

REQUEST FOR INFORMATION AND EXPRESSION OF INTEREST (RFI)
for
MATERIALS FOR BROADBAND NETWORK

Questions and answers
V2_7.6.2023

June 2023

Q1: Required references – do we need to provide references for distributor company that will offer the materials (list of companies to whom have we as distributor delivered the materials) or from manufacturer (list of companies to whom have they produced materials)?

A1: We expect references from the company that is potential bidder, regardless whether it is distributor or manufacturer.

Q2: Technical requirements – there are no requirements for microducts and ducts – will they be delivered in later stage?

A2: You can find updated version of technical requirements attached.

Q3: Could you please verify that the quantities regarding PAN cabinets stated in the RFI are correct?

A3: Quantities provided in RFI are valid.

Q4: May the offer be submitted for a specific scope of the inquiry (example: only fiber optics cables); whether the buyer accepts partial bids?

A4: Offer can be provided for a specific scope or for a specific material. In appendix 3 please select “x” only for those materials, which you can provide.

Q5: Can you please share the evaluation and selection criteria of the tender, weights. E.g. how partial offering or references or other criteria affects the offer evaluation?

A5: More details about the evaluation procedure will be provided in the RFQ phase.

Q6: Can the Purchaser provide expected delivery schedule?

A6: As stated in the RFI the quantities provided are for 2022 and 2023, quarterly forecasts will be provided after the contract signature.

Q7: Questions to: 04_Appendix 4_Technical requirements for materials.pdf, for all materials, suppliers must provide the Supplier’s declaration of conformity according EN ISO/IEC 17050 in Slovenian and Croatian language.” Can Vendor provide mentioned declarations in English language?

A7: According to the laws in Slovenia and Croatia and EU directives, all materials must have Conformity statement in official local language SI: (Uradni list RS, št. 82/13: 6. člen obveznosti proizvajalcev) and CRO: (Zakon o građevnim proizvodima, Obveze proizvođača, čl.30.st.8). If the vendor does not provide this statement in local language, there is the possibility to translate it without official translator, but it has to include original DoC.

In this phase it is not obligatory to translate declarations and you can send it in English language. However, suppliers will have to provide it in Slovenian and Croatian language before the selection procedure is completed (RFFO phase).

Q8: Please confirm that requirement (described above) is related only to: 04_Appendix 4_Technical requirements for materials.pdf and it does NOT apply for: 05_Appendix 5_Technical requirements for cables?

A8: See answer above.

Q9: Questions to: 05_Appendix 5_Technical requirements for cables

- ADSS 50m span 4F - spec says that cable needs LSZH sheath and EU certificate "Water blocking aramid yarns must be used in the cable core to prevent it from water ingress • LSZH (Low smoke, Zero halogen,) outer sheath must be extruded around the cable, EU certificate for in-building installation must be provided" [cable description] Could you please check if it concerns only 4F and whether by certificate they mean CPR and if yes what class is required?

A9: This requirement is necessary for ADSS 50m span 4F and 12F.

Q10: When reviewing the documentation, we found out that the requirements for all outdoor cables from position 45 to 49 are missing. I am also asking for these requirements.

A10: You can find updated version of technical requirements attached.

Q11: Questions to: 05_Appendix 5_Technical requirements for cables

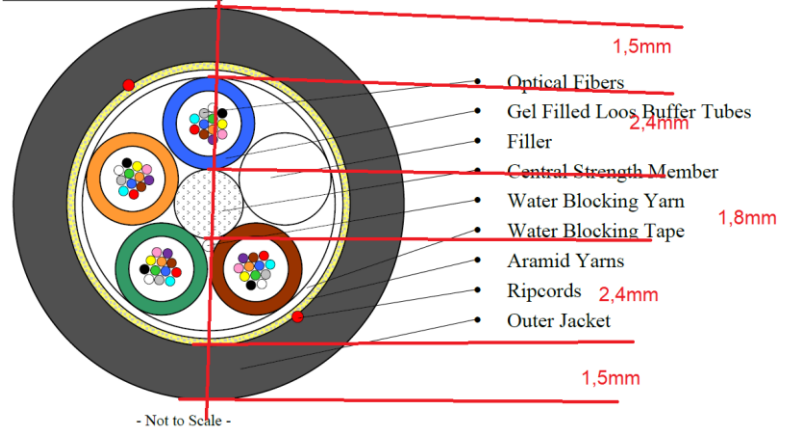
- ADSS 50 m 12-48 - spec says that in case of 12 and 24F the outer diameter (OD) should be 7mm and in case of 48F 10mm. However 12-48F is the same construction what is indicated by required FRP and Tube size. Therefore "12-48F ADSS 50m span" would all be 10 mm?

