



DEPARTMENT OF ELECTRONIC COMMUNICATIONS DEPUTY MINISTRY OF RESEARCH, INNOVATION AND DIGITAL POLICY

Public Consultation Report for the Expansion of Very High-Capacity Networks in Underserved Areas

(Investment under Recovery and Resilience Facility)





Table of Contents

1.	Introductory remarks	3
2.	Main issues raised by the stakeholders	4
a)	Comments on proposed intervention areas (mapping)	4
b)		
c)	Comments on the intervention of mobile networks (Type B intervention)	6
d)	Access to existing infrastructure	7
e)	Comments on obligations to provide wholesale products	8
3.	Other topics raised by stakeholders	10
f)	Comments related to the schedule of the Scheme	10
g)	Comments on providing information on the existing infrastructure in the intervention areas	10
h)	Comments on the claw-back mechanism described	11
i)	Comments on the limitation of having a different contractor per LOT	11
j)	Other comments regarding the bidding and evaluation procedure for awarding each lot	12
k)	Comments made by the National Regulatory Authority of Cyprus (OCECPR/ΓΕΡΗΕΤ)	12
4.	Annex 1 – Public Consultation Document	12
5.	Annex 2 – Detailed list of comments received	30

1. Introductory remarks

In line with the Cyprus Recovery and Resilience Plan, the Government of Cyprus intends to implement the investment "Expansion of Very High-Capacity Networks in underserved areas", which aims to accelerate, through public intervention, the deployment of Very High-Capacity Networks (VHCN) infrastructures in underserved areas with the aim to ensure that (a) all premises in organised urban and rural communities have access to 100 Mbps download speeds, upgradable to 1 Gbps download speeds; (b) the entire population living in urban and rural communities, as well as all major terrestrial transport paths have uninterrupted 5G coverage with download speeds of at least 100 Mbps; and (c) all main socioeconomic drivers (SED) have access to symmetrical Gigabit connectivity.

For the implementation of this Investment (scheme), a state aid support scheme will be set-up to support investment costs in a Private DBO (Design, Build and Operate) - Gap Funding model. The beneficiaries of the scheme will be electronic communications network operators under the general authorisation regime (Law 24(I)/2022). As a result of the public support, it is expected that based on the RRF milestones at least 44,000 premises in underserved areas will be covered by VHCN connectivity networks. The total budget allocated to the scheme will be of 35,000,000 EUR and will finance investments throughout 2022 - 2025.

The main features of the measure were submitted for public consultation by the Department of Electronic Communications (DEC), in line with European State aid rules¹. The public consultation, published on DEC's website², was open between 23rd of June and 23rd of July 2022. The objective of the public consultation was twofold:

- to confirm the list of underserved areas in Cyprus in order to consolidate the final map of eligible intervention areas and
- 2. to obtain feedback on the proposed public support scheme.

By July 23, 2022, 3 responses to the public consultation were received by DEC, all coming from telecommunication operators in Cyprus. Some additional comments were also received from the Cyprus NRA.

In general, all stakeholders responding to the public consultation welcomed the measure and expressed interest in participating to its implementation. The following sections will detail the main responses received from the stakeholders, while an analytical list containing all the comments received can be found in Annex 2.

¹ See Annex 1

² DEC, 2022,

2. Main issues raised by the stakeholders

Stakeholders' comments can be grouped into the following categories, ranging from proposed intervention areas (mapping exercise provided) to various aspects and details of the proposed scheme.

a) Comments on proposed intervention areas (mapping)

All 3 stakeholders that submitted detailed responses to the public consultation included comments on the map of the proposed intervention areas, as follows:

- CYTA considered that the map provided in the public consultation document was not up to date and small adaptations were needed to it. For this reason and in order for DEC to finalise the borders of the eligible areas for subsidy, CYTA shared new information about its optical network as developed so far, along with its optical network development plan until 2025. In addition, it submitted the existing geographic and population coverage of its 5G network.
- CYTA requested more information related to the three LOTs (indicatively including here: (a) number
 of premises, (b) density of premises, (c) population, (d) distance from road for remote properties, (e)
 number of SEDs, (g) number of base stations with microwave connection).
- EPIC suggested to perform a double-check as regards the details of the mapping³, since some differences were found between EPIC's numbers and the numbers used for the mapping exercise (provided by the Cypriot NRA). Also, EPIC commented that the mapping should exclude any non-living quarters (abandoned buildings etc.) form the total number of buildings to be connected in each lot.
- Lastly, Primetel also considers that interested stakeholders should be given more information regarding the properties/buildings mentioned in the public consultation document, including how many of them are habitable and their category (e.g. main house/ country house etc.).

Impact of the comments on the planned scheme:

- ✓ The update and finalisation of the mapping has already started and is planned to finish shortly, integrating all the new data received from CYTA. As such CYTA's concern is addressed.
- ✓ The concern of EPIC and Primetel can only be partially addressed by the incorporation of new data received by CYTA⁴ in the updated mapping. However, there is no other more-detailed possible way to identify the non-habitable houses and exclude them from the eligible areas of the intervention.
- ✓ Lastly, the telecom operators will receive (as requested) more detailed information regarding the three lots. This information will include (indicatively)⁵: Postal Codes (PC), municipality community, total buildings in each PC, Organised Communities in each PC, total number of buildings in Investment 1, total number of buildings outside

³ This activity is in progress at the time of the elaboration of this report and is expected to finish in Mid-September.

⁴ This data refers to active CYTA broadband connection points that exist today in each Lot. This data was agreed to be shared with DEC and the GSI Expert, since it can be used to draw a conclusion regarding the number of actual connection points in each lot, thus excluding any non-habitable buildings where most-possibly there is no interest in connecting (e.g., abandoned buildings, garages etc.).

