

# Bosnia and Herzegovina



**Name:** Association of Consulting Engineers Bosnia and Herzegovina – ITA BH  
(Udruzenje Konsultanata Inzenjera Bosne I Hercegovine – ITA BH)

**Type of structure:** Non-profit, open association

**Number of members:** 15 members

## ASSOCIATION ACTIVITIES DURING 2017 AND TO DATE

Several activities, including lectures and presentations at engineering events were developed throughout 2017.

## CURRENT TUNNELLING ACTIVITIES

- Construction of two double tube tunnels (Pečuj and Ričice) on the Corridor Vc on the highway Sarajevo – Zenica began in 2016; Pečuj tunnel length - 1000m; Ričice tunnel length - 520m; Value of works - €107M. Client - PC Autoceste FB&H. Excavation of both tunnels was finished in 2017. The expected project completion is in 2018. Funding is provided through the international financial institutions of the OPEC Fund for International Development and the European Bank for Reconstruction and Development (EBRD). The works are being carried out by the JV Euro-asfalt and Strabag AG (Photo 1).
- Completion of the reconstruction of the Kalovita brda road tunnel on the

Ljubogošta-Pale motorway. Reconstruction began in 2017 and finished in the same year. The value of works was €750.000. The works were carried out by "Romanijaputevi", and the client was "Putevi Srpske". (Photo 2)

- Completed excavation of the hydro

tunnel for the irrigation of the Bilečko polje. The tunnel length is 1800m. The works were carried out by Integral inženjering, and the client was Hidroelektrane na Trebišnjici.

- Start of excavation of the water supply tunnel on the Dabar Hydropower plant. The tunnel length is 12.125km with a diameter of 4.6m. The works are being carried out by Integral inženjering, and the client is Mješoviti holding ERS – MP a.d. Trebinje ZP Hidroelektrane na Trebišnjici a.d. Trebinje. The value of the works on the tunnel is €67M. Completion is expected in 4 years. The headrace tunnel passes through two different geological zones. The inlet structure is located near the riverbed of the Zavidolska river and is 3.5km from the Pošćenje dam. The grid and gate to enable the tunnel closure for water control and tunnel maintenance are already designed and ready for construction. Two access tunnels (Straževica, at a length of 830m, and Vodostan at a length of 295m) are also designed and ready to be constructed (Photo 3).



- Construction of the drainage tunnel for the Bileća field – Phase I. The project includes the construction of a hydro tunnel to a length of 1,720m, with a circular cross-section of 2.7m. The tunnel is straight, with a vertical grade of 0.40%, and will be reinforced-using a concrete single-layer lining with a thickness 25cm, constructed using the New Austrian Tunnelling Method. The project also includes construction of an entrance structure with a catchment tank and gallery to a length of 16m, exit structures to a length of 11m, two channels with a catchment tank and vertical manhole, and an aqueduct bridge and culvert. The works are being carried out by Integral inženjering, and the client is a Mixed Holding - Power Utility of the Republic of Srpska, Trebinje. The value of works on the tunnel is €4.6M.





- Micro tunnels are under construction in Mostar for the main sewage collector. The Contractor is Ludwig Pfeiffer Hoch-und Tiefbau GmbH & Co. The value of the works is €5.5M. The

Modernization Project. The Project is financed from the loan from the World Bank and the European Investment Bank.

- Construction of the Žaba tunnel with a



expected completion date is in 2018. (Photo 4)

## FUTURE TUNNELLING ACTIVITIES

- Construction of the Oštrovac road tunnel on Neum- Stolac section. The tunnel length is 190m and the value of the entire section, at a length of 7km, is €3.08M. The works are being carried out by Integral inženjering, and the client is PC Ceste FBiH. The completion works for the construction of the main road M 17.3 Neum – Stolac (total length of 32.9km) are part of the Federation Road Sector

service tunnel on the Neum – Stolac section. The tunnel length is 975m and has an expected start date in 2018. The client is PC Ceste FBiH.

- Construction of the Privorac cut-and-cover tunnel on the Mostar south bypass. The tunnel length is 200m with an expected start date in 2018. The client is PC Ceste FBiH.
- Construction of the Novi tunnel with a service tunnel on the Mostar south bypass. The tunnel length is 899m with an expected start date in 2018. The client is PC Ceste FBiH.
- Reconstruction of the tunnels Ormanica, Čaklovići, Karaula (577m)

and Vranduk II - 1060m. The client is PC Ceste FBiH.

- Construction of the Hum and Vraca highway tunnels on the section called the Donja Gračanica – Zenica sjever – tunnel Zenica. The length of the Hum tunnel is 400m, and the Vraca tunnel length is 300m. The client is PC Autoceste FBiH. The project has an expected start date in 2018.
- Construction of the highway Počitelj tunnel on the section called the Zvirovići - Počitelj. The tunnel length is 1200m. The client is PC Autoceste FBiH. The project has an expected start date in 2018.
- Construction of the >2000m Zenica highway tunnel and 3650m Golubinja tunnel on the Žepče - Zenica road section. The client is PC Autoceste FBiH. The project's expected start date is in 2019.
- Construction of the 10km Preng highway tunnel on the Konjic - Mostar section. The client is PC Autoceste FBiH and the expected start is in 2019-2020.
- Construction of the 2700m Kvanj highway tunnel and the 400m Gorica tunnel on the Mostar south - Buna section. The client is PC Autoceste FBiH and the expected start date is in 2018.
- Construction of the 3200m Ivan highway tunnel on the Tarčin - Konjic section. The client is PC Autoceste FBiH. The expected start date is in 2019.
- Construction of the Vranduk water supply tunnel for the Vranduk Hydropower plant. Construction is being carried out under a turnkey format. Works are expected to start in 2018 after finding a second Contractor. The previous contract with Strabag was terminated. The supply tunnel length is 1.5km. The client is PC Elektroprivreda BiH.

## STATISTICS

1. Length or volume excavated - % mechanized/% conventional during 2017:  
20% mechanized (Microtunnels)/ 80% conventional
2. Amount (USD or EUR) of tunnelling/ underground space facilities awarded in 2017:  
Microtunnelling for the main collector in Mostar €5.5M
3. List of tunnels completed:  
Drainage tunnel - Bileća near Bileća, hydro tunnel - Ribnica near Kakanj
4. List of tunnels under construction:  
Highway tunnel Pečuj, Highway tunnel Ričice, hydro tunnel Dabar, Micro tunnels in Mostar