



Business Case			
Programme (if applicable):	ICT Strategy Action Plan		
Project / Work Package Name:	Mobile Carrier Signal Booster	PMO Ref:	n/a
Project / Work Package Manager:	Tom Carvell		
Date:	8 th March 2022	Version:	
Sponsors Name:	Tony Vincent	Allocated Cost Code:	

1.0	Funding Stream (please 'x' as appropriate)		2.0 Purpose (please 'x' as appropriate)	
1.1	Existing Budget		2.1	Project
1.2	Capital Bid	X	2.2	Temporary Resource
1.3	Transition Fund		2.3	Increase in Revenue
			2.4	Capital Purchase
				X

3.0	Reason for submitting this business case (link to Strategic Commitments)
	<p>Since initial occupation, RBFRS Headquarters has suffered from variable mobile telephone signal strength, due to generally lower signal levels in the area coupled with the building construction method further degrading signal levels, especially in areas surrounding the inner courtyard, and in particular on the ground floor. The building of steel framework construction and is also equipped with treated window glass to minimise solar gain as there are no opening windows in the building. Both techniques attenuate mobile telephone mobile signals significantly.</p> <p>Newsham court was equipped with a mobile signal booster unit some 4 years ago, which was subsequently decommissioned as it was found to lie outside the OFCOM licensing remit and therefore deemed illegal for use in the UK. Between that period and 2021 there were no legally licensable commercially available mobile signal booster available.</p> <p>During the construction of the Theale Community Fire Station, similar mobile carrier signal coverage issues were identified and the market for booster technology was examined again. A suitable, legal and effective solution was sourced, trialled and subsequently implemented at Theale, using funds from the capital project associated with the build.</p> <p>As a new, licensable, effective and affordable solution was now available on the UK market, provision was made in the 2022/2023 SAIF for implementation of the solution at Newsham Court.</p> <p>The proposal is fully aligned with the ICT strategy, which states:</p> <p><i>“Further efficiencies in the execution of RBFRS ways of working will be largely met through digitisation and automation of existing manual, paper based processes, and an increased requirement to deliver information flexibly, quickly and securely to the right recipients”</i></p>



The ICT strategy also states that:

“The RBFRRS ICT strategy should adopt a “mobile first” approach to applications and services that focusses on providing a role-tailored, simple and intuitive, high quality user experience regardless of physical location or access method”

Finally, 4/5g mobile telephone carrier signals form a key element in RBFRRS’s network connectivity resilience strategy. The Network refresh approved in the 2021/22 budget and currently underway utilises 4G connectivity as an automated backup in the event of primary network outage. Increasing mobile carrier signal strength at Newsham Court will positively impact user experiences in such outage situations, and with the use of tethered 4/5g hotspots as the final fall-back capability for individual users, will support continued operations for all but the most severe of business continuity events.

It follows that acceptable mobile telephone carrier signal coverage within RBFRRS premises is an important element in delivering the ICT strategic vision. This proposal is therefore a foundational factor in being able to provide assurance of a consistent and ubiquitous mobile platform experience as more daily tasks become mobile centric going forward, as well as enhancing overall network resilience for staff members using the building.

4.0 Project/ Work Package SMART Objectives

1. Carry out full mobile signal coverage survey to determine optimal booster/repeater locations by end of Q2 2022/23
2. Implement identified mobile carrier signal booster system to agreed specification at Newsham court to improve mobile signal levels across the premises for all major UK mobile carriers (O2, Vodafone, EE, 3) by end Q3 2022/23
3. Test and validate mobile signal improvement and overall system performance by end of Q3 2022/23

5.0 Options Appraisal

Option Number	Brief Description of Option
<p>1 Do nothing</p>	<p>Do nothing – ongoing signal issues across most mobile carrier networks due to building construction materials and methods. Increasing issues over time as more services are delivered on mobile-only platforms as per the ICT strategy action plan. Potential for some operational impact (Boss mobile on service devices, critical operational telephone communications, SMS messaging delay etc.)</p>
<p>2</p>	<p>Implement the identified solution – multiple signal repeaters and boosters strategically placed within the building to ensure good consistent mobile coverage across the premises. No modifications or configuration to mobile devices required.</p>



