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## ACCESS DENIED: A QUALITATIVE STUDY OF INADEQUATE BROADBAND ACCESS IN RURAL BRITAIN

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### Background

Adequate broadband access is necessary for business development & efficiency, social support, delivery of health and government services, leisure, consumption, employment, and educational services (Townsend et al., 2013). Although broadband is available to nearly all UK homes and commercial properties, there is a considerable disparity in the quality of access across the UK. Variations are most evident between urban and rural areas: the more remote and sparsely populated a location, the more likely it is to experience slow connectivity. The most common type of broadband in the UK is via ADSL and it is distance dependent; the connection speed relies on how close the household or business is to the nearest telephone exchange.

The UK government defines *adequate* broadband as speeds of at least 2 megabits per second. Whether this is still sufficient for the use of high bandwidth applications such as video conferencing or TV streaming is debatable. Although the government has committed funding to improve broadband in rural areas, it has had to delay its initial target of universal availability of at least 2Mb/s by 2015 to the year 2017. This is problematic, as Ofcom reports that 8% of the UK population cannot currently access broadband of at least 2Mb/s (2013, p. 21), while others claim that 11% of UK users are in such 'slow spots' (cswbroadband.org.uk). Furthermore, Internet speeds in rural areas are not just slow but also unreliable, and there is contention at peak times.

Variations in broadband connectivity have important implications, as the quality and speed of connections determine the activities and resources users can access adequately—in other words: inadequate access presents a boundary toward full online participation for those UK citizens living outside of urban areas. Most studies on the

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availability and speed of Internet access are of a quantitative nature. For instance, the OxIS 2013 survey found that nearly a third (31%) of those living in deep rural areas say that their internet speed is always too slow for what they want to do, compared with 20% in shallow rural areas and only 6% in urban areas (Dutton & Blank, 2013).

Although quantitative studies give a first indication of the scope of the problem, they are not well suited to examine the actual impact of inadequate Internet speed on the lives of people, nor do they give an insight into people's strategies to cope with these problems. These more nuanced aspects are more appropriately examined with qualitative research methods.

On the basis of a range of qualitative methods, our study will explore how the boundary of very limited broadband speed affects the daily lives of rural Internet users. We will investigate how people work around the constraints and whether they opt for alternative technologies to get online. Due to a counter-urbanization process (wealthier people move to the countryside in pursuit of a higher quality of life) there are rather mixed populations in rural areas, which can be both relatively rich and relatively poor.

Depending on their socio-economic position, users might have different strategies to cope with inadequate network performance. Technologies such as satellite or mobile phone can provide alternatives for rural communities. However, these technologies are often expensive, have restricted data allowance, are slower than fixed lines, have a high latency, are susceptible to bad weather, get blocked by trees or clouds, and are sometimes complex to install. Furthermore, public awareness of these alternatives might be low.

## **Research Questions**

Adequate broadband speed is important to make living and working in rural areas sustainable. In relation to recent digital inequality research and theories (Helsper, 2011; Van Deursen & Van Dijk, 2013), we theorize that quality of access has a strong impact on the breadth of Internet uses in rural communities, rather than a potential lack of skills as is often found to be the case in urban communities.

Research in rural communities is required to gain an understanding of the current and future access requirements across rural Britain. This project will focus on how people living in rural areas are affected by the unavailability of (adequate) Internet connections.

The research questions for this study are:

- How do people cope with inadequate Internet speeds? Do the strategies they employ depend on their socio-economic position?
- What are the alternative technologies available to rural communities? Are people aware of these technologies? To which degree are these alternative technologies considered to be viable options (in terms of cost, performance, speed, or complexity)?
- What kind of public or community-based interventions are considered to be the most successful by rural communities?

- Does the distinction between ‘shallow’ and ‘deep’ rural areas enable a (more) meaningful comparison between different locations?

## Methodology

To shed light on these questions, we will (initially) conduct semi-structured interviews and focus groups in four locations across England and Wales.

- **Face-to-face interviews.** We will conduct 15 in-depth semi-structured interviews with adult Internet users in each location, resulting in a total of 60 interviews. Participants will also be asked to measure their Internet speed during a 24-hour period.
- **Focus groups.** We will organise a focus group in each location with teenagers (between 12 and 18 years of age). These 4 focus groups will inform us how adolescents in rural areas cope with slower Internet speeds and whether it affects their personal lives and their schoolwork.

In a bigger follow-up study, we will look at additional rural areas across all of Great Britain to verify our findings from this pilot study.

## Impact

Across different levels (EU, national, regional, county, local or community) considerable effort is being invested in developing policy measures that aim to increase the availability of Internet services. A frequent critique of the current public policies is that the focus on super-fast broadband for the masses is diverting resources away from investments to implement universal access across *all* of the UK.

Our results from this project have considerable potential to influence policy regarding intervention by public bodies (e.g. subsidy or public procurement, service obligations on providers). We will inform efforts taken by central, devolved and local governments to develop intervention policies that target areas where the market will not deliver internet availability. Policymakers may need to redress existing types of policy. In doing so, they may expand the scope of available opportunities and open avenues to local and community-based initiatives for which these avenues do not sufficiently exist.

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