ONE WORD Project
Policy in a Box

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Executive Summary

The ONE WORD programme brought together four local authorities to build 5G infrastructure, supported by industry project participants. The initiative aimed to leverage the West of England Mayoral Combined Authority's experience from the Digital Connectivity Infrastructure Accelerator and practical deployment insights to create a blueprint for the future wireless infrastructure rollout in the west of England.

Workshops and follow-up meetings with participating local authorities provided a platform to assess their experiences, progress and challenges. Local authorities reported that they were on track to meet deadlines and, whilst expertise varied, they were able to draw on internal resources to support progress. They also expressed a strong commitment to improving project delivery by streamlining processes and sharing best practice.

However, several challenges emerged during the programme. These included slow procurement processes, unclear project ownership and planning department rejections of digital infrastructure sites. A lack of data and insights on planning and mobile infrastructure further hindered decision-making. Additionally, insufficient project duration and internal financial constraints – exacerbated by hiring freezes – made it difficult for local authorities to recruit dedicated telecoms personnel. Despite short term funding being allocated for this purpose, local authorities were often unable to hire staff, leading to a reallocation of funds to materials, with ONE WORD partners taking on delivery roles. Poor interdepartmental collaboration also restricted the sharing of insights, further impacting project outcomes. Furthermore, a lack of senior leadership engagement and poor external communication contributed to delays.

Key lessons from the programme highlighted the need for local authorities to standardise processes, procedures and timelines to enhance project effectiveness and efficiency. Better resource allocation within councils was identified as crucial for robust project management. Improving data sharing – both internally and between councils – was seen as essential for informed decision-making and enhanced collaboration. Local authorities also recognised the importance of fostering good relationships between other councils and infrastructure providers to generate innovative solutions. Sharing lessons learnt was another priority to ensure continuous improvement in project delivery.

Based on these discussions, we have identified several recommended actions local authorities can follow to address these challenges and promote good practice:

1.

Standardised processes and timelines

Local authorities should develop and adopt clear, standardised processes to streamline digital infrastructure deployment projects. This will require coordination across multiple teams, but will enhance delivery effectiveness and efficiency.

2.

Resource Allocation

Sustainable investment and long-term resource commitment – whether from local or central government – is needed to support digital infrastructure deployment. Appointing a digital champion within councils could help bridge stakeholder discussions, though the role's success depends on the skills and experience of the individual(s) appointed. A digital champion within local authorities will support the effective delivery of digital infrastructure projects.

3.

Collaboration and Partnerships

Both local authorities and digital infrastructure providers should explore new partnerships and collaboration opportunities. Strengthening internal and external stakeholder engagement will ensure greater alignment on priorities, enhance communication and generate innovative solutions. However, this could demand significant time commitments from local authorities.

4.

Strengthening Leadership and Strategic Direction

Elevating digital connectivity and digital infrastructure deployment as a priority for internal project approvals and senior leadership support will help drive successful outcomes. However, potential changes to council staffing structures may affect long-term stability.

5.

Adopting Best Practice and Industry Standards

Regularly reviewing policies and engaging with Government will help ensure digital infrastructure deployment aligns with national priorities. However, the fast-paced nature of policy and technological advancements means digital connectivity strategies may quickly become outdated.

By implementing these recommendations, local authorities can overcome key barriers, improve project delivery, and establish a strong foundation for future digital infrastructure initiatives.

ONE WORD Background

The Need

Ensuring seamless access to communications infrastructure for social, economic and commercial purposes is becoming increasingly achievable. Users no longer need to actively consider whether they can access the products and services they rely on via communications networks. Fixed, 'wired in property', infrastructure provides a consistent, near ubiquitous level of service quality, and mobile/wireless connectivity is also becoming more widely availability with improving reliability.

Rural and urban communities still experience significant differences in service availability. This is being addressed through a number of UK Government-backed schemes to promote and subsidise the delivery of new infrastructure in rural settings, such as the UK-wide Shared Rural Network programme and in Scotland the Scottish 4G Infill (S4GI) Programme. Both schemes aim to address poor access to 4G networks in rural communities currently underserved by commercial deployment for economic reasons.

Whilst well-served by mobile communications infrastructure, urban and suburban areas experience fluctuating mobile network demand due to a dense and transient user-base. Usage varies throughout the day, across weekdays and weekends, and peaks during local events such as public holidays, national celebrations, and sporting or festival events. This creates challenges for mobile network providers, who must design networks with sufficient capacity to handle peak demand or risk poor customer satisfaction. These issues offer opportunities to test emerging 5G solutions. High-demand urban locations and event venues can serve as valuable testbeds for new technology deployments. Similarly, rural areas can face capacity challenges during high-footfall events, e.g. festivals.

The ONE WORD host councils typically represent 'second-tier' cities – busy and prosperous areas with good coverage from all main operators in key locations. However, they often lack sufficient capacity during busy peak periods. Among them, Cardiff has strong coverage, but still faces shortages on major event days. Bath falls in the middle, whilst Shrewsbury is currently under-served for existing demand.

ONE WORD Project

The Department for Science, Innovation and Technology (DSIT) Open Network Ecosystem (ONE) programme funded the Western Open RAN Deployment (ONE WORD) project to test the deployment of Open RAN technology in dense urban and transient communities (e.g. at events) across four local authority sites: Cardiff Council, Bath & North East Somerset Council, Shropshire Council and Worcestershire County Council. The four councils worked with technical and other partners to deploy infrastructure across their region at various times throughout the year to address multiple use cases (Fig 1).

The ONE WORD project assessed the viability and efficacy of the deployed solutions, with particular focus on replicability in alignment with DSIT programme objectives. To support this, the West of England Mayoral Combined Authority, also a named partner, was tasked with creating a suite of policy documents, leading to the delivery of a best practice 'Policy in a Box'. This supported the replicability requirement and, where possible, tested any material changes in local policy through live ONE WORD deployments.

