

**ZAHTEJ ZA SUDJELOVANJE
U OGRANIČENOM POSTUPKU JAVNE NABAVE**

Broj zahtjeva	
Datum zahtjeva	
NARUČITELJ	HŽ Infrastruktura d.o.o., Mihanovićeve 12, 10 000 Zagreb OIB: 39901919995
Predmet nabave	JAVNI RADOVI na rekonstrukciji postojećeg i izgradnji drugog kolosijeka željezničke pruge na dionici Dugo Selo – Križevci

Podaci o natjecatelju

Zajednica natjecatelja (zaokružiti):		DA ¹	NE
Naziv i sjedište natjecatelja / člana zajednice natjecatelja ovlaštenog za komunikaciju s naručiteljem			
OIB ²		IBAN	
Gospodarski subjekt u sustavu PDV-a (zaokružiti)		DA	NE
Adresa za dostavu pošte			
Telefon		Telefax	
E-mail			
Ime, prezime i funkcija osobe za kontakt			
Ime, prezime i stručna kvalifikacija osoba koje bi trebale biti odgovorne za izvršenje ugovora			

ZA NATJECATELJA

M.P.

(ime, prezime, funkcija i potpis ovlaštene osobe)

¹ U slučaju zajednice natjecatelja popuniti Prilog 1a – Članovi zajednice natjecatelja
² Ili nacionalni identifikacijski broj prema zemlji sjedišta gospodarskog subjekta, ako je primjenjivo

PODACI O ČLANOVIMA ZAJEDNICE NATJECATELJA

(priložiti samo u slučaju zajednice natjecatelja)³

Broj zahtjeva za sudjelovanje:	
NARUČITELJ:	HŽ Infrastruktura d.o.o., Mihanovićeva 12, 10 000 Zagreb OIB: 39901919995
Predmet nabave:	JAVNI RADOVI na rekonstrukciji postojećeg i izgradnji drugog kolosijeka željezničke pruge na dionici Dugo Selo – Križevci

Član zajednice natjecatelja koji je ovlašten za komunikaciju s naručiteljem:

1)

Naziv i sjedište člana zajednice natjecatelja			
OIB		IBAN	
Gospodarski subjekt u sustavu PDV-a (zaokružiti)		DA	NE
Adresa za dostavu pošte			
Telefon		Telefax	
E-mail			
Ime, prezime i funkcija osobe za kontakt			
Ime, prezime i stručna kvalifikacija osoba koje bi trebale biti odgovorne za izvršenje ugovora			

ZA ČLANA ZAJEDNICE NATJECATELJA

M.P. _____

(ime, prezime, funkcija i potpis ovlaštene osobe)

2)

Naziv i sjedište člana zajednice natjecatelja			
OIB		IBAN	
Gospodarski subjekt u sustavu PDV-a (zaokružiti)		DA	NE
Adresa za dostavu pošte			
Telefon		Telefax	
E-mail			
Ime, prezime i funkcija osobe za kontakt			
Ime, prezime i stručna kvalifikacija osoba koje bi trebale biti odgovorne za izvršenje ugovora			

ZA ČLANA ZAJEDNICE NATJECATELJA

M.P. _____

(ime, prezime, funkcija i potpis ovlaštene osobe)

³ Zahtjevu za sudjelovanje se može priložiti više obrazaca, ovisno o broju članova zajednice natjecatelja

PODACI O PODIZVODITELJIMA(priložiti samo u slučaju postojanja podizvoditelja)⁴

Broj zahtjeva za sudjelovanje:	
NARUČITELJ:	HŽ Infrastruktura d.o.o., Mihanovićeva 12, 10 000 Zagreb OIB: 39901919995
Predmet nabave:	JAVNI RADOVI na rekonstrukciji postojećeg i izgradnji drugog kolosijeka željezničke pruge na dionici Dugo Selo – Križevci

1)

Naziv i sjedište podizvoditelja			
OIB		IBAN	
Gospodarski subjekt u sustavu PDV-a (zaokružiti)		DA	NE
Adresa za dostavu pošte			
Telefon		Telefax	
E-mail			
Ime, prezime i funkcija osobe za kontakt			
Ime, prezime i stručna kvalifikacija osoba koje bi trebale biti odgovorne za izvršenje ugovora			

ZA PODIZVODITELJA

M.P.

(ime, prezime, funkcija i potpis ovlaštene osobe)**2)**

Naziv i sjedište podizvoditelja			
OIB		IBAN	
Gospodarski subjekt u sustavu PDV-a (zaokružiti)		DA	NE
Adresa za dostavu pošte			
Telefon		Telefax	
E-mail			
Ime, prezime i funkcija osobe za kontakt			
Ime, prezime i stručna kvalifikacija osoba koje bi trebale biti odgovorne za izvršenje ugovora			

ZA PODIZVODITELJA

M.P.

