



**NET4GAS, s.r.o**

**HP Pipeline DN1400, Node Kateřinský  
potok – Node Přimda  
SPRQ for General Contractor Selection  
LOT I**

**05.03.2018**

Bidder's name:

Bidder's adress:

**ILF CONSULTING ENGINEERS**

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**REVISION HISTORY**

002	5.03.19	Re-Approved	Team	Team	Schorling
001	19.12.18	Re-Approved	Team	Team	Schorling
000	13.12.18	Approved	Team	Team	Schorling
B01	14.11.18	Issue for Review	Team	Team	Schorling
A01	12.11.18	Issue for IDC	Team	Team	Schorling
Rev.	Date	Issue, Purpose	Prepared	Checked	Approved

Instructions:

1. Bidder is responsible for correctness of all calculated sum values.
2. Bidder shall fill cells highlighted with a colour.
3. Bidders unit rates shall be filled into cells highlighted with yellow colour.
4. Cells highlighted with a different colour than yellow may be filled based on relevant subsheets (colour indicates a reference to a subsheet)
5. Piping DN1400 including T-pieces DN1400 are part of Pipeline works.  
 Welds between ball valve DN1400 and piping DN1400 are part of Pipeline works.  
 All other works related to installation of ball valve DN1400 are considered as Mechanical works.
6. All figures concerning unit quantity are indicative only. Bidder shall verify these figures prior to submitting the offer.
7. Prices provided by Bidder in SPRQ will be considered as prices for 14-Month Scenario. Prices for other scenarios for evaluation purposes will be recalculated by using coefficients under items K1, K2 or K3 as applicable. In case selects 12-Month Scenario, 11-Month Scenario or 10-Month Scenario, all items in SPRQ concerning 14-Month Scenario shall be multiplied by the respective coefficient.
8. Bidder shall provide unit prices also for items where 0 quantity is stated.

Item Number	Item Description	Quantity	Unit	Unit Price Supply [Euro]	Unit Price Installation [Euro]	Total Price [Euro]	Payment
P1	<b>TOTAL PRICE BASE ITEMS (14-Month Scenario)</b>						
P2	<b>TOTAL PRICE OPTIONAL ITEMS</b>						
P3	<b>TOTAL PRICE UNIT RATES [(Total Price - Pipeline UR) + (Total Price - Mechanical UR)]</b>						
K1	Coefficient K1 for 12-Month Scenario as per Draft Contract which will be applied on the 14-Month Scenario as a base scenario.						
K2	Coefficient K2 for 11-Month Scenario as per Draft Contract which will be applied on the 14-Month Scenario as a base scenario.						
K3	Coefficient K3 for 10-Month Scenario as per Draft Contract which will be applied on the 14-Month Scenario as a base scenario.						
0	<b>GENERAL SERVICES</b>						
0.1	<b>Project management</b> Including engineering/progress/construction/HSSE/QA meetings, reporting, DCC, development of method statements, plans, procedures, etc. Other requirements as per documents General Technical Requirements and Scope of Work.	1	Lump sum				overall progress
0.2	<b>Permits, fees, insurances, etc.</b> Acquisition of all required permits, etc. Other requirements as per documents General Technical Requirements and Scope of Work.	1	Lump sum				overall progress
0.3	<b>Engineering</b> Includes but is not limited to detail realization documentation incl. side constructions as required (e.g. closed crossings, bridges, roads, special methods, etc.) for approval/review, testing and commissioning documentation, documentation for trial operation permit and as-built documentation. Other requirements as per documents General Technical Requirements and Scope of Work.	1	Lump sum				overall progress
0.4	<b>Procurement</b> Procurement of materials and equipment others than supplies by Employer. Other requirements as per documents General Technical Requirements and Scope of Work.	1	Lump sum				overall progress
1	<b>PREPARATORY WORKS</b>						
1.1	<b>Surveys and As-Built Documentation</b>	1	Lump sum				overall progress

Item Number	Item Description	Quantity	Unit	Unit Price Supply [Euro]	Unit Price Installation [Euro]	Total Price [Euro]	Payment
	Perform all required general and construction surveys, staking out of site and marking of all crossed underground facilities incl. hand excavation probes, as-built surveys and documentation works incl. handover of hardcopies and native files. Additional geotechnical, topographical, as-built and other surveys for need of General Contractor. Archaeological, pyrotechnical surveys.						
1.2	<b>Passports, photo/video documentation</b> Obtaining photographic/video documentation of given area including access routes, trees, and non-forest vegetation, etc. Other requirements as per documents General Technical Requirements and Scope of Work.	1	Lump sum				overall progress
1.3	<b>Mobilization</b> Complete mobilization of all materials, equipment, machinery, personnel, fences, land, etc. to finalize the works incl. associated costs, measures, temporary site facilities alongside pipeline route incl. water, electricity, mobile toilets, parking places and other supplies for construction purposes.	1	Lump sum				milestone
1.4	<b>Site installations, temporary offices and stockyards</b> Requirements as per documents General Technical Requirements and Scope of Work. Including operation of constructed pipe yards.	1	Lump sum				overall progress
<b>2</b>	<b>CONSTRUCTION</b>						
<b>2.1</b>	<b>Pipeline</b>						
	All works and costs required to finalize works as per contract, project (tender) documentation, permits, authority statements, <b>land owner's requirements (C4G-HPPL-AUT-ILF-0771-L-USP)</b> and description below (but not limited to), etc. The contractor can base his calculation on above mentioned documents but it is the CONTRACTOR's responsibility to gather all information required for the CONTRACTOR's assessment and price. Unit m1 stands for linear pipeline (road) meter as per horizontal chainage incl. full width of RoW. Real 3D length and construction reserve (e.g. cut & waste) must be considered by the CONTRACTOR. In case of casing pipes, real lengths are listed.						
<b>2.1.1</b>	<b>General Pipeline Construction</b> This cost group comprises all required construction and installation costs (equipment, services and consumables) of main pipeline, fiber optic cable and cathodic protection according to project documentation.						
<b>2.1.1.1</b>	<b>Preparation of Working Strip</b>	63 055	m1				activity progress

Item Number	Item Description	Quantity	Unit	Unit Price Supply [Euro]	Unit Price Installation [Euro]	Total Price [Euro]	Payment
	Clearing, topsoil stripping, grading, preparation and maintenance of working strip incl. stations and access roads incl. transport of materials and eventually topsoil, disposal of excess materials and import of required materials. Survey and marking of working strip and all 3rd party facilities. Any obstacles and difficulties of the preparation of the ROW have to be calculated into the price.						
2.1.1.2	<b>Loading, Unloading, Piling up and Transportation of Material</b> Material receipt, acceptance, storage, handling and transport of all pipeline and construction materials. Accounting and management of materials and return of surplus materials.	1	Lump Sum				activity progress
2.1.1.3	<b>Stringing and Bending of Pipes</b> Handling, transportation and stringing of all materials. Stringing, and cold field bending of pipes including the necessary site surveys.	63 055	m1				activity progress
2.1.1.4	<b>Welding</b> Internal cleaning, cutting, bevelling, execution of complete girth welding incl. repair welds, coordination with third parties like inventory survey NDT, etc. Including all tie-in's and for all wall thicknesses, welding and welder qualifications and cutting out of welds for testing. Including welding/installation of station piping DN1400.	63 055	m1				activity progress
2.1.1.5	<b>Field Coating</b> Field coating of all girth welds incl. surface preparation and repair of damaged areas of factory coating including inspection.	63 055	m1				activity progress
2.1.1.6	<b>Trenching</b> Excavation of pipeline, fiber optic cable and cathodic protection system trenches incl. required bell holes. Separation of excavated soil layers where required. Excavation and securing with proper support and protection of third party structures, line facilities/utilities, including entire handling, trench dewatering, water table management and other water measures according to permits and authorities. Trench wall supports, planking and strutting, etc.	63 055	m1				activity progress
2.1.1.7	<b>Laying of Pipeline</b> Lowering in of pipe strings, execution of tie-in welds NOT included in other items. Holiday detection and repair coating.	63 055	m1				activity progress
2.1.1.8	<b>Bedding and Padding</b> Preparation of bedding and padding with suitable material incl. compaction.	63 055	m1				activity progress

Item Number	Item Description	Quantity	Unit	Unit Price Supply [Euro]	Unit Price Installation [Euro]	Total Price [Euro]	Payment
2.1.1.9	<b>Laying of FOC Conduits - Optional Item</b> (Lump Sum included in into the Sum of section 5. Optional Items) Installation, bedding, padding, backfilling, reinstatement, protection, testing and marking of conduits incl. signal wire and chambers in the same m1 length as pipeline above. Conduits are placed mostly in pipeline trench.	1	Lump Sum				activity progress
2.1.1.10	<b>Backfilling of the Pipeline Trench</b> Supply and installation of warning tapes, delivery of additional backfill material, backfilling of the pipe trench in layers, compaction, etc. Special compaction measures at crossings and stations to avoid dangerous settlements.	63 055	m1				activity progress
2.1.1.11	<b>Reinstatement</b> Reinstatement of all whole Right of Way to original or better quality incl. stations and all used roads. Proper removal and disposal of all surplus and rubbish materials such as stones, geotextiles, gravel, etc. Reinstatement of topsoil (technical and biological) and installation or surface protection such as erosion measures all to satisfaction of landowner / tenants and authorities.	63 055	m1				activity progress
2.1.2	<b>Protection and Special Measures</b> This cost group comprises of all required extra construction and installation costs (equipment, services and consumables, etc.) to General Pipeline Construction costs required for particular items.						
2.1.2.1	<b>Access Roads</b> Improvement and stabilization of existing access roads. Erection, maintenance and reinstatement of temporary access roads.	1	Lump Sum				overall progress
2.1.2.2	<b>Temporary Construction Roads - Working Strip Stabilization</b> Stabilization and installation of working strip/construction road for construction and transport purposes.	1 537	m1				overall progress
2.1.2.3	<b>Buoyancy Control and Pipeline Protection Installations</b> Supply and prefabrication of buoyancy control and pipeline protection measures like continuous concrete coating, discontinuous weighting with prefabricated concrete weights and additional protective coatings. Installation costs incl. transport, storage, additional earthworks, etc. to be included in cost of crossings under General Pipeline Construction.						
2.1.2.3.1	<b>Concrete Weights Continuous</b> Including FOC conduits weights	197	m1				overall progress
2.1.2.3.2	<b>Concrete Weights Alternately</b>	1 352	m1				overall progress

Item Number	Item Description	Quantity	Unit	Unit Price Supply [Euro]	Unit Price Installation [Euro]	Total Price [Euro]	Payment
	Including FOC conduits weights						
2.1.2.3.3	<b>Concrete Coating</b> Including FOC conduits weights	130	m1				overall progress
2.1.2.3.4	<b>Additional Coating - geotextile 1000g/m2</b> Applicable for steep slopes and areas prone to buoyancy (apart of watercourse crossings).	927	m1				overall progress
2.1.2.3.5	<b>Additional Coating - Cemtex or equivalent (e.g. GRP)</b> Applicable for open cut road crossings. Alternatively HDPE rockshield mesh can be used.	835	m1				overall progress
2.1.2.3.6	<b>Additional Coating - Cemtex or equivalent (e.g. GRP)</b> Applicable for watercourse crossings.	1 390	m1				overall progress
2.1.2.4	<b>Transport Difficulties Along Pipeline Route</b> Difficulties by transport of pipes, bends and materials along the pipeline route (e.g. portions inaccessible for wheeled vehicles)	1	Lump Sum				overall progress
2.1.2.5	<b>Steep Slopes</b> Supply, installation and execution of all transport and special measures and installations within steep slopes except of additional coating.	711	m1				overall progress
2.1.2.6	<b>Pipeline Crossings of Third Party Installations</b> Restrictions of construction works and measures in vicinity of third party installations (e.g. manual excavation, additional earthworks, special equipment, single pipe laying, welding in trench, facility support and protection, casing/gutter, re-bedding, re-padding, marking, compaction, blinding, etc.).	63 055	m1				overall progress
2.1.2.7	<b>Protection of Third Party Installations</b> Protection and marking of third party facilities crossed by site transport incl. following administrators / owners requirements.	63 055	m1				overall progress
2.1.2.8	<b>Relocations</b> Relocation of tracks/roads and ditches/streams in collision with the pipeline.	1	Lump Sum				overall progress
2.1.2.9	<b>Reparation and Relocation of Drainage Systems</b> Reparation and relocation of drainage systems encountered and damaged during construction works.	1	Lump Sum				overall progress
2.1.2.10	<b>Terrain Check and Measures in Undermined Areas</b>	1	Lump Sum				overall progress

Item Number	Item Description	Quantity	Unit	Unit Price Supply [Euro]	Unit Price Installation [Euro]	Total Price [Euro]	Payment
	Regular terrain check and measures in undermined areas.						
2.1.2.11	<b>Ditch Slope and Drainage in Land Slide Areas</b> Reduction of ditch slope angle and drainage of pipeline ditch in the land slide areas incl. monitoring measures.	1	Lump Sum				overall progress
2.1.2.12	<b>Improvement of Existing Roads</b> Improvement of existing roads as per agreements with owners / operators						
2.1.2.12.1	<b>Road at Přečaply</b>	355	m1				milestone
2.1.2.12.2	<b>Road at Straná u Nechranic</b>	1 006	m1				milestone
2.1.2.12.3	<b>Road at Pesvice</b>	351	m1				milestone
2.1.3	<b>Environmental Provisions</b> Extra Lump Sum charge for special environmental and reinstatement provisions specified in project documentation and authority statements such as (but not limited to), EIA, hydrogeological assessment, etc.						
2.1.3.1	<b>Protection and Compensation Environmental Measures</b> Provide protection and compensation environmental measures according to requirements of relevant authorities.	1	Lump Sum				overall progress
2.1.3.2	<b>Compensatory Out Planting of Trees and Bushes Outside Forests</b> Provide compensatory out planting of trees and bushes including 5 years maintenance for the deforested areas and single trees within the working strip, along the access roads outside forests and wherever prescribed by authorities.	1	Lump Sum				overall progress
2.1.3.3	<b>Substitute Planting Within Forest Land Plots</b> Provide substitute planting of forest land plots including 7 years maintenance for reinstated areas within the working strip incl. signed handover to land owners, tenants or their forest managers.	1	Lump Sum				overall progress
2.1.3.4	<b>Drinking Water Sources Protection Measures</b> Complete measures for preservation of drinking water sources incl. water monitoring e.g. as per hydrogeological assessment.	1	Lump Sum				overall progress
2.1.4	<b>Railway Crossings</b>						