⁵ The complete list of details made available to the telecom providers will be given when the mapping activity will be completed/finalized.

of organised communities in Investment 1, density of buildings in Investment 1, total population, total households, density of households per Organised Community, density of households per Postal Code and others.

b) Comments on the intervention for fixed networks (Type A and C interventions)

Two out of the three stakeholders that submitted detailed responses to the public consultation included inputs regarding the fixed network interventions, as follows:

- The first stakeholder (CYTA) mentioned the following points:
 - Firstly, CYTA proposed that standardisation of optical network deployment architecture and topology could be added to the minimum performance requirements for Type A & C investments currently included in the scheme, since this would help ensure that there is no doubt as to the required minimum passive infrastructure and access equipment needed for deployments.
 - CYTA commented also on the upgradability to a Gigabit connection within 5 working days.
 The provider confirmed that this is technologically possible but asked for further specifications regarding the technology to be used in order to support this upgrade.
 - Furthermore, CYTA asked for clarification on the requirement "all premises passed by the supported network can be connected within maximum 4 weeks from the date of the request of the end user" in order to define precisely when a building can be considered as passed at the level of its architectural development and pre-construction network. At the same time, a concern was raised that if connection requests are made at the normal rate, the timeframe of 4 weeks might not be sufficient to install the hub and connect the customer.
 - It also asked a clarification on what services the SEDs will need to have.
 - Lastly, CYTA referred that only the subsidisation of passive equipment is currently included in the scheme. The proposal of the operator was to revise this provision in order to subsidise active equipment also.
- The second stakeholder (EPIC) suggested that based on the statistics available for CYTA's response time, the delivery time in order to connect a passed premise should be increased from 4 to 8 weeks, in order to ensure that there is sufficient time to connect the premise.

Impact of the comments on the planned scheme:

Regarding CYTA's comments:

- ✓ Further details on the technical requirements for the deployment of subsidised networks will be included in the implementation guidelines of the scheme, while taking into account technological neutrality considerations. However, it should be noted that DEC will not impose any architecture or technical solution, as this remains in the freedom of the telecom operators. The only requirement is that the proposed solution complies with the required service level specifications of the call.
- ✓ Also, related to Gigabit upgradability within 5 days without further investments in the passive infrastructure, it will be in the choice of the operators to propose technological solutions that make this upgradability possible, in line with the technological neutrality principle.
- ✓ Regarding the requirement that all premises passed can be connected within 4 weeks from the date of the user request, the implementing guidelines will provide some further details on the definition

and technical requirements for a premise to be considered passed; in any case, the definition of the houses passed means that no further investment into the passive infrastructure is required in order to connect the end user, therefore it is considered that four weeks is a sufficient timeframe for connecting an end-user. Furthermore, the timeframe of connecting houses passed within 4 weeks is also described in the "Handbook of BEREC Guidelines on Geographical surveys of network deployments". More specifically, in the handbook "a premise is considered passed if, on request from an end-user, the relevant operator can provide broadband services (regardless of whether these premises are already connected or not connected to the network) at the end-user premises. The provision of broadband services at the end users premises should not exceed normal connection fees, i.e. without any additional or exceptional cost if it is the standard commercial practice and, in any case, not exceeding the usual cost in the country. The reference for "normal connection fees" should be determined by the relevant NRA/OCA. Furthermore, the operator must be able to technically connect the end user, usually within 4 weeks from the date of the request". Therefore, the requirement on the 4 week-connectivity limit will be maintained as of now.

- ✓ Also, as regards the clarification requested on the SEDs, the scheme will only cover the Gigabit symmetrical connection of the SEDs.
- ✓ Regarding the inclusion of active equipment to the scheme, the provisions will be updated so that both passive and active equipment would be eligible for funding.

Regarding EPIC's comment:

✓ the requirement on the 4 week-connectivity limit will be maintained (see also justification above on CYTA's comment).

c) Comments on the intervention of mobile networks (Type B intervention)

As regards, the inclusion of Type B interventions CYTA responded to the public consultation by clarifying that "it has developed a 5G mobile technology network on its own initiative, with 94% geographic coverage and 100% population coverage, thus providing the entire Cypriot territory with a minimum download speed of 100Mbps without any state aid. Based on this network, other providers are able to provide mobile services using CYTA's wholesale services. This capability exists for at least three mobile operators (including CYTA) per base station in terms of CYTA's infrastructure and where it is not currently offered, possible actions are taken, whenever required, to achieve this capability. Thus, these areas are characterized by OCECPR as areas with the same competitive intensity, such as urban and semi-urban areas, and therefore no special regulation is imposed.". On this point, CYTA has also sent relevant mapping information. Therefore, CYTA proposed that the subsidy scheme should not include a subsidy for Type B interventions.

https://www.berec.europa.eu/sites/default/files/files/document_register_store/2021/6/Handbook_on_BEREC_Guidelines_on_Geographical_surveys_of_network_deployments.pdf

⁶ BEREC,

DEC has conducted a meeting with CYTA focused on discussing further and clarifying any points of the public consultation and especially Type B intervention. During this meeting, CYTA confirmed the above-mentioned statement and described that their statement is based on the best effort technology.

Based on that, DEC has consulted with relevant stakeholders and since no data opposing to this statement came up, it was decided to remove the Type B intervention from the scheme.

Other suggestions regarding Type B interventions were received form EPIC and Primetel as well, as it can be analytically reviewed in the Annex 2 of this report, but since this type of intervention will not be included, these comments will not have an impact on the scheme.

Impact of the comments on the planned scheme:

✓ The impact and the consequent adaptation of the scheme is described above.

d) Access to existing infrastructure

Regarding the access to existing infrastructure, one stakeholder (EPIC) had the following comments:

- EPIC did not agree with the obligations set to the infrastructure owner in the public consultation text, since according to its estimation especially for type A investments existing infrastructure will be used for the scheme. In this context, EPIC considers that as CYTA owns the biggest part of the existing infrastructure in Cyprus, this provides it with a material advantage for the bidding process. Based on this, EPIC requested that the current obligations set by the by Collocation and Facilities Sharing Decree (247/2013) should continue but should also be extended for this project as in any other event CYTA will have a material advantage over Epic or any other beneficiary.
- EPIC also raised a concern as regards some repairs or upgrading that will be needed in the existing CYTA infrastructure during the scheme. More specifically, many areas at the moment are connected via the copper network of CYTA, but this doesn't mean that reusable ducts exist, but rather the copper cable is buried. Hence new ducts should be created. In many areas, the ducts and poles will have major faults (broken, blocked, weak structures/poles) and will require investments for repairs and reconstruction. These investments will be necessarily borne by the successful beneficiary but ultimately will remain property of CYTA who is the "owner" of the infrastructure and will have to maintain them. Hence, EPIC proposed that:
 - Either the funding increases to cover these costs that will benefit the passive infrastructure of CYTA irrespective of the beneficiary,
 - Or CYTA undertakes the costs performed by the beneficiary via an agreed mechanism of compensation.