The ONE WORD project sub-projects were deployed in real-world settings to support actual events and requirements, rather than in a sandbox testing environment. As a result, all deployments were subject to local planning and regulatory considerations. The role of the Combined Authority work package was to ensure interactions between project and planning or administrative processes were captured during the rollout of projects over the course of 2024. Up to three specific deployment and use periods took place throughout the year, with opportunities embedded in the process for the four project teams to test, review and refine local policy.

Figure 1. Small cell attachment (Shropshire)

Shaping the Policy in a Box

Approach Taken

Workshop ‘A’

Workshop ‘A’ focused on understanding and documenting the different local processes used to deploy the ONE WORD infrastructure project across the four High Density Demand (HDD) deployment sites. The workshop was structured into four key blocks. First, participants reviewed the ONE WORD projects, the wider DSIT programme, and prior experiences from the Digital Connectivity Infrastructure Accelerator (DCIA). The second block explored how each project interacted with local policies and processes. The third block identified overlaps and synergies across the different project processes and deployment approaches. Finally, the workshop concluded with a discussion on what a successful project outcome would look like.

Discussions covered a wide range of topics, from policies and processes, to barriers and enablers. Councils reported that most projects were on track to meet deadlines, but highlighted the lack of a consistent definition of “process” across the projects and councils. Project delivery and success heavily depended on the expertise of individual team members who could navigate complex local authority processes. Procurement was identified as a major barrier, limiting the ability to allocate funds across different projects. With the implementation of the new Procurement Act in February 2025, this challenge was expected to become even more pronounced.

The workshop concluded with discussions on next steps, including the development of a Policy in a Box toolkit. This would outline best practice and draft policy to enable future projects like ONE WORD.

Workshop ‘B’ (1-2-1 Engagements)

The second workshop, Workshop ‘B’, consisted of a series of one-to-one deep dive engagements with each council involved in the ONE WORD project. These discussions focused on the challenges and opportunities associated with digital infrastructure deployment.

A key challenge that emerged was the complexity of planning processes. Councils noted that mobile infrastructure planning lacked clarity, including uncertainty over which council department or individual held responsibility. Frequent rejections of planning applications due to resident and council concerns over visual impact further complicated deployments. Additionally, councils identified a lack of data and insights on planning trends, as well as an absence of dedicated digital infrastructure specialists within their teams, both of which hindered rollout efforts. Other challenges included poor collaboration between council departments and project partners, weak leadership in driving projects forward, and difficulties in stakeholder engagement and communication, which remained critical for smooth project implementation and community acceptance. It was noted these were challenges that should be addressed early in a project.

Despite these challenges, councils identified several opportunities to improve digital infrastructure rollout projects. Standardised processes and timelines was seen as a key step towards a more consistent, efficient and transparent approach. Improved resource allocation and data sharing were also highlighted as ways to enhance project management. Local authorities noted opportunities to leverage external funding to accelerate projects and emphasised the importance of sharing experiences and lessons learnt across councils to inform future initiatives.

Challenges Identified

The primary challenges identified across the two workshops were:

Planning

Councils noted a range of planning process issues associated with mobile infrastructure which included slow procurement processes, a lack of clarity around ownership of projects and site rejections due to their visual impact.

Leadership

Clear leadership or ownership of digital connectivity and associated infrastructure projects within councils was not always apparent. A lack of engagement, and buy-in, from senior management resulted in little sponsorship of projects during internal processes, this resulted in projects becoming bogged down.

Data and Insights

In conversations with council staff, they identified the lack of data and insights associated with planning and mobile infrastructure. Without this data, it made it difficult to gain understanding about why applications fail and to inform better decision making.

Communication & Stakeholder Engagement

Councils identified challenges in how projects were communicated internally as well as externally to the public and wider stakeholders. Where communication had been poor, it resulted in delays to the project due to new issues, concerns or complaints arising.

Resources

There was frequent discussion about the lack of resources councils had in terms of finances for hiring dedicated telecom personnel, which ended up impacting how projects were implemented or managed.

Collaboration

Councils noted a lack of collaboration and partnership across council departments that would enable insight sharing and help streamline project delivery.

Key Areas for Improvement

Standardisation

There is a need to develop consistent, streamlined processes, procedures and timelines that digital infrastructure projects can follow. This will help improve both their effectiveness and their efficiency in delivery.

Resource Allocation

Resources needed to be better allocated amongst councils to enable appropriate management of digital infrastructure projects.

Data Sharing

Another area for improvement is the sharing of data within and between councils. This would support better decision making and facilitate collaboration between departments and external partners. Appropriate, pre-determined data sharing processes would be one part of this.

Collaboration and Partnerships

Both councils and telecoms providers should explore new partnerships and points of collaboration. In doing so, this would help create new touchpoints across teams and potentially lead to innovative solutions to some of the problems faced.

Sharing Lessons Learnt

Past experiences both within and across councils should be shared between them and wider stakeholders. By identifying challenges, lessons learnt, guidance and useful sources of information, councils will be able to improve how they deliver associated projects.

Improved Strategy

There should be exploration of what a new and improved strategy could look like, one that better supports digital infrastructure projects.

Existing Guidance / Best Practice

Building Digital UK (BDUK): Digital Connectivity Portal

The BDUK Digital Connectivity Portal provides information and guidance for local authorities and network providers on how they can improve connectivity in local areas. The portal combines the Barrier Busting Handbook, detailed resources for local authorities, and advice for communication network providers. It also includes guidance for new home builders and a database of wider BDUK research.

The Barrier Busting Handbook serves as a guide for local authorities, operators and infrastructure providers, helping them address challenges that hinder the delivery of gigabit-capable broadband. It covers barriers associated to broadband deployment, such as planning permission issues, wayleave negotiations, and access to infrastructure, all of which are outlined in the Barriers and Mitigating Actions Grid. The handbook also identifies potential solutions, including legal and regulatory advice, best practice and case studies. Additionally, it also highlights relevant legislation that can support broadband deployment.

