartments and the name of the street and city in which you live or work. The addresses displayed on the SDI Geportal are taken from the Address Register of the Federation of BiH, harmonized with the INSPIRE standard in terms of display and accompanying attributes. The model of address data

Categories: Spatial reference system

The Spatial Reference System of the Federation of Bosnia and Herzegovina is a geocentric terrestrial reference system which, by definition of coordinate origin, coordinate axis orientation, scale, unit of length and temporal evolution, coincides with the International Terrestrial Reference System - ITRS for epoch 1989.0 - ITRS 89 and is called the European

Categories: Protected area - Scope of the Spatial Plan of the area of special importance...

U skladu s tačkom III član 1. tačka d) Ustava Federacije BiH, člana 5. i 19. Zakona o prostornom planiranju i korištenju zemljišta na nivou Federacije BiH (SL. novine Federacije BiH, br. 2/06, 72/07, 32/08, 4/10, 13/10, 45/10) Predstavnički dom Parlamenta Federacije BiH, na nastavku 30 redovne sjednice održane 25.06.2014. godine i Dom naroda Nedin Mujić

Categories: Administrative units

The data set of administrative units contains borders, names and codes for the following spatial units: State of Bosnia and Herzegovina, entities of FBiH and RS and the district of Brčko, cantons in FBiH, and units of local self-government in FBiH.

Categories: Orthoimagery of FBiH 2008

Digital orthophotos of the entire FBiH area. The recordings were made within the aerial photogrammetric survey of the territory of the Federation of Bosnia and Herzegovina, within the project "Preparation of digital ortho-photo plan of the Federation of Bosnia and Herzegovina" funded by the Ministry of Physical Planning of FBiH.

SDI Web Viewer

Info **Legenda**

0-9
10-19
20-29
30-39
40-49
50-59
60-69
70-79
80-89
90-n

Obrazovna struktura

Bez ikakvog obrazovanja
Nepotpuno obrazovanje
Osnovna škola
Srednja škola
Specijalizacija poslije SŠ
Viša škola i 1 stepen fakulteta
Viša škola/fakultet/akademija/Univerzitet

Bračni status


Nikad oženjen/udata
Oženjen/udat
Razveden/a
Udovac/a

Legenda

Obrazovna struktura

0,26

Bez ikakvog obrazovanja
Nepotpuno osnovno obrazovanje
Osnovna škola
Srednja škola
Specijalizacija poslije SŠ
Viša škola i 1 stepen fakulteta
Viša škola/fakultet/akademija/Univerzitet



Izbor tema

ANEX 1

- ☐ Koordinatni referentni sistemi
- ☐ Sistemi geografskih mreža
- ☐ Geografska imena
- ☒ Upravne jedinice
- ☒ Adrese
- ☒ Katastarske čestice
- ☒ Saobraćajne mreže
- ☐ Hidrografija
- ☐ Zaštićena područja
- ☒ Podaci o minski sumnjivim područjima

ANEX 2

- ☒ Geologija
- Ortofotosnimke**
 - ☐ Ortofoto FBiH 2018
 - ☒ Ortofoto FBiH 2012
 - ☐ Ortofoto 2008
 - ☐ Ortofoto urban 2018
 - ☐ Ortofoto KS urban 2017
 - ☐ Ortofoto urban 2013
- ☒ Pokrov zemljišta
- ☐ Visine

ANEX 3

- ☒ Izvori minerala
- ☒ Izvori energije
- ☒ Rasprostranjenost vrsta
- ☒ Staništa i biotopi
- ☒ Biogeografske regije
- ☒ Morske regije
- ☒ Oceanografsko-geografska obilježja

6496262, 4709749

powered by Infinite Solutions

SDI Geoportal – Data (1/2)

- FGA is very active in the field of coordinating the activities regarding the data harmonisation, creation of metadata, sharing and maintaining data and services
- Currently, there are 16 datasets that are fully or partially harmonised according to INSPIRE
- Annex I



Coordinate reference systems



Geographical grid systems



Geographical names



Administrative units



Addresses



Hydrography



Protected Sites

SDI Geoportal – Data (2/2)

► Annex II



Elevation



Geology



Orthoimagery

► Annex III



Environmental monitoring Facilities



Human health and safety



Meteorological geographical features



Land use



Population distribution and demography



Statistical units

Activities 2021

- Main activities during last year were:
 - Final preparations for adopting the Law
 - Adjusting to Law after adoption
 - Project activities for data harmonisation (FGA financing the activities)
 - Project activities for open-source platform for SDI (FGA financing the activities)
- Support Project for Spatial Data Infrastructure in the Federation of BiH
 - Concept written
 - Plans, activities, components were determined
 - Adopted by Government Public Investment Program (highest score)
- Published Geoportal, updated Registries and Metadata Catalogue
- Address Data of Federation first time published (for 26 municipalities)
- Other activities, seminars and plans

Activities 2022

- As for the activities during the year of 2022, we have planned:
 - Project activities for data harmonisation (FGA financing the activities)
 - Project activities for open-source platform for SDI (FGA financing the activities)
 - Project of creating the Visual Identity for SDI FBiH and promotion
 - New strategy for the next period
 - Update the applications of Registers and Metadata Catalogue (mainly focused on interoperability and better functionalities)
- Regular activities for Council and working groups
- Workshops, Educations, Seminars, Meetings, etc.

Activities and plans for future

- Established new Visual Identity of SDI FBiH and promotion of its benefits
- Conducting the proposed Project of support
 - Detailed specifications and activities
 - Component A: Development of technological architecture
 - Data retrieval service
 - Data view service
 - Download service
 - Transformation service
 - Data invoke service
 - Component B: Increasing the availability of SDI FBiH data through e-services
 - Component C: Capacity Building and Project Management
- Data harmonization, Metadata, update the Geoportal, Maintenance and optimization of all aspects, Bring other regulations based on Law, build capacities, etc..



THANK YOU FOR YOUR ATTENTION

Jasmin Catic
jasmin.catic@fgu.com.ba

*Federal Administration for Geodetic
and Real Property Affairs*
<https://www.fgu.com.ba/>

*Spatial Data Infrastructure in the
Federation of Bosnia and Herzegovina*
<https://www.ippfbih.gov.ba/>