Impact of the comments on the planned scheme:

✓ Regarding the first comment of EPIC, Collocation and Facilities Sharing Decree (247/2013) will
continue to be applied symmetrically to all telecom providers but cannot be extended or amended
somehow for the case of CYTA.

✓ Regarding the second point of EPIC, their concerned is already covered by the Cypriot legislation, since the Order 247/2013, as amended by Order 86/2022⁷ includes relative provisions, based on which CYTA will be responsible for undertaking any costs for repairing any damage to its existing infrastructure. Specifically, according to the Cyprus NRA, the legally obliged undertaking is responsible for the operational and well-maintained state of its network including electronic communications equipment as well as associated facilities. In the event that damage is detected, the legally obliged undertaking will proceed with its restoration and will incur all related costs, except those cases where there are insurmountable obstacles to the restoration of the damage provided that the legally obliged undertaking will document in writing the existence of such obstacles to both the Beneficiary and the Commissioner. The Commissioner will decide on the correctness and the proper documentation of the above. Any other arrangements not included in existing legislation can be concluded through a commercial agreement. The investment being financed with state aid, respecting market terms is of the essence in the context of such agreements to avoid passing on any state aid.

e) Comments on obligations to provide wholesale products

Regarding the obligations to provide wholesale products, CYTA has submitted the following points:

- CYTA proposed that for a provider to be considered eligible for participation in the scheme, it must have experience of providing Internet services to retail customers for at least 5 years in all cities in the free zones of Cyprus and must have electronic systems for the provision and support of Wholesale Services at the start of service provision in the LOTs.
- CYTA also suggested an adaptation of the requirements on dark fiber offering, taking into account the technical capabilities existing currently in Cyprus (see analytical comment in Annex 2).
- Furthermore, the requirement for at least one PoP in each LOT should not be a necessary condition according to CYTA, since there are other solutions that may facilitate the interested providers (reduction of complexity and cost). E.g. in the event that CYTA is selected as the contractor, interested providers may use the existing 3 points of connection (PoPs in major cities) offered through the Bitstream 2 IP Plus agreement.
- In addition to the development of the network, CYTA suggested that the government grant should also include supporting systems to be developed for the provision of wholesale services and fault management. With a view to the early development of wholesale-based retail service delivery systems from the aforementioned systems, the initial specifications of such wholesale service and fault management systems should be submitted, so as to enable the remaining providers to develop the necessary IT systems before the start of sales in each LOT. In addition to these specifications, according to CYTA the proposals should also include a schedule of technical tests, so that with the commercial operation of each LOT, simultaneous commercial exploitation by the other providers is possible. The final system specifications of each final contractor, for service requests and fault reporting, must be issued at least 1 year before the start of operation and communicated to all providers, to integrate the procedures into their systems. At least the basic principles of the system

OCECPR, https://ocecpr.ee.cy/sites/default/files/ec_decree_colocationamendment_gr_25.02.2022_ac_0.pdf

must be mentioned in the offer. The final system, with specific specifications or even minor changes, must be offered by each contractor at least 3 months before the start of operation, for testing. The appropriateness of the proposed claim management and fault reporting system must also be taken into account in the grading.

- According to CYTA, the subsidy must also include the necessary development of the IP backbone network to cover the needs that will arise from the development and operation of an optical fiber network in a LOT.
- Lastly, CYTA also proposed that as one of the criteria is the wholesale and retail prices to be offered to the other providers and end-users respectively and taking into account it's regulatory obligations, an exception should be made to the price definition as it will be partly a product of subsidy. Thus, CYTA will be able to compete on equal terms with the other bidders. In addition, it is not clear how the criterion referred to prices will be assessed, given that different products will be offered to end customers by other providers as well.

Comments of EPIC on wholesale access products included:

With regards to wholesale access conditions, EPIC proposed that the interest of a RAN sharing partner should be declared before the rollout, in order not to waste hardware and funds for something that finally won't be used. EPIC didn't agree with the full physical unbundling for Type C investments, since the network to be deployed will most possibly be a XGS.PON one, which by nature cannot be fully physically unbundled.

Impact of the comments on the planned scheme:

After considering the possibilities of adapting the planned scheme according to CYTA's comments and taking into account the legal framework the following decisions were taken.

- ✓ Regarding the proposal for requiring experience form telecom operators in order to participate in the scheme, DEC decided to keep the original provision of the public consultation text as of now, since CYTA's proposal is restrictive, given that the fixed, respectively mobile wholesale markets in Cyprus can be considered duopolies. This requirement could possibly be anti-EU law, due to the restrictions to new entrants from other Member States. Imposing such a requirement would restrict participation in the tendering procedure of the operators that are currently not active on the wholesale market.
- ✓ On the obligations for dark fiber, it will remain in the scheme, but the description will be adapted so that it is offered only "when available and technically feasible".
- ✓ On the requirement for at least one PoP in each LOT, the original provision of the public consultation text as of now will be maintained, since the requirement currently formulated (*The network that will be developed in each Lot will concentrate the traffic from all the served locations to one (or more) central Points-of-Presence (POPs), where other retail operators can be interconnected, in order to provide services)* is necessary to ensure effective wholesale service access to the subsidized network, irrespective of the winner of the lot.
- ✓ Regarding the proposal on financing supporting systems for the provision of wholesale services and fault management, it is considered to go beyond the scope of VHCN deployement. Additionally, the suggestion for 12 months prior to operation testing of the wholesale access system cannot be included in the scheme, as it might exclude some operators from participating in the tender. However, CYTA's request that other operators need to prove their wholesale capability is legitime, and a

- requirement in the tender that the wholesale service needs to be made available for testing for third parties 3 months before commercial operation start seems legitimate.
- ✓ Investments outside of the intervention areas will not be covered by the scheme. If up-grades to the backbone should be required, this will need to be covered through investments and cost recovery by the operators.
- ✓ As regards the exception requested by CYTA for wholesale access pricing due to their regulatory obligations, the benchmarks/principles set out in Point 151 of the Draft Broadband Guidelines are clear and do not allow for such an exception. These principles are to be strictly followed in setting the prices for the wholesale access products.

