Committee(s):	Date(s):	Item
Barbican Residential Committee	26 th March 2012	9
Subject:		For Decision
Replacement of Television Network System –		
Barbican Estate		
Report of:		Public
Director of Community & Children's Services		

<u>Summary</u>

- 1. The purpose of this report is to seek approval for the installation of a fibre optic system to replace the existing five wire integrated reception system (IRS) that currently provides digital television and radio services estate wide on the Barbican estate.
- 2. The IRS was installed in 2005 and at the time it was the largest fibre backbone system in Europe. Whilst the current system functions well, technological advances have meant that many more services for example, improved Broadband speeds, are available but these cannot be supported by a 5 wire single feed system.
- 3.Extensive research has been carried out by a specialist consultant, Concero Limited, to identify the technological options available to upgrade or replace the IRS with a delivery system which could increase quality and choice of content.
- 4. Concero's brief was to evaluate 3 options.
 - Do nothing and continue maintaining the IRS.
 - Upgrade the IRS to provide a wider range of television services and an improved Broadband service. This option would be funded by the City and recoverable through service charges.
 - Upgrade the IRS to provide a wider range of television services and an improved broadband service. This option would be privately funded by a television content or television cable installation company, with no capital investment by the City and therefore no costs recoverable through service charges.

It should be noted that the evaluated options do not include a review of the current BT cabling that provides telephony Broadband services

Recommendation

5. The preferred option is to adopt a non capital expenditure model privately funded. Four proposals have been evaluated and the detail of these proposals can be found in the main report. It is recommended that the Barbican Residential Committee instruct the Comptroller & City Solicitor to commence negotiations with Vision holdings and draft a set of contract Terms & Conditions for approval by RCC and BRC Committees

Main Report

Background

- 6. Prior to 2004 The Barbican Estate Television service was supplied by a communal network, operated and owned by NTL the cable operator. There was no contract with the Corporation of London and no obligation for the Corporation of London to supply Television services
- 7. In March 2004 your committee approved the installation of an Integrated Television Reception network. The final cost for this work inclusive of fees and staff costs was £488,608 which was recovered through the service charge account.

Current TV System

8. The current system installed at the Barbican Estate is a five wire single feed Integrated Reception System (IRS) The system is installed within the service tunnels, which is an area which exists under all twenty one blocks within the Estate and rises through each block via riser points. Uniquely the backbone of the IRS is fibre and utilises a single head end located at the top of Shakespeare Tower. On completion of the installation in 2005 it was the largest Fibre Backbone IRS in Europe to be connected to a single dish and antenna.

- 9. The IRS was designed to receive and distribute the full range of Digital services together with the existing analogue services until the latter are switched off in April 2012. All the services from both Terrestrial and Satellite networks are transmitted through the system, giving residents the freedom to choose for themselves which, if any, of the services they want to receive. At the point of installation the services available to the residents were as follows.
 - Analogue TV
 - Digital Terrestrial TV (Freeview)
 - Satellite TV (Sky TV Subscription)
 - Satellite TV (Sky Freesat one off charge for Set Top Box no subscription)
- 10.Since the installation, the IRS has continued to function well and provides a broad spectrum of standard content to the residents in terms of the delivery of both analogue and Digital services (Freeview & Satellite via Sky). However, there have been major developments in the provision of TV content High Definition, 3D and Video on Demand being a few examples and how it is viewed- PC, Tablet, Smart Phone.

Foreign Language Channels

- 11. The IRS as detailed above provides residents with a broad suite of viewing content, but there are restrictions relating mainly to the provision of foreign language channels. These are frequently requested due to the changing demographics of the Barbican Estate
- 12.Sky currently provide approximately 43 free to air foreign language channels which in general have an Asian content. By way of comparison, the Hotbird satellite allows access to approximately 2000 free to air & subscription foreign language channels across a broad spectrum of languages.