3	Migrate to alternative mobile carrier. Unlikely to remediate primary issue as building fabric limits mobile carrier signal penetration for all carriers. Could result in additional handset costs and/or disruption where existing devices are locked to Vodafone.
4 (if applicable)	Implement alternative technical solution. Not possible as all other technical solutions are not licensed for us in the UK by OFCOM



5.1 Cost				
	Costs			
Option Number	Year 1	Year 2	Year 3	Total
1 (do nothing)	0	0	0	0
2	£40k	0	0	£40k
3	£10k	0	0	£10k
4 (if applicable)	0	0	0	0

5.2 Monetary Savings				
	Savings			
Option Number	Year 1	Year 2	Year 3	Total
1 (do nothing)	0	0	0	0
2	0	0	0	0
3	0	0	0	0
4 (if applicable)	0	0	0	0

5.3 Non Monetary Benefits / Efficiencies of Recommended option	
	<ul style="list-style-type: none"> • Improvement in mobile carrier signal coverage for all users of Vodafone, O2, EE, and 3 mobile networks whilst at Newsham Court. • Improved user experience for both staff and visitors to Newsham Court. • Improved service resilience in the event of total primary network outage at Newsham Court. • Foundational element of executing elements of the ICT strategy action plan, specifically in connectivity assurance for both operational and non-operations business processes that will increasingly rely on mobility solutions. • Supports an increase in use of mobile platforms for key activities, reducing need for fixed location computing devices, and potentially improving process effectiveness and efficiency. • Reputational improvement – external visitors to Newsham Court • Reduction in reliance on guest wireless technologies for effective digital communication at Newsham Court.

5.4 Cost/Savings Assumptions				
Option Number				
1 (do nothing)	n/a – no savings identified			
2	n/a – no savings identified			



3	n/a – no savings identified			
4 (if applicable)	n/a – no savings identified			

5.5 Risks & Benefits (Include anything arising from the Equality Impact Assessment)		
Option Number	Risks	Benefits
1 (do nothing)	Ongoing poor mobile performance and resultant barriers to digitisation activities	Avoidance of implementation costs
2	None identified	Improved mobile experience at Newsham Court
		Enablement of downstream ICT strategy actions
		Improved performance under business continuity situations
		Greater assurance of continuity of service during primary network outages
3	Inability to demonstrate significant performance improvement	Avoidance of implementation costs
	Some devices may need to be replaced where locked to current provider	
4 (if applicable)	Enforcement action from OFCOM regarding any non-compliant booster technology, with attendant reputational damage	None identified

6.0 Recommendation



Option 2 – Proceed with proven, legal, and effective signal booster technology from Zonewave, as implemented at Theale Community Fire Station.

7.0 Monitoring and Evaluation		
7.1	Who will manage the implementation?	ICT Service Delivery
7.2	Who will monitor and evaluate the outcomes?	HBIS
7.3	Frequency of Reporting?	On completion of works
7.4	Who will manage Equality Impact Assessment review?	HBIS

8.0 Commissioning	
Decision (Approved/ Rejected)	
Decision Made on	
Decision Made by	
Comments (if Rejected)	



EQUALITY IMPACT ASSESSMENT (EIA)

EIA Register Reference Number:	<i>To be completed by Business Support</i>
Name of activity: (i.e. change, policy, procedure, project)	Mobile Carrier Signal Booster Implementation at Newsham Court
Directorate/department:	Corporate Services
Name of department head/policy owner/project lead:	Tony Vincent
Name(s) of person(s) completing this assessment:	Tony Vincent
Date of commencement of assessment:	8 th March 2022
Dates of Review: (please complete the review log at time of each review)	Click or tap here to enter text.

1. What is/are the aims/purpose and intended outcomes of the activity you are assessing?

To implement mobile carrier signal booster technology at Newsham Court in order to address long-standing mobile phone coverage issues inherent in the building due to construction methods and general mobile signal coverage in the geographical area. The outcome will be better signal strength across the four major mobile networks in the UK at the premises, meaning that both staff and visitors will enjoy an enhanced mobile experience.

2. Who is/may be affected by the activity, and how? Consider applicants, service users, members of the public, RBFRS employees, partner organisations etc.

Please refer to the completion guidance.

Has any consultation taken place with those who may be affected in order to inform this assessment?

All those utilising mobile devices at Newsham Court. No consultation necessary as no action required by the impacted demographic to take advantage of enhanced signal strengths.