In the meantime, as regards the comments of EPIC:

✓ The technical specifications for the offer of wholesale products that the providers will need to submit will be described further in the tender documents of the scheme. However, it should be noted that indeed the publication of access conditions to the existing infrastructure are a pre-condition to participate in the award process. According to BBGL (para 133), information regarding the use of existing infrastructure (including terms, conditions, pricing) must be provided at least two months before the deadline to submit the bid in the competitive selection procedure. Furthermore, regarding the access prices for the subsidised infrastructure, these are an integral part of the award process, and do not need to be divulged prior to the tender submission.

3. Other topics raised by stakeholders

In addition to the above topics, stakeholders provided additional inputs regarding the overall design of the scheme and the bidding procedure and implementation of the scheme. These topics can be grouped as follows:

f) Comments related to the schedule of the Scheme

All three telecom providers requested that the scheduled time for the implementation of the project be expanded (until the end of 2025).

Impact of the comments on the planned scheme:

The timeline proposed in the public consultation document takes into account the milestones and targets imposed in the Recovery and Resilience Plan, which foresee that coverage for all premises is reported to be completed by Q4 2025. In order to allow for sufficient time for verification of the completeness of works and the subsidy settlement, DEC considers the completion of the installation work should be done by 1/6/2025.

g) Comments on providing information on the existing infrastructure in the intervention areas

Two out of the three providers have requested for additional information (about the availability of the infrastructure in the intervention areas etc.) before the bidding process to allow the bidders to calculate the costs required to provide the required investments.

Impact of the comments on the designed procedure:

According to BBGL (para 133), information regarding the use of existing infrastructure (including terms, conditions, pricing) must be provided at least two months before the deadline to submit the bid in the competitive selection procedure.

h) Comments on the claw-back mechanism described

One stakeholder (CYTA) requested for more information as regards the claw-back mechanism which will be set and remain imposed throughout the lifespan of the subsidised network. Specifically, more details were requested for the implementation of the subsidy refund mechanism and particularly for the definition of the term "gains" mentioned in the scheme.

Impact of the comments on the designed procedure:

Some general guidelines on the calculation of the funding gap and the calculation of the subsidy will be given in the Tender Documents of the Investment (taking into account that competition must be ensured in the bidding process), but each operator will be free to choose how to build its business model and which factors will be taken into account when calculating the funding gap for the scheme.

Regarding the monitoring of the contractor for eligible costs going beyond EUR 5 million (claw-back mechanism), it is imposed by the new BBGL, par. 156 "Member States must implement a claw-back mechanism for at least the duration of the project if the aid amount of the project is above EUR 5 million, and must set out its rules transparently and clearly ex-ante (including in the documentation for the competitive selection procedure)".

It is proposed that the first assessment will be made 3 years after the winner of each lot completes the building/updating of the network, since during this period the providers are not foreseen to have excessive profits. After this initial 3-year period, the assessment is proposed to be made annually/biannually, since it is in the interest of the providers to do the assessment as frequently as possible. Full details about this topic will also be given in the tender documents.

i) Comments on the limitation of having a different contractor per LOT

Other suggestions provided by respondents (CYTA) included:

CYTA expressed the argument that the current limitation of having a different contractor per LOT is opposed to the fairer award of LOTs to the best bidder and will imply additional costs to the public. For these reasons, it suggested that this limitation is deleted from the scheme.

In case the proposal above couldn't be accepted, CYTA proposed that if a LOT is not awarded to the best bidder according to the tender criteria, the proposal of the bidder who will be awarded the lot shall be accepted, provided that it will not burden the public more than 10% of the proposal of the best bidder. Otherwise, the LOT must be assigned to the best bidder, even if another LOT has previously been awarded to him.

Impact of the comments on the designed procedure:

DEC agrees that the limitation of having different contractors/ LOT may lead to a situation where the best economical bid has not been selected. In order to counter-balance this risk, but still encourage a high level of competition, Cyprus authorities will allow for each bidder to be awarded maximum 2 lots. The operators were reminded that, as provided by point 120 of the Draft Broadband Guidelines, where the

number of participants is not sufficient, the Cyprus authorities will entrust an independent auditor with the assessment of the bid (including cost calculations) submitted by the winning bidder.

j) Other comments regarding the bidding and evaluation procedure for awarding each lot

Other comments submitted are the following:

 During the public consultation process and for transparency purposes it was proposed that the maximum subsidy per LOT must be predefined.

Impact of the comments on the designed procedure

 Only the total amount for the overall aid scheme can be disclosed (35 mil.). A fragmented aidamount per Lot will not be given to the telecom providers, since the intervention areas (lots) were designed so that they are balanced.

k) Comments made by the National Regulatory Authority of Cyprus (OCECPR/ГЕРНЕТ)

During the public consultation procedure, the Cypriot NRA also made a comment/clarification on the proposed scheme.

Specifically, on page 3, it is specified that "The beneficiaries of the scheme will be electronic communications network operators under the general authorization regime (Law 24(I)/2022)".

The NRA would like to clarify that under the General Authorization law, horizontal arrangements apply to providers, regardless of their power in the relevant market, such as co-location and rights of way. Based on that the NRA proposed that paragraph 15 be formulated as follows: "15. Jurisdiction Any party may contact the Department of Electronic Communications regarding issues in the implementation of the subsidy scheme. Any dispute or claim regarding the implementation of the scheme shall be subject to the jurisdiction of the competent Cyprus courts except those that fall in the remit of the Commissioner of Electronic Communications i.e. dispute settlement on access products, conditions and pricing."

Other comments regarding specific aspects of the scheme and the bidding and evaluation process were also submitted from the three providers, which can be analytically reviewed in the Annex of this document, along with their impact on the planned scheme.

