kyles community broadband

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KYLES

COMMUNITY BROADBAND

Request For Information

introduction

[Document subtitle]

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# introduction

The Kyles Community Broadband Group is seeking one or more partners to support the design, implementation and operation of a high speed broadband solution as part of the Kyles Community Broadband (KCB) Project.

The purpose of this Request for Information (RFI) is to:

1. Identify suitable solutions
2. Confirm the affordability of the potential solutions
3. Engage with the marketplace to understand whether there are aspects of our requirements which would present obstacles or constraints

It is intended that, following the evaluation of the RFI responses, suitable suppliers will be invited to present their potential solutions and share their implementation and service strategies through a demonstration and presentation session with the evaluating panel and members of the local community. The RFI process should help define the requirements and structure of the project and a full tender or series of tenders will be issued at the conclusion of the process. It is possible that this tender may need to follow the OJEU process (Official Journal of the European Union) although this will be determined during the RFI process.

This RFI seeks proposals for the provision of a broadband infrastructure and services to allow high speed Broadband access to all residential and business premises within the communities of Tighnabruaich, North, South and West Bute along with Colintraive and Glendaruel (see map). At present, there is an aspiration to include mobile broadband within the scope of the project and submissions are welcomed from suppliers who could provide services using the infrastructure that is created as part of this project.

It is recognised that some of the premises in the target areas will be served by the BT Next Generation Broadband (NGB) rollout and so the focus of this RFI is on premises for which there is no broadband provision planned for at least the next 3 years.

The KCB is supported by Community Broadband Scotland (CBS) to deliver a community-led Broadband service.

The need for good, future-proofed communications and broadband is essential for the growth and indeed the very existence of each of the communities. The area has long been excluded from effective modern communication services because of restrictions in technology, high costs and distance/logistics issues. The social, economic and educational growth of the area is significantly hampered. Local home-run and small businesses struggle to keep pace and many new people are discouraged from moving to the area because of this shortfall. Companies have already been forced to move away from the area due to poor infrastructure provision.

**Disclaimer:** The project will be managed and administered by a new Community Interest Company (CIC), Kyles Community Broadband, currently being established. This RFI is issued with the authority of the Colintraive & Glendaruel Development Trust, Tighnabruaich District Development Trust and Bute Community Broadband Group. However the point of contract and all further responsibility for the project will rest solely with the new body. Until the new body is fully established the project is being managed by the Colintraive & Glendaruel Development Trust.

# overview

## Background

The target area is split into three main locations and a further area may be added following community consultation – this is shown to the right of the map edged in blue.

LOCATION 1

Post Code – PA21 Kilfinan Parish with the main settlements of Tighnabruaich, Kames, Ardlamont, Millhouse, Portavadie, Kilfinan and Otter Ferry. Population is 792 with 737 premises, 60% of these being non-residential. The parish is, essentially, a peninsula covering an area of 13,674 ha. It is approximately 14.5 miles (23.3 km) long and just under 6 miles (9.5 km) at its widest point. The topography is rolling rather than mountainous, reaching just under 460m (1500 feet) at its highest point. The coastline is approx. 48km (30 miles) in length.

The parish is currently supported by Tighnabruaich (ADSL Max) and Kilfinan (EA) BT exchanges. Community Broadband Scotland (CBS) have indicated that some of the properties are likely to receive connection in 2016 under the Digital Scotland Superfast Broadband initiative but the nature and extent of this is not known at this time however it is unlikely to be effective for properties out with of 1km from the Tighnabruaich exchange and Milhouse cabinet.

LOCATION 2

Post Code – PA20 the rural areas of Bute more than 1km from the cabinets in the Rothesay and Kilchatten Bay areas. Bute is an island located in the Firth of Clyde with an area of 47.2 square miles and a total population of 6,498. The project population is approx. 250 residents with 30 plus businesses, including the major tourist attraction of Mount Stuart House. The island is approximately 20 miles (32.2 km) long and 7 miles (11.3) wide and is divided across its centre by the Highland Boundary Fault. North of the fault the landscape is hilly and largely uncultivated with extensive areas of forestry. The highest point, Kames Hill is 267 metres. To the south of the fault the terrain is smoother and more highly cultivated, although in the far south there is another area of rugged terrain. The North of Bute is separated from the Cowal peninsula by the Kyles of Bute which is 300m at its narrowest point. Rothesay is the only town and as BT are at present delivering the BT New Generation Broadband (NGB) programme here with new cabinets installed as far as Ardbeg to the North and Montford to the South as well as to the village of Kilchatten Bay, so neither of these areas will be covered by this project.