The portal provides guidance for local authorities on developing connectivity infrastructure. This includes topics such as digital leadership, legislation, planning, asset management and deployment. It outlines how local authorities can establish clear digital strategies and support the BDUK Gigabit programme which focused on rolling out Fibre To The Premise (FTTP) across the UK. Whilst primarily aimed at FTTP rollout, the portal's guidance on barrier busting and the Electronic Communications Code is also relevant to the ONE WORD project and the development of 5G technology. Although it does not provide step-by-step instructions for infrastructure development, it references the Street Works Toolkit and the Digital Infrastructure Toolkit, which both offer further details on how local authorities can approach connectivity infrastructure projects.

Within the Digital Connectivity Portal, there is also specification guidance for Communication Network Providers, outlining legislation, regulation and stakeholder engagement. This guidance details best practice that providers should consider in order to increase network resilience, collaborating with landowners, conducting street works with minimal disruption and ensuring network security. It also outlines the UK Government's vision for improving digital connectivity and the vital role that network providers play in this future. A theme is the need for coordination and collaboration between public bodies and network providers. The guidance emphasises the importance of early engagement and effective communication to enable smoother deployment of connectivity projects.

Code of Practice for Wireless Network Development

The Code of Practice for Wireless Network Development in England provides an agreed upon framework for local authorities and operators, to support the deployment of mobile infrastructure. The guidance outlines best practices for mobile networks operators, local planning authorities, and other stakeholders, aiming to facilitate the roll-out and improvement of mobile networks in the least disruptive manner possible. The code examines a range of related aspects including site selection, planning applications, community engagement, environmental considerations and pricing. Rather than focussing on specific technical aspects, the guidance provided is intended to help foster collaboration and ensue a more harmonious approach mobile infrastructure development. Local Government Association: Councillor's Guide to Digital Connectivity.

The Local Government Association (LGA) document, titled "A Councillor's Guide to Digital Connectivity", has been developed to help councillors across the UK improve digital connectivity in their communities. As digital connectivity is increasingly recognised as essential, councillors have a growing responsibility to advocate for better digital infrastructure within public bodies. The guide outlines both the importance and challenges of digital connectivity, the role councillors can play in addressing these issues, and how they can collaborate with others, including council departments and local communities.

The guide also provides practical advice on identifying areas with poor connectivity, working with broadband providers, engaging local stakeholders, and lobbying for additional funding and resources for connectivity projects. Whilst the guide covers the core aspects of broadband and mobile connectivity, as well the roles and responsibilities of the council and councillors, it does not offer detailed explanations of **key processes, stakeholders** or **data collection methods** that need to be considered when developing digital infrastructure projects.

Scottish Futures Trust: Infralink Playbook

The Scottish Futures Trust Infralink Playbook supports public sector bodies in Scotland with the development of mobile connectivity infrastructure. The guide provides local authorities with a range of guidance and processes for engaging telecoms operators, and the siting and operation of mobile infrastructure equipment. The playbook aims to streamline the rollout of mobile infrastructure across Scotland and reduce connectivity not-spots. By using the playbook to address mobile coverage gaps, it helps mitigate not-spots and delivers a range of benefits for across sectors such as education, healthcare and the local economy.

The playbook provides an overview of key areas, including management, stakeholder engagement, data and security, and supply chain and procurement pathways. These pathways summarise the main lessons learnt from the Infralink-Exchange project and are designed to assist public bodies in engaging effectively with the mobile industry. They provide a high-level framework for mobile infrastructure development from a public sector perspective and include case studies that offer indicative timeframes for each stage of the process.

The playbook also sets out standardised processes that local authorities in Scotland can follow to support the development of various types of telecoms infrastructure. These standardised processes are included in the appendices and cover requests for assets on land, rooftops and street furniture.

A key component of the playbook is its guidance on public sector roles in mobile infrastructure development. It outlines the departments required to support infrastructure projects, their specific roles and the stages at which they should be involved. The stakeholder engagement pathway provides a comprehensive overview of internal and external stakeholder groups, detailing their motivations for engagement and case studies that illustrate how other public bodies have successfully navigated these interactions.

The management pathway highlights how strong public sector leadership and clear strategic direction can facilitate the successful deployment of mobile infrastructure. It emphasises the importance of having a dedicated strategy to secure senior management buy-in, develop a project team and define an organisational approach to implementation.

The Data and Security Pathway outlines how public bodies can improve data collection and sharing. It identifies the key datasets required, explains how to access and validate them, and

provides guidance on publication and security considerations. The playbook underscores the value of data-driven decision making, particularly in the proper siting of infrastructure equipment and the identification of existing assets that can be leveraged for deployment.

Whilst the Playbook does not explicitly identify how public organisations can increase resource allocation for digital infrastructure management, it does stress the importance of establishing a clear impact measurement process. By implementing a implementing a structured approach to impact assessment, public bodies can quantify the benefits of digital infrastructure projects and build a stronger case for securing additional funding and resources.

BSI PAS 191:2023 Multifunctional Columns

The British Standards Institution BSI PAS 191:2023 is the standard for the design and specification of multifunctional columns. As urban spaces evolve, there is increasing demand to leverage existing infrastructure to enhance digital connectivity (see Fig 2). Multifunctional columns serve a variety of purposes, including lighting, CCTV, telecommunications (e.g. small cells), environmental sensors and Christmas lights, making them integral to a smart city ecosystem.

The PAS 191:2023 documentation is aimed at various stakeholders including designers, telecoms operators and owners (e.g. public bodies). It outlines specific requirements for the design, installation, maintenance, and testing and inspection of multifunctional columns. The standard also provides an overview of the framework and terminology to ensure that manufacturers and users can have confidence in this key infrastructure.

Note: poles utilised by the ONE WORD project were not officially accredited with this standard, instead following locally implemented specifications.