4. Annex 1 – Public Consultation Document





DEPARTMENT OF ELECTRONIC COMMUNICATIONS DEPUTY MINISTRY OF RESEARCH, INNOVATION AND DIGITAL POLICY

Public Consultation for the Expansion of Very High-Capacity Networks in Underserved Areas

(Investment under Recovery and Resilience Facility)

23 June 2022

Contents

Preliminary remarks	15
High-level project description	16
1. Objectives of the scheme	16
2. Preliminary identification of eligible intervention areas	16
3. Performance of subsidized networks	17
4. Budget and duration of the scheme	18
5. Eligible beneficiaries & conditions for participation in the scheme	18
6. Intervention model	18
7. Eligible costs	19
8. Aid amount and aid intensity	19
9. Selection process and award criteria	20
10. Wholesale access conditions	20
11. Private extensions to adjacent areas	21
12. Use of existing infrastructure	22
13. Claw back mechanism	22
14. Checks and audits	22
15. Jurisdiction	22
16. Final remarks and questions to stakeholders	23
Annex 1: Description of Lots	23
1. Methodology for Lots definition	23

Expansion of Very High-Capacity Networks in underserved areas

Public consultation pursuant to paragraphs 64 and 78 (b) of the European Union Guidelines for the Application of State Aid Rules in relation to the Rapid Development of Broadband

Networks⁸

Preliminary remarks

The Cyprus Recovery and Resilience Plan, adopted by the European Council in July 2021, under Component 4.1, foresees dedicated investments to support deployment of very highcapacity networks in underserved areas of Cyprus.

This investment aims to accelerate, through public intervention, deployment of VHCN infrastructures in underserved areas with the aim to ensure that (a) all premises in organized urban and rural communities have access to 100 Mbps download speeds, upgradable to 1 Gbps download speeds; (b) the entire population living in urban and rural communities, as well as all major terrestrial transport paths have uninterrupted 5G coverage with download speeds of at least 100 Mbps; and (c) all main socio-economic drivers (SED) have access to symmetrical Gigabit connectivity.

For the implementation of the measure, a State aid support scheme will be set-up to support investment costs in a Private DBO (Design, Build and Operate) - Gap Funding model. The beneficiaries of the scheme will be electronic communications network operators under the general authorization regime (Law 24(I)/2022). As a result of the public support, it is expected that based on the RRF milestones at least 44,000 premises in underserved areas will be covered by VHCN connectivity networks. The total budget allocated to the scheme will be of 35,000,000 EUR and will finance investments throughout 2022-2025.

This document outlines the main features of the support scheme, including the map of eligible intervention areas preliminarily identified. It is submitted for public consultation by the Department of Electronic Communications, in line with European State aid rules. The objective of the public consultation is twofold: confirm the list of underserved areas in Cyprus in order to consolidate the final map of eligible intervention areas and obtain feedback on the proposed public support scheme. Interested parties are invited to comment on the measure. Electronic communications network operators should submit substantiated information regarding their own networks able to reliably provide the threshold speeds in the target area that are present or credibly planned to be deployed until 2025.

15

⁸ The present consultation is carried out in conformity with the new Broadband Guidelines, and in particular paragraphs 77 to 83.

The deadline to submit comments and observations together with the relevant documentation is 23rd of July 2022. Please use the following e-mail address to submit your information: nioannou@dec.dmrid.gov.cy, akakkouras@dec.dmrid.gov.cy. Please identify the information that should be considered confidential.

Following the outcome of the public consultation, the scheme will be notified to the European Commission pursuant to Article 108, Paragraph 3 of the TFEU.

High-level project description

1. Objectives of the scheme

The scheme will support investments in VHCN access networks in underserved areas of Cyprus through three (3) types of interventions:

- A. <u>Type A investments</u>: Investments in VHCN fixed access networks providing at least 300 Mbps download speed, upgradable to 1 Gbps download speed, located in areas where no networks providing 100 Mbps download connectivity are present or planned by 2025.
- B. <u>Type B investments</u>: Investments in mobile networks that provide a 5G service at a minimum speed of 100 Mbps download, in areas where no such networks are present or planned by 2025. No support will be granted or used to meet legal obligations, such as coverage obligations attached to rights of use for spectrum.
- C. <u>Type C investments</u>: Investments for configuration of VHCN fixed access networks to provide 1 Gbps symmetrical speeds to socio-economic drivers (educational institutions of all levels (primary, secondary and higher education), hospitals and buildings housing government agencies of the central and regional administration), where 1 Gbps symmetrical speeds services are not available or planned by 2025.

2. Preliminary identification of eligible intervention areas

The intervention areas will consist of discrete areas, scattered over the entire territory of the Republic of Cyprus.

Dedicated mapping exercises for fixed and wireless networks were conducted by OCECPR throughout 2021 to identify private investment plans up to 2025. Based on the results of this mapping, a preliminary list of eligible intervention areas under the support scheme has been identified, as described below.

A detailed list of sites is given in Annex 2:

- Eligible intervention areas for Type A investments- areas where no networks providing 100 Mbps download connectivity are present or planned.
- Eligible intervention areas for Type B investments- areas where no mobile networks providing a 5G service for minimum 100 Mbps download speeds are present or planned.

Eligible socio-economic drivers (SED) buildings for Type C investments.

3. Performance of subsidized networks

The new infrastructure supported by the scheme will have to observe minimum performance requirements, as described below for each type of investments:

A. Minimum performance requirements for Type A investments

Subsidized fixed access networks should provide minimum 300 Mbps download speed (min. 50 Mbps upload speed) that can be reliably achieved under usual peak time conditions⁹. It must be possible (within 5 working days) to upgrade the supported networks to 1 Gbps download speed (250 Mbps upload speed) reliably achieved at peak time conditions without further investments in the passive infrastructure supported by the scheme.

The funding applicants must ensure that the infrastructure supported and deployed under the scheme will result in the provision of a fixed broadband access service that at least triples the existing download and upload speeds provided under usual peak time conditions to end users in the target areas and ensures in all cases, irrespective of the existing speeds, the provision, under usual peak time conditions, of speeds of at least 1000 Mbps download and 250 Mbps upload.

Supported networks must reach at least up to the boundaries of passed premises, so that all premises passed by the supported network can be connected within maximum 4 weeks from the date of the request of the end user, for normal activation fees.