Broadband Services

13.It is generally perceived across the estate that the delivery of Broadband through the telephone cabling does not serve the residents well. In the tower blocks for instance some residents are only receiving download and upload speeds of around 0.80Mbps and 0.30 Mbps respectively despite their ISP packages quoting up to 8 Mbps.

14. The reason for this is that the condition of residents' phone lines (the actual physical copper wire) varies enormously in quality, hence the speeds they can support vary, no matter who the Internet Service provider is and what package is provided. Although it is possible for BT to upgrade existing cabling to 'roadside cabinets' to fibre, known as Fibre To The Cabinet (FTTC), they have no plans to carry out any upgrades in the Barbican area in the near future. If FTTC was installed, it is likely that there would be a charge raised by BT to extend the fibre into each property. This is known as Fibre To The Home (FTTH).

Proposed Options

- 15.Following a number of requests from Barbican residents, the Housing Services Director engaged the services of a specialist consultant to look at the options for television and Broadband services. Their brief was to evaluate three options:
 - Do nothing and continue maintaining the IRS.
 - Upgrade the IRS to provide a wider range of television services and an improved Broadband service. This option would be funded by the City and recoverable through service charges.
 - Upgrade the IRS to provide a wider range of television services and an improved Broadband service. This option would be privately funded by a television content or television cable installation company, with no capital investment by the City and therefore no costs recoverable through service charges.

Option 1 - Do Nothing

- 16.Paragraphs 8 to 12 detail the current television system and the services available. It is clear that the system continues to operate well and provides the services it was intended to when installed in 2005. Since then, however, there have been major technological advances in how we view television.
- 17.One of the main developments which has proved popular has been the service provided by Sky known as Sky +. This allows a user to watch one channel whilst recording another. At the time that the IRS was being designed the Sky + service was still being developed by BskyB. For this service to be made available to the estate it will require two cable feeds to be installed into each flat, so for the Barbican Estate it would be a major engineering exercise.

- 18. The main reason for this is that the conduit rising through the buildings from the service tunnels vary in size with a maximum of 50mm diameter, entry into the flats is via a 15mm diameter conduit. This restricts any installation of a second feed into the flats which also requires additional switches to be fitted.
- 19.Broadband services have improved greatly over the past 5 years with speeds in excess of 100Mb. As the IRS does not support Broadband, residents have to rely on the existing telephone cabling to receive these services. As explained in paragraph 14, the condition of the cabling across the estate varies considerably due to its age. To improve services would require complete re-wiring. BT has indicated that they have no immediate plans for re-wiring on the Barbican Estate.
- 20. Taking the above into consideration and the number of requests we receive from residents for improved Television and Broadband services, the 'do nothing' option is not recommended.

Option 2 - Upgrade of IRS Funded By The City of London

- 21.It is possible to provide residents with an upgraded IRS that will deliver an unparalleled suite of digital services including the UK's fastest residential Broadband speeds and for the first time, full access to Sky Plus which facilitates increasingly popular services like personal video recording (PVR) high definition and 3D television.
- 22.A wide range of additional services would also be available including lower cost IP telephone packages, video on demand and access to a much wider range of international TV channels in addition to those that Sky currently provides through the IRS
- 23. The City will be able to fully utilise this network for delivery of communication and interactive services to residents via a set top box. This could include an estate management channel with content providing regular video information and updates on matters affecting the individuals property or estate wide issues.

Estimated Cost

24. The estimated costs at April 2011 prices are as follows:

Cabling	£157,704
Cable Routers	£115,920
Ethernet Switches	£28,887
Gigabit Interface Connectors	£37,996
Servers	£67,698
Head End	£42,848
Receivers	£33,600
Wire Speed Traffic Shaping	
Devices	£84,000
Internet Lines	£28,000
Local IPTV	£11,319
Fees and Staff Costs	£91,195
Total	£699,167

<u>Note:</u> the above costs are indicative and do not incorporate on-going costs relating to the maintenance of the infrastructure & content

25. The above estimated costs will be recoverable from long leaseholders under the terms of their lease at paragraphs 10 and 11 of the Fifth Schedule which states that the landlord may charge for "All such other matters whatsoever in relation to which the City may in its reasonable discretion incur or decide to incur any costs liabilities or outgoings in relation to the Estate {Building}.

