| TABLE OF PRICE |  |  |  |
| :---: | :---: | :---: | :---: |
| No. | PART | Amount (USD) | Mark |
| 1 | CONSTRUCTION FEE | 316,215,575 |  |
| 1 | Architectural Works | 3,792,366 | P1-P9 |
| 2 | Substructure Works | 27,858,545 | P10-P19 |
| 3 | Superstructure | 86,887,921 | P20-P31 |
| 4 | Bridge, Culvert and Underpass | 23,901,589 | P32-P34 |
| 5 | Access Road and Road detour | 5,878,175 | P35-P36 |
| 6 | Drainage Works | 1,599,950 | P37-P38 |
| 7 | Overhead contact system | 23,240,661 | P39-P57 |
| 8 | Electrical Traction Substation - EVP, PSN, PS | 5,845,392 | P58-P68 |
| 9 | Power Supply | 4,336,518 | P69-P72 |
| 10 | Signaling System | 57,919,405 | P73-P109 |
| 11 | Telecommunication | 62,195,448 | P110-P173 |
| 12 | Thermotechnical Installations \& Fire Suppression | 709,811 | P174-P176 |
| 13 | Platforms and Lifts | 474,216 | P177 |
| 14 | Roads Traffic Signalization and Equipment | 464,119 | P178-P179 |
| 15 | Landscaping ,planning of platform and evironment measures | 11,111,458 | P180-P181 |
| II | Temporary and Transition works | 23,442,089 | P182-P185 |
| III | DESIGN FEE | 10,504,876 | $3 \%$ of the contract amount |
| 1 | Design Fee(PGD) | 5,252,438 |  |
| 2 | Design Fee(PZI) | 5,252,438 |  |
|  | TOTAL: | 350,162,540 |  |

1 Architectural Works

| No. | Item | Description | Unit | No. of Unit | Unit Price (USD) | Total Price (USD) | No. of Books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| A | Renovation for control post for signalling and telecommunication equipment in New Belgrade station |  |  |  |  |  |  |
| 1 | Structure works | Including demolition,earth works,concrete and reinforcment concrete, masonry,timber structure, insulation | Completion of demolition,earth works,concrete and reinforcment concrete,masonry,timber structure,insulation of the building | 1 | 37,017.33 | 37,017.33 | 1/1 |
| 2 | Decoration works | Including aluminium,steel works,tinsmith,ceramic,flooring and other decoration | Completion of aluminium,steel works,tinsmith,ceramic,flooring and other decoration of the building | 1 | 79,285.97 | 79,285.97 | 1/1 |
| B | Architecture of the pedestrian underpass in the Tosin bunar stopping place |  |  |  |  |  |  |
| 1 | Architecture of the pedestrian underpass in the Tosin bunar stopping place |  | Completion of decoration of the pedestrian underpass in the Tosin bunar stopping place | 1 | 58,348.88 | 58,348.88 | 1/2 |
| C | Building for Zemun railway station |  |  |  |  |  |  |
| 1 | Structure works | Including demolition,earth works,concrete and reinforcment concrete, masonry,timber structure,insulation | Completion of demolition,earth works,concrete and reinforcment concrete, masonry,timber structure,insulation of the building | 1 | 142,305.22 | 142,305.22 | 1/3 |
| 2 | Decoration works | Including aluminium,Steel works,tinsmith,ceramic,flooring and other decoration | Completion of aluminium,Steel works,tinsmith,ceramic,flooring and other decoration of the building | 1 | 115,002.66 | 115,002.66 | 1/3 |
| D | Renovation for central post building in Zemun |  |  |  |  |  |  |
| 1 | Structure works | Including demolition,earth works,concrete and reinforcment concrete, masonry,timber structure, insulation | Completion of demolition,earth works,concrete and reinforcment concrete, masonry,timber structure,insulation of the building | 1 | 190,695.70 | 190,695.70 | 1/4 |
| 2 | Decoration works | Including aluminium,Steel works,tinsmith,ceramic,flooring and other decoration | Completion of aluminium,Steel works,tinsmith,ceramic,flooring and other decoration of the building | 1 | 382,964.82 | 382,964.82 | 1/4 |

## 1 Architectural Works

| No. | Item | Description | Unit | No. of Unit | Unit Price (USD) | Total Price (USD) | No. of Books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| E | Architecture of the pedestrian underpass in Zemun Railway Station |  |  |  |  |  |  |
| 1 | Dismantling, concrete, reiforcement, insulation and masonry works |  | completion of dismantling, concrete, reiforcement,insulation and masonry works | 1 | 75,759.45 | 75,759.45 | 1/5 |
| 2 | Steel, canopy covering and tinsmith's works |  | completion of steel, canopy covering and tinsmith's works | 1 | 25,334.77 | 25,334.77 | 1/5 |
| 3 | Locksmith's works,Rendering, painting, construction of ballast and other works |  | completion of locksmith's works,rendering, painting, construction of ballast and other works | 1 | 196,104.55 | 196,104.55 | 1/5 |
| F | Architecture of buggage pedestrian underpass in Zemun Railway Station |  |  |  |  |  |  |
| 1 | Dismantling, concrete, insulation and masonry works |  | completion of dismantling, concrete, insulation and masonry works | 1 | 56,610.17 | 56,610.17 | 1/5 |
| 2 | Rendering, painting and construction of ballast |  | completion of rendering, painting and construction of ballast | 1 | 51,731.15 | 51,731.15 | 1/5 |
| G | Architecture of the pedestrian underpass in the Altina stopping place |  |  |  |  |  |  |
| 1 | Architecture of the pedestrian underpass in the Altina stopping place |  | Completion of decoration of the pedestrian underpass $y$ in the Altina stopping place | 1 | 65,434.39 | 65,434.39 | 1/6 |
| H | Repairs and adaptation of the station building in Zemun Polje railway station |  |  |  |  |  |  |
| 1 | Structure works | Including demolition, earth works,concrete and reinforcment concrete, masonry,timber structure,insulation | Completion of demolition, earth works,concrete and reinforcment concrete,masonry,timber structure, insulation of the building | 1 | 20,860.86 | 20,860.86 | 1/7 |
| 2 | Decoration works | Including aluminium,Steel works,tinsmith,ceramic,flooring and other decoration | Completion of aluminium,Steel works,tinsmith,ceramic,flooring and other decoration of the building | 1 | 32,557.78 | 32,557.78 | 1/7 |
| I | Repairs and adaptation of signalling \& telecommunication building in Zemun Polje railway station |  |  |  |  |  |  |

1 Architectural Works

| No. | Item | Description | Unit | No. of Unit | Unit Price (USD) | Total Price (USD) | No. of Books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | Structure works | Including demolition,earth works,concrete and reinforcment concrete, masonry,timber structure,insulation | Completion of demolition,earth works, concrete and reinforcment concrete, masonry,timber structure, insulation of the building | 1 | 20,613.26 | 20,613.26 | 1/8 |
| 2 | Decoration works | Including aluminium,Steel works,tinsmith,ceramic,flooring and other decoration | Completion of aluminium, Steel works,tinsmith,ceramic,flooring and other decoration of the building | 1 | 20,234.88 | 20,234.88 | 1/8 |
| J | Architecture of the pedestrian underpass in the Zemun Polje railway station |  |  |  |  |  |  |
| 1 | Architecture of the pedestrian underpass in the Zemun Polje railway station |  | Completion of decoration of the pedestrian underpass in the Zemunsko Polje railway station | 1 | 58,387.60 | 58,387.60 | 1/9 |
| K | Architecture of the pedestrian underpass in the Kamendin Stopping Place |  |  |  |  |  |  |
| 1 | Architecture of the pedestrian underpass in the Kamendin Stopping Place |  | Completion of decoration of the pedestrian underpass in the Kamendin stopping place | 1 | 39,632.03 | 39,632.03 | 1/10 |
| L | Architecture of station building in Batajnica railway station |  |  |  |  |  |  |
| 1 | Structure works | Including demolition,earth works,concrete and reinforcment concrete, masonry,timber structure, insulation | Completion of demolition,earth works, concrete and reinforcment concrete, masonry,timber structure,insulation of the building | 1 | 121,590.30 | 121,590.30 | 1/11 |
| 2 | Decoration works | Including aluminium,steel works,tinsmith,ceramic,flooring and other decoration | Completion of aluminium,steel works,tinsmith,ceramic,flooring and other decoration of the building | 1 | 94,408.57 | 94,408.57 | 1/11 |
| M | Architecture of the pedestrian underpass in the Batajnica railway station |  |  |  |  |  |  |

1 Architectural Works

| No. | Item | Description | Unit | No. of Unit | Unit Price (USD) | Total Price (USD) | No. of Books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | Architecture of the pedestrian underpassy in the Batajnica railway station |  | Completion of decoration of the pedestrian underpass in the Batajnica railway station | 1 | 79,426.61 | 79,426.61 | 1/12 |
| N | Repairs and adaptation of the station building in Nova Pazova railway station |  |  |  |  |  |  |
| 1 | Structure works | Including demolition,earth works,concrete and reinforcment concrete, masonry,timber structure, insulation | Completion of demolition,earth works,concrete and reinforcment concrete,masonry,timber structure, insulation of the building | 1 | 112,361.45 | 112,361.45 | 1/13 |
| 2 | Decoration works | Including aluminium,steel works,tinsmith,ceramic,flooring and other decoration | Completion of aluminium,steel works,tinsmith,ceramic,flooring and other decoration of the building | 1 | 139,032.41 | 139,032.41 | 1/13 |
| 0 | Architecture of the pedestrian underpass in Nova Pazova railway station |  |  |  |  |  |  |
| 1 | Architecture of the pedestrian underpass in Nova Pazova railway station |  | Completion of decoration of the pedestrian underpass in the Nova Pazova railway station | 1 | 56,247.84 | 56,247.84 | 1/14 |
| P | Repairs and adaptation of central post building in Stara Pazova railway station |  |  |  |  |  |  |
| 1 | Structure works | Including demolition,earth works,concrete and reinforcment concrete,masonry,timber structure,insulation | Completion of demolition,earth works, concrete and reinforcment concrete,masonry,timber structure,insulation of the building | 1 | 138,680.03 | 138,680.03 | 1/15 |
| 2 | Decoration works | Including aluminium,steel works,tinsmith,ceramic,flooring and other decoration | Completion of aluminium,steel works,tinsmith,ceramic,flooring and other decoration of the building | 1 | 211,793.38 | 211,793.38 | 1/15 |
| Q | Repairs and adaptation of of signalling \& telecommunication building in Stara Pazova railway station |  |  |  |  |  |  |

1 Architectural Works

| No. | Item | Description | Unit | No. of Unit | Unit Price (USD) | Total Price (USD) | No. of Books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | Structure works | Including demolition,earth works,concrete and reinforcment concrete, masonry,timber structure,insulation | Completion of demolition,earth works,concrete and reinforcment concrete, masonry,timber structure, insulation of the building | 1 | 25,247.46 | 25,247.46 | 1/16 |
| 2 | Decoration works | Including aluminium,steel works,tinsmith,ceramic,flooring and other decoration | Completion of aluminium,steel works,tinsmith,ceramic,flooring and other decoration of the building | 1 | 23,978.74 | 23,978.74 | 1/16 |
| R | Architecture of the pedestrian underpass in the Stara Pazova railway station |  |  |  |  |  |  |
| 1 | Architecture of the pedestrian underpass in the Stara Pazova railway station |  | Completion of decoration of the pedestrian underpass in the Stara Pazova railway station | 1 | 60,078.07 | 60,078.07 | 1/17 |
| S | Repairs and adaptation of signalling \& telecommunication building in Batajnica railway station |  |  |  |  |  |  |
| 1 | Structure works | Including demolition,earth works,concrete and reinforcment concrete, masonry,timber structure,insulation | Completion of demolition,earth works, concrete and reinforcment concrete, masonry,timber structure, insulation of the building | 1 | 26,178.99 | 26,178.99 | 1/18 |
| 2 | Decoration works | Including aluminium,steel works,tinsmith,ceramic,flooring and other decoration | Completion of aluminium,steel works,tinsmith,ceramic,flooring and other decoration of the building | 1 | 27,101.89 | 27,101.89 | 1/18 |
| T | Building for track sectioning post (TSP) in Stara Pazova railway station |  |  |  |  |  |  |
| 1 | Structure works | Including demolition,earth works,concrete and reinforcment concrete, masonry,timber structure,insulation | Completion of demolition,earth works,concrete and reinforcment concrete,masonry,timber structure, insulation of the building | 1 | 52,375.08 | 52,375.08 | 1/19 |

1 Architectural Works

| No. | Item | Description | Unit | No. of Unit | Unit Price (USD) | Total Price (USD) | No. of Books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2 | Decoration works | Including aluminium,steel works,tinsmith,ceramic,flooring and other decoration | Completion of aluminium,steel works,tinsmith,ceramic,flooring and other decoration of the building | 1 | 26,548.67 | 26,548.67 | 1/19 |
| U | Building for track sectioning post in Batajnica railway station |  |  |  |  |  |  |
| 1 | Structure works | Including demolition,earth works,concrete and reinforcment concrete, masonry,timber structure,insulation | Completion of demolition,earth works, concrete and reinforcment concrete,masonry,timber structure,insulation of the building | 1 | 61,451.41 | 61,451.41 | 1/20 |
| 2 | Decoration works | Including aluminium,steel works,tinsmith,ceramic,flooring and other decoration | Completion of aluminium,steel works,tinsmith,ceramic,flooring and other decoration of the building | 1 | 29,986.74 | 29,986.74 | 1/20 |
| V | Architecture works for electric traction substation and External Substation (ETS) in Zemun railway station |  |  |  |  |  |  |
| 1 | Structure works | Including demolition,earth works,concrete and reinforcment concrete, masonry,timber structure,insulation | Completion of demolition,earth works,concrete and reinforcment concrete, masonry,timber structure,insulation of the building | 1 | 90,638.57 | 90,638.57 | 1/21 |
| 2 | Decoration works | Including aluminium,Steel works,tinsmith,ceramic,flooring and other decoration | Completion of aluminium, Steel works,tinsmith,ceramic,flooring and other decoration of the building | 1 | 32,394.30 | 32,394.30 | 1/21 |
| W | Building for placement of temporary GSM-R geo-redundant centre in Batajnica railway station |  |  |  |  |  |  |

1 Architectural Works

| No. | Item | Description | Unit | No. of Unit | Unit Price (USD) | Total Price (USD) | No. of Books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | Structure works | Including demolition,earth works,concrete and reinforcment concrete, masonry,timber structure,insulation | Completion of demolition,earth works,concrete and reinforcment concrete, masonry,timber structure, insulation of the building | 1 | 54,030.56 | 54,030.56 | 1/22 |
| 2 | Decoration works | Including aluminium,steel works,tinsmith,ceramic,flooring and other decoration | Completion of aluminium,steel works,tinsmith,ceramic,flooring and other decoration of the building | 1 | 21,460.36 | 21,460.36 | 1/22 |
| X | Building for telecommunication equipment in Altina stopping place |  |  |  |  |  |  |
| 1 | Structure works | Including demolition,earth works,concrete and reinforcment concrete, masonry,timber structure, insulation | Completion of demolition,earth works,concrete and reinforcment concrete, masonry,timber structure, insulation of the building | 1 | 18,051.23 | 18,051.23 | 1/23 |
| 2 | Decoration works | Including aluminium,Steel works,tinsmith,ceramic,flooring and other decoration | Completion of aluminium,Steel works,tinsmith,ceramic,flooring and other decoration of the building | 1 | 10,385.63 | 10,385.63 | 1/23 |
| Y | Building for telecommunication equipment in Kamendin stopping place |  |  |  |  |  |  |
| 1 | Structure works | Including demolition,earth works,concrete and reinforcment concrete, masonry,timber structure,insulation | Completion of demolition,earth works, concrete and reinforcment concrete,masonry,timber structure, insulation of the building | 1 | 18,151.22 | 18,151.22 | 1/24 |
| 2 | Decoration works | Including aluminium,Steel works,tinsmith,ceramic,flooring and other decoration | Completion of aluminium, Steel works,tinsmith,ceramic,flooring and other decoration of the building | 1 | 11,217.30 | 11,217.30 | 1/24 |
| Z | Building for telecommunication equipment in Tošin Bunar stopping place |  |  |  |  |  |  |

1 Architectural Works

| No. | Item | Description | Unit | No. of Unit | Unit Price (USD) | Total Price (USD) | No. of Books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | Structure works | Including demolition,earth works,concrete and reinforcment concrete, masonry,timber structure,insulation | Completion of demolition,earth works,concrete and reinforcment concrete,masonry,timber structure, insulation of the building | 1 | 18,051.23 | 18,051.23 | 1/25 |
| 2 | Decoration works | Including aluminium,Steel works,tinsmith,ceramic,flooring and other decoration | Completion of aluminium, Steel works,tinsmith,ceramic,flooring and other decoration of the building | 1 | 10,385.63 | 10,385.63 | 1/25 |
| AA | Building for telecommunication equipment next to entrance portal of Bežanijska kosa tunnel |  |  |  |  |  |  |
| 1 | Building for telecommunication equipment next to entrance portal of Bežanijska kosa tunnel |  | Completion all works of the building | 1 | 29,368.52 | 29,368.52 | 1/26 |
| AB | Building for telecommunication equipment next to exit portal of Bežanijska kosa tunnel |  |  |  |  |  |  |
| 1 | Building for telecommunication equipment next to exit portal of Bežanijska kosa tunnel |  | Completion all works of the building | 1 | 29,368.52 | 29,368.52 | 1/27 |
| AC | Temporary containers |  |  |  |  |  |  |
| 1 | temporary container located at Km 3+693,00 ( New Belgrade), |  | completion of the temporary container at Km 3+693,00 ( New Belgrade), | 1 | 26,813.41 | 26,813.41 | 1/28 |
| 2 | Temporary container located at Km 5+542,00 ( Tosin Bunar), |  | completion of the temporary container located at Km 5+542,00 ( Tosin Bunar), | 1 | 26,813.41 | 26,813.41 | 1/28 |
| 3 | Temporary container located at Km 8+116,00 (Zemun), |  | completion of the temporary container located at Km 8+116,00 ( Zemun), | 1 | 26,813.41 | 26,813.41 | 1/28 |
| 4 | Temporary container located at Km 8+938,00 ( Zemun), |  | completion of the temporary container located at Km 8+938,00 ( Zemun), | 1 | 22,938.43 | 22,938.43 | 1/28 |
| 5 | Temporary container located at Km $12+168,00$ ( Zemun Polje), |  | completion of the temporary container located at Km 12+168,00 ( Zemun Polje), | 1 | 26,813.41 | 26,813.41 | 1/28 |
| 6 | Temporary container located at Km 12+636,00 (Zemun Polje), |  | completion of the temporary container located at Km 12+636,00 ( Zemun Polje), | 1 | 26,813.41 | 26,813.41 | 1/28 |

1 Architectural Works

| No. | Item | Description | Unit | No. of Unit | Unit Price (USD) | Total Price (USD) | No. of Books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 7 | Temporary container located at Km 13+952,00 (Kamendin), |  | completion of the temporary container located at Km 13+952,00 (Kamendin), | 1 | 26,813.41 | 26,813.41 | 1/28 |
| 8 | Temporary container located at Km 15+934,00 (Ugrinovci), |  | completion of the temporary container located at Km 15+934,00 (Ugrinovci), | 1 | 26,813.41 | 26,813.41 | 1/28 |
| 9 | Temporary container located at Km 17+373,00 ( Batajnica), |  | completion of the temporary container located at Km 17+373,00 ( Batajnica), | 1 | 26,813.41 | 26,813.41 | 1/28 |
| 10 | Temporary container located at Km 18+540,00 ( Batajnica), |  | completion of the temporary container located at Km 18+540,00 ( Batajnica), | 1 | 26,813.41 | 26,813.41 | 1/28 |
| 11 | Temporary container located at Km 19+173,00 ( Batajnica), |  | completion of the temporary container located at Km 19+173,00 ( Batajnica), | 1 | 38,438.34 | 38,438.34 | 1/28 |
| 12 | Temporary container located at Km 19+485,00 (Batajnica), |  | completion of the temporary container located at $\mathrm{Km} \mathrm{19+485,00} \mathrm{(Batajnica)}$, | 1 | 26,813.41 | 26,813.41 | 1/28 |
| 13 | Temporary container located at Km 19+537,00 (Batajnica) |  | completion of the temporary container located at $\mathrm{Km} \mathrm{19+537,00} \mathrm{(Batajnica)}$, | 1 | 26,813.41 | 26,813.41 | 1/28 |
| 14 | Temporary container located at km 26+896,00 (Nova Pazova), |  | completion of the temporary container located at km 26+896,00 (Nova Pazova), | 1 | 26,813.41 | 26,813.41 | 1/28 |
| 15 | Temporary containerlocated at Km 27+694,00 (Nova Pazova), |  | completion of the temporary containerlocated at Km 27+694,00 (Nova Pazova), | 1 | 26,813.41 | 26,813.41 | 1/28 |
| 16 | Temporary container located at Km 34+698,00 (Stara Pazova), |  | completion of the temporary container located at Km 34+698,00 (Stara Pazova), | 1 | 26,813.41 | 26,813.41 | 1/28 |
| 17 | Temporary container located at Km 35+641,00 (Stara Pazova), |  | completion of the temporary container located at Km 35+641,00 (Stara Pazova), | 1 | 26,813.41 | 26,813.41 | 1/28 |
| AD | Building for accommodation of supply devices and batteries for backup supply of SS installations in Stara Pazova railway station |  |  |  |  |  |  |
| 1 | Structure works | Including demolition,earth works,concrete and reinforcment concrete,masonry,timber structure, insulation | Completion of demolition,earth works,concrete and reinforcment concrete, masonry,timber structure, insulation of the building | 1 | 19,382.39 | 19,382.39 | 1/29 |
| 2 | Decoration works | Including aluminium,Steel works,tinsmith,ceramic,flooring and other decoration | Completion of aluminium, Steel works,tinsmith,ceramic,flooring and other decoration of the building | 1 | 10,534.01 | 10,534.01 | 1/29 |
| Summery(USD) |  |  |  |  |  | 3,792,366.39 |  |

## 2 Substructure works

| No. | Item | Description | Unit | No. of Unit | Unit Price (USD) | Total Price (USD) | No. of books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| A | Open track section Belgrade Center-New Belgrade km0+694.31-km2+853.76 |  |  |  |  |  |  |
| 1 | Preliminary works | Including clearing of site, cutting tree, removal fences and demolition of existing facilities | Completion of works | 1 | 479.32 | 479.32 | 2/2.1 |
| 2 | Removal ballast |  | Completion of the works for one track | 2 | 41,253.26 | 82,506.53 | 2/2.1 |
| 3 | Foundation Treatment | Topsoil stripping,mechanized tamping of foundation soil | Completion of the works for one track | 2 | 85.94 | 171.87 | 2/2.1 |
| 4 | Excavation |  | Completion of the works for one track | 2 | 4,278.98 | 8,557.96 | 2/2.1 |
| 5 | Embankment |  | Completion of works | 2 | 236.66 | 473.32 | 2/2.1 |
| 6 | Transition layer |  | Completion of the works for one track | 2 | 6,326.66 | 12,653.31 | 2/2.1 |
| 7 | Protection layer |  | Completion of the works for one track | 2 | 13,778.35 | 27,556.69 | 2/2.1 |
| 8 | Subgrade |  | Completion of the works for one track | 2 | 5,145.61 | 10,291.22 | 2/2.1 |
| 9 | Dewatering |  | Completion of the works | 1 | 483.29 | 483.29 | 2/2.1 |
| 10 | Slope topsoling |  | Completion of the works | 1 | 263.96 | 263.96 | 2/2.1 |
| B | New Belgrade station km 2+853.76-km 3+980.98 |  |  |  |  |  |  |
| 1 | Preliminary works | Including clearing of site, cutting tree, removal fences and demolition of existing facilities | Completion of works | 1 | 4,543.62 | 4,543.62 | 2/2.1 |
| 2 | Removal ballast |  | Completion of the Works for the left or right side of the station | 2 | 20,393.83 | 40,787.65 | 2/2.1 |
| 3 | Foundation Treatment | Topsoil stripping,mechanized tamping of foundation soil | Completion of the Works for the left or right side of the station | 2 | 1,967.63 | 3,935.25 | 2/2.1 |
| 4 | Excavation |  | Completion of the Works for the left or right side of the station | 2 | 52,565.54 | 105,131.09 | 2/2.1 |
| 5 | Embankment |  | Completion of the Works for the left or right side of the station | 2 | 8,185.61 | 16,371.22 | 2/2.1 |

## 2 Substructure works

| No. | Item | Description | Unit | No. of Unit | Unit Price (USD) | Total Price (USD) | No. of books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 6 | Transition layer |  | Completion of the Works for the left or right side of the station | 2 | 51,275.04 | 102,550.08 | 2/2.1 |
| 7 | Protection layer |  | Completion of the Works for the left or right side of the station | 2 | 112,053.30 | 224,106.61 | 2/2.1 |
| 8 | Subgrade |  | Completion of the Works for the left or right side of the station | 2 | 41,724.31 | 83,448.63 | 2/2.1 |
| 9 | Dewatering |  | Completion of the works | 1 | 27,335.79 | 27,335.79 | 2/2.1 |
| 10 | Slope topsoling |  | Completion of the works | 1 | 2,715.96 | 2,715.96 | 2/2.1 |
| C | Open track section New Belgrade-Zemun km 3+980.98-km 7+623.62 |  |  |  |  |  |  |
| 1 | Preliminary works | Including clearing of site, cutting tree, removal fences and demolition of existing facilities | Completion of works | 1 | 26,457.19 | 26,457.19 | 2/2.1 |
| 2 | Removal ballast |  | Completion of the works for one track | 2 | 68,258.79 | 136,517.57 | 2/2.1 |
| 3 | Foundation Treatment | Topsoil stripping,mechanized tamping of foundation soil | Completion of the works for one track | 2 | 18,091.95 | 36,183.90 | 2/2.1 |
| 4 | Excavation |  | Completion of the works for one track | 2 | 64,332.66 | 128,665.32 | 2/2.1 |
| 5 | Embankment |  | Completion of the works for one track | 2 | 178,231.89 | 356,463.78 | 2/2.1 |
| 6 | Transition layer |  | Completion of the works for one track | 2 | 64,907.80 | 129,815.59 | 2/2.1 |
| 7 | Geocomposite |  | Completion of the works for one track | 2 | 2,791.97 | 5,583.95 | 2/2.1 |
| 8 | Protection layer |  | Completion of the works for one track | 2 | 127,876.56 | 255,753.13 | 2/2.1 |

## 2 Substructure works

| No. | Item | Description | Unit | No. of Unit | Unit Price (USD) | Total Price (USD) | No. of books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 9 | Subgrade |  | Completion of the works for one track | 2 | 51,426.31 | 102,852.61 | 2/2.1 |
| 10 | Dewatering |  | Completion of the works | 1 | 11,090.92 | 11,090.92 | 2/2.1 |
| 11 | Slope topsoling |  | Completion of the works | 1 | 10,154.42 | 10,154.42 | 2/2.1 |
| D | Zemun station km 7+623.62-km 8+920.67 |  |  |  |  |  |  |
| 1 | Preliminary works | Including clearing of site, cutting tree, removal fences and demolition of existing facilities | Completion of works | 1 | 77,093.13 | 77,093.13 | 2/2.1 |
| 2 | Removal ballast |  | Completion of the Works for the left or right side of the station | 2 | 78,129.77 | 156,259.54 | 2/2.1 |
| 3 | Excavation |  | Completion of the Works for the left or right side of the station | 2 | 242,264.04 | 484,528.07 | 2/2.1 |
| 4 | Embankment |  | Completion of the Works for the left or right side of the station | 2 | 2,338.75 | 4,677.49 | 2/2.1 |
| 5 | Transition layer |  | Completion of the Works for the left or right side of the station | 2 | 273,568.36 | 547,136.72 | 2/2.1 |
| 6 | Geocomposite |  | Completion of the Works for the left or right side of the station | 2 | 91,708.92 | 183,417.84 | 2/2.1 |
| 7 | Protection layer |  | Completion of the Works for the left or right side of the station | 2 | 388,712.19 | 777,424.39 | 2/2.1 |
| 8 | Subgrade |  | Completion of the Works for the left or right side of the station | 2 | 119,599.77 | 239,199.54 | 2/2.1 |
| 9 | Dewatering |  | Completion of the works | 1 | 430,085.38 | 430,085.38 | 2/2.1 |
| 10 | Slope topsoling |  | Completion of the works | 1 | 1,650.30 | 1,650.30 | 2/2.1 |

## 2 Substructure works

| No. | Item | Description | Unit | No. of Unit | Unit Price (USD) | Total Price (USD) | No. of books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| E | Open track between Zemun and Zemunsko Polje (km8+920.67-km12+026.56) |  |  |  |  |  |  |
| 1 | Preliminary works | Including clearing of site, cutting tree, removal fences and demolition of existing facilities | Completion of works | 1 | 69,308.66 | 69,308.66 | 2/2.1 |
| 2 | Removal ballast |  | Completion of the works for one track | 2 | 55,407.88 | 110,815.77 | 2/2.1 |
| 3 | Foundation Treatment | Topsoil stripping,mechanized tamping of foundation soil | Completion of the works for one track | 2 | 18,950.47 | 37,900.95 | 2/2.1 |
| 4 | Excavation |  | Completion of the works for one track | 2 | 242,761.39 | 485,522.78 | 2/2.1 |
| 5 | Embankment |  | Completion of the works for one track | 2 | 25,044.07 | 50,088.13 | 2/2.1 |
| 6 | Transition layer |  | Completion of the works for one track | 2 | 224,199.26 | 448,398.51 | 2/2.1 |
| 7 | Geocomposite |  | Completion of the works for one track | 2 | 52,577.81 | 105,155.62 | 2/2.1 |
| 8 | Protection layer |  | Completion of the works for one track | 2 | 322,877.90 | 645,755.80 | 2/2.1 |
| 9 | Subgrade |  | Completion of the works for one track | 2 | 139,661.05 | 279,322.10 | 2/2.1 |
| 10 | Slope topsoling |  | Completion of the works | 1 | 33,249.55 | 33,249.55 | 2/2.1 |
| F | Zemunsko Polje station (km12+026.56-km12+667.05) |  |  |  |  |  |  |
| 1 | Preliminary works | Including clearing of site, cutting tree, removal fences and demolition of existing facilities | Completion of works | 1 | 20,056.79 | 20,056.79 | 2/2.1 |
| 2 | Removal ballast |  | Completion of the Works for the left or right side of the station | 2 | 42,696.66 | 85,393.33 | 2/2.1 |

## 2 Substructure works

| No. | Item | Description | Unit | No. of Unit | Unit Price (USD) | $\begin{gathered} \hline \text { Total Price } \\ \text { (USD) } \end{gathered}$ | No. of books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 3 | Foundation Treatment | Topsoil stripping,mechanized tamping of foundation soil | Completion of the Works for the left or right side of the station | 2 | 1,862.54 | 3,725.09 | 2/2.1 |
| 4 | Excavation |  | Completion of the Works for the left or right side of the station | 2 | 59,449.56 | 118,899.13 | 2/2.1 |
| 5 | Embankment |  | Completion of the Works for the left or right side of the station | 2 | 529.00 | 1,058.00 | 2/2.1 |
| 6 | Transition layer |  | Completion of the Works for the left or right side of the station | 2 | 69,672.64 | 139,345.28 | 2/2.1 |
| 7 | Geocomposite |  | Completion of the Works for the left or right side of the station | 2 | 21,031.12 | 42,062.25 | 2/2.1 |
| 8 | Protection layer |  | Completion of the Works for the left or right side of the station | 2 | 76,892.71 | 153,785.42 | 2/2.1 |
| 9 | Subgrade |  | Completion of the Works for the left or right side of the station | 2 | 33,817.65 | 67,635.29 | 2/2.1 |
| 10 | Dewatering |  | Completion of the works | 1 | 59,244.23 | 59,244.23 | 2/2.1 |
| 11 | Slope topsoling |  | Completion of the works | 1 | 4,969.81 | 4,969.81 | 2/2.1 |
| G | Open track between Zemunsko Polje and Batajnica (km12+667.05-km18+246.93) |  |  |  |  |  |  |
| 1 | Preliminary works | Including clearing of site, cutting tree, removal fences and demolition of existing facilities | Completion of works | 1 | 110,042.90 | 110,042.90 | 2/2.1 |
| 2 | Removal ballast |  | Completion of the works for one track | 2 | 98,802.97 | 197,605.93 | 2/2.1 |
| 3 | Foundation Treatment | Topsoil stripping,mechanized tamping of foundation soil | Completion of the works for one track | 2 | 15,294.31 | 30,588.61 | 2/2.1 |
| 4 | Excavation |  | Completion of the works for one track | 2 | 480,792.11 | 961,584.22 | 2/2.1 |
| 5 | Embankment |  | Completion of the works for one track | 2 | 1,322.50 | 2,645.01 | 2/2.1 |
| 6 | Transition layer |  | Completion of the works for one track | 2 | 408,876.76 | 817,753.52 | 2/2.1 |

## 2 Substructure works

| No. | Item | Description | Unit | No. of Unit | Unit Price (USD) | Total Price (USD) | No. of books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 7 | Geocomposite |  | Completion of the works for one track | 2 | 97,440.73 | 194,881.46 | 2/2.1 |
| 8 | Protection layer |  | Completion of the works for one track | 2 | 423,495.57 | 846,991.14 | 2/2.1 |
| 9 | Subgrade |  | Completion of the works for one track | 2 | 171,998.19 | 343,996.38 | 2/2.1 |
| 10 | Dewatering |  | Completion of the works | 1 | 11,253.39 | 11,253.39 | 2/2.1 |
| 11 | Slope topsoling |  | Completion of the works | 1 | 51,841.53 | 51,841.53 | 2/2.1 |
| H | Batajnica passenger Station (km18+246.93-km19+901.41) |  |  |  |  |  |  |
| 1 | Preliminary works | Including clearing of site, cutting tree, removal fences and demolition of existing facilities | Completion of works | 1 | 33,801.57 | 33,801.57 | 2/2.1 |
| 2 | Removal ballast |  | Completion of the Works for the left or right side of the passenger station | 2 | 50,286.15 | 100,572.29 | 2/2.1 |
| 3 | Foundation Treatment | Topsoil stripping,mechanized tamping of foundation soil | Completion of the Works for the left or right side of the passenger station | 2 | 1,440.52 | 2,881.03 | 2/2.1 |
| 4 | Excavation |  | Completion of the Works for the left or right side of the passenger station | 2 | 129,897.81 | 259,795.62 | 2/2.1 |
| 5 | Embankment |  | Completion of the Works for the left or right side of the passenger station | 2 | 3,438.51 | 6,877.03 | 2/2.1 |
| 6 | Transition layer |  | Completion of the Works for the left or right side of the passenger station | 2 | 150,569.14 | 301,138.29 | 2/2.1 |
| 7 | Geocomposite |  | Completion of the Works for the left or right side of the passenger station | 2 | 46,376.33 | 92,752.65 | 2/2.1 |
| 8 | Protection layer |  | Completion of the Works for the left or right side of the passenger station | 2 | 171,772.71 | 343,545.42 | 2/2.1 |
| 9 | Subgrade |  | Completion of the Works for the left or right side of the passenger station | 2 | 65,942.07 | 131,884.14 | 2/2.1 |
| 10 | Dewatering |  | Completion of the works | 1 | 147,368.03 | 147,368.03 | 2/2.1 |

## 2 Substructure works

| No. | Item | Description | Unit | No. of Unit | Unit Price (USD) | Total Price (USD) | No. of books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 11 | Slope topsoling |  | Completion of the works | 1 | 3,696.16 | 3,696.16 | 2/2.1 |
| I | Batajnica Freight Station (km19+880.86-km21+275.26) |  |  |  |  |  |  |
| 1 | Preliminary works | Including clearing of site, cutting tree, removal fences and demolition of existing facilities | Completion of works | 1 | 22,560.22 | 22,560.22 | 2/2.1 |
| 2 | Removal ballast |  | Completion of the Works for the left or right side of the freight station | 2 | 50,938.00 | 101,876.01 | 2/2.1 |
| 3 | Foundation Treatment | Topsoil stripping,mechanized tamping of foundation soil | Completion of the Works for the left or right side of the freight station | 2 | 8,140.23 | 16,280.46 | 2/2.1 |
| 4 | Excavation |  | Completion of the Works for the left or right side of the freight station | 2 | 140,887.40 | 281,774.80 | 2/2.1 |
| 5 | Embankment |  | Completion of the Works for the left or right side of the freight station | 2 | 96,389.72 | 192,779.44 | 2/2.1 |
| 6 | Transition layer |  | Completion of the Works for the left or right side of the freight station | 2 | 162,348.90 | 324,697.81 | 2/2.1 |
| 7 | Geocomposite |  | Completion of the Works for the left or right side of the freight station | 2 | 49,524.91 | 99,049.81 | 2/2.1 |
| 8 | Protection layer |  | Completion of the Works for the left or right side of the freight station | 2 | 177,728.77 | 355,457.54 | 2/2.1 |
| 9 | Subgrade |  | Completion of the Works for the left or right side of the freight station | 2 | 67,135.41 | 134,270.82 | 2/2.1 |
| 10 | Dewatering |  | Completion of the works | 1 | 72,072.26 | 72,072.26 | 2/2.1 |
| 11 | Slope topsoling |  | Completion of the works | 1 | 10,696.70 | 10,696.70 | 2/2.1 |
| J | Open track Between Batajnica and Nova Pazova (km21+275.26-km26+470.18) |  |  |  |  |  |  |

## 2 Substructure works

| No. | Item | Description | Unit | No. of Unit | Unit Price (USD) | Total Price (USD) | No. of books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | Preliminary works | Including clearing of site, cutting tree, removal fences and demolition of existing facilities | Completion of works | 1 | 7,065.96 | 7,065.96 | 2/2.1 |
| 2 | Removal ballast |  | Completion of the Works for one track | 2 | 55,724.50 | 111,449.00 | 2/2.1 |
| 3 | Foundation Treatment | Topsoil stripping,mechanized tamping of foundation soil | Completion of the Works for one track of the four tracks | 4 | 198,398.84 | 793,595.37 | 2/2.1 |
| 4 | Excavation |  | Completion of the Works for one track of the four tracks | 4 | 71,015.57 | 284,062.27 | 2/2.1 |
| 5 | Embankment |  | Completion of the Works for one track of the four tracks | 4 | 1,634,032.93 | 6,536,131.74 | 2/2.1 |
| 6 | Transition layer |  | Completion of the Works for one track of the four tracks | 4 | 230,611.95 | 922,447.78 | 2/2.1 |
| 7 | Protection layer |  | Completion of the Works for one track of the four tracks | 4 | 333,747.71 | 1,334,990.82 | 2/2.1 |
| 8 | Subgrade |  | Completion of the Works for one track of the four tracks | 4 | 86,215.00 | 344,860.01 | 2/2.1 |
| 9 | Dewatering |  | Completion of the works | 1 | 308,868.40 | 308,868.40 | 2/2.1 |
| 10 | Slope topsoling |  | Completion of the works | 1 | 87,450.06 | 87,450.06 | 2/2.1 |
| K | Nova Pazova station (km26+470.18-km27+751.91) |  |  |  |  |  |  |
| 1 | Preliminary works | Including clearing of site, cutting tree, removal fences and demolition of existing facilities | Completion of works | 1 | 2,002.37 | 2,002.37 | 2/2.1 |
| 2 | Removal ballast |  | Completion of the Works for the left or right side of the station | 2 | 21,511.30 | 43,022.59 | 2/2.1 |
| 3 | Foundation Treatment | Topsoil stripping,mechanized tamping of foundation soil | Completion of the Works for the left or right side of the station | 2 | 36,298.34 | 72,596.69 | 2/2.1 |

## 2 Substructure works

| No. | Item | Description | Unit | No. of Unit | Unit Price (USD) | Total Price (USD) | No. of books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 4 | Excavation |  | Completion of the Works for the left or right side of the station | 2 | 21,686.57 | 43,373.15 | 2/2.1 |
| 5 | Embankment |  | Completion of the Works for the left or right side of the station | 2 | 33,832.11 | 67,664.22 | 2/2.1 |
| 6 | Transition layer |  | Completion of the Works for the left or right side of the station | 2 | 70,850.62 | 141,701.24 | 2/2.1 |
| 7 | Protection layer |  | Completion of the Works for the left or right side of the station | 2 | 80,307.51 | 160,615.03 | 2/2.1 |
| 8 | Subgrade |  | Completion of the Works for the left or right side of the station | 2 | 14,634.89 | 29,269.77 | 2/2.1 |
| 9 | Dewatering |  | Completion of the works | 1 | 57,249.72 | 57,249.72 | 2/2.1 |
| 10 | Slope topsoling |  | Completion of the works | 1 | 4,734.59 | 4,734.59 | 2/2.1 |
| L | Open track between Nova Pazova - Stara Pazova (km27+751.91-km34+637.91) |  |  |  |  |  |  |
| 1 | Preliminary works | Including clearing of site, cutting tree, removal fences and demolition of existing facilities | Completion of works | 1 | 25,596.87 | 25,596.87 | 2/2.1 |
| 2 | Removal ballast |  | Completion of the Works for one track | 2 | 63,611.97 | 127,223.95 | 2/2.1 |
| 3 | Foundation Treatment | Topsoil stripping,mechanized tamping of foundation soil | Completion of the Works for one track of the four tracks | 4 | 28,218.74 | 112,874.96 | 2/2.1 |
| 4 | Excavation |  | Completion of the Works for one track of the four tracks | 4 | 46,860.44 | 187,441.78 | 2/2.1 |
| 5 | Embankment |  | Completion of the Works for one track of the four tracks | 4 | 80,255.90 | 321,023.58 | 2/2.1 |
| 6 | Transition layer |  | Completion of the Works for one track of the four tracks | 4 | 41,725.49 | 166,901.98 | 2/2.1 |
| 7 | Protection layer |  | Completion of the Works for one track of the four tracks | 4 | 170,670.84 | 682,683.36 | 2/2.1 |

## 2 Substructure works

| No. | Item | Description | Unit | No. of Unit | Unit Price (USD) | Total Price (USD) | No. of books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 8 | Subgrade |  | Completion of the Works for one track of the four tracks | 4 | 18,002.19 | 72,008.74 | 2/2.1 |
| 9 | Dewatering |  | Completion of the works | 1 | 211,613.54 | 211,613.54 | 2/2.1 |
| 10 | Slope topsoling |  | Completion of the works | 1 | 24,582.07 | 24,582.07 | 2/2.1 |
| M | Stara Pazova station (km34+637.91- km36+339.65) |  |  |  |  |  |  |
| 1 | Preliminary works | Including clearing of site, cutting tree, removal fences and demolition of existing facilities | Completion of works | 1 | 3,483.25 | 3,483.25 | 2/2.1 |
| 2 | Removal ballast |  | Completion of the Works for the left or right side of the station | 2 | 25,198.95 | 50,397.89 | 2/2.1 |
| 3 | Foundation Treatment | Topsoil stripping,mechanized tamping of foundation soil | Completion of the Works for the left or right side of the station | 2 | 667.50 | 1,335.01 | 2/2.1 |
| 4 | Excavation |  | Completion of the Works for the left or right side of the station | 2 | 11,654.78 | 23,309.55 | 2/2.1 |
| 5 | Transition layer |  | Completion of the Works for the left or right side of the station | 2 | 12,891.56 | 25,783.11 | 2/2.1 |
| 6 | Protection layer |  | Completion of the Works for the left or right side of the station | 2 | 18,007.15 | 36,014.30 | 2/2.1 |
| 7 | Subgrade |  | Completion of the Works for the left or right side of the station | 2 | 4,947.78 | 9,895.56 | 2/2.1 |
| 8 | Dewatering |  | Completion of the works | 1 | 1,145.64 | 1,145.64 | 2/2.1 |
| Summery(USD) |  |  |  |  |  | 27,858,544.76 |  |

3 Superstructure

| No. | Item | Description | Unit | No. of Unit | Unit Price (USD) | Total Price (USD) | No. of Books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| A | Open track section Belgrade Center-New Belgrade km0+694.31-km2+853.76 |  |  |  |  |  |  |
| 1 | Dismantling existing track |  | Completion of dismantling existing track on left or right track | 2 | 60,309.34 | 120,618.68 | 2/2-1 |
| 2 | Ballast |  | Completion of the Works on left or right track | 2 | 221,366.82 | 442,733.64 | 2/2-1 |
| 3 | Assembling and laying track |  |  |  |  |  |  |
| 3-1 | Procurement |  | Completion of the Works on left or right track | 2 | 579,649.47 | 1,159,298.93 | 2/2-1 |
| 3-2 | Handling |  | Completion of the Works on left or right track | 2 | 20,536.41 | 41,072.81 | 2/2-1 |
| 3-3 | Works |  | Completion of the Works on left or right track | 2 | 1,084,747.29 | 2,169,494.57 | 2/2-1 |
| 4 | Mechanized leveling and dynamic stabilization of the track |  | Completion of the Works on left or right track | 2 | 108,891.87 | 217,783.73 | 2/2-1 |
| 5 | Welding and stress relief |  | Completion of the Works on left or right track | 2 | 40,092.78 | 80,185.56 | 2/2-1 |
| 6 | Other works |  | completion of all other works | 1 | 18,573.82 | 18,573.82 | 2/2-1 |
| B | New Belgrade station km 2+853.76-km 3+980.98 |  |  |  |  |  |  |
| 1 | Dismantling existing track |  | Completion of dismantling existing track for the left or right side of the station | 2 | 56,497.46 | 112,994.93 | 2/2-1 |
| 2 | Dismantling existing switchess |  | Completion of dismantlement of one set of existing switch | 17 | 2,970.01 | 50,490.16 | 2/2-1 |
| 3 | Ballast |  | Completion of the Works for the left or right side of the station | 2 | 141,833.59 | 283,667.19 | 2/2-1 |
| 4 | Assembling and laying track |  |  |  |  |  |  |
| 4-1 | Procurement |  | Completion of the Works for the left or right side of the station | 2 | 1,048,508.79 | 2,097,017.57 | 2/2-2 |
| 4-2 | Handling |  | Completion of the Works for the left or right side of the station | 2 | 13,662.76 | 27,325.52 | 2/2-2 |
| 4-3 | Works |  | Completion of the Works for the left or right side of the station | 2 | 53,965.43 | 107,930.86 | 2/2-2 |
| 5 | Assembling and laying of switchess | - Type 60E1-300-6 ${ }^{\circ}$ |  |  |  |  |  |
| 5-1 | Procurement |  | Completion of procurement for each one set of switches | 7 | 107,672.15 | 753,705.07 | 2/2-1 |
| 5-2 | Handling |  | Completion of handling for each one set of switches | 7 | 656.76 | 4,597.32 | 2/2-1 |

3 Superstructure

| No. | Item | Description | Unit | No. of Unit | Unit Price (USD) | Total Price (USD) | No. of Books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 5-3 | Works |  | Completion of works for each one set of switches | 7 | 22,265.99 | 155,861.92 | 2/2-1 |
| 6 | Assembling and laying of switchess | - Type 60E1-200-6 ${ }^{\text {² }}$ |  |  |  |  |  |
| 6-1 | Procurement |  | Completion of procurement for each one set of switches | 4 | 92,721.74 | 370,886.97 | 2/2-1 |
| 6-2 | Handling |  | Completion of handling for each one set of switches | 4 | 547.30 | 2,189.20 | 2/2-1 |
| 6-3 | Works |  | Completion of works for each one set of switches | 4 | 19,976.45 | 79,905.80 | 2/2-1 |
| 7 | Assembling and laying of double connecting track | - Double connecting track: 4 switches type 60E1-300-6 ${ }^{\circ}$ type and 1 crossing type 60E1-12 ${ }^{\circ}$ |  |  |  |  |  |
| 7-1 | Procurement |  | Completion of procurement for each one set of double connecting track | 1 | 631,817.34 | 631,817.34 | 2/2-1 |
| 7-2 | Handling |  | Completion of handling for each one set of double connecting track | 1 | 3,853.85 | 3,853.85 | 2/2-1 |
| 7-3 | Works |  | Completion of works for each one set of double connecting track | 1 | 130,656.23 | 130,656.23 | 2/2-1 |
| 8 | Mechanized leveling and dynamic stabilization of the track |  | Completion of the Works for the left or right side of the station | 2 | 43,507.59 | 87,015.17 | 2/2-1 |
| 9 | Welding and stress relief |  | Completion of the Works for the left or right side of the station | 2 | 78,336.34 | 156,672.69 | 2/2-1 |
| 10 | Other works |  | completion of all other works | 1 | 10,336.12 | 10,336.12 | 2/2-1 |
| C | Open track section New Belgrade-Zemun km 3+980.98-km 7+623.62 |  |  |  |  |  |  |
| 1 | Dismantling existing track |  | Completion of dismantling existing track on left or right track | 2 | 99,789.50 | 199,578.99 | 2/2-1 |
| 2 | Ballast |  | Completion of the Works on left or right track | 2 | 365,622.54 | 731,245.09 | 2/2-1 |
| 3 | Assembling and laying track |  |  |  |  |  |  |
| 3-1 | Procurement |  | Completion of the Works on left or right track | 2 | 949,766.94 | 1,899,533.88 | 2/2-1 |
| 3-2 | Handling |  | Completion of the Works on left or right track | 2 | 33,944.84 | 67,889.67 | 2/2-1 |

## 3 Superstructure



3 Superstructure

| No. | Item | Description | Unit | No. of Unit | Unit Price (USD) | Total Price (USD) | No. of Books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 7 | Assembling and laying of double connecting track | - Double connecting track: 4 switches type 60E1-300-6 ${ }^{\circ}$ type and 1 crossing type 60E1-12 ${ }^{\circ}$ |  |  |  |  |  |
| 7-1 | Procurement |  | Completion of procurement for each one set of double connecting track | 2 | 576,394.77 | 1,152,789.53 | 2/2-1 |
| 7-2 | Handling |  | Completion of handling for each one set of double connecting track | 2 | 3,515.79 | 7,031.59 | 2/2-1 |
| 7-3 | Works |  | Completion of works for each one set of double connecting track | 2 | 119,195.16 | 238,390.31 | 2/2-1 |
| 8 | Mechanized leveling and dynamic stabilization of the track |  | Completion of the Works for the left or right side of the station | 2 | 208,688.92 | 417,377.85 | 2/2-1 |
| 9 | Welding and stress relief |  | Completion of the Works for the left or right side of the station | 2 | 197,366.74 | 394,733.48 | 2/2-1 |
| 10 | Fence |  | Completion of the Works | 1 | 16,704.38 | 16,704.38 | 2/2-1 |
| 11 | Other works |  | completion of all other works | 1 | 20,655.61 | 20,655.61 | 2/2-1 |
| E | Open track between Zemun and Zemunsko Polje (km8+920.67-km12+026.56) |  |  |  |  |  |  |
| 1 | Dismantling existing track |  | Completion of dismantling existing track on left or right track | 2 | 81,002.39 | 162,004.78 | 2/2-1 |
| 2 | Ballast |  | Completion of the Works on left or right track | 2 | 301,575.07 | 603,150.13 | 2/2-1 |
| 3 | Assembling and laying track |  |  |  |  |  |  |
| 3-1 | Procurement |  | Completion of the Works on left or right track | 2 | 784,117.86 | 1,568,235.72 | 2/2-1 |
| 3-2 | Handling |  | Completion of the Works on left or right track | 2 | 27,998.91 | 55,997.82 | 2/2-1 |
| 3-3 | Works |  | Completion of the Works on left or right track | 2 | 256,898.01 | 513,796.03 | 2/2-1 |
| 4 | Mechanized leveling and dynamic stabilization of the track |  | Completion of the Works on left or right track | 2 | 148,466.56 | 296,933.12 | 2/2-1 |
| 5 | Welding and stress relief |  | Completion of the Works on left or right track | 2 | 52,719.62 | 105,439.24 | 2/2-1 |
| 6 | Fence |  | Completion of the Works | 1 | 47,531.42 | 47,531.42 | 2/2-1 |
| 7 | Other works |  | completion of all other works | 1 | 17,932.46 | 17,932.46 | 2/2-1 |

3 Superstructure

| No. | Item | Description | Unit | No. of Unit | Unit Price (USD) | Total Price (USD) | No. of Books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| F | Zemunsko Polje station (km12+026.56-km12+667.05) |  |  |  |  |  |  |
| 1 | Dismantling existing track |  | Completion of dismantling existing track for the left or right side of the station | 2 | 58,675.68 | 117,351.36 | 2/2-1 |
| 2 | Dismantling existing switchess |  | Completion of dismantlement of one set of existing switch | 11 | 2,970.01 | 32,670.10 | 2/2-1 |
| 3 | Ballast |  | Completion of the Works for the left or right side of the station | 2 | 114,396.02 | 228,792.04 | 2/2-1 |
| 4 | Assembling and laying track |  |  |  |  |  |  |
| 4-1 | Procurement |  | Completion of the Works on left or right track | 2 | 292,951.17 | 585,902.33 | 2/2-1 |
| 4-2 | Handling |  | Completion of the Works on left or right track | 2 | 10,962.42 | 21,924.84 | 2/2-1 |
| 4-3 | Works |  | Completion of the Works on left or right track | 2 | 69,437.00 | 138,874.00 | 2/2-1 |
| 5 | Assembling and laying of switches | - Type 60E1-300-6 ${ }^{0}$ |  |  |  |  |  |
| 5-1 | Procurement |  | Completion of procurement for each one set of switches | 14 | 107,672.15 | 1,507,410.15 | 2/2-1 |
| 5-2 | Handling |  | Completion of handling for each one set of switches | 14 | 656.76 | 9,194.64 | 2/2-1 |
| 5-3 | Works |  | Completion of works for each one set of switches | 14 | 22,265.99 | 311,723.84 | 2/2-1 |
| 6 | Mechanized leveling and dynamic stabilization of the track |  | Completion of the Works for the left or right side of the station | 2 | 55,755.32 | 111,510.64 | 2/2-1 |
| 7 | Welding and stress relief |  | Completion of the Works for the left or right side of the station | 2 | 59,158.21 | 118,316.43 | 2/2-1 |
| 8 | Fence |  | Completion of the Works | 1 | 8,824.80 | 8,824.80 | 2/2-1 |
| 9 | Other works |  | completion of all other works | 1 | 4,382.90 | 4,382.90 | 2/2-1 |
| G | Open track between Zemunsko Polje and Batajnica (km12+667.05-km18+246.93) |  |  |  |  |  |  |
| 1 | Dismantling existing track |  | Completion of dismantling existing track on left or right track | 2 | 145,435.59 | 290,871.18 | 2/2-1 |
| 2 | Ballast |  | Completion of the Works on left or right track | 2 | 526,336.84 | 1,052,673.68 | 2/2-1 |
| 3 | Assembling and laying track |  |  |  |  |  |  |
| 3-1 | Procurement |  | Completion of the Works on left or right track | 2 | 1,449,992.38 | 2,899,984.75 | 2/2-1 |

3 Superstructure

| No. | Item | Description | Unit | No. of Unit | Unit Price (USD) | Total Price (USD) | No. of Books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 3-2 | Handling |  | Completion of the Works on left or right track | 2 | 51,866.46 | 103,732.92 | 2/2-1 |
| 3-3 | Works |  | Completion of the Works on left or right track | 2 | 324,124.89 | 648,249.78 | 2/2-1 |
| 4 | Mechanized leveling and dynamic stabilization of the track |  | Completion of the Works on left or right track | 2 | 275,302.23 | 550,604.47 | 2/2-1 |
| 5 | Welding and stress relief |  | Completion of the Works on left or right track | 2 | 97,282.28 | 194,564.56 | 2/2-1 |
| 6 | Fence |  | Completion of the Works | 1 | 91,424.92 | 91,424.92 | 2/2-1 |
| 7 | Other works |  | completion of all other works | 1 | 46,301.45 | 46,301.45 | 2/2-1 |
| H | Batajnica passenger Station (km18+246.93-kmK19+901.41) |  |  |  |  |  |  |
| 1 | Dismantling existing track |  | Completion of dismantling existing track for the left or right side of the passenger station | 2 | 67,927.42 | 135,854.85 | 2/2-1 |
| 2 | Dismantling existing switchess |  | Completion of dismantlement of one set of existing switch | 20 | 2,970.01 | 59,400.19 | 2/2-1 |
| 3 | Ballast |  | Completion of the Works for the left or right side of the passenger station | 2 | 209,990.75 | 419,981.50 | 2/2-1 |
| 4 | Assembling and laying track |  |  |  |  |  |  |
| 4-1 | Procurement |  | Completion of the Works for the left or right side of the passenger station | 2 | 566,118.63 | 1,132,237.25 | 2/2-1 |
| 4-2 | Handling |  | Completion of the Works for the left or right side of the passenger station | 2 | 20,245.60 | 40,491.19 | 2/2-1 |
| 4-3 | Works |  | Completion of the Works for the left or right side of the passenger station | 2 | 128,773.75 | 257,547.51 | 2/2-1 |
| 5 | Assembling and laying of switchess | - type 60E1-300-60 |  |  |  |  |  |
| 5-1 | Procurement |  | Completion of procurement for each one set of switches | 19 | 107,672.15 | 2,045,770.91 | 2/2-1 |
| 5-2 | Handling |  | Completion of handling for each one set of switches | 19 | 656.76 | 12,478.44 | 2/2-1 |