(ime, prezime, funkcija i potpis ovlaštene osobe)⁴ Zahtjevu za sudjelovanje se može priložiti više obrazaca, ovisno o broju podizvoditelja

Izjava o nekažnjavanju

Temeljem čl. 67. St. 2. Zakona o javnoj nabavi (NN 90/11 i 83/13), u svezi sa stavkom 1. točka 1. istog članka daje se

I Z J A V A

kojom ja _____ iz _____
(ime i prezime) (prebivalište i adresa stanovanja)

broj osobne iskaznice _____ izdane od _____

kao osoba ovlaštena po zakonu za zastupanje gospodarskog subjekta

(naziv i sjedište gospodarskog subjekta, OIB)

pod materijalnom i kaznenom odgovornošću izjavljujem za sebe i za gospodarski subjekt kojeg zastupam, da protiv mene osobno niti protiv gospodarskog subjekta kojeg zastupam nije izrečena pravomoćna osuđujuća presuda niti za jedno kazneno djelo navedeno u članku 67. stavak (1) točke 1a) i 1b) Zakona o javnoj nabavi (NN 90/11 i 83/13) odnosno za odgovarajuća kaznena djela prema propisima države sjedišta gospodarskog subjekta ili države iz koje dolazim.

U _____, _____ 2013. godine

Za natjecatelja

Osoba ovlaštena za zastupanje

(M. P.)

(čitko ime i prezime, potpis)

Napomena:

Izjavu daje osoba po zakonu ovlaštena za zastupanje gospodarskog subjekta.

Izjava ne smije biti starija od tri mjeseca računajući od dana početka postupka javne nabave.

Izjava za profesionalnu djelatnost

Temeljem čl. 68. st. 4. Zakona o javnoj nabavi (NN 90/11 i NN 83/13), u svezi sa stavkom 1. točka 3. istog članka dajem

IZJAVU

kojom ja _____ iz _____
(ime i prezime) (prebivalište i adresa stanovanja)

broj osobne iskaznice _____ izdane od _____

kao osoba ovlaštena po zakonu za zastupanje gospodarskog subjekta

(naziv i sjedište gospodarskog subjekta, OIB)

pod materijalnom i kaznenom odgovornošću izjavljujem za gospodarski subjekt koji po zakonu zastupam, da gospodarski subjekt kojeg zastupam nije pravomoćno osuđen za bilo koje djelo koje se odnosi na obavljanje profesionalne djelatnosti, a koje su navedene u točki 3.1.f. *Dokumentacije za nadmetanje - 1. dio **Rekonstrukcija postojećeg i izgradnja drugog kolosijeka željezničke pruge na dionici Dugo Selo – Križevci***, odnosno za odgovarajuća kaznena djela prema propisima države sjedišta gospodarskog subjekta.

U _____, _____ 2013. godine

(M. P.)

Za natjecatelja
Osoba ovlaštena za zastupanje

(čitko ime i prezime, potpis)

POPIS USPJEŠNO ISPUNJENIH UGOVORA O IZVEDENIM RADOVIMA
u tijeku ove godine i tijekom 7 godina koje joj prethode

REDNI BROJ	OPIS RADOVA	VRIJEDNOST UGOVORA O IZVEDENIM RADOVIMA (bez PDV-a)	Godina ugovaranja i završetka	NARUČITELJ RADOVA

Datum: _____

(osoba ovlaštena za zastupanje ponuditelja)

(M. P.)

(potpis)

* priložiti potvrde druge ugovorne strane da su radovi uredno izvršeni i u skladu s pravilima struke

PODACI O ZADOVOLJAVAJUĆEM IZVRŠENJU UGOVORA

NAZIV I SJEDIŠTE NARUČITELJA: _____

NAZIV I SJEDIŠTE IZVODITELJA: _____

PREDMET UGOVORA: _____

POPIS RADOVA OBUHVAĆENIH UGOVOROM: _____

VRIJEDNOST RADOVA (bez PDV-a): _____

DATUM I MJESTO IZVOĐENJA RADOVA: _____

IZJAVA O UREDNOM IZVRŠENJU RADOVA I U SKLADU S PRAVILIMA STRUKE:

Datum: _____

M.P. Potpis naručitelja: _____

IZJAVA O RASPOLAGANJU TEHNIČKIM STRUČNJACIMA

Temeljem članka 72. stavak 4. točka 3., a u skladu s točkom 4.3.g. dokumentacije za nadmetanje za nabavu nabavu radova na **rekonstrukciji postojećeg i izgradnji drugog kolosijeka željezničke pruge na dionici Dugo Selo – Križevci**, dajemo

IZJAVU

da ćemo za potrebe izvršenja predmetnih radova imati na raspolaganju sve tehničke stručnjake minimalnog stupnja stručnog zvanja i navedenih specijalnosti kako je traženo u točki 4.3.g) Dokumentacije za nadmetanje 1. dio:

- i) Glavni inženjer gradilišta građevinske ili elektrotehničke struke s iskustvom u vođenju barem jednog projekta opisa i složenosti kao predmet nabave: radovi obnove i/ili rekonstrukcije i/ili nadogradnje i/ili izgradnje željezničkih pruga, minimalne vrijednosti 400.000.000,00 kn;
- ii) Tri inženjera gradilišta građevinske struke s radnim iskustvom u izvođenju radova koji odgovaraju predmetu nabave: radovi obnove i/ili rekonstrukcije i/ili nadogradnje i/ili izgradnje željezničkih građevinskih infrastrukturnih podsustava;
- iii) Inženjer gradilišta s radnim iskustvom u izvođenju radova koji odgovaraju predmetu nabave: radovi obnove i/ili rekonstrukcije i/ili nadogradnje i/ili izgradnje željezničkih elektroenergetskih infrastrukturnih podsustava;
- iv) Inženjer gradilišta s radnim iskustvom u izvođenju radova koji odgovaraju predmetu nabave: radovi obnove i/ili rekonstrukcije i/ili nadogradnje i/ili izgradnje željezničkih signalnosigurnosnih infrastrukturnih podsustava;
- v) Inženjer gradilišta s radnim iskustvom u izvođenju radova koji odgovaraju predmetu nabave: radovi obnove i/ili rekonstrukcije i/ili nadogradnje i/ili izgradnje željezničkih telekomunikacijskih infrastrukturnih podsustava;
- vi) Inženjer gradilišta strojarske struke s radnim iskustvom u izvođenju radova koji odgovaraju predmetu nabave: radovi obnove, rekonstrukcije, nadogradnje ili izgradnje željezničkih pruga;
- vii) Inženjer prometa s najmanje 10 godina radnog iskustva u izvođenju radova koji odgovaraju predmetu nabave: radovi obnove i/ili rekonstrukcije i/ili nadogradnje i/ili izgradnje željezničkih pruga;
- viii) Geodet s najmanje 6 godina radnog iskustva u izvođenju radova koji odgovaraju predmetu nabave: radovi obnove i/ili rekonstrukcije i/ili nadogradnje i/ili izgradnje željezničkih pruga;
- ix) Ispitivač signalno-sigurnosnih uređaja ("tester in charge"/"assessor") s najmanje 5 godina radnog iskustva kao ispitivač, s važećim certifikatom za obavljanje poslova ispitivanja signalno-sigurnosnih uređaja izdanim od ovlaštene institucije;
- x) Projektant sa najmanje 10 godina radnog iskustva na projektiranju građevinskog infrastrukturnog podsustava obnove i/ili rekonstrukcije i/ili nadogradnje i/ili izgradnje željezničkih pruga opisa i složenosti istog ili sličnog predmetu nabave (glavni ili izvedbeni projekt);
- xi) Projektant sa najmanje 6 godina radnog iskustva na projektiranju elektroenergetskog infrastrukturnog podsustava obnove i/ili rekonstrukcije i/ili nadogradnje i/ili izgradnje željezničkih pruga opisa i složenosti istog ili sličnog predmetu nabave (glavni ili izvedbeni projekt);
- xii) Projektant sa najmanje 6 godina radnog iskustva na projektiranju signalnosigurnosnog infrastrukturnog podsustava obnove i/ili rekonstrukcije i/ili nadogradnje i/ili izgradnje željezničkih pruga opisa i složenosti istog ili sličnog predmetu nabave (glavni ili izvedbeni projekt);

- xiii) Projektant sa najmanje 6 godina radnog iskustva na projektiranju telekomunikacijskog infrastrukturnog podsustava obnove i/ili rekonstrukcije i/ili nadogradnje i/ili izgradnje željezničkih pruga opisa i složenosti istog ili sličnog predmetu nabave (glavni ili izvedbeni projekt);
- xiv) Koordinator zaštite na radu II u skladu s Pravilnikom o zaštiti na radu na privremenim ili pokretnim gradilištima (NN 51/08);
- xv) Stručnjak za osiguranje kvalitete.

Ukoliko naša ponuda bude odabrana kao najpovoljnija, spomenute stručnjake ćemo imenovati za izvršenje posla prije sklapanja ugovora.

U _____, _____ 2013. godine

(M. P.)

Za natjecatelja
Osoba ovlaštena za zastupanje

(čitko ime i prezime, potpis)

Izjava o integritetu

(naziv natjecatelja)

(OIB natjecatelja)

(adresa natjecatelja)

Temeljem mjere 1.5. Antikorupcijskog programa za trgovačka društva u većinskom državnom vlasništvu za razdoblje 2010.-2012. Vlade RH od 25.11.2009. godine, a u svrhu postupka javne nabave: ograničeni postupak javne nabave, Naručitelja **HŽ Infrastruktura d.o.o., Zagreb**, evidencijskog broja 3-EU/13-JP za nabavu javnih radova na **rekonstrukciji postojećeg i izgradnji drugog kolosijeka željezničke pruge na dionici Dugo Selo – Križevci** dajem sljedeću:

IZJAVU O INTEGRITETU

kojom izjavljujemo da kao Natjecatelj u ovom postupku nabave:

- jamčimo za korektnost u predmetnom postupku
- jamčimo za izostanak bilo kakve zabranjene prakse u vezi s predmetnim postupkom nadmetanja, a koja obuhvaća radnje koje su korupcija ili prijevara, nuđenje, davanje ili obećavanje neke nedopuštene, neopravdane ili neprilične prednosti koja može utjecati na djelovanje nekog zaposlenika, te
- izražavamo suglasnost s provedbom revizije cijeloga predmetnog postupka od strane neovisnih stručnjaka i prihvaćanjem odgovornosti i određenih sankcija (ugovorne kazne, bezuvjetni otkaz ugovora) ukoliko se krše pravila.

U _____, _____ 2013. godine

Za natjecatelja
Ovlaštena osoba

(M. P.)

(čitko ime i prezime, potpis)

Napomena:

U slučaju zajednice natjecatelja svaki član zajednice popunjava Izjavu o integritetu.

Izjava o nepostojanju poreznog duga

Temeljem čl. 67. St. 3. točke 3. Zakona o javnoj nabavi (NN 90/11, NN 83/13), u svezi sa stavkom 1. točka 2. istog članka dajem

IZJAVA

kojom ja _____ iz _____
(ime i prezime) (prebivalište i adresa stanovanja)

broj osobne iskaznice _____ izdane od _____

kao osoba ovlaštena po zakonu za zastupanje gospodarskog subjekta

(naziv i sjedište gospodarskog subjekta, OIB)

pod materijalnom i kaznenom odgovornošću izjavljujem da je gospodarski subjekt kojeg zastupam ispunio obvezu plaćanja dospjelih poreznih obveza i obveza za mirovinsko i zdravstveno osiguranje prema propisima države sjedišta gospodarskog subjekta.