Option 3 - Upgrade of IRS Privately Funded

26. The current economic climate suggests that existing telecommunications operators are not prepared to invest in the deployment of new infrastructure to large Multiple Dwelling Units (MDUs) whether it be Fibre or Coax based.

- 27. Virgin Media would have to rewire or cable the whole of the Barbican Estate to provide their services which is unlikely in view of the complexity (technical & Listed status) and cost versus the commercial return. It is probable that the legacy cable TV network would not support their high speed Broadband or next generation TV service. As Virgin Media rents network from BT they would experience the same difficulties as BT as the existing infrastructure would not support its high speed Broadband service (50Meg), or its next generation TV service. Virgin Media have demonstrated this with their recent announcement that from January 2012 it is withdrawing its services in the Westminster area of London as it cannot provide its high speed Broadband or next generation TV services over the existing BT infrastructure. It is also worth noting that Virgin Media (then know at NTL) ceased providing services to the Barbican Estate in 2004. They were only prepared to continue to provide Cable services if the City of London and the Residents were prepared to pay approximately One Million Pounds to upgrade the network.
- 28.Following advice from COL Central Procurement, expressions of interest were sought from specialist companies who could upgrade or replace the IRS at the Barbican Estate. In particular the City of London were seeking expressions of interest from companies specialising in the design & installation of state of the art TV distribution systems to residential multiple dwelling units. The scope of the works was for the companies to fully fund, under a concession contract, the upgrade or replacement of the IRS to facilitate the provision of a dual feed system (Sky + Functionality) and an increase in viewing content with a particular focus on foreign language channels
- 29. Concero Limited were commissioned to draft the technical questions and associated weighting that formed the basis of a Pre- Qualification Questionnaire. Following the completion of this exercise the PQQ document was uploaded onto the London Tenders Portal. Details of the PQQ process and the evaluation process can be found in Appendix A.
- 30. The purpose of the PQQ exercise was to establish whether there was an appetite and desire within the market for companies to provide state of the art TV services to the Barbican Estate on a concession basis. It is interesting to note that originally 20 companies expressed interest in the contract although ultimately only four companies made a submission. Of these four companies none were incumbent TV operators such as BT, Talk Talk or Virgin Media. Mindful of this, of the four that did submit a PQQ three of the companies, SCCI, MDTV & AVC could be considered as 'traditional' aerial installation companies.

31.Mindful of the above, this opens up opportunities to a pioneering private sector communication company who aim to provide customer focussed and tailored solutions to multiple dwellings. Their scale allows flexibility and a 'partnership' approach that large telecommunication operators simply cannot provide as they are driven by customer acquisition, retention and product 'up sale' revenue streams. Whilst Vision Holdings would want to recover their costs through the services they are able to provide, they would also want to use this as an opportunity move into the residential market. The Barbican would be considered as an exemplar and iconic estate and would provide Vision Holdings with future opportunities in the residential market. Accordingly, the private sector communication company will offer the best value in the long term, subject of course to the contractual terms of any engagement.

Proposal from Vision Holdings

- 32. Vision Holdings are an established company with a turnover in excess of 20 Million. They specialise in the delivery of TV content via a number of different platforms, devices and to different sectors from Hotels through to Freeview. By way of example, they currently have their own TV channel on Freeview channel 110 called 'Vision' which streams foreign language channels and they have further channels in development which will be on the Freeview platform.
- 33. The application of new technology to deliver content can be only be interpreted as positive when considering Vision Holdings as a possible partner for the City of London.
- 34. Vision Holdings have reiterated in all communications that to make their proposal commercially viable they must ensure that from day one that all of the products and services that they provide will be competitively priced. Whether it be super –fast Broadband or niche TV products such as foreign language channels, their pricing policies will be designed to encourage a broad take up of services by residents. Vision Holdings have provided indicative costs for their TV & Broadband service which are detailed below.