B. Minimum performance requirements for Type B investments

The supported 5G mobile infrastructure should provide a terrestrial connection delivering a data rate of at least 100 Mbps symmetrical that can be reliably achieved under peak time conditions. In practice the scheme will fund the connection to symmetrical gigabit ready backhaul for base stations currently connected only through radio or micro-wave links.

The funding applicant must ensure that the infrastructure supported and deployed under the scheme will result in the provision of a mobile broadband access service that at least doubles the existing download and upload speeds provided under usual peak time conditions to end users in the target areas and ensures in all cases, irrespective of the existing speeds, the provision, under usual peak time conditions, of speeds of at least 100 Mbps download and 20 Mbps upload.

C. Minimum performance requirements for Type C investments

Subsidized access networks connecting SEDs should provide minimum 1 Gbps symmetrical speeds that can be reliably achieved under peak time conditions, irrespective of the technologies used.

The funding applicant must ensure that the infrastructure supported and deployed under the scheme will result in the provision of a fixed broadband access service that at least triples the existing download and

17

⁹ Speed under usual peak time conditions is understood as the speed that end users are expected to achieve during the entire peak-hour period

upload speeds provided under usual peak time conditions to SEDs and ensures in all cases, irrespective of the existing speeds, the provision, under usual peak time conditions, of speeds of at least 1 Gbps download and 1 Gbps upload.

For all three types of investments, beneficiaries are entitled to propose the provision of the required services using or combining whatever technology they deem most suitable.

4. Budget and duration of the scheme

The budget of the measure is 35,000,000 EUR, entirely made available through the Recovery and Resilience Facility ("RRF"). The scheme will last until 31 December 2025 (date until which aid can be granted under the scheme).

5. Eligible beneficiaries & conditions for participation in the scheme

The beneficiaries of the scheme are undertakings, authorized electronic communications network operators, established in the Republic of Cyprus at the time of selection of the grantees of the support, that design, build and operate the infrastructure supported under the scheme. The beneficiaries will be selected following an open, transparent, and nondiscriminatory competitive funding procedure, following the public procurement legislation of Cyprus.

The beneficiaries of the scheme must confirm the subsidized networks for which they receive investment support are not part of their investment plans until 2025; in addition, applicants must provide appropriate documentation, such as performance, cost, time and financing plans demonstrating the implementation of the investment would not be possible without public support.

The infrastructure built will be in the property of the undertaking that receives funding following the competitive selection procedure. The selected undertaking is obliged to operate and maintain the subsidized infrastructure for at least seven years after the start of its operation. This obligation will be in force irrespective of any change in ownership of the infrastructure within this timeframe. Wholesale access rules apply to any subsidized infrastructure.

Undertakings in difficulty¹⁰ will not be eligible to receive support under this scheme.

6. Intervention model

The implementation of the investments will follow a Private DBO (Design, Build and Operate) – Gap Funding model¹¹. The Contractor will undertake the design, construction, and operation of the network, as well as part of the financing, and the public sector will cover the funding gap with a grant, calculated on the basis of a percentage of eligible investment costs for the deployment of subsidized infrastructure, following an open tender procedure.

¹⁰ In line with the definition in the Guidelines on State aid for rescuing and restructuring non-financial undertakings in difficulty (OJ C 249, 31.7.2014, p. 1)

¹¹ 'Gap funding' refers to the difference between investment costs and expected profits for private investors.(2013/C25/01 - annex 1)

As will be explained in detail below, the geographical territory of the Republic of Cyprus will be divided into three (3) Lots. Each Lot will include a combination of type A, B and C investments, grouped in the respective intervention area.

7. Eligible costs

Eligible costs will include investment costs for the three types of investments, as well as ownservices costs and project planning and management costs, detailed as follows:

- A. Eligible investment costs for Type A investments: costs for deployment of passive infrastructure of VHCN fixed access networks. This can include: civil engineering works, preparation of documentation to obtain the necessary permits, ducting, including sub-ducts, microtubes, etc., and their installation; fibre cables including inlets and splicing, fibre distribution panels, including their installation, passive equipment in distribution and local centers.
- B. Eligible investment costs for Type B investments: costs for deployment of 5G mobile networks. This can include: costs for deployment of passive infrastructure for 5G mobile networks. This includes investment costs for the roll-out of passive infrastructure or its upgrade or adaptation when necessary for the use of an existing infrastructure: costs for deployment of optical backhaul networks up to the first distribution point (macrocells); costs for design and construction of the mobile access network, deployment of new small cells, securing power supply, foundations, masts or support structure, technical rooms and structural security measures; costs for connections between the passive access network and the backhaul networks, i.e. deployment of ducts, dark fiber etc.
- C. Eligible investment costs for Type C investments: costs for configuration of existing access networks serving SED to ensure 1 Gbps symmetrical speeds can be reliably achieved under normal peak time conditions. This configuration can be done either at the passive level (point-to-point) or at active level with the addition of appropriate terminal equipment (WDM-PON). Investments can include: civil engineering works; preparation of documentation to obtain the necessary permits; ducting, including subducts, microtubes, etc., and their installation; fibre cables including inlets and splicing; fibre distribution panels, including their installation; passive equipment in distribution and local centers.
- D. Other overall project costs (for all three types of investments):
 - a) Own-services costs directly related to the implementation of the investment- work and material used for the project, duly justified
 - b) Project planning and management related costs

The investment implementation period and the eligibility of costs cannot, under any circumstance, start before the submission of the project funding proposal to the granting authority. All works have to be finalized no later than 1st of June 2025. Failure to deliver by this timeline forfeits the right to the gap funding support.

8. Aid amount and aid intensity

A maximum aid amount will be defined for each Lot in the selection procedure.

9. Selection process and award criteria

The beneficiaries of the support scheme will be selected through an open, competitive and non-discriminatory selection process, following the Cyprus procurement rules.

In order to encourage competition, the territory of Cyprus will be divided into three (3) Lots, described in Annex 1 of this document.

Project proposals will need to ensure coverage of at least 15.000 premises included in each Lot. Additional points in the selection procedure will be awarded to bidders offering a higher coverage.

