

Science Funding

SCIENCE POLICY RESEARCH UNIT

Climate Change

Innovation Systems Energy Sustainability

Growth Development Emerging Techno

# An exploration of local government approach to multiple regulatory and political uncertainties

Jessica van Thiel, PhD Candidate  
SPRU, University of Sussex

**The 7th International Symposium for Next Generation Infrastructure**



Socio-technical Systems Transitions Fo

Poverty Low Carbon Infrastructure In

Inclusive Growth

Creative Industries



BUSINESS  
SCHOOL

Digital Training

Biomedical Ur

# Introduction to doctoral research

*Dealing with multiple uncertainties: An exploration of local government approach to multiple regulatory and political uncertainties*

- Case study comparison of UK and French Government approaches to implementing digital regulation during an uncertain time
- Interviewed 25 UK local authorities and 20 French local authorities
- Two focus groups (of four people) in each country
- Fieldwork conducted from July 2020 to August 2021

# Doctoral research continued

**Objective of the research:** to explore the digital (access and inclusion) strategies that were created at the local level to adapt to the multiple uncertainties (COVID-19, Brexit, etc)

## Themes:

- 1) How are COVID-19 and Brexit related & the prioritization of uncertainty?
  - Reset/Restart post-pandemic strategy
- 2) **Digital inclusion strategies and local authority agility**
- 3) Policy implications for local authorities

# Uncertainty context

**The COVID-19 pandemic** - emphasizes the importance of digital access to meet the requirements of the lockdowns: major gaps identified in digital inclusion; and digital divide exacerbated by the pandemic

- Digital uncertainties for residents (uptake in internet use, requirements of higher speeds, etc) (Pinzaru, Zbucnea, and Anghel, 2020)

**Brexit** - overlaps with COVID-19 as the demand for faster broadband speeds came at a time when service provider workers were leaving the country

- UK Government initiatives were put in place to train domestic workers, however, the demand was so high during the pandemic, initiatives could not keep up

# Digital uncertainty

The pandemic and Brexit have created a great deal of uncertainty of what the implications will mean for the digital economy and other infrastructure (such as broadband internet) moving forward (Aturin, Moga, and Smagulova, 2020).

- Most councils/communes found it challenging as workers could not access resident homes due to COVID restrictions



usave.co.uk

# Digital uncertainty continued

- In some cases COVID-19 sped up the rollout of broadband.

*“Thanks to COVID-19 they (the commune) achieved 110% of their objectives related to their fibre/broadband implementation, which would not have been possible in a ‘normal’ context”.*

This was a result of being able to access homes easily because of significantly less traffic on the roads, more flexible and availability in people’s scheduling, and a *“push to provide access to as many homes as possible”*.

# Agility

## Agile approach:

- Organizational agility is the capacity, ability and flexibility of an organization to adopt quickly to a changing external environment and landscape (Mrugalska and Ahmed, 2021)
- Agile approaches towards more comprehensive and interactive public policy can increase certainty, stability, and more innovation (Elsner, 2004)
- With regards to the development of digital infrastructure and digital inclusion initiatives, organizations who are agile and who adapt quickly to uncertainty thrive (Brown, 2017)



[thekennelclub.org.uk](http://thekennelclub.org.uk)

# Impact of the uncertainties on local government

## Local Government Response:

- Local government in the UK and in France have expressed that the pandemic has worsened the digital divide, socio-economic, gender, age as primary factors of most marginalized
- In many cases, local government have aimed to address this by focusing on digital inclusion strategies in an agile way (examples and best practices explored later)
- The uncertainty of the pandemic, allowed policy-makers and management to develop and implement regulation more efficiently as their response to the urgency was agile and flexible (i.e., working with various stakeholders, 'internal' decision-making, etc)

# Digital inclusion priorities identified

- **Affordable & Accessible Broadband:** Rural areas or the last “2%” don’t have access to broadband internet. In some areas where there is superfast broadband, low-income residents cannot afford it, this deepens the digital divide
- **Devices:** a lack of access to laptops or PCs to be able to meet the requirements of working/school from home
- **Digital Education:** misinformation about superfast broadband, 4G/5G, and a lack of understanding of the benefits of using digital technology
- **Digital Skills:** some residents have a lack of essential digital skills, such as: how to interact online, access information, and use the internet safely. This inhibits their use of technology

# Digital inclusion at the local level: best practices

## Local government have been reactive to the increasing digital divide

Agile responses have resulted in sustainable infrastructure that will continue to thrive post-pandemic, for example:

- providing affordable and accessible broadband through subsidies to vulnerable residents (low-income homes)
- providing free devices to those in need (predominantly low-income families)
- initiatives to inform residents about the benefits of superfast broadband; training of essential digital skills
- digital training for businesses with a focus on a post-pandemic strategy

# Local level best practices continued

**Digital Education:** 5G advocacy – as a solution to reach rural areas, fact-checking/myths about, advocacy on the benefits of superfast broadband (**Bradford Council, Essex County Council, Welsh Government, Bordeaux Metropole, Commune de Bordeaux**)

**Digital Skills (residents):** training of essential digital skills including: 1) Digital foundation skills 2) Communicating 3) Handling information and content 3) Transacting 4) Problem solving 5) Being safe and legal online (**Southwark Council, Welsh Government, East Sussex**)

**Digital Resilience (businesses):** digital training, transformation, impact, and strategy for COVID/post pandemic (tele-working, etc.) (**Digital Jersey, Bournemouth, Christ Church and Poole Council**)

# Digital Communities Wales – an overview



<https://www.digitalcommunities.gov.wales/digital-communities-wales-an-overview/>

# Digital infrastructure and agility

## Findings to explore further: exemplars in digital infrastructure

**Jersey** is ranked 1st in Europe and globally for broadband speeds. 100% of homes and businesses connected to a pure fibre gigabit-speed network and download speed of 500 megabits per second (Digital Jersey, 2022)

**Estonia** Estonian Wideband Infrastructure Network (EstWin), to solve the rural connectivity challenge in an area underserved by telecom operators. Aims to bring ultra-fast internet access within 1,5 km of all rural households (European Commission, 2019)

# Digital infrastructure and agility continued

## Characteristics of successful digital infrastructure initiatives:

- a clear and consistent broadband strategy prior to the pandemic (and during/post)
- limited legislative and infrastructure context - starting with little existing infrastructure
- a focus on accelerating projects and adapting to external demands
- stakeholder engagement and collaboration

# Contribution & Conclusion

- ❖ Local authority agility went beyond addressing the requirements of the pandemic, some cases observed the **re-defining of the term digital inclusion** altogether. Digital inclusion thus became agile terminology in itself
- ❖ Digital inclusion should be seen as a **dynamic and evolving process** which requires an agile approach. This approach, not only changes local governments actions, it also implies working across different stakeholder groups

# Thank you

Jessica van Thiel: [j.hadjis-van-thiel@sussex.ac.uk](mailto:j.hadjis-van-thiel@sussex.ac.uk)

# Questions?