3 Superstructure

| No. | Item | Description | Unit | No. of Unit | Unit Price (USD) | Total Price (USD) | No. of Books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 5-3 | Works |  | Completion of works for each one set of switches | 19 | 22,265.99 | 423,053.78 | 2/2-1 |
| 6 | Assembling and laying of switchess | - Type 60E1-200-7,5 ${ }^{\circ}$ |  |  |  |  |  |
| 6-1 | Procurement |  | Completion of procurement for each one set of switches | 1 | 93,041.00 | 93,041.00 | 2/2-1 |
| 6-2 | Handling |  | Completion of handling for each one set of switches | 1 | 547.30 | 547.30 | 2/2-1 |
| 6-3 | Works |  | Completion of works for each one set of switches | 1 | 19,976.45 | 19,976.45 | 2/2-1 |
| 7 | Assembling and laying of double connecting track | - Double connecting track: 4 switches type 60E1-300-6 ${ }^{\circ}$ type and 1 crossing type 60E1-12 ${ }^{\circ}$ |  |  |  |  |  |
| 7-1 | Procurement |  | Completion of procurement for each one set of double connecting track | 1 | 687,239.91 | 687,239.91 | 2/2-1 |
| 7-2 | Handling |  | Completion of handling for each one set of double connecting track | 1 | 4,191.91 | 4,191.91 | 2/2-1 |
| 7-3 | Works |  | Completion of works for each one set of double connecting track | 1 | 142,117.30 | 142,117.30 | 2/2-1 |
| 8 | Mechanized leveling and dynamic stabilization of the track |  | Completion of the Works for the left or right side of the passenger station | 2 | 105,729.48 | 211,458.96 | 2/2-1 |
| 9 | Welding and stress relief |  | Completion of the Works for the left or right side of the passenger station | 2 | 101,309.71 | 202,619.42 | 2/2-1 |
| 10 | Fence |  | Completion of the Works | 1 | 2,279.75 | 2,279.75 | 2/2-1 |
| 11 | Other works |  | completion of all other works | 1 | 17,441.98 | 17,441.98 | 2/2-1 |
| I | Batajnica Freight Station (km19+880.86-km21+275.26) |  |  |  |  |  |  |
| 1 | Dismantling existing track |  | Completion of dismantling existing trackfor the left or right side of the freight station | 2 | 69,022.20 | 138,044.41 | 2/2-1 |
| 2 | Dismantling existing switchess |  | Completion of dismantlement of one set of existing switch | 16 | 2,970.01 | 47,520.15 | 2/2-1 |
| 3 | Ballast |  | Completion of the Works for the left or right side of the freight station | 2 | 300,443.42 | 600,886.83 | 2/2-1 |

3 Superstructure

| No. | Item | Description | Unit | No. of Unit | Unit Price (USD) | Total Price (USD) | No. of Books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 4 | Assembling and laying track |  |  |  |  |  |  |
| 4-1 | Procurement |  | Completion of the Works for the left or right side of the freight station | 2 | 640,440.82 | 1,280,881.64 | 2/2-1 |
| 4-2 | Handling |  | Completion of the Works for the left or right side of the freight station | 2 | 22,884.86 | 45,769.72 | 2/2-1 |
| 4-3 | Works |  | Completion of the Works for the left or right side of the freight station | 2 | 144,555.65 | 289,111.31 | 2/2-1 |
| 5 | Assembling and laying of switchess | - Type 60E1-300-6 ${ }^{\circ}$ |  |  |  |  |  |
| 5-1 | Procurement |  | Completion of procurement for each one set of switches | 13 | 107,672.15 | 1,399,737.99 | 2/2-1 |
| 5-2 | Handling |  | Completion of handling for each one set of switches | 13 | 656.76 | 8,537.88 | 2/2-1 |
| 5-3 | Works |  | Completion of works for each one set of switches | 13 | 22,265.99 | 289,457.85 | 2/2-1 |
| 6 | Assembling and laying of switchess | - Type 60E1-200-6 ${ }^{\circ}$ |  |  |  |  |  |
| 6-1 | Procurement |  | Completion of procurement for each one set of switches | 3 | 92,721.74 | 278,165.23 | 2/2-1 |
| 6-2 | Handling |  | Completion of handling for each one set of switches | 3 | 547.30 | 1,641.90 | 2/2-1 |
| 6-3 | Works |  | Completion of works for each one set of switches | 3 | 19,976.45 | 59,929.35 | 2/2-1 |
| 7 | Mechanized leveling and dynamic stabilization of the track |  | Completion of the Works for the left or right side of the freight station | 2 | 120,690.53 | 241,381.07 | 2/2-1 |
| 8 | Welding and stress relief |  | Completion of the Works for the left or right side of the freight station | 2 | 87,720.44 | 175,440.89 | 2/2-1 |
| 9 | Fence |  | Completion of the Works | 1 | 3,566.45 | 3,566.45 | 2/2-1 |
| 10 | Other |  | completion of all other works | 1 | 9,180.46 | 9,180.46 | 2/2-1 |
| J | Open track between Batajnica and Nova Pazova (km21+275.26-km26+470.32) |  |  |  |  |  |  |
| 1 | Dismantling existing track |  | Completion of dismantling existing track on left or right track | 2 | 143,898.36 | 287,796.72 | 2/2-1 |
| 2 | Ballast |  | Completion of the Works on each track of the four tracks | 4 | 550,409.24 | 2,201,636.96 | 2/2-1 |
| 3 | Assembling and laying track |  |  |  |  |  |  |
| 3-1 | Procurement |  | Completion of the Works on each track of the four tracks | 4 | 1,373,847.96 | 5,495,391.83 | 2/2-1 |

3 Superstructure

| No. | Item | Description | Unit | No. of Unit | Unit Price (USD) | Total Price (USD) | No. of Books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 3-2 | Handling |  | Completion of the Works on each track of the four tracks | 4 | 49,191.91 | 196,767.64 | 2/2-1 |
| 3-3 | Works |  | Completion of the Works on each track of the four tracks | 4 | 311,530.90 | 1,246,123.60 | 2/2-1 |
| 4 | Mechanized leveling and dynamic stabilization of the track |  | Completion of the Works on each track of the four tracks | 4 | 261,291.32 | 1,045,165.26 | 2/2-1 |
| 5 | Welding and stress relief |  | Completion of the Works on each track of the four tracks | 1 | 370,251.25 | 370,251.25 | 2/2-1 |
| 6 | Fence |  | completion of the works | 1 | 100,567.98 | 100,567.98 | 2/2-1 |
| 7 | Other works |  | completion of all other works | 1 | 71,231.81 | 71,231.81 | 2/2-1 |
| K | Nova Pazova station (km26+470.32-km27+751.91) |  |  |  |  |  |  |
| 1 | Dismantling existing track |  | Completion of dismantling existing track for the left or right side of the station | 2 | 56,089.05 | 112,178.10 | 2/2-1 |
| 2 | Dismantling existing switchess |  | Completion of dismantlement of one set of existing switch | 17 | 2,970.01 | 50,490.16 | 2/2-1 |
| 3 | Ballast |  | Completion of the Works for the left or right side of the station | 2 | 259,604.71 | 519,209.42 | 2/2-1 |
| 4 | Assembling and laying track |  |  |  |  |  |  |
| 4-1 | Procurement |  | Completion of the Works for the left or right side of the station | 2 | 654,527.28 | 1,309,054.55 | 2/2-1 |
| 4-2 | Handling |  | Completion of the Works for the left or right side of the station | 2 | 23,417.25 | 46,834.51 | 2/2-1 |
| 4-3 | Works |  | Completion of the Works for the left or right side of the station | 2 | 146,024.10 | 292,048.21 | 2/2-1 |
| 5 | Assembling and laying of switchess | - Type 60E1-1200-1:18.5 |  |  |  |  |  |
| 5-1 | Procurement |  | Completion of procurement for each one set of switches | 8 | 277,018.96 | 2,216,151.71 | 2/2-1 |
| 5-2 | Handling |  | Completion of handling for each one set of switches | 8 | 1,051.73 | 8,413.86 | 2/2-1 |
| 5-3 | Works |  | Completion of works for each one set of switches | 8 | 29,918.05 | 239,344.38 | 2/2-1 |
| 6 | Assembling and laying of switchess | - Type 60E1-760-1:14 |  |  |  |  |  |
| 6-1 | Procurement |  | Completion of procurement for each one set of switches | 2 | 246,969.45 | 493,938.90 | 2/2-1 |
| 6-2 | Handling |  | Completion of handling for each one set of switches | 2 | 882.70 | 1,765.41 | 2/2-1 |

3 Superstructure

| No. | Item | Description | Unit | No. of Unit | Unit Price (USD) | Total Price (USD) | No. of Books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 6-3 | Works |  | Completion of works for each one set of switches | 2 | 24,659.38 | 49,318.77 | 2/2-1 |
| 7 | Assembling and laying of switchess | - Type 60E1-300-60 ${ }^{\circ}$ |  |  |  |  |  |
| 7-1 | Procurement |  | Completion of procurement for each one set of switches | 1 | 107,672.15 | 107,672.15 | 2/2-1 |
| 7-2 | Handling |  | Completion of handling for each one set of switches | 1 | 656.76 | 656.76 | 2/2-1 |
| 7-3 | Works |  | Completion of works for each one set of switches | 7 | 22,265.99 | 155,861.92 | 2/2-1 |
| 8 | Assembling and laying of switchess | - type 49E1-300-60 |  |  |  |  |  |
| 8-1 | Works |  | Completion of works for each one set of switches | 1 | 20,085.91 | 20,085.91 | 2/2-1 |
| 9 | Mechanized leveling and dynamic stabilization of the track |  | Completion of the Works for the left or right side of the station | 2 | 139,419.03 | 278,838.05 | 2/2-1 |
| 10 | Welding and stress relief |  | Completion of the Works for the left or right side of the station | 2 | 70,031.90 | 140,063.79 | 2/2-1 |
| 11 | Fence |  | Completion of the Works | 1 | 12,797.31 | 12,797.31 | 2/2-1 |
| 12 | Other works |  | completion of all other works | 1 | 9,458.03 | 9,458.03 | 2/2-1 |
| L | Open track between Nova Pazova - Stara Pazova (km27+751.91-km34+637.91) |  |  |  |  |  |  |
| 1 | Dismantling existing track |  | Completion of dismantling existing track on left or right track | 2 | 180,791.88 | 361,583.77 | 2/2-1 |
| 2 | Ballast |  | Completion of the Works on each track of the four tracks | 4 | 675,794.19 | 2,703,176.74 | 2/2-1 |
| 3 | Assembling and laying track |  |  |  |  |  |  |
| 3-1 | Procurement |  | Completion of the Works on each track of the four tracks | 4 | 1,715,904.84 | 6,863,619.34 | 2/2-1 |
| 3-2 | Handling |  | Completion of the Works on each track of the four tracks | 4 | 61,441.77 | 245,767.09 | 2/2-1 |
| 3-3 | Works |  | Completion of the Works on each track of the four tracks | 4 | 383,241.13 | 1,532,964.52 | 2/2-1 |
| 4 | Mechanized leveling and dynamic stabilization of the track |  | Completion of the Works on each track of the four tracks | 4 | 326,429.79 | 1,305,719.16 | 2/2-1 |
| 5 | Welding and stress relief |  | Completion of the Works on each track of the four tracks | 4 | 115,876.53 | 463,506.10 | 2/2-1 |
| 6 | Fence |  | completion of the works | 1 | 115,084.89 | 115,084.89 | 2/2-1 |

3 Superstructure

| No. | Item | Description | Unit | No. of Unit | Unit Price (USD) | Total Price (USD) | No. of Books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 7 | Other works |  | completion of all other works | 1 | 72,665.04 | 72,665.04 | 2/2-1 |
| M | Stara Pazova station (km34+637.91- km36+339.65) |  |  |  |  |  |  |
| 1 | Dismantling existing track |  | Completion of dismantling existing track for the left or right side of the station | 2 | 88,217.73 | 176,435.45 | 2/2-1 |
| 2 | Dismantling existing switchess |  | Completion of dismantlement of one set of existing switch | 22 | 2,970.01 | 65,340.20 | 2/2-1 |
| 3 | Ballast |  | Completion of the Works for the left or right side of the station | 2 | 357,025.97 | 714,051.93 | 2/2-1 |
| 4 | Assembling and laying track |  |  |  |  |  |  |
| 4-1 | Procurement |  | Completion of the Works for the left or right side of the station | 2 | 896,301.16 | 1,792,602.32 | 2/2-1 |
| 4-2 | Handling |  | Completion of the Works for the left or right side of the station | 2 | 32,264.20 | 64,528.40 | 2/2-1 |
| 4-3 | Works |  | Completion of the Works for the left or right side of the station | 2 | 201,051.94 | 402,103.87 | 2/2-1 |
| 5 | Assembling and laying of switchess | - Type 60E1-1200-1:18.5 |  |  |  |  |  |
| 5-1 | Procurement |  | Completion of procurement for each one set of switches | 12 | 277,018.96 | 3,324,227.56 | 2/2-1 |
| 5-2 | Handling |  | Completion of handling for each one set of switches | 12 | 1,051.73 | 12,620.80 | 2/2-1 |
| 5-3 | Works |  | Completion of works for each one set of switches | 12 | 29,918.05 | 359,016.58 | 2/2-1 |
| 6 | Assembling and laying of switchess | - Type 60E1-760-1:14 |  |  |  |  |  |
| 6-1 | Procurement |  | Completion of procurement for each one set of switches | 4 | 246,969.45 | 987,877.80 | 2/2-1 |
| 6-2 | Handling |  | Completion of handling for each one set of switches | 4 | 882.70 | 3,530.82 | 2/2-1 |
| 6-3 | Works |  | Completion of works for each one set of switches | 4 | 24,659.38 | 98,637.53 | 2/2-1 |
| 7 | Assembling and laying of switchess | - Type 60E1-300-60 ${ }^{\circ}$ |  |  |  |  |  |
| 7-1 | Works |  | Completion of works for each one set of switches | 5 | 22,265.99 | 111,329.94 | 2/2-1 |
| 8 | Assembling and laying of switchess | - Type 49E1-200-60 ${ }^{\circ}$ |  |  |  |  |  |
| 8-1 | Procurement |  | Completion of procurement for each one set of switches | 2 | 77,762.21 | 155,524.42 | 2/2-1 |

## 3 Superstructure

| No. | Item | Description | Unit | No. of Unit | Unit Price (USD) | Total Price (USD) | No. of Books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 8-2 | Handling |  | Completion of handling for each one set of switches | 2 | 547.30 | 1,094.60 | 2/2-1 |
| 8-3 | Works |  | Completion of works for each one set of switches | 3 | 19,976.45 | 59,929.35 | 2/2-1 |
| 9 | Mechanized leveling and dynamic stabilization of the track |  | Completion of the Works for the left or right side of the station | 2 | 171,009.77 | 342,019.54 | 2/2-1 |
| 10 | Welding and stress relief |  | Completion of the Works for the left or right side of the station | 2 | 99,104.27 | 198,208.53 | 2/2-1 |
| 11 | Fence |  | Completion of the Works | 1 | 16,628.93 | 16,628.93 | 2/2-1 |
| 12 | Other |  | completion of all other works | 1 | 11,088.67 | 11,088.67 | 2/2-1 |
| Summery(USD) |  |  |  |  |  | 86,887,920.62 |  |

## 4 Bridge, Culvert, Underpass

| No. | Item | Description | Unit | No. of Unit | Unit Price (USD) | Total Price (USD) | No. of Books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| A | Overpass bridge at km13+288.51 |  |  |  |  |  |  |
| 1 | Pile of abutment | Located on abutment S1, S8 | Completion of the piles located on each abutment | 2 | 200,089.34 | 400,178.67 | 2/1-1 |
| 2 | Pile of Pier | Located on piers ,S2, S3, S4, S5, S6, S7 | Completion of the piles located on each pier | 6 | 113,401.98 | 680,411.90 | 2/1-1 |
| 3 | Pile Cap of abutment | Located on abutment S1, S8 | Completion of the pile cap of each abutment | 2 | 67,968.69 | 135,937.38 | 2/1-1 |
| 4 | Pile Cap of Pier | Located on piers S1, S2,S3, S4, S5, S6, S7 | Completion of the pile cap of each pier | 6 | 55,314.71 | 331,888.28 | 2/1-1 |
| 5 | Abutment body | Located on abutment S1, S8 | Completion of each abutment body | 2 | 176,965.83 | 353,931.65 | 2/1-1 |
| 6 | Pier shaft | Located on piers S1, S2, S3, S4, S5, S6, S7 | Completion of each pier shaft | 6 | 59,318.65 | 355,911.90 | 2/1-1 |
| 7 | Prefabricated main girders made of prestressed concrete | 1. Precast main girders made of pre-stressed concrete; <br> 2. Installation of main girders. | Completion of each span of girder in left side and/or right side of bridge | 14 | 141,838.18 | 1,985,734.59 | 2/1-1 |
| 8 | Bridge deck slab |  | Completion of bridge deck slab | 1 | 410,559.58 | 410,559.58 | 2/1-1 |
| 9 | Waterproofing |  | Completion of waterproofing | 1 | 432,334.17 | 432,334.17 | 2/1-1 |
| 10 | Asphalt concrete layer |  | Completion of the asphalt concrete layer work | 1 | 43,413.04 | 43,413.04 | 2/1-1 |
| 11 | Drainage |  | Completion of the drainage work | 1 | 3,063.12 | 3,063.12 | 2/1-1 |
| 12 | All other works of Bridge |  | Completion of all works of Bridge | 1 | 216,261.63 | 216,261.63 | 2/1-1 |
| B | Underpass at railway km 15+915.43 |  |  |  |  |  |  |
| 1 | Underpass at railway km 15+915.43 |  | Completion of underpass works at each side of the railway | 2 | 1,883,884.01 | 3,767,768.02 | 2/1-1 |
| C | Overpass bridge at km26+392.67 |  |  |  |  |  |  |
| 1 | Pile of Abutment | Located on abutment S1, S9 | Completion of the piles located on each abutment | 2 | 56,865.46 | 113,730.93 | 2/1-1 |
| 2 | Pile of Pier | Located on piers S2, S3, S4, S5, S6, S7, S8 | Completion of the piles located on each pier | 7 | 50,691.50 | 354,840.49 | 2/1-1 |
| 3 | Pile Cap of Abutment | Located on abutment S1, S9 | Completion of the pile cap of each abutment | 2 | 29,302.43 | 58,604.87 | 2/1-1 |
| 4 | Pile Cap of Pier | $\begin{aligned} & \text { Located on piers S2, S3, S4, } \\ & \text { S5, S6, S7, S8 } \end{aligned}$ | Completion of the pile cap of each pier | 7 | 25,116.37 | 175,814.60 | 2/1-1 |
| 5 | Foundation of Retaining wall |  | Completion of the foundation of the retaining wall | 1 | 58,604.87 | 58,604.87 | 2/1-1 |
| 6 | Abutment body | Located on abutment S1, S9 | Completion of each abutment body | 2 | 29,427.73 | 58,855.45 | 2/1-1 |
| 7 | Pier shaft | $\begin{aligned} & \text { Located on piers S2, S3, S4, } \\ & \text { S5, S6, S7, S8 } \end{aligned}$ | Completion of each pier shaft | 7 | 20,442.81 | 143,099.68 | 2/1-1 |

## 4 Bridge, Culvert, Underpass

| No. | Item | Description | Unit | No. of Unit | Unit Price (USD) | Total Price (USD) | No. of Books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 8 | Retaining wall body |  |  | 1 | 35,200.63 | 35,200.63 | 2/1-1 |
| 9 | Cast main girders in site |  | Completion of each span | 8 | 149,538.94 | 1,196,311.48 | 2/1-1 |
| 10 | Waterproofing |  | Completion of waterproofing Works | 1 | 250,825.67 | 250,825.67 | 2/1-1 |
| 11 | Asphalt concrete layer |  | Completion of the asphalt concrete layer work | 1 | 20,375.39 | 20,375.39 | 2/1-1 |
| 12 | All other works of Bridge |  | Completion of all works of Bridge | 1 | 168,958.24 | 168,958.24 | 2/1-1 |
| D | Overpass bridge at km34+696.44 |  |  |  |  |  |  |
| 1 | Pile of Abutment | Located on abutment S1, S10 | Completion of the piles located on each abutment | 2 | 65,183.10 | 130,366.20 | 2/1-1 |
| 2 | Pile of Pier | Located on piers S2, S3, S4, S5, S6, S7, S8, S9 | Completion of the piles located on each pier | 8 | 67,627.46 | 541,019.71 | 2/1-1 |
| 3 | Pile Cap of Abutment | Located on abutment S1, S10 | Completion of the pile cap of each abutment | 2 | 31,194.66 | 62,389.33 | 2/1-1 |
| 4 | Pile Cap of Pier | Located on piers S2, S3, S4, S5, S6, S7, S8, S9 | Completion of the pile cap of each pier | 8 | 28,062.97 | 224,503.75 | 2/1-1 |
| 5 | Retaining wall Foundation |  |  | 1 | 265,833.82 | 265,833.82 | 2/1-1 |
| 6 | Abutment body | Located on abutment S1, S10 | Completion of each abutment body | 2 | 43,822.99 | 87,645.97 | 2/1-1 |
| 7 | Pier shaft | Located on piers S2, S3, S4, S5, S6, S7, S8, S9 | Completion of each pier shaft | 8 | 19,746.53 | 157,972.24 | 2/1-1 |
| 8 | Retaining wall body |  |  | 1 | 57,846.34 | 57,846.34 | 2/1-1 |
| 9 | Prefabricated main girders made of prestressed concrete |  | Completion of each span of girders of the bridge | 9 | 174,248.08 | 1,568,232.70 | 2/1-1 |
| 10 | Edge cornices supporting footways |  | Completion of works | 1 | 65,062.84 | 65,062.84 | 2/1-1 |
| 11 | Waterproofing |  | Completion of the works | 1 | 335,155.89 | 335,155.89 | 2/1-1 |
| 12 | Steel fence |  | Completion of the works | 1 | 114,367.66 | 114,367.66 | 2/1-1 |
| 13 | All other works of Bridge |  | Completion of all works of Bridge | 1 | 184,095.61 | 184,095.61 | 2/1-1 |
| E | Frame bridge at km23+762.55 |  |  |  |  |  |  |
| 1 | Pile of Overpass bridge | Located on frame structure | Completion of each pile located on frame structure | 38 | 18,882.95 | 717,552.10 | 2/1-1 |
| 2 | Pile Cap |  | Completion of the pile cap of each side beside railway | 2 | 179,046.14 | 358,092.29 | 2/1-1 |
| 3 | Pier shaft and wall |  | Completion of each side beside railway | 2 | 329,556.48 | 659,112.97 | 2/1-1 |
| 4 | Bridge deck slab |  | Completion of bridge deck slab | 1 | 447,390.26 | 447,390.26 | 2/1-1 |
| 5 | Waterproofing |  | Completion of the Works | 1 | 133,519.41 | 133,519.41 | 2/1-1 |

## 4 Bridge, Culvert, Underpass

| No. | Item | Description | Unit | No. of Unit | Unit Price (USD) | Total Price (USD) | No. of Books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 6 | All other works of Bridge |  | Completion of all works of Bridge | 1 | 34,145.80 | 34,145.80 | 2/1-1 |
| F | Culvert |  |  |  |  |  |  |
| 1 | Km13+240.81 box culvert |  | Completion of half of the culvert box | 2 | 44,717.71 | 89,435.43 | 2/1-2 |
| 2 | Km14+081 box culvert |  | Completion of half of the culvert box | 2 | 44,087.78 | 88,175.57 | 2/1-2 |
| 3 | Km15+742.11box culvert |  | Completion of half of the culvert box | 2 | 44,692.45 | 89,384.91 | 2/1-2 |
| 4 | Km16+442.26box culvert |  | Completion of half of the culvert box | 2 | 44,722.87 | 89,445.73 | 2/1-2 |
| 5 | Km21+833.42box culvert |  | Completion of half of the culvert box | 2 | 75,426.24 | 150,852.48 | 2/1-2 |
| 6 | Km23+021.04box culvert |  | Completion of half of the culvert box | 2 | 55,682.33 | 111,364.67 | 2/1-2 |
| 7 | Km23+080.78box culvert |  | Completion of half of the culvert box | 2 | 147,351.33 | 294,702.66 | 2/1-2 |
| 8 | Km26+235box culvert |  | Completion of half of the culvert box | 2 | 123,326.91 | 246,653.82 | 2/1-2 |
| 9 | Km26+408.94box culvert |  | Completion of half of the culvert box | 2 | 176,270.48 | 352,540.96 | 2/1-2 |
| 10 | Km29+603.26box culvert |  | Completion of half of the culvert box | 2 | 162,899.68 | 325,799.36 | 2/1-2 |
| 11 | Km32+036.58box culvert |  | Completion of half of the culvert box | 2 | 167,821.96 | 335,643.92 | 2/1-2 |
| 12 | Km32+727.25box culvert |  | Completion of half of the culvert box | 2 | 156,941.37 | 313,882.75 | 2/1-2 |
| G | Underpass |  |  |  |  |  |  |
| 1 | Underpass in Tosin Bunar stopping place |  | Completion of half of the underpass | 2 | 293,873.21 | 587,746.43 | 2/6-1 |
| 2 | Underpass in Altina stopping place |  | Completion of half of the underpass | 2 | 205,227.56 | 410,455.11 | 2/11-1 |
| 3 | Underpass in Zemun Polje railway station |  | Completion of half of the underpass | 2 | 308,655.97 | 617,311.94 | 2/14-1 |
| 4 | Underpass in Kamendin stopping place |  | Completion of half of the underpass | 2 | 225,164.93 | 450,329.86 | 2/15-1 |
| 5 | Underpass in Batajnica railway station |  | Completion of half of the underpass | 2 | 522,977.76 | 1,045,955.53 | 2/18-1 |
| 6 | Underpass in Nova Pazova railway station |  | Completion of half of the underpass | 2 | 202,493.14 | 404,986.27 | 2/20-1 |
| Summery(USD) |  |  |  |  |  | 23,901,588.50 |  |

5 Access Road and Road detour

| No. | Item | Description | Unit | No. of Unit | Unit Price (USD) | Total Price (USD) | No Books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| A | Access road to Zemun station |  |  |  |  |  |  |
| 1 | Preliminary works |  | Completion of the works | 1 | 38,525.48 | 38,525.48 | 2/3-1.1-1 |
| 2 | Substructure-earthworks |  | Completion of the works | 1 | 160,652.37 | 160,652.37 | 2/3-1.1-1 |
| 3 | Superstructure-pavement structure |  | Completion of the works | 1 | 371,420.95 | 371,420.95 | 2/3-1.1-1 |
| 4 | Dewatering |  | Completion of the works | 1 | 41,493.87 | 41,493.87 | 2/3-1.1-1 |
| B | Road detour from km 12+700 to km 13+000 |  |  |  |  |  |  |
| 1 | Preliminary works |  | Completion of the works | 1 | 28,052.74 | 28,052.74 | 2/3-1.2-1 |
| 2 | Substructure-earthworks |  | Completion of the works | 1 | 17,886.09 | 17,886.09 | 2/3-1.2-1 |
| 3 | Superstructure-pavement structure |  | Completion of the works | 1 | 58,322.65 | 58,322.65 | 2/3-1.2-1 |
| 4 | Dewatering |  | Completion of the works | 1 | 7,719.62 | 7,719.62 | 2/3-1.2-1 |
| C | Road detour from km 13+300 to km 13+900 |  |  |  |  |  |  |
| 1 | Preliminary works |  | Completion of the works | 1 | 9,023.08 | 9,023.08 | 2/3-1.3-1 |
| 2 | Substructure-earthworks |  | Completion of the works | 1 | 51,275.14 | 51,275.14 | 2/3-1.3-1 |
| 3 | Superstructure-pavement structure |  | Completion of the works | 1 | 95,313.51 | 95,313.51 | 2/3-1.3-1 |
| D | Road grade separation at km 13+288.51 of railway line |  |  |  |  |  |  |
| 1 | Preliminary works |  | Completion of the works | 1 | 19,361.49 | 19,361.49 | 2/3-1.4-1 |
| 2 | Substructure-earthworks |  | Completion Half the length of the road | 2 | 522,260.20 | 1,044,520.40 | 2/3-1.4-1 |
| 3 | Superstructure-pavement structure |  | Completion Half the length of the road | 2 | 579,397.74 | 1,158,795.48 | 2/3-1.4-1 |
| 4 | Dewatering |  | Completion Half the length of the road | 2 | 57,426.89 | 114,853.78 | 2/3-1.4-1 |
| 5 | Works with geosynthetics |  | Completion Half the length of the road | 2 | 41,420.60 | 82,841.20 | 2/3-1.4-1 |
| 6 | All other works of Road |  | Completion of all other works | 1 | 5,284.82 | 5,284.82 | 2/3-1.4-1 |
| E | Road grade separation at km 15+915.43 of railway line |  |  |  |  |  |  |
| 1 | Preliminary works |  | Completion of the works | 1 | 8,044.76 | 8,044.76 | 2/3-1.5-1 |
| 2 | Substructure-earthworks |  | Completion of the works | 1 | 54,865.84 | 54,865.84 | 2/3-1.5-1 |

## 5 Access Road and Road detour

| No. | Item | Description | Unit | No. of Unit | Unit Price (USD) | Total Price (USD) | No Books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 3 | Superstructure-pavement structure |  | Completion of the works | 1 | 106,647.35 | 106,647.35 | 2/3-1.5-1 |
| 4 | Dewatering |  | Completion of the works | 1 | 2,335.63 | 2,335.63 | 2/3-1.5-1 |
| F | Road grade sepration at km 26+392.67 of railway Line |  |  |  |  |  |  |
| 1 | Preliminary works |  | Completion of the works | 1 | 7,538.25 | 7,538.25 | 2/3-2.1-1 |
| 2 | Substructure-earthworks |  | Completion of the works | 1 | 327,118.31 | 327,118.31 | 2/3-2.1-1 |
| 3 | Superstructure-pavement structure |  | Completion of the works | 1 | 267,289.12 | 267,289.12 | 2/3-2.1-1 |
| 4 | Dewatering |  | Completion of the works | 1 | 64,263.60 | 64,263.60 | 2/3-2.1-1 |
| G | Access road to Nova Pazova railway station |  |  |  |  |  |  |
| 1 | Preliminary works |  | Completion of the works | 1 | 10,237.58 | 10,237.58 | 2/3-2.2-1 |
| 2 | Substructure-earthworks |  | Completion of the works | 1 | 19,276.20 | 19,276.20 | 2/3-2.2-1 |
| 3 | Superstructure-pavement structure |  | Completion of the works | 1 | 262,634.23 | 262,634.23 | 2/3-2.2-1 |
| 4 | PreCast concrete pipes |  | Completion of the works | 1 | 1,164.83 | 1,164.83 | 2/3-2.2-1 |
| H | Road grade separation at km 34+696.44 of railway line |  |  |  |  |  |  |
| 1 | Preliminary works |  | Completion of the works | 1 | 84,017.14 | 84,017.14 | 2/3-2.3-1 |
| 2 | Substructure-earthworks |  | Completion Half the length of the road | 2 | 122,938.61 | 245,877.23 | 2/3-2.3-1 |
| 3 | Superstructure-pavement structure |  | Completion Half the length of the road | 2 | 459,472.96 | 918,945.91 | 2/3-2.3-1 |
| 4 | Dewatering |  | Completion of the works | 1 | 192,576.65 | 192,576.65 | 2/3-2.3-1 |
| Summery(USD) |  |  |  |  |  | 5,878,175.31 |  |

## 6 Drainage of the Route and Stations, Reconstruction of Existing Drainage Network

| No. | Item | Description | Unit | No.of Unit | Unit Price (USD) | Total Price (USD) | No. of Books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| A | Water engineering installtions of SS and TK in Novi Beograd |  |  |  |  |  |  |
|  | Drainage works |  | Completion of drainage works | 1 | 3,171.05 | 3,171.05 | 3/3 |
| B | Water engineering installtions of underpass in the Tosin Bunar |  |  |  |  |  |  |
|  | Drainage works |  | Completion of drainage works | 1 | 13,481.49 | 13,481.49 | 3/3 |
| C | Water engineering installtions in Novi Beograd |  |  |  |  |  |  |
|  | Drainage works |  | Completion of drainage works | 1 | 62,577.90 | 62,577.90 | 3/3 |
| D | Water engineering installtions of Station building at Zemun station |  |  |  |  |  |  |
|  | Drainage works |  | Completion of drainage works | 1 | 51,263.49 | 51,263.49 | 3/3 |
| E | Water engineering installtions of central post building in Zemun |  |  |  |  |  |  |
|  | Drainage works |  | Completion of drainage works | 1 | 62,568.84 | 62,568.84 | 3/3 |
| F | Water engineering installtions of underpass in Altina stopping place |  |  |  |  |  |  |
|  | Drainage works |  | Completion of drainage works | 1 | 11,599.25 | 11,599.25 | 3/3 |
| G | Water engineering installtions in Zemun Polje |  |  |  |  |  |  |
|  | Drainage works |  | Completion of drainage works | 1 | 17,089.79 | 17,089.79 | 3/3 |
| H | Water engineering installtions of underpass in stop-station Kamendin |  |  |  |  |  |  |
|  | Drainage works |  | Completion of drainage works | 1 | 8,462.17 | 8,462.17 | 3/3 |
| I | Subway at Zemun station |  |  |  |  |  |  |
|  | Drainage works |  | Completion of drainage works | 1 | 62,577.90 | 62,577.90 | 3/3 |
| J | Drainage of access road to Zemun station |  |  |  |  |  |  |
|  | Drainage works |  | Completion of drainage works | 1 | 124,837.89 | 124,837.89 | 3/1 |
| K | Drainage of road with a crossover at km 13+288.51 |  |  |  |  |  |  |
|  | Drainage works |  | Completion of drainage works | 1 | 152,620.20 | 152,620.20 | 3/1 |
| L | Drainage of road with a underpass at km 15+915.43 |  |  |  |  |  |  |

## 6 Drainage of the Route and Stations, Reconstruction of Existing Drainage Network

| No. | Item | Description | Unit | No.of Unit | Unit Price (USD) | Total Price (USD) | No. of Books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Drainage works |  | Completion of drainage works | 1 | 174,427.41 | 174,427.41 | 3/1 |
| M | Drainage works of the subway area at Batajnica station |  |  |  |  |  |  |
|  | Drainage works of the subway area at Batajnica station |  | Completion of drainage works | 1 | 16,318.38 | 16,318.38 |  |
| N | Drainage works of access road to Nova Pazova station |  |  |  |  |  |  |
|  | Drainage works of access road to Nova Pazova station |  | Completion of drainage works | 1 | 67,106.62 | 67,106.62 | 3/1 |
| 0 | Drainage works of road grade separation with a crossover at km 26+392.67 of therailway Line |  |  |  |  |  |  |
|  | Drainage works of road grade separation with a crossover at km 26+392.67 of therailway Line |  | Completion of drainage works | 1 | 105,684.53 | 105,684.53 | 3/1 |
| P | Drainage works of road with a crossover at km 34+694.44 |  |  |  |  |  |  |
|  | Drainage works of road with a crossover at km 34+694.44 |  | Completion of drainage works | 1 | 174,143.46 | 174,143.46 | 3/1 |
| Q | Drainage works in Batajnica railway station |  |  |  |  |  |  |
|  | Drainage works in Batajnica railway station |  | Completion of drainage works | 1 | 47,561.35 | 47,561.35 | 3/3 |
| R | Drainage works in the Nova Pazova railway station |  |  |  |  |  |  |
|  | Drainage works in the Nova Pazova railway station |  | Completion of drainage works | 1 | 74,667.47 | 74,667.47 | 3/3 |
| S | Drainage works in Stara Pazova railway station |  |  |  |  |  |  |
|  | Drainage works in Stara Pazova railway station |  | Completion of drainage works | 1 | 47,551.42 | 47,551.42 | 3/3 |
| T | Relocation of channel at km 26+446 of the railway |  |  |  |  |  |  |
|  | Drainage work |  | Completion of drainage works | 1 | 322,239.79 | 322,239.79 | 3/2 |
|  | Summary(USD) |  |  |  |  | 1,599,950.38 |  |

## 7 Overhead contact system

| No | Item | Description | Unit | No. of Unit | Unit Price (USD) | Total Price (USD) | No. of books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| A | Electric traction fixed installations-OCS Belgrade Centre - Novi Belgrade |  |  |  |  |  |  |
| A-1 | Dismantling and reconstruction of existing OCS | Dismantling and reconstruction of existing OCS,some/all of the followings based on the design: foundations,poles,portals,drop arms,catenary with automatic/fixed tensioning,cantilevers with brackets, insulators, anchor ties,bypass feeder with tensioning/sunspension/brackets,disconnetor,earthing, all kinds of calmps and connections. | left or right open track | 2 | 29,780.87 | 59,561.74 | 4/1.2.5.1.2.1 |
| A-2 | Electrical works | New OCS electrical works according to new alignment and station plan. |  |  |  |  |  |
| 1 | Single cantilever | Material supply and assembly installation with breckets and insulators. | left or right open track | 2 | 43,998.34 | 87,996.67 | 4/1.2.5.1.2.1 |
| 2 | Twin cantilever | Material supply and assembly installation with breckets and insulators. | left or right open track | 2 | 10,951.97 | 21,903.93 | 4/1.2.5.1.2.1 |
| 3 | Anchor tie | Material supply and assembly installation with ties and brackets. | left or right open track | 2 | 2,499.91 | 4,999.81 | 4/1.2.5.1.2.1 |
| 4 | Mid-point | Material supply and assembly installation with ropes and clamps. | left or right open track | 2 | 1,488.04 | 2,976.08 | 4/1.2.5.1.2.1 |
| 5 | Fixed end | Catenary end on a pole with brackets but without pulleys and balance weights. | left or right open track | 2 | 967.23 | 1,934.45 | 4/1.2.5.1.2.1 |
| 6 | Automatic tensioning | Catenary end on a pole with brackets,pulleys and balance weights. | left or right open track | 2 | 11,829.91 | 23,659.82 | 4/1.2.5.1.2.1 |
| 7 | OCS Catenary | Installation and material suppy of Ri100 contact line,Bzll 65 messeger wire,droppers,cut-in insulators and connecting strand,including carry interventions on existing 25 kV network, ensure safety of site during construction and make provisional connections for phased opening to traffic of new reconstructed track sections. | left or right open track | 2 | 111,626.73 | 223,253.46 | 4/1.2.5.1.2.1 |
| 8 | Disconnectors | Hand drive,leverage and brackets. | left or right open track | 1 | 5,319.74 | 5,319.74 | 4/1.2.5.1.2.1 |
| A-3 | Return conductor and earthing | Some/all of the followings based on the design:connection of TSP,cross bond,all kinds of metalltic constructions' earthing such as OCS poles, fences and sound barriers.Double earthing with separate earthing and to rails via spark gap,earthing in the tunnel. | left or right open track | 2 | 8,284.66 | 16,569.31 | 4/1.2.5.1.2.1 |
| A-4 | Miscellaneous | Other relevant works. |  |  |  |  |  |

7 Overhead contact system

| No | Item | Description | Unit | No. of Unit | Unit Price (USD) | Total Price (USD) | No. of books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | Compeletion of works | Inspect and test completed works and energize the OCS. | left or right open track | 2 | 2,232.06 | 4,464.12 | 4/1.2.5.1.2.1 |
| B | Electric traction fixed installations-OCS Novi Belgrade |  |  |  |  |  |  |
| B-1 | Dismantling and reconstruction of existing OCS | Dismantling and reconstruction of existing OCS,some/all of the followings based on the design: foundations,poles,portals, drop arms,catenary with automatic/fixed tensioning,cantilevers with brackets,insulators,anchor ties,bypass feeder with tensioning/sunspension/brackets,disconnetor,earthing, all kinds of calmps and connections | left or right station | 2 | 62,098.58 | 124,197.17 | 4/1.2.5.1.2.2 |
| B-2 | Civil works | OCS related civil works. |  |  |  |  |  |
| 1 | Foundations of poles | Mark location, excavate and transport,excavated material, cast foundations for OCS poles and insert holding down bolts,average volume 3.0 m 3 . | left or right station | 2 | 7,805.78 | 15,611.55 | 4/1.2.5.1.2.2 |
| 2 | Foundations of anchors | Mark location, excavate and transport,excavated material, construct anchor foundations and insert anchor loop. | left or right station | 2 | 1,864.47 | 3,728.93 | 4/1.2.5.1.2.2 |
| 3 | OCS poles and portals | Supply and errect poles and portals. | left or right station | 2 | 9,191.83 | 18,383.66 | 4/1.2.5.1.2.2 |
| B-3 | Electrical works | New OCS electrical works according to new alignment and station plan. |  |  |  |  |  |
| 1 | Single cantilever | Material supply and assembly installation with breckets and insulators. | left or right station | 2 | 61,946.63 | 123,893.26 | 4/1.2.5.1.2.2 |
| 2 | Twin cantilever | Material supply and assembly installation with breckets and insulators. | left or right station | 2 | 54,714.77 | 109,429.53 | 4/1.2.5.1.2.2 |
| 3 | Anchor tie | Material supply and assembly installation with ties and brackets. | left or right station | 2 | 9,366.93 | 18,733.86 | 4/1.2.5.1.2.2 |
| 4 | Mid-point | Material supply and assembly installation with ropes and clamps. | left or right station | 2 | 2,349.17 | 4,698.33 | 4/1.2.5.1.2.2 |
| 5 | Fixed end | Catenary end on a pole with brackets but without pulleys and balance weights. | left or right station | 2 | 4,832.15 | 9,664.29 | 4/1.2.5.1.2.2 |
| 6 | Automatic tensioning | Catenary end on a pole with brackets,pulleys and balance weights. | left or right station | 2 | 35,460.52 | 70,921.04 | 4/1.2.5.1.2.2 |
| 7 | Drop arm | Supply and installation of drop arms on portals. | left or right station | 2 | 1,018.47 | 2,036.94 | 4/1.2.5.1.2.2 |

7 Overhead contact system

| No | Item | Description | Unit | No. of Unit | Unit Price (USD) | Total Price (USD) | No. of books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 8 | OCS Catenary | Installation and material suppy of Ri100 contact line,Bzll 65 messeger wire,droppers,cut-in insulators and connecting strand,including carry interventions on existing 25 kV network, ensure safety of site during construction and make provisional connections for phased opening to traffic of new reconstructed track sections. | left or right station | 2 | 195,632.14 | 391,264.27 | 4/1.2.5.1.2.2 |
| 9 | Section insulator | Supply and installation of section insulator. | station | 1 | 28,621.18 | 28,621.18 | 4/1.2.5.1.2.2 |
| 10 | Disconnectors | Hand drive,leverage and brackets. | station | 1 | 21,261.44 | 21,261.44 | 4/1.2.5.1.2.2 |
| 11 | Disconnectors | Motor drive,leverage and brackets. | station | 1 | 52,038.50 | 52,038.50 | 4/1.2.5.1.2.2 |
| B-4 | Return conductor and earthing | Some/all of the followings based on the design:connection of TSP,cross bond,all kinds of metalltic constructions' earthing such as OCS poles ,fences and sound barriers.Double earthing with separate earthing and to rails via spark gap,earthing in the tunnel. | left or right station | 2 | 9,277.72 | 18,555.44 | 4/1.2.5.1.2.2 |
| B-5 | Miscellaneous | Other relevant works. |  |  |  |  |  |
| 1 | Compeletion of works | Inspect and test completed works and energize the OCS. | left or right station | 2 | 4,956.05 | 9,912.10 | 4/1.2.5.1.2.2 |
| C | Electric traction fixed installations-OCS Novi Belgrade - Zemun |  |  |  |  |  |  |
| C-1 | Dismantling and reconstruction of existing OCS | Dismantling and reconstruction of existing OCS,some/all of the followings based on the design: foundations,poles,portals,drop arms,catenary with automatic/fixed tensioning,cantilevers with brackets,insulators, anchor ties,bypass feeder with tensioning/sunspension/brackets,disconnetor,earthing, all kinds of calmps and connections | left or right open track | 2 | 40,166.40 | 80,332.79 | 4/1.2.5.1.2.3 |
| C-2 | Civil works | OCS related civil works. |  |  |  |  |  |
| 1 | Foundations of poles | Mark location, excavate and transport,excavated material, cast foundations for OCS poles and insert holding down bolts,average volume 3.0m3. | left or right open track | 2 | 2,232.17 | 4,464.34 | 4/1.2.5.1.2.3 |
| 2 | OCS poles and portals | Supply and errect poles and portals. | left or right open track | 2 | 106,191.73 | 212,383.45 | 4/1.2.5.1.2.3 |
| C-3 | Electrical works | New OCS electrical works according to new alignment and station plan. |  |  |  |  |  |
| 1 | Single cantilever | Material supply and assembly installation with breckets and insulators. | left or right open track | 2 | 28,000.33 | 56,000.66 | 4/1.2.5.1.2.3 |

7 Overhead contact system

| No | Item | Description | Unit | No. of Unit | Unit Price (USD) | Total Price (USD) | No. of books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2 | Twin cantilever | Material supply and assembly installation with breckets and insulators. | left or right open track | 2 | 5,476.25 | 10,952.51 | 4/1.2.5.1.2.3 |
| 3 | Upper and lower extended cantilever | Material supply and assembly installation with breckets and insulators. | left or right open track | 2 | 547.63 | 1,095.25 | 4/1.2.5.1.2.3 |
| 4 | Cantilever in the tunnel | Material supply and assembly installation with breckets and insulators. | left or right open track | 2 | 76,500.90 | 153,001.80 | 4/1.2.5.1.2.3 |
| 5 | Anchor tie | Material supply and assembly installation with ties and brackets. | left or right open track | 2 | 2,500.03 | 5,000.06 | 4/1.2.5.1.2.3 |
| 6 | Mid-point | Material supply and assembly installation with ropes and clamps. | left or right open track | 2 | 2,351.22 | 4,702.44 | 4/1.2.5.1.2.3 |
| 7 | Mid-point in the tunnel | Material supply and assembly installation with ropes and clamps. | left or right open track | 2 | 1,988.12 | 3,976.24 | 4/1.2.5.1.2.3 |
| 8 | Automatic tensioning | Catenary end on a pole with brackets,pulleys and balance weights. | left or right open track | 2 | 7,887.00 | 15,774.00 | 4/1.2.5.1.2.3 |
| 9 | Drop arm | Supply and installation of drop arms on portals. | left or right open track | 2 | 31,090.40 | 62,180.79 | 4/1.2.5.1.2.3 |
| 10 | OCS Catenary | Installation and material suppy of Ri100 contact line,Bzll 65 messeger wire,droppers,cut-in insulators and connecting strand,including carry interventions on existing 25 kV network, ensure safety of site during construction and make provisional connections for phased opening to traffic of new reconstructed track sections. | left or right open track | 2 | 179,759.06 | 359,518.12 | 4/1.2.5.1.2.3 |
| C-4 | Return conductor and earthing | Some/all of the followings based on the design:connection of TSP,cross bond,all kinds of metalltic constructions' earthing such as OCS poles ,fences and sound barriers.Double earthing with separate earthing and to rails via spark gap,earthing in the tunnel. | left or right open track | 2 | 12,775.45 | 25,550.90 | 4/1.2.5.1.2.3 |
| C-5 | Miscellaneous | Other relevant works. |  |  |  |  |  |
| 1 | Compeletion of works | Inspect and test completed works and energize the OCS. | left or right open track | 2 | 4,960.38 | 9,920.75 | 4/1.2.5.1.2.3 |
| D | Electric traction fixed installations-OCS Zemun |  |  |  |  |  |  |

## 7 Overhead contact system

| No | Item | Description | Unit | No. of Unit | Unit Price (USD) | Total Price (USD) | No. of books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| D-1 | Dismantling and reconstruction of existing OCS | Dismantling and reconstruction of existing OCS,some/all of the followings based on the design: foundations,poles,portals,drop arms,catenary with automatic/fixed tensioning,cantilevers with brackets,insulators,anchor ties,bypass feeder with tensioning/sunspension/brackets,disconnetor,earthing, all kinds of calmps and connections. | left or right station | 2 | 102,769.76 | 205,539.52 | 4/1.2.5.1.2.4 |
| D-2 | Civil works | OCS related civil works. |  |  |  |  |  |
| 1 | Foundations of poles | Mark location, excavate and transport,excavated material, cast foundations for OCS poles and insert holding down bolts,average volume 3.0 m 3 . | left or right station | 2 | 16,178.06 | 32,356.13 | 4/1.2.5.1.2.4 |
| 2 | Foundations of anchors | Mark location, excavate and transport,excavated material, construct anchor foundations and insert anchor loop. | left or right station | 2 | 2,798.25 | 5,596.49 | 4/1.2.5.1.2.4 |
| 3 | OCS poles | Supply and errect poles. | left or right station | 2 | 19,723.11 | 39,446.21 | 4/1.2.5.1.2.4 |
| 4 | OCS portals | Supply and errect portals. | station | 1 | 4,165.39 | 4,165.39 | 4/1.2.5.1.2.4 |
| D-3 | Electrical works | New OCS electrical works according to new alignment and station plan. |  |  |  |  |  |
| 1 | Single cantilever | Material supply and assembly installation with breckets and insulators. | left or right station | 2 | 94,637.59 | 189,275.18 | 4/1.2.5.1.2.4 |
| 2 | Twin cantilever | Material supply and assembly installation with breckets and insulators. | left or right station | 2 | 73,905.86 | 147,811.73 | 4/1.2.5.1.2.4 |
| 3 | Anchor tie | Material supply and assembly installation with ties and brackets. | left or right station | 2 | 14,370.58 | 28,741.17 | 4/1.2.5.1.2.4 |
| 4 | Mid-point | Material supply and assembly installation with ropes and clamps. | left or right station | 2 | 7,051.40 | 14,102.81 | 4/1.2.5.1.2.4 |
| 5 | Fixed end | Catenary end on a pole with brackets but without pulleys and balance weights. | left or right station | 2 | 5,318.31 | 10,636.61 | 4/1.2.5.1.2.4 |
| 6 | Automatic tensioning | Catenary end on a pole with brackets,pulleys and balance weights. | left or right station | 2 | 51,249.13 | 102,498.27 | 4/1.2.5.1.2.4 |
| 7 | Drop arm | Supply and installation of drop arms on portals. | left or right station | 2 | 4,585.64 | 9,171.29 | 4/1.2.5.1.2.4 |

7 Overhead contact system

| No | Item | Description | Unit | No. of Unit | Unit Price (USD) | Total Price (USD) | No. of books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 8 | OCS Catenary | Installation and material suppy of Ri100 contact line,Bzll 65 messeger wire,droppers,cut-in insulators and connecting strand,including carry interventions on existing 25 kV network, ensure safety of site during construction and make provisional connections for phased opening to traffic of new reconstructed track sections. | left or right station | 2 | 339,069.92 | 678,139.85 | 4/1.2.5.1.2.4 |
| 9 | Bypass feeder | Installation and material suppy of Cu150mm2 bypass feeder along with tensioning,brackets,suspension and connections to OCS. | left or right station | 2 | 55,302.95 | 110,605.90 | 4/1.2.5.1.2.4 |
| 10 | Section insulator | Supply and installation of section insulator. | station | 1 | 40,091.85 | 40,091.85 | 4/1.2.5.1.2.4 |
| 11 | Disconnectors | Hand drive,leverage and brackets. | station | 1 | 42,546.45 | 42,546.45 | 4/1.2.5.1.2.4 |
| 12 | Disconnectors | Motor drive,leverage and brackets. | station | 1 | 66,943.72 | 66,943.72 | 4/1.2.5.1.2.4 |
| D-4 | Return conductor and earthing | Some/all of the followings based on the design:connection of TSP, cross bond, all kinds of metalltic constructions' earthing such as OCS poles ,fences and sound barriers.Double earthing with separate earthing and to rails via spark gap,earthing in the tunnel. | left or right station | 2 | 37,491.61 | 74,983.21 | 4/1.2.5.1.2.4 |
| D-5 | Miscellaneous | Other relevant works. |  |  |  |  |  |
| 1 | Compeletion of works | Inspect and test completed works and energize the OCS. | left or right station | 2 | 8,925.83 | 17,851.66 | 4/1.2.5.1.2.4 |
| E | Electric traction fixed installations-OCS Zemun - Zemun Polje |  |  |  |  |  |  |
| E-1 | Dismantling and reconstruction of existing OCS | Dismantling and reconstruction of existing OCS,some/all of the followings based on the design: foundations,poles,portals,drop arms,catenary with automatic/fixed tensioning,cantilevers with brackets,insulators, anchor ties,bypass feeder with tensioning/sunspension/brackets, disconnetor,earthing, all kinds of calmps and connections. | left or right open track | 2 | 25,884.66 | 51,769.32 | 4/1.2.5.1.2.5 |
| E-2 | Civil works | OCS related civil works. |  |  |  |  |  |
| 1 | Foundations of poles | Mark location, excavate and transport,excavated material, cast foundations for OCS poles and insert holding down bolts,average volume 3 m 3 . | left or right open track | 2 | 13,930.86 | 27,861.73 | 4/1.2.5.1.2.5 |
| 2 | Foundations of anchors | Mark location, excavate and transport,excavated material, construct anchor foundations and insert anchor loop. | left or right open track | 2 | 1,552.83 | 3,105.65 | 4/1.2.5.1.2.5 |
| 3 | OCS poles | Supply and errect poles. | left or right open track | 2 | 16,243.55 | 32,487.10 | 4/1.2.5.1.2.5 |

7 Overhead contact system

| No | Item | Description | Unit | No. of Unit | Unit Price (USD) | Total Price (USD) | No. of books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| E-3 | Electrical works | New OCS electrical works according to new alignment and station plan. |  |  |  |  |  |
| 1 | Single cantilever | Material supply and assembly installation with breckets and insulators. | left or right open track | 2 | 51,925.35 | 103,850.70 | 4/1.2.5.1.2.5 |
| 2 | Twin cantilever | Material supply and assembly installation with breckets and insulators. | left or right open track | 2 | 10,936.66 | 21,873.32 | 4/1.2.5.1.2.5 |
| 3 | Upper and lower extended cantilever | Material supply and assembly installation with breckets and insulators. | left or right open track | 2 | 410.12 | 820.25 | 4/1.2.5.1.2.5 |
| 4 | Anchor tie | Material supply and assembly installation with ties and brackets. | left or right open track | 2 | 4,992.82 | 9,985.64 | 4/1.2.5.1.2.5 |
| 5 | Mid-point | Material supply and assembly installation with ropes and clamps. | left or right open track | 2 | 3,521.72 | 7,043.45 | 4/1.2.5.1.2.5 |
| 6 | Automatic tensioning | Catenary end on a pole with brackets,pulleys and balance weights. | left or right open track | 2 | 15,751.16 | 31,502.33 | 4/1.2.5.1.2.5 |
| 7 | OCS Catenary | Installation and material suppy of Ri100 contact line,Bzll 65 messeger wire,droppers,cut-in insulators and connecting strand,including carry interventions on existing 25 kV network, ensure safety of site during construction and make provisional connections for phased opening to traffic of new reconstructed track sections. | left or right open track | 2 | 145,510.05 | 291,020.10 | 4/1.2.5.1.2.5 |
| 8 | Bypass feeder tensioning | Installation and material suppy. | left or right open track | 2 | 572.09 | 1,144.19 | 4/1.2.5.1.2.5 |
| 9 | Bypass feeder suspensiong fittings | Installation and material suppy. | left or right open track | 2 | 1,337.36 | 2,674.73 | 4/1.2.5.1.2.5 |
| 10 | Neutral Section | Supply and installation of neutral section made of two section insulators. | left or right open track | 2 | 9,153.51 | 18,307.01 | 4/1.2.5.1.2.5 |
| E-4 | Return conductor and earthing | Some/all of the followings based on the design:connection of TSP,cross bond,all kinds of metalltic constructions' earthing such as OCS poles ,fences and sound barriers.Double earthing with separate earthing and to rails via spark gap,earthing in the tunnel. | left or right open track | 2 | 36,443.14 | 72,886.28 | 4/1.2.5.1.2.5 |
| E-5 | Miscellaneous | Other relevant works. |  |  |  |  | 4/1.2.5.1.2.5 |
| 1 | Compeletion of works | Inspect and test completed works and energize the OCS. | left or right open track | 2 | 3,467.24 | 6,934.47 | 4/1.2.5.1.2.5 |
| F | Electric traction fixed installations-OCS Zemun Polje |  |  |  |  |  |  |