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	Extra Lump Sum charges to construction and installation costs under General Pipeline Construction or Protection and Special Measures. This costs group includes all additional measures, installations and works, NOT included in the required construction and installation costs under General Pipeline Construction or Protection and Special Measures costs (e.g. special crossing methods, additional earthworks, construction pits stabilization, supply and installation of casing pipes, protective pipes, spare conduits, concrete slabs, etc.)						
2.1.4.1	<b>Railway Crossing DZ-001, Inner Casing Pipe Length = 124 m</b>	1	Lump Sum				milestone
2.1.4.2	<b>Railway Crossing DZ-002, Inner Casing Pipe Length = 22 m</b>	1	Lump Sum				milestone
2.1.4.3	<b>Railway Crossing DZ-003, Inner Casing Pipe Length = 24 m</b>	1	Lump Sum				milestone
2.1.4.4	<b>Railway Crossing DZ-004, Inner Casing Pipe Length = 18 m</b>	1	Lump Sum				milestone
2.1.5	<b>Road Crossings</b>						
	Extra Lump Sum charges to construction and installation costs under General Pipeline Construction or Protection and Special Measures. This costs group includes all additional measures, installations and works, NOT included in the required construction and installation costs under General Pipeline Construction or Protection and Special Measures costs (e.g. special crossing methods, additional earthworks, construction pits stabilization, supply and installation of casing pipes, protective pipes, spare conduits, concrete slabs, etc.)						
2.1.5.1	<b>Closed Road Crossing DS-001, Casing Pipe Length = 22 m</b>	1	Lump Sum				milestone
2.1.5.2	<b>Closed Road Crossing DS-002, Casing Pipe Length = 22 m</b>	1	Lump Sum				milestone
2.1.5.3	<b>Closed Road Crossing DS-004, Casing Pipe Length = 18 m</b>	1	Lump Sum				milestone
2.1.5.4	<b>Closed Road Crossing DS-005, Casing Pipe Length = 26 m</b>	1	Lump Sum				milestone
2.1.5.5	<b>Closed Road Crossing DS-007, Casing Pipe Length = 40 m</b>	1	Lump Sum				milestone
2.1.5.6	<b>Closed Road Crossing DS-008, Casing Pipe Length = 16 m</b>	1	Lump Sum				milestone
2.1.5.7	<b>Closed Road Crossing DC-039, Casing Pipe Length = 38 m</b>	1	Lump Sum				milestone
2.1.5.8	<b>Closed Road Crossing DS-009, Casing Pipe Length = 24 m</b>	1	Lump Sum				milestone
2.1.5.9	<b>Closed Road Crossing DS-010, Casing Pipe Length = 18 m</b>	1	Lump Sum				milestone
2.1.5.10	<b>Closed Road Crossing DS-011, Casing Pipe Length = 18 m</b>	1	Lump Sum				milestone
2.1.5.11	<b>Closed Road Crossing DS-012, Casing Pipe Length = 18 m</b>	1	Lump Sum				milestone
2.1.5.12	<b>Closed Road Crossing DS-013, Casing Pipe Length = 46 m</b>	1	Lump Sum				milestone
2.1.5.13	<b>Closed Road Crossing DS-014, Casing Pipe Length = 16 m</b>	1	Lump Sum				milestone
2.1.5.14	<b>Closed Road Crossing DS-016, Casing Pipe Length = 18 m</b>	1	Lump Sum				milestone
2.1.5.15	<b>Closed Road Crossing DS-017, Casing Pipe Length = 18 m</b>	1	Lump Sum				milestone
2.1.5.16	<b>Closed Road Crossing DS-018, Casing Pipe Length = 23 m</b>	1	Lump Sum				milestone
2.1.5.17	<b>Closed Road Crossing DS-019, Casing Pipe Length = 16 m</b>	1	Lump Sum				milestone
2.1.5.18	<b>Closed Road Crossing DS-020, Casing Pipe Length = 18 m</b>	1	Lump Sum				milestone

Item Number	Item Description	Quantity	Unit	Unit Price Supply [Euro]	Unit Price Installation [Euro]	Total Price [Euro]	Payment
2.1.5.19	<i>Closed Road Crossing DS-021, Casing Pipe Length = 18 m</i>	1	Lump Sum				milestone
2.1.5.20	<i>Closed Road Crossing DS-023, Casing Pipe Length = 18 m</i>	1	Lump Sum				milestone
2.1.5.21	<i>Closed Road Crossing DS-024, Casing Pipe Length = 16 m</i>	1	Lump Sum				milestone
2.1.5.22	<i>Closed Road Crossing DS-025, Casing Pipe Length = 20 m</i>	1	Lump Sum				milestone
2.1.5.23	<i>Closed Road Crossing DS-026, Casing Pipe Length = 18 m</i>	1	Lump Sum				milestone
2.1.5.24	<i>Closed Road Crossing DS-027, Casing Pipe Length = 20 m</i>	1	Lump Sum				milestone
2.1.5.25	<i>Closed Road Crossing DS-028, Casing Pipe Length = 20 m</i>	1	Lump Sum				milestone
2.1.5.26	<i>Open Cut Road Crossing DS-003, Casing Pipe Length = 18 m</i>	1	Lump Sum				milestone
2.1.5.27	<i>Open Cut Road Crossing DS-015, Casing Pipe Length = 16 m</i>	1	Lump Sum				milestone
2.1.5.28	<i>Open Cut "Road" Crossing OK-011, Casing Pipe Length = 26 m</i>	1	Lump Sum				milestone
2.1.5.29	<i>Open Cut "Road" Crossing OK-012, Casing Pipe Length = 16 m</i>	1	Lump Sum				milestone
2.1.5.30	<i>Open Cut "Road" Crossing DC-050, Casing Pipe Length = 14 m</i>	1	Lump Sum				milestone
2.1.5.31	<i>Open Cut "Road" Crossing OK-013, Casing Pipe Length = 10 m</i>	1	Lump Sum				milestone
2.1.5.32	<i>Open Cut "Road" Crossing OK-014, Casing Pipe Length = 12 m</i>	1	Lump Sum				milestone
2.1.5.33	<i>Open Cut "Road" Crossing DC-051, Casing Pipe Length = 14 m</i>	1	Lump Sum				milestone
2.1.5.34	<i>Open Cut "Road" Crossing DC-052, Casing Pipe Length = 16 m</i>	1	Lump Sum				milestone
2.1.5.35	<b>Minor Open Cut Road Crossings</b>	79	Lump Sum				milestone
2.1.6	<b>Watercourse Crossings</b>						
	Extra Lump Sum charges to construction and installation costs under General Pipeline Construction or Protection and Special Measures. This costs group includes all additional measures, installations and works, NOT included in the required construction and installation costs under General Pipeline Construction or Protection and Special Measures costs (e.g. special crossing methods, additional earthworks, lowering of underground water table, water transfer, watercourse bridges and passages, supply and installation of buoyancy control measures and sand bags, rip-rap, stones, concrete slabs, special bank reinstatement, etc.)						
2.1.6.1	<i>Closed Watercourse Crossing DV-009, Bored Pipe Length = 32.5 m</i>	1	Lump Sum				activity progress
2.1.6.2	<i>Closed Watercourse Crossing DV-018, Bored Pipe Length = 40 m</i>	1	Lump Sum				activity progress
2.1.6.3	<i>Closed Watercourse Crossing DV-022, Bored Pipe Length = 40.6 m</i>	1	Lump Sum				activity progress
2.1.6.4	<i>Open Cut Watercourse Crossing (incl. piped) DV-003</i>	1	Lump Sum				activity progress
2.1.6.5	<i>Open Cut Watercourse Crossing (incl. piped) DV-011</i>	1	Lump Sum				activity progress
2.1.6.6	<i>Open Cut Watercourse Crossing (incl. piped) DV-014</i>	1	Lump Sum				activity progress
2.1.6.7	<i>Open Cut Watercourse Crossing (incl. piped) DV-019</i>	1	Lump Sum				activity progress
2.1.6.8	<i>Open Cut Watercourse Crossing (incl. piped) DV-020</i>	1	Lump Sum				activity progress
2.1.6.9	<i>Open Cut Watercourse Crossing (incl. piped) DV-032</i>	1	Lump Sum				activity progress

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2.1.6.10	<b>Minor Open Cut Watercourse Crossings</b>	23	Lump Sum				activity progress
2.1.7	<b>Marker Posts</b> Supply and installation of pipeline and FOC marker posts and markers incl. protective measures. Calculation of costs shall include transportation, excavation, supply and installation of concrete foundation, compaction of backfilling, reinstatement, etc.						
2.1.7.1	<b>Pipeline Marker Posts</b>	1	Lump Sum				overall progress
2.1.7.2	<b>FOC Marker Posts and Markers</b>	1	Lump Sum				overall progress
2.1.8	<b>Pipeline Cathodic Protection</b> Supply, replacement, adjustment and installation of pipeline cathodic protection posts and cables incl. connection and protection. Calculation of costs shall include transportation, earthworks, connection, crossings of third party lines, supply and installation of posts, cables and casings, compaction of backfilling, reinstatement, etc. In case of collision with existing cathodic protection cables this group includes also replacement of existing cables and re-connection wherever required.						
2.1.8.1	<b>Cathodic Protection Posts and Cabling</b> incl. electrodes, coupons, etc.	1	Lump Sum				overall progress
2.1.8.2	<b>Pearson Survey</b>	1	Lump Sum				overall progress
2.2	<b>Line valve stations</b> Includes but is not limited to supply of material and construction/installation of all systems and objects enumerated in the document Scope of Work within limits defined by Interface Report. Includes also supply and installation of piping material <DN300. All works and costs required to finalize works as per contract, project (tender) documentation, permits, authority statements, etc. are included.						
2.2.1	<b>RU 06 Kateřinský potok</b>						
2.2.1.1	<b>Civil works</b>	1	Lump sum				milestone
2.2.1.2	<b>Mechanical works</b>	1	Lump sum				milestone
2.2.1.3	<b>Electrical works</b>	1	Lump sum				milestone
2.2.1.4	<b>Instrumentation and control system works</b>	1	Lump sum				milestone
2.2.1.5	<b>Telecommunication system works</b>	1	Lump sum				milestone
2.2.1.6	<b>Integrated security system works</b>	1	Lump sum				milestone
2.2.2	<b>TU33S Jirkov</b>						

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2.2.2.1	<i>Civil works</i>	1	Lump sum				milestone
2.2.2.2	<i>Mechanical works</i>	1	Lump sum				milestone
2.2.2.3	<i>Electrical works</i>	1	Lump sum				milestone
2.2.2.4	<i>Instrumentation and control system works</i>	1	Lump sum				milestone
2.2.2.5	<i>Telecommunication system works</i>	1	Lump sum				milestone
2.2.2.6	<i>Integrated security system works</i>	1	Lump sum				milestone
2.2.3	<b>TU 51S Hrušovany</b>						
2.2.3.1	<i>Civil works</i>	1	Lump sum				milestone
2.2.3.2	<i>Mechanical works</i>	1	Lump sum				milestone
2.2.3.3	<i>Electrical works</i>	1	Lump sum				milestone
2.2.3.4	<i>Instrumentation and control system works</i>	1	Lump sum				milestone
2.2.3.5	<i>Telecommunication system works</i>	1	Lump sum				milestone
2.2.3.6	<i>Integrated security system works</i>	1	Lump sum				milestone
2.2.4	<b>TU 52S Sýrovice</b>						
2.2.4.1	<i>Civil works</i>	1	Lump sum				milestone
2.2.4.2	<i>Mechanical works</i>	1	Lump sum				milestone
2.2.4.3	<i>Electrical works</i>	1	Lump sum				milestone
2.2.4.4	<i>Instrumentation and control system works</i>	1	Lump sum				milestone
2.2.4.5	<i>Telecommunication system works</i>	1	Lump sum				milestone
2.2.4.6	<i>Integrated security system works</i>	1	Lump sum				milestone
2.2.5	<b>TU 53S Malměřice</b>						
2.2.5.1	<i>Civil works</i>	1	Lump sum				milestone
2.2.5.2	<i>Mechanical works</i>	1	Lump sum				milestone
2.2.5.3	<i>Electrical works</i>	1	Lump sum				milestone
2.2.5.4	<i>Instrumentation and control system works</i>	1	Lump sum				milestone
2.2.5.5	<i>Telecommunication system works</i>	1	Lump sum				milestone
2.2.5.6	<i>Integrated security system works</i>	1	Lump sum				milestone
2.3	<b>Cathodic protection stations</b>						
	Includes but is not limited to supply of material and construction/installation of all systems and objects enumerated in the Scope of Work document within limits defined by Interface Report. All works and costs required to finalize works as per contract, project (tender) documentation, permits, authority statements, etc. are included.						
2.3.1	<b>SKAO 098 Jirkov</b>	1	Lump sum				overall progress
2.3.2	<b>SKAO 309 Malměřice</b>	1	Lump sum				overall progress
3	<b>TESTING, COMMISSIONING, TRIAL OPERATION</b>						

Item Number	Item Description	Quantity	Unit	Unit Price Supply [Euro]	Unit Price Installation [Euro]	Total Price [Euro]	Payment
3.1	<b><u>Mechanical and EICT completion</u></b> Completion of all mechanical, electrical and ICT systems including tagging/labelling of all equipment. Other requirements as per documents General Technical Requirements and Scope of Work.	1	Lump sum	<del> </del>	<del> </del>		milestone
3.2	<b><u>Inspection and Testing</u></b> Inspection and testing of all systems including delivery of all equipment and services for complete pressure tests and pipeline stress test incl. water supply and disposal, all planning and clarification works, gauging, cleaning, drying, welding and dismantling of test chambers and end caps, connection of the test sections with golden welds, etc. Caliper pig run incl. evaluation and reports. Other requirements as per documents General Technical Requirements and Scope of Work.	1	Lump sum	<del> </del>	<del> </del>		milestone
3.3	<b><u>Pre-commissioning</u></b> Includes services with electrical power and utilities without availability of natural gas in the system. Other requirements as per documents General Technical Requirements and Scope of Work.	1	Lump sum	<del> </del>	<del> </del>		milestone
3.4	<b><u>Commissioning</u></b> First fill process of the pipeline and functional tests. Other requirements as per documents General Technical Requirements and Scope of Work.	1	Lump sum	<del> </del>	<del> </del>		milestone
3.5	<b><u>Start-up and trial operation</u></b> Operation of the pipeline including correction of identified shortcomings or defects, executing routine maintenance and cleaning works. Other requirements as per documents General Technical Requirements and Scope of Work.	1	Lump sum	<del> </del>	<del> </del>		milestone
<b>4</b>	<b>FINISHING WORKS</b>						
4.1	<b><u>Site cleaning</u></b> Including waste management, disposal and treatment of surplus material incl. associated costs, measures, etc.  Other requirements as per documents General Technical Requirements and Scope of Work.	1	Lump sum	<del> </del>	<del> </del>		milestone
4.2	<b><u>Demobilization</u></b> Complete demobilization of all facilities, materials, equipment, machinery, personnel, fences, land, temporary site facilities alongside pipeline route incl. water, electricity, mobile toilets, parking places and other supplies for construction purposes.	1	Lump sum	<del> </del>	<del> </del>		milestone
4.3	<b><u>Training of Employer personnel</u></b>	1	Lump sum	<del> </del>	<del> </del>		milestone

Item Number	Item Description	Quantity	Unit	Unit Price Supply [Euro]	Unit Price Installation [Euro]	Total Price [Euro]	Payment
	Training of Employer's key personnel in all the systems, which are essential for the safe and reliable operation of the pipeline system and all subsystems. Other requirements as per documents General Technical Requirements and Scope of Work.						
4.4	<b>Health and safety signs</b> As per relevant station layouts.	1	Lump sum				milestone
4.5	<b>Cleaning of fire water basin in Syrovice</b> As per HZS (fire brigade) requirements.	1	Lump sum				milestone