LOCATION 3

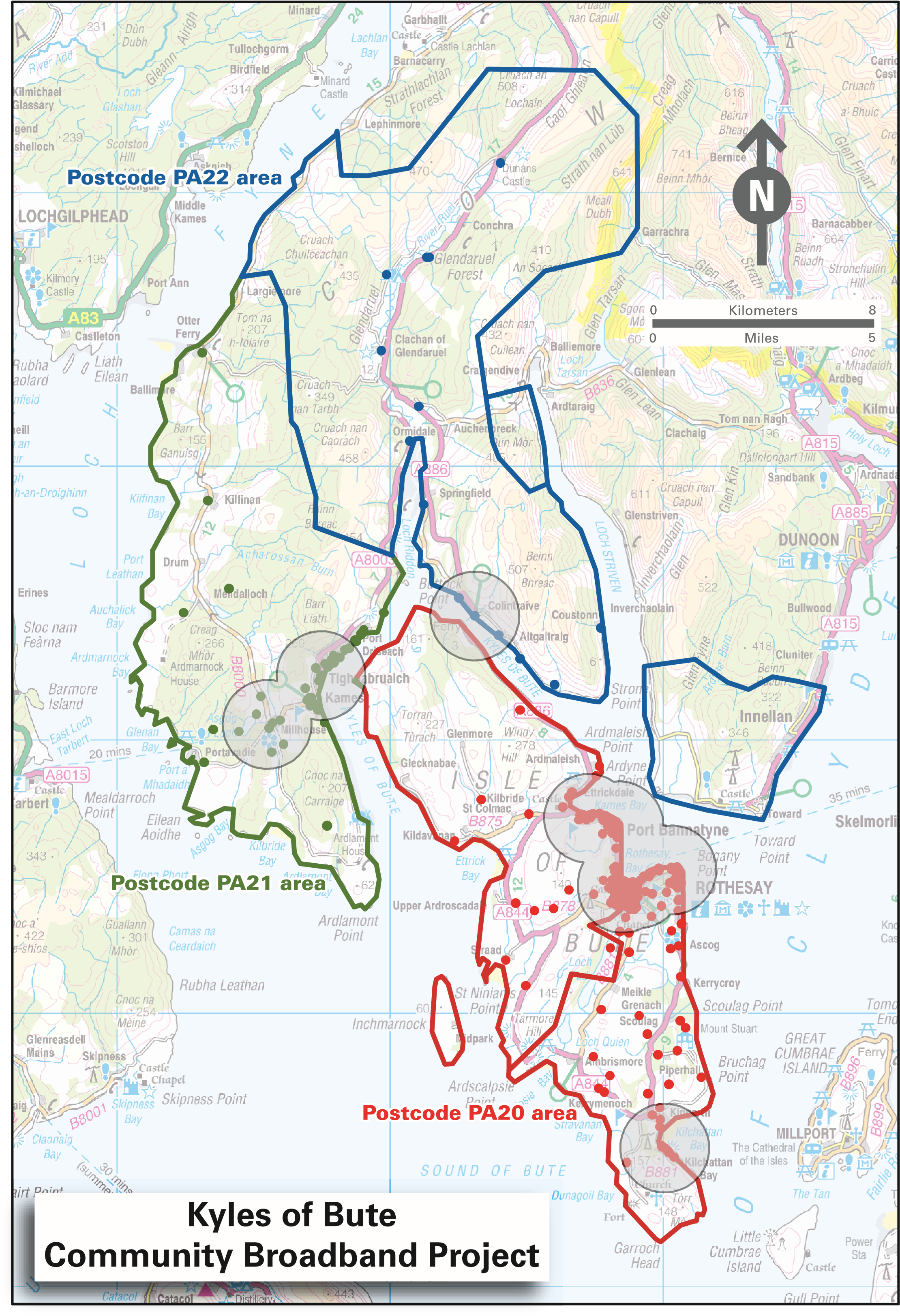
PA22 – the communities of Colintraive and Glendaruel (known locally as ‘ColGlen’) are located in South West Cowal at the top of the Kyles of Bute. The two village centres of Colintraive and Glendaruel are 10 miles (16 km) apart with the communities covering an area which stretches for approx. 30 miles (49 km) end to end. The total population is 250 and 40 small businesses. A small number of properties (20 – 30) at Colintraive which are sited within 1km of the exchange will be part of the BT NGB roll out.