In other words, please confirm, that the outer diameter should be 10mm, not 7mm as described in specification.

Dimensions and Descriptions
The standard optical cable structure is shown in the following table:

Item	Contents	Value
Structure	Type	12
	Fibre count/tube	1+5
Loose tube or central tube	Outer diameter (mm)	2,4
	Material	FRP
Central strength member	Diameter (mm)	1,8
	PE layer diameter (mm)	-
Water blocking	Material	Water blocking yarn & tape
Peripheral strength member	Material	Aramid yarn
	Material	HDPE
Sheath	Colour	Black
	Thickness (mm)	Nominal: 1.5
Ripcord	Number	2
Cable diameter(mm) MAXIMUM Approx.		7
Cable weight(kg/km) MAXIMUM Approx.		75

Ex. 48 fiber ADSS S-50M



A11: Confirmed, outer diameter of cable 12-48F can be 10mm.

Q12: Second question is regarding technical requirements for items numbers: 44-49 from Material list. Seems they are not included in Appendix 5 ADSS 50m span 4F.

49	44	576 G.657 mini to be blown in pipes of 12mm internal profile	m	198 000
50	45	4 G.657 Optical fiber cables for outdoor installation	m	1 290 000
51	46	12 G.657 Optical fiber cables for outdoor installation	m	390 000
52	47	48 G.657 Optical fiber cables for outdoor installation (Rodents Protected)	m	39 000
53	48	144 G.657 Optical fiber cables for outdoor installation (Rodents Protected)	m	39 000
54	49	288 G.657 Optical fiber cables for outdoor installation (Rodents Protected)	m	20 000

A12: You can find updated version of technical requirements attached.

Q13: Are the signatures of references (appendix 2) necessary for a positive application?

A13: Yes, all references need to be signed by reference person.

Q14: Appendix 4-5 - They do not include technical specifications for plastic micro protective pipes, Microduct. Why are they not included?

A14: You can find updated version of technical requirements attached.

Q15: Is the cable range 8-25mm for oval port must for all closures sizes or could be split to few groups? (Example, 8-12mm for closures up to 144 fiber, 8-25mm for closures 216-576 fibers. I presume as stated in tender alternative can be offered, but it would help to better specify the product for you).

A15: Cable range 8-25mm for oval port is a must for all closures sizes.

Q16: Do you maybe have international standard covering next requirement? Airproof performance: Airing pressure inside box 100 Kpa pointer.

A16: Technical specification: - Airproof performance: Airing pressure inside box 100Kpa pointer immovability after 24 hours or no air bell within 15min when parked in the common temperature water.

Q17: Could you please confirm that next information is correct?

(Page 19 from the tender document, Appendix 4)

144 Fibre splice closure

Specified splice closure for use in RUNE project must have the following characteristics:

- Number of splices: 144
- Splice trays capacity: 12 splices
- Minimal diameter for round ports [mm]: 1,7
- Range of cable diameter for oval port [mm]: 4-29
- Minimal number of cable entrances (oval + round): 1+58

A17: There was a mistake in a technical specifications. Correct values for 144 are:

- Minimal diameter for round ports [mm]: 12
- Range of cable diameter for oval port [mm]: 8-25
- Minimal number of cable entrances (oval: 1 + round: 58)

You can find updated version of technical requirements attached.

Q18: We are kindly asking to extend submission date for at least 2 weeks. Due to extensive list of materials we would like to prepare correct and competitive offer and we would need more time.

A18: At this stage we are not planning to extend the RFI deadline for submitting the offer.

Q19: Please tell which terminal box is the appropriate one: FP-020 or FP-0191?

A19: None of terminal boxes provides a space for cable, which is obligatory requirement for tender.

Q20: Regarding the cables, we would like to inform you that the discount prices sent are valid in the package, for sets whose total offer value exceeds xxx euros without VAT. For lots with a total bid value below the upper limit, it is nailed down to the individual submitted bid prices of xxx, due to

associated costs, reduced scale economics, logistics costs, and associated representation costs and tax duties.