- Freeview (DTT) Free
- Freesat- Free
- Sky Services (Sky + HD) subject to standard Sky subscription fees
- Foreign Language Channels for example: Polska Plus (Polish), Hellenic TV (Greek), Turkish TV – Pricing Point: £5.00 to £10.00 per Month per channel
- Telephony Services
- Vision Holdings, will look to provide niche TV channels to the residents of the Barbican and they have confirmed that they currently have access to over 3000 global TV channels and expect to deliver these within the same pricing range of £5.00 to £10.00 per Month per channel.
- VOD- Video on Demand such a Love Films
- Set Top Box Free
- No Connection Fee
- No Obligation To Subscribe To Vision Holdings Services

Super-Fast Broadband

- 20 Meg £13.00 Per Calendar Month (PCM)
- 100Meg £24.00 PCM
- 1Gig £50.00 PCM
- 35.Vision Holdings have indicated that they would aim to provide other Broadband packages such as 250 Meg & 500Meg to meet the needs of the residents subject to demand. Vision Holdings will provide IP Telephony services over the FTTH network and there would be no line rental charge as there network will by-pass the telephone exchange. The residents can if they so choose elect to stay with their current telephony provider be it BT or another provider. It is important to note that the existing telephony infrastructure will remain untouched and residents can continue to receive services from their existing supplier

- 36.Vision Holdings have confirmed that they would meet all costs associated with the installation of the Fibre To The Home Network (FTTH). Accordingly, there would be no capital expenditure on the part of the COL or the residents. Vision Holdings will further maintain the whole system for a period of 12 months after the installation has been fully commissioned. Thereafter, it is proposed to negotiate a price with Vision Holdings to maintain the system until the first review period of 5 years. Vision Holdings will have dedicated on-site engineers throughout the day, as well as off-site customer services representatives.
- 37. Vision Holdings will install the network at no cost for to the COL & the residents on basis of having a licence to provide content over the network for a period of 25 Years. COL will ensure that the contract will contain a robust set of key performance indicators (KPI's) which will be developed in consultation with residents. These will include, but not be limited to:
 - Continuous service and network improvements
 - Network neutrality (will allow other providers to deliver services)
 - Network availability
 - No maximum data usage
 - Monitoring service call resolution
 - Monitoring customer complaints
- 38.Vision Holdings believe that 5 year reviews will satisfy both parties. It would be their intention to continue after the licence period expires, subject to the satisfactory performance and continuing upgrade of the network. Any review will involve members of a Working Party made up of officers and RCC Members
- 39. Vision Holdings have reiterated that the FTTH Network would be owned by the COL once fully commissioned.

Observations

- 40.By offering an exclusive right to install and supply services the proposal will be scrutinised by Ofcom to ensure that any offering does not breach anti-competitive laws. This may be overcome by offering usage of the network to other operators at commercially competitive rates. Vision Holdings have confirmed they would be prepared to allow third parties to utilise the network and any authorised third party who can deliver content to their servers will have access to the network subject to the usual terms and conditions and acceptable use policy.
- 41. The opportunity has been offered to more than one private sector Communication Company thus providing a benchmark. It has further demonstrated from this exercise that there is no commercial appetite on the part of incumbent operators to provide superfast Broadband or upgrade the TV infrastructure at the Barbican Estate.
- 42.Contractually, the City will ensure they include 5 year reviews. These must be set against an agreed set of KPI's which if not adhered to would allow COL to terminate the contract and provide the option to contract with another organisation to provide services. Consideration will also be given to the desired outcome should the operator reach a point where they no longer deem the system commercially viable (e.g. not enough subscribers).
- 43. Vision Holdings' proposal is an FTTH network which will offer exactly what residents currently receive via the IRS. It is important to reiterate this point. If you currently receive free TV services this will continue. If you subscribe to receive TV services (Sky) this will continue. If you currently have a home telephone or Broadband service this will continue as before, unless you decide to take up a TV service, Broadband package or telephony service from Vision Holdings. The FTTH network will also facilitate other services such as allowing the BEO to utilise the network for communication to all residents.
- 44.All of the information regarding the proposed infrastructure offered by Vision Holdings is based on initial surveys of the Barbican Estate by their technical representatives. Accordingly, both parties have confirmed that they would require further surveys to determine their final technical network architecture.