7 Overhead contact system

| No | Item | Description | Unit | No. of Unit | Unit Price (USD) | Total Price (USD) | No. of books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| F-1 | Dismantling and reconstruction of existing OCS | Dismantling and reconstruction of existing OCS,some/all of the followings based on the design: foundations,poles,portals, drop arms,catenary with automatic/fixed tensioning,cantilevers with brackets,insulators,anchor ties,bypass feeder with tensioning/sunspension/brackets,disconnetor,earthing, all kinds of calmps and connections. | left or right station | 2 | 56,411.80 | 112,823.61 | 4/1.2.5.1.2.6 |
| F-2 | Civil works | OCS related civil works. |  |  |  |  |  |
| 1 | Foundations of poles | Mark location, excavate and transport,excavated material, cast foundations for OCS poles and insert holding down bolts,average volume 3.0 m 3 . | left or right station | 2 | 13,924.16 | 27,848.33 | 4/1.2.5.1.2.6 |
| 2 | Foundations of anchors | Mark location, excavate and transport,excavated material, construct anchor foundations and insert anchor loop. | left or right station | 2 | 6,829.15 | 13,658.31 | 4/1.2.5.1.2.6 |
| 3 | Foundations of portal poles | Mark location, excavate and transport,excavated material, cast foundations for rigid portal poles,average volume 5.5 m 3 . | station | 1 | 68,618.28 | 68,618.28 | 4/1.2.5.1.2.6 |
| 4 | OCS poles | Supply and errect poles. | left or right station | 2 | 15,881.06 | 31,762.13 | 4/1.2.5.1.2.6 |
| 5 | OCS portals | Supply and errect portals. | staion | 1 | 99,808.41 | 99,808.41 | 4/1.2.5.1.2.6 |
| 6 | Fences | Supply and erect safety wire fences. | left or right station | 2 | 1,033.73 | 2,067.46 | 4/1.2.5.1.2.6 |
| F-3 | Electrical works | New OCS electrical works according to new alignment and station plan. |  |  |  |  |  |
| 1 | Single cantilever | Material supply and assembly installation with breckets and insulators. | left or right station | 2 | 35,265.64 | 70,531.28 | 4/1.2.5.1.2.6 |
| 2 | Twin cantilever | Material supply and assembly installation with breckets and insulators. | left or right station | 2 | 36,893.47 | 73,786.93 | 4/1.2.5.1.2.6 |
| 3 | Anchor tie | Material supply and assembly installation with ties and brackets. | left or right station | 2 | 6,861.83 | 13,723.66 | 4/1.2.5.1.2.6 |
| 4 | Mid-point | Material supply and assembly installation with ropes and clamps. | left or right station | 2 | 1,485.24 | 2,970.49 | 4/1.2.5.1.2.6 |
| 5 | Fixed end | Catenary end on a pole with brackets but without pulleys and balance weights. | left or right station | 2 | 5,309.75 | 10,619.50 | 4/1.2.5.1.2.6 |
| 6 | Automatic tensioning | Catenary end on a pole with brackets,pulleys and balance weights. | left or right station | 2 | 23,615.38 | 47,230.77 | 4/1.2.5.1.2.6 |
| 7 | Drop arm | Supply and installation of drop arms on portals. | left or right station | 2 | 12,208.71 | 24,417.42 | 4/1.2.5.1.2.6 |

7 Overhead contact system

| No | Item | Description | Unit | No. of Unit | Unit Price (USD) | Total Price (USD) | No. of books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 8 | OCS Catenary | Installation and material suppy of Ri100 contact line,Bzll 65 messeger wire,droppers,cut-in insulators and connecting strand,including carry interventions on existing 25 kV network, ensure safety of site during construction and make provisional connections for phased opening to traffic of new reconstructed track sections. | left or right station | 2 | 143,240.67 | 286,481.34 | 4/1.2.5.1.2.6 |
| 9 | Section insulator | Supply and installation of section insulator. | station | 1 | 22,872.76 | 22,872.76 | 4/1.2.5.1.2.6 |
| 10 | Disconnectors | Hand drive,leverage and brackets. | station | 1 | 74,262.21 | 74,262.21 | 4/1.2.5.1.2.6 |
| F-4 | Return conductor and earthing | Some/all of the followings based on the design:connection of TSP,cross bond,all kinds of metalltic constructions' earthing such as OCS poles ,fences and sound barriers.Double earthing with separate earthing and to rails via spark gap,earthing in the tunnel. | left or right station | 2 | 26,192.28 | 52,384.56 | 4/1.2.5.1.2.6 |
| F-5 | Miscellaneous | Other relevant works. |  |  |  |  |  |
| 1 | Compeletion of works | Inspect and test completed works and energize the OCS. | left or right station | 2 | 4,950.81 | 9,901.63 | 4/1.2.5.1.2.6 |
| G | Electric traction fixed installations-OCS Zemun Polje - Batajnica |  |  |  |  |  |  |
| G-1 | Dismantling and reconstruction of existing OCS | Dismantling and reconstruction of existing OCS,some/all of the followings based on the design: foundations,poles,portals,drop arms,catenary with automatic/fixed tensioning,cantilevers with brackets, insulators, anchor ties,bypass feeder with tensioning/sunspension/brackets, disconnetor,earthing, all kinds of calmps and connections. | left or right open track | 2 | 66,337.72 | 132,675.44 | 4/1.2.5.1.2.7 |
| G-2 | Civil works | OCS related civil works. |  |  |  |  |  |
| 1 | Foundations of poles | Mark location, excavate and transport,excavated material, cast foundations for OCS poles and insert holding down bolts,average volume 3.0 m 3 . | left or right open track | 2 | 4,458.78 | 8,917.56 | 4/1.2.5.1.2.7 |
| 2 | OCS poles | Supply and errect poles. | left or right open track | 2 | 3,415.42 | 6,830.85 | 4/1.2.5.1.2.7 |
| 3 | Fences | Supply and erect safety wire fences. | left or right open track | 2 | 2,586.09 | 5,172.18 | 4/1.2.5.1.2.7 |
| G-3 | Electrical works | New OCS electrical works according to new alignment and station plan. |  |  |  |  |  |
| 1 | Single cantilever | Material supply and assembly installation with breckets and insulators. | left or right open track | 2 | 101,208.35 | 202,416.69 | 4/1.2.5.1.2.7 |

7 Overhead contact system

| No | Item | Description | Unit | No. of Unit | Unit Price (USD) | Total Price (USD) | No. of books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2 | Twin cantilever | Material supply and assembly installation with breckets and insulators. | left or right open track | 2 | 21,877.74 | 43,755.49 | 4/1.2.5.1.2.7 |
| 3 | Upper and lower extended cantilever | Material supply and assembly installation with breckets and insulators. | left or right open track | 2 | 546.94 | 1,093.89 | 4/1.2.5.1.2.7 |
| 4 | Anchor tie | Material supply and assembly installation with ties and brackets. | left or right open track | 2 | 9,987.67 | 19,975.33 | 4/1.2.5.1.2.7 |
| 5 | Mid-point | Material supply and assembly installation with ropes and clamps. | left or right open track | 2 | 9,393.16 | 18,786.32 | 4/1.2.5.1.2.7 |
| 6 | Automatic tensioning | Catenary end on a pole with brackets,pulleys and balance weights. | left or right open track | 2 | 31,508.71 | 63,017.41 | 4/1.2.5.1.2.7 |
| 7 | OCS Catenary | Installation and material suppy of Ri100 contact line,Bzll 65 messeger wire,droppers,cut-in insulators and connecting strand,including carry interventions on existing 25 kV network, ensure safety of site during construction and make provisional connections for phased opening to traffic of new reconstructed track sections. | left or right open track | 2 | 299,486.30 | 598,972.59 | 4/1.2.5.1.2.7 |
| G-4 | Return conductor and earthing | Some/all of the followings based on the design:connection of TSP,cross bond, all kinds of metalltic constructions' earthing such as OCS poles ,fences and sound barriers.Double earthing with separate earthing and to rails via spark gap,earthing in the tunnel. | left or right open track | 2 | 11,228.69 | 22,457.39 | 4/1.2.5.1.2.7 |
| G-5 | Miscellaneous | Other relevant works. |  |  |  |  |  |
| 1 | Compeletion of works | Inspect and test completed works and energize the OCS. | left or right open track | 2 | 4,954.20 | 9,908.40 | 4/1.2.5.1.2.7 |
| H | Electric traction fixed installations-OCS Batajnica |  |  |  |  |  |  |
| H-1 | Dismantling and reconstruction of existing OCS | Dismantling and reconstruction of existing OCS,some/all of the followings based on the design: foundations,poles,portals,drop arms,catenary with automatic/fixed tensioning,cantilevers with brackets,insulators,anchor ties,bypass feeder with tensioning/sunspension/brackets, disconnetor,earthing, all kinds of calmps and connections. | left or right station | 2 | 152,459.73 | 304,919.47 | 4/1.2.5.1.2.8 |
| H-2 | Civil works | OCS related civil works. |  |  |  |  |  |
| 1 | Foundations of poles | Mark location, excavate and transport,excavated material, cast foundations for OCS poles and insert holding down bolts,average volume 3.6 m 3 . | left or right station | 2 | 39,054.66 | 78,109.33 | 4/1.2.5.1.2.8 |

7 Overhead contact system

| No | Item | Description | Unit | No. of Unit | Unit Price (USD) | Total Price (USD) | No. of books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2 | Foundations of anchors | Mark location, excavate and transport,excavated material, construct anchor foundations and insert anchor loop. | left or right station | 2 | 11,505.13 | 23,010.26 | 4/1.2.5.1.2.8 |
| 3 | Foundations of portal poles | Mark location, excavate and transport,excavated material, cast foundations for rigid portal poles,average volume 6.7 m 3 . | station | 1 | 73,318.62 | 73,318.62 | 4/1.2.5.1.2.8 |
| 4 | OCS poles | Supply and errect poles. | left or right station | 2 | 44,153.49 | 88,306.98 | 4/1.2.5.1.2.8 |
| 5 | OCS portals | Supply and errect portals. | station | 1 | 204,806.52 | 204,806.52 | 4/1.2.5.1.2.8 |
| H-3 | Electrical works | New OCS electrical works according to new alignment and station plan. |  |  |  |  |  |
| 1 | Single cantilever | Material supply and assembly installation with breckets and insulators. | left or right station | 2 | 130,640.45 | 261,280.90 | 4/1.2.5.1.2.8 |
| 2 | Twin cantilever | Material supply and assembly installation with breckets and insulators. | left or right station | 2 | 93,076.56 | 186,153.12 | 4/1.2.5.1.2.8 |
| 3 | Anchor tie | Material supply and assembly installation with ties and brackets. | left or right station | 2 | 14,372.12 | 28,744.23 | 4/1.2.5.1.2.8 |
| 4 | Mid-point | Material supply and assembly installation with ropes and clamps. | left or right station | 2 | 5,951.19 | 11,902.37 | 4/1.2.5.1.2.8 |
| 5 | Fixed end | Catenary end on a pole with brackets but without pulleys and balance weights. | left or right station | 2 | 6,769.47 | 13,538.95 | 4/1.2.5.1.2.8 |
| 6 | Automatic tensioning | Catenary end on a pole with brackets, pulleys and balance weights. | left or right station | 2 | 76,881.89 | 153,763.79 | 4/1.2.5.1.2.8 |
| 7 | Drop arm | Supply and installation of drop arms on portals. | left or right station | 2 | 37,708.21 | 75,416.41 | 4/1.2.5.1.2.8 |
| 8 | OCS Catenary | Installation and material suppy of Ri100 contact line,Bzll 65 messeger wire,droppers,cut-in insulators and connecting strand,including carry interventions on existing 25 kV network, ensure safety of site during construction and make provisional connections for phased opening to traffic of new reconstructed track sections. | left or right station | 2 | 428,536.28 | 857,072.56 | 4/1.2.5.1.2.8 |
| 9 | Bypass feeder | Installation and material suppy of Cu150mm2 bypass feeder along with tensioning,brackets,suspension and connections to OCS. | left or right station | 2 | 46,786.79 | 93,573.58 | 4/1.2.5.1.2.8 |
| 10 | Section insulator | Supply and installation of section insulator. | station | 1 | 60,144.18 | 60,144.18 | 4/1.2.5.1.2.8 |
| 11 | Disconnectors | Motor drive,leverage and brackets. | station | 1 | 119,023.74 | 119,023.74 | 4/1.2.5.1.2.8 |

7 Overhead contact system

| No | Item | Description | Unit | No. <br> of Unit | Unit Price (USD) | Total Price (USD) | No. of books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| H-4 | Return conductor and earthing | Some/all of the followings based on the design:connection of TSP,cross bond,all kinds of metalltic constructions' earthing such as OCS poles ,fences and sound barriers.Double earthing with separate earthing and to rails via spark gap,earthing in the tunnel. | left or right station | 2 | 33,475.43 | 66,950.85 | 4/1.2.5.1.2.8 |
| H-5 | Miscellaneous | Other relevant works. |  |  |  |  |  |
| 1 | Compeletion of works | Inspect and test completed works and energize the OCS. | left or right station | 2 | 12,398.31 | 24,796.61 | 4/1.2.5.1.2.8 |
| 1 | Electric traction fixed installations-OCS Batajnica - Nova Pazova |  |  |  |  |  |  |
| I-1 | Dismantling exsiting OCS | Dismantling and reconstruction of existing OCS,some/all of the followings based on the design: foundations,poles,portals,drop arms,catenary with automatic/fixed tensioning,cantilevers with brackets,insulators, anchor ties,bypass feeder with tensioning/sunspension/brackets,disconnetor,earthing, all kinds of calmps and connections. | left or right open track | 2 | 51,183.91 | 102,367.83 | 4/1.2.5.1.2.9 |
| I-2 | Civil works | OCS related civil works. |  |  |  |  |  |
| 1 | Foundations of poles | Mark location, excavate and transport,excavated material, cast foundations for OCS masts of concrete C 25 (with steel bar), and insert 6 holding down bolts M39X1360 mm, average volume 1,45 m3. | left or right open track | 2 | 155,536.17 | 311,072.34 | 4/1.2.5.1.2.9 |
| 2 | Foundations of anchors | Mark location, excavate and transport,excavated material, construct anchor foundations of concrete C 25, average volume 1,41 m3 and insert anchor loop and anchor baseboard,install anchor tie with bracket. | left or right open track | 2 | 32,120.30 | 64,240.61 | 4/1.2.5.1.2.9 |
| 3 | Foundations of portal poles | Mark location, excavate and transport,excavated material, cast foundations for rigid portal masts of concrete C25 (with steel bar), average volume 4 m 3 . | open track | 1 | 59,830.77 | 59,830.77 | 4/1.2.5.1.2.9 |
| 4 | OCS poles | Supply and errect poles. | left or right open track | 2 | 196,431.46 | 392,862.91 | 4/1.2.5.1.2.9 |
| 5 | OCS portals | Supply and errect portals. | open track | 1 | 216,725.65 | 216,725.65 | 4/1.2.5.1.2.9 |
| 6 | Fences | Supply and erect safety wire fences. | left and right side open track | 1 | 25,743.92 | 25,743.92 | 4/1.2.5.1.2.9 |

7 Overhead contact system

| No | Item | Description | Unit | No. of Unit | Unit Price (USD) | Total Price (USD) | No. of books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| I-3 | Electrical works | New OCS electrical works according to new alignment and station plan. |  |  |  |  |  |
| 1 | Single cantilever | Material supply and assembly installation with breckets and insulators. | left or right open track | 2 | 130,757.65 | 261,515.30 | 4/1.2.5.1.2.9 |
| 2 | Twin cantilever | Material supply and assembly installation with breckets and insulators. | left or right open track | 2 | 56,731.97 | 113,463.93 | 4/1.2.5.1.2.9 |
| 3 | Mid-point | Material supply and assembly installation with ropes and clamps. | left or right open track | 2 | 38,663.55 | 77,327.10 | 4/1.2.5.1.2.9 |
| 4 | Separate automatic tensioning | Separate catenary end on a pole with brackets,pulleys and balance weights. | left or right open track | 2 | 87,958.39 | 175,916.77 | 4/1.2.5.1.2.9 |
| 5 | Drop arm | Supply and installation of drop arms on portals. | left or right open track | 2 | 14,588.22 | 29,176.44 | 4/1.2.5.1.2.9 |
| 6 | OCS Catenary | Installation and material suppy of Ri100 contact line,Bzll 65 messeger wire,droppers,cut-in insulators and connecting strand,including carry interventions on existing 25 kV network, ensure safety of site during construction and make provisional connections for phased opening to traffic of new reconstructed track sections. | left or right open track | 2 | 767,275.22 | 1,534,550.45 | 4/1.2.5.1.2.9 |
| 7 | Bypass feeder | Installation and material suppy of ACSR240 bypass feeder along with tensioning,brackets,suspension and connections to OCS. | left or right open track | 2 | 44,942.50 | 89,885.01 | 4/1.2.5.1.2.9 |
| 8 | Neutral section | Supply and installation of neutral section made of two section insulators. | left or right open track | 2 | 1,835.45 | 3,670.89 | 4/1.2.5.1.2.9 |
| 9 | Automatic neutral section passing device | Supply and installation of automatic neutral section passing device. | set | 2 | 16,092.33 | 32,184.66 | 4/1.2.5.1.2.9 |
| 10 | Disconnectors | Hand drive,leverage and brackets. | left or right open track | 2 | 24,947.76 | 49,895.53 | 4/1.2.5.1.2.9 |
| 11 | Arresters | Zink-Oxide arrester,leverage and brackets. | left or right open track | 2 | 7,723.18 | 15,446.35 | 4/1.2.5.1.2.9 |
| I-4 | Return conductor and earthing | Return circuits and kinds of earthing. |  |  |  |  |  |
| 1 | Return wire | Return wire of ACSR-240 with brackets,suspension and tensioning. | left or right open track | 2 | 39,109.54 | 78,219.08 | 4/1.2.5.1.2.9 |

7 Overhead contact system

| No | Item | Description | Unit | No. of Unit | Unit Price (USD) | Total Price (USD) | No. of books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2 | Other works of return conductor and earthing | Some/all of the followings based on the design:boosting wire,connection of TSP, cross bond,separate grounding, all kinds of metalltic constructions' earthing such as OCS poles ,fences and sound barriers.Double earthing with separate earthing and to rails via spark gap, earthing in the tunnel. | left or right open track | 2 | 127,460.65 | 254,921.30 | 4/1.2.5.1.2.9 |
| I-5 | Miscellaneous | Other relevant works. |  |  |  |  |  |
| 1 | Compeletion of works | Inspect and test completed works and energize the OCS. | left or right open track | 2 | 19,864.13 | 39,728.27 | 4/1.2.5.1.2.9 |
| J | Electric traction fixed installations-OCS Nova Pazova |  |  |  |  |  |  |
| J-1 | Dismantling exsiting OCS | Dismantling and reconstruction of existing OCS,some/all of the followings based on the design: foundations,poles,portals,drop arms,catenary with automatic/fixed tensioning,cantilevers with brackets,insulators,anchor ties,bypass feeder with tensioning/sunspension/brackets,disconnetor,earthing, all kinds of calmps and connections. | left or right station | 2 | 64,304.24 | 128,608.48 | 4/1.2.5.1.2.10 |
| J-2 | Civil works | OCS related civil works. |  |  |  |  |  |
| 1 | Foundations of poles | Mark location, excavate and transport,excavated material, cast foundations for OCS masts of concrete C 25 (with steel bar), and insert 6 holding down bolts M39X1360 mm, average volume 1,45 m3. | left or right station | 2 | 43,999.48 | 87,998.95 | 4/1.2.5.1.2.10 |
| 2 | Foundations of anchors | Mark location, excavate and transport,excavated material, construct anchor foundations of concrete C 25, average volume 1,41 m3 and insert anchor loop and anchor baseboard, install anchor tie with bracket. | left or right station | 2 | 19,634.65 | 39,269.31 | 4/1.2.5.1.2.10 |
| 3 | Foundations of portal poles | Mark location, excavate and transport,excavated material, cast foundations for rigid portal masts of concrete C25 (with steel bar), average volume 4 m 3 . | station | 1 | 95,579.12 | 95,579.12 | 4/1.2.5.1.2.10 |
| 4 | OCS poles | Supply and errect poles. | left or right station | 2 | 61,759.91 | 123,519.83 | 4/1.2.5.1.2.10 |
| 5 | OCS portals | Supply and errect portals. | station | 1 | 318,914.40 | 318,914.40 | 4/1.2.5.1.2.10 |
| J-3 | Electrical works | New OCS electrical works according to new alignment and station plan. |  |  |  |  |  |
| 1 | Single cantilever | Material supply and assembly installation with breckets and insulators. | left or right station | 2 | 66,695.35 | 133,390.71 | 4/1.2.5.1.2.10 |

7 Overhead contact system

| No | Item | Description | Unit | No. of Unit | Unit Price (USD) | Total Price (USD) | No. of books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2 | Twin cantilever | Material supply and assembly installation with breckets and insulators. | left or right station | 2 | 76,872.65 | 153,745.30 | 4/1.2.5.1.2.10 |
| 3 | Mid-point | Material supply and assembly installation with ropes and clamps. | left or right station | 2 | 34,742.63 | 69,485.26 | 4/1.2.5.1.2.10 |
| 4 | Separate fixed end | Separate catenary end on a pole with brackets but without pulleys and balance weights. | left or right station | 2 | 2,441.84 | 4,883.67 | 4/1.2.5.1.2.10 |
| 5 | Separate automatic tensioning | Separate catenary end on a pole with brackets, pulleys and balance weights. | left or right station | 2 | 61,474.32 | 122,948.64 | 4/1.2.5.1.2.10 |
| 6 | Drop arm | Supply and installation of drop arms on portals. | left or right station | 2 | 24,846.76 | 49,693.53 | 4/1.2.5.1.2.10 |
| 7 | OCS Catenary | Installation and material suppy of Ri100 contact line,Bzll 65 messeger wire,droppers,cut-in insulators and connecting strand,including carry interventions on existing 25 kV network, ensure safety of site during construction and make provisional connections for phased opening to traffic of new reconstructed track sections. | left or right station | 2 | 319,588.72 | 639,177.43 | 4/1.2.5.1.2.10 |
| 8 | Section insulators | Supply and installation of section insulators. | station | 1 | 35,711.27 | 35,711.27 | 4/1.2.5.1.2.10 |
| 9 | Disconnectors | Hand drive,leverage and brackets. | station | 1 | 6,227.16 | 6,227.16 | 4/1.2.5.1.2.10 |
| 10 | Disconnectors | Motor drive,leverage and brackets. | station | 1 | 99,729.77 | 99,729.77 | 4/1.2.5.1.2.10 |
| J-4 | Return conductor and earthing | Return circuits and kinds of earthing. |  |  |  |  |  |
| 1 | Return wire | Return wire of ACSR-240 with brackets,suspension and tensioning. | left or right station | 2 | 10,485.74 | 20,971.48 | 4/1.2.5.1.2.10 |
| 2 | Other works of return conductor and earthing | Some/all of the followings based on the design:boosting wire,connection of TSP, cross bond,separate grounding, all kinds of metalltic constructions' earthing such as OCS poles ,fences and sound barriers.Double earthing with separate earthing and to rails via spark gap,earthing in the tunnel. | left or right station | 2 | 40,197.94 | 80,395.88 | 4/1.2.5.1.2.10 |
| J-5 | Miscellaneous | Other relevant works. |  |  |  |  |  |
| 1 | Compeletion of works | Inspect and test completed works and energize the OCS. | left or right station | 2 | 9,916.49 | 19,832.98 | 4/1.2.5.1.2.10 |
| K | Electric traction fixed installations-OCS Nova Pazova - Stara Pazova |  |  |  |  |  |  |

7 Overhead contact system

| No | Item | Description | Unit | No. of Unit | Unit Price (USD) | Total Price (USD) | No. of books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| K-1 | Dismantling exsiting OCS | Dismantling and reconstruction of existing OCS,some/all of the followings based on the design: foundations,poles,portals,drop arms,catenary with automatic/fixed tensioning,cantilevers with brackets,insulators,anchor ties,bypass feeder with tensioning/sunspension/brackets, disconnetor,earthing, all kinds of calmps and connections. | left or right open track | 2 | 73,706.68 | 147,413.37 | 4/1.2.5.1.2.11 |
| K-2 | Civil works | OCS related civil works. |  |  |  |  |  |
| 1 | Foundations of poles | Mark location, excavate and transport,excavated material, cast foundations for OCS masts of concrete C 25 (with steel bar), and insert 6 holding down bolts M39X1360 mm, average volume $1,45 \mathrm{~m} 3$. | left or right open track | 2 | 240,263.09 | 480,526.17 | 4/1.2.5.1.2.11 |
| 2 | Foundations of anchors | Mark location, excavate and transport,excavated material, construct anchor foundations of concrete C 25, average volume $1,41 \mathrm{~m} 3$ and insert anchor loop and anchor baseboard,install anchor tie with bracket. | left or right open track | 2 | 37,919.07 | 75,838.14 | 4/1.2.5.1.2.11 |
| 3 | OCS poles | Supply and errect poles. | left or right open track | 2 | 299,120.86 | 598,241.71 | 4/1.2.5.1.2.11 |
| 4 | Fences | Supply and erect safety wire fences. | left or right open track | 2 | 12,837.81 | 25,675.61 | 4/1.2.5.1.2.11 |
| K-3 | Electrical works | New OCS electrical works according to new alignment and station plan. |  |  |  |  |  |
| 1 | Single cantilever | Material supply and assembly installation with breckets and insulators. | left or right open track | 2 | 192,781.04 | 385,562.08 | 4/1.2.5.1.2.11 |
| 2 | Twin cantilever | Material supply and assembly installation with breckets and insulators. | left or right open track | 2 | 60,622.97 | 121,245.94 | 4/1.2.5.1.2.11 |
| 3 | Mid-point | Material supply and assembly installation with ropes and clamps. | left or right open track | 2 | 30,848.77 | 61,697.54 | 4/1.2.5.1.2.11 |
| 4 | Separate automatic tensioning | Separate catenary end on a pole with brackets,pulleys and balance weights. | left or right open track | 2 | 87,725.00 | 175,450.00 | 4/1.2.5.1.2.11 |
| 5 | Drop arm | Supply and installation of drop arms on portals. | left or right open track | 2 | 2,567.56 | 5,135.12 | 4/1.2.5.1.2.11 |

7 Overhead contact system

| No | Item | Description | Unit | No. of Unit | Unit Price (USD) | Total Price (USD) | No. of books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 6 | OCS Catenary | Installation and material suppy of Ri100 contact line,Bzll 65 messeger wire,droppers,cut-in insulators and connecting strand,including carry interventions on existing 25 kV network, ensure safety of site during construction and make provisional connections for phased opening to traffic of new reconstructed track sections. | left or right open track | 2 | 845,436.03 | 1,690,872.05 | 4/1.2.5.1.2.11 |
| K-4 | Return conductor and earthing | Return circuits and kinds of earthing. |  |  |  |  |  |
| 1 | Return wire | Return wire of ACSR-240 with brackets,suspension and tensioning. | left or right open track | 2 | 48,452.49 | 96,904.98 | 4/1.2.5.1.2.11 |
| 2 | Other works of return conductor and earthing | Some/all of the followings based on the design:boosting wire,connection of TSP,cross bond,separate grounding,all kinds of metalltic constructions' earthing such as OCS poles ,fences and sound barriers.Double earthing with separate earthing and to rails via spark gap, earthing in the tunnel. | left or right open track | 2 | 121,381.74 | 242,763.49 | 4/1.2.5.1.2.11 |
| K-5 | Miscellaneous | Other relevant works. |  |  |  |  |  |
| 1 | Compeletion of works | Inspect and test completed works and energize the OCS. | left or right open track | 2 | 19,811.43 | 39,622.86 | 4/1.2.5.1.2.11 |
| L | Electric traction fixed installations-OCS Stara Pazova |  |  |  |  |  |  |
| L-1 | Dismantling exsiting OCS | Dismantling and reconstruction of existing OCS,some/all of the followings based on the design: foundations,poles,portals,drop arms,catenary with automatic/fixed tensioning,cantilevers with brackets, insulators, anchor ties,bypass feeder with tensioning/sunspension/brackets, disconnetor,earthing, all kinds of calmps and connections. | left or right station | 2 | 105,797.64 | 211,595.28 | 4/1.2.5.1.2.12 |
| L-2 | Civil works | OCS related civil works. |  |  |  |  |  |
| 1 | Foundations of poles | Mark location, excavate and transport,excavated material, cast foundations for OCS masts of concrete C 25 (with steel bar), and insert 6 holding down bolts M39X1360 mm, average volume 1,45 m3. | left or right station | 2 | 83,333.41 | 166,666.81 | 4/1.2.5.1.2.12 |
| 2 | Foundations of anchors | Mark location, excavate and transport,excavated material, construct anchor foundations of concrete C 25, average volume 1,41 m3 and insert anchor loop and anchor baseboard,install anchor tie with bracket. | left or right station | 2 | 30,758.46 | 61,516.91 | 4/1.2.5.1.2.12 |

7 Overhead contact system

| No | Item | Description | Unit | No. of Unit | Unit Price (USD) | Total Price (USD) | No. of books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 3 | Foundations of portal poles | Mark location, excavate and transport,excavated material, cast foundations for rigid portal masts of concrete C25 (with steel bar), average volume 4 m 3 . | station | 1 | 83,624.93 | 83,624.93 | 4/1.2.5.1.2.12 |
| 4 | OCS poles | Supply and errect poles. | left or right station | 2 | 113,547.49 | 227,094.99 | 4/1.2.5.1.2.12 |
| 5 | OCS portals | Supply and errect portals. | station | 1 | 372,766.32 | 372,766.32 | 4/1.2.5.1.2.12 |
| L-3 | Electrical works | New OCS electrical works according to new alignment and station plan. |  |  |  |  |  |
| 1 | Single cantilever | Material supply and assembly installation with breckets and insulators. | left or right station | 2 | 91,757.77 | 183,515.55 | 4/1.2.5.1.2.12 |
| 2 | Twin cantilever | Material supply and assembly installation with breckets and insulators. | left or right station | 2 | 94,060.20 | 188,120.39 | 4/1.2.5.1.2.12 |
| 3 | Mid-point | Material supply and assembly installation with ropes and clamps. | left or right station | 2 | 13,509.92 | 27,019.85 | 4/1.2.5.1.2.12 |
| 4 | Separate fixed end | Separate catenary end on a pole with brackets but without pulleys and balance weights. | left or right station | 2 | 5,493.69 | 10,987.37 | 4/1.2.5.1.2.12 |
| 5 | Separate automatic tensioning | Separate catenary end on a pole with brackets, pulleys and balance weights. | left or right station | 2 | 79,031.98 | 158,063.96 | 4/1.2.5.1.2.12 |
| 6 | Drop arm | Supply and installation of drop arms on portals. | left or right station | 2 | 41,979.05 | 83,958.09 | 4/1.2.5.1.2.12 |
| 7 | OCS Catenary | Installation and material suppy of Ri100 contact line,Bzll 65 messeger wire,droppers,cut-in insulators and connecting strand,including carry interventions on existing 25 kV network, ensure safety of site during construction and make provisional connections for phased opening to traffic of new reconstructed track sections. | left or right station | 2 | 346,969.68 | 693,939.35 | 4/1.2.5.1.2.12 |
| 8 | Bypass feeder | Installation and material suppy of Cu150mm2 bypass feeder along with tensioning,brackets,suspension and connections to OCS. | left or right station | 2 | 38,514.41 | 77,028.82 | 4/1.2.5.1.2.12 |
| 9 | Section insulators | Supply and installation of section insulators. | station | 1 | 46,420.88 | 46,420.88 | 4/1.2.5.1.2.12 |
| 10 | Disconnectors | Hand drive,leverage and brackets. | station | 1 | 80,946.50 | 80,946.50 | 4/1.2.5.1.2.12 |
| 11 | Disconnectors | Motor drive,leverage and brackets. | station | 1 | 83,101.38 | 83,101.38 | 4/1.2.5.1.2.12 |
| 12 | Arresters | Zink-Oxide arrester,leverage and brackets. | left or right station | 2 | 7,710.44 | 15,420.87 | 4/1.2.5.1.2.12 |

## 7 Overhead contact system

| No | Item | Description | Unit | No. of Unit | Unit Price (USD) | Total Price (USD) | No. of books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| L-4 | Return conductor and earthing | Return circuits and kinds of earthing. |  |  |  |  |  |
| 1 | Return wire | Return wire of ACSR-240 with brackets,suspension and tensioning. | left or right station | 2 | 10,581.03 | 21,162.06 | 4/1.2.5.1.2.12 |
| 2 | Other works of return conductor and earthing | Some/all of the followings based on the design:boosting wire,connection of TSP, cross bond,separate grounding, all kinds of metalltic constructions' earthing such as OCS poles, fences and sound barriers.Double earthing with separate earthing and to rails via spark gap,earthing in the tunnel. | left or right station | 2 | 111,695.54 | 223,391.08 | 4/1.2.5.1.2.12 |
| L-5 | Miscellaneous | Other relevant works. |  |  |  |  |  |
| 1 | Compeletion of works | Inspect and test completed works and energize the OCS. | left or right station | 2 | 14,873.53 | 29,747.06 | 4/1.2.5.1.2.12 |
| Summary (USD): |  |  |  |  |  | 23,240,661.35 |  |

8 Electrical Traction Substation - EVP, PSN, PS

| No | Item | Description | Unit | No. of Unit | Unit Price (USD) | Total Price (USD) | No. of books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| A | RECONSTRUCTION OF "ZEMUN" ETS - ELECTRICAL PART |  |  |  |  |  |  |
| A-1 | DISMANTLING OF ELECTRICAL EQUIPMENTS |  |  |  |  |  |  |
| 1 | Dismantling of $110 / 27.5 \mathrm{kV}$ equipment | Include dismantling of traction transformer, 110 kV disconnector, 110 kV voltage transformer, 110 kV current voltage, 110 kV lighting arrester,auxiliary transformer, 25 kV circuit breaker, 25 kV disconnector , 25 kV voltage transformer | set | 1 | 79,746.51 | 79,746.51 | 4.1.3.1 |
| 2 | Dismantling of AC\&DC system | Include dismantling of AC cabinets, DC cabinets, DC Battery, etc | set | 1 | 5,092.71 | 5,092.71 | 4.1.3.1 |
| 3 | Dismantling of control protection panel | Include dismantling of all protection cabinets(transformer,feeder,metering,communication), etc | set | 1 | 1,354.58 | 1,354.58 | 4.1.3.1 |
| 4 | Dismantling of cables | Include dismantling of electrical and control cables, etc | set | 1 | 63,861.42 | 63,861.42 | 4.1.3.1 |
| 5 | Dismantling of outdoor lighting | Include dismantling of outdoor lighting and cables | set | 1 | 1,286.51 | 1,286.51 | 4.1.3.1 |
| A-2 | INSTALLATION WORKS |  |  |  |  |  |  |
| 1 | Detection and reinforcement of foundation | Include reinforcement foundation of traction transformer, 110 kV disconnector,110kV voltage transformer, 110 kV current voltage, 110 kV lighting arrester, lead structure | set | 1 | 22,707.90 | 22,707.90 | 4.1.3.1 |
| 2 | Detection and reinforcement of grounding grid | Include reinforcement grounding of ETS | set | 1 | 191,460.60 | 191,460.60 | 4.1.3.1 |
| 3 | Installation of 110/27.5kV equipment | Include installation of traction transformer, 110 kV disconnector, 110 kV voltage transformer, 110 kV current voltage, 110 kV lighting arrester,auxiliary transformer, 25 kV circuit breaker cabinets, 25 kV disconnector cabinets, 25 kV voltage transformer cabinets, 25 kV bus cabinets | set | 1 | 74,664.01 | 74,664.01 | 4.1.3.1 |
| 4 | Installation of AC\&DC system | Include installation of AC power supply cabinets, DC charging cabinet, DC power supply cabinet, DC battery cabinet | set | 1 | 4,887.37 | 4,887.37 | 4.1.3.1 |
| 5 | Installation and testing of control protection cabinets | Include installation and testing of all cabinets in intergrated automation system (transformer,feeder,metering,communication), etc | set | 1 | 18,991.32 | 18,991.32 | 4.1.3.1 |
| 6 | Cable laying | Include laying of all auxiliary power supply electric cables and secondary control cables | set | 1 | 145,024.91 | 145,024.91 | 4.1.3.1 |
| 7 | Installation of outdoor lighting | Include installation of lamps, cables | set | 1 | 3,904.91 | 3,904.91 | 4.1.3.1 |
| 8 | Ancillary works | Include installation of Anti mouse board, insulation pad, etc | set | 1 | 2,149.85 | 2,149.85 | 4.1.3.1 |
| 9 | Control of OCS disconnector | Include installation of control cabinet, cable laying, over rail, cable protection, protection pipe laying, cable trench, etc | set | 1 | 64,987.97 | 64,987.97 | 4.1.3.1 |
| A-3 | ELECTRICAL EQUIPMENTS |  |  |  |  |  |  |
| 1 | Traction transformer | 110/27.5kV, 10MVA, single phase, outdoor, oil immersed, natural cooling system (ONAN), secondary side load regulation | pcs | 2 | 301,087.24 | 602,174.47 | 4.1.3.1 |
| 2 | Auxiliary transformer | Single phase, 25/0.23kV, 80kVA | pcs | 1 | 18,189.23 | 18,189.23 | 4.1.3.1 |
| 3 | 110kV disconnector motoroperated | Double phase, outdoor, motor-operated, two disconnectors with earthing circuit, 1250A | pcs | 3 | 8,041.25 | 24,123.74 | 4.1.3.1 |

8 Electrical Traction Substation - EVP, PSN, PS

| No | Item | Description | Unit | No. of Unit | Unit Price (USD) | Total Price (USD) | No. of books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 4 | 110kV disconnector manualoperated | Double phase, outdoor, manual-operated, 1250A | pcs | 5 | 5,552.18 | 27,760.90 | 4.1.3.1 |
| 5 | 110kV Current transformer | $2 \times 150 / 5,0.2,0.5,5 \mathrm{P} 20,5 \mathrm{P} 20$, outdoor, oil immersed | pCs | 2 | 4,404.08 | 8,808.16 | 4.1.3.1 |
| 6 | 110kV Voltage transformer | 110/ $\sqrt{ }: 0.1 / \sqrt{ } 3: 0.1 / \sqrt{ } 3,0.2,3 \mathrm{P}$, outdoor, oil immersed, capacitive | pcs | 2 | 3,733.60 | 7,467.19 | 4.1.3.1 |
| 7 | 110kV Lightening Arrester | 102/266kV | pCS | 4 | 1,723.29 | 6,893.14 | 4.1.3.1 |
| 8 | 25kV Air Insulation Switchgears | With vacuum circuit breaker 1250A, current transformer 800/5; voltage transformer 25/0.1; disconnector 1250A; | set | 1 | 228,794.31 | 228,794.31 | 4.1.3.1 |
| 9 | OCS disconnector control cabinet | Include double power auto transfer switch, communication device, RTU host, terminals, etc | pcs | 1 | 28,719.54 | 28,719.54 | 4.1.3.1 |
| 10 | Concentrated earthing box | Include busbar, 1 kV current transfromer | set | 1 | 8,615.30 | 8,615.30 | 4.1.3.1 |
| 11 | AC \& DC system $2 \times 100 \mathrm{Ah}$ | Include AC power supply cabinets, DC charging cabinet, DC power supply cabinet, DC battery cabinet | set | 1 | 31,590.93 | 31,590.93 | 4.1.3.1 |
| 12 | Integrated automation system | Include power meter cabinets, protection cabinets, communication mangement cabinets, etc | set | 1 | 162,741.06 | 162,741.06 | 4.1.3.1 |
| 13 | Technical service training | Include factory training, field training, warranty period service, etc | set | 1 | 478,651.50 | 478,651.50 | 4.1.3.1 |
| B | TSPn "BATAJNICA" - ELECTRICAL PART |  |  |  |  |  |  |
| B-1 | DISMANTLING OF ELECTRICAL EQUIPMENTS |  |  |  |  |  |  |
| 1 | Dismantling of 27.5 kV equipment | Include dismantling of auxiliary transformer, 25 kV circuit breaker, 25 kV disconnector , 25 kV voltage transformer | set | 1 | 24,415.30 | 24,415.30 | 4.1.3.2 |
| 2 | Dismantling of grounding system | Include grounding wires of TSPn | set | 1 | 8,724.21 | 8,724.21 | 4.1.3.2 |
| 3 | Dismantling of AC\&DC system | Include dismantling of AC cabinets,DC cabinets, DC Battery, etc | set | 1 | 5,372.93 | 5,372.93 | 4.1.3.2 |
| 4 | Dismantling of control protection cabinet | Include dismantling of all protection cabinets(feeder,communication), etc | set | 1 | 1,192.35 | 1,192.35 | 4.1.3.2 |
| 5 | Dismantling of cables (electrical and control) | Include dismantling of electrical and control cables, etc | set | 1 | 14,649.63 | 14,649.63 | 4.1.3.2 |
| B-2 | INSTALLATION WORKS |  |  |  |  |  |  |
| 1 | Installation of 27.5 kV equipment | Include installation of auxiliary transformer, 25 kV circuit breaker cabinets, 25 kV disconnector cabinets, 25 kV voltage transformer cabinets, 25 kV bus cabinets | set | 1 | 31,806.48 | 31,806.48 | 4.1.3.2 |
| 2 | Installation of AC\&DC system | Include installation of AC power supply cabinets, DC charging cabinet, DC power supply cabinet, DC battery cabinet | set | 1 | 4,887.37 | 4,887.37 | 4.1.3.2 |
| 3 | Installation and testing of control protection cabinets | Include installation and testing of all cabinets in intergrated automation system (feeder, communication), etc | set | 1 | 12,330.74 | 12,330.74 | 4.1.3.2 |
| 4 | Cable laying | Include laying of all auxiliary power supply electric cables and secondary control cables | set | 1 | 48,776.14 | 48,776.14 | 4.1.3.2 |
| 5 | Installation of outdoor lighting | Include installation of lamps, cables | set | 1 | 3,010.93 | 3,010.93 | 4.1.3.2 |
| 6 | Ancillary works | Include installation of Anti mouse board, insulation pad, etc | set | 1 | 648.93 | 648.93 | 4.1.3.2 |

8 Electrical Traction Substation - EVP, PSN, PS

| No | Item | Description | Unit | No. of Unit | Unit Price (USD) | $\begin{gathered} \hline \text { Total Price } \\ \text { (USD) } \\ \hline \end{gathered}$ | No. of books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| B-3 | ELECTRICAL EQUIPMENTS |  |  |  |  |  | 4.1.3.2 |
| 1 | Auxiliary transformer | Single phase, $25 / 0.23 \mathrm{kV}$, 50 kVA | pcs | 1 | 16,367.25 | 16,367.25 | 4.1.3.2 |
| 2 | 25kV Air Insulation Switchgears | With vacuum circuit breaker 1250A, current transformer 800/5 ;voltage transformer 25/0.1;disconnector 1250A;busbar 1250A | set | 1 | 307,101.15 | 307,101.15 | 4.1.3.2 |
| 3 | AC \& DC system $2 \times 75$ Ah | Include AC power supply cabinets, DC charging cabinet, DC power supply cabinet, DC battery cabinet | set | 1 | 21,060.62 | 21,060.62 | 4.1.3.2 |
| 4 | Integrated automation system | Including protection cabinets, communication mangement cabinets, etc | set | 1 | 124,449.85 | 124,449.85 | 4.1.3.2 |
| 5 | Technical service training | Including factory training, field training, warranty period service, etc | set | 1 | 54,041.30 | 54,041.30 | 4.1.3.2 |
| C | TSP "STARA PAZOVA" - ELECTRICAL PART |  |  |  |  |  |  |
| C-1 | DISMANTLING OF ELECTRICAL EQUIPMENTS | TSP "STARA PAZOVA" |  |  |  |  |  |
| 1 | Dismantling of 27.5 kV equipment | Include dismantling of auxiliary transformer,25kV circuit breaker,25kV disconnector , 25 kV voltage transformer | set | 1 | 10,996.58 | 10,996.58 | 4.1.3.3 |
| 2 | Dismantling of grounding system | Include grounding wires of TSP Stara pazova | set | 1 | 8,724.21 | 8,724.21 | 4.1.3.3 |
| 3 | Dismantling of AC\&DC system | Include dismantling of AC cabinets,DC cabinets, DC Battery, etc | set | 1 | 5,372.93 | 5,372.93 | 4.1.3.3 |
| 4 | Dismantling of control protection cabinet | Include dismantling of all protection cabinets(feeder,communication), etc | set | 1 | 1,192.35 | 1,192.35 | 4.1.3.3 |
| 5 | Dismantling of cables (electrical and control) | Include dismantling of electrical and control cables, etc | set | 1 | 14,649.63 | 14,649.63 | 4.1.3.3 |
| C-2 | INSTALLATION WORKS | TSP "STARA PAZOVA" |  |  |  |  |  |
| 1 | Installation of 27.5 kV equipment | Include installation of auxiliary transformer, 25 kV circuit breaker cabinets, 25 kV voltage transformer cabinets, 25 kV bus cabinets | set | 1 | 18,546.60 | 18,546.60 | 4.1.3.3 |
| 2 | Installation of AC\&DC system | Include installation of AC power supply cabinets, DC charging cabinet, DC power supply cabinet, DC battery cabinet | set | 1 | 4,887.37 | 4,887.37 | 4.1.3.3 |
| 3 | Installation and testing of control protection cabinets | Include installation and testing of all cabinets in intergrated automation system (feeder, communication), etc | set | 1 | 12,330.74 | 12,330.74 | 4.1.3.3 |
| 4 | Cable laying | Include laying of all auxiliary power supply electric cables and secondary control cables | set | 1 | 48,776.14 | 48,776.14 | 4.1.3.3 |
| 5 | Installation of outdoor lighting | Include installation of lamps, cables | set | 1 | 3,010.93 | 3,010.93 | 4.1.3.3 |
| 6 | Ancillary works | Include installation of Anti mouse board, insulation pad, etc | set | 1 | 648.93 | 648.93 | 4.1.3.3 |
| 7 | Control of OCS disconnector | Include installation of control cabinet, cable laying, over rail, cable protection, protection pipe laying, cable trench, etc | set | 1 | 71,025.71 | 71,025.71 | 4.1.3.3 |
| C-3 | ELECTRICAL EQUIPMENTS | TSP "STARA PAZOVA" |  |  |  |  |  |
| 1 | Auxiliary transformer | Single phase, 25/0.23kV, 50kVA | pcs | 1 | 16,367.25 | 16,367.25 | 4.1.3.3 |
| 2 | 25kV Air Insulation Switchgears | With vacuum circuit breaker 1250A, current transformer 800/5 ;voltage transformer 25/0.1;busbar 1250A | set | 1 | 153,549.44 | 153,549.44 | 4.1.3.3 |

8 Electrical Traction Substation - EVP, PSN, PS

| No | Item | Description | Unit | No. of Unit | Unit Price (USD) | $\begin{gathered} \hline \text { Total Price } \\ \text { (USD) } \\ \hline \end{gathered}$ | No. of books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 3 | OCS disconnector control cabinet | Include double power auto transfer switch, communication device, RTU host, terminals, etc | pcs | 1 | 28,719.54 | 28,719.54 | 4.1.3.3 |
| 4 | AC \& DC system 2×75Ah | Include AC power supply cabinets, DC charging cabinet, DC power supply cabinet, DC battery cabinet | set | 1 | 21,060.62 | 21,060.62 | 4.1.3.3 |
| 5 | Integrated automation system | Including protection cabinets, communication mangement cabinets, etc | set | 1 | 124,449.85 | 124,449.85 | 4.1.3.3 |
| 6 | Technical service training | Including factory training, field training, warranty period service, etc | set | 1 | 54,041.30 | 54,041.30 | 4.1.3.3 |
| D | TSP "NOVA PAZOVA" - ELECTRICAL PART |  |  |  |  |  |  |
| D-1 | DISMANTLING OF ELECTRICAL EQUIPMENTS | TSP "NOVA PAZOVA" |  |  |  |  |  |
| 1 | Dismantling of 27.5 kV equipment | Include dismantling of auxiliary transformer,25kV circuit breaker,25kV disconnector , 25 kV voltage transformer | set | 1 | 15,635.50 | 15,635.50 | 4.1.3.4 |
| 2 | Dismantling of grounding system | Include grounding wires of TSP Nova pazova | set | 1 | 8,724.21 | 8,724.21 | 4.1.3.4 |
| 3 | Dismantling of AC\&DC system | Include dismantling of AC cabinets, DC cabinets, DC Battery, etc | set | 1 | 5,372.93 | 5,372.93 | 4.1.3.4 |
| 4 | Dismantling of control protection cabinet | Include dismantling of all protection cabinets(feeder,communication), etc | set | 1 | 1,192.35 | 1,192.35 | 4.1.3.4 |
| 5 | Dismantling of cables (electrical and control) | Include dismantling of electrical and control cables, etc | set | 1 | 14,649.63 | 14,649.63 | 4.1.3.4 |
| E | REMOTE CONTROL UNIT - NOVI BEOGRAD |  |  |  |  |  |  |
| E-1 | INSTALLATION WORKS |  |  |  |  |  |  |
| 1 | Grounding grid of RTU | Include installation grounding of RTU | set | 1 | 14,714.30 | 14,714.30 | 4.1.3.5 |
| 2 | Installation and testing of RTU | Include installation and testing of all cabinets in RTU box (RTU, communication, power supply), etc | pcs | 1 | 5,043.93 | 5,043.93 | 4.1.3.5 |
| 3 | Ancillary works | Include Anti mouse board, insulation pad, etc. | set | 1 | 571.78 | 571.78 | 4.1.3.5 |
| 4 | Cable laying | Include cable laying, over rail, cable protection, protection pipe laying, cable trench, etc | set | 1 | 52,497.26 | 52,497.26 | 4.1.3.5 |
| 5 | Supply and laying of 1 kV power supply cable in the trench and its routing through the adequate conduit to the nearest polemounted TS connected to the OCS and RTU. | Include laying of 1 kV power supply cable in the trench and its routing through the adequate conduit to the nearest pole-mounted TS connected to the OCS and RTU. | set | 1 | 3,403.46 | 3,403.46 | 4.1.3.5 |
| E-2 | ELECTRICAL EQUIPMENTS |  |  |  |  |  |  |
| 1 | OCS disconnector control cabinet | Including double power auto transfer switch, communication device, RTU host, terminals, etc | pcs | 1 | 28,719.54 | 28,719.54 | 4.1.3.5 |
| 2 | Technical service training | Including factory training, field training, warranty period service, etc | set | 1 | 19,145.61 | 19,145.61 | 4.1.3.5 |
| F | REMOTE CONTROL UNIT - ZEMUN POLJE |  |  |  |  |  |  |

8 Electrical Traction Substation - EVP, PSN, PS

| No | Item | Description | Unit | No . of Unit | Unit Price (USD) | Total Price (USD) | No. of books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| F-1 | INSTALLATION WORKS |  |  |  |  |  |  |
| 1 | Grounding grid of RTU | Include installation grounding of RTU | set | 1 | 14,714.30 | 14,714.30 | 4.1.3.6 |
| 2 | Installation and testing of RTU | Include installation and testing of all cabinets in RTU box (RTU, communication, power supply), etc | pcs | 2 | 5,043.93 | 10,087.86 | 4.1.3.6 |
| 3 | Ancillary works | Include Anti mouse board, insulation pad, etc. | set | 1 | 571.78 | 571.78 | 4.1.3.6 |
| 4 | Cable laying | Include cable laying, over rail, cable protection, protection pipe laying, cable trench, etc | set | 1 | 49,409.19 | 49,409.19 | 4.1.3.6 |
| 5 | Supply and laying of 1 kV power supply cable in the trench and its routing through the adequate conduit to the nearest polemounted TS connected to the OCS and RTU. | Include laying of 1 kV power supply cable in the trench and its routing through the adequate conduit to the nearest pole-mounted TS connected to the OCS and RTU. | set | 1 | 3,403.46 | 3,403.46 | 4.1.3.6 |
| F-2 | ELECTRICAL EQUIPMENTS |  |  |  |  |  |  |
| 1 | OCS disconnector control cabinet | Including double power auto transfer switch, communication device, RTU host, terminals, etc | pcs | 2 | 28,719.54 | 57,439.09 | 4.1.3.6 |
| 2 | Technical service training | lincluding factory training, field training, warranty period service, etc | set | 1 | 19,145.61 | 19,145.61 | 4.1.3.6 |
| G | REMOTE CONTROL UNIT - BATAJNICA |  |  |  |  |  |  |
| G-1 |  |  |  |  |  |  | 4.1.3.7 |
| 1 | Grounding grid of RTU | Include installation grounding of RTU | set | 1 | 14,714.30 | 14,714.30 | 4.1.3.7 |
| 2 | Installation and testing of RTU | Include installation and testing of all cabinets in RTU box (RTU, communication, power supply), etc | pcs | 2 | 5,043.93 | 10,087.86 | 4.1.3.7 |
| 3 | Ancillary works | Include Anti mouse board, insulation pad, etc. | set | 1 | 571.78 | 571.78 | 4.1.3.7 |
| 4 | Cable laying | Include cable laying, over rail, cable protection, protection pipe laying, cable trench, etc | set | 1 | 77,201.86 | 77,201.86 | 4.1.3.7 |
| 5 | Supply and laying of 1 kV power supply cable in the trench and its routing through the adequate conduit to the nearest polemounted TS connected to the OCS and RTU. | Include laying of 1 kV power supply cable in the trench and its routing through the adequate conduit to the nearest pole-mounted TS connected to the OCS and RTU. | set | 1 | 3,403.46 | 3,403.46 | 4.1.3.7 |
| G-2 | ELECTRICAL EQUIPMENTS |  |  |  |  |  | 4.1.3.7 |
| 1 | OCS disconnector control cabinet | Including double power auto transfer switch, communication device, RTU host, terminals, etc | pcs | 2 | 28,719.54 | 57,439.09 | 4.1.3.7 |

8 Electrical Traction Substation - EVP, PSN, PS


8 Electrical Traction Substation - EVP, PSN, PS

| No | Item | Description | Unit | No. of Unit | Unit Price (USD) | Total Price (USD) | No. of books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | Historical data server | For storage of the historical and various static data storage of traction power supply systems,rack-mounted and its technical specifications are as follows: <br> CPU: 8-core Intel Xeon CPU (dual CPU configuration) <br> Memory: 32GB <br> Network interface: 4 10BaseT / 100BaseTX <br> External capacity: $4 \times 900 \mathrm{~GB}$ <br> DVD-ROM: 1 | pcs | 2 | 44,036.26 | 88,072.51 | 4.1.4 |
| 2 | Configure server | Configure and manage various types of system data. The configuration data includes all kinds of platform nodes, pictures, dot information and communication protocols of the dispatching system. As a database server, its special system architecture can ensure that after its offline does not affect the core business of main station. <br> The configuration server can also provide maintenance functions of adding, change and so on. The configuration server uses a rack-mounted server with the following technical parameters: <br> CPU: 8-core Intel Xeon CPU (dual CPU configuration) <br> Memory: 32GB <br> Network interface: 4 10BaseT / 100BaseTX <br> External capacity: $4 \times 600 \mathrm{~GB}$ <br> DVD-ROM: 1 | pcs | 1 | 40,589.68 | 40,589.68 | 4.1.4 |
| 3 | Storage device | For the SCADA system data storage,the basic configuration indicators are as follows: Controller: Dual controller <br> Cache: 2GB <br> Host interface: 4 4Gbps Fiber Channel interface <br> RAID level: 5 level <br> Memory partition: 4,8,16 or 64 memory partitions <br> Fan and power supply: dual redundant hot-swappable <br> hard drive: SAS hard drive, hard drive capacity 2 T | pcs | 1 | 91,901.41 | 91,901.41 | 4.1.4 |