Figure 2. Small Cell attachment onto modified multi-functional column (Shropshire)

CASE STUDY:

Worcestershire County Council's Streetscape Design Guide

The Streetscape Design Guide has been developed to support architects, consultants, engineers, planners, developers and designers in designing schemes and applying for planning permission.

A revised version, Worcestershire County Council Streetscape Design Guide 2024, is currently undergoing final consultation. This updated guide embeds digital infrastructure and connectivity requirements, specifically within Appendix I: Digital Infrastructure & Connectivity.

The guide outlines the requirements for providing digital infrastructure within highways and public areas throughout Worcestershire, including broadband and mobile services. It also supports Local Development Plans, ensuring digital connectivity is considered as part of future developments.

ONE WORD Policy in a Box

Streamlining Digital Infrastructure Deployment

Challenges

The development of regional digital connectivity infrastructure is often hindered by inconsistent and inefficient internal processes within local authorities. Without clear procedures for managing digital infrastructure projects councils and telecoms providers face delays due to unpredictable costs, duplicated efforts, overly complex processes and poor coordination between departments. These issues increase the risks of connectivity projects running over-budget, missing deadlines or failing to deliver their intended benefits.

Lessons Learnt

Reflecting on their experience, local authorities involved in the ONE WORD project emphasised that having clear timelines and structured processes is critical for successful digital infrastructure development and deployment. Recognising this enabled councils to agree standardised mechanisms for stakeholders to engage with local authorities, thereby ensuring that any communication is transparent and that all interactions are properly tracked.

Good Practice

To enable the smooth deployment of digital infrastructure, councils should establish easy, simple and accessible processes for telecom providers to:

- Register interest in council-owned assets
- Outline their deployment plans
- Contact relevant local authority staff
- Ask questions or seek guidance

A dedicated webpage with a contact form or clearly listed contact details of relevant individuals can facilitate this initial engagement.

Each local authority should also implement a comprehensive system for logging and tracking requests from telecom providers and operators interested in working with the council.

This could be managed via a simple spreadsheet or an existing Customer Relationship Management (CRM) tool. This would enable councils to log requests from companies and track the status of their applications. However, not all pre-existing CRM systems within councils may have the necessary case management functionality. Therefore, to ensure consistency and accountability, councils should adopt a standardised process for handling provider requests. This will ensure a consistent, predictable and impartial approach with all providers.

Setting target response timescales is also essential. Agreed timescales – covering both internal and external processes – will help ensure telecom provider requests are handled fairly and efficiently. Appropriate Service Level Agreements (SLAs) should be established to provide clear expectations for all stakeholders.

Finally, local authorities should introduce a reporting mechanism to monitor interest from the telecom market, track trends and provide project updates to internal and external stakeholders.

Key Action

If councils take only one action from these recommendations, it should be to establish a clear process for providers to engage with them. Whether via a webpage, contact form or dedicated email, this step is fundamental to building strong relationships between telecom providers and local authorities.

Resource Allocation for Digital Infrastructure Deployment

Challenges

Local authorities face several challenges in allocating resources for digital infrastructure deployment. Without a dedicated individual or team to lead engagement with the market, understand residents' needs and explore connectivity solutions, the full benefits of digital connectivity may not be realised.
Telecom providers also struggle when they lack strong relationships with councils, as local authorities play a key role in overcoming planning and access challenges. Additionally, local authorities without a clear understanding of local connectivity issues – or accurate connectivity mapping – risk implementing poorly planned interventions with limited impact or benefit for local residents.

Lessons Learnt

A major lesson from the ONE WORD project was the importance of appointing an individual to oversee digital connectivity projects from inception to delivery. This role, often referred to as a 'digital champion,' proved essential in gathering data on connectivity challenges, identifying solutions, and accelerating the deployment of infrastructure. Local authorities that had a digital champion in place reported significant benefits in streamlining digital infrastructure development and deployment.

Good Practice

To effectively support digital infrastructure deployment, each local authority should appoint a digital champion – a dedicated individual responsible for managing development, overseeing associated resources, and acting as a key point of contact for internal and external stakeholders. Where funding constraints make a full-time appointment unfeasible, responsibilities can be distributed across a relevant team, though this is less effective.

The digital champion's role includes responsibility for:

- Leading engagement with telecom providers and coordinating stakeholder relationships
- Being the primary point of contact, and directing requests to appropriate teams and ensuring timely action
- Managing digital infrastructure projects and reporting on progress

As highlighted in Mobile UK's report on digital champions in Local authorities, this role is critical in aligning different digital strategies, facilitating smooth infrastructure rollout and addressing digital exclusion. Ultimately this role is essential for accelerating the progress of digital transformation across local authorities and the UK.

To ensure cross-departmental collaboration, local authorities should embed digital connectivity considerations within all relevant teams, such as planning, highways, legal, property and estates and economic development as well as others, depending on the nature of the digital infrastructure project. These departments should maintain regular communication with the digital champion to ensure shared objectives, clarity on roles, and alignment with broader strategic goals (see Table 1).

Local authorities must also establish clear guidance on the expectations of individuals and teams involved in digital infrastructure projects. Clearly defined roles and responsibilities, documented within project frameworks, will enhance project continuity and prevent duplication of effort.

Additionally, local authorities should aim to ensure that the management of digital infrastructure projects are cost-neutral to minimise financial burdens and ensure long-term sustainability.

