Digital divide between Rural and Urban areas

Rural areas face the risk of a “double digital divide”. On the supply side, they are still lagging behind in terms of the provision of Next generation access (NGA) infrastructure – so closing this gap has to be a continued investment priority. On the demand side, many rural areas lack the basic skills and knowledge of the potential of digital technology so that even if the ‘digital highways’ are in place, they may remain under-exploited in terms of service provision, business use, or customer take up.

As next generation broadband services emerge, it is vitally important that rural areas are not left behind. We need to work on both the supply and demand side of digitisation to ensure rural business prosperity, future livelihoods, public services and the community life of many of our rural areas.

Example of Community-based (broadband) Initiatives

Open-Access FTTP networks are recognized as being one of the best High Speed Broadband models to lay the foundations and accelerate digital transformation. In rural (and urban) Europe. One of the most successful countries in developing these ‘local fibre networks’ has been Sweden where the Swedish Local Fibre Alliance has supported local authorities and communities to plan and build largely municipally owned and managed networks (86%).

Building local connections

At a local level, rural areas throughout Europe have been experimenting for over ten years with hubs and digital service centres to support the take up and application of new technologies. They have evolved into a variety of forms (described below) and have the potential to act as nodes or outreach posts facilitating two-way flows between the digital needs of rural communities and other digital innovation initiatives (such as the Digital Innovation Hubs – see below).

The Micropol Interreg IVC project 2012-2014 (www.micropol-interreg.eu) identified around 30 good practices in ‘Smart Work’ Centres in non-metropolitan Europe. A recent trend in rural France has been the integration of Fab-Labs* into the service portfolio of the Hubs (CoCotte Numérique and Morvan Centres in France being such examples). For simplicity we refer to all these centres as rural digital hubs.

*Fab-Labs: A fab lab (fabrication laboratory) is a small-scale workshop offering (personal) digital fabrication. Digital fabrication is a type of manufacturing process where the machine used is controlled by a computer.
Rural Digital hubs. A tool for helping rural businesses and communities benefit from all the opportunities of the digital transformation

To facilitate an understanding of their functions, roles and operation Rural hubs can be broadly divided into five categories, this categorisation was developed to assist local stakeholders better adapt their hub plans to local priorities.

I. **Economic Development Hubs:** These offer flexible office space from individual ‘closed’ office space to co-working areas with collaborative spaces for training, video-conferencing and other local/economic development uses, they target or support wider economic development aims by supporting a wide range of business users from entrepreneurs to distance workers to business ‘satellites’, public and voluntary sector workers.

*Example → Ludgate Hub, Co. Cork Ireland, [www.ludgate.ie](http://www.ludgate.ie)/ Nivernais Morvan, France ([https://www.nivernaismorvan.net/teletravail/telecentre-de-lormes/](https://www.nivernaismorvan.net/teletravail/telecentre-de-lormes/))*

II. **Socio-Economic Hubs:** Socio-economic hubs focus on a territory and therefore also incorporate a social service provision role, most commonly found in smaller more remote communities where the critical mass necessary to create a dynamic of hub eco-systems is enhanced by incorporating social and economic activities.


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Rural Digital Hubs → Key priorities:

- Providing training on developing digital skills ensuring that the rural population is able to take advantage of new technologies and tools
- Creating and supporting small and micro enterprises
- Creating and safeguarding jobs and start-ups
- Building business capacity and skills, e.g. through support networks or forums, business incubators and mentoring
- Facilitating and supporting farm diversification
- Identifying and developing new markets for new and existing products or services
- Foster entrepreneurship through small scale pilot initiatives to trial new rural business ideas

III. **Community Service Hubs or Networks:** Where community digital engagement is the priority, these act as a service hub for the local territory providing the first building block of the digital ecosystem and engage with their target community by offering wide range of non-business services, including employment, information and a range of other public and community services. These are provided either remotely, via video-conferencing or in-situ.