Item Number	Item Description	Quantity	Unit	Unit Price Supply [Euro]	Unit Price Installation [Euro]	Total Price [Euro]	Payment
<b>5</b>	<b>OPTIONAL ITEMS</b>						
<b>5.1</b>	<b>Pipe yards</b> Complete construction, security during operation and reinstatement as per project documentation. Other requirements as per documents General Technical Requirements and Scope of Work. Note: Operation of pipe yards shall be included in item 1.4 above.						
<del>5.1.1</del>	<del>Pipe yard - Hora Svate Kateřiny</del>	<del>1</del>	<del>Lump sum</del>	<del></del>	<del></del>	<del></del>	<del>milestone</del>
<del>5.1.2</del>	<del>Pipe yard - Vrskman</del>	<del>1</del>	<del>Lump sum</del>	<del></del>	<del></del>	<del></del>	<del>milestone</del>
<del>5.1.3</del>	<del>Pipe yard - Nezabylice</del>	<del>1</del>	<del>Lump sum</del>	<del></del>	<del></del>	<del></del>	<del>milestone</del>
<del>5.1.4</del>	<del>Pipe yard - Chuderin</del>	<del>1</del>	<del>Lump sum</del>	<del></del>	<del></del>	<del></del>	<del>milestone</del>
<del>5.1.5</del>	<del>Pipe yard - Vroutek (Podbořany)</del>	<del>1</del>	<del>Lump sum</del>	<del></del>	<del></del>	<del></del>	<del>milestone</del>
<b>5.2</b>	<b>FOC supply and installation</b> Includes supply, installation and testing of fiber optic cables. Supply includes but is not limited to fiber optic cable (FOC), optical distribution frames (ODF) and pig tails. Installation includes but is not limited to blowing-in of FOC into HDPE conduit, termination of FOC on ODFs and testing of fibers.	1	Lump sum				milestone
<b>5.3</b>	<b>TU Vrskmaň</b> Includes but is not limited to supply of material and construction/installation of all systems and objects enumerated in the Scope of Work document within limits defined by Interface Report. Includes also supply and installation of piping material <DN300. All works and costs required to finalize works as per contract, project (tender) documentation, permits, authority statements, etc. are included.						
5.3.1	Civil works	1	Lump sum				milestone
5.3.2	Mechanical works	1	Lump sum				milestone
5.3.3	Electrical works	1	Lump sum				milestone
5.3.4	Instrumentation and control system works	1	Lump sum				milestone
5.3.5	Telecommunication system works	1	Lump sum				milestone
5.3.6	Integrated security system works	1	Lump sum				milestone
<b>6</b>	<b>STAND-BY COSTS</b>						
6.1	<b>Stand-by costs before issuance of NTP</b> Stand-by costs per calendar day.	1	Lump sum				monthly
6.2	<b>Stand-by costs after issuance of NTP</b> Stand-by costs per calendar day.	1	Lump sum				monthly
6.3	<b>Interruption mobilization and demobilization costs</b>	1	Lump sum				milestone

Item Number	Item Description	Quantity	Unit	Unit Price Supply [Euro]	Unit Price Installation [Euro]	Total Price [Euro]	Payment
	This item shall be applied in case the interruption requires additional transport (such as trailers) - there and back.						
6.3.1	<b>Total transportation costs per km</b>	1	km				milestone
6.4	<b><u>TOTAL PRICE BASE ITEMS for construction of pipeline, preparatory works and general services (including dedicated Line Valve Station) from km 0,0 (NODE KATEŘINSKÝ POTOK) to km 11,6 out of the complete Lot I.</u></b>	1	Lump Sum				

Telco - Pipeline					Total Price [Euro]		0,00	0,00	0	
Item Number	Item Type	Item Description	Total Quantity	Unit	Unit Price Supply [Euro]	Unit Price Installation [Euro]	Total Unit Price [Euro]	Total Price [Euro]	LOT 1	
									quant	price
..1		<b>FOC Conduits</b>								
..1.1		HDPE cable duct 40/33 (Dura-Line) white	69 000	m					69 000	
..1.2		HDPE cable duct 40/33 (Dura-Line) green	69 000	m					69 000	
..1.3		Copper conductor 2x PVC ins.+ sheet NYY 6	69 000	m					69 000	
..1.4		Underground warning tape orange coloured	75 000	m					75 000	
..1.5		Pipe couplings PLASSON 40	300	pc					300	
..1.6		Pipe end-plug PLASSON 40	502	pc					502	
..1.7		LPE Casing pipe 160	1 596	m					1 596	
..1.8		Corrugated pipe KOPOFLEX 160	613	m					613	
..1.9		Corrugated pipe KOPOFLEX 125	1 640	m					1 640	
..1.10		Corrugated pipe KOPOFLEX 110	2 530	m					2 530	
..1.11		Underground marker 3M 1255	300	pc					300	
..1.12		Yellow aboveground marker incl. concrete pipe	150	pc					150	
..1.13		Cable chamber OKOS 3A 1300x780x450mm	19	pc					19	
..1.14		NYY cable junction box incl. concrete pillar and earthing electrode	7	pc					7	
..1.15		Surge arrester (eg. Saltek FLP-B+C MAXI V/1)	2	pc					2	
..1.16		Warnign sign "POZOR-NEBEZPEČÍ ÚRAZU INDUKOVANÝM NAPĚTÍM"	1	pc					1	
..1.17		Earthing rod FeZn l=1500mm	2	pc					2	
..1.18		Wire FeZn 8mm	3	m					3	
..1.19		Small installation material	1	pc					1	
..2		<b>Other works related to FOC conduit installation such as excavation, bedding, backfilling, compaction, etc.</b>								
..2.1		<i>Other works related to FOC conduit installation for LOT 1</i> (Kindly enumerate here)	1	Lump sum					1	

Cathodic protection works - Pipeline					Total Price [Euro]		0,00	0,00	0	
Item Number	Item Type	Item Description	Total Quantity	Unit	Unit Price Supply [Euro]	Unit Price Installation [Euro]	Total Unit Price [Euro]	Total Price [Euro]	LOT 1	
										quant
..1		<b>Cathodic protection</b>								
..1.1		Measuring electrode V&C	16	pc					16	
..1.2		Steel measuring coupon 10 cm2	16	pc					16	
..1.3		Steel measuring coupon 1 cm2	4	pc					4	
..1.4		Mounting foam	14	pc					14	
..1.5		Cable XLPE 1x10 RM/16	180	m					180	
..1.6		Cable Cu 750 V : CYKY-J 3x6	1 738	m					1 738	
..1.7		Cable Cu 750 V : CYKY-O 4x10	200	m					200	
..1.8		Leutron PLPro 20 A	4	pc					4	
..1.9		Cathodic protection Protegol (cartridge 200 ml, 1-2 pc/1 connected)	148	pc					148	
..1.10		Connection box	19	pc					19	
..1.11		Terminal block	19	pc					19	
..1.12		Inhibitor Zerust	74	pc					74	
..1.13		Tube KF 09040 40/32 Koppoflex	1 600	m					1 600	
..1.14		Earth strap FeZn 30x4	80	m					80	
..1.15		Leutron PLPro 40 A	0	pc						
..2		<b>Other works related to CP installation such as excavation, bedding, backfilling, compaction, etc.</b>								
..2.1		<i>Other works related to CP installation for LOT 1</i>	1	Lump sum					1	
		(Kindly enumerate here)								

Civil works - Line valve stations			Total Price [Euro]		0,00		0,00		0		0		0		0		0	
Item Number	Item Type	Item Description	Total Quantity	Unit	Unit Price Supply [Euro]	Unit Price Installation [Euro]	Total Unit Price [Euro]	Total Price [Euro]	DN Kateřinský potok	LVS Jirkov	LVS Vrškaň - Option	LVS Hrušovany	LVS Sýrovice	LVS Malměřice				
									quant	price	quant	price	quant	price	quant	price	quant	price
..1		<b>DEMOLITION WORKS</b>																
		<b>General Remarks</b>																
		This chapter covers all required demolition works related to the EPC contract.																
		All demolished materials have to be removed from the construction site and professional disposed at a officially approved dumpsite.																
		All required works for the complete demolition have to be taken into consideration in the relevant unit rates and will not be paid separately.																
..1.1	R	<b>Demolition of Wire Mesh Fences</b> Complete demolition of existing wire mesh fence including foundations.	323	m1					100	65	0	45	23	90				
..1.2	R	<b>Temporary Dismantling and Reinstallation of Wire Mesh Fences</b> Temporary dismantling of existing wire mesh fence including foundations, including transport and storage of dismantled material and its complete reinstallation in the original position and quality. Including gates, emergency doors, if they are located in the dismantled part of the fence.	65	m1					65	0	0	0	0	0				
..1.3	R	<b>Temporary Dismantling and Reinstallation of Concrete Cable Trench and Shafts</b> Temporary dismantling of existing concrete cable trench and shafts, including transport and storage of dismantled material and its complete reinstallation in the original position and quality. Various size and types as per coordination layouts, typical drawings. Including covers, etc.	70	m1					70	0	0	0	0	0				
..1.4	R	<b>Demolition/Relocation Others - DN Kateřinský potok</b> Other demolitions or relocations, which are not listed in previous demolition items. Such as complete demolition/relocation of existing lighting poles including foundation, demolition/relocation of existing cable channels, etc.	1	Lump Sum					1									
..1.5	R	<b>Demolition/Relocation Others - LVS Jirkov</b> Same as above for specific station.	1	Lump Sum						1								
..1.6	R	<b>Demolition/Relocation Others - LVS Vrškaň</b> Same as above for specific station.	1	Lump Sum							1							
..1.7	R	<b>Demolition/Relocation Others - LVS Hrušovany</b> Same as above for specific station.	1	Lump Sum								1						
..1.8	R	<b>Demolition/Relocation Others - LVS Sýrovice</b> Same as above for specific station.	1	Lump Sum									1					
..1.9	R	<b>Demolition/Relocation Others - LVS Malměřice</b> Same as above for specific station.	1	Lump Sum														1
..2		<b>SITE GRADING AND EARTHWORKS</b>																
..2.0		<b>General Remarks</b>																
		This chapter covers all required earth works for site grading, excavation and backfilling for all structures as well as the finishing works for green areas.																
		The contractor having fully responsibility to store the required quantities of excavated soil for the backfilling works on site or at a intermediate dumpsite.																
		Unsuitable and surplus soil material have to be removed from the construction site and professional disposed at a officially approved dumpsite.																
		The calculation of the excavation quantities for the site grading is based on the bottom level of the top soil stripping.																
		Excavations, backfillings accounting according to m3 compacted soil volume.																
		Including terrain shaping for unpaved storm water drainage channels.																

Civil works - Line valve stations			Total Price [Euro]	0,00	0,00	0	0	0	0	0	0								
Item Number	Item Type	Item Description	Total Quantity	Unit	Unit Price Supply [Euro]	Unit Price Installation [Euro]	Total Unit Price [Euro]	Total Price [Euro]	DN Kateřinský potok	LVS Jirkov	LVS Vráskman - Option	LVS Hrušovany	LVS Syrovice	LVS Maimerice					
									quant	price	quant	price	quant	price	quant	price			
..2.1	R	<b>Soil Mass Excavation</b> Soil mass excavation of soil grade 1-4 for site grading purposes, including terrain shaping for unpaved storm water drainage channels, including excavations for structures and foundations. Including loading, transport and storage of excavation material. Including potential dewatering works of the excavation pits.	8 385	m3					1 260		857		1 744		1 068		873		2 584
..2.2	R	<b>Hand Excavation</b> Excavation of soil grade 1-4 per hand in areas where mechanical excavation is impossible or prohibited. Independent of the depth of the excavation pit. Including loading, transport and storage of excavation material. Including potential dewatering works of the excavation pits.	168	m3					25		17		35		21		17		52
..2.3	R	<b>Soil Mass Backfilling with Excavation Material Including Compaction</b> Soil mass backfilling with stored excavation material for site grading purposes, including terrain shaping for unpaved storm water drainage channels, including the excavations for structures and foundations.  Assembling and compaction in layers, maximum thickness of the layers and compaction characteristics according to specification. Including loading and transport from the intermediate dump site.	7 993	m3					900		857		1 744		1 035		873		2 584
..2.4	R	<b>Soil Mass Backfilling with Supplied Material Including Compaction</b> Soil mass backfilling with supplied suitable soil material for site grading purposes, including terrain shaping for unpaved storm water drainage channels, including the excavations for structures and foundations. Supply of suitable material is expected to be provided from suitable surplus soil material from HPPL pipeline installation.  Assembling and compaction in layers, maximum thickness of the layers according to specification. Including loading and transport from the intermediate dump site.	2 158	m3					0		1 659		22		0		269		208
..2.5	R	<b>Compaction of Backfilling of the Pipeline Trench Inside Stations</b> Compaction of backfilling material of the pipe trench in layers according to the Earthworks Specification. Compaction requirements applicable for station, requirements for fill below structures foundations, etc. shall be met.	6	Lump Sum					1		1		1		1		1		1
..2.6	R	<b>Spreading of Top Soil and Seeding of Green Areas</b> Spreading of stored top soil material, manual distribution with a rake, minimum thickness according to the original thickness of stripped top soil as per pedological survey. Including loading and transport from the intermediate dump site. Including seeding of green areas including fertilisation and watering of the green areas until the first grass-cutting.	4 880	m2					700		650		260		250		620		2 400
..2.7	R	<b>Removal of Unsuitable and Surplus Soil Material</b> Unsuitable and surplus soil material have to be removed from the construction site and professional disposed at a officially approved dumpsite. Including of transport to the dumpsite in as well as costs for dumping. Accounting according to m3 difference in the balance of excavation and backfilling volume of the above listed items.	452	m3					385		0		13		54		0		0
..2.8	R	<b>Concrete Cable Trench</b> Excavation, construction and backfilling of reinforced concrete cable trench with removable cover according to the typical drawing and specification. Including type for traffic areas. Including cable shafts.	670	m1					0		205		55		110		75		225
..2.9	R	<b>Underground Cable Conduits</b> Excavation, construction and backfilling of cable conduits buried in earth. Including cable shafts. Supply of cable conduits is not included in this item. Including supply and assembling of sand for sand bedding of cable conduits and cable warning tapes.	227	m1					0		32		50		30		35		80

Civil works - Line valve stations			Total Price [Euro]	0,00	0,00	0	0	0	0	0	0					
Item Number	Item Type	Item Description	Total Quantity	Unit	Unit Price Supply [Euro]	Unit Price Installation [Euro]	Total Unit Price [Euro]	Total Price [Euro]	DN Kateřinský potok	LVS Jirkov	LVS Vrakman - Option	LVS Hrušovany	LVS Sýrovice	LVS Maimerice		
									quant	price	quant	price	quant	price	quant	price
..2.10	R	<b>Cable Road Crossing</b> Excavation, construction and backfilling of cable road crossing with PVC cable conduits embedded with lean concrete grade C12/15 X0 at road crossings.	169	m1					0	26	53	20	0	70		
..2.11	R	<b>Sheet Piling</b> Installation of sheet piling for needs of excavation works. Including detail design of the sheet piling, material supply, material temporary storage, anchors, horizontal steel beams, topping ring beam, bracings, etc. Including material removal and disposal. Height of piles as per excavation pit needs. Counted as per m1 of the sheet piling wall.	55	m1					55	0	0	0	0	0		
..2.12	R	<b>Installation of Casing Pipes</b> Installation of casing pipes for 2 existing underground gas pipelines DN 900 below new access road to the new station. Including detail design of the casing pipe, installation, material supply, material temporary storage, etc. Including material removal and disposal. Length of casing pipes as per coordination drawings.	2	pcs					0	0	2	0	0	0		
..3		<b>CONCRETE WORKS</b>														
..3.0		<b>General Remarks</b> Difficulties for concreting works at low temperatures have to be taken into consideration in the relevant unit rates and will not be paid separately. Difficulties for chamfering of edges, providing of pockets and openings, embedding of cable conduits, embedding of steel parts or anchoring elements have to be taken into consideration in the relevant unit rates and will not be paid separately.														
..3.1	R	<b>Structural Concrete</b> Supply of the material and construction of structural concrete for all concrete structures exposed to atmospheric conditions or in contact with soil. Concrete Grade C35/45, XC3, XF3, XA1 or grade C35/45, XC3, XF3, XA3, XD2. Including: - Formwork - Reinforcement bars, reinforcement meshes, Grade BS1 500 S - Lean concrete layer, 10cm, Grade C12/15, X0 - Non shrinkable grouting - Foundation earthing, 30/3.5mm - Earthing connections - Cable conduits - Embedded anchoring elements - Other embedded steel elements  Including levelling and compaction of excavation surface.	725	m3					0	130	130	130	135	200		
..4		<b>STEEL STRUCTURES</b>														
..4.0		<b>General Remarks</b> The preparation of the detailed static calculations as well as of the workshop drawings is part of contractors scope of work. Steel grade S235JR. All structural steel elements have to be hot dip galvanized according to the specification.  Including all required fixing materials, screws, bolts, etc. for the structural steel construction. Including all required anchorings to foundations with an anchoring system. Including all required scaffolds for the installation.														
..4.1	R	<b>Steel Structures</b>	15 000	kg					0	1 500	1 500	1 500	1 500	9 000		