8 Electrical Traction Substation - EVP, PSN, PS

4
Application and communication server
the core equipment of SCADA dispatching main station system used for real-time business processing. It mainly completes the business logic processing of SCADA, realizes communication with the controlled station system. The number of equipment configuration are related to the number of controlled sites and I/ O monitoring points. According to the requirements of the monitoring capacity, the system configures 2 sets of communication and application server. When there is an application and communication server failure, another server can immediately replace the fault machine to run. It can greatly improve the reliability of SCADA business processing. The communications and application servers are rack-mounted server configurations. Its technical parameters are as follows:
CPU: 6-core Intel Xeon CPU (dual CPU configuration) Memory: 32GB
Network interface: 5 10BaseT / 100BaseTX
External capacity: 4 * 300GB
DVD-ROM: 1
Maintain the system maintenance platform and anti-virus software. Through the maintenance workstations can log on the system network, online maintenance of all the equipment within the system, and regularly updated anti-virus database, carrying the system's anti-virus services.
The maintenance workstation uses a world-renowned brand workstation-level computer, configure a 22 -inch display. Considering the maintenance workstation can be used to replace the faulty dispatcher workstation if necessary, so the main specifications are consistent with the dispatcher workstation. Specifications are as follows:
CPU: single 4 core (intel core I7)
Frequency: 3.0 GHz
Memory: 16GB
Hard drive: 1TB (SATA)
DVD-ROM: 1
Graphics type: high-definition multi-screen graphics card, memory 4GB

| No | Item | Description | Unit | No. of Unit | Unit Price (USD) | Total Price (USD) | No. of books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 4 | Application and communication server | the core equipment of SCADA dispatching main station system used for real-time business processing. It mainly completes the business logic processing of SCADA, realizes communication with the controlled station system. The number of equipment configuration are related to the number of controlled sites and I / O monitoring points. According to the requirements of the monitoring capacity, the system configures 2 sets of communication and application server. When there is an application and communication server failure, another server can immediately replace the fault machine to run. It can greatly improve the reliability of SCADA business processing. The communications and application servers are rack-mounted server configurations. Its technical parameters are as follows: CPU: 6-core Intel Xeon CPU (dual CPU configuration) <br> Memory: 32GB <br> Network interface: 5 10BaseT / 100BaseTX <br> External capacity: 4 * 300GB <br> DVD-ROM: 1 | pcs | 2 | 38,292.35 | 76,584.69 | 4.1.4 |
| 5 | Maintenance work station | Maintain the system maintenance platform and anti-virus software. Through the maintenance workstations can log on the system network, online maintenance of all the equipment within the system, and regularly updated anti-virus database, carrying the system's anti-virus services. <br> The maintenance workstation uses a world-renowned brand workstation-level computer, configure a 22 -inch display. Considering the maintenance workstation can be used to replace the faulty dispatcher workstation if necessary, so the main specifications are consistent with the dispatcher workstation. Specifications are as follows: <br> CPU: single 4 core (intel core 17) <br> Frequency: 3.0 GHz <br> Memory: 16GB <br> Hard drive: 1TB (SATA) <br> DVD-ROM: 1 <br> Graphics type: high-definition multi-screen graphics card, memory 4GB | pcs | 1 | 7,183.57 | 7,183.57 | 4.1.4 |


| No | Item | Description | Unit | No. of Unit | Unit Price (USD) | Total Price (USD) | No. of books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 4 | Application and communication server | the core equipment of SCADA dispatching main station system used for real-time business processing. It mainly completes the business logic processing of SCADA, realizes communication with the controlled station system. The number of equipment configuration are related to the number of controlled sites and I / O monitoring points. According to the requirements of the monitoring capacity, the system configures 2 sets of communication and application server. When there is an application and communication server failure, another server can immediately replace the fault machine to run. It can greatly improve the reliability of SCADA business processing. The communications and application servers are rack-mounted server configurations. Its technical parameters are as follows: CPU: 6-core Intel Xeon CPU (dual CPU configuration) <br> Memory: 32GB <br> Network interface: 5 10BaseT / 100BaseTX <br> External capacity: 4 * 300GB <br> DVD-ROM: 1 | pcs | 2 | 38,292.35 | 76,584.69 | 4.1.4 |
| 5 | Maintenance work station | Maintain the system maintenance platform and anti-virus software. Through the maintenance workstations can log on the system network, online maintenance of all the equipment within the system, and regularly updated anti-virus database, carrying the system's anti-virus services. <br> The maintenance workstation uses a world-renowned brand workstation-level computer, configure a 22 -inch display. Considering the maintenance workstation can be used to replace the faulty dispatcher workstation if necessary, so the main specifications are consistent with the dispatcher workstation. Specifications are as follows: <br> CPU: single 4 core (intel core 17) <br> Frequency: 3.0 GHz <br> Memory: 16GB <br> Hard drive: 1TB (SATA) <br> DVD-ROM: 1 <br> Graphics type: high-definition multi-screen graphics card, memory 4GB | pcs | 1 | 7,183.57 | 7,183.57 | 4.1.4 |


| No | Item | Description | Unit | No. of Unit | Unit Price (USD) | Total Price (USD) | No. of books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 4 | Application and communication server | the core equipment of SCADA dispatching main station system used for real-time business processing. It mainly completes the business logic processing of SCADA, realizes communication with the controlled station system. The number of equipment configuration are related to the number of controlled sites and I/ O monitoring points. According to the requirements of the monitoring capacity, the system configures 2 sets of communication and application server. When there is an application and communication server failure, another server can immediately replace the fault machine to run. It can greatly improve the reliability of SCADA business processing. The communications and application servers are rack-mounted server configurations. Its technical parameters are as follows: CPU: 6-core Intel Xeon CPU (dual CPU configuration) <br> Memory: 32GB <br> Network interface: 5 10BaseT / 100BaseTX <br> External capacity: 4 * 300GB <br> DVD-ROM: 1 | pcs | 2 | 38,292.35 | 76,584.69 | 4.1.4 |
| 5 | Maintenance work station | Maintain the system maintenance platform and anti-virus software. Through the maintenance workstations can log on the system network, online maintenance of all the equipment within the system, and regularly updated anti-virus database, carrying the system's anti-virus services. <br> The maintenance workstation uses a world-renowned brand workstation-level computer, configure a 22 -inch display. Considering the maintenance workstation can be used to replace the faulty dispatcher workstation if necessary, so the main specifications are consistent with the dispatcher workstation. Specifications are as follows: <br> CPU: single 4 core (intel core I7) <br> Frequency: 3.0 GHz <br> Memory: 16GB <br> Hard drive: 1TB (SATA) <br> DVD-ROM: 1 <br> Graphics type: high-definition multi-screen graphics card, memory 4GB | pcs | 1 | 7,183.57 | 7,183.57 | 4.1.4 |


| No | Item | Description | Unit | No. of Unit | Unit Price (USD) | Total Price (USD) | No. of books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 4 | Application and communication server | the core equipment of SCADA dispatching main station system used for real-time business processing. It mainly completes the business logic processing of SCADA, realizes communication with the controlled station system. The number of equipment configuration are related to the number of controlled sites and I / O monitoring points. According to the requirements of the monitoring capacity, the system configures 2 sets of communication and application server. When there is an application and communication server failure, another server can immediately replace the fault machine to run. It can greatly improve the reliability of SCADA business processing. The communications and application servers are rack-mounted server configurations. Its technical parameters are as follows: CPU: 6-core Intel Xeon CPU (dual CPU configuration) <br> Memory: 32GB <br> Network interface: 5 10BaseT / 100BaseTX <br> External capacity: 4 * 300GB <br> DVD-ROM: 1 | pcs | 2 | 38,292.35 | 76,584.69 | 4.1.4 |
| 5 | Maintenance work station | Maintain the system maintenance platform and anti-virus software. Through the maintenance workstations can log on the system network, online maintenance of all the equipment within the system, and regularly updated anti-virus database, carrying the system's anti-virus services. <br> The maintenance workstation uses a world-renowned brand workstation-level computer, configure a 22 -inch display. Considering the maintenance workstation can be used to replace the faulty dispatcher workstation if necessary, so the main specifications are consistent with the dispatcher workstation. Specifications are as follows: <br> CPU: single 4 core (intel core I7) <br> Frequency: 3.0 GHz <br> Memory: 16GB <br> Hard drive: 1TB (SATA) <br> DVD-ROM: 1 <br> Graphics type: high-definition multi-screen graphics card, memory 4GB | pcs | 1 | 7,183.57 | 7,183.57 | 4.1.4 |

8 Electrical Traction Substation - EVP, PSN, PS

| No | Item | Description | Unit | No. of Unit | Unit Price (USD) | Total Price (USD) | No. of books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 6 | Core switch | Constitute a redundant data processing network, responsible for the data exchange between the computer nodes and storage devices. <br> Its technical specifications are as follows: <br> Type: Layer 3 switch; <br> Machine switching capacity: 5.9Tbps; <br> Packet forwarding rate: 200Mpps; <br> 24-port Ethernet 10 / 100Mpps ports, SFP-based Gigabit Ethernet ports are configured on-demand. | pcs | 4 | 80,413.59 | 321,654.36 | 4.1.4 |
| 7 | Firewall \& IPS intrusion detection adaptive security device | mainly used to ensure the system's network security, to achieve virus protection, network management, firewall isolation, intrusion detection and other functions. The detailed technical specifications are as follows: <br> clear text throughput: 188Mbps <br> 168-bit 3DES IPSec VPN throughput: 130Mbps <br> concurrent VPN tunnel: 2000 <br> Concurrent connection: 130,000 5000 / sec <br> Processor: 433MHz <br> random storage memory: 32MB, or 64MB SDRAM <br> flash memory: 16MB | pcs | 1 | 50,123.91 | 50,123.91 | 4.1.4 |
| 8 | Cables and accessories | include power supply cables, fiber,LCD cables | pcs | 1 | 1,531.56 | 1,531.56 | 4.1.4 |
| 9 | Access layer switch | For communication with the controlled station. Its technical specifications are as follows: <br> Transmission rate: 10Mbps / 100Mbps / 1000Mbps <br> Exchange mode: storage - forwarding <br> Packet forwarding rate: 30 Mpps <br> Transmission mode: support full duplex <br> Backplane Bandwidth: 32Gbps <br> VLAN support: support | pcs | 2 | 12,445.32 | 24,890.65 | 4.1.4 |

8 Electrical Traction Substation - EVP, PSN, PS

| No | Item | Description | Unit | No. of Unit | Unit Price (USD) | Total Price (USD) | No. of books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 10 | Dispatching staff station | According to SCADA system dispatching management, analysis and other operational needs, the allocation of a set of dispatcher workstation for the realization of the daily management. <br> Dispatcher workstations using the world famous brand of workstation-class computer, each configuration 3 22-inch display, and the main specifications are as follows: <br> CPU: single 4 core (intel core I7) <br> Frequency: 3.0 GHz <br> Memory: 16GB <br> Hard drive: 1TB (SATA) <br> DVD-ROM: 1 <br> Graphics type: high-definition multi-screen graphics card, memory 4GB <br> System configuration data printer used to complete the system monitoring screen, data, reports and other print. The use of laser network printer, A4 format, resolution 600 * 600 dpi . | pcs | 1 | 7,907.38 | 7,907.38 | 4.1.4 |
| 11 | Cabinets and kits | include Server cabinets and kits | pcs | 9 | 4,613.96 | 41,525.64 | 4.1.4 |
| 12 | Column head cabinet | The system has two independent AC power supply, with dual power switch, cabinet configuration ammeter, voltmeter, and not less than 10 feeders. <br> The system configures on-line uninterruptible power supply system (UPS), redundant configuration. UPS has a remote communication interface for real-time monitoring UPS work status by the workstation. <br> UPS capacity is 15 kVA , to meet the full load of 1 hour power supply needs. | pcs | 2 | 9,572.80 | 19,145.61 | 4.1.4 |

8 Electrical Traction Substation - EVP, PSN, PS

| No | Item | Description | Unit | No. of Unit | Unit Price (USD) | Total Price (USD) | No. of books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 13 | Software cost | SCADA dispatching master system software, including: system software, platform software and application software. <br> (1) System software:The system software includes the operating system, the database management system, the cluster management software and so on. The operating system takes advantage of the popular Windows operating system, realtime multi-tasking, multi-user features, and provide a complete debugging, diagnostic means, with a strong network management functions. The database uses a large commercial database. The system is equipped with perfect application software package to meet the needs of field operation and management. System software needs to support common development tools to meet the needs of various system development and expansion of the system. <br> (2) Platform software <br> Platform software is located in the system software, under the SCADA application software, according to user needs for the second development, mature and reliable, with good openness and large-scale monitoring system to adapt, with high reliability, portability, Scalability, maintenance, the world's leading generic software platform. <br> (3) Application software <br> SCADA dispatching master system application software should include three parts, one is based on the secondary development of platform software to achieve SCADA function of the application software, such as SCADA dispatching software, SCADA application service software, communication management software, etc. ; Second, dispatching management The application software, such as dispatching management and statistical analysis software, maintenance management software, dispatching planning management software, etc. .; third is to ensure the safe operation of SCADA system necessary for application software network management software, virus protection software. | pcs | 1 | 382,921.20 | 382,921.20 | 4.1.4 |
| 14 | LCD display and its control device (55inch, 3*4=12 unit) | Used to display the line diagram, power supply facilities distribution diagram, substation main wiring diagram, catenary power supply sub-schematic diagram, catenary switch remote monitoring, and other information. It can display the dispatch center any display on the screen, and can be multi-screen display. | pcs | 1 | 176,143.89 | 176,143.89 | 4.1.4 |
| 15 | Technical service training | Include technical guidance for field installation, on-site training(including hardware and sofeware Software use and maintenance),on-site debuging, and warranty service | pcs | 1 | 153,168.25 | 153,168.25 | 4.1.4 |
| Summary (USD): |  |  |  |  |  | 5,845,392.10 |  |

## 9 Power Supply

| No | Item | Description | Unit | No. of Unit | Unit Price (USD) | Total Price (USD) | No. of books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| A | Transformer station powered from OCS 25/0.23 Kv |  |  |  |  |  |  |
| 1 | Electrical installation works for 25/0.23 kV 50 kVA | Supporting structure,foundation,complete disconnector assembly,electrical cross connections (conductors) ,HV fuse,surge arrestor ,insulator,transformer, cabinet,grounding,other works Transformer 25/0.23 kV 50 kVA |  |  |  |  |  |
| 1-1 | construction cost | foundation,total for earthing system | set | 9 | 2,741.68 | 24,675.10 | 4/2.1 |
| 1-2 | installation cost | Supporting structure, connections, TS testing and so on | set | 9 | 10,607.46 | 95,467.10 | 4/2.1 |
| 1-3 | equipment cost | Transformer 25/0.23 kV 50 kVA ,cabinet | set | 9 | 6,381.49 | 57,433.42 | 4/2.1 |
| 2 | Electrical installation works for 25/0.23 kV 100 kVA | Supporting structure,foundation,complete disconnector assembly,electrical cross connections (conductors) ,HV fuse,surge arrestor ,insulator,transformer,cabinet,grounding,other works |  |  |  |  |  |
| 2-1 | construction cost | foundation,total for earthing system | set | 16 | 2,741.68 | 43,866.84 | 4/2.1 |
| 2-2 | installation cost | Supporting structure, connections, TS testing and so on | set | 16 | 10,664.18 | 170,626.88 | 4/2.1 |
| 2-3 | equipment cost | Transformer 25/0.23 kV 100 kVA , cabinet | set | 16 | 8,555.92 | 136,894.79 | 4/2.1 |
| B | Distribution transformer stations 10(20)/0.4 kV |  |  |  |  |  |  |
| 1 | Electrical installation works for distribution transformer stations 10(20)/0.4 kV | Foundation, cable trench, cable, transformer, other works | place | 3 | 18,435.42 | 55,306.25 | 4/2.2 |
| 2 | Supply of materials and equipment | Ttransformer station 10(20)/0.4 kV | set | 3 | 43,015.97 | 129,047.92 | 4/2.2 |
| C | Electric power installations |  |  |  |  |  |  |
| 1 | Electrical installations for facilities in Novi Beograd |  |  |  |  |  |  |
| 1-1 | installation cost | Power supply,distributin cabinets,UPS(1.5h~3h) systerm,electrica lighting system and wiring for socket,luminaires and accessries, grounding,other works | place | 1 | 35,452.73 | 35,452.73 | 4/2.2 |
| 1-2 | equipment cost | UPS (1.5h~3h) and accessories | place | 1 | 21,271.64 | 21,271.64 | 4/2.2 |
| 2 | Electrical installations for facilities in Tošin Bunar |  |  |  |  |  |  |
| 2-1 | installation cost | Power supply,distributin cabinets,electrica lighting system and wiring for socket,luminaires and accessries,grounding,other works | place | 1 | 3,639.81 | 3,639.81 | 4/2.2 |

## 9 Power Supply

| No | Item | Description | Unit | No. of Unit | Unit Price (USD) | Total Price (USD) | No. of books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 3 | Electrical installations for facilities in Zemun |  |  |  |  |  |  |
| 3-1 | installation cost | Power supply,distributin cabinets,UPS (1.5h~3h) systerm,electrica lighting system and wiring for socket,luminaires and accessries, grounding,other works | place | 1 | 192,673.75 | 192,673.75 | 4/2.2 |
| 3-2 | equipment cost | UPS(1.5h~3h) and accessories | place | 1 | 34,980.02 | 34,980.02 | 4/2.2 |
| 4 | Electrical installations for facilities in Altina |  |  |  |  |  |  |
| 4-1 | installation cost | Power supply,distributin cabinets,electrica lighting system and wiring for socket,luminaires and accessries,grounding,other works | place | 1 | 3,639.81 | 3,639.81 | 4/2.2 |
| 5 | Electrical installations for facilities in Zemunsko Polje |  |  |  |  |  |  |
| 5-1 | installation cost | Power supply,distributin cabinets,UPS (1.5h~3h) systerm,electrica lighting system and wiring for socket,luminaires and accessries, grounding,other works | place | 1 | 24,107.85 | 24,107.85 | 4/2.2 |
| 5-2 | equipment cost | UPS (1.5h~3h) and accessories | place | 1 | 10,872.17 | 10,872.17 |  |
| 6 | Electrical installations for facilities in Kamendin |  |  |  |  |  |  |
| 6-1 | installation cost | Power supply,distributin cabinets,electrica lighting system and wiring for socket,luminaires and accessries,grounding,other works | place | 1 | 3,639.81 | 3,639.81 | 4/2.2 |
| 7 | Electrical installations for facilities in Batajnica |  |  |  |  |  |  |
| 7-1 | installation cost | Power supply,distributin cabinets,UPS (1.5h~3h) systerm,electrica lighting system and wiring for socket,luminaires and accessries, grounding,other works | place | 1 | 65,327.56 | 65,327.56 | 4/2.2 |
| 7-2 | equipment cost | UPS (1.5h~3h) and accessories | place | 1 | 33,089.21 | 33,089.21 | 4/2.2 |
| 8 | Electrical installations for facilities in Nova Pazova |  |  |  |  |  |  |
| 8-1 | installation cost | Power supply,distributin cabinets,UPS (1.5h~3h) systerm,electrica lighting system and wiring for socket,luminaires and accessries, grounding,other works | place | 1 | 49,161.11 | 49,161.11 | 4/2.2 |
| 8-2 | equipment cost | UPS (1.5h~3h) and accessories, distributin cabinets | place | 1 | 41,597.86 | 41,597.86 | 4/2.2 |
| 9 | Electrical installations for facilities in Stara Pazova |  |  |  |  |  |  |

## 9 Power Supply

| No | Item | Description | Unit | No. of Unit | Unit Price (USD) | $\begin{gathered} \hline \text { Total Price } \\ \text { (USD) } \\ \hline \end{gathered}$ | No. of books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 9-1 | installation cost | Power supply,distributin cabinets,UPS (1.5h~3h) systerm,electrica lighting system and wiring for socket,luminaires and accessries, grounding,other works | place | 1 | 51,997.33 | 51,997.33 | 4/2.2 |
| 9-2 | equipment cost | UPS (1.5h~3h) and accessories, distributin cabinets | place | 1 | 24,202.39 | 24,202.39 | 4/2.2 |
| 10 | Electrical power installations for supplying TK installations in the tunnel Bežanija |  |  |  |  |  |  |
| 10-1 | installation cost | Power supply,distributin cabinets,UPS (1.5h~3h) systerm,electrica lighting system and wiring for socket,luminaires and accessries, grounding,other works | place | 1 | 7,279.63 | 7,279.63 | 4/2.2 |
| 10-2 | equipment cost | UPS (1.5h~3h) and accessories, distributin cabinets | place | 1 | 87,260.98 | 87,260.98 | 4/2.2 |
| D | Lighting installation in station |  |  |  |  |  |  |
| 1 | Lighting installation in New Belgrade station | Foundation, cable trench,LV cable, lighting pole,luminaires and accessries,grounding,other works | station | 1 | 71,415.97 | 71,415.97 | 4/2.3 |
| 2 | Supply of materials and equipment for Novi Beograd | Lighting poles, luminaires | station | 1 | 166,637.27 | 166,637.27 | 4/2.3 |
| 3 | Lighting installation in Tosin bunar stopping place | Foundation,cable trench,LV cable, lighting pole,luminaires and accessries, grounding,other works | station | 1 | 29,638.48 | 29,638.48 | 4/2.3 |
| 4 | Supply of materials and equipment for Tošin Bunar | Lighting poles,luminaires | station | 1 | 69,156.45 | 69,156.45 | 4/2.3 |
| 5 | Lighting installation in Zemun station | Foundation,cable trench,LV cable, lighting pole,luminaires and accessries, grounding,other works | station | 1 | 76,436.08 | 76,436.08 | 4/2.3 |
| 6 | Supply of materials and equipment for Zemun | Lighting poles,luminaires | station | 1 | 178,350.85 | 178,350.85 | 4/2.3 |
| 7 | place | Foundation,cable trench,LV cable, lighting pole,luminaires and accessries, grounding,other works | station | 1 | 17,868.17 | 17,868.17 | 4/2.3 |
| 8 | Supply of materials and equipment for Altina | Lighting poles,luminaires | station | 1 | 41,692.41 | 41,692.41 | 4/2.3 |
| 9 | Lighting installation in Zemunsko polje | Foundation,cable trench,LV cable, lighting pole,luminaires and accessries, grounding,other works | station | 1 | 16,024.63 | 16,024.63 | 4/2.3 |
| 10 | Supply of materials and equipment for Zemunsko Polje | Lighting poles,luminaires | station | 1 | 37,390.81 | 37,390.81 | 4/2.3 |
| 11 | Lighting installation in Kamendin stopping place | Foundation,cable trench,LV cable, lighting pole,luminaires and accessries,grounding,other works | station | 1 | 24,348.93 | 24,348.93 | 4/2.3 |
| 12 | Supply of materials and equipment for Kamendin | Lighting poles,luminaires | station | 1 | 56,814.17 | 56,814.17 | 4/2.3 |

## 9 Power Supply

| No | Item | Description | Unit | No. of Unit | Unit Price (USD) | Total Price (USD) | No. of books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 13 | Lighting installation in Batajnica station | Foundation,cable trench,LV cable, lighting pole,luminaires and accessries, grounding,other works | station | 1 | 29,576.37 | 29,576.37 | 4/2.3 |
| 14 | Supply of materials and equipment for Batajnica | Lighting poles, luminaires | station | 1 | 69,011.52 | 69,011.52 | 4/2.3 |
| 15 | Lighting installation in Nova Pazova station | Foundation,cable trench,LV cable, lighting pole,luminaires and accessries, grounding,other works | station | 1 | 35,490.16 | 35,490.16 | 4/2.3 |
| 16 | Supply of materials and equipment for Nova Pazova | Lighting poles, luminaires | station | 1 | 82,810.38 | 82,810.38 | 4/2.3 |
| 17 | Lighting installation in Stara Pazova station | Foundation,cable trench,LV cable, lighting pole,luminaires and accessries, grounding,other works | station | 1 | 43,228.22 | 43,228.22 | 4/2.3 |
| 18 | Supply of materials and equipment for Stara Pazova | Lighting poles,luminaires | station | 1 | 100,865.84 | 100,865.84 | 4/2.3 |
| 19 | Lighting installation in 15+915 | Foundation,cable trench,LV cable, lighting pole,luminaires and accessries, grounding,other works | station | 1 | 12,762.98 | 12,762.98 | 4/2.3 |
| 20 | Supply of materials and equipment for 15+915 | Lighting poles,luminaires | station | 1 | 29,780.29 | 29,780.29 | 4/2.3 |
| E | Lighting installation at grade separated crossings and access roads |  |  |  |  |  |  |
| 1 | 12+700 to 13+000 |  | place | 1 | 34,236.93 | 34,236.93 | 4/2.4 |
| 2 | 13+288 |  | place | 1 | 231,545.06 | 231,545.06 | 4/2.4 |
| 3 | 13+350 to 13+900 |  | place | 1 | 42,186.85 | 42,186.85 | 4/2.4 |
| 4 | 15+915 |  | place | 1 | 123,481.37 | 123,481.37 | 4/2.4 |
| 5 | 26+392 |  | place | 1 | 71,218.38 | 71,218.38 | 4/2.4 |
| 6 | 34+727 |  | place | 1 | 185,991.62 | 185,991.62 | 4/2.4 |
| F | Relocation and protection of electrical installations design for protection and relocation of the existing technical and utility infrastructure |  |  |  |  |  |  |
| 1 | Belgrade-Zemun (included) | 1kV/10kV/35kV | set | 1 | 749,156.75 | 749,156.75 | 4/2.5 |
| 2 | Zemun (excluded)-Batajnica (excluded) | 1kV/10kV/35kV | set | 1 | 122,778.75 | 122,778.75 | 4/2.5 |
| 3 | Batajnica (included)-Stara Pazova | 1kV/10kV/20kV/35kV | set | 1 | 183,110.68 | 183,110.68 | 4/2.5 |
|  | Summary (USD): |  |  |  |  | 4,336,518.33 |  |

## 10 Signaling System

| No | Item | Description | Unit | No. of Unit | Unit Price (USD) | Total Price (USD) | No. of books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| A | Interlocking of the Belgrade Center station, New Belgrade station and interstation distance between Beograd centar and novi Beograd |  |  |  |  |  |  |
| A-1 | INDOOR EQUIPMENT IN THE NEW BELGRADE STATION |  |  |  |  |  |  |
| 1 | CBI | Computer based interlocking device in the sation, including terminals, electronic control post device, LAN, interfaces with other system and etc. | set | 1 | 1,450,691.50 | 1,450,691.50 | 5/1.2 |
| 2 | CTC | Centralized traffic control device (CTC) in station, provided with interfaces that enable connection to CBI, to CTC control terminal in the train dispatcher's room, to CSM device and to the network used for data transmission (CTC network) | set | 1 | 205,841.36 | 205,841.36 | 5/1.2 |
| 3 | CSM | Centralized signaling monitoring device (CSM) in station provided with interfaces that enable connection to CBI, to CTC station device, to cable distribution frame, to power supply cabinets and to the network used for CSM data transmission | set | 1 | 176,741.76 | 176,741.76 | 5/1.2 |
| 4 | Electronic automatic blocking device | Electronic automatic blocking device, as a segment of the computer based interlocking system (CBI) in station that enables communication with dislocated controllers via optic cables. Controllers are accommodated in selfstanding cabinets or cabinets mounted on the signal post that controls both signal operation and 160 . | set | 1 | 68,613.79 | 68,613.79 | 5/1.2 |
| 5 | Lead acid ACCU battery | Lead acid ACCU battery with supply capacity of 3 h under the full load regime and additional 8 h in red lamp regime on all main station signals and axel counters, with DC busbars and fuses for both charging and discharging included. | set | 1 | 13,477.71 | 13,477.71 | 5/1.2 |
| 6 | Optical cable termination frame | Optical cable termination frame (3OKP=ODF) $2 \times 60$ | set | 1 | 1,592.82 | 1,592.82 | 5/1.2 |
| 7 | Points heating system | Points heating system provided with terminal and indoor devices for supervisory control and data acquisition system (SCADA) | set | 1 | 10,782.17 | 10,782.17 | 5/1.2 |

10 Signaling System

| No | Item | Description | Unit | No. of Unit | $\begin{gathered} \hline \text { Unit Price } \\ \text { (USD) } \end{gathered}$ | Total Price (USD) | No. of books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 8 | Power Box | Box provided with members for protection of the supply device against atmospheric discharges at the point where cables enter the power room. The box is provided with adequate number of safety members for single-phase power from overhead catenary system, three-phase power from public mains, and three-phase power from diesel generator socket outlet. | set | 1 | 980.20 | 980.20 | 5/1.2 |
| 9 | Power Panel | Station power panel provided with switches, converters, and etc. | set | 1 | 227,577.23 | 227,577.23 | 5/1.2 |
| 10 | Safety interface | Safety interface - electronic control post/station post of the automatic block relay device, SpDrS-64JŽ system. The item includes all necessary interface elements required for traffic operations on the single track. | set | 1 | 15,928.20 | 15,928.20 | 5/1.2 |
| 11 | Safety microprocessor evaluator | Safety microprocessor evaluator, 2003 or 2002 for control of track occupancy in stations and automatic block sections by double-counting sensors of train wheels | set | 1 | 120,686.75 | 120,686.75 | 5/1.2 |
| 12 | Video monitoring and controlling of points lever position | Indoor devices that enable video monitoring and controlling of points lever position | set | 1 | 6,738.85 | 6,738.85 | 5/1.2 |
| 13 | Cable distribution frame | Cable distribution frame (ZKR) with mounting accessories, with cable connectors and surge voltage protective devices and protective devices from electromagnetic influence from OCS ( $10 \times 13 \times 6=780$ connections) | set | 1 | 18,378.69 | 18,378.69 | 5/1.2 |
| A-2 | INDOOR EQUIPMENT IN THE BELGRADE CENTER STATION |  |  |  |  |  |  |
| 1 | CTC | Centralized traffic control device (CTC) in station, provided with interfaces that enable connection to CBI, to CTC control terminal in the train dispatcher's room, to CSM device and to the network used for data transmission (CTC network) | set | 1 | 340,618.44 | 340,618.44 | 5/1.2 |
| 2 | CSM | Centralized signaling monitoring device (CSM) in station provided with interfaces that enable connection to CBI, to CTC station device, to cable distribution frame, to power supply cabinets and to the network used for CSM data transmission | set | 1 | 206,331.46 | 206,331.46 | 5/1.2 |

10 Signaling System

| No | Item | Description | Unit | No. of Unit | Unit Price (USD) | Total Price (USD) | No. of books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 3 | Electronic-relay interface for connection to the existing automatic block relay interface on the interstation distance Belgrade Centre - New Belgrade. The item includes all necessary interface elements required for traffic operations on the single track. |  | set | 2 | 22,054.43 | 44,108.86 | 5/1.2 |
| 4 | Electronic interface used for connection of the existing interlocking device in the Belgrade Center Station and RBC. This item among other includes acquiring of communication protocol of existing CBI in station Belgrade Center (ESA 44 SB) and its harmonization with communication protocol of RBC over vital signalling network which also has to be open (transparent) and clearly and completely documented. |  | set | 1 | 73,514.77 | 73,514.77 | 5/1.2 |
| 5 | Electronic interface used for connection of the existing interlocking device in the Belgrade Center Station and CTC station device. This item among other includes acquiring of communication protocol of existing CBI in station Belgrade Center (ESA 44 SB) and its harmonization with communication protocol of station CTC device which also has to be open (transparent) and clearly and completely documented. |  | set | 1 | 14,702.95 | 14,702.95 | 5/1.2 |

10 Signaling System

| No | Item | Description | Unit | No. <br> of Unit | Unit Price (USD) | $\begin{gathered} \hline \text { Total Price } \\ \text { (USD) } \\ \hline \end{gathered}$ | No. of books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 6 | Electronic interface used for connection of the existing interlocking device in the Belgrade Center Station and CSM station device. This item among other includes acquiring of communication protocol of existing CBI in station Belgrade Center (ESA 44 SB) and its harmonization with communication protocol of station CSM device which also has to be open (transparent) and clearly and completely |  | set | 1 | 7,351.48 | 7,351.48 | 5/1.2 |
| 7 | Electronic interface used to connect the existing points heating system in the Belgrade Center Station and data network for the remote control of points heating system. This item among other includes acquiring of communication protocol of existing point heating system in station Belgrade Center and its harmonization with communication protocol of remote control for points heating which also has to be open (transparent) and clearly and completely documented. Item also includes networking devices for accessing the remote control for points heating data network. |  | set | 1 | 3,675.74 | 3,675.74 | 5/1.2 |

10 Signaling System

| No | Item | Description | Unit | No. of Unit | Unit Price (USD) | Total Price (USD) | No. of books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 8 | Devices for the formation of station signaling/interlocking LAN in CBI with necessary servers and devices for both control and protection of the said network (with communication devices that enable connection of LAN to vital signalling network and lineside optical cable). |  | set | 1 | 26,955.42 | 26,955.42 | 5/1.2 |
| 9 | UPS used for power supply of additional interlocking, CTC and CSM devices from the main and standby supply in the Belgrade Center Station. Nominal power load - 5kVA |  | set | 1 | 7,351.48 | 7,351.48 | 5/1.2 |
| 10 | Optical cable termination frame (3 OKP=ODF) $2 \times 60$ |  | set | 1 | 1,592.82 | 1,592.82 | 5/1.2 |
| A-3 | OUTDOOR EQUIPMENT IN THE NEW BELGRADE STATION |  |  |  | 0.00 | 0.00 |  |
| 1 | Signal | Main signal with foundation,Limit track signal together with foundation,Shunting signal together with foundation,Speed sign,Direction sign,Signaling sign "78" | station | 1 | 395,975.07 | 395,975.07 | 5/1.2 |
| 2 | Electric points switch machine | Electric points switch machine,Termination cable box,Setting lever, long control lever, and short control lever with bolts,Signal point indicator | station | 1 | 182,537.18 | 182,537.18 | 5/1.2 |
| 3 | Video monitoring and controlling of points lever position | Outdoor devices that enable video monitoring and controlling of points lever position | station | 1 | 17,600.66 | 17,600.66 | 5/1.2 |
| 4 | Points heating system device | Distribution cabinet,Termination box provided with appropriate clamps and fuses (PO),Electric points heater,Meteorological station | station | 1 | 98,414.84 | 98,414.84 | 5/1.2 |
| 5 | Concrete foundation for distribution cabinet in charge of points heating. |  | station | 1 | 1,337.97 | 1,337.97 | 5/1.2 |

10 Signaling System

| No | Item | Description | Unit | No. <br> of Unit | Unit Price (USD) | Total Price (USD) | No. of books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 6 | Outdoor members constituting the twin axle counter (wheel sensor) provided with rail fastening and shields, connecting housing, electronic cards and surge arrester members. Covering shall be painted to show signal mark 207: "section limit"/ |  | station | 1 | 128,222.02 | 128,222.02 | 5/1.2 |
| 7 | Combined track magnet 1000/2000Hz (autostop system I60) provided with universal fastening system and shields |  | station | 1 | 41,811.53 | 41,811.53 | 5/1.2 |
| 8 | Track magnet 500 Hz (autostop system I-60) provided with universal fastening system and shields |  | station | 1 | 12,344.36 | 12,344.36 | 5/1.2 |
| A-4 | CABLES, CABLE ACCESSORIES AND GROUNDING SYSTEM IN THE NEW BELGRADE STATION |  |  |  |  |  |  |
| 1 | Cables,cable accessries | Cale,Single mode optical cable,Heat-shrinking cable joint,Cable distribution cabine,Termination box,Material for sealing of cable cabinet,PEHD plastic pipe,Cable route marker,PE cable warning strip,PE cable shield,sand,Brick | station | 1 | 124,943.78 | 124,943.78 | 5/1.2 |
| 2 | Concrete foundation | Concrete foundation for cable distribution cabinet | station | 1 | 4,013.91 | 4,013.91 | 5/1.2 |
| 3 | Grounding system | Insulated wire, FeZn 95mm2, for grounding of outdoor elements,Portions for welding FeZn 95mm2 wire to rail. | station | 1 | 14,485.11 | 14,485.11 | 5/1.2 |
| A-5 | INSTALLATION OF INDOOR EQUIPMENT IN NEW BELGRADE STATION | installation of indoor equipment in new belgrade station | station | 1 | 161,303.66 | 161,303.66 | 5/1.2 |
| A-6 | INSTALLATION OF INDOOR EQUIPMENT IN THE BELGRADE CENTER STATION | installation of indoor equipment in the belgrade center station | station | 1 | 46,314.31 | 46,314.31 | 5/1.2 |

10 Signaling System

| No | Item | Description | Unit | No. <br> of Unit | Unit Price (USD) | $\begin{gathered} \hline \text { Total Price } \\ \text { (USD) } \\ \hline \end{gathered}$ | No. of books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| A-7 | INSTALLATION OF OUTDOOR EQIPMENT IN THE NEW BELGRADE STATION | installation of outdoor eqipment in the new belgrade station | Complete execution of the works on the left / right side of the station | 2 | 58,809.06 | 117,618.12 | 5/1.2 |
| A-8 | INSTALLATION OF CABLES, CABLE ASSECORIES AND GROUNDING SYSTEM IN THE NEW BELGRADE STATION | installation of cables, cable assecories and grounding system in the new belgrade station | Complete execution of the works on the left / right side of the station | 2 | 32,712.91 | 65,425.82 | 5/1.2 |
| A-9 | DISMANTLING THE EXISTING DEVICES AND INSTALLING TEMPORARY INTERLOCKING IN THE COURSE OF WORKS ON THE NEW BELGRADE STATION |  |  |  | 0.00 | 0.00 |  |
| 1 | Dismantling of the interlocking devices | Dismantling of the outdoor interlocking devices and indoor devices | set | 1 | 20,829.19 | 20,829.19 | 5/1.2 |
| 2 | Installing of temporary interlocking | Installing of the temporary outdoor and indoor devices | set | 1 | 195,478.21 | 195,478.21 | 5/1.2 |
| 3 | Dismantling of temporary interlocking | Dismantling of the temporary outdoor and indoor devices | set | 1 | 5,714.55 | 5,714.55 | 5/1.2 |
| A-10 | INDOOR EQUIPMENT CONSTITUTING THE AUTOMATIC BLOCK ON INTERSTATION DISTANCE BETWEEN BELGRADE CENTER AND NEW BELGRADE |  | set | 1 | 23,892.30 | 23,892.30 | 5/1.2 |
| A-11 | OUTDOOR AUTOMATIC BLOCK EQUIPMENT ON INTERSTATION DISTANCE BETWEEN BELGRADE CENTER AND NEW BELGRADE |  |  |  |  |  |  |
| 1 | Signal | Main signal,Cabinet ,Standard warning sign provided with foundation. | open line | 1 | 71,559.28 | 71,559.28 | 5/1.2 |
| 2 | Concrete foundation | Concrete foundation for cabinets | open line | 1 | 183.79 | 183.79 | 5/1.2 |

10 Signaling System

| No | Item | Description | Unit | No. <br> of Unit | Unit Price (USD) | $\begin{gathered} \hline \text { Total Price } \\ \text { (USD) } \\ \hline \end{gathered}$ | No. of books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 3 | Outdoor members constituting the twin axle counter (wheel sensor) provided with rail fastening and shields, connecting housing, electronic cards and surge arrester members. Covering shall be painted to show signal mark 207: "section limit" |  | open line | 1 | 14,653.94 | 14,653.94 | 5/1.2 |
| 4 | Combined track magnet $1000 / 2000 \mathrm{~Hz}$ (autostop system I60) provided with universal fastening system and shields |  | open line | 1 | 11,149.74 | 11,149.74 | 5/1.2 |
| A-12 | CABLES, CABLE ACCESSORIES AND EARTHING OF AUTOMATIC BLOCK ON THE INTER STATION DISTANCE BETWEEN BELGRADE CENTER AND NEW BELGRADE |  |  |  |  |  |  |
| 1 | Cable | Cale,Single mode optical cable,Heat-shrinking cable joint,Optical joint,Cabinet,Material for sealing of cable cabinet ,Termination box,PEHD plastic pipe,Cable route marker ,PE cable warning strip,PE cable shield,Sand | open line | 1 | 16,173.20 | 16,173.20 | 5/1.2 |
| 2 | Grounding system | Insulated wire, FeZn 95mm2, for grounding of outdoor elements,Portions for welding FeZn 95 mm 2 wire to rail. | open line | 1 | 1,360.27 | 1,360.27 | 5/1.2 |
| A-13 | INSTALLATION OF OUTDOOR AUTOMATIC BLOCK <br> EQUIPMENT ON INTERSTATION DISTANCE BETWEEN BELGRADE CENTER AND NEW BELGRADE | installation of outdoor automatic block equipment on interstation distance between belgrade center and new belgrade | Complete execution of the works on the left / right side of the open line | 2 | 4,391.90 | 8,783.79 | 5/1.2 |
| A-14 | LAYING OF CABLES, CABLE ACCESSORIES AND GROUNDING SYSTEMB.CENTER - NB | laying of cables, cable accessories and grounding system- b.center - nb | Complete the outdoor equipment installation on the left / right side of the open line | 2 | 6,265.05 | 12,530.10 | 5/1.2 |
| A-15 | DISMANTLING OF THE AUTOMATIC BLOCK B.CENTRE - N.BELGRADE |  | open line | 1 | 2,315.72 | 2,315.72 | 5/1.2 |

10 Signaling System

| No | Item | Description | Unit | No. <br> of Unit | Unit Price (USD) | Total Price (USD) | No. of books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| B | Interlocking of the Zemun station and interstation distance between novi Beograd and Zemun |  |  |  |  |  |  |
| B-1 | INDOOR EQUIPMENT IN THE STATION ZEMUN |  |  |  |  |  |  |
| 1 | CBI | Computer based interlocking device in the sation, including terminals, electronic control post device, LAN, interfaces with other system and etc. | set | 1 | 2,501,952.74 | 2,501,952.74 | 5/1.3 |
| 2 | CTC | Centralized traffic control device (CTC) in station, provided with interfaces that enable connection to CBI, to CTC control terminal in the train dispatcher's room, to CSM device and to the network used for data transmission (CTC network) | set | 1 | 242,598.75 | 242,598.75 | 5/1.3 |
| 3 | CSM | Centralized signaling monitoring device (CSM) in station provided with interfaces that enable connection to CBI, to CTC station device, to cable distribution frame, to power supply cabinets and to the network used for CSM data transmission | set | 1 | 207,403.55 | 207,403.55 | 5/1.3 |
| 4 | Electronic automatic blocking device | Electronic automatic blocking device, as a segment of the computer based interlocking system (CBI) in station that enables communication with dislocated controllers via optic cables. Controllers are accommodated in selfstanding cabinets or cabinets mounted on the signal post that controls both signal operation and I60 . | set | 1 | 68,613.79 | 68,613.79 | 5/1.3 |
| 5 | Lead acid ACCU battery | Lead acid ACCU battery with supply capacity of 3h under the full load regime and additional 8 h in red lamp regime on all main station signals and axel counters, with DC busbars and fuses for both charging and discharging included. | set | 1 | 20,829.19 | 20,829.19 | 5/1.3 |
| 6 | Optical cable termination frame | Optical cable termination frame (3OKP=ODF) $2 \times 60$ | set | 1 | 1,592.82 | 1,592.82 | 5/1.3 |
| 7 | Points heating system | Points heating system provided with terminal and indoor devices for supervisory control and data acquisition system (SCADA) | set | 1 | 10,782.17 | 10,782.17 | 5/1.3 |

## 10 Signaling System

| No | Item | Description | Unit | No. of Unit | Unit Price (USD) | Total Price (USD) | No. of books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 8 | Power Box | Box provided with members for protection of the supply device against atmospheric discharges at the point where cables enter the power room. The box is provided with adequate number of safety members for single-phase power from overhead catenary system, three-phase power from public mains, and three-phase power from diesel generator socket outlet. | set | 1 | 980.20 | 980.20 | 5/1.3 |
| 9 | Power Panel | Station power panel provided with switches, converters, and etc. | set | 1 | 212,874.28 | 212,874.28 | 5/1.3 |
| 10 | Safety interface | Safety interface - electronic control post station Zemun/(future) interlocking device in TPS Zemun. The item includes all necessary interface elements required for traffic operations on the single track. | set | 3 | 15,928.20 | 47,784.60 | 5/1.3 |
| 11 | Safety microprocessor evaluator | Safety microprocessor evaluator, 2003 or 2002 for control of track occupancy in stations and automatic block sections by double-counting sensors of train wheels | set | 1 | 230,958.91 | 230,958.91 | 5/1.3 |
| 12 | Video monitoring and controlling of points lever position | Indoor devices that enable video monitoring and controlling of points lever position | set | 1 | 9,189.35 | 9,189.35 | 5/1.3 |
| 13 | Cable distribution frame | Cable distribution frame (ZKR) with mounting accessories, with cable connectors and surge voltage protective devices and protective devices from electromagnetic influence from OCS (10x13x6=780 connections) | set | 2 | 18,378.69 | 36,757.39 | 5/1.3 |
| B-2 | OUTDOOR EQUIPMENT IN THE STATION ZEMUN |  |  |  |  |  |  |
| 1 | Signal | Main signal ,Limit track signal together with foundation, Shunting signal together with foundation, Speed sign,Signaling sign "78" ,Cabinet | station | 1 | 724,720.88 | 724,720.88 | 5/1.3 |
| 2 | Electric points switch machine | Electric points switch machine,Termination cable box,Setting lever, long control lever, and short control lever with bolts,Signal point indicator,Derailing electric setting machine,Support of the derailing electric setting machine,Derailment head,Derailment sign indicator | station | 1 | 491,002.71 | 491,002.71 | 5/1.3 |

## 10 Signaling System

| No | Item | Description | Unit | No. of Unit | Unit Price (USD) | Total Price (USD) | No. of books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 3 | Video monitoring and controlling of points lever position | Outdoor devices that enable video monitoring and controlling of points lever position | station | 1 | 54,872.65 | 54,872.65 | 5/1.3 |
| 4 | Points heating system device | Distribution cabinet,Termination box provided with appropriate clamps and fuses (PO),Electric points heater,Meteorological station | station | 1 | 290,448.90 | 290,448.90 | 5/1.3 |
| 5 | Concrete foundation for distribution cabinet in charge of points heating. |  | station | 1 | 3,440.49 | 3,440.49 | 5/1.3 |
| 6 | Outdoor members constituting the twin axle counter (wheel sensor) provided with rail fastening and shields, connecting housing, electronic cards and surge arrester members. Covering shall be painted to show signal mark 207: "section limit"/ |  | station | 1 | 348,031.18 | 348,031.18 | 5/1.3 |
| 7 | Combined track magnet $1000 / 2000 \mathrm{~Hz}$ (autostop system I60) provided with universal fastening system and shields |  | station | 1 | 66,898.44 | 66,898.44 | 5/1.3 |
| 8 | Track magnet 500 Hz (autostop system I-60) provided with universal fastening system and shields |  | station | 1 | 4,937.74 | 4,937.74 | 5/1.3 |
| B-3 | CABLES, CABLE ACCESSORIES AND GROUNDING SYSTEM IN THE STATION ZEMUN |  |  |  |  |  |  |
| 1 | Cables,cable accessries | Cale,Single mode optical cable,Heat-shrinking cable joint,Cable distribution cabine,Termination box,Material for sealing of cable cabinet,PEHD plastic pipe,Cable route marker,PE cable warning strip,PE cable shield,sand,Brick | station | 1 | 424,367.07 | 424,367.07 | 5/1.3 |
| 2 | Concrete foundation | Concrete foundation for cable distribution cabinet | station | 1 | 11,149.74 | 11,149.74 | 5/1.3 |
| 3 | Grounding system | Insulated wire, FeZn 95mm2, for grounding of outdoor elements,Portions for welding FeZn 95 mm 2 wire to rail. | station | 1 | 36,601.41 | 36,601.41 | 5/1.3 |
| B-4 | INSTALLATION OF INDOOR EQUIPMENT IN STATION ZEMUN | installation of indoor equipment in station zemun | station | 1 | 261,651.33 | 261,651.33 | 5/1.3 |

10 Signaling System

| No | Item | Description | Unit | No. <br> of Unit | Unit Price (USD) | Total Price (USD) | No. of books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| B-5 | INSTALLATION OF OUTDOOR EQUIPMENT IN THE STATION ZEMUN | installation of outdoor equipment in the station zemun | Complete execution of the works on the left / right side of the station | 2 | 129,821.27 | 259,642.54 | 5/1.3 |
| B-6 | INSTALLATION OF CABLES, CABLE ASSECORIES AND GROUNDING SYSTEM IN THE STATION ZEMUN | installation of cables, cable assecories and grounding system in the station zemun | Complete execution of the works on the left / right side of the station | 2 | 92,815.19 | 185,630.38 | 5/1.3 |
| B-7 | DISMANTLING THE EXISTING DEVICES AND INSTALLING TEMPORARY INTERLOCKING IN THE COURSE OF WORKS ON THE STATION ZEMUN |  |  |  |  |  |  |
| 1 | Dismantling of the interlocking devices | Dismantling of the outdoor interlocking devices and indoor devices | set | 1 | 46,559.36 | 46,559.36 | 5/1.3 |
| 2 | Installing of temporary interlocking | Installing of the temporary outdoor and indoor devices | set | 1 | 214,181.12 | 214,181.12 | 5/1.3 |
| 3 | Dismantling of temporary interlocking | Dismantling of the temporary outdoor and indoor devices | set | 1 | 7,416.42 | 7,416.42 | 5/1.3 |
| B-8 | INDOOR EQUIPMENT CONSTITUTING THE AUTOMATIC BLOCK ON INTERSTATION DISTANCE BETWEEN NOVI BEOGRAD AND ZEMUN |  | set | 1 | 23,892.30 | 23,892.30 | 5/1.3 |
| B-9 | OUTDOOR AUTOMATIC BLOCK EQUIPMENT ON INTERSTATION DISTANCE BETWEEN NOVI BEOGRAD AND ZEMUN |  |  |  |  |  |  |
| 1 | Signal | Main signal,Pre-signalisation repeater signal,Cabinet ,Standard warning sign provided with foundation,Tunnel type warning sign | open line | 1 | 171,622.69 | 171,622.69 | 5/1.3 |
| 2 | Concrete foundation | Concrete foundation for cabinets | open line | 1 | 183.79 | 183.79 | 5/1.3 |

10 Signaling System

| No | Item | Description | Unit | $\begin{array}{\|c\|} \hline \text { No. } \\ \text { of Unit } \end{array}$ | Unit Price (USD) | $\begin{gathered} \hline \text { Total Price } \\ \text { (USD) } \\ \hline \end{gathered}$ | No. of books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 3 | Outdoor members constituting the twin axle counter (wheel sensor) provided with rail fastening and shields, connecting housing, electronic cards and surge arrester members. Covering shall be painted to show signal mark 207: "section limit" |  | open line | 1 | 14,653.94 | 14,653.94 | 5/1.3 |
| 4 | Combined track magnet 1000/2000Hz (autostop system I60) provided with universal fastening system and shields |  | open line | 1 | 22,299.48 | 22,299.48 | 5/1.3 |
| B-10 | CABLES, CABLE ACCESSORIES AND EARTHING OF AUTOMATIC BLOCK ON THE INTER STATION DISTANCE BETWEEN NOVI BEOGRAD AND ZEMUN |  |  |  |  |  |  |
| 1 | Cable | Cale,Single mode optical cable,Heat-shrinking cable joint,Optical joint,Cabinet,Material for sealing of cable cabinet ,Termination box,PEHD plastic pipe,Steel pipe,Cable route marker ,PE cable warning strip,PE cable shield, Sand | open line | 1 | 42,968.15 | 42,968.15 | 5/1.3 |
| 2 | Grounding system | Insulated wire, FeZn 95mm2, for grounding of outdoor elements,Portions for welding FeZn 95mm2 wire to rail. | open line | 1 | 3,126.71 | 3,126.71 | 5/1.3 |
| B-11 | INSTALLATION OF OUTDOOR AUTOMATIC BLOCK EQUIPMENT ON INTERSTATION DISTANCE BETWEEN NOVI BEOGRAD AND ZEMUN | installation of outdoor automatic block equipment on interstation distance between novi beograd and zemun | Complete execution of the works on the left / right side of the open line | 2 | 9,039.25 | 18,078.51 | 5/1.3 |
| B-12 | LAYING OF CABLES, CABLE ACCESSORIES AND GROUNDING SYSTEM ON INTERSTATION DISTANCE BETWEEN NOVI BEOGRAD AND ZEMUN | laying of cables, cable accessories and grounding system on interstation distance between novi beograd and zemun | Complete execution of the works on the left / right side of the open line | 2 | 9,900.46 | 19,800.93 | 5/1.3 |

10 Signaling System

| No | Item | Description | Unit | No. of Unit | Unit Price (USD) | Total Price (USD) | No. of books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| B-13 | DISMANTLING OF THE AUTOMATIC BLOCK NOVI BEOGRAD - ZEMUN |  | open line | 1 | 4,631.43 | 4,631.43 | 5/1.3 |
| C | Interlocking of the Zemun polje station and interstation distance between Zemun and Zemun polje |  |  |  |  |  |  |
| C-1 | INDOOR EQUIPMENT IN THE ZEMUNSKO POLJE STATION |  |  |  |  |  |  |
| 1 | CBI | Computer based interlocking device in the sation, including terminals, electronic control post device, LAN, interfaces with other system and etc. | set | 1 | 1,117,424.54 | 1,117,424.54 | 5/1.4 |
| 2 | CTC | Centralized traffic control device (CTC) in station, provided with interfaces that enable connection to CBI, to CTC control terminal in the train dispatcher's room, to CSM device and to the network used for data transmission (CTC network) | set | 1 | 205,841.36 | 205,841.36 | 5/1.4 |
| 3 | CSM | Centralized signaling monitoring device (CSM) in station provided with interfaces that enable connection to CBI, to CTC station device, to cable distribution frame, to power supply cabinets and to the network used for CSM data transmission | set | 1 | 169,665.97 | 169,665.97 | 5/1.4 |
| 4 | Electronic automatic blocking device | Electronic automatic blocking device, as a segment of the computer based interlocking system (CBI) in station that enables communication with dislocated controllers via optic cables. Controllers are accommodated in selfstanding cabinets or cabinets mounted on the signal post that controls both signal operation and I60 . | set | 1 | 71,064.28 | 71,064.28 | 5/1.4 |
| 5 | Lead acid ACCU battery | Lead acid ACCU battery with supply capacity of 3h under the full load regime and additional 8 h in red lamp regime on all main station signals and axel counters, with DC busbars and fuses for both charging and discharging included. | set | 1 | 13,477.71 | 13,477.71 | 5/1.4 |
| 6 | Optical cable termination frame | Optical cable termination frame (3OKP=ODF) $2 \times 60$ | set | 1 | 1,592.82 | 1,592.82 | 5/1.4 |
| 7 | Points heating system | Points heating system provided with terminal and indoor devices for supervisory control and data acquisition system (SCADA) | set | 1 | 10,782.17 | 10,782.17 | 5/1.4 |

10 Signaling System

| No | Item | Description | Unit | No. <br> of Unit | $\begin{gathered} \hline \text { Unit Price } \\ \text { (USD) } \end{gathered}$ | $\begin{gathered} \hline \text { Total Price } \\ \text { (USD) } \\ \hline \end{gathered}$ | No. of books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 8 | Power Box | Box provided with members for protection of the supply device against atmospheric discharges at the point where cables enter the power room. The box is provided with adequate number of safety members for single-phase power from overhead catenary system, three-phase power from public mains, and three-phase power from diesel generator socket outlet. | set | 1 | 980.20 | 980.20 | 5/1.4 |
| 9 | Power Panel | Station power panel provided with switches, converters, and etc. | set | 1 | 200,621.81 | 200,621.81 | 5/1.4 |
| 10 | Safety microprocessor evaluator | Safety microprocessor evaluator, 2003 or 2002 for control of track occupancy in stations and automatic block sections by double-counting sensors of train wheels | set | 1 | 115,173.14 | 115,173.14 | 5/1.4 |
| 11 | Video monitoring and controlling of points lever position | Indoor devices that enable video monitoring and controlling of points lever position | set | 1 | 9,189.35 | 9,189.35 | 5/1.4 |
| 12 | Cable distribution frame | Cable distribution frame (ZKR) with mounting accessories, with cable connectors and surge voltage protective devices and protective devices from electromagnetic influence from OCS (10x13x6=780 connections) | set | 1 | 18,378.69 | 18,378.69 | 5/1.4 |
| 13 | Relay safety interface between CBI Zemunsko Polje and (future) CBI in TPS Zemun. The item includes all necessary interface elements required for traffic operations on the single track. |  | set | 1 | 15,928.20 | 15,928.20 | 5/1.4 |
| C-2 | OUTDOOR EQUIPMENT IN THE Z | EMUNSKO POLJE STATION |  |  |  |  |  |
| 1 | Signal | Main signal with foundationDirection sign,Separate outer distant (warning) signal with foundation,Direction sign provided,Standard warning sign provided with foundation. | station | 1 | 283,792.75 | 283,792.75 | 5/1.4 |
| 2 | Electric points switch machine | Electric points switch machine,Termination cable box,Setting lever, long control lever, and short control lever with bolts,Signal point indicator | station | 1 | 170,368.03 | 170,368.03 | 5/1.4 |
| 3 | Video monitoring and controlling of points lever position | Outdoor devices that enable video monitoring and controlling of points lever position | station | 1 | 16,565.33 | 16,565.33 | 5/1.4 |