U _____, _____ 2013. godine

(M. P.)

Za natjecatelja
Osoba ovlaštena za zastupanje

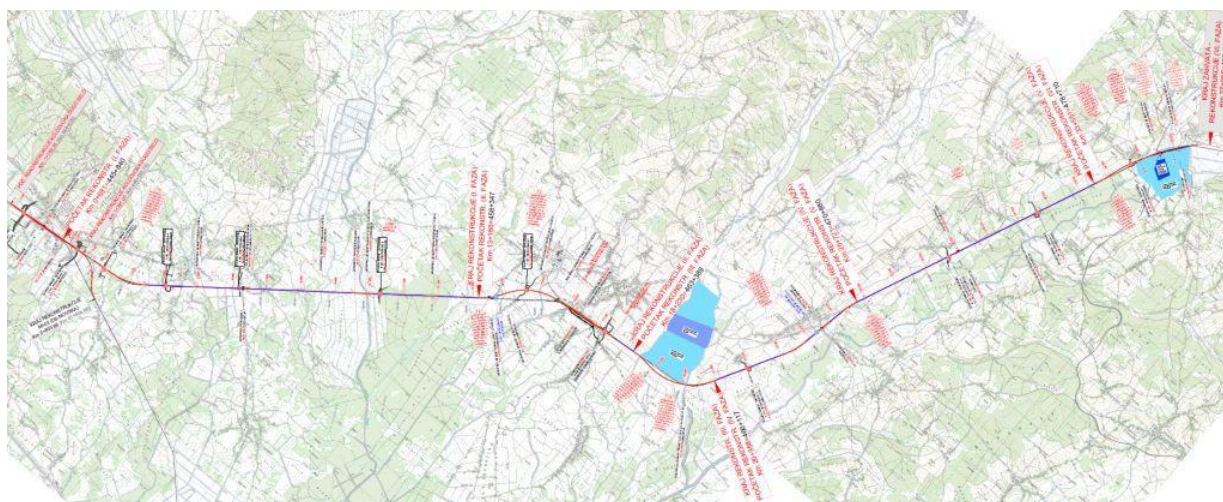
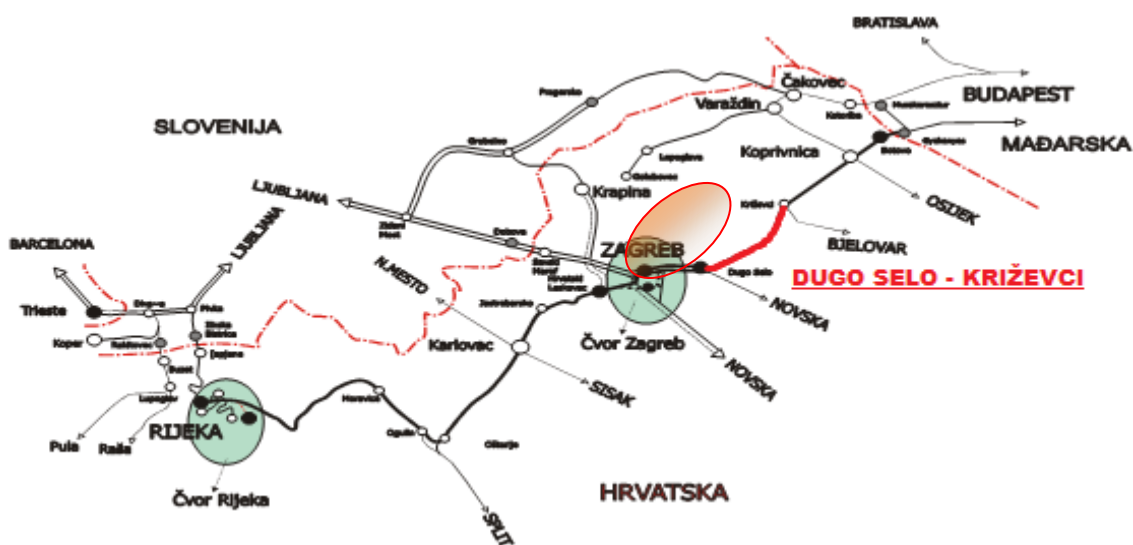
(čitko ime i prezime, potpis)

2.1. Description of the procurement subject

Introduction

Railway line Dugo Selo – Križevci is a constituent part of the Vb Pan European Corridor on the territory of the Republic of Croatia, and of the railway line M201 State border - Koprivnica - Dugo Selo. The existing railway line is single-track, with large interstation distances. Its transport and line capacity is already limited, without possibility of increase. With this project the section Dugo Selo – Križevci would be transformed into a double track railway line, with much more favourable use characteristics, which would contribute to meeting the demands of interoperability, increasing the capacity and considerably reducing the traveling time.

Presentation 1 – Spatial and situation layout of the section Dugo Selo - Križevci



EXISTING CONDITION

Railway line section Dugo Selo – Križevci, in total length of 36,0 km, is a single-track railway line adapted for operation of trains of mass of 22,5 and 8 t/axis and for the highest permitted speed of 140 km/h. The railway line was last rehabilitated between 2002 and 2004 and it is in a good usage condition.