Each Lot will include all three types of investments⁵ described above and will be awarded to a bidder, based on the most economically advantageous offer (please refer to the award criteria below). Eligible undertakings have the possibility to bid for all three Lots. However, as a general rule, an undertaking can be successfully awarded the bid for only one Lot. Only in the exceptional circumstance that there is only one bidder or only one eligible bid for a Lot, and the submitting tenderer has already been selected for another Lot, can the same tenderer be declared successful for more than one Lot.

In case of a single bidder for a Lot, the selection committee will appoint an independent auditor for the assessment of the bid (including cost calculations).

For the evaluation of submitted offers, the following selection and award criteria will be used:

- Amount of requested public support. The offer proposing the lowest amount of public support will be awarded the maximum score; the remaining offers will be awarded scores in decreasing order.
- Price offered to end-users and to other retail operators
- Additional points will be given for bidders going beyond the minimum coverage of 15.000 households per Lot.
- Environmental impact (expected CO2 emissions for the planned infrastructure over a 20-year period)
- Timeline for completion of the works (each month completed prior to 1st of June 2025 will award additional points) (NB: penalties will be applied to any contractor in case of delay in delivery)
- Compliance with the Cybersecurity Toolbox⁶

Should there be only one bidder for one of the/several Lots, an assessment of this winning bid by an independent auditor (including cost calculations) will have to be carried out.

10. Wholesale access conditions

Effective and comprehensive wholesale access to the subsidized passive infrastructure must be offered at both the passive and active layer, under open, transparent, fair and nondiscriminatory conditions, to all operators who request it.

- ⁵ See annex 1 for detailed description of the lots.
- ⁶ <u>5g_eu_toolbox_72D70AC7-A9E7-D11D-BE17B0ED8A49D864_64468 (1).pdf</u>
 For the fixed access networks subsidized (investment types A and C), at least the following products should be made available to access seekers: bit-stream access, virtual unbundled access ('VULA'),

buildings or entries to buildings, building wiring, antennae, towers and other supporting constructions, ducts, conduits, masts, manholes, and cabinets". In addition, for investment type C, full physical unbundling should be made available to access seekers.

For the mobile access networks subsidized (investment type B), at least the following products should be made available to access seekers: access to poles/masts/towers, backhaul access, MVNO and RAN.

Wholesale access for all active access products should be granted for at least ten (10) years. For VULA and passive infrastructure elements, access should be granted for an unlimited duration, throughout the lifespan of the network element concerned.

Project funding applications must contain all conditions for the provision of wholesale access, including the prices. Moreover, following the award of the bid, all beneficiaries will be required to publish a reference wholesale offer describing all supported wholesale products, conditions and prices.

The wholesale service price for the proposed products must be less than or equal to the regulated wholesale prices approved by the Cyprus National Regulatory Authority (NRA), as applicable or can be determined through any existing commercial agreements. Furthermore there should be no margin squeeze between wholesale and retail prices.

The network that will be developed in each Lot will concentrate the traffic from all the served locations to one (or more) central Points-of-Presence (POPs), where other retail operators can be interconnected, in order to provide services.

The relevant elements of passive infrastructure financed under the measure have to be large enough to cater for at least three access seekers and to host point-to-multipoint as well as point-to-point solutions.

In the case of mobile networks deployed, the mobile sites must be sized in such a way that they can be used by at least three MNOs active in the Republic of Cyprus.

Aid will not be granted or used to meet legal obligations, such as coverage obligations attached to spectrum rights of use. Supported infrastructure will not be considered to meet any coverage obligations attached to the relevant spectrum rights of use.

Beneficiaries will also have to offer effective and comprehensive wholesale access to all existing and privately funded infrastructure used for the deployment of the subsidized network in the target areas. The same access conditions will apply on the entirety of the network including on the part where existing infrastructure will be used.

11. Private extensions to adjacent areas

Using their own resources, the aid beneficiary or access seekers connecting to the State funded network may wish to extend the network into adjacent areas. Private extensions in adjacent areas may be permitted two years after the State funded network enters into operation. This moratorium aims to protect existing operators in non-eligible areas from competition stemming from subsidies backhaul.

12. Use of existing infrastructure

In order to reduce deployment costs and limit the negative environmental effects of network deployment, the granting authority encourages potential participants to the scheme to make use of existing public and private infrastructures that could be re-used for deployment of subsidized networks.

A database with information on the existence of such infrastructures throughout the territory of the Republic of Cyprus is made available by the NRA. The NRA will further assess the current availability of information regarding existing physical infrastructure and will ensure that it will be integrated into a single portal.

Any operator that owns or controls infrastructure in the eligible intervention areas identified above and that wishes to participate in the selection procedure must:

- (1) Inform DEC and the NRA about this infrastructure through this public consultation exercise
- (2) Undertake to make this infrastructure available for use by other operators participating to the selection process.
- (3) Information regarding the use of the respective infrastructure (terms, conditions, pricing) should be provided to any operators requesting it at least 2 months before the deadline for submission of bids in the competitive selection procedure.

13. Claw back mechanism

A claw back mechanism will be set-up for all projects for which eligible costs exceed 5,000,000 EUR at the time of final account. The mechanism will be operational throughout the lifespan of the subsidized network.

Under the mechanism, aid beneficiaries will have to refund those unexpected gains which exceed an increase of 30% as compared to the gains calculated for the funding gap in the project proposal phase.

Please note that to ensure that aid remains proportional and does not lead to overcompensation or crosssubsidisation of non-aided activities, the aid beneficiary must ensure accounting separation between the funds used for the construction and the operation of the network and other funds at its disposal.

14. Checks and audits

The Government of Cyprus, notably DEC and the Audit Office of Cyprus will be entitled to carry out spot checks to verify the correct implementation of the measure.

As such, upon request, any operator benefitting from the scheme will have to give access for the carrying out of performance checks of the new installation.

By participating in the aid scheme, the operators agree that audits be carried out at their premises and at the installations' technical sites. This should notably allow the authorities to establish that subsidized infrastructures were implemented according to the specification of the scheme.

15. Jurisdiction

Any party may contact the Department of Electronic Communications regarding issues in the implementation of the subsidy scheme.