Civil works - Line valve stations			Total Price [Euro]	0,00	0,00	0	0	0	0	0	0					
Item Number	Item Type	Item Description	Total Quantity	Unit	Unit Price Supply [Euro]	Unit Price Installation [Euro]	Total Unit Price [Euro]	Total Price [Euro]	DN Kateřinský potok	LVS Jirkov	LVS Vrakman - Option	LVS Hrušovany	LVS Sýrovice	LVS Malměřice		
									quant	price	quant	price	quant	price	quant	price
		Supply of the materials, fabrication and installation of the steel structures for platforms, crossovers, supporting steel plates according to the construction drawings and static calculations. Including: - grating for stairs, platforms, crossovers, etc. Design load 5kN/m2. - hand rails, chain hand rails - kicker plates, etc.														
..5		<b>ROADS AND PAVED AREAS STATION</b>														
..5.1	R	<b>Asphalt Paved Area</b> Supply of the material and construction of the asphalt concrete wearing course paved area according to typical drawing and specification. Consisting mainly of: - Asphalt concrete wearing course, grade AC011, thickness 60mm - Bituminous base course layer, R-Material, thickness 60mm - SD crushed run material layer, thickness 250mm - Crushed run material layer, various thickness, min. 250mm - Geotextile 200g/m2 Including: - Excavation works, compaction of sub grade - Prefabricated concrete curb stones 30/15cm, straight and curved, laid in concrete bedding of min. thickness 10cm - Road shoulders.	1 070	m2					0	225	235	232	53	325		
..5.2	R	<b>Concrete Interlocking Tile Paved Area</b> Supply of the material and construction of the concrete interlocking tiles paved area according to typical drawing and specification. Consisting mainly of: - Concrete interlocking tiles, thickness 100mm. Joints have to be filled with sand and the finished surface have to be compacted with a compactor. - Base course 30mm - SD crushed run material layer, thickness 200mm - Crushed run material layer, various thickness, min. 200mm - Sand-gravel 100mm - Geotextile 200g/m2 Including: - Excavation works, compaction of sub grade - Prefabricated concrete curb stones 30/15cm, straight and curved, laid in concrete bedding of min. thickness 10cm - Road shoulders.	1 390	m2					0	0	230	0	0	1 160		
..5.3	R	<b>Gravel Area, 100mm</b> Supply of the material and construction of the gravel areas. Grain size 8/16mm. Thickness 100mm. Including: - Geotextile 200g/m2 - Compaction of sub grade - Prefabricated concrete curb stones 5/20cm (only where gravel area is not adjacent to fence sill or road curb stone), laid in concrete bedding of min. thickness 10cm	4 720	m2					0	1 250	260	420	290	2 500		
..6		<b>FENCE AND GATES</b>														
..6.0		<b>General Remarks</b> All steel fencing material to be hot dip galvanized and PE coated.														
..6.1	R	<b>Fence</b>	556	m1					0	110	105	91	53	197		

Civil works - Line valve stations					Total Price [Euro]		0,00		0,00		0		0		0		0		0	
Item Number	Item Type	Item Description	Total Quantity	Unit	Unit Price Supply [Euro]	Unit Price Installation [Euro]	Total Unit Price [Euro]	Total Price [Euro]	DN Kateřinský potok	LVS Jirkov	LVS Vráskman - Option	LVS Hrušovany	LVS Syrovice	LVS Maimerice						
									quant	price	quant	price	quant	price	quant	price	quant	price	quant	price
		Supply of the materials and construction of a wire mesh pannels fence including posts, foundations according to typical drawing and specification. Total fence height 2.50m above finished ground level. Fence consisting of: - posts - corner posts - intermediate straining posts - wire mesh pannels - razor wire on V-shape extension arms with 2+2 rows of straining wires Including: - Foundations - Levelling concrete, thickness minimum 10cm - Concrete sill between post foundations - Excavation and backfilling works, compaction of excavation surface - Including emergency doors																		
..6.2	R	<b>Entrance Gate, Double Wing, width 6.00m</b> Supply of the material, construction and installation of a double wing entrance gate according to typical drawing and specification. Width 6.00m, gate height 2.50m. The complete gate structure shall be in galvanised steel. Double wing gate consisting of: - Gate frame, height 2.00m with vertical extension arms 0.50m for razor wire on 2 strands of straining wire - 1 bracing for each door wing - Covered with wire mesh pannels - Equipped with locking system Including: - Two gate posts and straining post - Foundations - Levelling concrete, thickness minimum 10cm - Concrete sill between the two post foundations - Excavation and backfilling works	1	Pieces					0	0	0	0	0	1						
..6.3	R	<b>Entrance Gate, Sliding, width 4.00m</b> Supply of the material, construction and installation of a sliding entrance gate according to typical drawing and specification. Width 4.00m, gate height 2.50m. The complete gate structure shall be in galvanised steel. Sliding gate consisting of: - Gate frame, height 2.00m with vertical extension arms 0.50m for razor wire on 2 strands of straining wire - Bracing - Covered with wire mesh pannels - Equipped with locking system Including: - Two gate posts and straining post - Foundations - Levelling concrete, thickness minimum 10cm - Concrete sill between the two post foundations - Excavation and backfilling works	1	Pieces					0	0	1	0	0	0						
..7		<b>OTHER CIVIL WORKS</b>																		
..6.0		<b>General Remarks</b> All other civil works, activities, supplies, removals, storages, permitting, etc. which are not enumerated in the previous civil items. Summe of previous civil items and itemi in this chapter shall cover the complete price offer for all required civil works.																		

Civil works - Line valve stations					Total Price [Euro]		0,00		0,00		0		0		0		0		0	
Item Number	Item Type	Item Description	Total Quantity	Unit	Unit Price Supply [Euro]	Unit Price Installation [Euro]	Total Unit Price [Euro]	Total Price [Euro]	quant	price										
..6.1	R	Other Civil Works - DN Kateřinský potok (Kindly enumerate here)	1	Lump Sum					1											
..6.2	R	Other Civil Works - LVS Jirkov (Kindly enumerate here)	1	Lump Sum							1									
..6.3	R	Other Civil Works - LVS Vrskmaň (Kindly enumerate here)	1	Lump Sum									1							
..6.4	R	Other Civil Works - LVS Hrušovany (Kindly enumerate here)	1	Lump Sum										1						
..6.5	R	Other Civil Works - LVS Sýrovice (Kindly enumerate here)	1	Lump Sum													1			
..6.6	R	Other Civil Works - LVS Malměřice (Kindly enumerate here)	1	Lump Sum															1	

		Mechanical works - Line valve stations	Total Price - Mechanical Works [Euro]				0,00	0,00	0	0	0	0	0	0							
Item Number	Item Type	Item Description	Total Quantity	Unit	Unit Price Supply [Euro]	Unit Price Installation [Euro]	Total Unit Price [Euro]	Total Price [Euro]	DN Kateřinský potok		LVS Jirkov		LVS Vrs kman - Option		LVS Huseovany		LVS Syrovice		LVS Malměřice		
									quant	price	quant	price	quant	price	quant	price	quant	price	quant	price	
..1		<b>Installation of Aboveground Station Piping including Valves</b> Fabrication and installation of complete aboveground station main piping system (conveying the natural gas) and aboveground valves in accordance with Station Piping Arrangements, Station P&I Diagrams and C4G-HPPL-ILF-GENER-STR-SPC-823 "Piping Installation and Fabrication Specification". Fabrication and installation of complete mainline valve by-pass with pipeline vents, aboveground and underground sections, including the pipeline vents in accordance with Station Piping Arrangements. All required works and materials for installation of aboveground valves have to be taken into consideration in the unit rate. Accounting according to lump sum.	5	Lump Sum					0		1		1		1		1		1		1
..2		<b>Installation of Underground Station Piping including Valves</b> Fabrication and installation of complete underground station main piping system (conveying the natural gas) and underground valves in accordance with Station Piping Arrangements, Station P&I Diagrams and C4G-HPPL-ILF-GENER-STR-SPC-823 "Piping Installation and Fabrication Specification". Piping DN1400 including T-pieces DN1400 are part of Pipeline works and shall not be included in here. Welds between ball valve DN1400 and piping DN1400 are part of Pipeline works and shall not be included in here. All other mechanical works related to installation of ball valve DN1400 shall be included in this item. All required works and materials for installation of underground valves have to be taken into consideration in the unit rate. Accounting according to lump sum.	0	Lump Sum					0		0		0		0		0		0		0
..3		<b>Supply of Piping including Valves for Aboveground Installation (&lt;DN 300)</b> Supply of piping material including valves smaller than DN 300 (design pressure 100 barg) for transport of natural gas and aboveground installation in accordance with Station P&I diagrams, C4G-HPPL-ILF-GENER-STR-SPC-809 "Assembling Material < DN 300 - Specification" and C4G-HPPL-ILF-GENER-STR-SPC-810 "Ball Valves < DN 300 - Specification". All piping material required for completion of lines smaller than DN 300 have to be taken into consideration in the unit rate, including the Teflon plates for electric separation of cathodically protected piping from the supporting structures. Accounting according to lump sum.	5	Lump Sum					0		1		1		1		1		1		1
..4		<b>Supply of Piping including Valves for Underground Installation (&lt;DN 300)</b> Supply of piping material including valves smaller than DN 300 (design pressure 100 barg) for transport of natural gas and underground installation in accordance with Station P&I diagrams, C4G-HPPL-ILF-GENER-STR-SPC-809 "Assembling Material < DN 300 - Specification" and C4G-HPPL-ILF-GENER-STR-SPC-810 "Ball Valves < DN 300 - Specification". All piping material required for completion of lines smaller than DN 300 have to be taken into consideration in the unit rate. Accounting according to lump sum.	1	Lump Sum					0		0		0		0		0		0		1
..5		<b>Installation of Scraper Traps</b> Installation of scraper traps delivered by Client in accordance with C4G-HPPL-ILF-GENER-STR-SPC-823 "Piping Installation and Fabrication Specification". All required works and materials for installation have to be taken into consideration in the unit rate. Accounting according to pieces.	2	Pieces					0		0		0		0		0		0		2
..6		<b>Uninstallation of Scraper Trap</b> Uninstallation of existing Scraper Trap, including related piping, supports and other utilities. Transportation and installation of Scraper Trap in LVS Malměřice (TU53S) Accounting according to lump sum.	1	Lump Sum					1		0		0		0		0		0		0
..7		<b>Uninstallation of Induction Bends</b> Removal of existing Induction Bends necessary for connection of newly build piping including excavation works as well as all other works necessary. Cleaning, Preservation and Transport to Stockyard at Louny. Accounting according to lump sum.	1	Lump Sum					1		0		0		0		0		0		0

Mechanical works - Line valve stations			Total Price - Mechanical Works [Euro]				0,00	0,00	0	0	0	0	0	0							
Item Number	Item Type	Item Description	Total Quantity	Unit	Unit Price Supply [Euro]	Unit Price Installation [Euro]	Total Unit Price [Euro]	Total Price [Euro]	DN Kateřinský potok		LVS Jirkov		LVS Vrskman - Option		LVS Hrusovany		LVS Syrovice		LVS Malmerice		
									quant	price	quant	price	quant	price	quant	price	quant	price	quant	price	
..8		Other works related to Mechanical installation such as excavation, bedding, backfilling, compaction, etc.																			
..8.1		Other works related to Mechanical installation for DN Kateřinský potok (Kindly enumerate here)	1	Lump sum					1												
..8.2		Other works related to Mechanical installation for LVS Jirkov (Kindly enumerate here)	1	Lump sum						1											
..8.3		Other works related to Mechanical installation or LVS Vrskman (Kindly enumerate here)	1	Lump sum								1									
..8.4		Other works related to Mechanical installation for LVS Hrusovany (Kindly enumerate here)	1	Lump sum									1								
..8.5		Other works related to Mechanical installation for LVS Syrovice (Kindly enumerate here)	1	Lump sum											1						
..8.6		Other works related to Mechanical installation for LVS Malmerice (Kindly enumerate here)	1	Lump sum																1	

Electrical works - Line valve stations			Total Price [Euro]		0,00	0,00	0	0	0	0	0	0									
Item Number	Item Type	Item Description	Total Quantity	Unit	Unit Price Supply [Euro]	Unit Price Installation [Euro]	Total Unit Price [Euro]	Total Price [Euro]	DN Kateřinský potok		LVS Jirkov		LVS Vrsáňman - Opiton		LVS Hrušovany		LVS Syrovice		LVS Malmerice		
									quant	price	quant	price	quant	price	quant	price	quant	price	quant	price	
..1		<b>Lighting Poles, Fixtures and Junction Boxes</b> Complete supply with all auxiliary and mounting material to mount the poles on the foundations, the lighting fixtures on the poles and to connect the cables. All equipment has to be provided with cable glands.																			
..1.1		Conical steel poles hot dip galvanized for process light 7 m	15	pcs							3		3		2		3				4
..1.2		EX LED lighting fixture 4330 lm	17	pcs							3		3		2		3				6
..1.3		EX-Lighting Pole Fuse Boxes	15	pcs							3		3		2		3				4
..1.4		Conical steel poles hot dip galvanized for street light 7 m	7	pcs									1		1						5
..1.5		Non ATEX LED lighting fixture 3320 lm	7	pcs									1		1						5
..1.6		Non ATEX Lighting Pole Fuse Boxes	7	pcs									1		1						5
..2		<b>Power Cables</b> Complete supply installation and connection.																			
..2.1		NYCY 2 x 2,5/2,5	230	m							30		30		30		30				110
..2.2		NYCY 2 x 4/4	130	m											65		65				
..2.3		NYCY 2 x 6/6	630	m																	630
..2.4		NYCY 3 x 25/25	570	m													570				
..2.5		NYCY 4 x 4/4	1 230	m							100		125		125		125				755
..2.6		NYCY 4 x 6/6	1 230	m							525		50								655
..2.7		NYCY 4 x 70/35	570	m									570								
..2.8		NYCWY 2 x 10/10	100	m									100								
..2.9		NYCWY 4 x 10/10	50	m									50								
..2.10		N2XH-J 3 x 2,5	20	m											10		10				
..2.11		NYCWY 4 x 16/16	10	m																	10
..2.12		CYKY 4 x 10	0	m																	
..2.13		Cable installation and connection material incl. glands, lugs, screws, nuts, conduits, heat shrin tubes etc.	5	Lump sum								1		1		1		1			1
..3		<b>Earthing and Lightning Protection and Potential Equalisation</b>																			
..3.1		Stainless steel strip V4A, 30 x 3.5 mm Complete supply with all auxiliary and mounting material.	1 565	m1							25		260		230		240		170		640
..3.2		Earthing bars - stainless steel V2A, 40 x 6 mm Complete supply with all auxiliary and mounting material.	32	pcs							1		6		5		5		5		10
..3.3		Lightning protection rods 1m length Complete supply with all auxiliary and mounting material.	20	pcs									4		4		4		4		4
..3.4		Lightning protection rods 3m length Complete supply with all auxiliary and mounting material.	5	pcs																	5
..3.5		EX-Isolating spark gaps Complete supply with all auxiliary and mounting material.	3	pcs											1		1		1		
..3.6		Jumper and bonding cables Complete supply with all auxiliary and mounting material.	6	Lump sum							1		1		1		1		1		1
..3.7		Small installation material	6	Lump sum							1		1		1		1		1		1