10 Signaling System

| No | Item | Description | Unit | No. <br> of Unit | Unit Price (USD) | Total Price (USD) | No. of books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 4 | Points heating system device | Distribution cabinet,Termination box provided with appropriate clamps and fuses (PO),Electric points heater,Meteorological station | station | 1 | 91,355.58 | 91,355.58 | 5/1.4 |
| 5 | Concrete foundation for distribution cabinet in charge of points heating. |  | station | 1 | 1,146.83 | 1,146.83 | 5/1.4 |
| 6 | Outdoor members constituting the twin axle counter (wheel sensor) provided with rail fastening and shields, connecting housing, electronic cards and surge arrester members. Covering shall be painted to show signal mark 207: "section limit"/ |  | station | 1 | 117,231.56 | 117,231.56 | 5/1.4 |
| 7 | Combined track magnet $1000 / 2000 \mathrm{~Hz}$ (autostop system I60) provided with universal fastening system and shields |  | station | 1 | 39,024.09 | 39,024.09 | 5/1.4 |
| 8 | Track magnet 500 Hz (autostop system I-60) provided with universal fastening system and shields |  | station | 1 | 2,468.87 | 2,468.87 | 5/1.4 |
| C-3 | CABLES, CABLE ACCESSORIES AND GROUNDING SYSTEM IN THE ZEMUNSKO POLJE STATION |  |  |  |  |  |  |
| 1 | Cables,cable accessries | Cale,Single mode optical cable,Heat-shrinking cable joint,Cable distribution cabine,Termination box,Material for sealing of cable cabinet,PEHD plastic pipe,Cable route marker,PE cable warning strip,PE cable shield,sand,Brick | station | 1 | 78,632.83 | 78,632.83 | 5/1.4 |
| 2 | Concrete foundation | Concrete foundation for cable distribution cabinet | station | 1 | 2,675.94 | 2,675.94 | 5/1.4 |
| 3 | Grounding system | Insulated wire, FeZn 95mm2, for grounding of outdoor elements,Portions for welding FeZn 95mm2 wire to rail. | station | 1 | 10,407.49 | 10,407.49 | 5/1.4 |
| C-4 | INSTALLATION OF INDOOR EQUIPMENT IN ZEMUNSKO POLJE STATION | installation of indoor equipment in zemunsko polje station | station | 1 | 141,638.46 | 141,638.46 | 5/1.4 |

10 Signaling System

| No | Item | Description | Unit | No. of Unit | Unit Price (USD) | Total Price (USD) | No. of books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| C-5 | INSTALLATION OF OUTDOOR EQIPMENT IN THE ZEMUNSKO POLJE STATION | installation of outdoor eqipment in the zemunsko polje station | Complete execution of the works on the left / right side of the station | 2 | 47,291.13 | 94,582.27 | 5/1.4 |
| C-6 | INSTALLATION OF CABLES, CABLE ASSECORIES AND GROUNDING SYSTEM IN THE ZEMUNSKO POLJE STATION | installation of cables, cable assecories and grounding system in the zemunsko polje station | Complete execution of the works on the left / right side of the station | 2 | 23,790.17 | 47,580.34 | 5/1.4 |
| C-7 | DISMANTLING THE EXISTING DEVICES AND INSTALLING TEMPORARY INTERLOCKING IN THE COURSE OF WORKS ON THE ZEMUNSKO POLJE STATION |  |  |  |  |  |  |
| 1 | Dismantling of the interlocking devices | Dismantling of the outdoor interlocking devices and indoor devices | set | 1 | 46,559.36 | 46,559.36 | 5/1.4 |
| 2 | Installing of temporary interlocking | Installing of the temporary outdoor and indoor devices | set | 1 | 168,128.10 | 168,128.10 | 5/1.4 |
| 3 | Dismantling of temporary interlocking | Dismantling of the temporary outdoor and indoor devices | set | 1 | 4,753.96 | 4,753.96 | 5/1.4 |
| C-8 | INDOOR EQUIPMENT CONSTITUTING THE AUTOMATIC BLOCK ON INTERSTATION DISTANCE BETWEEN ZEMUN AND ZEMUNSKO POLJE |  | set | 1 | 23,892.30 | 23,892.30 | 5/1.4 |
| C-9 | OUTDOOR AUTOMATIC BLOCK EQUIPMENT ON INTERSTATION DISTANCE BETWEEN ZEMUN AND ZEMUNSKO POLJE |  |  |  |  |  |  |
| 1 | Signal | Main signal,Pre-signalisation repeater signa,Cabinet ,Standard warning sign provided with foundation. | open line | 1 | 96,529.80 | 96,529.80 | 5/1.4 |
| 2 | Concrete foundation | Concrete foundation for cabinets | open line | 1 | 735.15 | 735.15 | 5/1.4 |

10 Signaling System

| No | Item | Description | Unit | No. <br> of Unit | Unit Price (USD) | $\begin{gathered} \hline \text { Total Price } \\ \text { (USD) } \\ \hline \end{gathered}$ | No. of books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 3 | Outdoor members constituting the twin axle counter (wheel sensor) provided with rail fastening and shields, connecting housing, electronic cards and surge arrester members. Covering shall be painted to show signal mark 207: "section limit" |  | open line | 1 | 14,653.94 | 14,653.94 | 5/1.4 |
| 4 | Combined track magnet 1000/2000Hz (autostop system I60) provided with universal fastening system and shields |  | open line | 1 | 11,149.74 | 11,149.74 | 5/1.4 |
| C-10 | CABLES, CABLE ACCESSORIES AND EARTHING OF AUTOMATIC BLOCK ON THE INTER STATION DISTANCE BETWEEN ZEMUN AND ZEMUNSKO POLJE |  |  |  |  |  |  |
| 1 | Cable | Cale,Single mode optical cable,Heat-shrinking cable joint,Optical joint,Cabinet,Material for sealing of cable cabinet ,Termination box,PEHD plastic pipe,Cable route marker ,PE cable warning strip,PE cable shield,Sand | open line | 1 | 34,560.90 | 34,560.90 | 5/1.4 |
| 2 | Grounding system | Insulated wire, FeZn 95mm2, for grounding of outdoor elements,Portions for welding FeZn 95mm2 wire to rail. | open line | 1 | 2,387.64 | 2,387.64 | 5/1.4 |
| C-11 | INSTALLATION OF OUTDOOR AUTOMATIC BLOCK EQUIPMENT ON INTERSTATION DISTANCE BETWEEN ZEMUN AND ZEMUNSKO POLJE | installation of outdoor automatic block equipment on interstation distance between zemun and zemunsko polje | Complete execution of the works on the left / right side of the open line | 2 | 5,415.59 | 10,831.18 | 5/1.4 |
| C-12 | LAYING OF CABLES, CABLE ACCESSORIES AND GROUNDING SYSTEM- ZEMUN Z.POLJE | laying of cables, cable accessories and grounding system- zemun - z.polje | Complete execution of the works on the left / right side of the open line | 2 | 7,481.15 | 14,962.31 | 5/1.4 |
| C-13 | DISMANTLING OF THE AUTOMATIC BLOCK ZEMUN ZEMUNSKO POLJE |  | open line | 1 | 1,617.32 | 1,617.32 | 5/1.4 |

10 Signaling System

| No | Item | Description | Unit | No. of Unit | Unit Price (USD) | Total Price (USD) | No. of books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| D | Interlocking of the Batajnica station and interstation distance between Zemun polje station and Batajnica station |  |  |  |  |  |  |
| D-1 | INDOOR EQUIPMENT |  |  |  |  |  |  |
| 1 | CBI | Computer based interlocking device in the sation, including terminals, electronic control post device, LAN, interfaces with other system and etc. | set | 1 | 2,011,854.26 | 2,011,854.26 | 5/1.5 |
| 2 | CTC | Centralized traffic control device (CTC) in station, provided with interfaces that enable connection to CBI, to CTC control terminal in the train dispatcher's room, to CSM device and to the network used for data transmission (CTC network) | set | 1 | 242,598.75 | 242,598.75 | 5/1.5 |
| 3 | CSM | Centralized signaling monitoring device (CSM) in station provided with interfaces that enable connection to CBI, to CTC station device, to cable distribution frame, to power supply cabinets and to the network used for CSM data transmission | set | 1 | 200,113.34 | 200,113.34 | 5/1.5 |
| 4 | Electronic automatic blocking device | Electronic automatic blocking device, as a segment of the computer based interlocking system (CBI) in station that enables communication with dislocated controllers via optic cables. Controllers are accommodated in selfstanding cabinets or cabinets mounted on the signal post that controls both signal operation and I60. | set | 1 | 93,118.71 | 93,118.71 | 5/1.5 |
| 5 | Lead acid ACCU battery | Lead acid ACCU battery with supply capacity of 3h under the full load regime and additional 8 h in red lamp regime on all main station signals and axel counters, with DC busbars and fuses for both charging and discharging included. | set | 1 | 22,054.43 | 22,054.43 | 5/1.5 |
| 6 | Optical cable termination frame | Optical cable termination frame (3OKP=ODF) 2x60 | set | 1 | 1,592.82 | 1,592.82 | 5/1.5 |
| 7 | Points heating system | Points heating system provided with terminal and indoor devices for supervisory control and data acquisition system (SCADA) | set | 1 | 10,782.17 | 10,782.17 | 5/1.5 |
| 8 | Power Box | Box provided with members for protection of the supply device against atmospheric discharges at the point where cables enter the power room. The box is provided with adequate number of safety members for single-phase power from overhead catenary system, three-phase power from public mains, and three-phase power from diesel generator socket outlet. | set | 1 | 980.20 | 980.20 | 5/1.5 |

10 Signaling System

| No | Item | Description | Unit | No. <br> of Unit | Unit Price (USD) | Total Price (USD) | No. of books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 9 | Power Panel | Station power panel provided with switches, converters, and etc. | set | 1 | 239,094.54 | 239,094.54 | 5/1.5 |
| 10 | Safety interface | Safety interface - electronic control post/station post of the automatic block relay device, SpDrS-64JŽ system. The item includes all necessary interface elements required for traffic operations on the single track. | set | 1 | 15,928.20 | 15,928.20 | 5/1.5 |
| 11 | Safety microprocessor evaluator | Safety microprocessor evaluator, 2003 or 2002 for control of track occupancy in stations and automatic block sections by double-counting sensors of train wheels | set | 1 | 219,931.69 | 219,931.69 | 5/1.5 |
| 12 | Video monitoring and controlling of points lever position | Indoor devices that enable video monitoring and controlling of points lever position (including monitor, keyboard, and mouse) | set | 1 | 9,189.35 | 9,189.35 | 5/1.5 |
| 13 | Cable distribution frame | Cable distribution frame (ZKR) with mounting accessories, with cable connectors and surge voltage protective devices and protective devices from electromagnetic influence from OCS (10x13x6=780 connections) | set | 2 | 18,378.69 | 36,757.39 | 5/1.5 |
| D-2 | OUTDOOR EQUIPMENT IN THE BATAJNICA STATION |  |  |  |  |  |  |
| 1 | Signal | Main signal with foundation,Pre-signalisation repeater signal ,Limit track signal together with foundation, Shunting signal together with foundation,Speed sign,Direction sign,Signaling sign "78" | station | 1 | 640,472.95 | 640,472.95 | 5/1.5 |
| 2 | Electric points switch machine | Electric points switch machine,Termination cable box,Setting lever, long control lever, and short control lever with bolts,Signal point indicator ,Derailing electric setting machine,Support of the derailing electric setting machine, Derailment head | station | 1 | 510,100.63 | 510,100.63 | 5/1.5 |
| 3 | Video monitoring and controlling of points lever position | Outdoor devices that enable video monitoring and controlling of points lever position | station | 1 | 46,589.99 | 46,589.99 | 5/1.5 |
| 4 | Points heating system device | Distribution cabinet,Termination box provided with appropriate clamps and fuses (PO),Electric points heater,Meteorological station | station | 1 | 244,275.50 | 244,275.50 | 5/1.5 |
| 5 | Concrete foundation for distribution cabinet in charge of points heating. |  | station | 1 | 3,058.21 | 3,058.21 | 5/1.5 |

10 Signaling System

| No | Item | Description | Unit | No. <br> of Unit | Unit Price (USD) | $\begin{gathered} \hline \text { Total Price } \\ \text { (USD) } \\ \hline \end{gathered}$ | No. of books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 6 | Outdoor members constituting the twin axle counter (wheel sensor) provided with rail fastening and shields, connecting housing, electronic cards and surge arrester members. Covering shall be painted to show signal mark 207: "section limit"/ |  | station | 1 | 318,723.29 | 318,723.29 | 5/1.5 |
| 7 | Combined track magnet $1000 / 2000 \mathrm{~Hz}$ (autostop system I60) provided with universal fastening system and shields |  | station | 1 | 64,111.01 | 64,111.01 | 5/1.5 |
| 8 | Track magnet 500 Hz (autostop system I-60) provided with universal fastening system and shields |  | station | 1 | 7,406.61 | 7,406.61 | 5/1.5 |
| D-3 | CABLES, CABLE ACCESSORIES AND GROUNDING SYSTEM IN THE BATAJNICA STATION |  |  |  |  |  |  |
| 1 | Cables,cable accessries | Cale,Single mode optical cable,Heat-shrinking cable joint,Cable distribution cabine,Termination box,Material for sealing of cable cabinet,PEHD plastic pipe,Cable route marker,PE cable warning strip,PE cable shield, sand,Brick | station | 1 | 325,440.43 | 325,440.43 | 5/1.5 |
| 2 | Concrete foundation | Concrete foundation for cable distribution cabinet | station | 1 | 8,027.81 | 8,027.81 | 5/1.5 |
| 3 | Grounding system | Insulated wire, FeZn 95mm2, for grounding of outdoor elements,Portions for welding FeZn 95 mm 2 wire to rail. | station | 1 | 29,709.28 | 29,709.28 | 5/1.5 |
| D-4 | INSTALLATION OF INDOOR EQUIPMENT IN BATAJNICA STATION | installation of indoor equipment in batajnica station | station | 1 | 230,897.65 | 230,897.65 | 5/1.5 |
| D-5 | INSTALLATION OF OUTDOOR EQUIPMENT IN THE STATION BATAJNICA | Installation of outdoor eqipment in the batajnica station | Complete execution of the works on the left / right side of the open line | 2 | 130,352.72 | 260,705.44 | 5/1.5 |

10 Signaling System

| No | Item | Description | Unit | No. <br> of Unit | Unit Price (USD) | Total Price (USD) | No. of books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| D-6 | INSTALLATION OF CABLES, CABLE ASSECORIES AND GROUNDING SYSTEM IN THE BATAJNICA STATION | Installation of cables, cable assecories and grounding system in the batajnica station | Complete execution of the works on the left / right side of the open line | 2 | 79,880.80 | 159,761.61 | 5/1.5 |
| D-7 | DISMANTLING THE EXISTING DEVICES AND INSTALLING TEMPORARY INTERLOCKING IN THE COURSE OF WORKS ON THE BATAJNICA STATION |  |  |  |  |  | 5/1.5 |
| 1 | Dismantling of the interlocking devices | Dismantling of the outdoor interlocking devices and indoor devices | set | 1 | 40,433.12 | 40,433.12 | 5/1.5 |
| 2 | Installing of temporary interlocking | Installing of the temporary outdoor and indoor devices | set | 1 | 288,829.27 | 288,829.27 | 5/1.5 |
| 3 | Dismantling of temporary interlocking | Dismantling of the temporary outdoor and indoor devices | set | 1 | 11,293.09 | 11,293.09 | 5/1.5 |
| D-8 | INDOOR EQUIPMENT CONSTITUTING THE AUTOMATIC BLOCK ON INTERSTATION DISTANCE BETWEEN ZEMUNSKO POLJE AND BATAJNICA |  | set | 1 | 23,892.30 | 23,892.30 | 5/1.5 |
| D-9 | OUTDOOR AUTOMATIC BLOCK EQUIPMENT ON INTERSTATION DISTANCE BETWEEN ZEMUNSKO POLJE AND BATAJNICA |  |  |  |  |  |  |
| 1 | Signal | Main signal,Cabinet ,Standard warning sign provided with foundation. | open line | 1 | 212,511.60 | 212,511.60 | 5/1.5 |
| 2 | Concrete foundation | Concrete foundation for cabinets | open line | 1 | 551.36 | 551.36 | 5/1.5 |
| 3 | Outdoor members constituting the twin axle counter (wheel sensor) provided with rail fastening and shields, connecting housing, electronic cards and surge arrester members. Covering shall be painted to show signal mark 207: "section limit" | Outdoor members constituting the twin axle counter (wheel sensor) provided with rail fastening and shields, connecting housing, electronic cards and surge arrester members. Covering shall be painted to show signal mark 207: "section limit" | open line | 1 | 21,980.92 | 21,980.92 | 5/1.5 |

# 10 Signaling System 

| No | Item | Description | Unit | No. of Unit | Unit Price (USD) | Total Price (USD) | No. of books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 4 | Combined track magnet (autostop system I-60) provided with universal fastening system and shields | Combined track magnet $1000 / 2000 \mathrm{~Hz}$ (autostop system I-60) provided with universal fastening system and shields | open line | 1 | 33,449.22 | 33,449.22 | 5/1.5 |
| D-10 | CABLES, CABLE ACCESSORIES AND EARTHING OF AUTOMATIC BLOCK ON THE INTER STATION DISTANCE BETWEEN ZEMUNSKO POLJE AND BATAJNICA |  |  |  |  |  |  |
| 1 | Cable | Cale,Single mode optical cable,Heat-shrinking cable joint,Optical joint,Cabinet,Material for sealing of cable cabinet ,Termination box,PEHD plastic pipe,Cable route marker ,PE cable warning strip,PE cable shield,Sand | open line | 1 | 74,086.93 | 74,086.93 | 5/1.5 |
| 2 | Grounding system | Insulated wire, FeZn 95mm2, for grounding of outdoor elements,Portions for welding FeZn 95 mm 2 wire to rail. | open line | 1 | 3,709.68 | 3,709.68 | 5/1.5 |
| D-11 | INSTALLATION OF OUTDOOR AUTOMATIC BLOCK <br> EQUIPMENT ON INTERSTATION DISTANCE ZEMUNSKO POLJE AND BATAJNICA | installation of outdoor automatic block equipment on interstation distance zemunsko polje and batajnica | Complete execution of the works on the left / right side of the open line | 2 | 11,662.51 | 23,325.01 | 5/1.5 |
| D-12 | LAYING OF CABLES, CABLE ACCESSORIES AND GROUNDING SYSTEM ZEMUNSKO POLJE BATAJNICA | laying of cables, cable accessories and grounding system -zemunsko polje - batajnica | Complete execution of the works on the left / right side of the open line | 2 | 15,814.66 | 31,629.31 | 5/1.5 |
| D-13 | DISMANTLING OF THE AUTOMATIC BLOCK ZEMUNSKO POLJE BATAJNICA |  | open line | 1 | 4,851.97 | 4,851.97 | 5/1.5 |
| E | Interlocking of the Nova Pazova station and interstation distance between Batajnica station and Nova Pazova station |  |  |  |  |  |  |
| E-1 | INDOOR EQUIPMENT IN THE NOVA PAZOVA STATION |  |  |  |  |  |  |
| 1 | CBI | Computer based interlocking device in the sation, including terminals, electronic control post device, LAN, interfaces with other system and etc. | set | 1 | 1,636,928.93 | 1,636,928.93 | 5/1.6 |

## 10 Signaling System

| No | Item | Description | Unit | No. of Unit | $\begin{gathered} \hline \text { Unit Price } \\ \text { (USD) } \end{gathered}$ | $\begin{gathered} \hline \text { Total Price } \\ \text { (USD) } \\ \hline \end{gathered}$ | No. of books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2 | CTC | Centralized traffic control device (CTC) in station, provided with interfaces that enable connection to CBI, to CTC control terminal in the train dispatcher's room, to CSM device and to the network used for data transmission (CTC network) | set | 1 | 205,841.36 | 205,841.36 | 5/1.6 |
| 3 | CSM | Centralized signaling monitoring device (CSM) in station provided with interfaces that enable connection to CBI, to CTC station device, to cable distribution frame, to power supply cabinets and to the network used for CSM data transmission | set | 1 | 188,534.76 | 188,534.76 | 5/1.6 |
| 4 | Electronic automatic blocking device | Electronic automatic blocking device, as a segment of the computer based interlocking system (CBI) in station that enables communication with dislocated controllers via optic cables. Controllers are accommodated in selfstanding cabinets or cabinets mounted on the signal post that controls both signal operation and I60 . | set | 1 | 107,821.67 | 107,821.67 | 5/1.6 |
| 5 | Lead acid ACCU battery | Lead acid ACCU battery with supply capacity of 3h under the full load regime and additional 8 h in red lamp regime on all main station signals and axel counters, with DC busbars and fuses for both charging and discharging included. | set | 1 | 17,153.45 | 17,153.45 | 5/1.6 |
| 6 | Optical cable termination frame | Optical cable termination frame (3OKP=ODF) $2 \times 60$ | set | 1 | 1,592.82 | 1,592.82 | 5/1.6 |
| 7 | Points heating system | Points heating system provided with terminal and indoor devices for supervisory control and data acquisition system (SCADA) | set | 1 | 10,782.17 | 10,782.17 | 5/1.6 |
| 8 | Power Box | Box provided with members for protection of the supply device against atmospheric discharges at the point where cables enter the power room. The box is provided with adequate number of safety members for single-phase power from overhead catenary system, three-phase power from public mains, and three-phase power from diesel generator socket outlet. | set | 1 | 980.20 | 980.20 | 5/1.6 |
| 9 | Power Panel | Station power panel provided with switches, converters, and etc. | set | 1 | 243,505.43 | 243,505.43 | 5/1.6 |

10 Signaling System

| No | Item | Description | Unit | No. <br> of Unit | Unit Price (USD) | Total Price (USD) | No. of books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 10 | Safety microprocessor evaluator | Safety microprocessor evaluator, 2003 or 2002 for control of track occupancy in stations and automatic block sections by double-counting sensors of train wheels | set | 1 | 155,606.27 | 155,606.27 | 5/1.6 |
| 11 | Video monitoring and controlling of points lever position | Indoor devices that enable video monitoring and controlling of points lever position | set | 1 | 9,189.35 | 9,189.35 | 5/1.6 |
| 12 | Cable distribution frame | Cable distribution frame (ZKR) with mounting accessories, with cable connectors and surge voltage protective devices and protective devices from electromagnetic influence from OCS ( $10 \times 13 \times 6=780$ connections) | set | 2 | 18,378.69 | 36,757.39 | 5/1.6 |
| E-2 | OUTDOOR EQUIPMENT IN THE NOVA PAZOVA STATION |  |  |  |  |  |  |
| 1 | Signal | Main signal,Limit track signal together with foundation,Shunting signal together with foundation | station | 1 | 451,644.13 | 451,644.13 | 5/1.6 |
| 2 | Electric points switch machine | Electric points switch machine,Termination cable box,Setting lever, long control lever, and short control lever with bolts,Signal point indicator ,Electro-mechanical controller,Support of the electro-mechanical controller,Derailing electric setting machine,Support of the derailing electric setting machine, Derailment head,Derailment sign indicator | station | 1 | 510,785.54 | 510,785.54 | 5/1.6 |
| 3 | Video monitoring and controlling of points lever position | Outdoor devices that enable video monitoring and controlling of points lever position | station | 1 | 41,413.32 | 41,413.32 | 5/1.6 |
| 4 | Points heating system device | Distribution cabinet,Termination box provided with appropriate clamps and fuses (PO),Electric points heater,Meteorological station | station | 1 | 199,953.44 | 199,953.44 | 5/1.6 |
| 5 | Concrete foundation for distribution cabinet in charge of points heating. |  | station | 1 | 2,293.66 | 2,293.66 | 5/1.6 |
| 6 | Outdoor members constituting the twin axle counter (wheel sensor) provided with rail fastening and shields, connecting housing, electronic cards and surge arrester members. Covering shall be painted to show signal mark 207: "section limit"/ |  | station | 1 | 175,847.33 | 175,847.33 | 5/1.6 |

10 Signaling System

| No | Item | Description | Unit | No. of Unit | Unit Price (USD) | Total Price (USD) | No. of books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 7 | Combined track magnet (autostop system I-60) provided with universal fastening system and shields |  | station | 1 | 41,811.53 | 41,811.53 | 5/1.6 |
| E-3 | CABLES, CABLE ACCESSORIES AND GROUNDING SYSTEM IN THE NOVA PAZOVA STATION |  |  |  |  |  |  |
| 1 | Cables,cable accessries | Cale,Single mode optical cable,Heat-shrinking cable joint,Cable distribution cabine,Termination box,Material for sealing of cable cabinet,PEHD plastic pipe,Cable route marker,PE cable warning strip,PE cable shield,sand,Brick | station | 1 | 265,705.14 | 265,705.14 | 5/1.6 |
| 2 | Concrete foundation | Concrete foundation for cable distribution cabinet | station | 1 | 4,013.91 | 4,013.91 | 5/1.6 |
| 3 | Grounding system | Insulated wire, FeZn 95mm2, for grounding of outdoor elements,Portions for welding FeZn 95 mm 2 wire to rail. | station | 1 | 18,524.50 | 18,524.50 | 5/1.6 |
| E-4 | INSTALLATION OF INDOOR EQUIPMENT IN NOVA PAZOVA STATION | Installation of indoor equipment in Nova Pazova station | station | 1 | 186,298.69 | 186,298.69 | 5/1.6 |
| E-5 | INSTALLATION OF OUTDOOR EQIPMENT IN THE NOVA PAZOVA STATION | Installation of outdoor eqipment in the Nova Pazova station | Complete execution of the works on the left / right side of the station | 2 | 99,345.72 | 198,691.44 | 5/1.6 |
| E-6 | INSTALLATION OF CABLES, CABLE ASSECORIES AND GROUNDING SYSTEM IN THE NOVA PAZOVA STATION | Installation of cables, cable assecories and grounding system in the Nova Pazova station | Complete execution of the works on the left / right side of the station | 2 | 61,122.65 | 122,245.30 | 5/1.6 |
| E-7 | DISMANTLING THE EXISTING DEVICES AND INSTALLING TEMPORARY INTERLOCKING IN THE COURSE OF WORKS ON THE NOVA PAZOVA STATION |  |  |  |  |  |  |
| 1 | Dismantling of the interlocking devices | Dismantling of the outdoor interlocking devices and indoor devices | station | 1 | 46,559.36 | 46,559.36 | 5/1.6 |
| 2 | Installing of temporary interlocking | Installing of the temporary outdoor and indoor devices | station | 1 | 258,798.71 | 258,798.71 | 5/1.6 |
| 3 | Dismantling of temporary interlocking | Dismantling of the temporary outdoor and indoor devices | station | 1 | 9,659.84 | 9,659.84 | 5/1.6 |

## 10 Signaling System

| No | Item | Description | Unit | No. <br> of Unit | Unit Price (USD) | Total Price (USD) | No. of books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| E-8 | INDOOR EQUIPMENT CONSTITUTING THE AUTOMATIC BLOCK ON INTERSTATION DISTANCE BETWEEN BATAJNICA AND NOVA PAZOVA |  | set | 1 | 23,892.30 | 23,892.30 | 5/1.6 |
| E-9 | OUTDOOR AUTOMATIC BLOCK EQUIPMENT ON INTERSTATION DISTANCE BETWEEN BATAJNICA AND NOVA PAZOVA |  |  |  |  |  |  |
| 1 | Signal | Main signal,Separate outer distant (warning) signal,Cabinet ,Standard warning sign provided with foundation. | open line | 1 | 279,168.67 | 279,168.67 | 5/1.6 |
| 2 | Concrete foundation | Concrete foundation for cabinets | open line | 1 | 1,286.51 | 1,286.51 | 5/1.6 |
| 3 | Outdoor members constituting the twin axle counter (wheel sensor) provided with rail fastening and shields, connecting housing, electronic cards and surge arrester members. Covering shall be painted to show signal mark 207: "section limit" |  | open line | 1 | 36,634.86 | 36,634.86 | 5/1.6 |
| 4 | Combined track magnet $1000 / 2000 \mathrm{~Hz}$ (autostop system I60) provided with universal fastening system and shields |  | open line | 1 | 33,449.22 | 33,449.22 | 5/1.6 |
| E-10 | CABLES, CABLE ACCESSORIES AND EARTHING OF AUTOMATIC BLOCK ON THE INTER STATION DISTANCE BETWEEN BATAJNICA AND NOVA PAZOVA |  |  |  |  |  |  |
| 1 | Cable | Cale,Single mode optical cable,Heat-shrinking cable joint,Optical joint,Cabinet,Material for sealing of cable cabinet ,Termination box,PEHD plastic pipe,Cable route marker ,PE cable warning strip,PE cable shield,Sand | open line | 1 | 118,573.75 | 118,573.75 | 5/1.6 |
| 2 | Grounding system | Insulated wire, FeZn 95mm2, for grounding of outdoor elements,Portions for welding FeZn 95 mm 2 wire to rail. | open line | 1 | 5,320.02 | 5,320.02 | 5/1.6 |

10 Signaling System

| No | Item | Description | Unit | No. <br> of Unit | Unit Price (USD) | Total Price (USD) | No. of books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| E-11 | INSTALLATION OF OUTDOOR AUTOMATIC BLOCK EQUIPMENT ON INTERSTATION DISTANCE BETWEEN BATAJNICA AND NOVA PAZOVA | Installation of outdoor automatic block equipment on interstation distance between batajnica and nova pazova | Complete execution of the works on the left / right side of the open line | 2 | 14,306.59 | 28,613.17 | 5/1.6 |
| E-12 | LAYING OF CABLES, CABLE ACCESSORIES AND GROUNDING SYSTEM BATAJNICA -NOVA PAZOVA | laying of cables, cable accessories and grounding system - batajnica -nova pazova | Complete execution of the works on the left / right side of the open line | 2 | 22,966.95 | 45,933.91 | 5/1.6 |
| E-13 | DISMANTLING OF THE AUTOMATIC BLOCK BATAJNICA - NOVA PAZOVA |  | open line | 1 | 4,631.43 | 4,631.43 | 5/1.6 |
| F | Interlocking of the Stara Pazova station and interstation distance between Nova Pazova station and Stara Pazova |  |  |  |  |  |  |
| F-1 | INDOOR EQUIPMENT IN THE STARA PAZOVA STATION |  |  |  |  |  |  |
| 1 | CBI | Computer based interlocking device in the sation, including terminals, electronic control post device, LAN, interfaces with other system and etc. | set | 1 | 1,977,547.37 | 1,977,547.37 | 5/1.7 |
| 2 | CTC | Centralized traffic control device (CTC) in station, provided with interfaces that enable connection to CBI, to CTC control terminal in the train dispatcher's room, to CSM device and to the network used for data transmission (CTC network) | set | 1 | 242,598.75 | 242,598.75 | 5/1.7 |
| 3 | CSM | Centralized signaling monitoring device (CSM) in station provided with interfaces that enable connection to CBI, to CTC station device, to cable distribution frame, to power supply cabinets and to the network used for CSM data transmission | set | 1 | 196,039.39 | 196,039.39 | 5/1.7 |
| 4 | Electronic automatic blocking device | Electronic automatic blocking device, as a segment of the computer based interlocking system (CBI) in station that enables communication with dislocated controllers via optic cables. Controllers are accommodated in selfstanding cabinets or cabinets mounted on the signal post that controls both signal operation and I60 . | set | 1 | 117,623.64 | 117,623.64 | 5/1.7 |

10 Signaling System

| No | Item | Description | Unit | No. of Unit | Unit Price (USD) | Total Price (USD) | No. of books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 5 | Lead acid ACCU battery | Lead acid ACCU battery with supply capacity of 3h under the full load regime and additional 8 h in red lamp regime on all main station signals and axel counters, with DC busbars and fuses for both charging and discharging included. | set | 1 | 18,133.64 | 18,133.64 | 5/1.7 |
| 6 | Optical cable termination frame | Optical cable termination frame (3OKP=ODF) $2 \times 60$ | set | 1 | 1,592.82 | 1,592.82 | 5/1.7 |
| 7 | Points heating system | Points heating system provided with terminal and indoor devices for supervisory control and data acquisition system (SCADA) | set | 1 | 10,782.17 | 10,782.17 | 5/1.7 |
| 8 | Power Box | Box provided with members for protection of the supply device against atmospheric discharges at the point where cables enter the power room. The box is provided with adequate number of safety members for single-phase power from overhead catenary system, three-phase power from public mains, and three-phase power from diesel generator socket outlet. | set | 1 | 980.20 | 980.20 | 5/1.7 |
| 9 | Power Panel | Station power panel provided with switches, converters, and etc. | set | 1 | 274,136.59 | 274,136.59 | 5/1.7 |
| 10 | Relay safety interface | Relay safety interface between CBI Stara Pazova and (future) CBI in Indjija. The item includes all necessary interface elements required for traffic operations on the single track. | set | 4 | 15,928.20 | 63,712.80 | 5/1.7 |
| 11 | Safety interface | Safety interface - electronic control post/station post of the automatic block relay device, SpDrS -64JŽ system toward Golubinci. The item includes all necessary interface elements required for traffic operations on the single track. | set | 2 | 15,928.20 | 31,856.40 | 5/1.7 |
| 12 | Safety microprocessor evaluator | Safety microprocessor evaluator, 2003 or 2002 for control of track occupancy in stations and automatic block sections by double-counting sensors of train wheels | set | 1 | 181,336.44 | 181,336.44 | 5/1.7 |
| 13 | Video monitoring and controlling of points lever position | Indoor devices that enable video monitoring and controlling of points lever position | set | 1 | 9,189.35 | 9,189.35 | 5/1.7 |

10 Signaling System

| No | Item | Description | Unit | No. <br> of Unit | Unit Price (USD) | Total Price (USD) | No. of books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 14 | Cable distribution frame | Cable distribution frame (ZKR) with mounting accessories, with cable connectors and surge voltage protective devices and protective devices from electromagnetic influence from OCS (10x13x6=780 connections) | set | 2 | 18,378.69 | 36,757.39 | 5/1.7 |
| F-2 | OUTDOOR EQUIPMENT IN THE STARA PAZOVA STATION |  |  |  |  |  |  |
| 1 | Signal | Main signal with foundation,Limit track signal together with foundation,Shunting signal together with foundation,Speed sign,Direction sign,Signaling sign "78" | station | 1 | 487,721.50 | 487,721.50 | 5/1.7 |
| 2 | Electric points switch machine | Electric points switch machine,Termination cable box,Setting lever, long control lever, and short control lever with bolts,Signal point indicator ,Electro-mechanical controller,Support of the electro-mechanical controlle | station | 1 | 618,762.81 | 618,762.81 | 5/1.7 |
| 3 | Video monitoring and controlling of points lever position | Outdoor devices that enable video monitoring and controlling of points lever position | station | 1 | 57,978.65 | 57,978.65 | 5/1.7 |
| 4 | Points heating system device | Distribution cabinet,Termination box provided with appropriate clamps and fuses (PO),Electric points heater,Meteorological station | station | 1 | 266,161.46 | 266,161.46 | 5/1.7 |
| 5 | Concrete foundation for distribution cabinet in charge of points heating. |  | station | 1 | 2,867.08 | 2,867.08 | 5/1.7 |
| 6 | Outdoor members constituting the twin axle counter (wheel sensor) provided with rail fastening and shields, connecting housing, electronic cards and surge arrester members. Covering shall be painted to show signal mark 207: "section limit"/ |  | station | 1 | 219,809.17 | 219,809.17 | 5/1.7 |
| 7 | Combined track magnet 1000/2000Hz (autostop system I60) provided with universal fastening system and shields |  | station | 1 | 55,748.70 | 55,748.70 | 5/1.7 |

10 Signaling System

| No | Item | Description | Unit | No. of Unit | Unit Price (USD) | $\begin{gathered} \hline \text { Total Price } \\ \text { (USD) } \\ \hline \end{gathered}$ | No. of books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 8 | Track magnet 500 Hz (autostop system I-60) provided with universal fastening system and shields |  | station | 1 | 4,937.74 | 4,937.74 | 5/1.7 |
| F-3 | CABLES, CABLE ACCESSORIES AND GROUNDING SYSTEM IN THE STARA PAZOVA STATION |  |  |  |  |  |  |
| 1 | Cables,cable accessries | Cale,Single mode optical cable,Heat-shrinking cable joint,Cable distribution cabine,Termination box,Material for sealing of cable cabinet,PEHD plastic pipe,Cable route marker,PE cable warning strip,PE cable shield,sand,Brick | station | 1 | 449,366.99 | 449,366.99 | 5/1.7 |
| 2 | Concrete foundation | Concrete foundation for cable distribution cabinet | station | 1 | 5,351.88 | 5,351.88 | 5/1.7 |
| 3 | Grounding system | Insulated wire, FeZn 95mm2, for grounding of outdoor elements,Portions for welding FeZn 95 mm 2 wire to rail. | station | 1 | 24,972.23 | 24,972.23 | 5/1.7 |
| F-4 | INSTALLATION OF INDOOR EQUIPMENT IN STARA PAZOVA STATION | Installation of indoor equipment in Stara Pazova station | station | 1 | 210,497.30 | 210,497.30 | 5/1.7 |
| F-5 | INSTALLATION OF OUTDOOR EQIPMENT IN THE STARA PAZOVA STATION | Installation of outdoor eqipment in the stara pazova station | Complete execution of the works on the left / right side of the station | 2 | 125,903.24 | 251,806.47 | 5/1.7 |
| F-6 | INSTALLATION OF CABLES, CABLE ASSECORIES AND GROUNDING SYSTEM IN THE STARA PAZOVA STATION | Installation of cables, cable assecories and grounding system in the stara pazova station | Complete execution of the works on the left / right side of the station | 2 | 68,403.71 | 136,807.42 | 5/1.7 |
| F-7 | DISMANTLING THE EXISTING DEVICES AND INSTALLING TEMPORARY INTERLOCKING IN THE COURSE OF WORKS ON THE STARA PAZOVA STATION |  |  |  |  |  |  |
| 1 | Dismantling of the interlocking devices | Dismantling of the outdoor interlocking devices and indoor devices | station | 1 | 46,559.36 | 46,559.36 | 5/1.7 |
| 2 | Installing of temporary interlocking | Installing of the temporary outdoor and indoor devices | station | 1 | 278,122.56 | 278,122.56 | 5/1.7 |
| 3 | Dismantling of temporary interlocking | Dismantling of the temporary outdoor and indoor devices | station | 1 | 9,576.52 | 9,576.52 | 5/1.7 |

10 Signaling System

| No | Item | Description | Unit | No. of Unit | Unit Price (USD) | Total Price (USD) | No. of books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| F-8 | INDOOR EQUIPMENT CONSTITUTING THE AUTOMATIC BLOCK ON INTERSTATION DISTANCE BETWEEN NOVA PAZOVA AND STARA PAZOVA |  | set | 1 | 23,892.30 | 23,892.30 | 5/1.7 |
| F-9 | OUTDOOR AUTOMATIC BLOCK EQUIPMENT ON INTERSTATION DISTANCE BETWEEN NOVA PAZOVA AND STARA PAZOVA |  |  |  |  |  |  |
| 1 | Signal | Main signal,Separate outer distant (warning) signal,Cabinet ,Standard warning sign provided with foundation. | open line | 1 | 275,837.23 | 275,837.23 | 5/1.7 |
| 2 | Concrete foundation | Concrete foundation for cabinets | open line | 1 | 551.36 | 551.36 | 5/1.7 |
| 3 | Outdoor members constituting the twin axle counter (wheel sensor) provided with rail fastening and shields, connecting housing, electronic cards and surge arrester members. Covering shall be painted to show signal mark 207: "section limit" |  | open line | 1 | 43,961.83 | 43,961.83 | 5/1.7 |
| 4 | Combined track magnet $1000 / 2000 \mathrm{~Hz}$ (autostop system I60) provided with universal fastening system and shields |  | open line | 1 | 44,598.96 | 44,598.96 | 5/1.7 |
| F-10 | CABLES, CABLE ACCESSORIES AND EARTHING OF AUTOMATIC BLOCK ON THE INTER STATION DISTANCE BETWEEN NOVA PAZOVA AND STARA PAZOVA |  |  |  |  |  |  |
| 1 | Cable | Cale,Single mode optical cable,Heat-shrinking cable joint,Optical joint,Cabinet,Material for sealing of cable cabinet ,Termination box,PEHD plastic pipe,Cable route marker ,PE cable warning strip,PE cable shield,Sand | open line | 1 | 127,432.43 | 127,432.43 | 5/1.7 |
| 2 | Grounding system | Insulated wire, FeZn 95mm2, for grounding of outdoor elements,Portions for welding FeZn 95mm2 wire to rail. | open line | 1 | 5,167.11 | 5,167.11 | 5/1.7 |

10 Signaling System

| No | Item | Description | Unit | No. <br> of Unit | Unit Price (USD) | Total Price (USD) | No. of books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| F-11 | INSTALLATION OF OUTDOOR AUTOMATIC BLOCK <br> EQUIPMENT ON INTERSTATION DISTANCE BETWEEN NOVA PAZOVA AND STARA PAZOVA | Installation of outdoor automatic block equipment on interstation distance between Nova Pazova and Stara Pazova | Complete execution of the works on the left / right side of the open line | 2 | 15,975.37 | 31,950.75 | 5/1.7 |
| F-12 | LAYING OF CABLES, CABLE ACCESSORIES AND GROUNDING SYSTEM - NOVA PAZOVA -STARA PAZOVA | Laying of cables, cable accessories and grounding system - Nova Pazova -Stara Pazova | Complete execution of the works on the left / right side of the open line | 2 | 17,546.73 | 35,093.46 | 5/1.7 |
| F-13 | DISMANTLING OF THE AUTOMATIC BLOCK NOVI BEOGRAD - ZEMUN |  | open line | 1 | 4,631.43 | 4,631.43 | 5/1.7 |
| G | Equipment and works in Centralized Traffic Control Center and ETCS-L2 system devices and works |  |  |  |  |  |  |
| G-1 | CTC CENTER EQUIPMENT | Procurement, installation and testing of device integrating the centralized traffic control system (CTC) | set | 1 | 12,498,700.97 | 12,498,700.97 | 5/2 |
| G-2 | CTC INSTALL | Procurement and installation of cables, cable accessories and other accompanying material for the purpose of installation and connecting the devices required for the centralized trafficcontrol system (CTC) | set | 1 | 2,732,922.88 | 2,732,922.88 | 5/2 |
| G-3 | CSM CENTER EQUIPMENT | All devices required for the center of the centralized signaling monitoring including communication equipment for the purpose of connecting with station devices. | set | 1 | 1,199,308.97 | 1,199,308.97 | 5/2 |
| G-4 | CSM CENTER EQUIPMENT INSTALL | Procurement and installation of cables, cable accessories and other accompanying material for the purpose of installation and connection of devices required for csm and system testing | set | 1 | 41,689.00 | 41,689.00 | 5/2 |
| G-5 | Device for remote control of points heating | Device for remote control of points heating on the Belgrade Center - Novi Sad railway line section with control terminal in TC hall | set | 1 | 36,757.39 | 36,757.39 | 5/2 |
| G-6 | Remote control of points heating install | Cables, wiring and connecting of devices for remote control of the points heating | set | 1 | 4,598.35 | 4,598.35 | 5/2 |
| G-7 | ETCS-L2 INDOOR EQUIPMENT |  |  |  |  |  |  |

10 Signaling System

| No | Item | Description | Unit | No. <br> of Unit | Unit Price (USD) | Total Price (USD) | No. of books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | Radio block center (RBC) | including RBC and temporary speed restriction functions | set | 1 | 4,715,526.64 | 4,715,526.64 | 5/2 |
| 2 | Devices for creation of indoor LAN for RBC, including communication devices for their connection to the lineside optical cable and vital signaling/interlocking network, and including all necessary servers, terminals and devices for control and protection of the vital signalling/interlocking network (EMS). |  | set | 1 | 144,744.46 | 144,744.46 | 5/2 |
| 3 | Balise data preparation (by km) |  | km | 34.6 | 4,135.21 | 143,078.13 | 5/2 |
| 4 | Adjusting chainage specified in the ETCS system with the on site chainage (by km) |  | km | 34.6 | 2,068.22 | 71,560.26 | 5/2 |
| G-8 | ETCS-L2 LINE SIDE DEVICES IN THE BELGRADE CENTER STATION |  |  |  |  |  |  |
| 1 | ETCS-L2 LINE SIDE DEVICES IN THE BELGRADE CENTER STATION |  | station | 1 | 235,644.27 | 235,644.27 | 5/2 |
| 2 | INSTALLATION OF ETCS-L2 LINE SIDE DEVICES IN THE BELGRADE CENTER STATION |  | station | 1 | 1,661.14 | 1,661.14 | 5/2 |
| 3 | TESTING OF ETCS-L2 LINE SIDE DEVICES IN THE BELGRADE CENTER STATION |  | station | 1 | 7,946.00 | 7,946.00 | 5/2 |
| G-9 | ETCS-L2 LINE SIDE DEVICES IN THE NOVI BEOGRAD STATION AND BELGRADE CENTER - NOVI BEOGRAD INTERSTATION DISTANCE |  |  |  |  |  |  |
| 1 | ETCS-L2 LINE SIDE DEVICES IN THE NOVI BEOGRAD STATION AND BELGRADE CENTER - NOVI BEOGRAD INTERSTATION DISTANCE |  | station | 1 | 117,822.00 | 117,822.00 | 5/2 |

10 Signaling System

| No | Item | Description | Unit | No. <br> of Unit | Unit Price (USD) | $\begin{gathered} \hline \text { Total Price } \\ \text { (USD) } \\ \hline \end{gathered}$ | No. of books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2 | INSTALLATION OF ETCS-L2 LINE SIDE DEVICES IN THE NOVI BEOGRAD STATION AND BELGRADE CENTER - NOVI BEOGRAD INTERSTATION DISTANCE |  | station | 1 | 830.57 | 830.57 | 5/2 |
| 3 | TESTING OF ETCS-L2 LINE SIDE DEVICES IN THE NOVI BEOGRAD STATION AND BELGRADE CENTER - NOVI BEOGRAD INTERSTATION DISTANCE |  | station | 1 | 7,946.00 | 7,946.00 | 5/2 |
| G-10 | ETCS-L2 LINE SIDE DEVICES IN THE STATION ZEMUN AND NOVI BEOGRAD - ZEMUN INTERSTATION DISTANCE |  |  |  |  |  |  |
| 1 | ETCS-L2 LINE SIDE DEVICES IN THE STATION ZEMUN AND NOVI BEOGRAD - ZEMUN INTERSTATION DISTANCE |  | station | 1 | 259,208.72 | 259,208.72 | 5/2 |
| 2 | INSTALLATION OF ETCS-L2 LINE SIDE DEVICES IN THE STATION ZEMUN AND NOVI BEOGRAD - ZEMUN INTERSTATION DISTANCE |  | station | 1 | 1,827.25 | 1,827.25 | 5/2 |
| 3 | TESTING OF ETCS-L2 LINE SIDE DEVICES IN THE STATION ZEMUN AND NOVI BEOGRAD ZEMUN INTERSTATION DISTANCE |  | station | 1 | 7,946.00 | 7,946.00 | 5/2 |
| G-11 | ETCS-L2 LINE SIDE DEVICES IN THE STATION ZEMUNSKO POLJE AND ZEMUN - ZEMUNSKO POLJE INTERSTATION DISTANCE |  |  |  |  |  |  |

10 Signaling System

| No | Item | Description | Unit | No. <br> of Unit | Unit Price (USD) | Total Price (USD) | No. of books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | ETCS-L2 LINE SIDE DEVICES IN THE STATION ZEMUNSKO POLJE AND ZEMUN - <br> ZEMUNSKO POLJE INTERSTATION DISTANCE |  | station | 1 | 94,257.54 | 94,257.54 | 5/2 |
| 2 | INSTALLATION OF ETCS-L2 LINE SIDE DEVICES IN THE STATION ZEMUNSKO POLJE AND ZEMUN - ZEMUNSKO POLJE INTERSTATION DISTANCE |  | station | 1 | 664.45 | 664.45 | 5/2 |
| 3 | TESTING OF ETCS-L2 LINE SIDE DEVICES IN THE STATION ZEMUNSKO POLJE AND ZEMUN - ZEMUNSKO POLJE INTERSTATION DISTANCE |  | station | 1 | 7,946.00 | 7,946.00 | 5/2 |
| G-12 | ETCS-L2 LINE SIDE DEVICES IN THE STATION BATAJNICA AND ZEMUNSKO POLJE - BATAJNICA INTERSTATION DISTANCE |  |  |  |  |  |  |
| 1 | ETCS-L2 LINE SIDE DEVICES IN THE STATION BATAJNICA AND ZEMUNSKO POLJE - BATAJNICA INTERSTATION DISTANCE |  | station | 1 | 278,845.77 | 278,845.77 | 5/2 |
| 2 | INSTALLATION OF ETCS-L2 LINE SIDE DEVICES IN THE STATION BATAJNICA AND ZEMUNSKO POLJE - BATAJNICA INTERSTATION DISTANCE |  | station | 1 | 1,965.68 | 1,965.68 | 5/2 |
| 3 | TESTING OF ETCS-L2 LINE SIDE DEVICES IN THE STATION BATAJNICA AND ZEMUNSKO POLJE - BATAJNICA INTERSTATION DISTANCE |  | station | 1 | 7,946.00 | 7,946.00 | 5/2 |
| G-13 | ETCS-L2 LINE SIDE DEVICES IN THE STATION NOVA PAZOVA AND BATAJNICA - NOVA PAZOVA INTERSTATION DISTANCE |  |  |  |  |  |  |

10 Signaling System

| No | Item | Unit | No. of Unit | Unit Price (USD) | Total Price (USD) | No. of books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | ETCS-L2 LINE SIDE DEVICES IN THE STATION NOVA PAZOVA AND BATAJNICA - NOVA PAZOVA INTERSTATION DISTANCE | station | 1 | 141,386.45 | 141,386.45 | 5/2 |
| 2 | INSTALLATION OF ETCS-L2 LINE SIDE DEVICES IN THE STATION NOVA PAZOVA AND BATAJNICA - NOVA PAZOVA INTERSTATION DISTANCE | station | 1 | 996.68 | 996.68 | 5/2 |
| 3 | TESTING OF ETCS-L2 LINE SIDE DEVICES IN THE STATION NOVA PAZOVA AND BATAJNICA - NOVA PAZOVA INTERSTATION DISTANCE | station | 1 | 7,946.00 | 7,946.00 | 5/2 |
| G-14 | ETCS-L2 LINE SIDE DEVICES IN THE STATION STARA PAZOVA AND NOVA PAZOVA - STARA PAZOVA INTERSTATION DISTANCE |  |  |  |  |  |
| 1 | ETCS-L2 LINE SIDE DEVICES IN THE STATION STARA PAZOVA AND NOVA PAZOVA - STARA PAZOVA INTERSTATION DISTANCE | station | 1 | 141,386.45 | 141,386.45 | 5/2 |
| 2 | INSTALLATION OF ETCS-L2 LINE SIDE DEVICES IN THE STATION STARA PAZOVA AND NOVA PAZOVA - STARA PAZOVA INTERSTATION DISTANCE | station | 1 | 996.68 | 996.68 | 5/2 |
| 3 | TESTING OF ETCS-L2 LINE SIDE DEVICES IN THE STATION STARA PAZOVA AND NOVA PAZOVA - STARA PAZOVA INTERSTATION DISTANCE | station | 1 | 7,946.00 | 7,946.00 | 5/2 |
| Summary(USD): |  |  |  |  | 57,919,404.94 |  |

## 11 Telecommunication

| No | Item | Description | Unit | No. of Unit | Unit Price (USD) | Total Price (USD) | No. of books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| A | CABLES AND DISPATCHING TELECOMMUNICATION EQUIPMENT |  |  |  |  |  |  |
| 1 | RELOCATION AND PROTECTION OF LINE SIDE CABLES Belgrade-Zemun (included)-Work | Station channel,Sand,Cable,etc. <br> Placing the station channel, Filling the channel with sand, Building the structure for placing the optic fiber joint, etc. | set | 1 | 12,702.03 | 12,702.03 | 5/3.1 |
| 2 | RELOCATION AND PROTECTION OF LINE SIDE CABLES Zemun (excluded)-Batajnica (excluded)-Work | Station channel,Sand,Cable,etc. <br> Placing the station channel, Filling the channel with sand, Building the structure for placing the optic fiber joint, etc. | set | 1 | 97,344.46 | 97,344.46 | 5/3.1 |
| 3 | RELOCATION AND PROTECTION OF LINE SIDE CABLES <br> Batajnica (included)-Stara PazovaWork | Station channel,Sand,Cable,etc. <br> Placing the station channel, Filling the channel with sand, Building the structure for placing the optic fiber joint, etc. | set | 1 | 119,102.47 | 119,102.47 | 5/3.1 |
| 4 | LOCAL CABLE NETWORKS Belgrade-Zemun (included)-Work | Cables,closure,cabinet,etc. <br> Laying of cable, Installation of terminal strip, Measuring and testing of the local cable, etc. | set | 1 | 2,221.89 | 2,221.89 | 5/3.1 |
| 5 | LOCAL CABLE NETWORKS Zemun (excluded)-Batajnica (excluded)-Work | Cables,closure, cabinet,etc. <br> Laying of cable, Installation of terminal strip, Measuring and testing of the local cable, etc. | set | 1 | 925.03 | 925.03 | 5/3.1 |
| 6 | LOCAL CABLE NETWORKS Batajnica (included)-Stara PazovaWork | Cables,closure,cabinet,etc. <br> Laying of cable, Installation of terminal strip, Measuring and testing of the local cable, etc. | set | 1 | 4,949.34 | 4,949.34 | 5/3.1 |
| 7 | DISPATCH DEVICES BELGRADE STARA PAZOVA-Work | Dispatching device,Controle console,Control telephone, etc. Installation, testing, Installation of the complete dispatch equipment, etc. | set | 1 | 159,818.48 | 159,818.48 | 5/3.1 |
| 8 | RELOCATION AND PROTECTION OF LINE SIDE CABLES Belgrade-Zemun (included)Material/Equipment/Equipment | Station channel,Sand,Cable,etc. <br> Placing the station channel, Filling the channel with sand, Building the structure for placing the optic fiber joint, etc. | set | 1 | 88,914.22 | 88,914.22 | 5/3.1 |

## 11 Telecommunication

| No | Item | Description | Unit | No. of Unit | Unit Price (USD) | Total Price (USD) | No. of books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 9 | RELOCATION AND PROTECTION OF LINE SIDE CABLES Zemun (excluded)-Batajnica (excluded)-Material/Equipment | Station channel,Sand,Cable,etc. <br> Placing the station channel, Filling the channel with sand, Building the structure for placing the optic fiber joint, etc. | set | 1 | 681,411.22 | 681,411.22 | 5/3.1 |
| 10 | RELOCATION AND PROTECTION OF LINE SIDE CABLES <br> Batajnica (included)-Stara PazovaMaterial/Equipment | Station channel,Sand,Cable,etc. <br> Placing the station channel, Filling the channel with sand, Building the structure for placing the optic fiber joint, etc. | set | 1 | 833,717.29 | 833,717.29 | 5/3.1 |
| 11 | LOCAL CABLE NETWORKS Belgrade-Zemun (included)Material/Equipment | Cables,closure, cabinet,etc. <br> Laying of cable, Installation of terminal strip, Measuring and testing of the local cable, etc. | set | 1 | 15,553.25 | 15,553.25 | 5/3.1 |
| 12 | LOCAL CABLE NETWORKS Zemun (excluded)-Batajnica (excluded)-Material/Equipment | Cables,closure,cabinet,etc. <br> Laying of cable, Installation of terminal strip, Measuring and testing of the local cable, etc. | set | 1 | 6,475.23 | 6,475.23 | 5/3.1 |
| 13 | LOCAL CABLE NETWORKS <br> Batajnica (included)-Stara PazovaMaterial/Equipment | Cables,closure,cabinet,etc. <br> Laying of cable, Installation of terminal strip, Measuring and testing of the local cable, etc. | set | 1 | 34,645.39 | 34,645.39 | 5/3.1 |
| 14 | DISPATCH DEVICES BELGRADE STARA PAZOVA-Material/Equipment | Dispatching device, Controle console,Control telephone, etc. Installation, testing, Installation of the complete dispatch equipment, etc. | set | 1 | 1,118,729.34 | 1,118,729.34 | 5/3.1 |
| B | OPTICAL CABLES |  |  |  |  |  |  |
| 1 | CABLE ROUTE - PROCUREMENT OF MATERIALS AND DELIVERY Belgrade-Zemun (included) | HDPE tubes,Plastic joint,PNK racks | set | 1 | 489,040.44 | 489,040.44 | 5/3.2 |