The area is supported by exchanges at Colintraive and Glendaruel and have ADSL only available at present.

## Service area

The intended service areas for this the project are shown on the map outlined below (but see 2.1 above) with the following list of post codes. As the rollout of the DSSB programme is more clearly defined, the service boundaries for this procurement may be revised, in order to fully address all properties that will not receive acceptable uplift of service from the Tighnabruaich, Colintraive, Kilchatten Bay and Rothesay exchanges.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | | | | |
| Census Post Code | Residents | Properties | | Project Postcode Check |
| PA20 0QA | 31 | 10 |  | PA20 0QA |
| PA20 0QE | 7 | 3 |  | PA20 0QE |
| PA20 0QF | 24 | 12 |  | PA20 0QF |
| PA20 0QG | 22 | 9 |  | PA20 0QG |
| PA20 0QL | 20 | 6 |  | PA20 0QL |
| PA20 0QU | 13 | 5 |  | PA20 0QU |
| PA20 0QX | 19 | 6 |  | PA20 0QX |
| PA20 9LP | 46 | 20 |  | PA20 9LP |
| PA20 9LR | 0 | 0 |  | PA20 9LR |
| PA20 9LS | 10 | 4 |  | PA20 9LS |
| PA20 9LW | 13 | 10 |  | PA20 9LW |
| PA20 9LZ | 1 | 1 |  | PA20 9LZ |
| PA20 9NA | 11 | 5 |  | PA20 9NA |
| PA20 9NX | 4 | 2 |  | PA20 9NX |
| PA21 2BP | 0 | 0 |  | PA21 2BP |
| PA21 2DA | 24 | 12 |  | PA21 2DA |
| PA21 2DH | 54 | 27 |  | PA21 2DH |
| PA21 2DS | 12 | 8 |  | PA21 2DS |
| PA21 2AH | 30 | 15 |  | PA21 2AH |
| PA21 2ER | 39 | 18 |  | PA21 2ER |
| PA22 3AA | 24 | 10 |  | PA22 3AA |
| PA22 3AF | 25 | 11 |  | PA22 3AF |
| PA22 3AH | 32 | 17 |  | PA22 3AH |
| PA22 3AJ | 18 | 8 |  | PA22 3AJ |
| PA22 3AP | 6 | 3 |  | PA22 3AP |
| PA22 3AU | 7 | 3 |  | PA22 3AU |
| PA22 3AX | 3 | 1 |  | PA22 3AX |
| PA23 7UG | 51 | 22 |  | PA23 7UG |
| PA23 7UJ | 37 | 11 |  | PA23 7UJ |
| PA23 7UL | 4 | 2 |  | PA23 7UL |
|  |  |  |  |  |
| Total | 587 | 261 |  |  |



# requirements

This RFI has been divided into four elements in order to allow companies to bid for one, several or all of the elements. We have chosen this approach in order to enable companies with local or specialised capabilities to bid for a specific aspect of the work although we also welcome companies who can provide an end to end service. Suppliers are invited to comment, as part of their response to the RFI, on any concerns/comments they have on the structure of the tender and any alternative models that could be adopted when the final tender is issued.

Potential suppliers may wish to bid for any, or all of:

1. Design and project management of the Implementation of the local infrastructure (the Access Network) and connections to the backhaul provision (3)
2. Construction, installation and maintenance of the local infrastructure
3. Provision and support of backhaul services to the area (Internet Service Provision), providing service to the chosen Local Infrastructure provision (1)
4. Provision of an end to end support service (Support)

Any supplier bidding for any element of the system may also include support for, both their element or elements of the service, or for the service as a whole.

In addition, responses are welcomed from organisations who may wish to utiliise the local infrastructure for delivery of their own services.

Suppliers are requested to clearly indicate on their submission which elements of the requirement they are responding to. If any supplier wishes to provide an install-only-option for any element, without support, this should be clearly indicated. Suppliers are also invited to comment on the structure of the proposed procurement and propose alternative models if they feel they are more appropriate.

## Local infrastructure (access network) Design and Implementation

It is envisaged that a partner would be identified to assist in the design and project management of the local infrastructure. This project is entirely technology neutral and, at this stage, no decisions have been taken about the most appropriate technical solution. KCB is, therefore, seeking a partner who would carry out the detailed design of the solution and then project manage the implementation of the solution – both the local infrastructure and its connection to the back haul service.