Electrical works - Line valve stations			Total Price [Euro]				0,00	0,00	0	0	0	0	0	0							
Item Number	Item Type	Item Description	Total Quantity	Unit	Unit Price Supply [Euro]	Unit Price Installation [Euro]	Total Unit Price [Euro]	Total Price [Euro]	DN Kateřinský potok		LVS Jirkov		LVS Vrskman - Option		LVS Hrusovany		LVS Syrovice		LVS Malmerice		
									quant	price	quant	price	quant	price	quant	price	quant	price	quant	price	
		incl. cable lugs, screws, nuts, connectors, clamps, protective conduits etc.																			
..4		<b>Low Voltage Switchboards</b>																			
..4.1		New Low Voltage Switchboard	3	pcs										1				1		1	
		Complete supply with all auxiliary and mounting material to mount the switchboards on the foundations, and to connect the cables.																			
..4.2		Modification of existing LV Switchboards Incl. all equipment required for modification of the switchboards.	4	pcs							1				1			1		1	
..5		<b>Miscellaneous</b>																			
..5.1		Outdoor socket combination	1	set										1							
..5.2		Non ATEX Junction Boxes	1	pcs										1							
..6		<b>Other works related to Electrical installation such as excavation, bedding, backfilling, compaction, etc.</b>																			
..6.1		<i>Other works related to Electrical installation for DN Kateřinský potok</i> (Kindly enumerate here)	1	Lump sum					1												
..6.2		<i>Other works related to Electrical installation for LVS Jirkov</i> (Kindly enumerate here)	1	Lump sum							1										
..6.3		<i>Other works related to Electrical installation for LVS Vrskman</i> (Kindly enumerate here)	1	Lump sum										1							
..6.4		<i>Other works related to Electrical installation for LVS Hrusovany</i> (Kindly enumerate here)	1	Lump sum											1						
..6.5		<i>Other works related to Electrical installation for LVS Syrovice</i> (Kindly enumerate here)	1	Lump sum														1			
..6.6		<i>Other works related to Electrical installation for LVS Malmerice</i> (Kindly enumerate here)	1	Lump sum																	1

Instrumentation and control system works - Line valve stations				Total Price [Euro]		0,00	0,00	0	0	0	0	0	0								
Item Number	Item Type	Item Description	Total Quantity	Unit	Unit Price Supply [Euro]	Unit Price Installation [Euro]	Total Unit Price [Euro]	Total Price [Euro]	DN Kateřinský potok		LVS Jirkov		LVS Vrskman - Option		LVS Hrusovany		LVS Syrovice		LVS Malmerice		
									quant	price	quant	price	quant	price	quant	price	quant	price	quant	price	
..1		<b>Cabinet hardware</b>																			
..1.1		OT16F3C: Switch 16A	1	pcs										1							
..1.2		OTPS40FPN1: Additional 4th pole on the left side	1	pcs										1							
..1.3		OTPS40FPN2: Additional 4th pole on the right side	1	pcs										1							
..1.4		OHBS9: Operating handle	1	pcs										1							
..1.5		OTS40T3: Terminal cover for OT16...40F3C	1	pcs										1							
..1.6		6RSL-GN: MG door contact 6w with EOL 1k/1k and operational gap of 55mm	2	pcs										2							
..1.7		0G1000.00-090: Connector RS485/Profibus, integrated terminator	5	pcs							1			1		1			1		1
..1.8		X20IF1061-1: X20 Profibus DP V1 master interface	4	pcs							1				1				1		1
..1.9		X20AI2438: X20 card 2xAI 4-20 mA, HART	7	pcs							2			4					1		1
..1.10		X20BM11: X20 bus module, 24 V, passthrough internal supply	14	pcs							2			8		1			1		2
..1.11		X20TB12: X20 terminal	14	pcs							2			8		1			1		2
..1.12		X20DI6373: X20 card 6xDI, 24 V DC, sink/source	6	pcs										3		1			1		1
..1.13		X20CP1586: X20 CPU Atom 1,6GHz, 512 MB DRAM	1	pcs										1							
..1.14		X20IF1061: X20 Profibus DP V1 master interface	1	pcs										1							
..1.15		X20DO9321: X20 card 12xDO, 24 V DC, sink, 0,5 A	1	pcs										1							
..1.16		4PP320.1043-31: PowerPanel PP320 10.4", touch, Automation Runtime	1	pcs										1							
..1.17		5CFCRD.1024-04: Compact Flash 1GB	1	pcs										1							
..1.18		LTN-10C-3N: 4-pole circuit breaker 16A, char. C, 10kA	2	pcs										2							
..1.19		LPN-DC-25C-2: 2-pole DC circuit breaker 25A, char. C, 10kA	1	pcs										1							
..1.20		PS-LP-110S: Auxiliary contact for LPN, 1Z 1R	1	pcs										1							
..1.21		LTN-6C-1: 1-pole circuit breaker 6A, char. C, 10kA	2	pcs										2							
..1.22		LTN-4C-1: 1-pole circuit breaker 4A, char. C, 10kA	1	pcs										1							
..1.23		LTN-1C-3: 1-pole circuit breaker 1A, char. C, 10kA	1	pcs										1							
..1.24		LTN-10C-1: 1-pole circuit breaker 10A, char. C, 10kA	1	pcs										1							
..1.25		LTN-2C-1: 1-pole circuit breaker 2A, char. C, 10kA	1	pcs										1							
..1.26		LPN-10C-1: 1-pole circuit breaker 10A, char. C, 10kA	1	pcs										1							
..1.27		LC-X12120P: Lead accumulator Panasonic LC-X12120P 12V 120Ah	2	pcs										2							
..1.28		PLC-RSP-24DC/21AU: relay, 24Vdc, DIN, 1P, AgSnO	17	pcs										5		2			2		6
..1.29		PT 1X2+F-BE: Base module for PT	5	pcs										1		1			1		1
..1.30		PT 3-PB-ST: Overvoltage protection INTERBUS/PROFIBUS	5	pcs										1		1			1		1
..1.31		PT 2X1-24DC-ST: Overvoltage protection for 2x1 conductor	12	pcs										2		2			2		6
..1.32		PT 2X1-BE: Base for overvoltage protection	12	pcs										2		2			2		6
..1.33		PT 4-24DC-ST: Overvoltage protection for 4 conductors / 2A	6	pcs										1		1			1		3
..1.34		PT 4-BE: Base for overvoltage protection	6	pcs										1		1			1		3
..1.35		PT 1X2-24DC-ST: Overvoltage protection for 1x2 conductor (analog)	15	pcs										4		4			4		3
..1.36		PT 1X2-BE: Base for overvoltage protection	16	pcs										4		4			4		4
..1.37		ST 2.5: Spring-cage feed-through terminal, <4 mm²	24	pcs										1		18			1		3
..1.38		ST 4-HESILED 24 (5x20mm): Fused spring-cage terminal, 24V, <6 mm²	30	pcs										3		12			3		9
..1.39		STTBS 4-MT: 2-tier spring-cage feed-through terminal, <6 mm², upper tier disconnectable	21	pcs										4		5			4		4
..1.40		STTB 2.5: 2-tier spring-cage feed-through terminal, <4 mm²	30	pcs										5		2			5		13
..1.41		PT 2X2-24DC-ST: Overvoltage protection for 2x2 conductors	1	pcs																	1
..1.42		FL SWITCH SFNB 5TX: SWITCH, 5 ports TP-RJ45, 10/100MBit, 24Vdc	1	pcs												1					
..1.43		QUINT-ORING/24DC/2X10/1X20: diode block 24V DC	1	pcs												1					
..1.44		QUINT-PS 24V DC/10 A: Switching power supply 230 V AC / 24V DC, 10A	2	pcs												2					

Instrumentation and control system works - Line valve stations				Total Price [Euro]		0,00	0,00	0	0	0	0	0	0									
Item Number	Item Type	Item Description	Total Quantity	Unit	Unit Price Supply [Euro]	Unit Price Installation [Euro]	Total Unit Price [Euro]	Total Price [Euro]	DN Kateřinský potok		LVS Jirkov		LVS Vrskman - Option		LVS Hrusovany		LVS Syrovice		LVS Malmerice			
									quant	price	quant	price	quant	price	quant	price	quant	price	quant	price		
..1.45		QUINT-UPS/ 24DC/ 24DC/ 20:	1	pcs										1								
..1.46		EMD-BL-PH-480-PT: Line voltage sensing relay	1	pcs										1								
..1.47		PLC-RSP-24DC/21-21AU: relay, 24dc, DIN, 2P, AgSnO	1	pcs										1								
..1.48		PT-IQ-PTB-PT: Overvoltage protection driver with signalization	1	pcs										1								
..1.49		ST 10: Spring-cage feed-through terminal, <16 mm²	2	pcs										2								
..1.50		ST 2,5 BU: Spring-cage feed-through terminal, <4 mm²	7	pcs										7								
..1.51		ST 2,5-PE: Spring-cage feed-through terminal, <4 mm²	3	pcs										3								
..1.52		PT-IQ-2X2-24DC-PT: Overvoltage protection for 2x 2wire signal	3	pcs										3								
..1.53		PT-IQ-4X1-24DC-PT: Overvoltage protection for 4 conductors	2	pcs										2								
..1.54		VAL-SEC-T2-3S-350-FM: Overvoltage protection of type 3	1	pcs										1								
..1.55		SZ.4127010: Door contact without cable, NO+NC	0	pcs																		
..1.56		SK.3105370: SK Heater unit, 150W	1	pcs										1								
..1.57		CS 9774.405: Outdoor cabinet CS Toptec	1	pcs										1								
..1.58		CS 9765.072: Concrete base under CS Toptec	1	pcs										1								
..1.59		CS 9765.096: Mounting plate for CS Toptec	1	pcs										1								
..1.60		SZ 4138.150: Standart lighting w. 452 mm, socket, door contact, 230 V	1	pcs										1								
..1.61		SK 3238.100: Fan and filter unit, 55 m³/h, 230 V	1	pcs										1								
..1.62		SK 3238.200: Filter mat 148,5x148,5 mm	1	pcs										1								
..1.63		SK 3110.000: Thermostat, +5 to +60 °C, 230-24V/AC, 60-24 V/DC	1	pcs										1								
..1.64		SK 3118.000: Hygrostat, 50 to 100 % RH, 230-24V/AC, 60-24 V/DC	1	pcs										1								
..1.65		SZ 4127.010: Door contact	1	pcs										1								
..1.66		NS 500: Temperature sensor, 4-20 mA, -30 ... +60 °C	1	pcs										1								
..2		<b>Instrumentation</b>																				
..2.1		Pressure transmitter as per document "Instrumentation datasheets"	20	pcs										4		4		4		4		4
..2.2		Impulse piping	40	m										8		8		8		8		8
..2.3		Support for pressure transmitter mounting	20	pcs										4		4		4		4		4
..2.4		Pressure gauge as per document "Instrumentation datasheets"	44	pcs										6		6		6		6		20
..3		<b>Cables</b>																				
..3.1		RE-2Y(St)Yv 1x2x1,3 BK	1 586	m										630		100		170		210		476
..3.2		UNITRONIC BUS Yv L2/FIP	491	m										170		45		55		82		139
..3.3		ÖLFLEX CLASSIC 110 CY BK (4G1,5)	404	m										165		22		45		60		112
..3.4		ÖLFLEX CLASSIC 110 CY BK (5X1,5)	404	m										165		22		45		60		112
..3.5		ÖLFLEX CLASSIC 100 (2X0,5)	17	m										4		1		4		4		4
..3.6		RE-2Y(St)Yv 2x2x1,3 BK	238	m																		238
..3.7		RE-2Y(St)Yv 4x2x1,3 BK	238	m																		238
..3.8		ÖLFLEX CLASSIC 100 (3G1)	9	m																		9
..3.9		UNITRONIC LAN S-FTP CAT.5e	4	m																		4
..3.10		IFS-OPEN-END-DATACABLE	1	pcs																		1
..3.11		ÖLFLEX CLASSIC 110 (2x0,5)	12	m																		12
..4		<b>Cable routes</b>																				
..4.1		Roxtec GH 3x1 GALV with accessories	3	pcs										1				1		1		
..5		<b>PLC+HMI SW</b>																				
..5.1		New PLC SW	1	Lump sum																		1

Instrumentation and control system works - Line valve stations			Total Price [Euro]				0,00	0,00	0	0	0	0	0	0							
Item Number	Item Type	Item Description	Total Quantity	Unit	Unit Price Supply [Euro]	Unit Price Installation [Euro]	Total Unit Price [Euro]	Total Price [Euro]	DN Kateřinský potok		LVS Jirkov		LVS Vrskman - Option		LVS Hrusovany		LVS Syrovice		LVS Malmerice		
									quant	price	quant	price	quant	price	quant	price	quant	price	quant	price	
..5.2		New HMI SW	1	Lump sum									1								
..5.3		Implementation of new IEC60870-5-104 communication	1	Lump sum									1								
..5.4		Licensing of IEC60870-5-104 driver	1	pcs									1								
..5.5		PLC SW update	5	Lump sum							1		1		1		1		1		
..5.6		HMI SW update	5	Lump sum							1		1		1		1		1		
..5.7		Extension of IEC60870-5-104 communication	5	Lump sum							1		1		1		1		1		
..6		<b>Other works related to I&amp;C installation such as update of current PLC SW, update of current HMI SW, extension of IEC60870-5-104 communication, etc.</b>																			
..6.1		<i>Other works related to I&amp;C installation for DN Kateřinský potok</i> (Kindly enumerate here)	1	Lump sum					1												
..6.2		<i>Other works related to I&amp;C installation for LVS Jirkov</i> (Kindly enumerate here)	1	Lump sum							1										
..6.3		<i>Other works related to I&amp;C installation for LVS Vrskman</i> (Kindly enumerate here)	1	Lump sum									1								
..6.4		<i>Other works related to I&amp;C installation for LVS Hrusovany</i> (Kindly enumerate here)	1	Lump sum										1							
..6.5		<i>Other works related to I&amp;C installation for LVS Syrovice</i> (Kindly enumerate here)	1	Lump sum												1					
..6.6		<i>Other works related to I&amp;C installation for LVS Malmerice</i> (Kindly enumerate here)	1	Lump sum																1	