11 Telecommunication

| No | Item | Description | Unit | No. of Unit | Unit Price (USD) | Total Price (USD) | No. of books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2 | CABLE ROUTE - PROCUREMENT OF MATERIALS AND DELIVERY Zemun (excluded)-Batajnica (excluded) | HDPE tubes, Plastic joint,PNK racks | set | 1 | 652,781.96 | 652,781.96 | 5/3.2 |
| 3 | CABLE ROUTE - PROCUREMENT OF MATERIALS AND DELIVERY Batajnica (included)-Stara Pazova | HDPE tubes, Plastic joint,PNK racks | set | 1 | 895,546.39 | 895,546.39 | 5/3.2 |
| 4 | CABLE ROUTE - WORKS Belgrade-Zemun (included) | Excavate trench for telecommunication cables, Backfill, Lay HDPE tubes,Draw HDPE tubes, Interconnect the laid HDPE tubes | set | 1 | 205,337.71 | 205,337.71 | 5/3.2 |
| 5 | CABLE ROUTE - WORKS Zemun (excluded)-Batajnica (excluded) | Excavate trench for telecommunication cables, Backfill, Lay HDPE tubes,Draw HDPE tubes, Interconnect the laid HDPE tubes | set | 1 | 274,089.30 | 274,089.30 | 5/3.2 |
| 6 | CABLE ROUTE - WORKS <br> Batajnica (included)-Stara Pazova | Excavate trench for telecommunication cables, Backfill, Lay HDPE tubes,Draw HDPE tubes, Interconnect the laid HDPE tubes | set | 1 | 376,020.93 | 376,020.93 | 5/3.2 |
| 7 | CABLE PLANT- EQUIPMENT AND MATERIALS <br> Belgrade-Zemun (included) | Optic cable,Fibre splice,Optic distributor | set | 1 | 89,506.02 | 89,506.02 | 5/3.2 |
| 8 | CABLE PLANT- EQUIPMENT AND MATERIALS <br> Zemun (excluded)-Batajnica (excluded) | Optic cable,Fibre splice,Optic distributor | set | 1 | 119,474.61 | 119,474.61 | 5/3.2 |
| 9 | CABLE PLANT- EQUIPMENT AND MATERIALS <br> Batajnica (included)-Stara Pazova | Optic cable,Fibre splice,Optic distributor | set | 1 | 163,906.26 | 163,906.26 | 5/3.2 |
| 10 | CABLE PLANT- WORKS Belgrade-Zemun (included) | Draw in an optic cable,Make a straight plice,Make a f ork splice | set | 1 | 38,069.11 | 38,069.11 | 5/3.2 |
| 11 | CABLE PLANT- WORKS Zemun (excluded)-Batajnica (excluded) | Draw in an optic cable,Make a straight plice,Make a f ork splice | set | 1 | 50,815.49 | 50,815.49 | 5/3.2 |

## 11 Telecommunication

| No | Item | Description | Unit | No. of Unit | Unit Price (USD) | Total Price (USD) | No. of books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 12 | CABLE PLANT- WORKS Batajnica (included)-Stara Pazova | Draw in an optic cable,Make a straight plice,Make a f ork splice | set | 1 | 69,713.37 | 69,713.37 | 5/3.2 |
| 13 | EQUIPMENT FOR OPTICAL INFRASTRUCTURE MAINTENANCE | OTDR,Splicer,Instalation tools | set | 1 | 62,396.80 | 62,396.80 | 5/3.2 |
| C | TELECOMMUNICATION SYSTEMS IN STATIONS AND STOPPING PLACES |  |  |  |  |  |  |
| C-1 | SECTION |  |  |  |  |  |  |
| 1 | DISMANTLING OF THE EXISTING SYSTEMS-Work | Dismantling of parts of the existing telecommunications systems, Disassembly and reassembly of parts of the existing telecommunications systems | set | 1 | 283.62 | 283.62 | 5/3.3 |
| 2 | COMMON COMMUNICATION NETWORK-Work | Next Generation Firewall, DMZ, cabinet, etc. | set | 1 | 102,812.90 | 102,812.90 | 5/3.3 |
| 3 | OTN/DWDM TRANSMISSION SYSTEM -Work | NMS, NMS operator equipment, switch, etc. | set | 1 | 49,492.01 | 49,492.01 | 5/3.3 |
| 4 | VoIP COMMUNICATION SYSTEMWork | Rack, panel, switch, etc. Assembly and installation of rack, installation and connection of equipment to cable, commissioning of all equipment, etc. | set | 1 | 120,255.65 | 120,255.65 | 5/3.3 |
| 5 | VIDEO SURVEILLANCE SYSTEMWork | licenses for cameras, licenses for workstations, NMS operator equipment. System configuration, Designing and preparation of documentation, etc. | set | 1 | 40,557.92 | 40,557.92 | 5/3.3 |
| 6 | PUBLIC ADDRESS SYSTEM-Work | Operator equipment, Measurement by location. System configuration, Designing and preparation of documentation, etc. | set | 1 | 11,344.87 | 11,344.87 | 5/3.3 |
| 7 | CLOCK SYSTEM-Work | Software, time server, NMS operator equipment. System configuration, Designing and preparation of documentation, etc. | set | 1 | 16,308.25 | 16,308.25 | 5/3.3 |
| 8 | INFORMATION DISPLAY SYSTEMWork | NMS operator equipment. System configuration, Designing and preparation of documentation, etc. | set | 1 | 10,635.82 | 10,635.82 | 5/3.3 |
| 9 | SOFTWARE PACKAGE AVIS-Work | NMS operator equipment. System configuration, Designing and preparation of documentation, etc. | set | 1 | 75,727.02 | 75,727.02 | 5/3.3 |

11 Telecommunication

| No | Item | Description | Unit | $\begin{array}{\|c\|} \hline \text { No. } \\ \text { of Unit } \end{array}$ | $\begin{gathered} \hline \text { Unit Price } \\ \text { (USD) } \\ \hline \end{gathered}$ | $\begin{gathered} \hline \text { Total Price } \\ \text { (USD) } \\ \hline \end{gathered}$ | $\begin{aligned} & \hline \begin{array}{l} \text { No. of } \\ \text { books } \end{array} \\ & \hline \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 10 | INTEGRATION OF SECURITY SYSTEMS-Work | Highly sophisticated system, License for Alarm Management Package, license package, etc. System configuration, Designing and preparation of documentation, etc | set | 1 | 26,802.26 | 26,802.26 | 5/3.3 |
| 11 | ENVIRONMENTAL MONITORING SYSTEM-Work | Server, NMS operator equipment. System configuration, Designing and preparation of documentation, etc. | set | 1 | 33,750.99 | 33,750.99 | 5/3.3 |
| 12 | SOS SYSTEM-Work | Software, interface device, NMS operator equipment. System configuration, Designing and preparation of documentation, etc. | set | 1 | 2,552.60 | 2,552.60 | 5/3.3 |
| 13 | AUTOMATIC FIRE DETECTION AFD-Work | NMS operator equipment,System configuration, Designing and preparation of documentation, etc. System configuration, Designing and preparation of documentation, etc. | set | 1 | 6,665.11 | 6,665.11 | 5/3.3 |
| 14 | EXPLOSIVE GAS DETECTION SYSTEM Works | System configuration, User training, Designing and preparation of documentation, etc. | set | 1 | 18,151.80 | 18,151.80 | 5/3.3 |
| 15 | DISMANTLING OF THE EXISTING SYSTEMS-Material/Equipment | Dismantling of parts of the existing telecommunications systems, Disassembly and reassembly of parts of the existing telecommunications systems | set | 1 | 1,985.35 | 1,985.35 | 5/3.3 |
| 16 | COMMON COMMUNICATION NETWORK-Material/Equipment | Next Generation Firewall, DMZ, cabinet, etc. | set | 1 | 719,690.33 | 719,690.33 | 5/3.3 |
| 17 | OTN/DWDM TRANSMISSION SYSTEM -Material/Equipment | NMS, NMS operator equipment, switch, etc. | set | 1 | 346,444.04 | 346,444.04 | 5/3 |
| 18 | VIP COMMUNICATION SYSTEMMaterial/Equipment | Rack, panel, switch, etc. Assembly and installation of rack, installation and connection of equipment to cable, commissioning of all equipment, etc. | set | 1 | 841,789.52 | 841,789.52 | 5/3.3 |
| 19 | VIDEO SURVEILLANCE SYSTEMMateria//Equipment | licenses for cameras, licenses for workstations, NMS operator equipment. System configuration, Designing and preparation of documentation, etc. | set | 1 | 283,905.43 | 283,905.43 | 5/3.3 |

11 Telecommunication

| No | Item | Description | Unit | No. of Unit | Unit Price (USD) | Total Price (USD) | No. of books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 20 | PUBLIC ADDRESS SYSTEM- <br> Material/Equipment | Operator equipment, Measurement by location. System configuration, Designing and preparation of documentation, etc. | set | 1 | 79,414.11 | 79,414.11 | 5/3.3 |
| 21 | CLOCK SYSTEM-Material/Equipment | Software, time server, NMS operator equipment. System configuration, Designing and preparation of documentation, etc. | set | 1 | 114,157.78 | 114,157.78 | 5/3.3 |
| 22 | INFORMATION DISPLAY SYSTEMMaterial/Equipment | NMS operator equipment. System configuration, Designing and preparation of documentation, etc. | set | 1 | 74,450.72 | 74,450.72 | 5/3.3 |
| 23 | SOFTWARE PACKAGE AVIS- <br> Material/Equipment | NMS operator equipment. System configuration, Designing and preparation of documentation, etc. | set | 1 | 530,089.16 | 530,089.16 | 5/3.3 |
| 24 | INTEGRATION OF SECURITY SYSTEMS-Material/Equipment | Highly sophisticated system, License for Alarm Management Package, license package, etc. System configuration, Designing and preparation of documentation, etc. | set | 1 | 187,615.82 | 187,615.82 | 5/3.3 |
| 25 | ENVIRONMENTAL MONITORING SYSTEM-Material/Equipment | Server, NMS operator equipment. System configuration, Designing and preparation of documentation, etc. | set | 1 | 236,256.96 | 236,256.96 | 5/3.3 |
| 26 | SOS SYSTEM-Material/Equipment | Software, interface device, NMS operator equipment. System configuration, Designing and preparation of documentation, etc. | set | 1 | 17,868.17 | 17,868.17 | 5/3.3 |
| 27 | AUTOMATIC FIRE DETECTION AFD-Material/Equipment | NMS operator equipment,System configuration, Designing and preparation of documentation, etc. System configuration, Designing and preparation of documentation, etc. | set | 1 | 46,655.79 | 46,655.79 | 5/3.3 |
| C-2 | BELGRADE CENTER STATION |  |  |  |  |  |  |
| 1 | MAIN CABLE ROUTES-Work | Cable trays, installation hoses, firestop compaund, etc. | set | 1 | 850.87 | 850.87 | 5/3.3 |
| 2 | COMMON COMMUNICATION NETWORK-Work | Rack, Fiber optic patch panel, router, etc. Assembly and installation of rack, Installation and connection of active network equipment | set | 1 | 43,819.57 | 43,819.57 | 5/3.3 |
| 3 | OTN/DWDM TRANSMISSION SYSTEM -Work | Patch cords, OTN / DWDM device. Installation and connection of active network equipment | set | 1 | 15,457.39 | 15,457.39 | 5/3.3 |

## 11 Telecommunication

| No | Item | Description | Unit | No. of Unit | Unit Price (USD) | Total Price (USD) | No. of books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 4 | VIDEO SURVEILLANCE SYSTEMWork | Network storage device, Client video monitoring work station, Professional monitor, etc. Mounting and connection of the workstationt, monitor, storage device. | set | 1 | 15,741.01 | 15,741.01 | 5/3.3 |
| 5 | PUBLIC ADDRESS SYSTEM-Work | Call station, Keypad, Network audio controller, controls and routes, etc. Mounting and connection of the call station, network controller, network audio module, etc. | set | 1 | 992.68 | 992.68 | 5/3.3 |
| 6 | EQUIPMENT FOR CONNECTION TO EXISTING INTRANET Material | NMS operator equipment. Core switch, switch, Small sundry items and other unspecified material, etc. | set | 1 | 65,800.26 | 65,800.26 | 5/3.3 |
| 7 | MAIN CABLE ROUTESMaterial/Equipment | Cable trays, installation hoses, firestop compaund, etc. | set | 1 | 5,956.06 | 5,956.06 | 5/3.3 |
| 8 | COMMON COMMUNICATION NETWORK-Material/Equipment | Rack, Fiber optic patch panel, router, etc. Assembly and installation of rack, Installation and connection of active network equipment | set | 1 | 306,736.98 | 306,736.98 | 5/3.3 |
| 9 | OTN/DWDM TRANSMISSION SYSTEM -Material/Equipment | Patch cords, OTN / DWDM device. Installation and connection of active network equipment | set | 1 | 108,201.72 | 108,201.72 | 5/3.3 |
| 10 | VIDEO SURVEILLANCE SYSTEMMaterial/Equipment | Network storage device, Client video monitoring work station, Professional monitor, etc. Mounting and connection of the workstationt, monitor, storage device. | set | 1 | 110,187.07 | 110,187.07 | 5/3.3 |
| 11 | PUBLIC ADDRESS SYSTEMMaterial/Equipment | Call station, Keypad, Network audio controller, controls and routes, etc. Mounting and connection of the call station, network controller, network audio module, etc. | set | 1 | 6,948.73 | 6,948.73 | 5/3.3 |
| C-3 | INDJIJA STATION- |  |  |  |  |  |  |
| 1 | MAIN CABLE ROUTES Works | Cable trays, installation hoses, firestop compaund, etc. | set | 1 | 2,268.97 | 2,268.97 | 5/3.3 |
| 2 | COMMON COMMUNICATION NETWORK-Work | Rack, Modular patch panel, router,Voice-panel, etc. Assembly and installation of rack, Installation and connection of active network equipment. | set | 1 | 5,956.06 | 5,956.06 | 5/3.3 |
| 3 | OTN/DWDM TRANSMISSION SYSTEM -Work | Rack, patch cords, OTN / DWDM device, etc. Mounting and connection of the workstation, monitor, storage device. | set | 1 | 12,479.36 | 12,479.36 | 5/3.3 |

## 11 Telecommunication

| No | Item | Description | Unit | No. of Unit | Unit Price (USD) | Total Price (USD) | No. of books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 4 | VIDEO SURVEILLANCE SYSTEM- <br> Work | Network storage device, Client video monitoring work station, Professional monitor, etc. Mounting and connection of the workstation, monitor, storage device. | set | 1 | 15,599.20 | 15,599.20 | 5/3.3 |
| 5 | PUBLIC ADDRESS SYSTEM-Work | Call station, Keypad, Network audio controller, controls and routes, etc. Mounting and connection of the call station, network controller, network audio module, etc. | set | 1 | 1,843.54 | 1,843.54 | 5/3.3 |
| 6 | INTEGRATION OF SECURITY SYSTEMS-Work | Workstations | set | 1 | 1,276.30 | 1,276.30 | 5/3.3 |
| 7 | COMMON COMMUNICATION NETWORK-Material/Equipment | Rack, Modular patch panel, router,Voice-panel, etc. Assembly and installation of rack, Installation and connection of active network equipment. | set | 1 | 41,692.41 | 41,692.41 | 5/3.3 |
| 8 | OTN/DWDM TRANSMISSION SYSTEM -Material/Equipment | Rack, patch cords, OTN / DWDM device, etc. Mounting and connection of the workstation, monitor, storage device. | set | 1 | 87,355.52 | 87,355.52 | 5/3.3 |
| 9 | VIDEO SURVEILLANCE SYSTEMMaterial/Equipment | Network storage device, Client video monitoring work station, Professional monitor, etc. Mounting and connection of the workstation, monitor, storage device. | set | 1 | 109,194.40 | 109,194.40 | 5/3.3 |
| 10 | PUBLIC ADDRESS SYSTEMMaterial/Equipment | Call station, Keypad, Network audio controller, controls and routes, etc. Mounting and connection of the call station, network controller, network audio module, etc. | set | 1 | 12,904.79 | 12,904.79 | 5/3.3 |
| 11 | INTEGRATION OF SECURITY SYSTEMS-Material/Equipment | Workstations | set | 1 | 8,934.09 | 8,934.09 | 5/3.3 |
| C-4 | SENJAK TUNNEL |  |  |  |  |  |  |
| 1 | MAIN CABLE ROUTES-Work | Cable trays, installation hoses, firestop compaund, etc. | set | 1 | 567.24 | 567.24 | 5/3.3 |
| 2 | COMMON COMMUNICATION NETWORK-Work | Rack, Fiber optic patch panel, router, etc. Assembly and installation of rack, Installation and connection of active network equipment, Laying of fiber optic cables, etc. | set | 1 | 2,836.22 | 2,836.22 | 5/3.3 |
| 3 | VIDEO SURVEILLANCE SYSTEM- <br> Work | Network storage device, Client video monitoring work station, Professional monitor, etc. Mounting and connection of the workstation, monitor, storage device. | set | 1 | 2,127.16 | 2,127.16 | 5/3.3 |

11 Telecommunication

| No | Item | Description | Unit | $\begin{array}{\|c\|} \hline \text { No. } \\ \text { of Unit } \end{array}$ | $\begin{gathered} \hline \text { Unit Price } \\ \text { (USD) } \\ \hline \end{gathered}$ | $\begin{gathered} \hline \text { Total Price } \\ \text { (USD) } \\ \hline \end{gathered}$ | No. of books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 4 | MAIN CABLE ROUTESMaterial/Equipment | Cable trays, installation hoses, firestop compaund, etc. | set | 1 | 3,970.71 | 3,970.71 | 5/3.3 |
| 5 | COMMON COMMUNICATION NETWORK-Material/Equipment | Rack, Fiber optic patch panel, router, etc. Assembly and installation of rack, Installation and connection of active network equipment, Laying of fiber optic cables, etc. | set | 1 | 19,853.53 | 19,853.53 | 5/3.3 |
| 6 | VIDEO SURVEILLANCE SYSTEMMaterial/Equipment | Network storage device, Client video monitoring work station, Professional monitor, etc. Mounting and connection of the workstation, monitor, storage device. | set | 1 | 14,890.14 | 14,890.14 | 5/3.3 |
| C-5 | SAVA BRIDGE |  |  |  |  |  |  |
| 1 | MAIN CABLE ROUTES-Work | Cable trays, installation hoses, firestop compaund, etc. | set | 1 | 425.43 | 425.43 | 5/3.3 |
| 2 | COMMON COMMUNICATION NETWORK-Work | Rack, Fiber optic patch panel, router, etc. Assembly and installation of rack, Installation and connection of active network equipment, Laying of fiber optic cables, etc. | set | 1 | 2,694.41 | 2,694.41 | 5/3.3 |
| 3 | VIDEO SURVEILLANCE SYSTEMWork | Network storage device, Client video monitoring work station, Professional monitor, etc. Mounting and connection of the workstation, monitor, storage device. | set | 1 | 2,127.16 | 2,127.16 | 5/3.3 |
| 4 | MAIN CABLE ROUTESMateria//Equipment | Cable trays, installation hoses, firestop compaund, etc. | set | 1 | 2,978.03 | 2,978.03 | 5/3.3 |
| 5 | COMMON COMMUNICATION NETWORK-Material/Equipment | Rack, Fiber optic patch panel, router, etc. Assembly and installation of rack, Installation and connection of active network equipment, Laying of fiber optic cables, etc. | set | 1 | 18,860.85 | 18,860.85 | 5/3.3 |
| 6 | VIDEO SURVEILLANCE SYSTEMMaterial/Equipment | Network storage device, Client video monitoring work station, Professional monitor, etc. Mounting and connection of the workstation, monitor, storage device. | set | 1 | 14,890.14 | 14,890.14 | 5/3.3 |
| C-6 | BEZANIJA TUNNEL |  |  |  |  |  |  |
| 1 | MAIN CABLE ROUTES-Work | Cable trays, installation hoses, firestop compaund, etc. | set | 1 | 283.62 | 283.62 | 5/3.3 |
| 2 | COMMON COMMUNICATION NETWORK-Work | Rack, Fiber optic patch panel, router, etc. Assembly and installation of rack, Installation and connection of active network equipment, Laying of fiber optic cables, etc. | set | 1 | 2,694.41 | 2,694.41 | 5/3.3 |

## 11 Telecommunication

| No | Item | Description | Unit | No. of Unit | Unit Price (USD) | Total Price (USD) | No. of books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 3 | VIDEO SURVEILLANCE SYSTEM- <br> Work | Network storage device, Client video monitoring work station, Professional monitor, etc. Mounting and connection of the workstation, monitor, storage device. | set | 1 | 1,985.35 | 1,985.35 | 5/3.3 |
| 4 | MAIN CABLE ROUTESMaterial/Equipment | Cable trays, installation hoses, firestop compaund, etc. | set | 1 | 1,985.35 | 1,985.35 | 5/3.3 |
| 5 | COMMON COMMUNICATION NETWORK-Material/Equipment | Rack, Fiber optic patch panel, router, etc. Assembly and installation of rack, Installation and connection of active network equipment, Laying of fiber optic cables, etc. | set | 1 | 18,860.85 | 18,860.85 | 5/3.3 |
| 6 | VIDEO SURVEILLANCE SYSTEMMaterial/Equipment | Network storage device, Client video monitoring work station, Professional monitor, etc. Mounting and connection of the workstation, monitor, storage device. | set | 1 | 13,897.47 | 13,897.47 | 5/3.3 |
| C-7 | EEP - Belgrade-Zemun (included) |  |  |  |  |  |  |
| 1 | MAIN CABLE ROUTES-Work | Cable trays, installation hoses, firestop compaund, etc. | set | 1 | 709.05 | 709.05 | 5/3.3 |
| 2 | COMMON COMMUNICATION NETWORK-Work | Next Generation Firewall, DMZ, cabinet, etc. | set | 1 | 4,207.06 | 4,207.06 | 5/3.3 |
| 3 | VIDEO SURVEILLANCE SYSTEM- <br> Work | licenses for cameras, licenses for workstations, NMS operator equipment. System configuration, Designing and preparation of documentation, etc. | set | 1 | 2,458.06 | 2,458.06 | 5/3.3 |
| 4 | CLOCK SYSTEM-Work | Software, time server, NMS operator equipment. System configuration, Designing and preparation of documentation, etc. | set | 1 | 141.81 | 141.81 | 5/3.3 |
| 5 | ACCESS CONTROL SYSTEM Material | Controller 4 Wiegand, power supply, Battery, etc. Laying of cables, Mounting and connection of the reader, Mounting and connection of the button, etc. | set | 1 | 7,941.41 | 7,941.41 | 5/3.3 |

## 11 Telecommunication

| No | Item | Description | Unit | No. of Unit | Unit Price (USD) | Total Price (USD) | No. of books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 6 | INTRUSION DETECTION SYSTEM Material | Enclosure kit, The main panel, Gateway module, etc. Assembly, mounting and connection of the housing for system equipment, Mounting and connection of the motion detector, the glass break detector , etc. | set | 1 | 6,806.92 | 6,806.92 | 5/3.3 |
| 7 | AUTOMATIC FIRE DETECTION AFD-Work | NMS operator equipment,System configuration, Designing and preparation of documentation, etc. System configuration, Designing and preparation of documentation, etc. | set | 1 | 1,559.92 | 1,559.92 | 5/3.3 |
| 8 | FIRE ALARM SYSTEM WITH FIRE EXTINGUISHING MANAGEMENTWork | System configuration, Designing and preparation of documentation, etc. | set | 1 | 1,276.30 | 1,276.30 | 5/3.3 |
| 9 | MAIN CABLE ROUTESMaterial/Equipment | Cable trays, installation hoses, firestop compaund, etc. | set | 1 | 4,963.38 | 4,963.38 | 5/3.3 |
| 10 | COMMON COMMUNICATION NETWORK-Material/Equipment | Next Generation Firewall, DMZ, cabinet, etc. | set | 1 | 29,449.39 | 29,449.39 | 5/3.3 |
| 11 | VIDEO SURVEILLANCE SYSTEMMaterial/Equipment | licenses for cameras, licenses for workstations, NMS operator equipment. System configuration, Designing and preparation of documentation, etc. | set | 1 | 17,206.39 | 17,206.39 | 5/3.3 |
| 12 | CLOCK SYSTEM-Material/Equipment | Software, time server, NMS operator equipment. System configuration, Designing and preparation of documentation, etc. | set | 1 | 992.68 | 992.68 | 5/3.3 |
| 13 | AUTOMATIC FIRE DETECTION AFD-Material/Equipment | NMS operator equipment,System configuration, Designing and preparation of documentation, etc. System configuration, Designing and preparation of documentation, etc. | set | 1 | 10,919.44 | 10,919.44 | 5/3.3 |
| 14 | FIRE ALARM SYSTEM WITH FIRE EXTINGUISHING MANAGEMENTMaterial/Equipment | System configuration, Designing and preparation of documentation, etc. | set | 1 | 8,934.09 | 8,934.09 | 5/3.3 |
| C-8 | EEP - Zemun (excluded)-Batajnica (excluded) |  |  |  |  |  |  |
| 1 | MAIN CABLE ROUTES-Work | Cable trays, installation hoses, firestop compaund, etc. | set | 1 | 141.81 | 141.81 | 5/3.3 |

11 Telecommunication

| No | Item | Description | Unit | No. of Unit | Unit Price (USD) | Total Price (USD) | No. of books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2 | COMMON COMMUNICATION NETWORK-Work | Next Generation Firewall, DMZ, cabinet, etc. | set | 1 | 945.41 | 945.41 | 5/3.3 |
| 3 | VIDEO SURVEILLANCE SYSTEMWork | licenses for cameras, licenses for workstations, NMS operator equipment. System configuration, Designing and preparation of documentation, etc. | set | 1 | 189.08 | 189.08 | 5/3.3 |
| 4 | MAIN CABLE ROUTESMaterial/Equipment | Cable trays, installation hoses, firestop compaund, etc. | set | 1 | 992.68 | 992.68 | 5/3.3 |
| 5 | COMMON COMMUNICATION NETWORK-Material/Equipment | Next Generation Firewall, DMZ, cabinet, etc. | set | 1 | 6,617.84 | 6,617.84 | 5/3.3 |
| 6 | VIDEO SURVEILLANCE SYSTEMMaterial/Equipment | licenses for cameras, licenses for workstations, NMS operator equipment. System configuration, Designing and preparation of documentation, etc. | set | 1 | 1,323.57 | 1,323.57 | 5/3.3 |
| C-9 | EEP - Batajnica (included)-Stara Pazova |  |  |  |  |  |  |
| 1 | MAIN CABLE ROUTES-Work | Cable trays, installation hoses, firestop compaund, etc. | set | 1 | 1,276.30 | 1,276.30 | 5/3.3 |
| 2 | COMMON COMMUNICATION NETWORK-Work | Next Generation Firewall, DMZ, cabinet, etc. | set | 1 | 6,901.46 | 6,901.46 | 5/3.3 |
| 3 | VIDEO SURVEILLANCE SYSTEMWork | licenses for cameras, licenses for workstations, NMS operator equipment. System configuration, Designing and preparation of documentation, etc. | set | 1 | 4,443.41 | 4,443.41 | 5/3.3 |
| 4 | ACCESS CONTROL SYSTEM Material | Controller 4 Wiegand, power supply, Battery, etc. Laying of cables, Mounting and connection of the reader, Mounting and connection of the button, etc. | set | 1 | 11,344.87 | 11,344.87 | 5/3.3 |
| 5 | INTRUSION DETECTION SYSTEM Material | Enclosure kit, The main panel, Gateway module, etc. Assembly, mounting and connection of the housing for system equipment, Mounting and connection of the motion detector, the glass break detector, etc. | set | 1 | 15,882.82 | 15,882.82 | 5/3.3 |
| 6 | AUTOMATIC FIRE DETECTION AFD-Work | NMS operator equipment,System configuration, Designing and preparation of documentation, etc. System configuration, Designing and preparation of documentation, etc. | set | 1 | 3,119.84 | 3,119.84 | 5/3.3 |

11 Telecommunication

| No | Item | Description | Unit | $\begin{array}{\|c\|} \hline \text { No. } \\ \text { of Unit } \\ \hline \end{array}$ | $\begin{gathered} \hline \text { Unit Price } \\ \text { (USD) } \\ \hline \end{gathered}$ | $\begin{gathered} \hline \text { Total Price } \\ \text { (USD) } \\ \hline \end{gathered}$ | $\begin{array}{\|c} \hline \text { No. of } \\ \text { books } \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 7 | MAIN CABLE ROUTESMateria//Equipment | Cable trays, installation hoses, firestop compaund, etc. | set | 1 | 8,934.09 | 8,934.09 | 5/3.3 |
| 8 | COMMON COMMUNICATION NETWORK-Material/Equipment | Next Generation Firewall, DMZ, cabinet, etc. | set | 1 | 48,310.24 | 48,310.24 | 5/3.3 |
| 9 | VIDEO SURVEILLANCE SYSTEMMateria//Equipment | licenses for cameras, licenses for workstations, NMS operator equipment. System configuration, Designing and preparation of documentation, etc. | set | 1 | 31,103.86 | 31,103.86 | 5/3.3 |
| 10 | AUTOMATIC FIRE DETECTION AFD-Material/Equipment | NMS operator equipment,System configuration, Designing and preparation of documentation, etc. System configuration, Designing and preparation of documentation, etc. | set | 1 | 21,838.88 | 21,838.88 | 5/3.3 |
| C-10 | ANTENNA POLE LOCATION |  |  |  |  |  |  |
| 1 | MAIN CABLE ROUTES-Work | Cable trays, installation hoses, firestop compaund, etc. | set | 1 | 141.81 | 141.81 | 5/3.3 |
| 2 | COMMON COMMUNICATION NETWORK-Work | Rack, Fiber optic patch panel, router, etc. Assembly and installation of rack, Installation and connection of active network equipment, Laying of fiber optic cables, etc. | set | 1 | 1,276.30 | 1,276.30 | 5/3.3 |
| 3 | VIDEO SURVEILLANCE SYSTEMWork | Network storage device, Client video monitoring work station, Professional monitor, etc. Mounting and connection of the workstation, monitor, storage device. | set | 1 | 283.62 | 283.62 | 5/3.3 |
| 4 | MAIN CABLE ROUTESMateria//Equipment | Cable trays, installation hoses, firestop compaund, etc. | set | 1 | 992.68 | 992.68 | 5/3.3 |
| 5 | COMMON COMMUNICATION NETWORK-Material/Equipment | Rack, Fiber optic patch panel, router, etc. Assembly and installation of rack, Installation and connection of active network equipment, Laying of fiber optic cables, etc. | set | 1 | 8,934.09 | 8,934.09 | 5/3.3 |
| 6 | VIDEO SURVEILLANCE SYSTEMMateria//Equipment | Network storage device, Client video monitoring work station, Professional monitor, etc. Mounting and connection of the workstation, monitor, storage device. | set | 1 | 1,985.35 | 1,985.35 | 5/3.3 |
| C-11 | ANTENNA POLE LOCATION INCLUDING BUILDING FOR TK EQUIPMENT |  |  |  |  |  |  |

## 11 Telecommunication

| No | Item | Description | Unit | No. of Unit | Unit Price (USD) | Total Price (USD) | No. of books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | MAIN CABLE ROUTES-Work | Cable trays, installation hoses, firestop compaund, etc. | set | 1 | 567.24 | 567.24 | 5/3.3 |
| 2 | COMMON COMMUNICATION NETWORK-Work | Next Generation Firewall, DMZ, cabinet, etc. | set | 1 | 2,978.03 | 2,978.03 | 5/3.3 |
| 3 | VIDEO SURVEILLANCE SYSTEM- <br> Work | licenses for cameras, licenses for workstations, NMS operator equipment. System configuration, Designing and preparation of documentation, etc. | set | 1 | 992.68 | 992.68 | 5/3.3 |
| 4 | CLOCK SYSTEM-Work | Software, time server, NMS operator equipment. System configuration, Designing and preparation of documentation, etc. | set | 1 | 141.81 | 141.81 | 5/3.3 |
| 5 | ACCESS CONTROL SYSTEM Material | Controller 4 Wiegand, power supply, Battery, etc. Laying of cables, Mounting and connection of the reader, Mounting and connection of the button, etc. | set | 1 | 5,672.44 | 5,672.44 | 5/3.3 |
| 6 | INTRUSION DETECTION SYSTEM Material | Enclosure kit, The main panel, Gateway module, etc. Assembly, mounting and connection of the housing for system equipment, Mounting and connection of the motion detector, the glass break detector, etc. | set | 1 | 6,806.92 | 6,806.92 | 5/3.3 |
| 7 | AUTOMATIC FIRE DETECTION AFD-Work | NMS operator equipment,System configuration, Designing and preparation of documentation, etc. System configuration, Designing and preparation of documentation, etc. | set | 1 | 1,134.49 | 1,134.49 | 5/3.3 |
| 8 | FIRE ALARM SYSTEM WITH FIRE EXTINGUISHING MANAGEMENTWork | System configuration, Designing and preparation of documentation, etc. | set | 1 | 1,701.73 | 1,701.73 | 5/3.3 |
| 9 | MAIN CABLE ROUTESMaterial/Equipment | Cable trays, installation hoses, firestop compaund, etc. | set | 1 | 3,970.71 | 3,970.71 | 5/3.3 |
| 10 | COMMON COMMUNICATION NETWORK-Material/Equipment | Next Generation Firewall, DMZ, cabinet, etc. | set | 1 | 20,846.20 | 20,846.20 | 5/3.3 |
| 11 | VIDEO SURVEILLANCE SYSTEMMaterial/Equipment | licenses for cameras, licenses for workstations, NMS operator equipment. System configuration, Designing and preparation of documentation, etc. | set | 1 | 6,948.73 | 6,948.73 | 5/3.3 |

11 Telecommunication

| No | Item | Description | Unit | $\begin{gathered} \text { No. } \\ \text { of Unit } \end{gathered}$ | $\begin{gathered} \hline \text { Unit Price } \\ \text { (USD) } \\ \hline \end{gathered}$ | $\begin{gathered} \hline \text { Total Price } \\ \text { (USD) } \\ \hline \end{gathered}$ | No. of books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 12 | CLOCK SYSTEM-Materia/Equipment | Software, time server, NMS operator equipment. System configuration, Designing and preparation of documentation, etc. | set | 1 | 992.68 | 992.68 | 5/3.3 |
| 13 | AUTOMATIC FIRE DETECTION AFD-Material/Equipment | NMS operator equipment,System configuration, Designing and preparation of documentation, etc. System configuration, Designing and preparation of documentation, etc. | set | 1 | 7,941.41 | 7,941.41 | 5/3.3 |
| 14 | FIRE ALARM SYSTEM WITH FIRE EXTINGUISHING MANAGEMENTMateria//Equipment | System configuration, Designing and preparation of documentation, etc. | set | 1 | 11,912.12 | 11,912.12 | 5/3.3 |
| D | TELECOMMUNICATION SYSTEMS IN NOVI BEOGRAD RAILWAY STATION |  |  |  |  |  |  |
| 1 | DISMANTLING OF THE EXISTING SYSTEMS-Work | Dismantling of parts of the existing telecommunications systems, Disassembly and reassembly of parts of the existing telecommunications systems | set | 1 | 141.81 | 141.81 | 5/3.4 |
| 2 | MAIN CABLE ROUTES-Work | Pipe, Sand, Warning tape, etc. Excavation of trench, Laying of PE pipes, Installation of cable trays, etc. | set | 1 | 3,403.46 | 3,403.46 | 5/3.4 |
| 3 | COMMON COMMUNICATION NETWORK-Work | Rack, panel, switch, etc. Assembly and installation of rack, Installation and connection of active network equipment, Installation of adapter, etc | set | 1 | 24,249.66 | 24,249.66 | 5/3.4 |
| 4 | VIDEO SURVEILLANCE SYSTEMWork | Cameras, Aluminum enclosure, Mounting bracket, etc. Mounting and connection of mounting brackets, workstation, etc. | set | 1 | 14,606.52 | 14,606.52 | 5/3.4 |
| 5 | PUBLIC ADDRESS SYSTEM-Work | Call station, Keypad, Cabinet speaker, etc. Laying of cables, Mounting and connection of the call station, Mounting and connection of cabinet loudspeaker, etc. | set | 1 | 12,479.36 | 12,479.36 | 5/3.4 |
| 6 | CLOCK SYSTEM-Work | Slave clock, Fixing bracket, Small sundry items and other unspecified material, etc. Mounting and connection of slave clock, Fixing bracket, etc. | set | 1 | 7,657.79 | 7,657.79 | 5/3.4 |

11 Telecommunication

| No | Item | Description | Unit | No. of Unit | Unit Price (USD) | Total Price (USD) | No. of books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 7 | INFORMATION DISPLAY SYSTEMWork | TFT information display, Bracket, Small sundry items and other unspecified material. Mounting and connection of mounting information display, Mounting of bracket, etc. | set | 1 | 16,166.44 | 16,166.44 | 5/3.4 |
| 8 | ACCESS CONTROL SYSTEM-Work | Controller 4 Wiegand, power supply, Battery, etc. Laying of cables, Mounting and connection of the reader, Mounting and connection of the button, etc. | set | 1 | 1,701.73 | 1,701.73 | 5/3.4 |
| 9 | INTRUSION DETECTION SYSTEM- Work | Enclosure kit, The main panel, Gateway module, etc. Assembly, mounting and connection of the housing for system equipment, Mounting and connection of the motion detector, the glass break detector, etc. | set | 1 | 1,276.30 | 1,276.30 | 5/3.4 |
| 10 | CABLE ENTRY-Work | Distribution cabinet, Halogen-free corrugated installation hose, Installation cable, etc. Assembly and mounting of cabinet, mounting the equipment, Installation of pipes, etc. | set | 1 | 141.81 | 141.81 | 5/3.4 |
| 11 | DISPATCHING DEVICES-Work | Distribution cabinet, Loud sound bell, LB phone,etc. Assembly and mounting of cabinet, mounting the equipment, loud sound bell, etc. | set | 1 | 283.62 | 283.62 | 5/3.4 |
| 12 | AUTOMATIC FIRE DETECTION AFD-Work | NMS operator equipment,System configuration, Designing and preparation of documentation, etc. System configuration, Designing and preparation of documentation, etc. | set | 1 | 2,694.41 | 2,694.41 | 5/3.4 |
| 13 | DISMANTLING OF THE EXISTING SYSTEMS-Material/Equipment | Dismantling of parts of the existing telecommunications systems, Disassembly and reassembly of parts of the existing telecommunications systems | set | 1 | 992.68 | 992.68 | 5/3.4 |
| 14 | MAIN CABLE ROUTESMaterial/Equipment | Pipe, Sand, Warning tape, etc. Excavation of trench, Laying of PE pipes, Installation of cable trays, etc. | set | 1 | 23,824.23 | 23,824.23 | 5/3.4 |
| 15 | COMMON COMMUNICATION NETWORK-Material/Equipment | Rack, panel, switch, etc. Assembly and installation of rack, Installation and connection of active network equipment, Installation of adapter, etc. | set | 1 | 169,747.65 | 169,747.65 | 5/3.4 |

## 11 Telecommunication

| No | Item | Description | Unit | No. of Unit | Unit Price (USD) | Total Price (USD) | No. of books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 16 | VIDEO SURVEILLANCE SYSTEM- <br> Material/Equipment | Cameras, Aluminum enclosure, Mounting bracket, etc. Mounting and connection of mounting brackets, workstation, etc. | set | 1 | 102,245.66 | 102,245.66 | 5/3.4 |
| 17 | PUBLIC ADDRESS SYSTEMMaterial/Equipment | Call station, Keypad, Cabinet speaker, etc. Laying of cables, Mounting and connection of the call station, Mounting and connection of cabinet loudspeaker, etc. | set | 1 | 87,355.52 | 87,355.52 | 5/3.4 |
| 18 | CLOCK SYSTEM-Material/Equipment | Slave clock, Fixing bracket, Small sundry items and other unspecified material, etc. Mounting and connection of slave clock, Fixing bracket, etc. | set | 1 | 53,604.52 | 53,604.52 | 5/3.4 |
| 19 | INFORMATION DISPLAY SYSTEMMaterial/Equipment | TFT information display, Bracket, Small sundry items and other unspecified material. Mounting and connection of mounting information display, Mounting of bracket, etc. | set | 1 | 113,165.10 | 113,165.10 | 5/3.4 |
| 20 | ACCESS CONTROL SYSTEMMaterial/Equipment | Controller 4 Wiegand, power supply, Battery, etc. Laying of cables, Mounting and connection of the reader, Mounting and connection of the button, etc. | set | 1 | 11,912.12 | 11,912.12 | 5/3.4 |
| 21 | INTRUSION DETECTION SYSTEMMaterial/Equipment | Enclosure kit, The main panel, Gateway module, etc. Assembly, mounting and connection of the housing for system equipment, Mounting and connection of the motion detector, the glass break detector, etc. | set | 1 | 8,934.09 | 8,934.09 | 5/3.4 |
| 22 | CABLE ENTRY-Materia//Equipment | Distribution cabinet, Halogen-free corrugated installation hose, Installation cable,etc. Assembly and mounting of cabinet, mounting the equipment, Installation of pipes, etc. | set | 1 | 992.68 | 992.68 | 5/3.4 |
| 23 | DISPATCHING DEVICES- <br> Material/Equipment | Distribution cabinet, Loud sound bell, LB phone,etc. Assembly and mounting of cabinet, mounting the equipment, loud sound bell, etc. | set | 1 | 1,985.35 | 1,985.35 | 5/3.4 |
| 24 | AUTOMATIC FIRE DETECTION AFD-Material/Equipment | NMS operator equipment,System configuration, Designing and preparation of documentation, etc. System configuration, Designing and preparation of documentation, etc. | set | 1 | 18,860.85 | 18,860.85 | 5/3.4 |

## 11 Telecommunication

| No | Item | Description | Unit | No. of Unit | Unit Price (USD) | Total Price (USD) | No. of books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| E | TELECOMMUNICATION SYSTEMS IN TOŠIN BUNAR STOPPING PLACE |  |  |  |  |  |  |
| 1 | MAIN CABLE ROUTES Material | Perforated shielded cable tray made of steel sheet. Halogen-free installation corrugated hose. Supply and delivery of firestop compound. | set | 1 | 5,672.44 | 5,672.44 | 5/3.5 |
| 2 | COMMON COMMUNICATION NETWORK-Work | Freestanding 42U rack. <br> Managed Layer 2 switch with . <br> Freestanding antivandal cabinet for outdoor installation. <br> Assembly and installation of freestanding. <br> Material, manufacturing, construction of foundation, assembly <br> and mounting of outdoor rack cabinet. <br> Installation and connection of active network equipment with all necessary equipment. | set | 1 | 6,665.11 | 6,665.11 | 5/3.5 |
| 3 | VIDEO SURVEILLANCE SYSTEM Work | IP ONVIF Day / Night full HD 1080p camera. <br> Aluminum enclosure. <br> Pole mount adapter . <br> Mounting and connection of box camera. <br> Mounting and connection of aluminium housing . <br> Mounting and connection of the dome camera adapter. | set | 1 | 5,530.63 | 5,530.63 | 5/3.5 |
| 4 | PUBLIC ADDRESS SYSTEM-Work | Horn. <br> Waterproof distribution box equipped with a serial terminal. Distribution box equipped with serial terminals. <br> Laying cables. <br> Mounting and connection of network audio module Audio. Measuring and testing. | set | 1 | 2,552.60 | 2,552.60 | 5/3.5 |

## 11 Telecommunication

| No | Item | Description | Unit | No. of Unit | Unit Price (USD) | Total Price (USD) | No. of books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 5 | CLOCK SYSTEM-Work | Single-sided IP analog slave clock. <br> Double-sided IP analog slave clock. <br> Small sundry items and other unspecified material. Mounting and connection. <br> Instalation of bracket for single-sided or double-sided clock. Instalation of fixed bracket for single-sided or double-sided clock. | set | 1 | 1,276.30 | 1,276.30 | 5/3.5 |
| 6 | INFORMATION DISPLAY SYSTEMWork | TFT information display. <br> Bracket. <br> Small sundry items and other unspecified material. <br> Mounting and connection of the single-sided outdoor mounting information . <br> Mounting of bracket for single-sided information display. | set | 1 | 2,552.60 | 2,552.60 | 5/3.5 |
| 7 | ACCESS CONTROL SYSTEM-Work | Box for the accommodation of controller with two DIN rails. Controller 4 Wiegand with CF card. <br> External power supply with incorporated UPS. <br> Laying cables. <br> Assembly, installation and connection. <br> Measuring and testing. | set | 1 | 709.05 | 709.05 | 5/3.5 |
| 8 | INTRUSION DETECTION SYSTEMWork | Enclosure kit. <br> Gateway module. <br> Module for connection of communicators. <br> Laying cables. <br> Assembly, mounting and connection. <br> Measuring and testing. | set | 1 | 850.87 | 850.87 | 5/3.5 |
| 9 | AUTOMATIC FIRE DETECTION AFD-Work | steel housing with cover. power supply unit. Bracket. Assembly and mounting. Installation of pipes. Laying cables. | set | 1 | 1,134.49 | 1,134.49 | 5/3.5 |

## 11 Telecommunication

| No | Item | Description | Unit | No. of Unit | Unit Price (USD) | Total Price (USD) | No. of books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 10 | FIXED FIRE ALARM SYSTEM WITH FIRE EXSTINGUISHING MANAGEMENT-Work | Subsystem central unit for fire alarming and fire exstinguishing management. <br> Conventional optical smoke detector. <br> Manual call point for stopping. <br> Installation pipes. <br> Laying cables. <br> Mounting and connection of subsystem central unit. | set | 1 | 1,701.73 | 1,701.73 | 5/3.5 |
| 11 | COMMON COMMUNICATION NETWORK-Material/Equipment | Freestanding 42U rack. <br> Managed Layer 2 switch with . <br> Freestanding antivandal cabinet for outdoor installation. <br> Assembly and installation of freestanding. <br> Material, manufacturing, construction of foundation, assembly <br> and mounting of outdoor rack cabinet. <br> Installation and connection of active network equipment with all necessary equipment. | set | 1 | 46,655.79 | 46,655.79 | 5/3.5 |
| 12 | VIDEO SURVEILLANCE SYSTEM Material/Equipment | IP ONVIF Day / Night full HD 1080p camera. Aluminum enclosure. <br> Pole mount adapter . <br> Mounting and connection of box camera. <br> Mounting and connection of aluminium housing . <br> Mounting and connection of the dome camera adapter. | set | 1 | 38,714.38 | 38,714.38 | 5/3.5 |
| 13 | PUBLIC ADDRESS SYSTEMMaterial/Equipment | Horn. <br> Waterproof distribution box equipped with a serial terminal. Distribution box equipped with serial terminals. <br> Laying cables. <br> Mounting and connection of network audio module Audio. Measuring and testing. | set | 1 | 17,868.17 | 17,868.17 | 5/3.5 |

## 11 Telecommunication

| No | Item | Description | Unit | No. of Unit | Unit Price (USD) | Total Price (USD) | No. of books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 14 | CLOCK SYSTEM-Material/Equipment | Single-sided IP analog slave clock. <br> Double-sided IP analog slave clock. <br> Small sundry items and other unspecified material. <br> Mounting and connection. <br> Instalation of bracket for single-sided or double-sided clock. <br> Instalation of fixed bracket for single-sided or double-sided clock. | set | 1 | 8,934.09 | 8,934.09 | 5/3.5 |
| 15 | INFORMATION DISPLAY SYSTEMMaterial/Equipment | TFT information display. <br> Bracket. <br> Small sundry items and other unspecified material. <br> Mounting and connection of the single-sided outdoor mounting information. <br> Mounting of bracket for single-sided information display. | set | 1 | 17,868.17 | 17,868.17 | 5/3.5 |
| 16 | ACCESS CONTROL SYSTEMMaterial/Equipment | Box for the accommodation of controller with two DIN rails. Controller 4 Wiegand with CF card. <br> External power supply with incorporated UPS. <br> Laying cables. <br> Assembly, installation and connection. <br> Measuring and testing. | set | 1 | 4,963.38 | 4,963.38 | 5/3.5 |
| 17 | INTRUSION DETECTION SYSTEMMaterial/Equipment | Enclosure kit. <br> Gateway module. <br> Module for connection of communicators. <br> Laying cables. <br> Assembly, mounting and connection. <br> Measuring and testing. | set | 1 | 5,956.06 | 5,956.06 | 5/3.5 |

## 11 Telecommunication

| No | Item | Description | Unit | No. of Unit | Unit Price (USD) | Total Price (USD) | No. of books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 18 | AUTOMATIC FIRE DETECTION AFD-Material/Equipment | steel housing with cover. power supply unit. Bracket. Assembly and mounting. Installation of pipes. Laying cables. | set | 1 | 7,941.41 | 7,941.41 | 5/3.5 |
| 19 | FIXED FIRE ALARM SYSTEM WITH FIRE EXSTINGUISHING MANAGEMENT-Material/Equipment | Subsystem central unit for fire alarming and fire exstinguishing management. <br> Conventional optical smoke detector. <br> Manual call point for stopping. <br> Installation pipes. <br> Laying cables. <br> Mounting and connection of subsystem central unit. | set | 1 | 11,912.12 | 11,912.12 | 5/3.5 |
| F | TELECOMMUNICATION SYSTEMS IN ZEMUN RAILWAY STATION |  |  |  |  |  |  |
| F-1 | PART 01 ZEMUN PASSENGER STATION |  |  |  |  |  |  |
| 1 | DISMANTLING OF THE EXISTING SYSTEMS-Work | Dismantling parts of existing telecommunication systems,Dismantling and reassembly of parts of existing telecommunication systems | set | 1 | 141.81 | 141.81 | 5/3.6 |
| 2 | MAIN CABLE ROUTE-Work | Pipe,Fittings for branching,Halogen-free installation corrugated hose, etc. <br> Marking the route and facilities/buildings,Excavation of trench, Laying of PE pipes,etc. | set | 1 | 2,268.97 | 2,268.97 | 5/3.6 |
| 3 | COMMON COMMUNICATION NETWORK-Work | Freestanding 42U rack,ASN type 2, Layer 3 switch,Managed Layer 2 switch,etc. <br> Assembly and installation of freestanding;Material, manufacturing, construction,Laying of fiber optic cables,etc. | set | 1 | 25,100.53 | 25,100.53 | 5/3.6 |

## 11 Telecommunication

| No | Item | Description | Unit | No. of Unit | Unit Price (USD) | Total Price (USD) | No. of books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 4 | VIDEO SURVEILLANCE SYSTEMWork | Aluminum enclosure,Mounting bracket,Pole mount adapter,etc. Mounting and connection of box camera,Mounting and connection of aluminium housing,Mounting and connection of mounting brackets,etc | set | 1 | 14,322.90 | 14,322.90 | 5/3.6 |
| 5 | PUBLIC ADDRESS SYSTEM-Work | Ceiling speaker for indoor installation,Unidirectional sound projector ,Waterproof distribution box,etc. Laying of cables, Mounting and connection of the call station,Measuring and testing,etc. | set | 1 | 7,799.60 | 7,799.60 | 5/3.6 |
| 6 | CLOCK SYSTEM-Work | Single-sided IP analog slave clock, Double-sided IP analog slave clock,Fixing bracket,etc. <br> Mounting and connection,Instalation of bracket. | set | 1 | 5,105.19 | 5,105.19 | 5/3.6 |
| 7 | INFORMATION DISPLAY SYSTEMWork | TFT information display for indoor mounting,TFT information display for outdoor mounting,Bracket for mounting. Mounting and connection,Mounting of bracket for singlesided,Mounting of bracket for double-sided,etc. | set | 1 | 11,770.30 | 11,770.30 | 5/3.6 |
| 8 | SOS SYSTEM-Work | The central panel,A call-quit combination device,Distribution box,etc. <br> Laying of cables,Mounting and connecting,Assembly and mounting, etc. | set | 1 | 283.62 | 283.62 | 5/3.6 |
| 9 | ACCESS CONTROL SYSTEM-Work | Box for the accommodation,Controller 4 Wiegand with CF card, UPS,etc. <br> Laying of cables,Assembly,Mounting and connection. | set | 1 | 425.43 | 425.43 | 5/3.6 |
| 10 | INTRUSION DETECTION SYSTEMWork | Enclosure kit,The main panel,Gateway module,etc. Laying of cables,Assembly,Mounting and connection. | set | 1 | 709.05 | 709.05 | 5/3.6 |

## 11 Telecommunication

| No | Item | Description | Unit | No. of Unit | Unit Price (USD) | Total Price (USD) | No. of books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 11 | ENTRY OF THE CABLES owned bv Telekom Srbija a.d.-Work | Distribution cabinet,Halogen-free,Installation cable, type,etc. Assembly and mounting,Laying of cables,Designing and preparation. | set | 1 | 141.81 | 141.81 | 5/3.6 |
| 12 | DISPATCHING DEVICES-Work | Distribution cabinet,Loud sound bell,LB phone,etc. Assembly and mounting of cabinet,Mounting and connection, Laying of cables,etc. | set | 1 | 141.81 | 141.81 | 5/3.6 |
| 13 | AUTOMATIC FIRE DETECTION Work | Addressable Fire Control Panel ,Relay module,Battery,etc. Assembly and mounting of the cabinet ,Installation of pipes,Laying of cables,etc. | set | 1 | 2,694.41 | 2,694.41 | 5/3.6 |
| 14 | DISMANTLING OF THE EXISTING SYSTEMS-Material/Equipment | Dismantling parts of existing telecommunication systems,Dismantling and reassembly of parts of existing telecommunication systems | set | 1 | 992.68 | 992.68 | 5/3.6 |
| 15 | MAIN CABLE ROUTEMaterial/Equipment | Pipe,Fittings for branching,Halogen-free installation corrugated hose,etc. <br> Marking the route and facilities/buildings,Excavation of trench,Laying of PE pipes,etc. | set | 1 | 15,882.82 | 15,882.82 | 5/3.6 |
| 16 | COMMON COMMUNICATION NETWORK-Material/Equipment | Freestanding 42U rack,ASN type 2, Layer 3 switch,Managed Layer 2 switch,etc. <br> Assembly and installation of freestanding;Material, manufacturing, construction, Laying of fiber optic cables,etc. | set | 1 | 175,703.71 | 175,703.71 | 5/3.6 |
| 17 | VIDEO SURVEILLANCE SYSTEMMaterial/Equipment | Aluminum enclosure,Mounting bracket,Pole mount adapter,etc. Mounting and connection of box camera,Mounting and connection of aluminium housing,Mounting and connection of mounting brackets,etc | set | 1 | 100,260.31 | 100,260.31 | 5/3.6 |
| 18 | PUBLIC ADDRESS SYSTEMMaterial/Equipment | Ceiling speaker for indoor installation,Unidirectional sound projector ,Waterproof distribution box,etc. Laying of cables,Mounting and connection of the call station,Measuring and testing,etc. | set | 1 | 54,597.20 | 54,597.20 | 5/3.6 |

## 11 Telecommunication

| No | Item | Description | Unit | No. of Unit | Unit Price (USD) | Total Price (USD) | No. of books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 19 | CLOCK SYSTEM-Material/Equipment | Single-sided IP analog slave clock,Double-sided IP analog slave clock,Fixing bracket,etc. <br> Mounting and connection,Instalation of bracket. | set | 1 | 35,736.35 | 35,736.35 | 5/3.6 |
| 20 | INFORMATION DISPLAY SYSTEMMaterial/Equipment | TFT information display for indoor mounting,TFT information display for outdoor mounting,Bracket for mounting. Mounting and connection,Mounting of bracket for singlesided,Mounting of bracket for double-sided,etc. | set | 1 | 82,392.13 | 82,392.13 | 5/3.6 |
| 21 | SOS SYSTEM-Material/Equipment | The central panel,A call-quit combination device,Distribution box,etc. <br> Laying of cables,Mounting and connecting,Assembly and mounting ,etc. | set | 1 | 1,985.35 | 1,985.35 | 5/3.6 |
| 22 | ACCESS CONTROL SYSTEMMaterial/Equipment | Box for the accommodation,Controller 4 Wiegand with CF card, UPS,etc. <br> Laying of cables,Assembly,Mounting and connection. | set | 1 | 2,978.03 | 2,978.03 | 5/3.6 |
| 23 | INTRUSION DETECTION SYSTEMMaterial/Equipment | Enclosure kit,The main panel,Gateway module,etc. Laying of cables,Assembly,Mounting and connection. | set | 1 | 4,963.38 | 4,963.38 | 5/3.6 |
| 24 | ENTRY OF THE CABLES owned bv Telekom Srbija a.d.Material/Equipment | Distribution cabinet,Halogen-free,Installation cable, type,etc. Assembly and mounting,Laying of cables,Designing and preparation. | set | 1 | 992.68 | 992.68 | 5/3.6 |
| 25 | DISPATCHING DEVICESMaterial/Equipment | Distribution cabinet,Loud sound bell,LB phone,etc. Assembly and mounting of cabinet,Mounting and connection,Laying of cables,etc. | set | 1 | 992.68 | 992.68 | 5/3.6 |
| 26 | AUTOMATIC FIRE DETECTION Material/Equipment | Addressable Fire Control Panel ,Relay module,Battery,etc. Assembly and mounting of the cabinet ,Installation of pipes,Laying of cables, etc. | set | 1 | 18,860.85 | 18,860.85 | 5/3.6 |
| F-2 | PART 02 ZEMUN INTERLOCKING B | UILDING |  |  |  |  |  |