*Example → Guadalinfo, Andalucía, Spain; Maisons de Services network in the Lozère, France; ([http://www.guadalinfo.es/](http://www.guadalinfo.es/))*

IV. **Enterprise or Gateway Hubs:** These are a development of the traditional ‘business park’ or ‘incubator’ concept whilst they have a purely business focus and support entrepreneurs and SME’s, the addition of collaborative spaces to their service offer is designed to help provide future and existing business with the ‘missing pieces’ to create a viable digital ecosystem that functions at the site level and access wider systems.

*Example → (E.G) Berwick Workspace, Northumberland, UK, Entrepreneurial Park/Incubator Centre, Montemor O Novo and Évora County Community Fibre Network (Portugal); CoLab in Letterkenny (Donegal IE) → [www.co-lab.ie/](http://www.co-lab.ie/)*

V. **Distance Working Hubs:** Primarily aimed at to providing working environments in remote areas or to reduce ‘out-commuting’ and support distance working within rural communities. Such hubs can often act as centres for tele-work.

Key messages:

The major challenge with all hubs, whatever their ‘type’, is to create a business/operational model that works: a few desks, computers, printer, video-conferencing facility in an isolated, inappropriate underused facility does not produce the dynamic needed: failure rate is significant. The ‘Hubs’ are human spaces not four walls, needing dynamic interaction to create or contribute to local economic, social and digital eco-systems they are designed to support.

In Europe, studies have shown that SMEs grow two to three times faster, creating new jobs, when they embrace novel digital technologies. Growth in the adoption of technology and subsequent benefits are not just restricted to ICT businesses. Technologies can be used by existing or ‘traditional’ businesses to transform all areas of business activity.  

Examples of Rural Digital Hubs

The Ludgate Hub in Skibbereen, Co. Cork is located in the periphery of the South West of Ireland, With a 1000MB connection the Ludgate Hub utilises the digital age for job creation and innovation.

The initiative aims to facilitate up to 75 people in a creative co-working environment with a long term objective to create 500 direct jobs and 1000 indirect jobs via a sustainable digital economy for Skibbereen and the wider West Cork area. The Ludgate Hub is cited as an example of innovation occurring in rural Ireland and indeed a blue print for other rural areas. Skibbereen has also been selected as a pilot town for SIRO*, and 1GB of connectivity is now rolled out to the Ludgate Hub and town of Skibbereen creating a 1GB community.

*SIRO network: SIRO is the only network in Ireland that uses the existing electricity network to provide 100% fibre broadband directly into home or business, enabling speeds of 1 Gigabit per second

The Lozère digital network is an integrated support service aimed at providing citizens, business and public administration with comprehensive digital training, education and social services in France’s least populated (76000) and remote county as part of a strategy to digitally transform the economy of the territory.

A network of ten public digital service centres, a digital enterprise hub/incubator (POLEN) and the Chamber of Commerce offer access to all citizens and business, even in the remotest villages to a network of decentralized services (physical and virtual). The resulting ‘hubs’ have become a focus for communities, catalysts for local ecosystems and an access point to the wider digital economy and society.
The ‘Digital Innovation Hub (DIH)’ concept

According to DG CONNECT “the term Digital Innovation Hub” (DIH) refers to an ecosystem through which any business can get access to the latest knowledge, expertise and technology for testing and experimenting digital innovations relevant to its products, processes or business models. The Hub can provide also the connections with investors, facilitating access to financing of digital transformations of businesses and help connect users and suppliers of digital innovations across the value chain.

The core of a Digital Innovation Hub is one or multiple “competence centres”. These provide advanced technical expertise and facilities (labs, infrastructures, pilot lines for production, etc..). They cooperate within the hubs with the necessary partners in the innovation chain to support businesses in their digital transformation including investors, business development and legal experts, etc." In most cases, Digital Innovation Hubs operate at national or regional levels.

Questions for discussion:

1. Are there similar examples to help us promote digitisation in rural Europe?
2. What are the main needs the digital rural hubs should address in rural communities?
3. What are the success factors and constraints the rural development policy should take into account?