		Telecommunication system works - Line valve stations				Total Price [Euro]		0,00	0,00	0	0	0	0	0	0						
Item Number	Item Type	Item Description	Total Quantity	Unit	Unit Price Supply [Euro]	Unit Price Installation [Euro]	Total Unit Price [Euro]	Total Price [Euro]	DN Kateřinský potok		LVS Jirkov		LVS Vršman - Option		LVS Hrusovany		LVS Syrovice		LVS Malmerice		
									quant	price	quant	price	quant	price	quant	price	quant	price	quant	price	
		<b>FOC Conduits</b>																			
..1.1		HDPE cable duct 40/33 (Dura-Line) white	700	m										700							
..1.2		HDPE cable duct 40/33 (Dura-Line) green	700	m										700							
..1.3		HDPE cable duct 40/33 (Dura-Line) blue	150	m					50					100							
..1.4		HDPE cable duct 40/33 (Dura-Line) red	100	m										100							
..1.5		HDPE cable microduct 14/10 (Dura-Line)	780	m							230			100		150		150			250
..1.6		Copper conductor 2x PVC ins.+ sheet NYY 6	700	m										700							
..1.7		Pipe couplings PLASSON 40	2	pc										2							
..1.8		Pipe end-plug PLASSON 40	11	pc					3					8							
..1.9		Underground marker 3M 1255	2	pc					1					1							
..1.10		NYY cable termination socket (Kan-servis)	5	pc					1		1			2		1					
..1.11		Corrugated pipe MONOFLEX 1420HFPP	225	m					20		30			100		25		25			25
..1.12		Corrugated pipe KOPOFLEX 110	0	m																	
..1.13		FO cable reserve holder	11	pc					1		1			3		2		2			2
..1.14		Sleeve module Brattberg 60/40	9	pc					3					6							
..1.15		Sleeve module Brattberg 20/9	4	pc					1					3							
..1.16		Sleeve Brattberg RGP 200	1	pc					1												
..1.17		Sleeve module Brattberg 20/0	8	pc					8												
..1.18		Sleeve module Roxtec RM30	4	pc																	4
..1.19		Sleeve module Roxtec RM20	6	pc																	6
..1.20		Microduct gas-block 14/5	12	pc							2					4		4			2
..1.21		Anti-corrosion cable tray NIXKZN 20X40	12	m							2					4		4			2
..1.22		Microduct end plug 14	4	pc														2			2
..1.23		HDPE duct termination wall construction	0	pc																	
..1.24		Surge arrester (eg. Saltek FLP-B+C MAXI V/1)	2	pc										1		1					
..1.25		Warnign sign "POZOR-NEBEZPEČÍ ÚRAZU INDUKOVANÝM NAPĚTÍM"	2	pc										1		1					
..1.26		Small installation material	6	pc					1		1			1		1		1			1
..2		<b>Other works related to Telecommunication system installation such as excavation, bedding, backfilling, compaction, etc.</b>																			
..2.1		Other works related to Telecommunication system for DN Kateřinský potok	1	Lump sum					1												
		(Kindly enumerate here)																			
..2.2		Other works related to Telecommunication system for LVS Jirkov	1	Lump sum							1										
		(Kindly enumerate here)																			
..2.3		Other works related to Telecommunication system for LVS Vršman	1	Lump sum										1							
		(Kindly enumerate here)																			
..2.4		Other works related to Telecommunication system for LVS Hrusovany	1	Lump sum												1					
		(Kindly enumerate here)																			
..2.5		Other works related to Telecommunication system for LVS Syrovice	1	Lump sum														1			
		(Kindly enumerate here)																			
..2.6		Other works related to Telecommunication system for LVS Malmerice	1	Lump sum																	1
		(Kindly enumerate here)																			

Item Number	Item Type	Item Description	Total Quantity	Unit	Unit Price Supply [Euro]	Unit Price Installation [Euro]	Total Unit Price [Euro]	Total Price [Euro]	DN Kateřinský potok	LVS Jirkov	LVS Vrskmán - Option	LVS Hrušovany	LVS Syrovice	LVS Malmerice

Integrated security system - Line valve stations				Total Price [Euro]		0,00		0,00		0		0		0		0		0			
Item Number	Item Type	Item Description	Total Quantity	Unit	Unit Price Supply [Euro]	Unit Price Installation [Euro]	Total Unit Price [Euro]	Total Price [Euro]	DN Kateřinský potok		LVS Jirkov		LVS Vrskman - Option		LVS Hrusovany		LVS Syrovce		LVS Maimerice		
									quant	price	quant	price	quant	price	quant	price	quant	price	quant	price	
..1		<b>PTZS - system Galaxy GD 520</b>																			
..1.1		Control unit GD520	3	pcs							0		1		1		1				0
..1.2		module UDS1100	3	pcs							0		1		1		1				0
..1.3		module E080 - ethernet module	3	pcs							0		1		1		1				0
..1.4		Power supply unit 13,8 V / 5A in box	12	pcs							1		2		4		4				1
..1.5		Accu 12V/17Ah	15	pcs							1		3		5		5				1
..1.6		Expander G8	17	pcs							3		1		5		5				3
..1.7		Module MAXM2000	7	pcs							1		1		2		2				1
..1.8		MK7 keyboard	3	pcs							0		1		1		1				0
..1.9		ARS6311-RX contactless card reader	10	pcs							1		2		3		3				1
..1.10		CX502AM PIR detector, 15m range, antimasking	3	pcs							1		0		1		1				0
..1.11		dual detector outdoor mounted SDI 77XL2	0	pcs							0		0		0		0				0
..1.12		mounting kit PH-4 for detector's installation on the column	0	pcs							0		0		0		0				0
..1.13		optical fire detector connected to PZTS	0	pcs							0		0		0		0				0
..1.14		MAS303 magnet contact 4-wires	14	pcs							1		2		5		5				1
..1.15		EMPS50 magnet contact for gates, 4-wires with working space 55 mm	0	pcs							0		0		0		0				0
..1.16		Relay FINDER 62.33.9.012.0040 incl. base on DIN bar	5	pcs							1		1		1		1				1
..1.17		electromechanical door lock	7	pcs							1		1		2		2				1
..1.18		Maxipol outdoor rack with cover 1000x750x312 incl. pedestal 1000x750x300, base frame, mounting plate, door lock, Schrack incl. accessories (DIN bar, cable gland, heater,....)	3	pcs							0		1		1		1				0
..1.19		switchboard for power supply of Maxipol, 24 modules incl. accessories (socket, circuit breaker, switch,...)	4	pcs							0		2		1		1				0
..1.20		nontypical column for card reader incl. anchoring to a concrete base	6	pcs							0		2		2		2				0
..1.21		Signal lamp (LED) - red	3	pcs							0		1		1		1				0
..1.22		Signal lamp (LED) - green	3	pcs							0		1		1		1				0
..1.23		Signal piezo module	3	pcs							0		1		1		1				0
..1.24		panel button - round	3	pcs							0		1		1		1				0
..1.25		SL3p column, l=3m incl. anchoring to a concrete base	0	pcs							0		0		0		0				0
..1.26		cable UTP cat. 6 - RS485	125	m							20		15		40		40				10
..1.27		cable TCEPKPFL 5XN0,8 - RS485, card readers, outdoor detectors,...	845	m							0		105		230		220				290
..1.28		cable JYSTY 2x2x0,8 - magnet contact,...	140	m							20		10		50		50				10
..1.29		cable JYSTY 3x2x0,8 - PIR detectors, fire detectors,...	90	m							30		0		30		30				0
..1.30		cable UTP cat. 6 - connection between systems, card readers inside KMB	195	m							30		20		55		55				35
..1.31		cable CYSY 2x1,5 - power supply of door locks	390	m							65		70		85		85				85
..1.32		cable CYKY-J 3x2,5 - power supply of components in KMB	100	m							10		10		40		40				0
..1.33		cable CYKY-J 3x6 - power supply of Maxipol	345	m							0		45		40		40				220
..1.34		conduit fixed, UV, 25mm 320N incl. accessories	190	m							40		0		60		60				30
..1.35		conduit flexible, UV, 25mm 320N incl. accessories	90	m							20		20		20		20				10
..1.36		conduit KOPOFLEX 40mm	195	m							30		40		45		55				25
..1.37		programming of PZTS system	5	Lump sum							1		1		1		1				1
..1.38		dismantling of existing PZTS	1	Lump sum							1		0		0		0				0
..1.39		dismantling of existing barriers Absolute	2	Lump sum							1		0		0		0				1
..2		<b>PTZS - Peridect</b>																			
..2.1		Box for main units of PERIDECT 400x500x200 mm	4	pcs							1		0		1		1				1
..2.2		PERIDECT - CUP+ control unit	5	pcs							1		1		1		1				1
..2.3		PERIDECT - LCP+ line controller	10	pcs							2		2		2		2				2
..2.4		PERIDECT - IOP+ /RS485 output module, 16 rele	5	pcs							1		1		1		1				1

Integrated security system - Line valve stations				Total Price [Euro]				0,00	0,00	0	0	0	0	0	0						
Item Number	Item Type	Item Description	Total Quantity	Unit	Unit Price Supply [Euro]	Unit Price Installation [Euro]	Total Unit Price [Euro]	Total Price [Euro]	DN Kateřinský potok		LVS Jirkov		LVS Vrskman - Option		LVS Hrusovany		LVS Syrovce		LVS Maimerice		
									quant	price	quant	price	quant	price	quant	price	quant	price	quant	price	
..2.5		PERIDECT - IOP+/EXP extension module, 16 relé	2	pcs							1	0	0	0	0	0	0	0	1		
..2.6		PERIDECT - DSP+ senzor, IP 65	411	pcs							149	39	53	46	124						
..2.7		PERIDECT - LIP+ line input module, IP 65	12	pcs							2	2	2	2	4						
..2.8		PERIDECT - LPP+ surge protection of the data line, IP65	10	pcs							2	2	2	2	2						
..2.9		PERIDECT - LSP+ line separator, IP65	10	pcs							2	2	2	2	2						
..2.10		Configuration setup program for PERIDECT+ (czech and english version)	5	Lump sum							1	1	1	1	1						
..2.11		PERIDECT - programming cable	5	pcs							1	1	1	1	1						
..2.12		PIR detector, outdoor mounted	4	pcs							0	1	1	1	1						
..2.13		EMPS50 magnet contact for gates, 4-wires with working space 55 mm	8	pcs							0	2	2	2	2						
..2.14		PERIDECT LAM flexo / 250 m, data cable for connection of PERIDECT senzor	1 688	Lump sum							590	147	303	208	440						
..2.15		RT-330UV, binding tapes - packing 100 pcs	46	Lump sum							18	4	6	5	13						
..2.16		cable TCEPKFLE 5XN0,8 - outdoor detectors	369	m							30	55	50	45	189						
..2.17		cable JCXFE-R 2x2x0,8	30	m							0	10	10	10	0						
..2.18		cable JCXFE-R 10x2x0,8	90	m							30	10	10	10	30						
..2.19		cable CYKY-J 3x2,5 - power supply of components in KMB	80	m							10	10	20	20	20						
..2.20		conduit fixed, UV, 25mm 320N incl. accessories	110	m							20	0	30	30	30						
..2.21		conduit KOPOFLEX 40mm	105	m							15	20	15	30	25						
..2.22		Programming and linking outputs to PZTS	5	Lump sum							1	1	1	1	1						
..3		<b>CCTV system</b>																			
..3.1		AXIS Q6115 - E PZTS camera	7	pcs							1	1	2	2	1						
..3.2		AXIS T91A67 -Pole Bracket	7	pcs							1	1	2	2	1						
..3.3		Maxipol outdoor rack with cover 1000x750x312 incl. pedestal 1000x750x300, base frame, mounting plate, door lock, Schrack incl. accessories (DIN bar, cable gland, heater,....)	6	pcs							1	0	2	2	1						
..3.4		switchboard for power supply of Maxipol, 24 modules incl. accessories (socket, circuit breaker, switch,...)	6	pcs							1	0	2	2	1						
..3.5		DIN Fast Ethernet Media Converter, Mini Type,non-programable, 1x 10/100TX (RJ-45) - 1x 100FX (SFP), LFP function, -40 ~70C	6	pcs							1	0	2	2	1						
..3.6		SFP WDM transceiver 155Mbps, 100BASE-BX10, SM, 10km, TX 1310nm, LC simp., - 40 až 75°C, 3,3V, Cisco compatible, DMI	6	pcs							1	0	2	2	1						
..3.7		FO patchpanel for 4 SC couplings	6	pcs							1	0	2	2	1						
..3.8		FO patch cable MM, 1 m	12	pcs							2	0	4	4	2						
..3.9		Patch cable Cat 6 UTP PVC 10m	14	pcs							2	2	4	4	2						
..3.10		pole for cameras KAM11, length 11000 mm, incl.earthing	7	pcs							1	1	2	2	1						
..3.11		prefabricated base for KAM 11	7	pcs							1	1	2	2	1						
..3.12		cable FO 4 fibres, MM, 62/125, OM2, outdoor mounted	830	m							250	0	170	190	220						
..3.13		cable UTP cat. 6	160	m							20	45	38	38	19						
..3.14		cable CYKY-J 3x2,5	15	m							3	3	3	3	3						
..3.15		cable CYKY-J 3x6 - power supply of Maxipol	830	m							250	0	170	190	220						
..3.16		conduit fixed, UV, 25mm 320N incl. accessories	324	pcs							55	19	96	96	58						
..3.17		conduit flexible, UV, 25mm 320N incl. accessories	40	pcs							10	0	10	10	10						
..3.18		conduit KOPOFLEX 40mm	70	m							15	10	15	15	15						
..3.19		box for cable's connection, IP65, 100x100 mm	7	ks							1	1	2	2	1						
..3.20		programming of CCTV system	5	Lump sum							1	1	1	1	1						
..3.21		dismantling an existing cameras incl. cabling	0	Lump sum							0	0	0	0	0						
..3.22		dismantling of concrete column EVP 12/3	0	Lump sum							0	0	0	0	0						
..4		<b>VAS System</b>																			