Section of the railway line Dugo Selo – Križevci

The railway line passes through the flat area which is cut by rivers and drainage channels. The railway line is either level with the surrounding terrain or situated on a low embankment of up to 1,5 m height, with mild ascents and descents of up to max 6 mm/m.

- *Permanent way and substructure*

Rails (type 60-E1) are installed into the track on concrete sleepers PB 85, and on wooden sleepers on steel bridges. The track is continuous welded. Ballast bed is made of gravel, with a protective ca. 40 cm thick layer of crushed material underneath. Embankment body is built of borrow pit material. There are 7 bridges in total on the section, 3 of which are made of steel and with a span of 12, 25 m, 3 of reinforced concrete with opening of 5,5 up to 14m and 1 concrete with opening of 7,5m. There are 37 culverts.

- *Power supply and overhead line equipment*

The railway line is electrified with the single-phase compensated 25kV, 50 Hz overhead line equipment. The catenary of overhead line equipment is made with “Y” rope for speeds of up to 160 km/h on the main passing track, while in stations on the side tracks the catenary is made without “Y” rope for speeds up to 120 km/h. On supporting masts the standard system heights of 1,40 m have been applied and 1,00 m in overlaps and places of double cantilevers. The catenary is at 5,50 m height above the top of rail. As supporting structures the tubular poles founded on concrete foundations are used. For support of the catenary of the overhead line equipment, standard swiveling cantilevers are used. Firm and automatic tensioning are single. On open railway line, for the control of occupancy axle counters are used, resulting in both rails being included into the current return circuit.

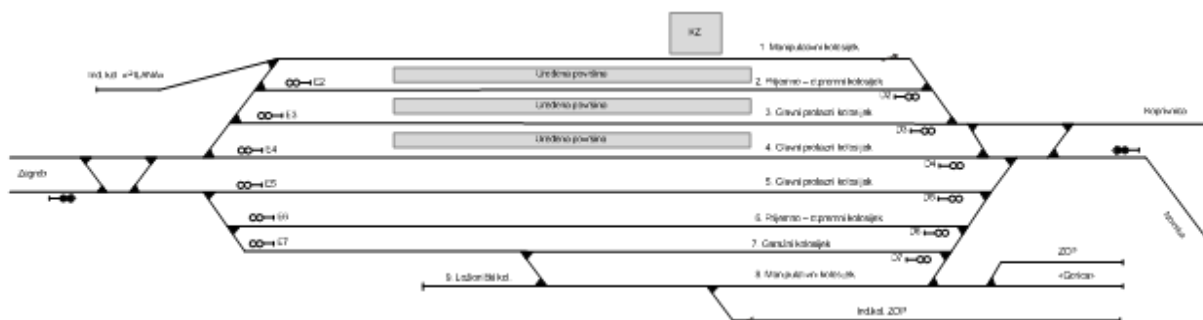
- *Protection of the railway line and telecommunications*

Railway line is protected with relay signaling and interlocking equipment type SbL 5 (ISKRA-LORENZ) and is divided into two subsections Dugo Selo – Vrbovec and Vrbovec –Križevci. The interstation distance has been secured by the ISKRA automatic block device. On the railway line Dugo Selo – Križevci there are in total 21 crossings, 19 of which are road level crossings and 2 pedestrian level crossings. Nine road level crossings are protected with Iskra - Ljubljana relay device. Along the railway line in direction Koprivnica, the track telecommunication cable type STKA 21x4x0,9/1,2 + 2kx is laid. Optic fibre cable with capacity of 48' (fibres) is suspended on the overhead line equipment masts.

Stations and stops

Railway line Dugo Selo is a railway line junction of significance for international transport. On the western side of the station the double track railway line M102 Zagreb Main Railway Station – Dugo Selo ends, and on the eastern side there are two single-track railway lines - railway line M201 (Gyekenyes)-state border - Botovo-Dugo Selo and railway line M103 Dugo Selo – Novska. The station has 9 tracks, 8 of which are electrified. In the station 26 switches on wooden sleepers are installed. The station also includes the sectioning facility and the building of ca. 500 m² in size. Station Dugo Selo is protected with the relay device type Integra which has been in operation for more than 50 years.

Presentation 2 – Existing condition in station Dugo Selo



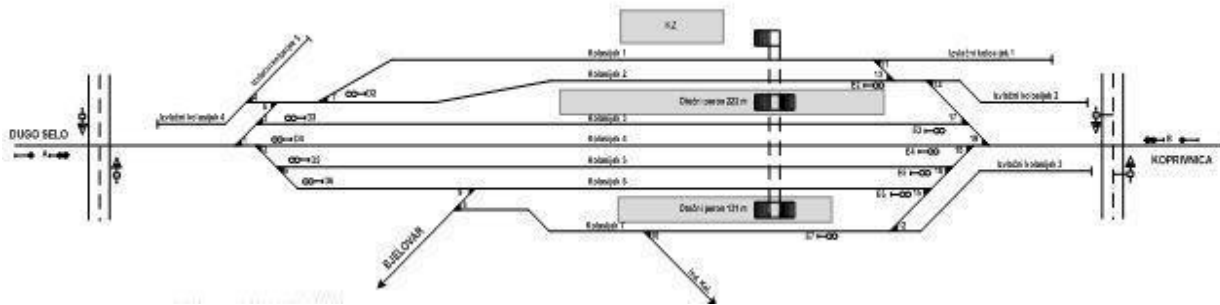
Station Vrbovec has 5 tracks 4 of which have been electrified. 12 switches on wooden sleepers are installed in the station. The existing platform in length of 250 m is situated between the second and the third track. The station also includes the building of ca. 350 m².