## 11 Telecommunication

| No | Item | Description | Unit | $\begin{gathered} \text { No. } \\ \text { of Unit } \end{gathered}$ | Unit Price (USD) | $\begin{gathered} \hline \text { Total Price } \\ \text { (USD) } \end{gathered}$ | No. of books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | DISMANTLING OF THE EXISTING SYSTEMS Works | Dismantling parts of existing telecommunication <br> systems,Dismantling and reassembly of parts of existing <br> telecommunication systems | set | 1 | 2,268.97 | 2,268.97 | 5/3.6 |
| 2 | MAIN CABLE ROUTE-Work | Pipe,Fittings for branching,Halogen-free installation corrugated hose,etc. <br> Marking the route and facilities/buildings,Excavation of trench, Laying of PE pipes,etc. | set | 1 | 7,374.17 | 7,374.17 | 5/3.6 |
| 3 | COMMON COMMUNICATION NETWORK-Work | Freestanding 42U rack,ASN type 2, Layer 3 switch,Managed Layer 2 switch,etc. <br> Assembly and installation of freestanding;Material, manufacturing, construction, Laying of fiber optic cables, etc. | set | 1 | 14,606.52 | 14,606.52 | 5/3.6 |
| 4 | VIDEO SURVEILLANCE SYSTEMWork | Aluminum enclosure,Mounting bracket,Pole mount adapter,etc. Mounting and connection of box camera,Mounting and connection of aluminium housing, Mounting and connection of mounting brackets,etc. | set | 1 | 5,814.25 | 5,814.25 | 5/3.6 |
| 5 | PUBLIC ADDRESS SYSTEM-Work | Ceiling speaker for indoor installation,Unidirectional sound projector ,Waterproof distribution box,etc. Laying of cables,Mounting and connection of the call station,Measuring and testing,etc. | set | 1 | 1,985.35 | 1,985.35 | 5/3.6 |
| 6 | CLOCK SYSTEM-Work | Single-sided IP analog slave clock, Double-sided IP analog slave clock,Fixing bracket,etc. <br> Mounting and connection,Instalation of bracket | set | 1 | 2,552.60 | 2,552.60 | 5/3.6 |
| 7 | ACCESS CONTROL SYSTEM-Work | Box for the accommodation, Controller 4 Wiegand with CF card, UPS,etc. <br> Laying of cables,Assembly,Mounting and connection. | set | 1 | 2,978.03 | 2,978.03 | 5/3.6 |
| 8 | INTRUSION DETECTION SYSTEMWork | Enclosure kit,The main panel,Gateway module,etc. Laying of cables,Assembly,Mounting and connection | set | 1 | 1,559.92 | 1,559.92 | 5/3.6 |

## 11 Telecommunication

| No | Item | Description | Unit | No. of Unit | Unit Price (USD) | Total Price (USD) | No. of books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 9 | ENTRY OF THE CABLES owned bv Telekom Srbija a.d.-Work | Distribution cabinet,Halogen-free,Installation cable, type,etc. Assembly and mounting,Laying of cables,Designing and preparation. | set | 1 | 141.81 | 141.81 | 5/3.6 |
| 10 | DISPATCHING DEVICES-Work | Distribution cabinet,Loud sound bell,LB phone,etc. Assembly and mounting of cabinet,Mounting and connection,Laying of cables, etc. | set | 1 | 283.62 | 283.62 | 5/3.6 |
| 11 | AUTOMATIC FIRE DETECTIONWork | Addressable Fire Control Panel ,Relay module,Battery,etc. Assembly and mounting of the cabinet ,Installation of pipes,Laying of cables,etc. | set | 1 | 7,090.55 | 7,090.55 | 5/3.6 |
| 12 | DATA CENTER - FIXED FIRE ALARM SYSTEM WITH FIRE EXSTINGUISHING MANAGEMENT Material-work | Subsystem central unit,Conventional optical smoke detector,Manual call point,etc. Installation of pipes,Laying of cables,Mounting and connection,etc. | set | 1 | 10,210.39 | 10,210.39 | 5/3.6 |
| 13 | EXPLOSIVE GAS DETECTION SYSTEM-Work | Central unit,Detector,Safety barrier,etc. Installation of pipes,Laying of cables,Mounting and connection,etc. | set | 1 | 850.87 | 850.87 | 5/3.6 |
| 14 | DATA CENTER - VIDEO <br> SURVEILLANCE SYSTEM-Work | Client workstation,Professional monitor,Small sundry items and other unspecified material,etc. <br> Mounting and connection of the workstation,Mounting and connection of the monitor. | set | 1 | 1,701.73 | 1,701.73 | 5/3.6 |
| 15 | DATA CENTER - INTEGRATION OF SECURITY SYSTEMS-Work | Workstations with two 32 " monitors for Administrator on duty. Freestanding 42U rack - enclosure | set | 1 | 1,276.30 | 1,276.30 | 5/3.6 |
| 16 | DATA CENTER - SERVER ROOM EQUIPMENT-Work | Mounting and connection of cabinets. Fiber optic patch panel,KVM switch,Storage unit,etc. | set | 1 | 23,824.23 | 23,824.23 | 5/3.6 |
| 17 | DATA CENTER - SERVER ROOM ACTIVE EQUIPMENT-Work | Installation and connection of active network,Small sundry items. | set | 1 | 460,176.38 | 460,176.38 | 5/3.6 |

## 11 Telecommunication

| No | Item | Description | Unit | No. of Unit | Unit Price (USD) | Total Price (USD) | No. of books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 18 | SUBREGIONAL STATION EQUIPMENT - COMMON COMMUNICATION NETWORKWork | Freestanding 42U rack dimensions,TOR DC switch. Assembly and installation of freestanding rack. | set | 1 | 709.05 | 709.05 | 5/3.6 |
| 19 | SUBREGIONAL STATION EQUIPMENT - OTN/DWDM TRANSMISSION SYSTEM-Work | Freestanding 42U rack dimensions,OTN / DWDM device. Assembly and installation,Installation and connection. | set | 1 | 12,479.36 | 12,479.36 | 5/3.6 |
| 20 | SUBREGIONAL STATION EQUIPMENT - VIDEO SURVEILLANCE SYSTEM-Work | Network storage device,Client video monitoring work station, Professional monitor for video surveillance systems,etc. Mounting and connection of the workstation,Mounting and connection of the monitor,Mounting and connection of the storage. | set | 1 | 21,838.88 | 21,838.88 | 5/3.6 |
| 21 | SUBREGIONAL STATION EQUIPMENT - PUBLIC ADDRESS SYSTEM-Work | Call station,Keypad for the call station,Network audio controller,etc. <br> Mounting and connection of the call station,Mounting and connection of the network,Measuring and testing,etc. | set | 1 | 2,268.97 | 2,268.97 | 5/3.6 |
| 22 | SUBREGIONAL STATION EQUIPMENT - INTEGRATION OF SECURITY SYSTEMS-Work | Workstations with two 32 " monitors | set | 1 | 1,276.30 | 1,276.30 | 5/3.6 |
| 23 | MAIN CABLE ROUTEMaterial/Equipment | Pipe,Fittings for branching,Halogen-free installation corrugated hose, etc. <br> Marking the route and facilities/buildings,Excavation of trench, Laying of PE pipes, etc. | set | 1 | 51,619.17 | 51,619.17 | 5/3.6 |
| 24 | COMMON COMMUNICATION NETWORK-Material/Equipment | Freestanding 42U rack,ASN type 2, Layer 3 switch,Managed Layer 2 switch,etc. <br> Assembly and installation of freestanding;Material, manufacturing, construction,Laying of fiber optic cables,etc. | set | 1 | 102,245.66 | 102,245.66 | 5/3.6 |

## 11 Telecommunication

| No | Item | Description | Unit | No. of Unit | Unit Price (USD) | Total Price (USD) | No. of books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 25 | VIDEO SURVEILLANCE SYSTEMMaterial/Equipment | Aluminum enclosure,Mounting bracket,Pole mount adapter,etc. Mounting and connection of box camera,Mounting and connection of aluminium housing,Mounting and connection of mounting brackets,etc. | set | 1 | 40,699.73 | 40,699.73 | 5/3.6 |
| 26 | PUBLIC ADDRESS SYSTEMMaterial/Equipment | Ceiling speaker for indoor installation,Unidirectional sound projector ,Waterproof distribution box,etc. Laying of cables,Mounting and connection of the call station,Measuring and testing,etc. | set | 1 | 13,897.47 | 13,897.47 | 5/3.6 |
| 27 | CLOCK SYSTEM-Material/Equipment | Single-sided IP analog slave clock,Double-sided IP analog slave clock,Fixing bracket,etc. <br> Mounting and connection,Instalation of bracket | set | 1 | 17,868.17 | 17,868.17 | 5/3.6 |
| 28 | ACCESS CONTROL SYSTEMMaterial/Equipment | Box for the accommodation,Controller 4 Wiegand with CF card, UPS,etc. <br> Laying of cables,Assembly,Mounting and connection. | set | 1 | 20,846.20 | 20,846.20 | 5/3.6 |
| 29 | INTRUSION DETECTION SYSTEMMaterial/Equipment | Enclosure kit, The main panel,Gateway module,etc. Laying of cables,Assembly,Mounting and connection. | set | 1 | 10,919.44 | 10,919.44 | 5/3.6 |
| 30 | ENTRY OF THE CABLES owned bv Telekom Srbija a.d.Material/Equipment | Distribution cabinet,Halogen-free,Installation cable, type,etc. Assembly and mounting,Laying of cables,Designing and preparation. | set | 1 | 992.68 | 992.68 | 5/3.6 |
| 31 | DISPATCHING DEVICESMaterial/Equipment | Distribution cabinet,Loud sound bell,LB phone,etc. Assembly and mounting of cabinet,Mounting and connection,Laying of cables,etc. | set | 1 | 1,985.35 | 1,985.35 | 5/3.6 |
| 32 | AUTOMATIC FIRE DETECTIONMaterial/Equipment | Addressable Fire Control Panel ,Relay module,Battery,etc. Assembly and mounting of the cabinet ,Installation of pipes,Laying of cables,etc. | set | 1 | 49,633.82 | 49,633.82 | 5/3.6 |

## 11 Telecommunication

| No | Item | Description | Unit | No. of Unit | Unit Price (USD) | Total Price (USD) | No. of books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 33 | EXPLOSIVE GAS DETECTION SYSTEM-Material/Equipment | Central unit,Detector,Safety barrier,etc. Installation of pipes,Laying of cables,Mounting and connection,etc. | set | 1 | 5,956.06 | 5,956.06 | 5/3.6 |
| 34 | DATA CENTER - VIDEO SURVEILLANCE SYSTEMMaterial/Equipment | Client workstation,Professional monitor,Small sundry items and other unspecified material,etc. <br> Mounting and connection of the workstation,Mounting and connection of the monitor. | set | 1 | 11,912.12 | 11,912.12 | 5/3.6 |
| 35 | DATA CENTER - INTEGRATION OF SECURITY SYSTEMS- <br> Material/Equipment | Workstations with two 32 " monitors for Administrator on duty. Freestanding 42U rack - enclosure | set | 1 | 8,934.09 | 8,934.09 | 5/3.6 |
| 36 | DATA CENTER - SERVER ROOM EQUIPMENT-Material/Equipment | Mounting and connection of cabinets. Fiber optic patch panel,KVM switch,Storage unit,etc. | set | 1 | 166,769.62 | 166,769.62 | 5/3.6 |
| 37 | DATA CENTER - SERVER ROOM ACTIVE EQUIPMENT- <br> Material/Equipment | Installation and connection of active network,Small sundry items. | set | 1 | 3,221,234.66 | 3,221,234.66 | 5/3.6 |
| 38 | SUBREGIONAL STATION EQUIPMENT - COMMON COMMUNICATION NETWORKMaterial/Equipment | Freestanding 42U rack dimensions,TOR DC switch. Assembly and installation of freestanding rack. | set | 1 | 4,963.38 | 4,963.38 | 5/3.6 |
| 39 | SUBREGIONAL STATION EQUIPMENT - OTN/DWDM TRANSMISSION SYSTEMMaterial/Equipment | Freestanding 42U rack dimensions,OTN / DWDM device. Assembly and installation, Installation and connection. | set | 1 | 87,355.52 | 87,355.52 | 5/3.6 |
| 40 | SUBREGIONAL STATION EQUIPMENT - VIDEO SURVEILLANCE SYSTEMMaterial/Equipment | Network storage device,Client video monitoring work station, Professional monitor for video surveillance systems, etc. Mounting and connection of the workstation,Mounting and connection of the monitor,Mounting and connection of the storage. | set | 1 | 152,872.15 | 152,872.15 | 5/3.6 |

## 11 Telecommunication

| No | Item | Description | Unit | No. of Unit | Unit Price (USD) | Total Price (USD) | No. of books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 41 | SUBREGIONAL STATION EQUIPMENT - PUBLIC ADDRESS SYSTEM-Material/Equipment | Call station,Keypad for the call station,Network audio controller,etc. <br> Mounting and connection of the call station,Mounting and connection of the network,Measuring and testing, etc. | set | 1 | 15,882.82 | 15,882.82 | 5/3.6 |
| 42 | SUBREGIONAL STATION EQUIPMENT - INTEGRATION OF SECURITY SYSTEMS- <br> Material/Equipment | Workstations with two 32 " monitors | set | 1 | 8,934.09 | 8,934.09 | 5/3.6 |
| G | TELECOMMUNICATION SYSTEMS IN ALTINA STOPPING PLACE |  |  |  |  |  |  |
| 1 | MAIN CABLE ROUTE-Work | Perforated shielded cable tray ,Halogen-free installation corrugated hose ,Installation corrugated hose,etc. Installation of cable trays, Installation of pipes,Placing installation pipes,etc. | set | 1 | 709.05 | 709.05 | 5/3.7 |
| 2 | COMMON COMMUNICATION NETWORK-Work | Freestanding 42U rack,ASN type 2, Layer 3 switch,Managed Layer 2 switch,etc. <br> Installation of cable trays, Installation of pipes, Placing installation pipes,etc. | set | 1 | 6,665.11 | 6,665.11 | 5/3.7 |
| 3 | VIDEO SURVEILLANCE SYSTEM- <br> Work | Aluminum enclosure,Mounting bracket,Pole mount adapter,etc. Mounting and connection of box camera,Mounting and connection of aluminium housing,Mounting and connection of mounting brackets,etc | set | 1 | 5,814.25 | 5,814.25 | 5/3.7 |
| 4 | PUBLIC ADDRESS SYSTEM-Work | Horn, IP 65,Waterproof distribution box ,Network audio controller,etc. <br> Laying of cables,Mounting and connection of the call station,Measuring and testing, etc. | set | 1 | 2,694.41 | 2,694.41 | 5/3.7 |
| 5 | CLOCK SYSTEM-Work | Single-sided IP analog slave clock,Double-sided IP analog slave clock,Fixing bracket,etc. <br> Mounting and connection, Instalation of bracket. | set | 1 | 1,276.30 | 1,276.30 | 5/3.7 |

## 11 Telecommunication

| No | Item | Description | Unit | No. of Unit | Unit Price (USD) | Total Price (USD) | No. of books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 6 | INFORMATION DISPLAY SYSTEMWork | TFT information display for indoor mounting,TFT information display for outdoor mounting,Bracket for mounting. Mounting and connection,Mounting of bracket for singlesided, Mounting of bracket for double-sided, etc. | set | 1 | 2,552.60 | 2,552.60 | 5/3.7 |
| 7 | ACCESS CONTROL SYSTEM-Work | Box for the accommodation, Controller 4 Wiegand with CF card, External power,etc. <br> Laying of cables,Assembly,Mounting and connection. | set | 1 | 709.05 | 709.05 | 5/3.7 |
| 8 | INTRUSION DETECTION SYSTEMWork | Enclosure kit, The main panel,Gateway module,etc. Laying of cables,Assembly,Mounting and connection. | set | 1 | 850.87 | 850.87 | 5/3.7 |
| 9 | AUTOMATIC FIRE DETECTIONWork | Addressable Fire Control Panel ,Relay module,Battery,etc. Assembly and mounting of the cabinet ,Installation of pipes,Laying of cables,etc. | set | 1 | 1,134.49 | 1,134.49 | 5/3.7 |
| 10 | FIXED FIRE ALARM SYSTEM WITH FIRE EXSTINGUISHING MANAGEMENT-Work | Subsystem central unit,Conventional optical smoke detector,Manual call point,ect. <br> Installation of pipes,Laying of cables,Mounting and connection,ect. | set | 1 | 1,701.73 | 1,701.73 | 5/3.7 |
| 11 | MAIN CABLE ROUTEMaterial/Equipment | Perforated shielded cable tray ,Halogen-free installation corrugated hose ,Installation corrugated hose,etc. Installation of cable trays, Installation of pipes,Placing installation pipes,etc. | set | 1 | 4,963.38 | 4,963.38 | 5/3.7 |
| 12 | COMMON COMMUNICATION NETWORK-Material/Equipment | Freestanding 42U rack,ASN type 2, Layer 3 switch,Managed Layer 2 switch,etc. <br> Installation of cable trays ,Installation of pipes,Placing installation pipes,etc. | set | 1 | 46,655.79 | 46,655.79 | 5/3.7 |

## 11 Telecommunication

| No | Item | Description | Unit | No. of Unit | Unit Price (USD) | Total Price (USD) | No. of books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 13 | VIDEO SURVEILLANCE SYSTEMMaterial/Equipment | Aluminum enclosure,Mounting bracket,Pole mount adapter,etc. Mounting and connection of box camera,Mounting and connection of aluminium housing,Mounting and connection of mounting brackets, etc | set | 1 | 40,699.73 | 40,699.73 | 5/3.7 |
| 14 | PUBLIC ADDRESS SYSTEM- <br> Material/Equipment | Horn, IP 65,Waterproof distribution box ,Network audio controller,etc. <br> Laying of cables,Mounting and connection of the call station,Measuring and testing, etc. | set | 1 | 18,860.85 | 18,860.85 | 5/3.7 |
| 15 | CLOCK SYSTEM-Material/Equipment | Single-sided IP analog slave clock,Double-sided IP analog slave clock,Fixing bracket,etc. <br> Mounting and connection,Instalation of bracket. | set | 1 | 8,934.09 | 8,934.09 | 5/3.7 |
| 16 | INFORMATION DISPLAY SYSTEMMaterial/Equipment | TFT information display for indoor mounting,TFT information display for outdoor mounting,Bracket for mounting. Mounting and connection,Mounting of bracket for singlesided,Mounting of bracket for double-sided, etc. | set | 1 | 17,868.17 | 17,868.17 | 5/3.7 |
| 17 | ACCESS CONTROL SYSTEMMaterial/Equipment | Box for the accommodation,Controller 4 Wiegand with CF card, External power,etc. <br> Laying of cables,Assembly,Mounting and connection. | set | 1 | 4,963.38 | 4,963.38 | 5/3.7 |
| 18 | INTRUSION DETECTION SYSTEMMaterial/Equipment | Enclosure kit, The main panel,Gateway module,etc. Laying of cables,Assembly,Mounting and connection. | set | 1 | 5,956.06 | 5,956.06 | 5/3.7 |
| 19 | AUTOMATIC FIRE DETECTIONMaterial/Equipment | Addressable Fire Control Panel ,Relay module,Battery,etc. Assembly and mounting of the cabinet ,Installation of pipes,Laying of cables, etc. | set | 1 | 7,941.41 | 7,941.41 | 5/3.7 |
| 20 | FIXED FIRE ALARM SYSTEM WITH FIRE EXSTINGUISHING MANAGEMENT-Material/Equipment | Subsystem central unit,Conventional optical smoke detector,Manual call point,ect. Installation of pipes,Laying of cables,Mounting and connection,ect. | set | 1 | 11,912.12 | 11,912.12 | 5/3.7 |
| H | TELECOMMUNICATION SYSTEMS IN ZEMUNSKO POLJE RAILWAY STATION |  |  |  |  |  |  |

## 11 Telecommunication

| No | Item | Description | Unit | No. of Unit | Unit Price (USD) | Total Price (USD) | No. of books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | DISMANTLING OF THE EXISTING SYSTEMS-Work | Dismantling parts of existing telecommunication systems,Dismantling and reassembly of parts of existing telecommunication systems | set | 1 | 141.81 | 141.81 | 5/3.8 |
| 2 | MAIN CABLE ROUTE-Work | Pipe,Fittings for branching,Sand,etc. Marking the route and facilities/buildings,Excavation of trench, Laying of PE pipes,etc. | set | 1 | 1,701.73 | 1,701.73 | 5/3.8 |
| 3 | COMMON COMMUNICATION NETWORK-Work | Freestanding 42U rack,ASN type 2, Layer 3 switch,Managed Layer 2 switch,etc. <br> Assembly and installation of freestanding;Material, manufacturing, construction,Laying of fiber optic cables,etc. | set | 1 | 12,621.17 | 12,621.17 | 5/3.8 |
| 4 | VIDEO SURVEILLANCE SYSTEM- <br> Work | Aluminum enclosure,Mounting bracket,Pole mount adapter,etc. Mounting and connection of box camera,Mounting and connection of aluminium housing,Mounting and connection of mounting brackets,etc. | set | 1 | 9,501.33 | 9,501.33 | 5/3.8 |
| 5 | CLOCK SYSTEM-Work | Single-sided IP analog slave clock, Double-sided IP analog slave clock,Fixing bracket,etc. <br> Mounting and connection, Instalation of bracket. | set | 1 | 5,105.19 | 5,105.19 | 5/3.8 |
| 6 | INFORMATION DISPLAY SYSTEMWork | TFT information display for indoor mounting,TFT information display for outdoor mounting,Bracket for mounting. Mounting and connection,Mounting of bracket for singlesided, Mounting of bracket for double-sided,etc. | set | 1 | 6,665.11 | 6,665.11 | 5/3.8 |
| 7 | PUBLIC ADDRESS SYSTEM-Work | Call station with speaker and microphone,Keypad for the call station ,Ceiling speaker for indoor installation,etc. Laying of cables,Mounting and connection of the call station,Measuring and testing,etc. | set | 1 | 4,396.14 | 4,396.14 | 5/3.8 |

## 11 Telecommunication

| No | Item | Description | Unit | No. of Unit | Unit Price (USD) | Total Price (USD) | No. of books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 8 | SOS SYSTEM-Work | The central panel;A call-quit combination device;SOS pushbutton, etc. <br> Laying of cables;Assembly, mounting and connecting, etc. | set | 1 | 141.81 | 141.81 | 5/3.8 |
| 9 | ACCESS CONTROL SYSTEM-Work | Box for the accommodation, Controller 4 Wiegand with CF card, UPS,etc. <br> Laying of cables,Assembly,Mounting and connection. | set | 1 | 992.68 | 992.68 | 5/3.8 |
| 10 | INTRUSION DETECTION SYSTEMWork | Enclosure kit,The main panel,Gateway module,etc. Laying of cables,Assembly,Mounting and connection. | set | 1 | 1,134.49 | 1,134.49 | 5/3.8 |
| 11 | ENTRY OF THE CABLES owned by Telekom Srbija a.d.-Work | Distribution cabinet,Halogen-free corrugated installation hose ,Installation cable, type,etc. <br> Assembly and mounting,Laying of cables,Installation of pipes,etc. | set | 1 | 141.81 | 141.81 | 5/3.8 |
| 12 | DISPATCHING DEVICES-Work | Distribution cabinet,Loud sound bell,LB phone,etc. Assembly and mounting of cabinet,Mounting and connection, Laying of cables,etc. | set | 1 | 283.62 | 283.62 | 5/3.8 |
| 13 | AUTOMATIC FIRE DETECTION AFD-Work | Addressable Fire Control Panel ,Relay module,Battery,etc. Assembly and mounting of the cabinet ,Installation of pipes,Laying of cables,etc. | set | 1 | 2,552.60 | 2,552.60 | 5/3.8 |
| 14 | DISMANTLING OF THE EXISTING <br> SYSTEMS-Material/Equipment | Dismantling parts of existing telecommunication systems,Dismantling and reassembly of parts of existing telecommunication systems | set | 1 | 992.68 | 992.68 | 5/3.8 |
| 15 | MAIN CABLE ROUTEMaterial/Equipment | Pipe,Fittings for branching,Sand,etc. Marking the route and facilities/buildings,Excavation of trench, Laying of PE pipes,etc. | set | 1 | 11,912.12 | 11,912.12 | 5/3.8 |

## 11 Telecommunication

| No | Item | Description | Unit | No. of Unit | Unit Price (USD) | Total Price (USD) | No. of books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 16 | COMMON COMMUNICATION NETWORK-Material/Equipment | Freestanding 42U rack,ASN type 2, Layer 3 switch,Managed Layer 2 switch,etc. <br> Assembly and installation of freestanding;Material, manufacturing, construction,Laying of fiber optic cables,etc. | set | 1 | 88,348.19 | 88,348.19 | 5/3.8 |
| 17 | VIDEO SURVEILLANCE SYSTEM- <br> Material/Equipment | Aluminum enclosure,Mounting bracket,Pole mount adapter,etc. Mounting and connection of box camera,Mounting and connection of aluminium housing,Mounting and connection of mounting brackets,etc. | set | 1 | 66,509.31 | 66,509.31 | 5/3.8 |
| 18 | CLOCK SYSTEM-Material/Equipment | Single-sided IP analog slave clock, Double-sided IP analog slave clock,Fixing bracket,etc. <br> Mounting and connection, Instalation of bracket. | set | 1 | 35,736.35 | 35,736.35 | 5/3.8 |
| 19 | INFORMATION DISPLAY SYSTEMMaterial/Equipment | TFT information display for indoor mounting,TFT information display for outdoor mounting,Bracket for mounting. Mounting and connection,Mounting of bracket for singlesided, Mounting of bracket for double-sided, etc. | set | 1 | 46,655.79 | 46,655.79 | 5/3.8 |
| 20 | PUBLIC ADDRESS SYSTEMMaterial/Equipment | Call station with speaker and microphone,Keypad for the call station ,Ceiling speaker for indoor installation,etc. Laying of cables,Mounting and connection of the call station,Measuring and testing,etc. | set | 1 | 30,772.97 | 30,772.97 | 5/3.8 |
| 21 | SOS SYSTEM-Material/Equipment | The central panel;A call-quit combination device;SOS pushbutton, etc. <br> Laying of cables;Assembly, mounting and connecting, etc. | set | 1 | 992.68 | 992.68 | 5/3.8 |
| 22 | ACCESS CONTROL SYSTEMMaterial/Equipment | Box for the accommodation, Controller 4 Wiegand with CF card, UPS,etc. <br> Laying of cables,Assembly,Mounting and connection. | set | 1 | 6,948.73 | 6,948.73 | 5/3.8 |

## 11 Telecommunication

| No | Item | Description | Unit | No. of Unit | Unit Price (USD) | Total Price (USD) | No. of books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 23 | INTRUSION DETECTION SYSTEMMaterial/Equipment | Enclosure kit, The main panel,Gateway module,etc. Laying of cables,Assembly,Mounting and connection. | set | 1 | 7,941.41 | 7,941.41 | 5/3.8 |
| 24 | ENTRY OF THE CABLES owned by Telekom Srbija a.d.Material/Equipment | Distribution cabinet,Halogen-free corrugated installation hose , Installation cable, type,etc. <br> Assembly and mounting,Laying of cables,Installation of pipes,etc. | set | 1 | 992.68 | 992.68 | 5/3.8 |
| 25 | DISPATCHING DEVICESMaterial/Equipment | Distribution cabinet,Loud sound bell,LB phone,etc. Assembly and mounting of cabinet,Mounting and connection,Laying of cables,etc. | set | 1 | 1,985.35 | 1,985.35 | 5/3.8 |
| 26 | AUTOMATIC FIRE DETECTION AFD-Material/Equipment | Addressable Fire Control Panel ,Relay module,Battery,etc. Assembly and mounting of the cabinet ,Installation of pipes,Laying of cables,etc. | set | 1 | 17,868.17 | 17,868.17 | 5/3.8 |
| 1 | TELECOMMUNICATION SYSTEMS IN KAMENDIN STOPPING PLACE |  |  |  |  |  |  |
| 1 | MAIN CABLE ROUTE-Work | Perforated shielded cable;Halogen-free installation corrugated hose,etc. <br> Marking the route and facilities/buildings; Excavation of trench;Laying of PE pipes,etc. | set | 1 | 709.05 | 709.05 | 5/3.9 |
| 2 | COMMON COMMUNICATION NETWORK-Work | Freestanding 42U rack;ASN type 2, Layer 3 switch;Managed Layer 2 switch,etc. <br> Assembly and installation of freestanding;Material, manufacturing, construction;Laying of fiber optic cables,etc. | set | 1 | 6,665.11 | 6,665.11 | 5/3.9 |
| 3 | VIDEO SURVEILLANCE SYSTEM- <br> Work | IP Box ONVIF Day / Night full HD 1080p camera;Aluminum enclosure;Mounting bracket,etc. Mounting and connection. | set | 1 | 5,247.00 | 5,247.00 | 5/3.9 |
| 4 | PUBLIC ADDRESS SYSTEM-Work | Horn;Waterproof distribution box;Distribution box,etc. Laying of cables;Mounting and connection,etc. | set | 1 | 2,410.79 | 2,410.79 | 5/3.9 |

## 11 Telecommunication

| No | Item | Description | Unit | No. of Unit | Unit Price (USD) | Total Price (USD) | No. of books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 5 | CLOCK SYSTEM-Work | Single-sided IP analog slave clock;Double-sided IP analog slave clock;Fixing bracket,etc. Mounting and connection. | set | 1 | 1,276.30 | 1,276.30 | 5/3.9 |
| 6 | INFORMATION DISPLAY SYSTEMWork | TFT information display;Bracket,,etc. Mounting and connection. | set | 1 | 2,552.60 | 2,552.60 | 5/3.9 |
| 7 | ACCESS CONTROL SYSTEM-Work | Controller 4 Wiegand with CF card;Box;External power,etc. Laying of cables;Assembly, installation and connection;Mounting,etc. | set | 1 | 709.05 | 709.05 | 5/3.9 |
| 8 | INTRUSION DETECTION SYSTEMWork | Enclosure kit;The main panel;Gateway module,etc. Assembly, mounting and connection;Measuring and testing,etc. | set | 1 | 850.87 | 850.87 | 5/3.9 |
| 9 | AUTOMATIC FIRE DETECTIONWork | Addressable Fire Control Panel;Relay module;Battery, etc. Assembly and mounting;Installation;Laying of cables,etc. | set | 1 | 1,134.49 | 1,134.49 | 5/3.9 |
| 10 | FIXED FIRE ALARM SYSTEM WITH FIRE <br> EXSTINGUISHING MANAGEMENTWork | Subsystem central unit;Subsystem central unit;Conventional optical smoke detector,etc. Installation pipes;Laying of cables;Mounting and connection,etc. | set | 1 | 1,701.73 | 1,701.73 | 5/3.9 |
| 11 | MAIN CABLE ROUTEMaterial/Equipment | Perforated shielded cable;Halogen-free installation corrugated hose,etc. <br> Marking the route and facilities/buildings;Excavation of trench;Laying of PE pipes,etc. | set | 1 | 4,963.38 | 4,963.38 | 5/3.9 |
| 12 | COMMON COMMUNICATION NETWORK-Material/Equipment | Freestanding 42U rack;ASN type 2, Layer 3 switch;Managed Layer 2 switch,etc. <br> Assembly and installation of freestanding;Material, manufacturing, construction;Laying of fiber optic cables,etc. | set | 1 | 46,655.79 | 46,655.79 | 5/3.9 |
| 13 | VIDEO SURVEILLANCE SYSTEMMaterial/Equipment | IP Box ONVIF Day / Night full HD 1080p camera;Aluminum enclosure;Mounting bracket,etc. Mounting and connection. | set | 1 | 36,729.02 | 36,729.02 | 5/3.9 |

## 11 Telecommunication

| No | Item | Description | Unit | No. of Unit | Unit Price (USD) | Total Price (USD) | No. of books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 14 | PUBLIC ADDRESS SYSTEM- <br> Material/Equipment | Horn;Waterproof distribution box;Distribution box,etc. Laying of cables;Mounting and connection,etc. | set | 1 | 16,875.50 | 16,875.50 | 5/3.9 |
| 15 | CLOCK SYSTEM-Material/Equipment | Single-sided IP analog slave clock;Double-sided IP analog slave clock;Fixing bracket,etc. <br> Mounting and connection. | set | 1 | 8,934.09 | 8,934.09 | 5/3.9 |
| 16 | INFORMATION DISPLAY SYSTEMMaterial/Equipment | TFT information display;Bracket,,etc. Mounting and connection. | set | 1 | 17,868.17 | 17,868.17 | 5/3.9 |
| 17 | ACCESS CONTROL SYSTEMMaterial/Equipment | Controller 4 Wiegand with CF card;Box;External power,etc. Laying of cables;Assembly, installation and connection;Mounting,etc. | set | 1 | 4,963.38 | 4,963.38 | 5/3.9 |
| 18 | INTRUSION DETECTION SYSTEMMaterial/Equipment | Enclosure kit;The main panel;Gateway module,etc. Assembly, mounting and connection;Measuring and testing,etc. | set | 1 | 5,956.06 | 5,956.06 | 5/3.9 |
| 19 | AUTOMATIC FIRE DETECTIONMaterial/Equipment | Addressable Fire Control Panel;Relay module;Battery,etc. Assembly and mounting;Installation;Laying of cables,etc. | set | 1 | 7,941.41 | 7,941.41 | 5/3.9 |
| 20 | FIXED FIRE ALARM SYSTEM WITH FIRE <br> EXSTINGUISHING MANAGEMENT- <br> Material/Equipment | Subsystem central unit;Subsystem central unit;Conventional optical smoke detector,etc. <br> Installation pipes;Laying of cables;Mounting and connection,etc. | set | 1 | 11,912.12 | 11,912.12 | 5/3.9 |
| J | TELECOMMUNICATION SYSTEMS IN BATAJNICA RAILWAY STATION |  |  |  |  |  |  |
| 1 | DISMANTLING OF THE EXISTING SYSTEMS-Work | Dismantling parts of existing telecommunication systems ; Dismantling and reassembly of parts of existing telecommunication systems | set | 1 | 141.81 | 141.81 | 5/3.10 |
| 2 | MAIN CABLE ROUTE-Work | Pipe;Fittings for branching;Sand,etc. <br> Marking the route and facilities/buildings;Excavation of trench;Laying of PE pipes,etc. | set | 1 | 2,836.22 | 2,836.22 | 5/3.10 |

## 11 Telecommunication

| No | Item | Description | Unit | No. of Unit | Unit Price (USD) | Total Price (USD) | No. of books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 3 | COMMON COMMUNICATION NETWORK-Work | Freestanding 42U rackELSN - Router;Managed Layer 2 switch,etc。 <br> Assembly and installation of freestanding;Material, manufacturing, construction;Laying of fiber optic cables,etc. | set | 1 | 21,271.64 | 21,271.64 | 5/3.10 |
| 4 | VIDEO SURVEILLANCE SYSTEMWork | IP Box ONVIF Day / Night full HD 1080p camera;Aluminum enclosure,etc. <br> Mounting and connection,etc. | set | 1 | 14,464.71 | 14,464.71 | 5/3.10 |
| 5 | CLOCK SYSTEM-Work | Single-sided IP analog slave clock;Single-sided IP analog slave clock;Fixing bracket,etc。 <br> Mounting and connection. | set | 1 | 4,679.76 | 4,679.76 | 5/3.10 |
| 6 | INFORMATION DISPLAY SYSTEMWork | TFT information display;Bracket,etc. Mounting and connection. | set | 1 | 9,643.14 | 9,643.14 | 5/3.10 |
| 7 | PUBLIC ADDRESS SYSTEM-Work | Call station;Keypad for the call station;Ceiling speaker,etc. <br> Laying of cables;Mounting and connection;Measuring and testing. | set | 1 | 4,963.38 | 4,963.38 | 5/3.10 |
| 8 | SOS SYSTEM-Work | The central panel;A call-quit combination device;SOS pushbutton, etc. <br> Laying of cables;Assembly, mounting and connecting, etc. | set | 1 | 141.81 | 141.81 | 5/3.10 |
| 9 | ACCESS CONTROL SYSTEM-Work | Box;Controller 4 Wiegand with CF card;External power supply,etc. <br> Laying of cables;Mounting and connection;Measuring and testing. | set | 1 | 1,985.35 | 1,985.35 | 5/3.10 |
| 10 | INTRUSION DETECTION SYSTEMWork | Enclosure kit;The main panel;Gateway module,etc. Laying of cables;Assembly, mounting and connection ;Measuring and testing. | set | 1 | 2,268.97 | 2,268.97 | 5/3.10 |

## 11 Telecommunication

| No | Item | Description | Unit | No. of Unit | Unit Price (USD) | Total Price (USD) | No. of books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 11 | ENTRY OF THE CABLES owned by Telekom Srbija a.d. -Work | Distribution cabinet;disconnection module;connection module, etc. <br> Assembly and mounting;Laying of cables;Measuring and testing, etc. | set | 1 | 141.81 | 141.81 | 5/3.10 |
| 12 | DISPATCHING DEVICES-Work | Distribution cabinet;disconnection module;connection module. Assembly and mounting;Laying of cables;Measuring and testing. | set | 1 | 283.62 | 283.62 | 5/3.10 |
| 13 | SUBREGIONAL STATION EQUIPMENT - COMMON COMMUNICATION NETWORKWork | Freestanding 42U rack;patch cords;TOR DC switch, etc. Assembly and installation;Installation and connection. | set | 1 | 709.05 | 709.05 | 5/3.10 |
| 14 | SUBREGIONAL STATION EQUIPMENT - OTN/DWDM TRANSMISSION SYSTEM-Work | Freestanding 42U rack;patch cords;TOR DC switch, etc. Assembly and installation. | set | 1 | 12,337.55 | 12,337.55 | 5/3.10 |
| 15 | SUBREGIONAL STATION EQUIPMENT - VIDEO SURVEILLANCE SYSTEM-Work | Network storage device;Network storage device, etc. Mounting and connection. | set | 1 | 9,359.52 | 9,359.52 | 5/3.10 |
| 16 | SUBREGIONAL STATION EQUIPMENT - PUBLIC ADDRESS SYSTEM-Work | Call station;Keypad for the call station;Ceiling speaker,etc. Mounting and connection;Measuring and testing. | set | 1 | 2,268.97 | 2,268.97 | 5/3.10 |
| 17 | SUBREGIONAL STATION EQUIPMENT -INTEGRATION OF SECURITY SYSTEMS-Work | Workstations with two 32 " monitors | set | 1 | 1,276.30 | 1,276.30 | 5/3.10 |
| 18 | AUTOMATIC FIRE DETECTIONWork | Addressable Fire Control Panel;Relay module;Battery,etc. Assembly and mounting;Installation;Laying of cables,etc. | set | 1 | 19,144.47 | 19,144.47 | 5/3.10 |
| 19 | FIXED FIRE ALARM SYSTEM WITH FIRE <br> EXSTINGUISHING MANAGEMENT- <br> Work | Subsystem central unit;Subsystem central unit;Conventional optical smoke detector,etc. Installation pipes;Laying of cables;Mounting and connection,etc. | set | 1 | 7,374.17 | 7,374.17 | 5/3.10 |
| 20 | DISMANTLING OF THE EXISTING SYSTEMS-Material/Equipment | Dismantling parts of existing telecommunication systems ; Dismantling and reassembly of parts of existing telecommunication systems | set | 1 | 992.68 | 992.68 | 5/3.10 |

## 11 Telecommunication

| No | Item | Description | Unit | No. of Unit | Unit Price (USD) | Total Price (USD) | No. of books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 21 | MAIN CABLE ROUTEMaterial/Equipment | Pipe;Fittings for branching;Sand,etc. Marking the route and facilities/buildings;Excavation of trench;Laying of PE pipes,etc. | set | 1 | 19,853.53 | 19,853.53 | 5/3.10 |
| 22 | COMMON COMMUNICATION NETWORK-Material/Equipment | Freestanding 42U rackELSN - Router;Managed Layer 2 switch, etc <br> Assembly and installation of freestanding;Material, manufacturing, construction;Laying of fiber optic cables,etc. | set | 1 | 148,901.45 | 148,901.45 | 5/3.10 |
| 23 | VIDEO SURVEILLANCE SYSTEMMaterial/Equipment | IP Box ONVIF Day / Night full HD 1080p camera;Aluminum enclosure,etc. <br> Mounting and connection, etc. | set | 1 | 101,252.98 | 101,252.98 | 5/3.10 |
| 24 | CLOCK SYSTEM-Material/Equipment | Single-sided IP analog slave clock;Single-sided IP analog slave clock;Fixing bracket,etc。 <br> Mounting and connection. | set | 1 | 32,758.32 | 32,758.32 | 5/3.10 |
| 25 | INFORMATION DISPLAY SYSTEMMaterial/Equipment | TFT information display;Bracket,etc. Mounting and connection. | set | 1 | 67,501.99 | 67,501.99 | 5/3.10 |
| 26 | PUBLIC ADDRESS SYSTEMMaterial/Equipment | Call station;Keypad for the call station;Ceiling speaker,etc. Laying of cables;Mounting and connection;Measuring and testing. | set | 1 | 34,743.67 | 34,743.67 | 5/3.10 |
| 27 | SOS SYSTEM-Material/Equipment | The central panel;A call-quit combination device;SOS pushbutton, etc. <br> Laying of cables;Assembly, mounting and connecting, etc. | set | 1 | 992.68 | 992.68 | 5/3.10 |
| 28 | ACCESS CONTROL SYSTEMMaterial/Equipment | Box;Controller 4 Wiegand with CF card;External power supply,etc. <br> Laying of cables;Mounting and connection;Measuring and testing. | set | 1 | 13,897.47 | 13,897.47 | 5/3.10 |
| 29 | INTRUSION DETECTION SYSTEMMaterial/Equipment | Enclosure kit;The main panel;Gateway module,etc. Laying of cables;Assembly, mounting and connection ;Measuring and testing. | set | 1 | 15,882.82 | 15,882.82 | 5/3.10 |

## 11 Telecommunication

| No | Item | Description | Unit | No. of Unit | Unit Price (USD) | Total Price (USD) | No. of books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 30 | ENTRY OF THE CABLES owned by Telekom Srbija a.d. Material/Equipment | Distribution cabinet;disconnection module;connection module, etc. <br> Assembly and mounting;Laying of cables;Measuring and testing, etc. | set | 1 | 992.68 | 992.68 | 5/3.10 |
| 31 | DISPATCHING DEVICESMaterial/Equipment | Distribution cabinet;disconnection module;connection module. Assembly and mounting;Laying of cables;Measuring and testing. | set | 1 | 1,985.35 | 1,985.35 | 5/3.10 |
| 32 | SUBREGIONAL STATION EQUIPMENT - COMMON COMMUNICATION NETWORKMaterial/Equipment | Freestanding 42U rack;patch cords;TOR DC switch, etc. Assembly and installation;Installation and connection. | set | 1 | 4,963.38 | 4,963.38 | 5/3.10 |
| 33 | SUBREGIONAL STATION EQUIPMENT - OTN/DWDM TRANSMISSION SYSTEMMaterial/Equipment | Freestanding 42U rack;patch cords;TOR DC switch, etc. Assembly and installation. | set | 1 | 86,362.84 | 86,362.84 | 5/3.10 |
| 34 | SUBREGIONAL STATION EQUIPMENT - VIDEO SURVEILLANCE SYSTEMMaterial/Equipment | Network storage device;Network storage device, etc. Mounting and connection. | set | 1 | 65,516.64 | 65,516.64 | 5/3.10 |
| 35 | SUBREGIONAL STATION EQUIPMENT - PUBLIC ADDRESS SYSTEM-Material/Equipment | Call station;Keypad for the call station;Ceiling speaker,etc. Mounting and connection;Measuring and testing. | set | 1 | 15,882.82 | 15,882.82 | 5/3.10 |
| 36 | SUBREGIONAL STATION EQUIPMENT -INTEGRATION OF SECURITY SYSTEMSMaterial/Equipment | Workstations with two 32 " monitors | set | 1 | 8,934.09 | 8,934.09 | 5/3.10 |

## 11 Telecommunication

| No | Item | Description | Unit | No. of Unit | Unit Price (USD) | Total Price (USD) | No. of books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 37 | AUTOMATIC FIRE DETECTIONMaterial/Equipment | Addressable Fire Control Panel;Relay module;Battery,etc. Assembly and mounting;Installation;Laying of cables,etc. | set | 1 | 134,011.30 | 134,011.30 | 5/3.10 |
| 38 | FIXED FIRE ALARM SYSTEM WITH FIRE <br> EXSTINGUISHING MANAGEMENT- <br> Material/Equipment | Subsystem central unit;Subsystem central unit;Conventional optical smoke detector,etc. <br> Installation pipes;Laying of cables;Mounting and connection,etc. | set | 1 | 51,619.17 | 51,619.17 | 5/3.10 |
| K | TELECOMMUNICATION SYSTEMS IN NOVA PAZOVA RAILWAY STATION |  |  |  |  |  |  |
| 1 | DISMANTLING OF THE EXISTING SYSTEMS-Work | Dismantling parts of existing telecommunication systems,Dismantling and reassembly of parts of existing telecommunication systems | set | 1 | 141.81 | 141.81 | 5/3.11 |
| 2 | MAIN CABLE ROUTE-Work | Pipe,Fittings for branching,Sand,etc. Marking the route and facilities/buildings,Excavation of trench,Laying of PE pipes,etc. | set | 1 | 1,985.35 | 1,985.35 | 5/3.11 |
| 3 | COMMON COMMUNICATION NETWORK-Work | Freestanding 42U rack,ASN type 2, Layer 3 switch,Managed Layer 2 switch,etc. <br> Assembly and installation of freestanding;Material, manufacturing, construction,Laying of fiber optic cables,etc. | set | 1 | 11,628.49 | 11,628.49 | 5/3.11 |
| 4 | VIDEO SURVEILLANCE SYSTEMWork | Aluminum enclosure,Mounting bracket,Pole mount adapter,etc. Mounting and connection of box camera,Mounting and connection of aluminium housing,Mounting and connection of mounting brackets,etc. | set | 1 | 7,232.36 | 7,232.36 | 5/3.11 |
| 5 | PUBLIC ADDRESS SYSTEM-Work | Call station with speaker and microphone,Keypad for the call station ,Ceiling speaker for indoor installation,etc. <br> Laying of cables,Mounting and connection of the call station,Measuring and testing, etc. | set | 1 | 6,239.68 | 6,239.68 | 5/3.11 |

## 11 Telecommunication

| No | Item | Description | Unit | $\begin{array}{\|c} \text { No. } \\ \text { of Unit } \end{array}$ | Unit Price (USD) | Total Price (USD) | No. of books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 6 | CLOCK SYSTEM-Work | Single-sided IP analog slave clock, Double-sided IP analog slave clock,Fixing bracket,etc. <br> Mounting and connection,Instalation of bracket. | set | 1 | 6,665.11 | 6,665.11 | 5/3.11 |
| 7 | INFORMATION DISPLAY SYSTEM- | TFT information display for indoor mounting,TFT information display for outdoor mounting,Bracket for mounting. Mounting and connection,Mounting of bracket for singlesided,Mounting of bracket for double-sided,etc. | set | 1 | 5,105.19 | 5,105.19 | 5/3.11 |
| 8 | sos SYSTEM -Work | The central panel;Alarm system:A call-quit combination device Room signal light,s,etc. <br> Mounting and connecting,Laying of cables,etc. | set | 1 | 283.62 | 283.62 | 5/3.11 |
| 9 | ACCESS CONTROL SYSTEM-Work | Box for the accommodation, Controller 4 Wiegand with CF card, UPS, etc. <br> Laying of cables,Assembly,Mounting and connection. | set | 1 | 1,418.11 | 1,418.11 | 5/3.11 |
| 10 | INTRUSION DETECTION SYSTEMWork | Enclosure kit,The main panel,Gateway module,etc. Laying of cables,Assembly,Mounting and connection | set | 1 | 1,134.49 | 1,134.49 | 5/3.11 |
| 11 | ENTRY OF THE CABLES owned by Telekom Srbija a.d. -Work | Distribution cabinet,Halogen-free corrugated installation hose ,Installation cable, type,etc. Assembly and mounting,Laying of cables,Installation of pipes,etc. | set | 1 | 141.81 | 141.81 | 5/3.11 |
| 12 | DISPATCHING DEVICES-Work | Distribution cabinet,Loud sound bell,LB phone,etc Assembly and mounting of cabinet,Mounting and connection,Laying of cables,etc. | set | 1 | 283.62 | 283.62 | 5/3.11 |
| 13 | AUTOMATIC FIRE DETECTION Work | Addressable Fire Control Panel;Relay module;Battery,etc. Assembly and mounting of the cabinet ,Installation of pipes,Laying of cables,etc. | set | 1 | 3,545.27 | 3,545.27 | 5/3.11 |

## 11 Telecommunication

| No | Item | Description | Unit | No. of Unit | Unit Price (USD) | Total Price (USD) | No. of books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 14 | EXPLOSIVE GAS DETECTION SYSTEM-Work | Central unit of the gas detection system;Alarm system: incorporated 85 dB signal buzzer Display elements,etc. Installation of pipes, Laying of cables,etc. | set | 1 | 1,418.11 | 1,418.11 | 5/3.11 |
| 15 | DISMANTLING OF THE EXISTING SYSTEMS-Material/Equipment | Dismantling parts of existing telecommunication systems,Dismantling and reassembly of parts of existing telecommunication systems | set | 1 | 992.68 | 992.68 | 5/3.11 |
| 16 | MAIN CABLE ROUTEMaterial/Equipment | Pipe,Fittings for branching,Sand,etc. Marking the route and facilities/buildings,Excavation of trench, Laying of PE pipes,etc. | set | 1 | 13,897.47 | 13,897.47 | 5/3.11 |
| 17 | COMMON COMMUNICATION NETWORK-Material/Equipment | Freestanding 42U rack,ASN type 2, Layer 3 switch,Managed Layer 2 switch,etc. <br> Assembly and installation of freestanding;Material, manufacturing, construction, Laying of fiber optic cables,etc. | set | 1 | 81,399.46 | 81,399.46 | 5/3.11 |
| 18 | VIDEO SURVEILLANCE SYSTEMMaterial/Equipment | Aluminum enclosure,Mounting bracket,Pole mount adapter,etc. Mounting and connection of box camera,Mounting and connection of aluminium housing,Mounting and connection of mounting brackets,etc. | set | 1 | 50,626.49 | 50,626.49 | 5/3.11 |
| 19 | PUBLIC ADDRESS SYSTEMMaterial/Equipment | Call station with speaker and microphone,Keypad for the call station ,Ceiling speaker for indoor installation, etc. Laying of cables,Mounting and connection of the call station,Measuring and testing,etc. | set | 1 | 43,677.76 | 43,677.76 | 5/3.11 |
| 20 | CLOCK SYSTEM-Material/Equipment | Single-sided IP analog slave clock, Double-sided IP analog slave clock,Fixing bracket,etc. <br> Mounting and connection,Instalation of bracket. | set | 1 | 46,655.79 | 46,655.79 | 5/3.11 |

## 11 Telecommunication

| No | Item | Description | Unit | No. of Unit | Unit Price (USD) | Total Price (USD) | No. of books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 21 | INFORMATION DISPLAY SYSTEMMaterial/Equipment | TFT information display for indoor mounting, TFT information display for outdoor mounting,Bracket for mounting. Mounting and connection,Mounting of bracket for singlesided,Mounting of bracket for double-sided,etc. | set | 1 | 35,736.35 | 35,736.35 | 5/3.11 |
| 22 | SOS SYSTEM -Materia/Equipment | The central panel;Alarm system:A call-quit combination device Room signal light,s,etc. <br> Mounting and connecting,Laying of cables,etc. | set | 1 | 1,985.35 | 1,985.35 | 5/3.11 |
| 23 | ACCESS CONTROL SYSTEMMaterial/Equipment | Box for the accommodation, Controller 4 Wiegand with CF card, UPS, etc. <br> Laying of cables,Assembly,Mounting and connection. | set | 1 | 9,926.76 | 9,926.76 | 5/3.11 |
| 24 | INTRUSION DETECTION SYSTEMMateria//Equipment | Enclosure kit,The main panel,Gateway module,etc. Laying of cables,Assembly,Mounting and connection. | set | 1 | 7,941.41 | 7,941.41 | 5/3.11 |
| 25 | ENTRY OF THE CABLES owned by Telekom Srbija a.d. Material/Equipment | Distribution cabinet,Halogen-free corrugated installation hose ,Installation cable, type,etc. <br> Assembly and mounting,Laying of cables, Installation of pipes,etc. | set | 1 | 992.68 | 992.68 | 5/3.11 |
| 26 | DISPATCHING DEVICESMaterial/Equipment | Distribution cabinet,Loud sound bell,LB phone,etc. Assembly and mounting of cabinet,Mounting and connection,Laying of cables,etc. | set | 1 | 1,985.35 | 1,985.35 | 5/3.11 |
| 27 | AUTOMATIC FIRE DETECTION - <br> Material/Equipment | Addressable Fire Control Panel;Relay module;Battery,etc. Assembly and mounting of the cabinet ,Installation of pipes, Laying of cables,etc. | set | 1 | 24,816.91 | 24,816.91 | 5/3.11 |
| 28 | EXPLOSIVE GAS DETECTION SYSTEM-Material/Equipment | Central unit of the gas detection system;Alarm system: incorporated 85 dB signal buzzer Display elements,etc. Installation of pipes,Laying of cables,etc. | set | 1 | 9,926.76 | 9,926.76 | 5/3.11 |
| L | TELECOMMUNICATION SYSTEMS | IN STARA PAZOVA RAILWAY STATION |  |  |  |  |  |

## 11 Telecommunication

| No | Item | Description | Unit | No. of Unit | Unit Price (USD) | Total Price (USD) | No. of books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | DISMANTLING OF THE EXISTING SYSTEMS-Work | Dismantling of parts of the existing telecommunications. Disassembly and reassembly of parts of the existing telecommunications systems which. | set | 1 | 141.81 | 141.81 | 5/3.12 |
| 2 | MAIN CABLE ROUTES-Work | Perforated shielded cable tray made of steel sheet. Halogen-free installation corrugated hose with. <br> Supply and delivery of firestop compound. <br> Installation of cable trays. Installation pipes. <br> All the works on closing the penetrations of the systems and facilities with firestop compound. | set | 1 | 3,545.27 | 3,545.27 | 5/3.12 |
| 3 | COMMON COMMUNICATION NETWORK-Work | Freestanding 42U rack. patch cords. <br> Fiber optic patch panel (drawer). <br> Assembly and installation of freestanding 19" rack 42U. <br> Assembly and installation of PO-TK cabinet. <br> Assembly and installation of wall mounting 19" rack. | set | 1 | 15,457.39 | 15,457.39 | 5/3.12 |
| 4 | VIDEO SURVEILLANCE SYSTEM- <br> Work | Aluminum enclosure for outdoor mounting for Day / Night IP cameras. <br> Mounting bracket. <br> Pole mount adapter for mounting brackets. <br> Mounting and connection of box camera. <br> Mounting and connection of aluminium housing. <br> Mounting and connection of the workstation. | set | 1 | 9,926.76 | 9,926.76 | 5/3.12 |

## 11 Telecommunication

| No | Item | Description | Unit | No. of Unit | Unit Price (USD) | Total Price (USD) | No. of books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 5 | CLOCK SYSTEM-Work | Single-sided IP analog slave clock. <br> Double-sided IP analog slave clock. <br> Fixing bracket. <br> Mounting and connection of the indoor mounted single-sided analog slave clock. <br> Mounting and connection of the outdoor mounted double-sided analog slave clock. <br> Instalation of bracket for single-sided or double-sided clock, diameter. | set | 1 | 3,119.84 | 3,119.84 | 5/3.12 |
| 6 | INFORMATION DISPLAY SYSTEMWork | TFT information display. <br> Bracket. <br> Small sundry items and other unspecified material and works. Mounting and connection of the single-sided indoor mounting information display. <br> Mounting and connection of the single-sided outdoor mounting information display. <br> Mounting of bracket for single-sided information display. | set | 1 | 5,956.06 | 5,956.06 | 5/3.12 |
| 7 | PUBLIC ADDRESS SYSTEM-Work | Call station with speaker and microphone on a flexible neck. Keypad for the call station with a minimum of 5 programmable keys, light indication. <br> Unidirectional sound projector. <br> Laying cables. <br> Mounting and connection of the call station and keypads. <br> Mounting and connection of unidirectional sound projector. | set | 1 | 5,814.25 | 5,814.25 | 5/3.12 |

## 11 Telecommunication

| No | Item | Description | Unit | No. of Unit | Unit Price (USD) | Total Price (USD) | No. of books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 8 | SOS SYSTEM-Work | The central panel with the following functions. <br> A call-quit combination device. <br> Room signal light. <br> Laying cables. <br> Assembly, mounting and connecting the central pane. <br> Mounting and connecting of call-quit combination device. | set | 1 | 141.81 | 141.81 | 5/3.12 |
| 9 | ACCESS CONTROL SYSTEM-Work | Controller 4 Wiegand with CF card. <br> External power supply with incorporated UPS. <br> Battery for additional power supply. <br> Laying cables. <br> Assembly, installation and connection. <br> Mounting and connection of the reader. | set | 1 | 1,843.54 | 1,843.54 | 5/3.12 |
| 10 | INTRUSION DETECTION SYSTEMWork | Enclosure kit. <br> The main panel. <br> Gateway module. <br> Laying cables. <br> Assembly, mounting and connection. <br> Mounting and connection of the motion detector. | set | 1 | 1,559.92 | 1,559.92 | 5/3.12 |
| 11 | ENTRY OF THE CABLES owned bv Telekom Srbija a.d. -Work | tribution cabinet for flushed wall mounting made. <br> Halogen-free corrugated installation hose. <br> Small sundry items and other unspecified material and works. <br> Assembly and mounting of cabinet. <br> Laying cables. <br> Designing and preparation of documentation. | set | 1 | 141.81 | 141.81 | 5/3.12 |
| 12 | DISPATCHING DEVICES -Work | Distribution cabinet. disconnection module. connection module. Assembly and mounting of cabinet. Mounting ang connection of LB phone. Laying cables. | set | 1 | 283.62 | 283.62 | 5/3.12 |