Integrated security system - Line valve stations				Total Price [Euro]		0,00	0,00	0	0	0	0	0	0								
Item Number	Item Type	Item Description	Total Quantity	Unit	Unit Price Supply [Euro]	Unit Price Installation [Euro]	Total Unit Price [Euro]	Total Price [Euro]	DN Kateřinský potok		LVS Jirkov		LVS Vrskman - Option		LVS Hrusovany		LVS Syrovice		LVS Malmerice		
									quant	price	quant	price	quant	price	quant	price	quant	price	quant	price	
..4.1		Plena amplifier , 1x120W, PLE-1MA120EU	1	pcs						0		1		0		0		0		0	
..4.2		Plena amplifier , 2x240W, PLE-2MA240EU	4	pcs						0		0		1		1		1		2	
..4.3		2N Ateus lift communicator	3	pcs						0		1		1		1		1		0	
..4.4		VG204 - telephone adapter	3	pcs						0		1		1		1		1		0	
..4.5		Ateus Helios, base unit, 1 button	3	pcs						0		1		1		1		1		0	
..4.6		patch cable UTP cat. 6, 5 m	3	pcs						0		1		1		1		1		0	
..4.7		jumper cables	3	Lump sum						0		1		1		1		1		0	
..4.8		horn loudspeaker 30 W, IP 65, LBC 3493/12	13	pcs						2		2		4		4		4		1	
..4.9		adapter for loudspeaker installation on the pole	13	pcs						2		2		4		4		4		1	
..4.10		cable TCEPKPFLE 5XN 0,8	130	m						0		55		40		35		35		0	
..4.11		cable CYKY-O 3x4	627	m						160		35		224		208		208		0	
..4.12		cable CYKY-O 3x6	220	m						0		0		0		0		220		0	
..4.13		conduit fixed, UV, 25mm 320N incl. accessories	209	m						35		19		58		58		58		39	
..4.14		box for cable's connection, IP65, 100x100 mm	5	ks						0		1		2		2		2		0	
..4.15		conduit KOPOFLEX 40mm	75	m						15		10		20		15		15		15	
..4.16		programming of VAS system	5	Lump sum						1		1		1		1		1		1	
..5		<b>Data rack for all systems</b>																			
..5.1		19" rack standalone 600x600, 45U, outdoor mounted, Schrack incl. accessories	1	pcs						0		1		0		0		0		0	
..5.2		19" rack standalone 600x600, 45U, glass door incl. accessories	2	pcs						0		0		1		1		1		0	
..5.3		socket 1x230V	6	pcs						0		2		2		2		2		0	
..5.4		19" distribution panel 1U, 6x230V with power switch, 3m	6	pcs						0		2		2		2		2		0	
..5.5		19" shelf	7	pcs						0		2		2		2		2		1	
..5.6		1U organizer horizontal	22	pcs						2		5		5		5		5		5	
..5.7		45U organizer vertical	3	pcs						0		1		1		1		1		0	
..5.8		patch pannel 24 ports, cat 6, with keystones	5	pcs						1		1		1		1		1		1	
..5.9		FO patch pannel 12 ports, MM duplex	4	pcs						1		0		1		1		1		1	
..6		<b>Other works related to Integrated security system installations such as excavation, bedding, backfilling, compaction, auxiliary installation material, demolitions, supporting structures, etc.</b>																			
..6.1		Other works related to Integrated security system installation for LVS Jirkov (Kindly enumerate here)	1	Lump sum							1										
..6.2		Other works related to Integrated security system installation for LVS Vrskman (Kindly enumerate here)	1	Lump sum									1								
..6.3		Other works related to Integrated security system installation for LVS Hrusovany (Kindly enumerate here)	1	Lump sum										1							
..6.4		Other works related to Integrated security system installation for LVS Syrovice (Kindly enumerate here)	1	Lump sum														1			
..6.5		Other works related to Integrated security system installation for LVS Malmerice (Kindly enumerate here)	1	Lump sum																	1

Cathodic protection stations					Total Price [Euro]		0,00	0,00	0	0		
Item Number	Item Type	Item Description	Total Quantity	Unit	Unit Price Supply [Euro]	Unit Price Installation [Euro]	Total Unit Price [Euro]	Total Price [Euro]	CPS Jirkov		CPS Malměnice	
									quant	price	quant	price
..1		<b>Cathodic protection system installation</b>										
..1.1		Measuring electrode V&C	3	pc					1		2	
..1.2		Steel measuring coupon 10 cm2	3	pc					1		2	
..1.3		Mounting foam	3	pc					1		2	
..1.4		Cable XLPE 1x10 RM/16	140	m					20		120	
..1.5		Cable Cu 750 V : CYKY-J 4x6	260	m					260			
..1.6		Cable Cu 750 V : CYKY-J 4x10	370	m					150		220	
..1.7		Cable Cu 750 V : CYKY-O 2x2,5	119	m							119	
..1.8		Cable Cu 750 V : CYKY-O 2x6	60	m							60	
..1.9		Cable Cu 750 V : CYKY-O 3x2,5	20	m							20	
..1.10		Cathodic protection Protogol (cartridge 200 ml, 1-2 pc/1 place)	23	pc					14		9	
..1.11		Connection box	5	pc					2		3	
..1.12		Terminal block	5	pc					2		3	
..1.13		Inhibitor Zerust	5	pc					2		3	
..1.14		Tube KF 09075 Koppoflex 75	270	m					270			
..1.15		Carbon - coke ground (based on Wenner's results)	6	t					6			
..1.16		Horizontal groundbed	125	m					125			
..1.17		Cable clutch 1 kV	0	pc								
..1.18		Kiosk CPS	0	pc								
..1.19		Tube KF 09040 40/32 Koppoflex	599	m							599	
..1.20		Clutch SPLICE ANODAFLEX	6	pc							6	
..1.21		Flexible anode ANODAFLEX 1500	260	m							260	
..1.22		Cable HALAR AWG 6	60	m							60	
..1.23		Surge arrester TC100	2	pc							2	
..2		<b>Other works related to Cathodic protection system installation such as excavation, bedding, backfilling, compaction, etc.</b>										
..2.1		<i>Other works related to Cathodic protection system for CPS Jirkov</i>	1	Lump sum					1			
		(Kindly enumerate here)										

Cathodic protection stations					Total Price [Euro]		0,00	0,00	0	0		
Item Number	Item Type	Item Description	Total Quantity	Unit	Unit Price Supply [Euro]	Unit Price Installation [Euro]	Total Unit Price [Euro]	Total Price [Euro]	CPS Jirkov		CPS Malměřice	
									quant	price	quant	price
..2.2		Other works related to Cathodic protection system for CPS Malměřice	1	Lump sum							1	
		(Kindly enumerate here)										

Item Number	Item Type	Item Description	Total Quantity	Unit	Total Price [Euro]		0,00		0,00		0		0		0		0		0				
					Unit Price Supply [Euro]	Unit Price Installation [Euro]	Total Unit Price [Euro]	Total Price [Euro]	Pipe yard - Hora Svaté Kateřiny	Pipe yard - Vrskmaň	Pipe yard - Nezabylice	Pipe yard - Chudeřín	Pipe yard - Vrutek I (Podborany)										
					quant	price	quant	price	quant	price	quant	price	quant	price	quant	price	quant	price	quant	price	quant	price	
.1		<b>Paved area entrance S1</b> includes but is not limited to topsoil stripping, earthworks, sub grade compaction, placement of woven geotextie, sand-gravel 10 cm and road panel	517	m2							88	132	84	147	66								
.2		<b>Paved area traffic and pipe storage S2 + S3</b> includes but is not limited to topsoil stripping, earthworks, sub grade compaction, placement of woven geotextie, SD crusher-run material 15 cm and 2x compacted	109 816	m2							14 037	25 767	24 186	25 228	20 598								
.3		<b>Fencing and gate, delivery and installation</b> includes but is not limited to earthworks, concrete footing, intermediate posts a galvanized chain link mesh height 1,8 m	3 170	m							544	733	707	636	550								
.4		<b>Culvert - reinforced concrete pipe DN 400</b> pipe under paved area entrance S1 (ditch by the road)	63	m							22	16	0	25	0								
.5		<b>Security before pipe yard operation</b> Lump sum for one month of security service. Expected duration of service approximately one month. Price for more/less months will be recalculated based on monthly lump sum. Service includes temporary power supply, water supply, toilets, etc. for needs of security team.																					
.5.1		<b>Security for PY - Hora Svaté Kateřiny</b>	12	Lump sum/ month							12												
.5.2		<b>Security for PY - Vrskmaň</b>	12	Lump sum/ month								12											
.5.3		<b>Security for PY - Nezabylice</b>	12	Lump sum/ month									12										
.5.4		<b>Security for PY - Chudeřín</b>	12	Lump sum/ month										12									
.5.5		<b>Security for PY - Vrutek I (Podborany)</b>	12	Lump sum/ month																12			
.6		<b>Security during pipe yard operation</b> Lump sum for one month of security service. Expected duration of service approximately twelve months. Price for more/less months will be recalculated based on monthly lump sum. Service includes temporary power supply, water supply, toilets, etc. for needs of security team.																					
.6.1		<b>Security for PY - Hora Svaté Kateřiny</b>	12	Lump sum/ month							12												
.6.2		<b>Security for PY - Vrskmaň</b>	12	Lump sum/ month								12											
.6.3		<b>Security for PY - Nezabylice</b>	12	Lump sum/ month									12										
.6.4		<b>Security for PY - Chudeřín</b>	12	Lump sum/ month										12									
.6.5		<b>Security for PY - Vrutek I (Podborany)</b>	12	Lump sum/ month																12			
.7		<b>Reinstatement of pipe yard</b> Incl. landscaping to restore to the original condition, complete technical and biological reinstatement, top soil spreading and seeding, etc.																					
.7.1		<b>Reinstatement of PY - Hora Svaté Kateřiny</b>	1	Lump sum							1												
.7.2		<b>Reinstatement of PY - Vrskmaň</b>	1	Lump sum								1											
.7.3		<b>Reinstatement of PY - Nezabylice</b>	1	Lump sum									1										
.7.4		<b>Reinstatement of PY - Chudeřín</b>	1	Lump sum										1									
.7.5		<b>Reinstatement of PY - Vrutek I (Podborany)</b>	1	Lump sum																1			
.8		<b>Other works related to construction of pipe yards not enumerated above.</b>																					
.8.1		Other works related to Integrated security system installation for PY Hora Svaté Kateřiny (Kindly enumerate here)	1	Lump sum							1												
.8.2		Other works related to Integrated security system installation for PY - Vrskmaň (Kindly enumerate here)	1	Lump sum								1											
.8.3		Other works related to Integrated security system installation for PY - Nezabylice (Kindly enumerate here)	1	Lump sum									1										
.8.4		Other works related to Integrated security system installation for PY - Chudeřín (Kindly enumerate here)	1	Lump sum										1									
.8.5		Other works related to Integrated security system installation for PY - Vrutek I (Podborany) (Kindly enumerate here)	1	Lump sum																1			

FOC installation - Option			Total Price [Euro]		0,00	0,00	0	0	0	0	0	0	0	0									
Item Number	Item Type	Item Description	Total Quantity	Unit	Unit Price Supply [Euro]	Unit Price Installation [Euro]	Total Unit Price [Euro]	Total Price [Euro]	DN Katerinsky potok		LVS Jirkov		LVS Vrskman - Option		LVS Hrusovany		LVS Syrovice		LVS Malmerice		LOT 1		
									quant	price	quant	price	quant	price	quant	price	quant	price	quant	price	quant	price	
..1		<b>Fibre Optic Cables</b>																					
..1.1		FO cable OFS 24F AllWave+	1 697	m							300		697		200			200			300		
..1.2		FO cable OFS AT-X4A12TT-048-012/036-3N	67 211	m																		67 211	
..2		<b>Optical Distribution Frames (ODF)</b>																					
..2.1		Optical distribution frame LSC1U-072/12 incl. all accessories, adapters and pigtails	6	pc					1		1		1		1			1			1		
..2.2		Optical distribution frame LSC2U-024/5 incl. all accessories, adapters and pigtails	1	pc								1											
..2.3		Optical distribution frame ORMP 1U incl. all accessories, adapters and pigtails	5	pc							1				2			1			1		
..2.4		Optical distribution box BUDI-1S incl. all accessories, adapters and pigtails	7	pc							1		1		2			2			1		
..2.5		Optical distribution box ORU 2 incl. accessories and BUDI-1S mount	6	pc							1				2			2			1		
..3		<b>Other Materials</b>																					
..3.1		FO splicing enclosure FIST-GCO2-BC6-NN incl. all accessories	7	pc																		7	
..3.2		Duct cable plug jackmoon 12S057SB	13	pc					1		2		4		2			2			2		
..3.3		Heat shrinkable tube with glue 16/8	130	pc																		130	
..3.4		Duct cable plug jackmoon 12S057SB	38	pc																		38	
..4		<b>Other works related to FOC installation such as small installation material, etc.</b>																					
..4.1		Other works related to FOC installation for DN Katerinsky potok (Kindly enumerate here)	1	Lump sum					1														
..4.2		Other works related to FOC installation for LVS Jirkov (Kindly enumerate here)	1	Lump sum							1												
..4.3		Other works related to FOC installation for LVS Vrskman (Kindly enumerate here)	1	Lump sum									1										
..4.4		Other works related to FOC installation for LVS Hrusovany (Kindly enumerate here)	1	Lump sum											1								
..4.5		Other works related to FOC installation for LVS Syrovice (Kindly enumerate here)	1	Lump sum														1					
..4.6		Other works related to FOC installation for LVS Malmerice (Kindly enumerate here)	1	Lump sum																	1		
..4.7		Other works related to FOC installation for LOT 1 (Kindly enumerate here)	1	Lump sum																		1	

Pipeline works - Unit rates			Total Price - Pipeline Unit Rates [Euro]					0,00
Item Number	Item Type	Item Description	Total Quantity	Unit	Unit Price Supply [Euro]	Unit Price Installation [Euro]	Total Unit Price [Euro]	Total Price [Euro]
		<b>Notes:</b> The stated quantities are just of tender evaluation purposes. Unit prices will be used in case of variation orders.						
..1		<b>Pipeline</b> Standard rates comprise of total costs, including materials, installation and man hours, on request of Employer and not included in the Contract. Unit m1 stands for linear pipeline (road) meter as per horizontal chainage incl. full width of RoW. Real 3D length and construction reserve (e.g. cut & waste) must be considered by the CONTRACTOR.						
..1.1		<b>Welding and Inspection Girth Welds DN1400</b> Pipe outside of trench.						
..1.1.1		<b>Cutting</b>	1	10 Pieces				
..1.1.2		<b>Bevel Preparation of Wall Thickness 18.0 mm</b>	1	10 Pieces				
..1.1.3		<b>Bevel Preparation of Wall Thickness 21.5 mm</b>	1	10 Pieces				
..1.1.4		<b>Welding of Wall Thickness 18.0 mm</b>	1	10 Pieces				
..1.1.5		<b>Welding of Wall Thickness 21.5 mm</b>	1	10 Pieces				
..1.1.6		<b>Applying Field Coating (Heat Shrinkable Sleeves)</b>	1	10 Pieces				
..1.1.7		<b>Cut Out and Replacement of Weld Seam 56" Test Weld</b>	1	Piece				
..1.2		<b>Welding and Inspection Tie-in Welds</b> Pipe inside trench.						
..1.2.1		<b>Cutting</b>	1	10 Pieces				

Pipeline works - Unit rates			Total Price - Pipeline Unit Rates [Euro]					0,00
Item Number	Item Type	Item Description	Total Quantity	Unit	Unit Price Supply [Euro]	Unit Price Installation [Euro]	Total Unit Price [Euro]	Total Price [Euro]
..1.2.2		Bevel Preparation of Wall Thickness 18.0 mm	1	10 Pieces				
..1.2.3		Bevel Preparation of Wall Thickness 21.5 mm	1	10 Pieces				
..1.2.4		Welding of Wall Thickness 18.0 mm	1	10 Pieces				
..1.2.5		Welding of Wall Thickness 21.5 mm	1	10 Pieces				
..1.2.6		Applying Field Coating (Heat Shrinkable Sleeves)	1	10 Pieces				
..1.2.7		Cut Out and Replacement of Weld Seam 56" Test Weld	1	Piece				
..1.3		Field Coating						
..1.3.1		Removal of Pipeline External Coating to Bare Metal	1	10 m2				
..1.3.2		Standard HDPE Coating	1	10 m1				
..1.3.3		Cemtex Coating	1	10 m1				
..1.3.4		GRP Coating	1	10 m1				
..1.3.5		Geotextile 1000g/m2 Coating	1	10 m1				
..1.3.6		Rockshield Coating	1	10 m1				
..1.3.7		Concrete Coating	1	10 m1				
..2		Construction Works						
..2.1		Extra Crossings						
..2.1.1		Closed Road Crossing DN1600/2040 including casing pipe supply and complete installation	1	m1				