Information

3. What information is already available that tells you what impact the activity has/will have on people? Consider quantitative and qualitative data, consultation, research, complaints etc. What does this information tell you?

Please list any policies that are related or referred to as part of this assessment.

Is there any equality data relating to this activity? Please also consider any further data that may inform your assessment i.e. consultations, complaint data, external research.



Please refer to the central register to identify any related existing EIAs.

Please describe any additional research undertaken to inform this assessment.

These sources of information will be used to inform your assessment of the activity.

Direct experience of implementing the proposed solution at Theale Community Fire Station in December 2021.

4. What impact may this activity have on the following groups?

Assessment of impact on groups in **bold** is a legal requirement, but it is important to consider the potential impacts of your activity on all of the following groups to ensure that your activity does not have unintended consequences.

	Neutral Impact	Positive Impact	Negative Impact	Please provide detail of potential impact(s), including any relevant evidence from the information section above:
Sex (Men and Women)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No change of use or behaviour required in mobile capabilities for impacted users
Race (All Racial Groups)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No change of use or behaviour required in mobile capabilities for impacted users
Disability (Mental, Physical, and Carers of Disabled people)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No change of use or behaviour required in mobile capabilities for impacted users
Religion or Belief	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No change of use or behaviour required in mobile capabilities for impacted users
Sexual Orientation (All diverse sexual orientations)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No change of use or behaviour required in mobile capabilities for impacted users
Pregnancy and Maternity (Includes new mothers and those returning to the workplace)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No change of use or behaviour required in mobile capabilities for impacted users
Marital Status (Married and Civil Partnerships)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No change of use or behaviour required



	Neutral Impact	Positive Impact	Negative Impact	Please provide detail of potential impact(s), including any relevant evidence from the information section above:
				in mobile capabilities for impacted users
Trans People (Includes non-binary identities and all other diverse gender identities/expressions)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No change of use or behaviour required in mobile capabilities for impacted users
Age (People of all ages)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No change of use or behaviour required in mobile capabilities for impacted users
People in different family circumstances (including those with caring responsibilities)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No change of use or behaviour required in mobile capabilities for impacted users
People in different social circumstances (including socio-economic factors i.e. poverty and isolation)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No change of use or behaviour required in mobile capabilities for impacted users
Different employee groups (including consideration of on-call staff, grades, contract status. Also consider non-employee groups i.e. casual workers, volunteers)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No change of use or behaviour required in mobile capabilities for impacted users
Other – this may include consideration of other factors as relevant to the activity such as unemployment, homelessness, urbanisation, rurality, health and wellbeing implications. Please see completion notes for further guidance.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No change of use or behaviour required in mobile capabilities for impacted users



- 5. What further research or consultation is needed to check the impact/potential impact of the activity on different groups? If needed, how will you gather additional information, and from whom? Please refer to the EIA guidance.**

None

Summary of Assessment

- 6. Taking account of the assessment above, have any negative and/or disproportionate impacts been identified? If so, what amendments will you make to the activity?**

No negative impacts identified.



7. After these amendments (if any) have been made, is/will there still be a negative impact on any group?

Yes

No

If No, go to section 9.

If Yes, please explain:

Click or tap here to enter text.

8. Can commencing or continuing the activity without further amendment be justified? If so, how? Please refer to the guidance documents for further information.

Click or tap here to enter text.

9. How can you ensure that any positive or neutral impact is maintained?

Capture feedback from on-site user community on a regular basis.

10. How will you monitor the impact of the activity in future? Please identify timelines and responsible owner for monitoring, including detail of links to project/service plans if relevant.

n/a – no change to solution envisaged in foreseeable future.



Review Log

Please ensure that you update the action plan accordingly as a result of any changes to the assessment.

Date of Review:	Reason for Review: (i.e. outcomes of consultation, further research conducted, change to activity etc.)	Outcome of Review: (please describe resulting changes to EIA)
8/3/22	Initial Assessment	n/a
Click or tap to enter a date.	Click or tap here to enter text.	Click or tap here to enter text.
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Admin

Please send the first draft and any further amended versions to Business Support to be held in the central register.

Check this box if you have undertaken research as part of this assessment that may be of use to others in completing other equality impact assessments:

Append this equality impact assessment as necessary to project reports, business cases and other documents as relevant to governance routes.