Any dispute or claim regarding the implementation of the scheme shall be subject to the jurisdiction of the competent Cyprus courts.

16. Final remarks and questions to stakeholders

All interested stakeholders are invited to submit their comments (Greek or English) on the aid scheme described above by 23rd of July 2022 at the following e-mail addresses: nioannou@dec.dmrid.gov.cy, akakkouras@dec.dmrid.gov.cy. In their answers, stakeholders are encouraged to address in particular but not limited to the following topics:

- (1) Are there any areas where operators plan investments with similar performance as the subsidized infrastructures for investment types A, B, and C respectively and that are currently identified as potentially eligible target areas? If so, please provide further information on the respective investment plans: location of the investments, performance of planned networks, timeline for finalization of investments.
- (2) Please provide information on the existing infrastructure your organization owns or controls and that could be re-used for deployment of connectivity networks supported under this scheme. The information to be provided must include at least:
 - type of infrastructure (duct, pole, cabinet, etc)
 - Location (GIS data)
 - Access conditions
 - Access pricing
- (3) Interested parties in an adjacent area should inform the authorities if they oppose extensions from the subsidised areas. In such a case, interested parties are invited to demonstrate that the planned extension enters an adjacent area which is already served by at least two independent networks providing speed comparable to those of the State funded network or that there is at least one comparable network in the adjacent area which entered into operation less than five years before the State funded network.

Annex A: Description of Lots

Methodology for Lots definition

Selection of the analysis' reference unit

Aiming at an analysis with the best possible spatial detail, as well as ensuring the correct connection of the quantitative data, the separation of the areas was carried out at the level of Postal Codes (PC). With this option the demographic and other statistics refer to a smaller geographical area in relation to the municipalities / communities without losing their accuracy, thus giving the possibility of exporting safer results.

Implementation of Multicriteria Analysis

The selected factors influencing the multi-criteria analysis were defined with a view to establish three balanced Lots. The objective was that each Lot should have an equivalent economic interest to potential

bidders. To that end a series of factors were defined, which affect the connection of the underserviced households. Each of these factors was then weighted in order to allocate different importance to the various factors. The methodology identified the following factors (and weightings): the density of buildings per Organized Community - as the main factor (60%), the actual distance from the nearest cabinet for the connection of areas (20%), the existence of Road Network A-B (10%) and the population of the community (10%).

Each influencing factor was divided into classes/sections allowing different rating (from bestworst) so that, in total, each region received a rating based on the same criteria.

Building Density Factor

Specifically, for the density of buildings, they were divided into twelve (12) different classes.

sity of buildings, they were divided into twelve (12) different			
Classsection/Score	From / Until Kilometers	Buildings per sq.	
1	0	50	
2	50	100	
3	100	150	
4	150	200	
5	200	300	
6	300	400	
7	400	500	
8	500	600	
9	600	700	
10	700	1000	
11	1000	15000	
12	15000	20000	

From estimated cost of connection of end-users, the estimated cost of connecting buildings in relation to the density of buildings is shown in the table below.

Classsection/Score	From / Buildin sq. Kilome	ıgs per	Weighted cost factor
1	0	50	1,00
2	50	100	0,78
3	100	150	0,65
4	150	200	0,54
5	200	300	0,43
6	300	400	0,37
7	400	500	0,33
8	500	600	0,30
9	600	700	0,28
10	700	1000	0,26
11	1000	15000	0,26
12	15000	20000	0,26

Organisational Community (OCs) connection distance from splitter

Class-Section/ Score	From/ (navigable	Until e meters)
1	1	200
2	200	500
3	500	750
4	750	1000
5	1000	1500

6	1500	2000
7	2000	2500
8	2500	3000
9	3000	5000
10	5000	8000

Existence of Road Network

Class-Section/ Score	Existence of Road Network (A-B)
1	yes
0	no

Community population

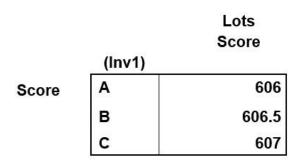
Class-Section/ Score	From/ U Number Dwelling	of
1	1	10
2	10	25
3	25	50

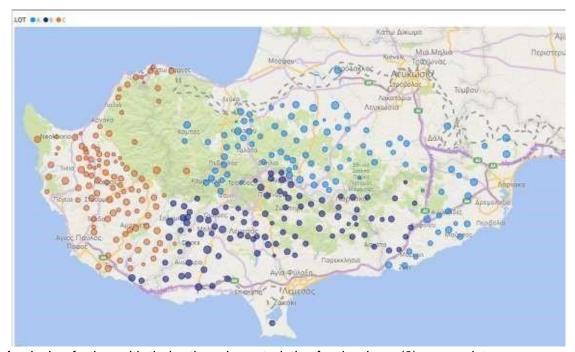
4	50	100
5	100	250
6	250	500
7	500	1000
8	1000	2500

Results of Multicriteria Analysis

Having in geographical connection all the geographical and quantitative parameters of each region and in detail the score for each factor (factors / weights) per region, we applied the method of multi-criteria analysis, resulting in a uniform calibration of the regions (scoring). The practical criterion of the geographical division of the areas (eg. the Organized Communities to be in the same Municipality) was taken into account in a way that adjacent areas should be in the same area (Lot), as well as be equal in their other geographical characteristics. (eg. number of PCs, Organised Communities, Buildings, etc.).

The results of the multi-criteria analysis gave three (3) areas of same attractiveness that can be seen in the graphs and tables below (detailed by area in Annex 2).





Analysing further with their other characteristics for the three (3) areas, data emerge:

Total Postal Codes by Region

A	98
В	101
С	108

Total Organised Communities by region

A	532
В	499
С	399

Buildings by area located within an Organised Community or outside (in/out OCs)

Buildings IN OCs

32290
25237
23249

Buildings OUT OCs

A	3403
В	2128
С	867

Base Stations per Lot without fixed backhaul connection

Lot	Mob. Bas	e Stations
A	49	
В	38	125
С	38	

Socio-economic drivers to be connected per Lot

LOT	SEDs
A	111
В	75
С	69

5. Annex 2 – Detailed list of comments received

Please see separate excel file with all comments received during the public consultation.