- 45.Having considered the proposal from Vision Holdings it is recommended that this solution best meets the needs of residents. In summary the key reasons for the recommendation are as follows:
 - No capital expenditure for the City of London or the Barbican residents
 - No connection costs or Set Top Box costs for Barbican residents
 - City of London will own the Network
 - New Fibre To The Home Network from day one
 - Broader choice of TV content (3000 plus channels) from Vision Holdings and the option to tailor programming to meet the residents requirements.
 - Vision Holdings are a dedicated TV content provider with a track record or providing TV content on different platforms and devices
 - Vision Holdings business model dictates that broad TV content choice and competitive pricing are a pre-requisite of the successful deployment and management of the FTTH over the term
 - Comparable & competitively priced superfast Broadband packages
 - FTTH from day one facilitates using the network for the delivery of COL communications.
 - Voice Over Internet Protocol (Voip) Telephony Services
 - Estate Wide Wi-Fi
 - Can be utilised for CCTV
 - Can be utilised for Environmental system control (i.e. smart metering)
 - Home Care Management/Communication
 - Dedicated on –site Vision Holdings maintenance staff & UK based customer services

Resident Consultation

- 46. The Installation of a fibre optic system has been discussed at the Resident Consultation Committee and with resident members. A Television Working Party was formed and is chaired by the Chairman of the RCC. There have been two public meetings held with Vision Holdings in attendance. Some of the frequently asked questions are attached at Appendix B.
- 47. This report was also discussed at the RCC on 12th March 2012. Although the report did not contain comments from the Chamberlain and the Comptroller & City Solicitor, the committee were overwhelmingly in favour of the proposals

Anticipated programme for installation

- 48.Should your Committee decide to proceed with the installation of the Fibre optic system as proposed by Vision Holdings and subject to negotiation with the Comptroller & City Solicitor, the anticipated programme for the project will be:
 - Report to Residents' Consultation Committee March 2012
 - Barbican Residential Committee March 2012
 - RCC agree Terms and Conditions May 2012BRC agree Terms and Conditions and approve proposal from Vision Holdings June 2012
 - Award of Contract July 2012
 - Complete roll out of the system January 2013

Financial Implications

49.Similar to the current system, there will be an on-going maintenance cost associated with the FTTH network. This will not be required until 12 months after the installation has been fully commissioned. The current cost for the maintenance of the existing IRS is £26,700 per annum. Indicative costs for future maintenance are estimated to be in the region of £20,000 per annum. It is intended to negotiate a cost to fully maintain the system until the first review period in year 5. With this in mind, the financial implications of the 3 options are:

- Option 1 No additional cost to the City Fund. Annual maintenance costs would continue.
- Option 2 The City Fund would need to fund a one off capital project of some £699,000 see paragraph 24 which would be recoverable from lessees through their service charges plus annual maintenance cost which again would be recoverable from lessees.
- Option 3 Minimal cost to City Fund After the initial 12 months the maintenance costs of the system see paragraph 49 will be chargeable to lessees through their service charges.