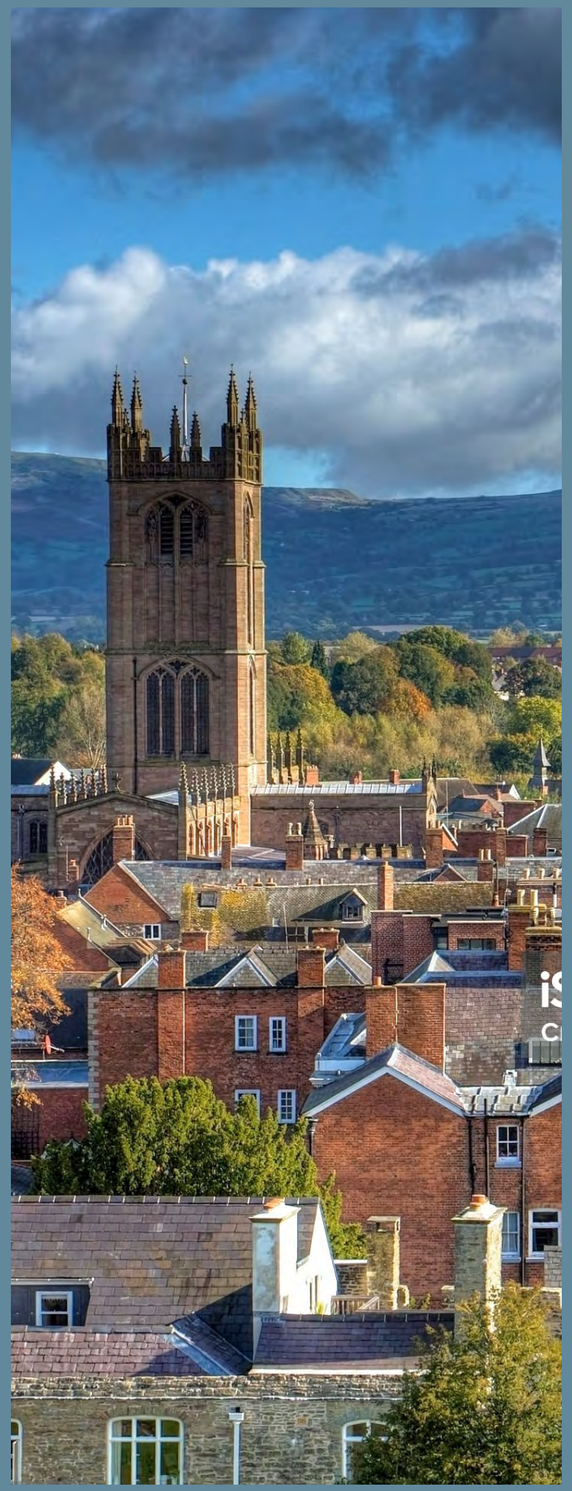
Alongside effective project management, this can be achieved through:

- Cost recovery mechanisms, such as application fees for network providers
- Annual rental fees for infrastructure placement on council-owned assets
- Legal cost coverage by providers for contract refinements

Key Action

The most impactful action a local authority can take is to appoint a **dedicated, full-time digital champion**. This role can take different forms, but should have sufficient authority to engage effectively with internal and external stakeholders, navigate local authority processes and oversee infrastructure deployment.

CASE STUDY:
Shropshire Council's Digital Champion Roles



The River Severn Partnership Advanced Wireless Innovation Region (RSPAWIR) programme has supported Shropshire Council to establish three key Digital Champion roles to drive digital infrastructure and advanced wireless technology adoption.

- **Digital Ambassador:** As a senior figurehead, the Digital Ambassador's role is on promoting the benefits of advanced wireless technology, bringing together local stakeholders, and leading on strategic change within the council.

- **Digital Champion:** The Digital Champion leads the digital strategic development, ensuring Shropshire Council's active participation in the RSPAWIR and promoting digital strategies. They provide oversight across the organisation's work and advocate for the consideration of digital infrastructure across council processes and policies. With their seniority (Director/Assistant Director level), they play a vital role in the unblocking of internal and external processes that hinder the development of digital infrastructure.

- **Digital Coordinator:** The Digital Coordinator supports the Digital Champion by leading sector-based use cases, attending working group meetings, and advocating for digital policy adoption within the council. The digital coordinator will often be a sector expert and work with the above two roles to resolve related concerns and undertake a variety of specific actions. They tend to be the main point of contact for internal departments and external agencies, supporting decision making and unblocking issues.

These roles ensure consistent leadership, active engagement with the RSPAWIR, and alignment of local policies with emerging digital opportunities, reinforcing the council's commitment to innovation and connectivity.

KEY:
R (Responsible): The person or team who does the work to complete the task.

A (Accountable): The person who is ultimately answerable for task completion.

C (Consulted): Those whose input is needed before an action can be taken.

I (Informed): Those who need to be kept up to date on progress and outcomes.

Activity	Digital Champion	Planning Department	Highways Team	Legal Team	Property & Estates	Economic Development	Senior Leadership	GIS Team	Finance
Lead engagement with telecoms providers	R/A	C	C	C	C	C	I	I	C
Develop and oversee digital infrastructure strategy	A	C	C	C	C	R	I	C	C
Coordinate internal stakeholders	R	C	C	C	C	C	I	C	C
Support planning applications and wayleaves	C	R	C	A	C	C	I	C	C
Manage street works and permits	C	C	R	C	C	C	I	C	C
Provide legal guidance on infrastructure deployment	C	C	C	R	C	C	I	C	C
Identify and manage use of local authority assets for deployment	C	C	C	C	R	C	I	C	C
Ensure alignment with economic growth objectives	C	C	C	C	C	R	I	C	C
Champion digital inclusion and community benefits	R	C	C	C	C	C	I	C	C
Report progress to senior leadership and elected members	R	C	C	C	C	C	A	C	C
Mapping and data analysis for infrastructure rollout	C	C	C	C	C	C	I	R	C
Invoicing, contracting, and payment tasks	C	C	C	C	C	C	I	C	R

Table 1. Digital Infrastructure Development - Roles and Responsibilities

Asset Data Management

Challenges

Local authorities do not always have a centralised database about their assets. Instead, this information can be spread across different departments and systems. This results in having an incomplete picture of available assets for attaching telecoms equipment onto to improve connectivity. In addition, the data local authorities can have may be outdated or lack technical details assets specifications, resulting in missed opportunities to improve connectivity.

Lessons Learnt

Local authorities involved in ONE WORD noted they needed to have a complete understanding about their assets, identify who is responsible for these, who collates the information and what information is collected. They further noted that if they didn't have an accurate asset register, it would be difficult to hold the required conversations between telecom providers and the relevant staff/departments within the local authority.