Presentation 3 – Existing condition of Vrbovec station



Station Križevci has 7 tracks, 5 of which are electrified. 19 switches on wooden sleepers are installed in the station. Existing platforms, situated between the second and the third track (ca. 250 m in length), and between the sixth and the seventh track (in length of ca. 130 m) are connected with the pedestrian underpass. The station includes the electric traction substation, station building of ca. 650 m² in size, and the building of 130 m² for accommodation of signaling and interlocking and telecommunication equipment

Presentation 4 – Existing condition of station Križevci



Stations Vrbovec and Križevci have been protected with relay equipment type SpDrL-30 which has been in operation since 1980.

In all stations one rail was used as return current circuit and for earthing.

The external telecommunication devices are connected with operator rooms via copper telecommunication cables.

There are 3 stops on the railway line - Božjakovina and Repinec with the area adapted for passenger entry and exit, and Gradec with an 80 m long platform.

NEW CONDITION – WORKS AND ACTIVITIES WHICH WILL BE THE SUBJECT OF THE CONTRACT

The goals of the planned activities on the project of reconstruction of the existing and construction of the second track are the following: speed of 160 km/h on the railway line section Dugo Selo – Križevci, improvement of transport safety, significant boost of the line capacity, traveling time reduction, improvement of travel quality, reception of the interoperable freight trains of 750 m in length with the highest permitted mass of 25 t/axle, i.e. of passenger trains of 400m in length, additional environment protection and enhancement of the quality of life of people living near the railway line. To this purpose following planned activities need to be carried out:

- Relocation of all existing installations (waterworks, gasworks, electric power and telecommunication lines) and removal of existing objects;
- Construction of the second track in length of 38,2 km and reconstruction of the existing of 9 km in length;

- Reconstruction of 3 existing stations (Dugo Selo, Vrbovec and Križevci), construction of the new station (Gradec) and of 2 stops in addition to the reconstruction and adaptation of the existing station buildings in stations (Dugo Selo, Vrbovec and Križevci);
- Construction of deviation of railway line M103 Dugo Selo – Novska, from station Dugo Selo to Ostrna, in length of 1,4 km;
- Construction of 5 new bridges and reconstruction of the existing 7;
- Elimination of in total 17 level road crossings and 2 pedestrian crossings in addition to construction of 12 crossings (11 overpasses and 1 underpass) and 6 pedestrian underpasses, construction of the roads connecting the grade-separated crossings with existing roads;
- Adaptation of elements of internal and external drainage on open railway line and stations and service roads and objects;
- Upgrade of electric traction fixed installations, modernization of signaling and interlocking, and telecommunication equipment and installation of ETCS level 1;
- Construction of ca. 20 km noise protection barriers and ca. 25 km of service roads;
- Preparation of detailed design documentation of the civil-engineering, electric power and control-command and signaling and interlocking subsystems, preparation of transport and technology design defining the minimum transport and technology conditions for transport operation and execution of works, and preparation of the as built designs;
- Maintenance in function of the existing railway line protection system, of level crossings and stations, and of overhead line equipment and radio telecommunication connections during the entire works execution period.

Open railway line

The design envisages, wherever the existing track meets the demands with its elements the construction of the second track in the immediate vicinity of the existing track, to its left or right side. On parts where elements of the existing track do not meet the required demands (6 places of ca. 9 km in length) deviations are to be made. Distance between track centres on open railway line is 4,50 m, and in stations including double track connections from both sides of each station it is 4,75 m. On island platforms in stations the distance is 9,50 m. The design envisages the smallest radius of the horizontal circular curve to be 2500 m, exceptionally 1700 m and the gradient of the level line to be max 6 mm/m.

- *Permanent way and substructure*

The permanent way is designed of rails type 60 E1 on the prestressed reinforced concrete track sleepers with elastic fastening material. The tracks are welded into continuous welded track. The ballast bed is made of minimum 30 cm thick layer of gravel of eruptive origin and adequate quality underneath the sleeper, and on bridges it is 35 cm. The protective layer is made of minimum 40 cm thick layer of crushed stone material, to the purpose of meeting the demands of rigidity, ability to support the substructure and reinforcement of the substructure, geotextile and geogrid are installed. Six bridges are to be removed and replaced by the new reinforced concrete structures (for 2 tracks) while one bridge is to be partially reconstructed. In addition, on a larger railway line deviation before Vrbovec 4 new reinforced concrete bridges and one bridge on the service road are to be constructed. The majority of existing culverts with openings smaller than 1,3 m are to be replaced by the new ones and a smaller number is to be retained and reconstructed.

- *Power supply and overhead line equipment*

On the existing track, elements of overhead line equipment are being rehabilitated (replacement of cantilevers, rehabilitation of foundations and anti-corrosive protection of masts). Single automatic tensioning is being replaced by the double one. On the reconstructed parts of the existing track and on the new one, new overhead line equipment with same characteristics as the one on the existing track, is being constructed.