## Local infrastructure (access network) COnstruction and Installation

While it is possible that the same partner would provide design and installation services, KBCB wishes to structure the tender such that companies could bid for the construction element alone, being managed by the Design and Implementation Partner.

## internet service provision

KCB is seeking to future proof the provision of broadband and is looking to achieve the highest possible bandwidth compatible with a sustainable ongoing service cost, and a latency which allows the use of voice and video conferencing across the links. Solutions are therefore sought which offer a Step Change for all areas within the Service Area and provide subscribers with a range of service offerings. In addition to increased speeds, it should be possible to take advantage of developments in the telecommunications infrastructure in the future, without requiring further major capital expenditure.

## Support and management

Once the implementation is complete, KCB is seeking a partner who can provide ongoing support and management services for all users of the infrastructure. This includes provision of an ISP service including, marketing, selling, billing and related services to residents and businesses within the defined areas as well as any partners who may be sharing the infrastructure. KCB is therefore seeking to procure a service and proposals are sought whereby, the supplier would be wholly responsible for maintenance of the network infrastructure including on-going management and maintenance and will be required to provide ISP services at rates to be compatible with similar services provided in fully served areas of the UK. This will be required to be delivered and supported for a minimum period of three years, with a rolling contract likely thereafter. The envisaged business model is shown below.

COMMUNITY USERS

For partners submitting a proposal to provide the support service, a high level business plan should be provided, covering the next three years, demonstrating the financial sustainability of the project, including the forecast subscriber numbers and subscription rates.

As an alternative to the above model, KBCB would also welcome the opportunity to discuss the creation of an organisational partnership with suppliers to achieve this.

## core requirements

The overall requirement is to provide the Service Area with effective, reliable, future proof and financially viable broadband services. With that, specific considerations include:

1. Service provision to individual properties throughout the service area of up to 15Mbps sustained download and in excess of 2Mbps sustained upload at time of first installation. The 15Mps is a regulatory restriction and, ideally, the infrastructure should be capable of speeds of 30Mbps or more with bandwidth initially restricted to 15Mbps.
2. The service must provide a latency of 80ms or lower from the core BT network to the end user premises, allowing for the use of voice and video conferencing solutions.
3. Ideally, the backhaul service should provide Quality of Service (QoS) protection, preserving bandwidth for specific uses, ensuring that peer to peer networking does not impinge on Video on Demand services (YouTube, iPlayer etc.), which in turn do not impinge on regular web browsing.
4. Long-term operational costs should be constrained to a per-premise cost not exceeding a target of circa £50 per month, averaged over all services provided, once uptake reaches the target of 70 connected premises.
5. For premises will be a mixture of residential and commercial properties, we anticipate a layered offering for each type. Suppliers are invited to outline their approach to providing different levels of service for commercial and residential customers.
6. Suppliers are invited to comment on whether they foresee any restrictions on data volumes for either upload or download
7. Support will be provided at a level to be determined by an SLA to be agreed with the chosen supplier. Suppliers are invited to present the service metrics they would anticipate as being realistic for this project.
8. Where wireless provision is proposed, any such should be specified and configured to not be unduly vulnerable to each or any combination of weather conditions, bodies of water or the presence of vegetation. Achievable Quality and Grade of service to be discussed with suppliers. Suppliers should describe how resilient their solutions are and what options there may be for lower cost, lower resilience solutions as well as higher cost, more resilient solutions.
9. Tourism is a key industry in the target area and suppliers are invited to propose solutions that would enable public access to network services for visitors to the area.
10. Mobile phone coverage across the target area is variable with some significant black spots. Suppliers are invited to propose potential solutions that could assist in improving phone coverage for the area.

# budget

This project is supported by Community Broadband Scotland and an application will be made for CBS capital grant funding. However, CBS require that the community provide some level of match-funding and this is usually met through initial installation charges. These charges are unlikely be available from the communities and KCB will look favourably on proposals which include an element of capital investment from the supplier. The supplier will not only benefit from the initial capital investment in the network infrastructure but also from on-going revenues for providing ISP services.