A20: Prices will not be evaluated In the RFI phase. All additional conditions will be evaluated in the next steps of this tender.

Q21: Do we need reference for each of the position (ex. it means 21 references for cables)? Or for group of positions? Example one reference for ADSS, one for mini to be blown, and one for outdoor (no matter how many fibers in cable) – in total 3 references.

A21: References are mandatory for each of the materials that you offer. However, you can get one signature for more materials if you supplied them to the same customer. In this case, please state the all material numbers in the same cell of Appendix 2.

Q22: Can you please provide a reference image of this 4-fibre splice closure?

4 Fibre splice closure

Specified splice closure for use in RUNE project must have the following characteristics:

- Number of splices: 4
- Splice trays capacity: 1 splices
- Minimal diameter for round ports [mm]: <4
- Minimal number of cable entrances: 3
- Environment temperature: -25°C - +75°C,
- Water tightness rating in accordance with IP 65,
- Wall-mounting adapter

A22: We don't have picture.

Q23: About the splice closure, we find that some parameters are incorrect, as shown in the red marked section below.

576 Fibre splice closure

Specified splice closure for use in RUNE project must have the following characteristics:

- Number of splices: 576
- Splice trays capacity: 12 or 24 splices
- Minimal diameter for round ports [mm]: 12
- Range of cable diameter for oval port [mm]: 8-25
- Minimal number of cable entrances (oval + round): 6+1
- Port sealing: Cablelok, Hetshrink
- Environment temperature: -40°C - +70°C,
- Airproof performance: Airing pressure inside box 100 Kpa pointer
- immovability after 24 hours or no air bell within 15 min when parked in the common temperature water.
- Re-encapsulation performance: no change in the index of air-proof performance after three times of repeat encapsulation,
- Insulation resistance: $\geq 2 \times 10^4 \text{ M}\Omega$,
- Water tightness rating in accordance with IP 68,
- Built-in organizer for fiber optic tubes
- Fully equipped with:
 - o Internal cable organizer
 - o Clamp
 - o Installation clamp
 - o Seal
 - o 6 Splice trays holder (capacity up to 4 splice trays)
 - o 288 adequate splice protection sleeves
 - o 12 Splice trays
 - o Seal kit for round ports and oval port
 - o Wall-mounting adapter
 - o Accessories set (clip with glue, sand paper, aluminium tape, insulating tape, cable ties)
 - o Velcro tapes for cable tubes arrangement

- Water tightness rating in accordance with IP 68,
- Built-in organizer for fiber optic tubes
- Fully equipped with:
 - o Internal cable organizer
 - o Clamp
 - o Installation clamp
 - o Seal
 - o 6 Splice trays holder (capacity up to 4 splice trays)
 - o 216 adequate splice protection sleeves
 - o 8 Splice trays
 - o Seal kit for round ports and oval port
 - o Wall-mounting adapter
 - o Accessories set (clip with glue, sand paper, aluminium tape, insulating tape, cable ties)
 - o Velcro tapes for cable tubes arrangement

A23: You can find updated version of technical requirements attached.

Q24: About this pole-mounted splice closure, do you have a picture can refer to?

4.3. POLE MOUNTED SPLICE CLOSURE FOR 144 SPLICES

Description

Pole mounted splice closure should be an outdoor cabinet for the reception and connection of aerial fiber optic cables. It is intended for outdoor installation on a pole and used as a protection for welded connections (splices) on aerial fiber optic cable.

All parts of pole mounted splice closure must meet the conditions for proper cable management; such as minimum permissible bend radius, simple and secure access to all joints, the possibility of re-coupling and switching without disturbing the characteristics of other joints.

A24: We don't have picture.

Q25: Can you please provide physical images of this part?

1	no.	Material	hit of measureme	Expected quantity
2	1	type 1 - PAN for outdoor instalation on a pole and or wall with capacity of minimum 72 connections	pcs	2,245
3	2	type 2 - PAN for outdoor instalation of ground (as stand-alone) with capacity of minimum 108 connections	pcs	5
4	3	type 3 - PAN for outdoor instalation of ground (as stand-alone) with capacity of minimum 360 connections	pcs	5
5	4	customer optical distribution box (min 24 splices)	pcs	406

A25: We don't have picture.

Q26: When I was briefly checking the sent specification, I didn't see specification for FO cable for outdoor installation and rodent protected cables – pos.45-49 from the list of material. Could you share this specification with me?