Good Practice

Local authorities should proactively identify the assets that could support digital connectivity infrastructure equipment that they are willing to make available.

Developing a comprehensive asset list would require collaboration between the digital champion, internal teams and any external stakeholders involved with managing assets (e.g. PFI (Private Finance Initiative) contracts). During this process, the local authority should identify the various technical and architectural attributes of each asset, if existing attachments are present, any known design limitations or considerations, any future planned works and any other relevant additional notes on the assets.

The asset list should be standardised as far as possible, without introducing excessive additional burden to asset owners/managers, thereby ensuring the local authority and telecom providers can clearly identify and discuss assets. A standardised approach across the wider region would contribute to a more efficient and effective management of digital connectivity infrastructure in the long term. Local authorities may choose a variety of attributes when developing their asset list, but key options are outlined in table 2 below.

Asset Attributes	Aspects
Location & Identification	Unique asset ID, Address, coordinates, UPRN (if applicable)
Asset Type	Asset type, material, dimensions, weight-bearing capacity, pre-existing attachments and utilities, planning and heritage status
Ownership & Access	Owner details, ownership arrangement, contact information, wayleave, access permissions
Condition & Suitability	Condition, structural information/integrity, accessibility, surrounding environment, obstructions, environmental factors
Legal & Regulatory	Leasehold details, covenants, planning history
Other	Photographs, notes, date of last update, public comments

Table 2. Asset Attribute List

Asset data should be stored in a system that is secure, accessible, easy to navigate and easy to update/modify. Options for managing and sharing asset data include:

- Publishing as Open Data via the local authority website
- Providing access on request through a structured spreadsheet
- Using third-party applications with controlled access for internal and external stakeholders

Key Action

The key action local authorities should take is to establish a **centralised asset registry**, even at a basic level (e.g. a spreadsheet with key attributes). This **low-cost initiative** would ensure asset data is accessible across council departments and would support discussions with telecom providers to improve digital connectivity.

Communication and Collaboration

Challenges

A lack of a clear engagement plan for developing digital connectivity infrastructure can create significant challenge for local authorities. Without a structured, coherent approach, communication with both internal and external stakeholders can become inconsistent, leading to:

- Misunderstandings and delays
- Missed collaboration opportunities
- Duplication of efforts
- Misalignment with regional or national strategies
- Increased costs and legal risks
- Project failure and inability to realise benefits
- Slower rollout of vital digital infrastructure

Poorly defined roles and responsibilities can further complicate engagement, resulting in fragmented messaging and difficulties in gathering crucial feedback from key stakeholders. Additionally, without robust reporting mechanisms, it becomes difficult to track progress, measure effectiveness and demonstrate the impact of digital connectivity projects.

Lessons Learnt

Through the ONE WORD project review, local authorities identified the need to:

- Clearly define responsibilities in digital connectivity infrastructure projects
- Ensure effective internal coordination, preventing siloed communication from different local authority teams
- Develop a structured engagement strategy, ensuring all stakeholders receive consistent messaging

Good Practice

Local authorities should develop and implement an engagement plan to provide a structured approach to:

- Identifying and managing relevant stakeholders
- Establishing relationships with internal and external partners
- Ensuring consistent communication and reporting

Pre-existing standards, such as PAS 11007:2019, offer guidance on effective stakeholder engagement for infrastructure projects Additionally, best practice frameworks, such as BS ISO 21500 (project management), BS ISO 31000 (risk management) and BS ISO 26000 (social responsibility), outline approaches to stakeholder engagement within their respective areas.

The engagement plan should:

- Clearly define stakeholders (internal teams, telecoms providers, community groups, etc.)
- Specify engagement methods (meetings, surveys, blog posts, regular reports)
- Follow a structured timeline to ensure consistent communication
- Allocate appropriate resources (time and budget) for engagement activities
- Include reporting mechanisms to track and evaluate effectiveness

A clear, coherent engagement plan will also support the development of a local authority's digital connectivity infrastructure priorities.

Reporting is another critical aspect of engagement that can help the long-term success of connectivity infrastructure projects by ensuring transparency and accountability. Local authorities should establish a reporting plan, which may include:

- Internal updates for council staff and leadership
- Formal external reports outlining project progress, deliverables and impact
- Regular data sharing to monitor progress, inform decision-making and maintain momentum

Digital champions within local authorities can play a crucial role in fostering engagement across teams by:

- Acting as convenors between departments and stakeholders
- Building internal awareness of digital connectivity projects
- Encouraging knowledge-sharing across teams
- Providing regular updates via meetings, presentations, or internal communications
- Question & answer sessions with relevant teams, providing an opportunities to address delivery issues and gather insights

Doing this will raise the profile of digital infrastructure projects, generate valuable feedback from staff across the council and encourage a supportive network of internal stakeholders who can assist with any delivery challenges.

Local authorities must also ensure alignment with regional initiatives to prevent fragmented approaches to digital infrastructure development and stakeholder engagement.

Regional collaboration also improves collaboration and communication. Whilst local authorities can manage digital infrastructure projects at the local level, regular engagement with other councils, combined authorities and government bodies is essential for:

- Sharing best practice and lessons learnt
- Ensure alignment across projects
- Ensuring consistency within and across regions
- Streamlining processes for telecoms providers

A regional coordination model could be led by:

- A local authority partnership
- A combined authority
- A dedicated umbrella organisation to facilitate coordination

This joined-up approach would simplify deployment for all stakeholders, create efficiencies, and result in both time and financial savings.

Key Action

The single, most impactful step for local authorities to undertake would be to **establish an internal working group**. This group would:

- Connect departments and senior leaders across the council
- Improve communication across the council
- **Foster internal buy-in** for digital infrastructure improvements
- **Minimise ad-hoc approaches** to collaboration and engagement with external stakeholders

While external engagement is also critical, internal alignment provides the **foundation for successful collaboration** with external stakeholders.