## 11 Telecommunication

| No | Item | Description | Unit | No. of Unit | Unit Price (USD) | Total Price (USD) | No. of books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 13 | AUTOMATIC FIRE DETECTIONWork | Addressable Fire Control Panel. <br> Relay module. <br> Battery. <br> Laying cables. <br> Mounting and connection of addressable fire alarm control panel. <br> Mounting and connection of the battery. | set | 1 | 16,450.06 | 16,450.06 | 5/3.12 |
| 14 | DISMANTLING OF THE EXISTING SYSTEMS-Material/Equipment | Dismantling of parts of the existing telecommunications. Disassembly and reassembly of parts of the existing telecommunications systems which. | set | 1 | 992.68 | 992.68 | 5/3.12 |
| 15 | MAIN CABLE ROUTESMaterial/Equipment | Perforated shielded cable tray made of steel sheet. Halogen-free installation corrugated hose with. <br> Supply and delivery of firestop compound. <br> Installation of cable trays. Installation pipes. <br> All the works on closing the penetrations of the systems and facilities with firestop compound. | set | 1 | 24,816.91 | 24,816.91 | 5/3.12 |
| 16 | COMMON COMMUNICATION NETWORK-Material/Equipment | Freestanding 42U rack. patch cords. <br> Fiber optic patch panel (drawer). <br> Assembly and installation of freestanding 19" rack 42U. <br> Assembly and installation of PO-TK cabinet. <br> Assembly and installation of wall mounting 19" rack. | set | 1 | 108,201.72 | 108,201.72 | 5/3.12 |
| 17 | VIDEO SURVEILLANCE SYSTEMMaterial/Equipment | Aluminum enclosure for outdoor mounting for Day / Night IP cameras. <br> Mounting bracket. <br> Pole mount adapter for mounting brackets. <br> Mounting and connection of box camera. <br> Mounting and connection of aluminium housing. <br> Mounting and connection of the workstation. | set | 1 | 69,487.34 | 69,487.34 | 5/3.12 |

## 11 Telecommunication

| No | Item | Description | Unit | No. of Unit | Unit Price (USD) | Total Price (USD) | No. of books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 18 | CLOCK SYSTEM-Material/Equipment | Single-sided IP analog slave clock. <br> Double-sided IP analog slave clock. <br> Fixing bracket. <br> Mounting and connection of the indoor mounted single-sided analog slave clock. <br> Mounting and connection of the outdoor mounted double-sided analog slave clock . <br> Instalation of bracket for single-sided or double-sided clock, diameter. | set | 1 | 21,838.88 | 21,838.88 | 5/3.12 |
| 19 | INFORMATION DISPLAY SYSTEMMaterial/Equipment | TFT information display. <br> Bracket. <br> Small sundry items and other unspecified material and works. Mounting and connection of the single-sided indoor mounting information display. <br> Mounting and connection of the single-sided outdoor mounting information display. <br> Mounting of bracket for single-sided information display. | set | 1 | 41,692.41 | 41,692.41 | 5/3.12 |
| 20 | PUBLIC ADDRESS SYSTEMMaterial/Equipment | Call station with speaker and microphone on a flexible neck. Keypad for the call station with a minimum of 5 programmable keys, light indication. <br> Unidirectional sound projector. <br> Laying cables. <br> Mounting and connection of the call station and keypads. Mounting and connection of unidirectional sound projector. | set | 1 | 40,699.73 | 40,699.73 | 5/3.12 |

## 11 Telecommunication

| No | Item | Description | Unit | No. of Unit | Unit Price (USD) | Total Price (USD) | No. of books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 21 | SOS SYSTEM-Material/Equipment | The central panel with the following functions. <br> A call-quit combination device. <br> Room signal light. <br> Laying cables. <br> Assembly, mounting and connecting the central pane. <br> Mounting and connecting of call-quit combination device. | set | 1 | 992.68 | 992.68 | 5/3.12 |
| 22 | ACCESS CONTROL SYSTEMMaterial/Equipment | Controller 4 Wiegand with CF card. <br> External power supply with incorporated UPS. <br> Battery for additional power supply. <br> Laying cables. <br> Assembly, installation and connection. <br> Mounting and connection of the reader. | set | 1 | 12,904.79 | 12,904.79 | 5/3.12 |
| 23 | INTRUSION DETECTION SYSTEMMaterial/Equipment | Enclosure kit. <br> The main panel. <br> Gateway module. <br> Laying cables. <br> Assembly, mounting and connection. <br> Mounting and connection of the motion detector. | set | 1 | 10,919.44 | 10,919.44 | 5/3.12 |
| 24 | ENTRY OF THE CABLES owned bv Telekom Srbija a.d. Material/Equipment | tribution cabinet for flushed wall mounting made. <br> Halogen-free corrugated installation hose. <br> Small sundry items and other unspecified material and works. <br> Assembly and mounting of cabinet. <br> Laying cables. <br> Designing and preparation of documentation. | set | 1 | 992.68 | 992.68 | 5/3.12 |

## 11 Telecommunication

| No | Item | Description | Unit | No. of Unit | Unit Price (USD) | Total Price (USD) | No. of books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 25 | DISPATCHING DEVICES Material/Equipment | Distribution cabinet. disconnection module. connection module. Assembly and mounting of cabinet. Mounting ang connection of LB phone. Laying cables. | set | 1 | 1,985.35 | 1,985.35 | 5/3.12 |
| 26 | AUTOMATIC FIRE DETECTIONMaterial/Equipment | Addressable Fire Control Panel. <br> Relay module. <br> Battery. <br> Laying cables. <br> Mounting and connection of addressable fire alarm control panel. <br> Mounting and connection of the battery. | set | 1 | 115,150.45 | 115,150.45 | 5/3.12 |
| M | INSTALLATION OF GSM-R SYSTEM ON THE RAILWAY LINE |  |  |  |  |  |  |
| M-1 | TELECOMMUNICATIONS |  |  |  |  |  |  |
| 1 | Belgrade Centar (Prokop)- centar of the GMS-R system-Material | GSM-R CORE, | set | 1 | 20,450,056.27 | 20,450,056.27 | 5/3.13 |
| 2 | Belgrade Centar (Prokop) - centar of the GMS-R system-Works | GSM-R CORE | set | 1 | 144,817.29 | 144,817.29 | 5/3.13 |
| 3 | Handheld GPH OPH,SIM card Material | Handheld GPH OPH,SIM card | set | 1 | 183,389.86 | 183,389.86 | 5/3.13 |
| 4 | Handheld GPH OPH, SIM card Works | Handheld GPH OPH,SIM card | set | 1 | 31,421.83 | 31,421.83 | 5/3.13 |
| 5 | Cab Radio Material | Cab Radio | set | 1 | 226,897.44 | 226,897.44 | 5/3.13 |
| 6 | Cab Radio Works | Cab Radio | set | 1 | 25,708.77 | 25,708.77 | 5/3.13 |
| 7 | Batajnica - temporary geo-redundant GSM-R centar-Material | GSM-R backup CORE in Batajnica | set | 1 | 12,142,206.33 | 12,142,206.33 | 5/3.13 |
| 8 | Batajnica - temporary geo-redundant GSM-R centar-Works | GSM-R backup CORE in Batajnica | set | 1 | 89,737.94 | 89,737.94 | 5/3.13 |

## 11 Telecommunication

| No | Item | Description | Unit | No. of Unit | Unit Price (USD) | Total Price (USD) | No. of books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 9 | Works refering to the whole seciton GMS-R system | Measuring and testing of the GSM-R locations, Commissioning of all equipment, Tools for RNP \& RNO, Global Acceptance \& Verification etc. | set | 1 | 2,196,367.27 | 2,196,367.27 | 5/3.13 |
| 10 | Base station of the GMS-R system Belgrade Center-Zemun (included) Material | GSM-R BTS along the line. | set | 1 | 1,227,742.45 | 1,227,742.45 | 5/3.13 |
| 11 | Base station of the GMS-R system Belgrade Center-Zemun (included) Works | GSM-R BTS along the line. | set | 1 | 202,023.13 | 202,023.13 | 5/3.13 |
| 12 | Base station of the GMS-R system Zemun (excluded)-Batajnica (excluded)-Material | GSM-R BTS along the line. | set | 1 | 370,885.53 | 370,885.53 | 5/3.13 |
| 13 | Base station of the GMS-R system Zemun (excluded)-Batajnica (excluded)-Works | GSM-R BTS along the line. | set | 1 | 6,353.13 | 6,353.13 | 5/3.13 |
| 14 | Base station of the GMS-R system Batajnica (included)-Stara PazovaMaterial | GSM-R BTS along the line. | set | 1 | 606,405.07 | 606,405.07 | 5/3.13 |
| 15 | Base station of the GMS-R system Batajnica (included)-Stara PazovaWorks | GSM-R BTS along the line. | set | 1 | 18,492.14 | 18,492.14 | 5/3.13 |
| 16 | TRANSMISSION NETWORK FOR THE CRTITCAL SERVICES - <br> Belgrade Center-Zemun (included) Material | SDH, <br> BITS. <br> NMS. <br> Fiber optic patch cord. | set | 1 | 719,364.57 | 719,364.57 | 5/3.13 |
| 17 | TRANSMISSION NETWORK FOR THE CRTITCAL SERVICES - <br> Belgrade Center-Zemun (included) Works | SDH, <br> BITS. <br> NMS. <br> Fiber optic patch cord. | set | 1 | 146,873.29 | 146,873.29 | 5/3.13 |
| 18 | TRANSMISSION NETWORK FOR THE CRTITCAL SERVICES -Zemun (excluded)-Batajnica (excluded)Material | SDH, <br> Fiber optic patch cord. | set | 1 | 136,767.59 | 136,767.59 | 5/3.13 |

## 11 Telecommunication

| No | Item | Description | Unit | No. of Unit | $\begin{gathered} \hline \text { Unit Price } \\ \text { (USD) } \\ \hline \end{gathered}$ | Total Price (USD) | No. of books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 19 | TRANSMISSION NETWORK FOR THE CRTITCAL SERVICES -Zemun (excluded)-Batajnica (excluded)Works | SDH, <br> Fiber optic patch cord. | set | 1 | 16,138.46 | 16,138.46 | 5/3.13 |
| 20 | TRANSMISSION NETWORK FOR THE CRTITCAL SERVICES Batajnica (included)-Stara PazovaMaterial | SDH, <br> Fiber optic patch cord. | set | 1 | 912,720.51 | 912,720.51 | 5/3.13 |
| 21 | TRANSMISSION NETWORK FOR THE CRTITCAL SERVICES Batajnica (included)-Stara PazovaWorks | SDH, <br> Fiber optic patch cord. | set | 1 | 124,960.92 | 124,960.92 | 5/3.13 |
| M-2 | STRUCTURES |  |  |  |  |  |  |
| 1 | GSM-R TOWERSMaterial/Equipment |  |  |  |  |  |  |
| 1-1 | Belgrade-Zemun (included) | 36 m or 42 m . Steel column. | set | 1 | 382,833.07 | 382,833.07 | 5/3.13 |
| 1-2 | Zemun (excluded)-Batajnica (excluded) | 36 m or 42 m . Steel column. | set | 1 | 76,566.61 | 76,566.61 | 5/3.13 |
| 1-3 | Batajnica (included)-Stara Pazova | 36 m or 42 m . Steel column. | set | 1 | 229,699.84 | 229,699.84 | 5/3.13 |
| N | RELOCATION AND PROTECTION OF TELECOMMUNICATION NETWORK |  |  |  |  |  |  |
| 1 | COLLISION 1a-Work | parallel crossing of fibre-optic telephone cable TOSM 03 ( $8 \times 12$ ) xIII $\times 0,25 \times 18$ CMAN and newly designed railway line from $\mathrm{km} 4+570.00$ to km 4+615 of the railway line | set | 1 | 240.70 | 240.70 | 5/4.1 |
| 2 | COLLISION 1b -Work | parallel crossing of fibre-optic telephone cable TOSM 03 ( $8 \times 12$ )xIIIx0,25x18 CMAN and newly designed railway line from km 5+154.00 to km 5+290 railway line | set | 1 | 337.28 | 337.28 | 5/4.1 |

## 11 Telecommunication

| No | Item | Description | Unit | No. of Unit | Unit Price (USD) | Total Price (USD) | No. of books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 3 | COLLISION 1 -Work | the existing copper cables TK10 100x4x0.4 and TK10 $150 \times 4 \times 0.4$ overlapping new railway underpass and orthogonal crossing of copper cables with newly designed track, km 13 + 950.00 of the railway route, underpass next to Kamendin stop | set | 1 | 674.28 | 674.28 | 5/4.1 |
| 4 | COLLISION 2 -Work | orthogonal crossing of copper cable TK33 AR 1x4x0.6 with the newly designed track, $\mathrm{km} 17+720.00$ of the railway route | set | 1 | 194.55 | 194.55 | 5/4.1 |
| 5 | COLLISION 3 -Work | orthogonal crossing of copper and fiber optic cables TK00V 200x4x0.4, TK10 5x4x0.6, TOSM 03 ( $8 \times 6$ ) xIIx0.4x3.5 CMAN, <br> TOSM 03 (2x6)xllx0.4x3.5 CMAN with the newly designed track, km <br> $19+640.00$ of the railway route, at the exit from Batajnica station | set | 1 | 1,124.32 | 1,124.32 | 5/4.1 |
| 6 | COLLISION 4-Work | vulnerable overhead network TK33 $3 \times 4 \times 0.6$ and parallel crossing of copper cable TK59MR $5 \times 4 \times 0.4$ with the newly designed street (overbridge), from km 26+209.00 (Novi Sad right track) of the railway route - to km 26+400 (Novi Sad right track) of the railway route, Nova 3 St. from km 0+008.29 to km 0+111.00 of the road route | set | 1 | 445.73 | 445.73 | 5/4.1 |

## 11 Telecommunication

| No | Item | Description | Unit | No. of Unit | Unit Price (USD) | Total Price (USD) | No. of books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 7 | COLLISION 5-Work | orthogonal crossing of copper cable TK10 10x4x0.4 with a newly designed street (overbridge) from km $26+465.00$ (Š id right track) of the line route - up to km $26+411$ (Novi Sad right track) of the railway route, Omladinska Street extension at km 0 +450.00 of the road route | set | 1 | 499.86 | 499.86 | 5/4.1 |
| 8 | COLLISION 6-Work | vulnerability of the overhead network TK59U 1x4x0.6 with acquired houses, at km $26+962.00$ ( Novi Sad right track) of the railway route | set | 1 | 37.63 | 37.63 | 5/4.1 |
| 9 | COLLISION 7-Work | vulnerability of the overhead network TK59U $5 \times 4 \times 0.4$ and TK59U TK59U $3 \times 4 \times 0.41 \times 4 \times 0.4$ with acquired houses, from km 26 <br> + 992.89 to km $27+108.33$ (Novi Sad left track) of the railway route, <br> Nova Pazova station | set | 1 | 190.14 | 190.14 | 5/4.1 |
| 10 | COLLISION 8 -Work | vulnerability of overhead network TK59U 1x4x0.6 with acquired houses, at km $27+689.00$ (Novi Sad left track) of the railway route | set | 1 | 37.63 | 37.63 | 5/4.1 |
| 11 | COLLISION 9-Work | orthogonal crossing of fiber optic cables TOSM 03 ( $6 \times 2$ ) xllx $0.4 \times 3.5$ CMAN and TOSM 03 ( $8 \times 6$ ) xllx0.4x3.5 CMAN with newly designed railway line at km $32+095.94$ (Novi Sad left track) of the railway route | set | 1 | 586.78 | 586.78 | 5/4.1 |

## 11 Telecommunication

| No | Item | Description | Unit | No. of Unit | Unit Price (USD) | Total Price (USD) | No. of books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 12 | COLLISION 10 -Work | skew and orthogonal crossing of fiber optic cable and copper cables TOSM 03 ( $4 \times 6$ )xllx0.4x3.5 CMAN, TK59 GMR $75 \times 4 \times 0.4$, TK10 $100 \times 4 \times 0.6$, TK10 $15 \times 4 \times 0.6$ with the railway route, as well as crossing of the existing telecommunication (TK) cables TK10 $15 \times 4 \times 0.6$, TK10 100x4x0.6, TK10 10x4x0.6, TOSM 03 (4x6)xIIx0.4x3.5 <br> CMAN, TK59 GMR $75 \times 4 \times 0.4$, TK10 150x4x0.4, TK10 150x4x0.6, TK10 $200 \times 4 \times 0.6$, TK10 $5 \times 4 \times 0.6$, TK10 1x4x0.6, TK10 $25 \times 4 \times 0.4$, TK10 $15 \times 4 \times 0.4$, TK10 50x4x0.4 and TK10 10x4x0.4 with the newly designed overbridge, from km 34+675.08 (Novi Sad left track) to km $34+884.45$ <br> (Novi Sad left track) of the railway route, entry to Stara Pazova station | set | 1 | 26,371.88 | 26,371.88 | 5/4.1 |
| 13 | COLLISION 11-Work | vulnerability of the overhead network TK59U $10 \times 4 \times 0.4$ and TK59U $3 \times 4 \times 0.6$ from $\mathrm{km} 34+824.8$ to $\mathrm{km} 34+$ 884.45 <br> (Novi Sad left track) of the railway route, entry to Stara Pazova station | set | 1 | 301.94 | 301.94 | 5/4.1 |
| 14 | COLLISION 1a -Material/Equipment | parallel crossing of fibre-optic telephone cable TOSM 03 ( $8 \times 12$ )xIIIx0,25x18 CMAN and newly designed railway line from $\mathrm{km} 4+570.00$ to km 4+615 of the railway line | set | 1 | 1,684.90 | 1,684.90 | 5/4.1 |
| 15 | COLLISION 1b-Material/Equipment | parallel crossing of fibre-optic telephone cable TOSM 03 (8x12)xIIIx0,25x18 CMAN and newly designed railway line from km 5+154.00 to km 5+290 railway line | set | 1 | 2,360.93 | 2,360.93 | 5/4.1 |
| 16 | COLLISION 1 -Material/Equipment | the existing copper cables TK10 100×4x0.4 and TK10 $150 \times 4 \times 0.4$ overlapping new railway underpass and orthogonal crossing of copper cables with newly designed track, km 13 + 950.00 <br> of the railway route, underpass next to Kamendin stop | set | 1 | 4,719.99 | 4,719.99 | 5/4.1 |

## 11 Telecommunication

| No | Item | Description | Unit | No. of Unit | Unit Price (USD) | Total Price (USD) | No. of books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 17 | COLLISION 2 -Material/Equipment | orthogonal crossing of copper cable TK33 AR 1x4x0.6 with the newly designed track, $\mathrm{km} 17+720.00$ of the railway route | set | 1 | 1,361.85 | 1,361.85 | 5/4.1 |
| 18 | COLLISION 3 -Material/Equipment | orthogonal crossing of copper and fiber optic cables TK00V 200x4x0.4, TK10 5x4x0.6, TOSM 03 (8x6)xIIx0.4x3.5 CMAN, <br> TOSM 03 (2x6)xIlx0.4x3.5 CMAN with the newly designed track, km <br> $19+640.00$ of the railway route, at the exit from Batajnica station | set | 1 | 7,870.25 | 7,870.25 | 5/4.1 |
| 19 | COLLISION 4-Material/Equipment | vulnerable overhead network TK33 $3 \times 4 \times 0.6$ and parallel crossing of copper cable TK59MR $5 \times 4 \times 0.4$ with the newly designed street (overbridge), from km 26+209.00 (Novi Sad right track) of the railway route - to km 26+400 (Novi Sad right track) of the railway route, Nova 3 St. from km 0+008.29 to km 0+111.00 of the road route | set | 1 | 3,120.10 | 3,120.10 | 5/4.1 |
| 20 | COLLISION 5-Material/Equipment | orthogonal crossing of copper cable TK10 10×4×0.4 with a newly designed street (overbridge) from km $26+465.00$ (Š id right track) of the line route - up to km $26+411$ (Novi Sad right track) of the railway route, Omladinska Street extension at km 0 +450.00 of the road route | set | 1 | 3,499.03 | 3,499.03 | 5/4.1 |
| 21 | COLLISION 6-Material/Equipment | vulnerability of the overhead network TK59U $1 \times 4 \times 0.6$ with acquired houses, at $\mathrm{km} 26+962.00$ ( Novi Sad right track) of the railway route | set | 1 | 263.43 | 263.43 | 5/4.1 |

## 11 Telecommunication

| No | Item | Description | Unit | No. of Unit | Unit Price (USD) | $\begin{gathered} \hline \text { Total Price } \\ \text { (USD) } \\ \hline \end{gathered}$ | No. of books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 22 | COLLISION 7-Material/Equipment | vulnerability of the overhead network TK59U $5 \times 4 \times 0.4$ and TK59U TK59U $3 \times 4 \times 0.41 \times 4 \times 0.4$ with acquired houses, from km 26 <br> + 992.89 to km $27+108.33$ (Novi Sad left track) of the railway route, <br> Nova Pazova station | set | 1 | 1,330.98 | 1,330.98 | 5/4.1 |
| 23 | COLLISION 8 -Material/Equipment | vulnerability of overhead network TK59U 1x4x0.6 with acquired houses, at km $27+689.00$ (Novi Sad left track) of the railway route | set | 1 | 263.43 | 263.43 | 5/4.1 |
| 24 | COLLISION 9-Material/Equipment | orthogonal crossing of fiber optic cables TOSM 03 ( $6 \times 2$ ) xllx0.4x3.5 CMAN and TOSM 03 ( $8 \times 6$ ) xllx0.4x3.5 CMAN with newly designed railway line at km $32+095.94$ (Novi Sad left track) of the railway route | set | 1 | 4,107.44 | 4,107.44 | 5/4.1 |
| 25 | COLLISION 10 -Material/Equipment | skew and orthogonal crossing of fiber optic cable and copper cables TOSM 03 ( $4 \times 6$ )xllx0.4×3.5 CMAN, TK59 GMR $75 \times 4 \times 0.4$, TK10 $100 \times 4 \times 0.6$, TK10 $15 \times 4 \times 0.6$ with the railway route, as <br> well as crossing of the existing telecommunication (TK) cables TK10 <br> $15 \times 4 \times 0.6$, TK10 100x4x0.6, TK10 10x4x0.6, TOSM 03 $(4 \times 6) \times \\| \times 0.4 \times 3.5$ <br> CMAN, TK59 GMR $75 \times 4 \times 0.4$,TK10 150x4x0.4, TK10 150x4x0.6, TK10 $200 \times 4 \times 0.6$, TK10 $5 \times 4 \times 0.6$, TK10 $1 \times 4 \times 0.6$, TK10 $25 \times 4 \times 0.4$, TK10 $15 \times 4 \times 0.4$, TK10 50x4x0.4 and TK10 10x4x0.4 with the newly designed overbridge, from km 34+675.08 (Novi Sad left track) to km 34+884.45 <br> (Novi Sad left track) of the railway route, entry to Stara Pazova station | set | 1 | 184,603.19 | 184,603.19 | 5/4.1 |

## 11 Telecommunication

| No | Item | Description | Unit | No. of Unit | Unit Price (USD) | Total Price (USD) | No. of books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 26 | COLLISION 11-Material/Equipment | vulnerability of the overhead network TK59U $10 \times 4 \times 0.4$ and TK59U $3 \times 4 \times 0.6$ from $\mathrm{km} 34+824.8$ to $\mathrm{km} 34+$ 884.45 <br> (Novi Sad left track) of the railway route, entry to Stara Pazova station | set | 1 | 2,113.58 | 2,113.58 | 5/4.1 |
| 0 | RELOCATION AND PROTECTION OF TELECOMMUNICATION NETWORK PART1.CABLE DUCT SYSTEM ROUTE |  |  |  |  |  |  |
| 1 | TUNNEL "SENJAK" -Work | Pipes, excavation, sand, gravel. Establishing cable conduit route. | set | 1 | 160.27 | 160.27 | 5/4.2 |
| 2 | TUNNEL "TOSIN BUNAR -ENTRANCE"-Work | Pipes, excavation, sand, gravel. Establishing cable conduit route. | set | 1 | 161.56 | 161.56 | 5/4.2 |
| 3 | TUNNEL "TOSIN BUNAR - EXIT" Work | Pipes, excavation, sand, gravel. Establishing cable conduit route. | set | 1 | 120.52 | 120.52 | 5/4.2 |
| 4 | stopping place Tošin Bunar-Work | Pipes, excavation, sand, gravel. Establishing cable conduit route. | set | 1 | 3,214.90 | 3,214.90 | 5/4.2 |
| 5 | railway station Zemun-Work | Pipes, excavation, sand, gravel. Establishing cable conduit route. | set | 1 | 7,653.20 | 7,653.20 | 5/4.2 |
| 6 | stopping place ALTINA-Work | Pipes, excavation, sand, gravel. Establishing cable conduit route. | set | 1 | 3,551.36 | 3,551.36 | 5/4.2 |
| 7 | railway station Zemunsko Polje-Work | Pipes, excavation, sand, gravel. Establishing cable conduit route. | set | 1 | 3,556.62 | 3,556.62 | 5/4.2 |
| 8 | stopping place KAMENDIN-Work | Pipes, excavation, sand, gravel. Establishing cable conduit route. | set | 1 | 3,131.99 | 3,131.99 | 5/4.2 |
| 9 | railway station BATAJNICA-Work | Pipes, excavation, sand, gravel. Establishing cable conduit route. | set | 1 | 6,951.73 | 6,951.73 | 5/4.2 |
| 10 | railway station NOVA PAZOVA-Work | Pipes, excavation, sand, gravel. Establishing cable conduit route. | set | 1 | 2,322.64 | 2,322.64 | 5/4.2 |
| 11 | railway station STARA PAZOVAWork | Pipes, excavation, sand, gravel. Establishing cable conduit route. | set | 1 | 3,504.31 | 3,504.31 | 5/4.2 |
| 12 | TUNNEL "SENJAK" Material/Equipment | Pipes, excavation, sand, gravel. Establishing cable conduit route. | set | 1 | 1,121.91 | 1,121.91 | 5/4.2 |
| 13 | TUNNEL "TOSIN BUNAR -ENTRANCE"-Material/Equipment | Pipes, excavation, sand, gravel. Establishing cable conduit route. | set | 1 | 1,130.94 | 1,130.94 | 5/4.2 |
| 14 | TUNNEL "TOSIN BUNAR - EXIT" - Material/Equipment | Pipes, excavation, sand, gravel. Establishing cable conduit route. | set | 1 | 843.62 | 843.62 | 5/4.2 |
| 15 | stopping place Tošin BunarMaterial/Equipment | Pipes, excavation, sand, gravel. Establishing cable conduit route. | set | 1 | 22,504.29 | 22,504.29 | 5/4.2 |

## 11 Telecommunication

| No | Item | Description | Unit | No. of Unit | Unit Price (USD) | Total Price (USD) | No. of books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 16 | railway station ZemunMaterial/Equipment | Pipes, excavation, sand, gravel. Establishing cable conduit route. | set | 1 | 53,572.37 | 53,572.37 | 5/4.2 |
| 17 | stopping place ALTINAMaterial/Equipment | Pipes, excavation, sand, gravel. Establishing cable conduit route. | set | 1 | 24,859.52 | 24,859.52 | 5/4.2 |
| 18 | railway station Zemunsko PoljeMaterial/Equipment | Pipes, excavation, sand, gravel. Establishing cable conduit route. | set | 1 | 24,896.31 | 24,896.31 | 5/4.2 |
| 19 | stopping place KAMENDINMaterial/Equipment | Pipes, excavation, sand, gravel. Establishing cable conduit route. | set | 1 | 21,923.94 | 21,923.94 | 5/4.2 |
| 20 | railway station BATAJNICAMaterial/Equipment | Pipes, excavation, sand, gravel. Establishing cable conduit route. | set | 1 | 48,662.11 | 48,662.11 | 5/4.2 |
| 21 | railway station NOVA PAZOVAMaterial/Equipment | Pipes, excavation, sand, gravel. Establishing cable conduit route. | set | 1 | 16,258.46 | 16,258.46 | 5/4.2 |
| 22 | railway station STARA PAZOVAMaterial/Equipment | Pipes, excavation, sand, gravel. Establishing cable conduit route. | set | 1 | 24,530.17 | 24,530.17 | 5/4.2 |
| P | RELOCATION AND PROTECTION OF TELECOMMUNICATION INFRASTRUCTURE, PART 2: CIVIL WORKS FOR CABLE CONDUITS |  |  |  |  |  |  |
| 1 | ZEMUN | Earth works, Concrete and reinforced concrete works, Reinforcement works, Masonry works, Other works. | set | 1 | 46,840.64 | 46,840.64 | 5/4.3 |
| 2 | TOSIN BUNAR | Earth works, Concrete and reinforced concrete works, Reinforcement works, Masonry works, Other works. | set | 1 | 30,857.06 | 30,857.06 | 5/4.3 |
| 3 | ALTINA | Earth works, Concrete and reinforced concrete works, Reinforcement works, Masonry works, Other works. | set | 1 | 39,620.50 | 39,620.50 | 5/4.3 |
| 4 | ZEMUN POLJA | Earth works, Concrete and reinforced concrete works, Reinforcement works, Masonry works, Other works. | set | 1 | 46,903.01 | 46,903.01 | 5/4.3 |
| 5 | KAMENDIN | Earth works, Concrete and reinforced concrete works, Reinforcement works, Masonry works, Other works. | set | 1 | 31,618.18 | 31,618.18 | 5/4.3 |
| 6 | BATAJNICA | Earth works, Concrete and reinforced concrete works, Reinforcement works, Masonry works, Other works. | set | 1 | 55,288.90 | 55,288.90 | 5/4.3 |
| 7 | NOVA PAZOVA | Earth works, Concrete and reinforced concrete works, Reinforcement works, Masonry works, Other works. | set | 1 | 21,724.48 | 21,724.48 | 5/4.3 |

## 11 Telecommunication

| No | Item | Description | Unit | No. of Unit | Unit Price (USD) | Total Price (USD) | No. of books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 8 | STARA PAZOVA | Earth works, Concrete and reinforced concrete works, Reinforcement works, Masonry works, Other works. | set | 1 | 31,237.52 | 31,237.52 | 5/4.3 |
| 9 | TOSIN BUNAR ENTRANCE TO THE TUNNEL | Earth works, Concrete and reinforced concrete works, Reinforcement works, Masonry works, Other works. | set | 1 | 5,584.37 | 5,584.37 | 5/4.3 |
| 10 | tosin bunar out of the TUNNEL | Earth works, Concrete and reinforced concrete works, Reinforcement works, Masonry works, Other works. | set | 1 | 5,584.37 | 5,584.37 | 5/4.3 |
| 11 | SENJAK TUNNEL | Earth works, Concrete and reinforced concrete works, Reinforcement works, Masonry works, Other works. | set | 1 | 5,584.37 | 5,584.37 | 5/4.3 |
| Summary(USD): |  |  |  |  |  | 62,195,448.40 |  |

12 Thermotechnical Installations \& Fire Suppression

| No. | Item | Description | Unit | No. of Unit | Unit Price (USD) | Total Price (USD) | No.of Books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| A | Termotechnical installations in New Belgrade station |  |  |  |  |  |  |
|  | Termotechnical installations |  | Completion of the termotechnical installation | 1 | 32,269.08 | 32,269.08 | 6/1 |
| B | Termotechnical installations in Tosin Bunar stopping place |  |  |  |  |  |  |
|  | Termotechnical installations |  | Completion of the termotechnical installation | 1 | 26,143.64 | 26,143.64 | 6/1 |
| C | Termotechnical installations of Bezanijska Kosa tunnel |  |  |  |  |  |  |
| 1 | Termotechnical installations |  | Completion of the termotechnical installations for the entrance of Bezanijska Kosa tunnel | 1 | 26,143.64 | 26,143.64 | 6/1 |
| 2 | Termotechnical installations |  | Completion of the termotechnical installations for the exit of Bezanijska Kosa tunnel | 1 | 26,143.64 | 26,143.64 | 6/1 |
| D | Fire suppression system at Tosin Bunar stopping place |  |  |  |  |  |  |
|  | Fire suppression system at Tosin Bunar stopping place |  | Completion of fire suppression system | 1 | 20,086.56 | 20,086.56 | 6/3 |
| E | Fire suppression system at Bezanijska Kosa tunnel |  |  |  |  |  |  |
| 1 | Fire suppression system installations |  | Completion of fire suppression system installations for the entrance of Bezanijska Kosa tunnel | 1 | 20,086.56 | 20,086.56 | 6/3 |
| 2 | Fire suppression system installations |  | Completion of fire suppression system installations for the exit of Bezanijska Kosa tunnel | 1 | 20,086.56 | 20,086.56 | 6/3 |
| F | Termotechnical installations of signal building in Zemun station |  |  |  |  |  |  |
|  | Termotechnical installations |  | Completion of the termotechnical installation | 1 | 126,402.18 | 126,402.18 | 6/1 |
| G | Termotechnical installations of ETS building in Zemun station |  |  |  |  |  |  |
|  | Termotechnical installations |  | Completion of the termotechnical installation | 1 | 4,778.27 | 4,778.27 | 6/1 |
| H | Termotechnical installations in Zemun station |  |  |  |  |  |  |

12 Thermotechnical Installations \& Fire Suppression

| No. | Item | Description | Unit | No. of Unit | Unit Price (USD) | Total Price (USD) | No.of Books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Termotechnical installations |  | Completion of the termotechnical installation | 1 | 8,840.84 | 8,840.84 | 6/1 |
| 1 | Termotechnical installations of TK building at Altina stopping place |  |  |  |  |  |  |
|  | Termotechnical installations |  | Completion of the termotechnical installation | 1 | 26,143.64 | 26,143.64 | 6/1 |
| J | Termotechnical installations in Zemunsko Polje station |  |  |  |  |  |  |
|  | Termotechnical installations |  | Completion of the termotechnical installation | 1 | 2,273.36 | 2,273.36 | 6/1 |
| K | Termotechnical installations of TK building in Zemunsko Polje station |  |  |  |  |  |  |
|  | Termotechnical installations |  | Completion of the termotechnical installation | 1 | 44,246.32 | 44,246.32 | 6/1 |
| L | Termotechnical installations of TK building at Kamendin stopping place |  |  |  |  |  |  |
|  | Termotechnical installations |  | Completion of the termotechnical installation | 1 | 26,143.64 | 26,143.64 | 6/1 |
| M | Fire suppression system of dispatching building in Zemun station |  |  |  |  |  |  |
|  | Fire suppression system of dispatching building in Zemun station |  | Completion of fire suppression system | 1 | 20,086.56 | 20,086.56 | 6/3 |
| N | Fire suppression system of ETS building in Zemun station |  |  |  |  |  |  |
|  | Fire suppression system of ETS building in Zemun station |  | Completion of fire suppression system | 1 | 20,086.56 | 20,086.56 | 6/3 |
| 0 | Fire suppression system of TK building at Altina stopping place |  |  |  |  |  |  |
|  | Fire suppression system of TK building at Altina stopping place |  | Completion of fire suppression system | 1 | 20,086.56 | 20,086.56 | 6/3 |
| P | Fire suppression system of TK building at Kamending stopping place |  |  |  |  |  |  |
|  | Fire suppression system of TK building at Kamending stopping place |  | Completion of fire suppression system | 1 | 20,086.56 | 20,086.56 | 6/3 |
| Q | Termotechnical installations in Batajnica station |  |  |  |  |  |  |
|  | Termotechnical installations |  | Completion of the termotechnical installation | 1 | 11,156.30 | 11,156.30 | 6/1 |
| R | Termotechnical installations GSM-R building in Batajnica station |  |  |  |  |  |  |
|  | Termotechnical installations |  | Completion of the termotechnical installation | 1 | 29,216.88 | 29,216.88 | 6/1 |
| S | Termotechnical installations of TSP building in Batajnica station |  |  |  |  |  |  |
|  | Termotechnical installations |  | Completion of the termotechnical installation | 1 | 4,462.52 | 4,462.52 | 6/1 |
| T | Termotechnical installations of TK building in Batajnica station |  |  |  |  |  |  |

12 Thermotechnical Installations \& Fire Suppression

| No. | Item | Description | Unit | No. of Unit | Unit Price (USD) | Total Price (USD) | No.of Books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Termotechnical installations |  | Completion of the termotechnical installation | 1 | 44,246.32 | 44,246.32 | 6/1 |
| U | Termotechnical installations in Nova Pazova station |  |  |  |  |  |  |
|  | Termotechnical installations |  | Completion of the termotechnical installation | 1 | 37,697.36 | 37,697.36 | 6/1 |
| V | Termotechnical installations in Stara Pazova station |  |  |  |  |  |  |
|  | Termotechnical installations |  | Completion of the termotechnical installation | 1 | 4,462.52 | 4,462.52 | 6/1 |
| W | Termotechnical installations of TK building in Stara Pazova station |  |  |  |  |  |  |
|  | Termotechnical installations |  | Completion of the termotechnical installation | 1 | 44,246.32 | 44,246.32 | 6/1 |
| X | Termotechnical installations of TSP building in Stara Pazova station |  |  |  |  |  |  |
|  | Termotechnical installations |  | Completion of the termotechnical installation | 1 | 2,673.30 | 2,673.30 | 6/1 |
| Y | Termotechnical installations pf power supply building in Stara Pazova station |  |  |  |  |  |  |
|  | Termotechnical installations |  | Completion of the termotechnical installation | 1 | 21,428.52 | 21,428.52 | 6/1 |
| Z | Fire suppression system of TK building in Batajnica station |  |  |  |  |  |  |
|  | Fire suppression system of TK building in Batajnica station |  | Completion of fire suppression system | 1 | 20,086.56 | 20,086.56 | 6/3 |
|  | Summary(USD) |  |  |  |  | 709,810.75 |  |

## 13 Lifts

| No. | Item | Description | Unit | No. of Unit | Unit Price (USD) | Total Price (USD) | No. of Books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | Lifts | Tosin bunar | Completion of installation of each lift | 2 | 26,944.07 | 53,888.14 | 6/2-1 |
| 2 | Lifts | Zemun | Completion of installation of each lift | 6 | 19,175.99 | 115,055.91 | 6/2-2 |
| 3 | Lifts | altina | Completion of installation of each lift | 2 | 22,689.75 | 45,379.49 | 6/2-3 |
| 4 | Lifts | Zemun polje | Completion of installation of each lift | 3 | 20,389.26 | 61,167.77 | 6/2-4 |
| 5 | Lifts | Kamendin | Completion of installation of each lift | 2 | 20,326.23 | 40,652.46 | 6/2-5 |
| 6 | Lifts | Batajnica | Completion of installation of each lift | 4 | 20,137.15 | 80,548.59 | 6/2-6 |
| 7 | Lifts | Nova Pazova | Completion of installation of each lift | 2 | 19,380.83 | 38,761.65 | 6/2-7 |
| 8 | Lifts | Stara Pazova | Completion of installation of each lift | 2 | 19,380.83 | 38,761.65 | 6/2-8 |
|  | Summary(USD) |  |  |  |  | 474,215.66 |  |

## 14 Roads Traffic Signalization and Equipment

| No. | Item | Description | Unit | TNo. OT | Unit Price (USD) | Total Price (USD) | No. of Books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| A | Information signs at New Belgrade station |  |  |  |  |  |  |
|  | Information signs |  | Completion of installation of information signs | 1 | 3,764.27 | 3,764.27 | 8/3 |
| B | Information signs at Tosin Bunar stopping place |  |  |  |  |  |  |
|  | Information signs |  | Completion of installation of information signs | 1 | 2,235.10 | 2,235.10 | 8/3 |
| C | Traffic signs and markings for the overpass at km 13+288.51 |  |  |  |  |  |  |
|  | Traffic signs and equipment |  | Completion of installation of traffic signs and equipment | 1 | 208,782.25 | 208,782.25 | 8/2.1,2.2,2.3 |
| D | Traffic signs and markings for the crossover from km12+700-km13+200 |  |  |  |  |  |  |
|  | Traffic signs and equipment |  | Completion of installation of traffic signs and equipment | 1 | 22,976.27 | 22,976.27 | 8/2.1,2.2,2.3 |
| E | Traffic signs and markings for the road at Zemun station |  |  |  |  |  |  |
|  | Traffic signs and equipment |  | Completion of installation of traffic signs and equipment | 1 | 9,652.22 | 9,652.22 | 8/2.1,2.2,2.3 |
| F | Traffic signs and markings for the overpass at km15+915.43 |  |  |  |  |  |  |
|  | Traffic signs and equipment |  | Completion of installation of traffic signs and equipment | 1 | 10,061.26 | 10,061.26 | 8/2.1,2.2,2.3 |
| G | Information signs at Zemun station |  |  |  |  |  |  |
|  | Information signs |  | Completion of installation of information signs | 1 | 7,864.09 | 7,864.09 | 8/3 |
| H | Information signs at Altina stopping place |  |  |  |  |  |  |
|  | Information signs |  | Completion of installation of information signs | 1 | 2,508.64 | 2,508.64 | 8/3 |
| 1 | Information signs at Zemunsko Polje station |  |  |  |  |  |  |
|  | Information signs |  | Completion of installation of information signs | 1 | 3,379.86 | 3,379.86 | 8/3 |
| J | Information signs at Kamendin stopping place |  |  |  |  |  |  |
|  | Information signs |  | Completion of installation of information signs | 1 | 2,063.73 | 2,063.73 | 8/3 |
| K | Traffic signs and markings for overpass at km 26+392.67 |  |  |  |  |  |  |
|  | Traffic signs and equipment |  | Completion of installation of traffic signs and equipment | 1 | 43,667.40 | 43,667.40 | 8/2.1,2.2,2.3 |
| L | Traffic signs and markings for the overpass at Nova Pazova station |  |  |  |  |  |  |
|  | Traffic signs and equipment |  | Completion of installation of traffic signs and equipment | 1 | 12,558.16 | 12,558.16 | 8/2.1,2.2,2.3 |

## 14 Roads Traffic Signalization and Equipment

| No. | Item | Description | Unit | $\begin{aligned} & \text { No. OT } \\ & \hline \text { Unit } \end{aligned}$ | Unit Price (USD) | Total Price (USD) | No. of Books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| M | Traffic signs and markings for the overpass at km34+696.44 |  |  |  |  |  |  |
|  | Traffic signs and equipment |  | Completion of installation of traffic signs and equipment | 1 | 121,275.72 | 121,275.72 | 8/2.1,2.2,2.3 |
| N | Information Signs at Batajnica station |  |  |  |  |  |  |
|  | Information signs |  | Completion of installation of information signs | 1 | 5,379.70 | 5,379.70 | 8/3 |
| 0 | Information signs at Nova Pazova station |  |  |  |  |  |  |
|  | Information signs |  | Completion of installation of information signs | 1 | 3,659.37 | 3,659.37 | 8/3 |
| P | Information signs at Stara Pazova station |  |  |  |  |  |  |
|  | Information signs |  | Completion of installation of information signs | 1 | 4,291.00 | 4,291.00 | 8/3 |
| Summary(USD) |  |  |  |  |  | 464,119.06 |  |

15 Landscaping, planning of platform and evironment measures

| No. | Item | Descr. | Unit | No. of Unit | Unit Price (USD) | Total Price (USD) | No.of Books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| A | Platforms and Canopies in New Belgrade Railway Station |  |  |  |  |  |  |
| 1 | Disassembly and Demolition Works |  | Completion of disassembling and demolition works for each platform | 6 | 9,397.18 | 56,383.09 | 9/4 |
| 2 | Concrete and reinforced concrete works |  | Completion of concrete and reinforced concrete works for each platform | 6 | 17,905.73 | 107,434.38 | 9/4 |
| 3 | Reinforcement works |  | Completion of concrete and reinforced concrete works for each platform | 6 | 3,476.75 | 20,860.48 | 9/4 |
| 4 | Steelworks |  | Completion of steelworks for each platform | 6 | 114,059.30 | 684,355.78 | 9/4 |
| 5 | Waterproof works |  | Completion of waterproof works for each platform | 6 | 80,574.94 | 483,449.62 | 9/4 |
| 6 | Metal works |  | Completion of metal works of protection screen at the staircase for each platform | 4 | 72,645.59 | 290,582.36 | 9/4 |
| 7 | Platform canopy |  | Completion of installation of canopy for each platform | 4 | 126,378.28 | 505,513.11 | 9/4 |
| 8 | Asphalt concrete layer |  | Completion of the asphalt concrete layer works for each platform | 6 | 25,424.67 | 152,548.04 | 9/4 |
| 9 | Platform facilities |  | Completion of the works | 1 | 32,261.98 | 32,261.98 | 9/4 |
| 10 | Platform walls |  | Completion of each platform walls | 6 | 42,739.29 | 256,435.73 | 9/4 |
| B | Platforms and Canopies in Tošin Bunar stopping place |  |  |  |  |  |  |
| 1 | Platform canopy and facilities |  | Completion of each platform canopy and facilities | 2 | 46,114.48 | 92,228.96 | 9/5 |
| 2 | Platform walls |  | Completion of each palfform walls | 2 | 39,234.35 | 78,468.70 | 9/5 |
| C | Platform canopy and landscaping for station building in Zemun railway station |  |  |  |  |  |  |
| 1 | Landscaping |  | Completion of the landscaping works | 1 | 119,244.22 | 119,244.22 | 9/6 |
| 2 | Platform canopy and facilities |  | Completion of each platform canopy and facilities | 4 | 125,935.64 | 503,742.54 | 9/7 |
| 3 | Platform walls |  | Completion of each palform walls | 4 | 228,747.38 | 914,989.52 | 9/7 |
| D | Platforms and Canopies in Altina stopping place |  |  |  |  |  |  |
| 1 | Platform canopy and facilities |  | Completion of each platform canopy and facilities | 2 | 48,086.40 | 96,172.80 | 9/8 |
| 2 | Platform walls |  | Completion of each palfform walls | 2 | 44,209.79 | 88,419.59 | 9/8 |
| E | Platform Facilities in Zemunsko polje station |  |  |  |  |  |  |
| 1 | Platform facilities and cleaning works |  | Completion of each platform facilities and cleaning works | 3 | 44,021.33 | 132,064.00 | 9/9 |
| 2 | Platform walls |  | Completion of each platform walls | 3 | 110,297.37 | 330,892.11 | 9/9 |
| 3 | landscaping |  | Completion of landscaping works | 1 | 35,792.60 | 35,792.60 | 9/15 |
| F | Platform Facilities and canopies in Kamendin stopping place |  |  |  |  |  |  |

## 15 Landscaping, planning of platform and evironment measures

| No. | Item | Descr. | Unit | No. of Unit | Unit Price (USD) | Total Price (USD) | No.of Books |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | Platform canopy and facilities |  | Completion of each platform canopy and facilities | 2 | 48,995.51 | 97,991.02 | 9/10 |
| 2 | Platform walls |  | Completion of each paltform walls | 2 | 40,193.09 | 80,386.17 | 9/10 |
| G | Platform walls in Batajnica railway Station |  |  |  |  |  |  |
| 1 | Platform walls |  | Completion of each paltform walls | 3 | 166,706.59 | 500,119.78 | 9/11 |
| 2 | Platform canopy and facilities |  | Completion of each platform canopy and facilities | 3 | 53,258.62 | 159,775.86 | 9/11 |
| H | Landscaping for station building in Batajnica railway station |  |  |  |  |  |  |
|  | Landscaping |  | Completion of landscaping works | 1 | 61,976.55 | 61,976.55 | 9/14 |
| 1 | Platform facilities and canopies in Nova Pazova railway station |  |  |  |  |  |  |
|  | Platform canopy and facilities |  | Completion of each platform canopy and facilities | 2 | 171,354.63 | 342,709.26 | 9/12 |
| J | Platform walls in Nova Pazova railway Station |  |  |  |  |  |  |
|  | Platform walls |  | Completion of each paltform walls | 1 | 115,897.32 | 115,897.32 | 9/12 |
| K | Landscaping for station building in Stara Pazova railway station |  |  |  |  |  |  |
|  | Landscaping |  | Completion of landscaping works | 1 | 119,365.00 | 119,365.00 | 9/13 |
| L | Noise Barriers |  |  |  |  |  |  |
|  | Noise Barriers |  | Completion of 10\% of the total area according to Design for Execution of the Works | 10 | 453,794.89 | 4,537,948.90 | 9/3 |
| M | Environmental protection measures prevent noise |  |  |  |  |  |  |
|  | Environmental protection measures prevent noise |  | Completion of the works | 1 | 113,448.72 | 113,448.72 | 9/3 |
| Summary(USD) |  |  |  |  |  | 11,111,458.19 |  |

II Temporary and Transition works

| No. | Item | Description | Unit | No. of Unit | Unit Price (USD) | Total Price (USD) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| A | Temporary road |  |  |  |  |  |
| 1 | Temporary road | the section of left side from Belgrade center to Zemun station(include) | completion of temporary road for this section of left side | 1 | 119,661.29 | 119,661.29 |
| 2 | Temporary road | the section of right side from Belgrade center to Zemun station(include) | completion of temporary road for the section of right side | 1 | 119,661.29 | 119,661.29 |
| 3 | Temporary road | the section of left side from Zemun station(exclude) to Batajnica station(exclude) | completion of temporary road for the section of left side | 1 | 316,304.42 | 316,304.42 |
| 4 | Temporary road | the section of right side from Zemun station(exclude) to Batajnica station(exclude) | completion of temporary road for the section of right side | 1 | 316,304.42 | 316,304.42 |
| 5 | Temporary road | the section of left side from Batajnica station(include) to Stara Pazova station(include) | completion of temporary road for the section of left side | 1 | 859,278.64 | 859,278.64 |
| 6 | Temporary road | the section of right side from Batajnica station(include) to Stara Pazova station(include) | completion of temporary road for the section of right side | 1 | 859,278.64 | 859,278.64 |
| B | Temporary electricity lines |  |  |  |  |  |
| 1 | Temporary electricity lines | section for Belgrade center-zemun station(include) | completion of temporary electricity lines for the section | 1 | 315,661.05 | 315,661.05 |
| 2 | Temporary electricity lines | section for Zemun station(exclude)-Batajnica station(exclude) | completion of temporary electricity lines for the section | 1 | 552,406.83 | 552,406.83 |
| 3 | Temporary electricity lines | section for Batajnica station(include) -Stara Pazova station(include) | completion of temporary electricity lines for the section | 1 | 236,745.78 | 236,745.78 |
| C | Temporary site for storage of track materials and welding works |  |  |  |  |  |
|  | Temporary site for storage of track materials and welding works |  | completion of temporary site | 1 | 694,840.54 | 694,840.54 |
| D | precasting plant for T-girders and other concrete pieces |  |  |  |  |  |
|  | precasting plant for T -girders and other concrete pieces |  | completion of precasting plant | 1 | 275,107.24 | 275,107.24 |
| E | Material storage yard |  |  |  |  |  |
|  | Material storage yard |  | completion of each material storage yard | 6 | 270,767.36 | 1,624,604.15 |
| F | Spoiling and levelling material site |  |  |  |  |  |
| 1 | material site 1 forsection for Belgrade center-Batajnica station(exclude) | completion of spoiling and leveling material site of section for Belgrade center-Batajnica station(exclude) | completion of material site 1 | 1 | 501,309.20 | 501,309.20 |

II Temporary and Transition works

| No. | Item | Description | Unit | No. of Unit | $\begin{gathered} \hline \text { Unit Price } \\ \text { (USD) } \\ \hline \end{gathered}$ | $\begin{gathered} \hline \text { Total Price } \\ \text { (USD) } \\ \hline \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2 | material site 2 for section for Batajnica station(include)Stara Pazova station(include) | completion of spoiling and leveling material site of section for Batajnica station(include)-Stara Pazova station(include) | completion of material site 2 | 1 | 410,162.07 | 410,162.07 |
| G | Steel processing plant |  |  |  |  |  |
|  |  |  |  |  |  |  |
| H |  |  |  |  |  |  |
|  | construction protective shelf for overpass crossing the railway |  | Completion of each construction protective shelf for overpass crossing the railway | 4 | 53,202.61 | 212,810.44 |
| 1 | Pumping measures for construction of culvert or underpass or subway |  |  |  |  |  |
|  | Pumping measures for construction of culvert or underpass or subway |  | Completion of each pumping measure for construction of culvert or underpass or subway | 7 | 118,289.84 | 828,028.87 |
| J | Transitional works |  |  |  |  |  |
| 1 | Transitional works | include earthworks, laying of rails,assembling switches, maintaining track, dismantling of track and switchs at site | completion of transitional works for the section of left side from Belgrade center to Zemun station(include) | 1 | 1,604,763.19 | 1,604,763.19 |
| 2 | Transitional works | include earthworks, laying of rails,assembling switches, maintaining track,dismantling of track and switchs at site | completion of transitional works for the section of right side from Belgrade center to Zemun station(include) | 1 | 1,604,763.19 | 1,604,763.19 |
| 3 | Transitional works | include earthworks, laying of rails,assembling switches, maintaining track,dismantling of track and switchs at site | completion of transitional works for the section of left side from Zemun station(exclude) to Batajnica station(exclude) | 1 | 1,203,572.39 | 1,203,572.39 |
| 4 | Transitional works | include earthworks, laying of rails,assembling switches, maintaining track,dismantling of track and switchs at site | completion of transitional works for the section of right side from Zemun station(exclude) to Batajnica station(exclude) | 1 | 1,203,572.39 | 1,203,572.39 |
| 5 | Transitional works | include earthworks, laying of rails,assembling switches, maintaining track, dismantling of track and switchs at site | completion of transitional works for the section of left side from Batajnica station(include) to Stara Pazova station(include) | 1 | 1,203,572.39 | 1,203,572.39 |
| 6 | Transitional works | include earthworks, laying of rails,assembling switches, maintaining track,dismantling of track and switchs at site | completion of transitional works for the section of right side from Batajnica station(include) to Stara Pazova station(include) | 1 | 1,203,572.39 | 1,203,572.39 |
| K | OCS |  |  |  |  |  |

II Temporary and Transition works

| No. | Item | Description | Unit | No. of Unit | Unit Price (USD) | $\begin{gathered} \text { Total Price } \\ \text { (USD) } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | OCS transitional works | transitional works of exsiting OCS caused by civil construction in open tracks. For instance, making temporary anchor for tensions that affact underconstruction and operational parts including catenary adjustments, setting up new temporary catenary for existing operation and temporary railway lines, making adjustments and connections for interfaces between under-consutruction and existing lines. | Left side of section Belgrade Centre Station(not included) to Zemun Station (included): | 1 | 158,828.21 | 158,828.21 |
| 2 | OCS transitional works |  | Right side of section Belgrade Centre Station(not included) to Zemun Station (included): | 1 | 158,828.21 | 158,828.21 |
| 3 | OCS transitional works | transitional works of exsiting OCS caused by civil construction in open tracks. For instance, making temporary anchor for tensions that affact underconstruction and operational parts including catenary adjustments, setting up new temporary catenary for existing operation and temporary railway lines, making adjustments and connections for interfaces between under-consutruction and existing lines. | Left side of section Zemun Station(exclude) to Batajnica Station (exclude): | 1 | 238,242.32 | 238,242.32 |
| 4 | OCS transitional works |  | Right side of section Zemun Station(exclude) to Batajnica Station (exclude): | 1 | 238,242.32 | 238,242.32 |
| 5 | OCS transitional works | transitional works of exsiting OCS caused by civil construction in open tracks. For instance, making temporary anchor for tensions that affact underconstruction and operational parts including catenary adjustments, setting up new temporary catenary for existing operation and temporary railway lines, making adjustments and connections for interfaces between under-consutruction and existing lines. | Left side of section Batajnica Station(included) toStara Pazova Station (included): | 1 | 397,070.53 | 397,070.53 |
| 6 | OCS transitional works |  | Right side of section Batajnica Station(included) toStara Pazova Station (included): | 1 | 397,070.53 | 397,070.53 |
| 7 | Resource management centre of electrification execution | Base built for executing works of electrification, which includes production line for prefabrication of cantilevers, integrated equipment droppers, etc., storage of the equipment such as contact conduct wire, catenary sag, additional conductors, cantilevers assemblies, etc., material warehouse, management centre,test zone, living facilities for staff and so on. | pcs | 1 | 3,790,360.35 | 3,790,360.35 |
| L | Power Supply |  |  |  |  |  |
|  | Temporary power supply facilities |  | pcs | 1 | 90,758.98 | 90,758.98 |
| M | Signaling and TK |  |  |  |  |  |

II Temporary and Transition works