Value For Money

50.It is important to maintain the television service to Barbican residents. Being at the cutting edge of technology has an impact upon the occupiers. Furthermore, the lack of adequate Broadband services that is available to the rest of the United kingdom is perceived to have a detrimental effect on leaseholders' potential re-sale and rental values. A recent survey by ISPreview.co.uk found that: 51.74% thought Broadband access was "critically important". 51.69% of UK internet users would be put off buying a new home if it did not have a fast Broadband connection. 51.50% would pay more for a property with faster connection speeds than their current home

Consultees

51. The Chamberlain and Comptroller & City Solicitor have been consulted in the preparation of this report and their comments have been incorporated

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APPENDIX A

- 1. The portal detailed that a total of 20 companies had initially expressed interest however, of these, 3 elected to opt out and 13 elected not to submit a completed Pre-Qualification Questionnaire. Accordingly, only four companies expressed an interest in the contract and submitted a completed Pre- Qualification Questionnaire. The companies who submitted a completed questionnaire were:
- Metro Digital Television Limited
- SCCI
- AVC Neocrest
- Vision Holdings Limited
- 2. Each section of the Pre-Qualification Questionnaire (PQQ) was scored by a panel of 4. As set out in the PQQ document, sections B, C, E, F, G, H & I could receive a maximum of 20 marks. Section D which focused on technical capacity & ability could receive a maximum of 20 marks for each question answered. Each section carried the following weighting:
 - Economic Operator Information Section B - 10%• Finance and Insurance Information Section C - 5%• Technical Capacity And Ability Section D (1.1-1.9) – 20% Section D (2-9) – 20% Section E - 5%• Equal Opportunities • Health & Safety Section F – 10% • Environmental Management Section G - 5%• Economic Regeneration Section H - 5%• References Section I -20%

Evaluation Results

AVC Neocrest

3. The PQQ submission from AVC Neocrest was incomplete as they elected not to answer questions D1.1-1.9. As this has a weighting of 20% this contributed in part to their low average score of 71.25. When multiplied by the weighting their overall score was 24.06%. In addition to the aforementioned, they did not include an Environmental Policy which was requested as part of the Pre-Qualification Questionnaire. AVC appear to have failed to understand that the PQQ related to a concession contract and as such they would need to fully fund any potential Digital TV installation. Accordingly, within their submission they made no reference to how they could commercially provide

the Digital TV service to the Barbican Estate. AVC Neocrest's overall rating based on the weighted score resulted in their PQQ submission being ranked fourth out of the four received.

MDTV

4. MDTV's PQQ submission was deemed to be thorough & professional and they were able to demonstrate that that the delivery of Digital TV installations was well within their capability. MDTV scored lower within Section D1.1-1.9 than SCCI & Vision Holdings. This was a reflection of a limited capacity to deliver state of the art TV system technologies and TV content delivery. MDTV however, did include all documentation which was requested as part of the Pre- Qualification Questionnaire. As detailed above in the procurement section of this report we were unable to collate references for MDTV. This contributed in part to their average score of 203.75. When multiplied by the weighting their overall score was 36.70%. As with SCCI & AVC, MDTV appear to have failed to understand that the POO related to a concession contract and as such they would need to fully fund any potential Digital TV installation. Accordingly, within their submission they made no reference to how they could commercially provide the Digital TV service to the Barbican Estate. MDTV's overall score of 36.70% resulted in their POO submission being ranked third out of the four received.

SCCI

5. SCCI's PQQ submission was deemed to be thorough and professional and they were able to demonstrate that that the delivery of Digital TV installations was well within their capability. They omitted to include an Environmental Policy & Company Health & Safety Policy, both which were requested as part of the Pre- Qualification Questionnaire. This contributed in part to their average score of 218.75. When multiplied by the weighting their overall score was 47.24%. SCCI like AVC appear to have failed to understand that the PQQ related to a concession contract and as such they would need to fully fund any potential Digital TV installation. Accordingly, within their submission they made no reference to how they could commercially provide the Digital TV service to the Barbican Estate. SCCI's overall score of 47.24% resulted in their PQQ submission being ranked second out of the four received. The overall relatively high score is a reflection of a professional submission.