Pipeline works - Unit rates			Total Price - Pipeline Unit Rates [Euro]					0,00
Item Number	Item Type	Item Description	Total Quantity	Unit	Unit Price Supply [Euro]	Unit Price Installation [Euro]	Total Unit Price [Euro]	Total Price [Euro]
..2.1.2		Closed Road Crossing DN1800/2240 including casing pipe supply and complete installation	1	m1				
..2.1.3		Closed Railway Crossing DN1600/1900 including casing pipe supply and complete installation	1	m1				
..2.1.4		Closed Railway Crossing DN1800/2100 including casing pipe supply and complete installation	1	m1				
..2.1.5		Open Cut Minor Road Crossing - casing DN1600/2040 incl. equipment and assemblies installation, pipe pulling-in and road reinstatement.	1	m1				
..2.1.6		Open Cut Minor Road Crossing - casing DN1800/2240 incl. equipment and assemblies installation, pipe pulling-in and road reinstatement.	1	m1				
..2.1.7		Open Cut Minor Road Crossing - no casing pipe, without reinstatement	1	m1				
..2.1.8		Direct product pipe boring DN1400	1	m1				
..2.1.9		LPE DN160 Boring including casing pipe	1	m1				
..2.2		<b>Trenching for Cathodic Protection and other Cables</b> Temporarily storage of topsoil, re-instatement of topsoil after cable/conduit laying, sowing. Machine excavation of the trench up to 1m depth, temporary storage of excavated soil, backfilling and compaction.	1	m1				
..2.3		<b>Trenching for 56" Pipe</b>						
..2.3.1		Trenching in Soil Class 1	1	100 m3				
..2.3.2		Trenching in Soil Class 2	1	100 m3				
..2.3.3		Trenching in Soil Class 3	1	100 m3				
..2.3.4		Trenching in Soil Class 4	1	100 m3				

Pipeline works - Unit rates			Total Price - Pipeline Unit Rates [Euro]					0,00
Item Number	Item Type	Item Description	Total Quantity	Unit	Unit Price Supply [Euro]	Unit Price Installation [Euro]	Total Unit Price [Euro]	Total Price [Euro]
..2.3.5		Trenching in Soil Class 5	1	100 m3				
..2.3.6		Trenching in Soil Class 6	1	50 m3				
..2.3.7		Trenching in Soil Class 7	1	10 m3				
..2.4		Preparation of Working Strip	1	100 m1				
..2.5		Stringing and Bending of Pipes	1	100 m1				
..2.6		Supply and Installation of Pipeline Sand Bedding and Padding incl. compaction	1	100 m1				
..2.7		Manual Excavation	1	10 m3				
..2.8		Additional Bags of Sand-Cement Mixture as per typical drawing	1	10 pieces				
..2.9		Additional Bags of Sand as per typical drawing	1	10 pieces				
..2.10		Additional Geotextile min. 500 g/m <sup>2</sup> As pipeline protection warpped around the pipeline	1	100 m2				
..2.11		Additional Geotextile min. 1000 g/m <sup>2</sup> As pipeline protection warpped around the pipeline	1	100 m2				
..2.12		Compaction of Sand, Gravel or Suitable Soil Backfilling in compaction layers to 95 % Proctor	1	100 m3				
..2.13		Geogrid for sloped surface permanent stabilzation	1	100 m2				
..2.14		Wooden facines for sloped surface permanent stabilzation	1	10 pieces				
..2.15		Temporary and Permanent Support, Stabilization and Protection of Any Crossed Line <DN300	1	piece				

Pipeline works - Unit rates			Total Price - Pipeline Unit Rates [Euro]					0,00
Item Number	Item Type	Item Description	Total Quantity	Unit	Unit Price Supply [Euro]	Unit Price Installation [Euro]	Total Unit Price [Euro]	Total Price [Euro]
..2.16		Temporary and Permanent Support, Stabilization and Protection of Any Crossed Line >DN300	1	piece				
..2.17		Assembly and Installation of DN1600/2040 Casing Pipe - Open Cut	1	m1				
..2.18		Assembly and installation of DN18002240 Casing pipe - Open Cut	1	m1				
..2.19		Casing pipe DN1600/2040 Equipment and Installation (spacers, end seals, steel bands, etc.)	1	kpl				
..2.20		Casing pipe DN18002240 Equipment and Installation (spacers, end seals, steel bands, etc.)	1	kpl				
..2.21		Asphalt Roads Crossing - Road Reinstatement	1	m1				
..2.22		Gravel Roads Crossing - Road Reinstatement	1	m1				
..2.23		Dirt Roads Crossing - Road Reinstatement	1	m1				
..2.24		Road Slip - Supply a Installation of Water Transfer Pipe DN300	1	piece				
..2.25		Road Slip - Supply a Installation of Water Transfer Pipe DN500	1	piece				
..2.26		Supply and Installation of Sheet Piling (depth of 8 m)	1	50 m2				
..2.27		Removal and Disposal of Sheet Piling (depth of 8 m)	1	50 m2				
..2.28		Watercourse Crossing - Supply a Installation of Arranged Stone Protection 200 kg	1	10 m3				
..2.29		Watercourse Crossing - Supply a Installation of Arranged Stone Protection 500 kg	1	10 m3				
..2.30		Watercourse Crossing - Supply a Installation of Stone Backfill	1	10 m3				
..2.31		Watercourse Crossing - Supply a Installation of Clay Plug (incl. compaction)	1	5 m3				

Pipeline works - Unit rates			Total Price - Pipeline Unit Rates [Euro]					0,00
Item Number	Item Type	Item Description	Total Quantity	Unit	Unit Price Supply [Euro]	Unit Price Installation [Euro]	Total Unit Price [Euro]	Total Price [Euro]
..2.32		Watercourse Crossing - Supply a Installation of Backfill Plug (incl. compaction)	1	5 m3				
..2.33		Watercourse Crossing - Supply a Installation of Water Transfer Pipe DN500	1	piece				
..2.34		Watercourse Crossing - Supply a Installation of Water Transfer Pipe DN1000	1	piece				
..2.35		Ditch Breaker	1	piece				
..2.36		Casing Pipe Fill with Bentonite Mixture	1	10 m3				
..2.37		Watercourse Crossings - Water Transfer / By-pass and Temporary Crossings for Machinery	1	kpl				
..2.38		Pipeline Trench Dewatering	1	100 m1				
..2.39		Underground Water Table Lowering	1	100 m1				
..3		Supply and Disposal of Materials						
..3.1		Disposal of Degraded Topsoil	1	100 m3				
..3.2		Supply of Native and Approved Topsoil	1	100 m3				
..3.3		Disposal of Subsoil	1	100 m3				
..3.4		Supply of Native and Approved Subsoil	1	100 m3				
..3.5		Supply of Approved Sand	1	100 m3				
..3.6		Supply of Approved Gravel	1	50 m3				
..3.7		Supply of Wooden Construction Logs	1	Ton				
..3.8		Disposal of Hydrotest Water Including Transport	1	1000 m3				

Pipeline works - Unit rates			Total Price - Pipeline Unit Rates [Euro]					0,00
Item Number	Item Type	Item Description	Total Quantity	Unit	Unit Price Supply [Euro]	Unit Price Installation [Euro]	Total Unit Price [Euro]	Total Price [Euro]
..3.9		Disposal of Concrete or Rock	1	10 Ton				
..3.10		Disposal of Trees or Other Organic Obstacles	1	10 Ton				
..3.11		Supply and Application of Seeding - Grass	1	1000 m2				
..3.12		Protective Concrete Ring DN1000 Including Gravel Fill	1	piece				
..3.13		Protective concrete ring DN600 Including Gravel Fill	1	piece				
..3.14		HDPE Conduit DN40	1	100 m1				
..3.15		LPE Casing DN160	1	10 m1				
..3.16		HDPE Joint	1	10 pieces				
..3.17		HDPE End Cap	1	10 pieces				
..3.18		Pipeline Warning Tape	1	100 m1				
..3.19		FOC Warning Tape	1	100 m1				
..3.20		Casing Kopoflex/Kopohalf 110mm	1	100 m1				
..3.21		Casing Kopoflex/Kopohalf 125mm	1	100 m1				
..3.22		Casing Kopoflex/Kopohalf 160mm	1	100 m1				
..3.23		FOC Concrete Gutter (Casing)	1	100 m1				
..3.24		Casing Pipe DN1600/2040 for Open Cut Road Crossings	1	m1				

Pipeline works - Unit rates			Total Price - Pipeline Unit Rates [Euro]					0,00
Item Number	Item Type	Item Description	Total Quantity	Unit	Unit Price Supply [Euro]	Unit Price Installation [Euro]	Total Unit Price [Euro]	Total Price [Euro]
..3.25		Casing Pipe DN1800/2240 for Open Cut Road Crossings	1	m1				
..3.26		Cable Marker - Above Ground	1	piece				
..3.27		Cable Marker - Under Ground	1	piece				
..3.28		Pipeline Marker	1	piece				
..3.29		Foundation Concrete "Slabs" (not reinforced) Class C12/15 in Open Trench (protective slab)	1	10 m3				
..3.30		Road Concrete Slab 150 mm	1	10 m2				
..3.31		Road Concrete Slab 180 mm	1	10 m2				
..3.32		Pipeline Concrete Weight	1	10 piece				
..3.33		Stabilization of Pipeline Working Strip for Construction on Unbearable Soil	1	10 m1				
..3.34		Drainage pipe DN65	1	50 m1				
..3.35		Drainage pipe DN100	1	50 m1				
..3.36		PVC pipe DN100	1	10 m1				
..3.37		PVC pipe DN200	1	10 m1				
..3.38		Drainage shaft DN800	1	piece				
..4		Costs for Work Standstill As approved in advance in writing						
..4.1		Costs for Work Standstill Due to Archaeological Finding	1	per day				

Pipeline works - Unit rates			Total Price - Pipeline Unit Rates [Euro]					0,00
Item Number	Item Type	Item Description	Total Quantity	Unit	Unit Price Supply [Euro]	Unit Price Installation [Euro]	Total Unit Price [Euro]	Total Price [Euro]
..4.2		Costs for Work Standstill Due to Flood	1	per day				
..4.3		Costs for Work Standstill Due to UXO Finding	1	per day				
..5		Special Obstacles						
..5.1		Backfill of Terrain Slump at Undermined Area With Gravel	1	10 tons				
..5.2		Backfill to Stop Landslide Movements	1	50 tons				

Mechanical works - Unit rates			Total Price - Mechanical Unit Rates [Euro]					0,00
Item Number	Item Type	Item Description	Total Quantity	Unit	Unit Price Supply [Euro]	Unit Price Installation [Euro]	Total Unit Price [Euro]	Total Price [Euro]
<b>Notes:</b>								
The stated quantities are just of tender evaluation purposes.								
Unit prices will be used in case of variation orders.								
..1		<b>Pipes</b>						
..1.1		Pipe - Longitudinally Welded, DN 1200	1	Pc.				
..1.2		Pipe - Longitudinally Welded, DN 700	1	Pc.				
..1.3		Pipe - Longitudinally Welded, DN 500	1	Pc.				
..1.4		Pipe - Longitudinally Welded, DN 300	1	Pc.				
..1.5		Pipe - Seamless, DN 100	1	Pc.				
..1.6		Pipe - Seamless, DN 80	1	Pc.				
..1.7		Pipe - Seamless, DN 50	1	Pc.				
..2		<b>Flanges</b>						
..2.1		Flange, Welding Neck, RF, DN 500, Class 600	1	Pc.				
..2.2		Flange, Welding Neck, RF, DN 300, Class 600	1	Pc.				
..2.3		Flange, Welding Neck, RF, DN 100, Class 600	1	Pc.				
..2.4		Flange, Welding Neck, RF, DN 80, Class 600	1	Pc.				
..2.5		Flange, Welding Neck, RF, DN 50, Class 600	1	Pc.				
..2.6		Blinds, DN 300	1	Pc.				
..2.7		Blinds, DN 100	1	Pc.				
..2.8		Blinds, DN 80	1	Pc.				
..2.9		Blinds, DN 50	1	Pc.				
..3		<b>Elbows</b>						
..3.1		Elbow 90° (R=1.5DN-LR), DN 1200	1	Pc.				
..3.2		Elbow 45° (R=1.5DN-LR), DN 1200	1	Pc.				
..3.3		Elbow 90° (R=1.5DN-LR), DN 700	1	Pc.				
..3.4		Elbow 90° (R=1.5DN-LR), DN 500	1	Pc.				
..3.5		Elbow 90° (R=1.5DN-LR), DN 300	1	Pc.				
..3.6		Elbow 90° (R=1.5DN-LR), DN 100	1	Pc.				
..3.7		Elbow 90° (R=1.5DN-LR), DN 80	1	Pc.				

Mechanical works - Unit rates			Total Price - Mechanical Unit Rates [Euro]					0,00
Item Number	Item Type	Item Description	Total Quantity	Unit	Unit Price Supply [Euro]	Unit Price Installation [Euro]	Total Unit Price [Euro]	Total Price [Euro]
..4		<b>Tees</b>						
..4.1		Tee, Reduced, DN 1200 / DN 700	1	Pc.				
..4.2		Tee, Straight, DN 500	1	Pc.				
..4.3		Tee, Straight, DN 300	1	Pc.				
..4.4		Tee, Reduced, DN 300 / DN 150	1	Pc.				
..4.5		Tee, Straight, DN 100	1	Pc.				
..4.6		Tee, Straight, DN 80	1	Pc.				
..5		<b>Reducers</b>						
..5.1		Reducer, Concentric/Eccentric, DN 700 / DN 500	1	Pc.				
..5.2		Reducer, Concentric/Eccentric, DN 500 / DN 300	1	Pc.				
..5.3		Reducer, Concentric/Eccentric, DN 150 / DN 100	1	Pc.				
..6		<b>Ball Valves</b>						
..6.1		Ball Valve, Gas Hydraulic, DN 1200, Class 600	1	Pc.				
..6.2		Ball Valve, Motor Operated, DN 500, Class 600	1	Pc.				
..6.3		Ball Valve, Motor Operated, DN 300, Class 600	1	Pc.				
..6.4		Ball Valve, Manually Operated, DN 300, Class 600	1	Pc.				
..6.5		Ball Valve, Manually Operated, DN 100, Class 600	1	Pc.				
..6.6		Ball Valve, Manually Operated, DN 80, Class 600	1	Pc.				
..6.7		Ball Valve, Manually Operated, DN 25, Class 600	1	Pc.				
..6.8		Ball Valve, Manually Operated, DN 15, Class 600	1	Pc.				
..7		<b>Gate Valves</b>						
..7.1		Gate Valve, Motor Operated, DN 300, Class 600	1	Pc.				
..7.2		Gate Valve, Manually Operated, DN 300, Class 600	1	Pc.				
..7.3		Gate Valve, Manually Operated, DN 100, Class 600	1	Pc.				
..7.4		Gate Valve, Manually Operated, DN 80, Class 600	1	Pc.				
..8		<b>Throttling Valves</b>						
..8.1		Axial throttling Valve, Motor Operated, DN 500, Class 600	1	Pc.				

Mechanical works - Unit rates			Total Price - Mechanical Unit Rates [Euro]					0,00
Item Number	Item Type	Item Description	Total Quantity	Unit	Unit Price Supply [Euro]	Unit Price Installation [Euro]	Total Unit Price [Euro]	Total Price [Euro]
..9		<b>Nipple Sampling - Safety (NOB), DN 50</b>						
..9.1		(In respect to Safety Sampling Nipple (NOB): Employer requires NOBs by supplier Techko - Odběrový Návarek Tlakový ODNP, (or equivalent)	1	Pc.				