CASE STUDY:
Greater Manchester Combined Authority

The Digital Infrastructure Action Group (DIAG) within GMCA plays a key role in enhancing digital connectivity across the region. The DIAG:

- Develops strategies and policies (e.g. the Dig Once approach)
- Collaborates with telecoms operators to align efforts, ensure consistency and identify opportunities
- Brings together key stakeholders, including local councils and businesses, to ensure a coordinated approach
- Initiatives to improve broadband, mobile, and other digital infrastructure,

By maintaining a consistent regional approach, GMCA supports efficient deployment and maximises the impact of digital infrastructure investments to ensure Greater Manchester has the digital infrastructure it needs.

Leadership and Strategic Direction

Challenges

A lack of leadership and strategic direction within local authorities can create significant barriers to the successful deployment of digital infrastructure. Without senior leadership buy-in, digital connectivity initiatives often:

- Struggle to gain traction and secure necessary resources
- Lack cohesion, leading to fragmented efforts and duplication of work
- Fail to be recognised as a priority and crucial component of economic and social development
- Miss opportunities to benchmark progress against national standards, hindering efforts to assess performance and identify improvement opportunities

Without clear direction and advocacy, digital infrastructure can become a secondary concern rather than a core enabler of local growth and inclusion.

Lessons Learnt

The ONE WORD project highlighted the critical importance of **strong leadership** and a clear strategy in driving digital connectivity. Local authorities that lacked a clear, concise digital strategy and effective leadership faced:

- Delays and increased costs in project delivery
- Missed opportunities to realise the full benefits of digital connectivity
- Disjointed cross-departmental efforts, leading to inefficiencies

Authorities that successfully embedded digital connectivity within their strategic vision were able to **align internal teams**, drive c**oherent policies** and **deliver meaningful infrastructure improvements**.

Good Practice

To ensure effective leadership and strategic direction, there are a range of actions local authorities should take.

Firstly, secure buy-in from senior leadership, this helps to:

- Elevate digital connectivity as a key priority and increase the profile of digital infrastructure projects and campaigns
- Provide political and financial support for initiatives
- Overcome internal barriers and accelerate progress
- Open doors for collaboration and funding opportunities

Implement regular reporting and leadership engagement so that:

- Projects get leadership support
- Leaders are engaged and informed about progress and impact
- Leaders can advocate for digital infrastructure within broader policy agendas
- Digital connectivity remains a visible priority across departments and

Senior leaders should also act as spokespersons, raising awareness internally and externally, helping to secure investment and championing digital connectivity initiatives. This will amplify the activities of the digital champion or other individuals responsible for digital infrastructure connectivity.

Additionally, it is important to establish a clear internal narrative, aligned to strategic priorities. This enables:

- Cross-departmental buy-in and collaboration
- Consistency when integrating digital infrastructure into other council projects
- Staff to easily identify and engage with digital champions or infrastructure leads

Local authorities can also benchmark against national standards, assessing their digital infrastructure projects to:

- Identify strengths and gaps in digital infrastructure development
- Justify funding requests and prioritisation decisions
- Support evidence-based decision-making

Useful benchmarking tools include:

- FarrPoint's Digital Connectivity Readiness Index (DCRI) – evaluates digital infrastructure readiness and adoption
- TechUK's Digital Index – assesses digital adoption and progress
- Local Government Association (LGA) reports and dashboards – provide insights on digital connectivity
- TechUK's Telecoms Action Plan – outlines key priorities for improving connectivity
- Mobile UK's "Councils and Connectivity" resources – provides practical advice on enhancing mobile infrastructure

Although these tools focus on different aspects of digital infrastructure, they provide a useful framework to assess progress and identify the links between digital infrastructure and digital adoption locally, and insights into how this compares nationally.

Finally, local authorities should ensure that digital connectivity is embedded in project approvals. Digital connectivity should be a key consideration in any project proposal brought forward for approval – on a par with sustainability, poverty reduction or community engagement. This approach ensures that:

- Digital infrastructure needs and impact are considered from the outset
- Digital connectivity requirements are integrated into planning and development processes
- Opportunities for innovation and efficiency are maximised

Overall, this will help build an awareness of connectivity at the start of new initiatives, rather than it being an afterthought.

Key Action

The most critical step for local authorities is to **secure senior leadership buy-in**. This foundation enables:

- **Stronger advocacy** for digital projects
- Increased resources and investment
- Overcoming internal obstacles
- More effective stakeholder engagement

By embedding leadership and strategic direction into digital infrastructure planning, local authorities can drive cohesive, long-term improvements in digital infrastructure deployment.

CASE STUDY:
Connecting Cambridgeshire

Connecting Cambridgeshire's **Dig Once initiative** exemplifies a coordinated approach to accelerated digital infrastructure development. This policy enables the installation of empty ducts for fibre optic cables during infrastructure projects (e.g. roadworks and cycleway construction).

This approach allows telecoms providers to quickly deploy fibre cables without repeated digging and increases the pace of gigabit broadband deployment.

Benefits include:

- Faster fibre rollout without repeated excavation
- Reduced costs for telecoms providers
- Minimised disruption to residents and businesses
- Lower environmental impact

This **proactive planning approach** supports more efficient infrastructure deployment and speeds up gigabit broadband availability for residents and businesses.

CASE STUDY:
South Worcestershire Development Plan

The South Worcestershire Development Plan (SWDP), developed by Malvern Hills, Wychavon and Worcester City Councils, sets out a long-term vision and objectives for South Worcestershire. Updated every five years, the current SWDP Review is currently in consultation.

Section 32 of the Plan, Telecommunications and Broadband, provides guidance and requirements for both wired and mobile telephone systems, as well as broadband infrastructure.

High-quality telecommunications and broadband are also addressed in Policy SWDPR 9 – Infrastructure and the South Worcestershire Development Plan Infrastructure Delivery Plan. The Plan recognises the importance of digital accessibility and the benefits it brings to residents and businesses.