- *Railway line protection and telecommunications*

As a part of the project the installation of new electronic signaling and interlocking and telecommunication equipment is planned with pertaining cable network and power supply. Interstation distances will be secured within the automatic block regime with the braking distance of 1500 m and maximum operating speed of 160

km/h. In accordance with the requirements of interoperability the upgrade of signaling and interlocking equipment with ETCS level 1 has been envisaged. The boundaries of ETCS installation are entry i.e. exit signals at contacts with existing railway lines, except in Gradec towards Sveti Ivan Žabno and in Dugo Selo towards Zagreb. The interstation connection will be made via optic fibre cable, and local connection with CU cables. Level crossings are to be eliminated except for two crossings which will be protected with new electronic equipment.

- *Grade-separated crossings*

11 multi-span overpasses (5-9 spans) and one underpass, which will connect roads after elimination of level crossings, will be constructed. The overpasses are founded on the piles and span structures are prefabricated girders. Two pedestrian crossings in the station i.e. stop will be redirected to the newly constructed pedestrian underpasses in the area of station/stop Necessary connections of roads and newly constructed overpasses and underpasses with necessary traffic signalization will be constructed.

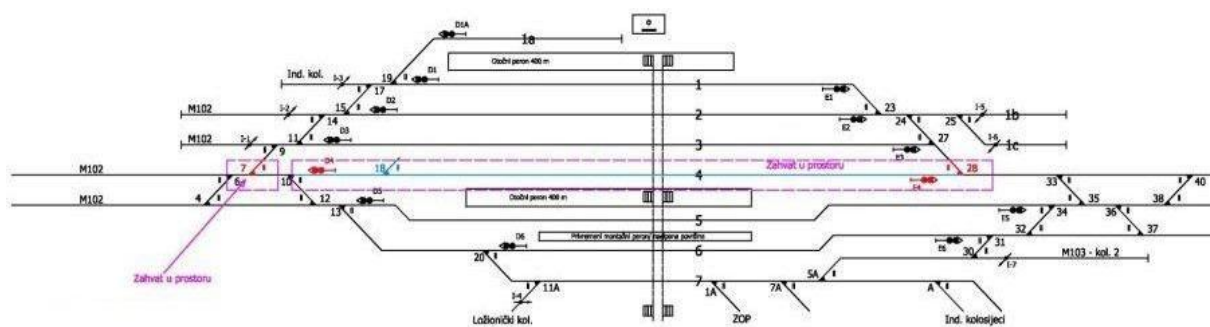
- *Noise barriers*

On places where railway line passes through residential settlements and future residential areas, construction of highly-absorbing noise barriers is envisaged. Noise barriers are planned as assembly structures made of vertical steel profiles and panels placed at the distance of maximum 4 m, exceptionally 5 from the track centre. They are founded on the short drilled reinforced concrete piles.

Stations and stops

Reconstruction of station Dugo Selo requires relocation of all installations, reconstruction of the first six tracks and partially of the track no. 7 and construction of all pertaining dead-end tracks together with elements of the internal and external drainage.

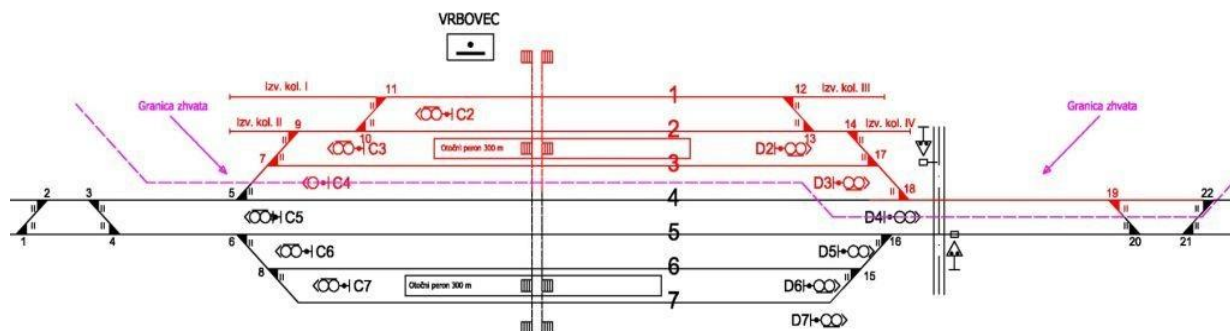
Presentation 5: New condition of station Dugo Selo



Reconstruction also includes construction of 2 platforms of 400 m in length with sheds, underpasses under all tracks, construction of service roads, parking lots and noise barriers. The building is to be completely reconstructed: ca. 300 m² is to be demolished, 200 m² is to be reconstructed and new duplex part of the area is to be constructed in size of ca. 500 m². Groundfloor building in total size of ca. 100 m² is to be constructed for accommodation of the overhead line equipment facilities.