A26: You can find updated version of technical requirements attached.

Answers sent on 7. June 2023

Q27: Adss cable clamp for 4F micro cable, user drop, (like telenco ACADSS6 or similar). The technical data sheet mentions a 3mm cable and the equivalent of Telenco products is 6mm. Should we take into the account the diameter of the cable or the equivalent of the product?

A27: Take into the account the diameter of the cable.

Q28: Adss cable end support clamp for 12F to 48F mini cable for medium load (like Telenco ACADSS 10 or similar). The technical data sheet mentions a 6-8mm cable and the equivalent of Telenco

products is 10-12mm. Should we take into the account the diameter of the cable or the equivalent of the product?

A28: Take into the account the diameter of the cable.

Q29: Adss pass through support for 12F to 48F mini cable for medium load (like Telenco Suspension devise DS8 or similar). The technical data sheet mentions a 6-8mm cable and the equivalent of Telenco products is 8-12mm. Should we take into the account the diameter of the cable or the equivalent of the product?

A29: Take into the account the diameter of the cable.

Q30: ADSS spiral clamp for 48F heavy load (like Telenco GSDEM AR 1680-17 or similar). What is the diameter of the cable?

A30: The diameter of the existing cable is 16,6 mm. (Depending on which cable you choose).

Q31: ADSS spiral clamp for 96F heavy load (like Telenco GSDEM AR 1680-17 or similar). What is the diameter of the cable?

A31: The diameter of the existing cable is 16,6 mm. (Depending on which cable you choose).

Q32: ADSS spilar clamp for 144 heavy load (like Telenco GSDEM AR 1680-17 or similar). What is the diameter of the cable?

A32: Cable diameter **MAXIMUM** Approx. 13,9 mm. (Depending on which cable you choose).

Q33: Table 1 – dimensions tolerance +0,1/-0,05mm. Our standard is +0,1/-0,1. From the other hand they wrote that a measuring instrument should be with precision of 0.1mm. We could offer HQS standard (+0,1/-0,0). They mentioned in point 1.1 that microducts should be UV stabilized without any period. Our HQS is 2 years UV stabilized. Pls. for your comment.

A33: Your proposal is acceptable.

Q34: There are the mistakes in table 2 about weight. The correct ones are – 18/14 – 96g/m, 16/12 – 84g/m, 14/10 – 72g/m, 12/10 – 34g/m, 12/8 – 59g/m, 10/8 – 27g/m. The rest of parameters we have much better (info from producer) – for your info only.

A34: OK, thank you.

Q35: The biggest problem is with packing. They need coils (no drums) with the maximum weight 50kg. It means that coils should have the maximum length: 18/14 - 520m, 16/12 – 590m, 14/10 – 690m, 12/10 – 1470m, 12/8 – 840m, 10/8 – 1850m. Is this mandatory or could be some standard, example as producer has?

A35: Your proposal is acceptable.

Q36: Can our partners, also we to see in appendix 4 and 5 (as revised documents) changes? Are marked in some way? Just not clear to specify what is filled. These are very large pdf. Would be helpful info, if possible, to get.

A36: In [appendix 4](#) changes refer to technical characteristics for Fibre splice closure 24, 48, 96, 144, 216, 288 and 576. Check this part one more time and pay attention mostly to minimal number of cable entrances and port sealing.

In [appendix 5](#) we added chapter 144 F G.657 ADSS with minimum 80m span in heavy load; 4/12 G.657 Optical fiber cables for outdoor installation; 48/144/288 G.657 Optical fiber cables for outdoor installation – Rodent Protected

Q37: Does Rune accept situation, when a Supplier (LS Cable & System), provides the offer to Rune in mentioned tender, and also in the same time we'll provide similar offer to other Supplier, who also wants to participate in this tender directly? In a result Rune will get 2 offers for same material position: one offer from LS Cable & System and second offer (also our product, same material) from a different vendor.

A37: Our tender is open and published on our website so that everyone can apply.

Q38: We have 2 questions about poles. What stiffness class does the customer require? There is no such information in the technical data sheet, we want to avoid the problems

A38: Depends on the level of load. The class will be determined according to the installation site. Class will be defined when ordering.

Q39: What should be the minimum trench (dig) length of the pole? The standard for these poles is 1.2 m, does this suit the customer?

A39: Standard incantation is 1/5 height of the pole.