VISION HOLDINGS

6. Vision Holdings PQQ submission was deemed to be thorough & professional and they were able to demonstrate that the delivery of Digital TV installations & content to the end user was well within their capability. Vision Holdings scored the highest within Section D1.1-1.9 with an average score of 102.50. This was a reflection of their ability to deliver state of the art TV system technologies and TV content delivery. Vision Holdings as with MDTV did include all documentation which was requested as part of the Pre-Qualification Questionnaire. As with the previous 3 PQQ submissions Vision Holdings did not make reference to the fact that the PQQ related to a concession contract and as such they would need to fully fund any potential Digital TV installation. Vision Holdings average score of 248.75 was the highest of all PQQ submissions received and when multiplied by the weighting their overall score was 51.23%. Vision Holdings overall score of 51.23% resulted in their PQQ submission being ranked first out of the four received. The high score is a reflection of a very professional submission.

Frequently Asked Questions

The whole thing seems quite complicated who is there to help me?

Vision Holdings will provide continuous consultation services to the Residents Consultation Committee and in turn the Barbican Residential Committee leading up to delivery of the project thereby establishing a forum for questions to asked and answers supplied.

The installation of the network will be managed by a specialist team reporting to the Barbican Estate Office, Barbican engineers will oversee the project and interface with the Barbican residents.

How long will this switchover take?

Once the core fibre infrastructure is installed there will be a phased program switching individual blocks over from the current IRS to the Fibre network. This is to ensure that there is minimum disruption to Barbican residents and ensure a continuity of TV services. It is anticipated that the migration from one system to the other should take six months. They will need access to flats to connect the fibre system to the home and this will be done through an appointment system.

Will I need a new set top box to receive the existing and new TV services?

Following the installation of the system many of the existing and new TV services will still be able to be accessed in the same way that is watched now. The connection will be made through a new outlet plate connected to the fibre system replacing the existing plate that connects to the copper system.

Residents may have to upgrade their TV sets to receive HD and 3D services should their TVs not currently have this functionality. Residents who currently subscribe to Sky will continue to receive these services in the same way.

A web site has been set up for residents to post comments and questions <u>www.visionfibremedia.com/barbican</u>.

What is all this going to cost me?

There will be no charge to residents for the upgrade of the current IRS. There will also be no additional costs if you do not make any changes to your current services that you receive however, Vision Holdings will offer a wider range of subscription TV and broadband packages that you may wish to subscribe to.

Will the upgrade give me reliable Broadband?

The upgrade will deliver an internet connection that bypasses the local telephone exchange infrastructure so you will not experience the disruptions or speed degradation as with normal Broadband providers. Using the fibre cable connected directly to the internet backbone will give you stable and super-fast Broadband speeds.

What if I subscribe to something Vision Holdings cannot supply? Will they stop me from receiving it?

Vision Holdings will offer total network neutrality and will not carry out any inspections of usage. This means that you can take out any service from any provider safe in the knowledge that Vision Holdings will not affect that service.

Will I be able to use wireless broadband in my home?

Yes, you will be able to access your internet wirelessly at home as you currently do. If you do not have wireless internet then you will be able to take up one of the packages on offer and will be provided with a new router.

Do I need a new set top box or television to receive the existing and new TV services?

Existing television services will be accessed in the same way as you currently access them. You may need a new set top box to receive some of the additional services on offer such as High Definition (HD) and 3D. You may also need to upgrade your television to receive these services.

What impact will there be on the interior of my flat – will I have wires everywhere?

The new fibre cable will go into the existing conduit in the same way as the existing cable is. The only visual change will be a different outlet plate being installed. There will very occasionally be instances where the cable may not easily be able to pass through the conduit due to damage, limited space. In these cases the cable may have to be surface mounted.