# Delivery and timescales

The approximate timetable for the award of this contract and project implementation is as follows:

|  |  |  |
| --- | --- | --- |
| **Activity** | **Who** | **When** |
| RFI documentation issued | KBCB | 10/12/2015 |
| RFI questions submitted by | Bidders | 23/12/2015 |
| Deadline receipt of Proposals | Bidders | 11/1/2016 |
| Supplier Presentations | KBCB | 14-22/1/2016 |
| Issue of formal ITT | KBCB | 29/2/2016 |

**Notes:**

1. During the RFI clarification period prior to the submission deadlines, answers to questions raised by potential bidders will be made available to all parties, where these do not compromise basic, commercial confidentiality.
2. Procurement timescales will be determined once the RFI has completed and will largely be determined by whether or not the tender must follow OJEU procurement guidelines

# response to this RFI

Responses should be emailed to [margaret@cgdt.org](mailto:margaret@cgdt.org)

It is the sole responsibility of bidders to ensure the delivery of their responses before the published deadline.

Late submissions will not be accepted.

All requests for further information about this process must be emailed to [margaret@cgdt.org](mailto:margaret@cgdt.org) before the published latest date to request clarification. Site visits are welcome and should be arranged with Margaret Shields at [margaret@cgdt.org](mailto:margaret@cgdt.org).

Suppliers are requested to reply to this RFI using the format below:

## Lot 1 – LoCAL INFRASTRUCTURE – Design and Implementation

## background information

6.1.1 Please provide an overview of your business/organisation in the context of our specific requirements for this lot in terms of experience and track record in designing and implementing network infrastructure and an indication of why you believe you are qualified to provide this service.

6.1.2 Examples of 3 previous, similar projects should be described stating the customer name, contact details, value of contract and start date/end dates for the project/service.

## technology and services

6.1.3 Please provide a high level description of the solution you would propose to meet the requirements.

6.1.4 Please indicate how components of the solution could be upgraded in future without the need for upgrade to all other parts of the solution or a wholesale redesign. It is envisaged that network speeds should be able to double over the next 3 years.

## Response to Core Requirements

* + 1. Service provision to individual properties throughout the service area of up to 15Mbps sustained download and in excess of 2Mbps sustained upload at time of first installation. Please describe how this will be achieved and the potential maximum bandwidth that could be supported.
    2. The service must provide a latency of 80ms or lower from the core BT network to the end user premises, allowing for the use of voice and video conferencing solutions. Please confirm that your solution will support this requirement and explain how it will be met.
    3. Ideally, the backhaul service should provide Quality of Service (QoS) protection, preserving bandwidth for specific uses, ensuring that peer to peer networking does not impinge on Video on Demand services (YouTube, iPlayer etc.), which in turn do not impinge on regular web browsing. Describe how QoS or similar mechanism could be implemented to protect specific services.
    4. Connections should not be capped in terms of data throughput although they may be throttled to meet a contracted bandwidth. Suppliers are invited to comment on whether they foresee any restrictions on data volumes for either upload or download
    5. Where wireless provision is proposed, any such should be specified and configured to not be unduly vulnerable to each or any combination of weather conditions, bodies of water or the presence of vegetation. Please indicate how your solution design builds in resilience and minimises interruption and interference.
    6. Tourism is a key industry in the target area and suppliers are invited to propose solutions that would enable public access to network services for visitors to the area. Please describe how your solution could offer public access.
    7. Mobile phone coverage across the target area is variable with some significant black spots. Suppliers are invited to propose potential solutions that could assist in improving phone coverage for the area.

## approach

6.1.13 Please describe your approach to this project, including details of how the objectives will be delivered and key tasks will be managed including working with KCB to fully deliver the requirements of the project.

6.1.14 Details of the overall project plan should be provided, highlighting key phases, tasks and milestones.

6.1.15 Please indicate the key risks, constraints and dependencies that you perceive to be associated with this project based on your experience of similar implementations.

## costing

6.1.16 Please provide a high level breakdown for the design and implementation of the local infrastructure, including key phases, tasks and timelines. At this stage, the plan is simply to provide estimates for the overall procurement and implementation timetable.

* + 1. Long-term operational costs should be constrained to a per-premise cost not exceeding a target of circa £50 per month, averaged over all services provided, once uptake reaches the target of 70 connected premises. Please provide a high level business plan that demonstrates how the proposed costings can be achieved using your proposed design for the local infrastructure.
    2. For premises will be a mixture of residential and commercial properties, we anticipate a layered offering for each type.

## Lot 2 – LoCAL INFRASTRUCTURE – Construction and Installation

## background information

6.2.1 Please provide an overview of your business/organisation and your general capability and experience in the construction of network infrastructure. This procurement is technology neutral and no decision has been made regarding the specific solution so your submissions should simply demonstrate the technologies you are expert in. If you are bidding solely for this Lot and not the Design lot, please provide details of your general capability. If you are bidding for Lots 1 and 2, please provide details of your capability to deliver the specific solution recommended in Lot 1.