Adopting Best Practice

Challenges

Without regular reviews of strategies, policies, and processes, digital connectivity programmes risk becoming outdated, inefficient and misaligned with legislative changes and technological advancements. If local authorities do not engage with internal specialists and external stakeholders, there is a risk that digital infrastructure plans will not align with broader strategic priorities, leading to inefficiencies and missed opportunities.

Lessons Learnt

Local authorities in the ONE WORD project identified that having a clear leader in place for digital projects was essential for ensuring best practice and industry standards were followed. Regular engagement with external stakeholders and counterparts in similar roles helped councils stay informed about wider developments in telecoms and government policy. This knowledge-sharing played a critical role in shaping effective digital connectivity strategies.

Good Practice

To ensure that digital connectivity infrastructure programmes remain efficient, effective and responsive to change, local authorities should conduct regular reviews of all relevant policies, processes, engagement plans, and reporting mechanisms. At a minimum, these should be assessed annually to maintain efficiency, ensure compliance with legislation, and align with local, regional, and national government priorities.

Engagement with internal and external specialists is equally important. Internally, local authorities engage and involve teams that have function-specific, technical or regulatory expertise to ensure that digital connectivity initiatives align with the latest policy and operational guidance. Externally, councils should actively engage with the telecoms sector, trade bodies, the Department for Science, Innovation & Technology (DSIT), BDUK, Ofcom and other public bodies, including those responsible for transport, health and emergency services. This cross-sector engagement improves digital infrastructure initiatives by strengthening alignment with broader policy and legislative frameworks, whilst helping to integrate digital connectivity considerations into other areas of public service delivery.

Effective change management is also critical to the success of digital infrastructure projects. A structured approach, informed by best practice, such as those used with the NHS change management framework, can help local authorities to:

- Establish a clear vision and communication strategy
- Secure leadership buy-in and support
- Engage internal and external stakeholders proactively and consistently
- Conduct impact assessments before implementing changes
- Provide adequate training and support for those affected by proposed changes
- Monitor and evaluate the impact of changes

By embedding structured change management principles, councils can ensure their digital infrastructure projects remain relevant, adapt to evolving circumstances and maximise their value for communities.

Local authorities are also encouraged to actively participate in consultations run by the UK Government, Ofcom and other regulatory bodies. These consultations provide an opportunity to offer feedback on technical, operational and economic aspects of digital infrastructure. Engaging in these processes helps shape national policy, raises the profile of local authority digital projects, and fosters stronger relationships between councils and central government.

Key Action

The most important action local authorities can take is to **prioritise regular engagement** with key external individuals and organisations involved in digital connectivity policy and strategy. This could take the form of regular meetings or scheduled check-ins (monthly or quarterly as appropriate) with:

- Telecoms sector representatives and trade bodies
- BDUK and local Project Gigabit deployment leads
- The Department for Science, Innovation & Technology (DSIT)
- Ofcom and other regulatory agencies
- Public sector partners, including transport, health, and emergency services

Consistent, ongoing communication with these groups will ensure that local authorities **remain informed about industry best practice, legislative developments, and emerging opportunities**. This approach will help **prevent misalignment** between digital infrastructure initiatives and broader strategic objectives while **supporting the efficient and effective delivery** of digital connectivity programmes.

CASE STUDY:
West of England Digital Office

The West of England Mayoral Combined Authority launched its **Digital Office** to promote best practice in digital infrastructure and facilitate knowledge-sharing across its unitary authorities – & North East Somerset, Bristol City and South Gloucestershire councils.

The Digital Office provides a collaborative forum for councils to share insights, align strategies and accelerate infrastructure deployment. It also ensures councils stay informed on policy, funding and industry developments, supporting barrier busting, process improvements and proactive problem-solving.

By engaging with telecoms providers, regulators and government bodies, the Digital Office aims to strengthen the region's position in digital connectivity, ensuring communities and businesses benefit from faster, more efficient infrastructure deployment. The formation of the Digital Office was directly informed by both the Digital Connectivity Infrastructure Accelerator and ONE WORD projects.

Conclusion

The ONE WORD Policy in a Box encapsulates the collective learning and insights gained from the ONE WORD project, which has brought together local authorities and industry partners to advance digital connectivity. This initiative has highlighted the essential role that strategic leadership, standardised processes, and strong collaboration play in delivering successful digital infrastructure projects.

Key Takeaways

Leadership and Strategic Vision: Strong leadership commitment and a clear strategic direction are vital for embedding digital connectivity as a core priority.

- **Standardisation and Efficiency:** Adopting standardised processes significantly improves project outcomes, streamlines workflows, and ensures consistent stakeholder engagement.
- **Resource Allocation:** Appointing dedicated digital champions and optimising resource management help overcome challenges associated with planning, deployment, and stakeholder coordination.
- **Collaboration and Engagement:** Building partnerships between local authorities, telecom providers, and regional stakeholders is key to addressing digital connectivity challenges.
- **Data and Asset Management:** Developing comprehensive asset registers and sharing data proactively with relevant teams and partners support evidence-based decision-making.

Call to Action

Local authorities and stakeholders are urged to embrace the Policy in a Box as a guiding framework for digital infrastructure projects. By doing so, they can align local priorities with national digital connectivity ambitions, foster collaboration, and unlock the full potential of digital transformation. We also encourage councils to actively participate in knowledge-sharing initiatives to continuously improve practices and maximise the impact of digital infrastructure investment.

By embedding these principles and practices within their strategic approach to digital infrastructure deployment, local authorities will be better equipped to deliver modern, connected communities that are resilient and future-ready.

The ONE WORD project was funded by the Department for Science, Innovation and Technology (DSIT) through the Open Networks Ecosystem (ONE) funding call in March 2023. The fund was created to address barriers to adopting open mobile networks by testing solutions in high-demand areas and developing new Open RAN software and hardware to enhance network performance.