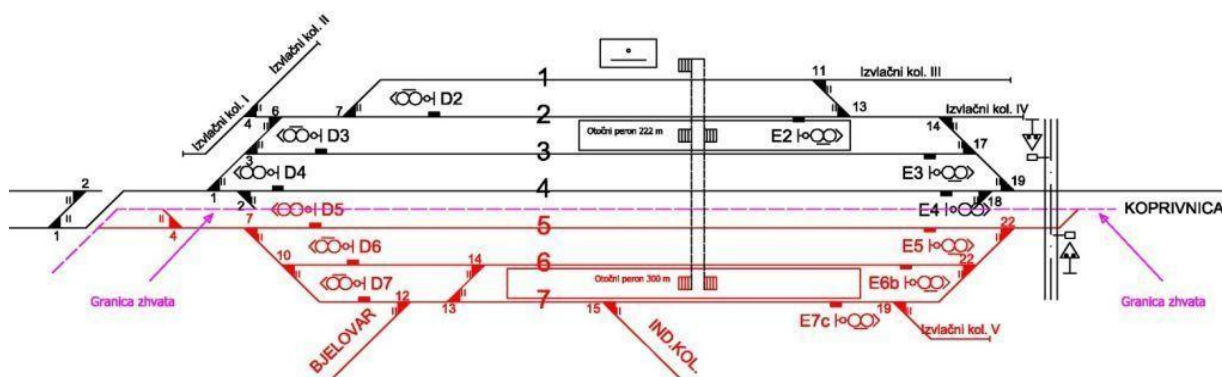
The reconstruction of station Vrbovec encompasses relocation of all installations, reconstruction of all five tracks, construction of two new tracks and pertaining end tracks together with elements of internal and external drainage. Reconstruction also includes construction of 2 platforms in length of 300m with sheds, of underpasses under all tracks, construction of the service road and noise barrier. Works in station include rehabilitation of a part of the building in size of ca. 100m² for accommodation of signaling and interlocking and telecommunication equipment..

Presentation 6 - New condition of station Vrbovec



Reconstruction of station Križevci encompasses relocation of all installations, reconstruction of all seven tracks and construction of all pertaining dead-end tracks together with elements of internal and external drainage. Reconstruction also includes the reconstruction and extension of 2 platforms in length of 300 m with sheds, partial reconstruction of the underpass, construction of service roads and noise barriers. Works in station encompass the rehabilitation of ca. 130 m² of the existing building for accommodation of signaling and interlocking and telecommunication equipment, reconstruction of the building of 25kV electric traction substation in size of ca. 190 m² and construction of the ground floor building in size of 21 m² for the facility for compensation of reactive power. Due to increase of the line capacity a new sectioning facility PS2+2BV and new transformer field in electric traction substation Križevci are to be constructed.

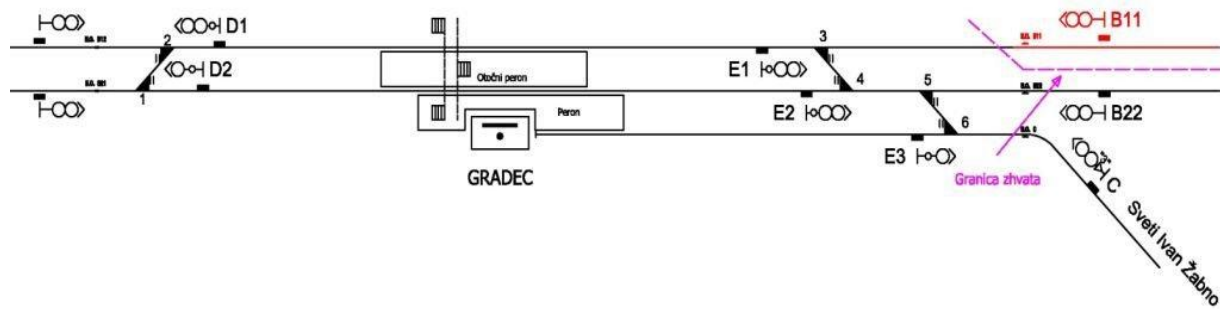
Presentation 7 – New condition of station Križevci



In the place of the existing stop Gradec the construction of the new station as a dividing station for the railway line towards Sv. Ivan Žabno and Bjelovar is envisaged. In the station 2 platforms in length of 300 m with a shed, underpass, service roads, parking lots and noise barriers are to be constructed.

Signaling and interlocking and telecommunication equipment will be accommodated in the premises of the building which will be renovated as a part of the project of construction of the railway line Gradec-Sveti Ivan Žabno.

Presentation 8 New condition of (stop) of station Gradec



In all stations and stops new electronic signaling and interlocking and telecommunication equipment with pertaining cable network, power supply and passenger information system will be installed. All underpasses, platforms and parking lots are to be equipped with electric lighting and to this purpose in areas of stations and stops new distribution transformer stations are to be constructed.

GENERAL REQUIREMENTS DURING EXECUTION OF WORKS

Works on reconstruction of the existing and on construction of the second track as well as works on reconstruction of the station must be executed in the manner as to enable transport operations during entire duration of works. The existing railway line protection system of level crossing and stations must be in function, with some possible alterations, the existing protection system must be in operation at least two years from the beginning of works. The works on the existing part of the railway line, i.e. the works which will have impact on the undisturbed transport operations will be organized in permanent daily 8-hour railway line closures in sections per ca. 5 km.

For the needs of reconstruction/construction/ of objects (bridges, culverts, pedestrian underpasses) on existing part of the railway line it will be necessary to provide a sufficient number of provisional structures to the purpose of uninterrupted transport operations. Equally so, for the needs of the project, the detailed project documentation of the civil-engineering, electric power, control-command and signaling and interlocking subsystems, transport and technology design which defines minimum transport and technology conditions for transport operations and execution of works, and the as-built projects will need to be designed.

We emphasize that in accordance with Article 179, Item 3 of Act on Physical Planning and Construction (OG no. 76/07, 38/09, 55/11, 90/11, 50/12, 55/12, 80/13, hereinafter Act on Physical Planning and Construction) the designer cannot be the employee of the person who is the contractor on the same construction. The contractor will have to execute all the obligations stipulated in approvals embedded in location and building permits, which were prescribed by authorised bodies in accordance with special regulations (Hrvatske vode, Hrvatske šume, T-com, Plinacro, itd.)