6.2.2 Examples of 3 previous projects should be described stating the customer name, contact details, value of contract and start date/end dates for the project/service.

## approach

6.2.3 Please describe your approach to infrastructure construction and installation, including details of how the objectives will be delivered and key tasks will be managed including working with KCB. Please indicate what information and support you would require from KCB and/or other suppliers on other Lots.

6.2.4 Please indicate the key risks, constraints and dependencies that you perceive to be associated with this project based on your experience of similar implementations.

## support

6.2.5 Please indicate the proposed maintenance service for the physical infrastructure in terms of response times and hours of service

## costing

6.2.6 You should provide high level estimates of your equipment, installation and support service costing, in particular:

## Lot 3 – Provision of Backhaul Services

## background information

6.3.1 Please provide an overview of your business/organisation in the context of our specific requirements for network backhaul services and an indication of why you are qualified to provide this service. Please indicate clearly which of the four aspects of the solution you are responding to.

6.3.2 Examples of 3 previous, similar projects should be described stating the customer name, contact details, value of contract and start date/end dates for the project/service.

## technology and services

6.3.3 Provide a high level description of the solution you would propose to meet the requirements.

6.3.4 Please indicate how components of the solution could be upgraded in future without the need for upgrade to all other parts of the solution or a wholesale redesign.

## Response to Core Requirements

* + 1. Service provision to individual properties throughout the service area of up to 15Mbps sustained download and in excess of 2Mbps sustained upload at time of first installation. Please describe how this will be achieved and the potential maximum bandwidth that could be supported.
    2. Ideally, the backhaul service should provide Quality of Service (QoS) protection, preserving bandwidth for specific uses, ensuring that peer to peer networking does not impinge on Video on Demand services (YouTube, iPlayer etc.), which in turn do not impinge on regular web browsing. Describe how QoS or similar mechanism could be implemented to protect specific services.
    3. Connections should not be capped in terms of data throughput although they may be throttled to meet a contracted bandwidth. Suppliers are invited to comment on whether they foresee any restrictions on data volumes for either upload or download

## approach

6.3.8 Please describe your approach to this project, including details of how the objectives will be delivered and key tasks will be managed including working with KCB to fully deliver the requirements of the project.

6.3.9 Details of the overall project plan should be provided, highlighting key phases, tasks and milestones.

6.3.10 Please indicate the key risks, constraints and dependencies that you perceive to be associated with this project based on your experience of similar implementations.

## costing

6.3.11 Please provide high level estimates of the costs of provision and maintenance of backhaul services.

## Lot 4 – Provision of a Support Service

## background information

6.4.1 Please provide an overview of your business/organisation in the context of our specific requirements for the provision of a managed support service or Internet Service Provider and an indication of why you are qualified to provide this service. Please indicate clearly which of the four aspects of the solution you are responding to.

6.4.2 Examples of 3 previous, similar services should be described in terms of the services delivered, the scale of the service (customers and revenue).

## Response to Core Requirements

* + 1. Long-term operational costs should be constrained to a per-premise cost not exceeding a target of circa £50 per month, averaged over all services provided, once uptake reaches the target of 70 connected premises. Please provide a high level business plan demonstrating how you would deliver a service for this cost.
    2. Tourism is a key industry in the target area and suppliers are invited to propose solutions that would enable public access to network services for visitors to the area. Please describe how you would envisage supporting public access to the services.

## support

6.4.5 Demonstrate how you will deliver the following support:

* Helpdesk service
* Fault reporting
* Service Review and Reporting
* Active network monitoring and management
* Service level agreement with corresponding response/fix times
* Maintenance of active and passive infrastructure
* Network security measures

## retail services

6.4.8 Please outline how you will deliver the following services:

* Contract details including prices, optional services and billing
* Payment facilities
* Sustainability of service
* Reversion in the event of supplier failure

6.4.9 Outline details of how the services will be sustainable following the three year initial contract period, for a further minimum period of five years.

## costing

6.4.10 Please describe how you would meet our expectation that long-term operational costs should be constrained to a per-premise cost not exceeding a target of circa £50 per month, averaged over all services provided, once uptake reaches the target of 70 connected premises.

# commercial terms and conditions

Any interested parties are liable for their own costs relating to the RFI and subsequent tender process.