

This is a response to the Ireland 2040 Issues and Choices position paper on behalf of Lero – the Irish Software Research Centre.

Lero is an academic research centre funded by Science Foundation Ireland (SFI) and comprises researchers in all 7 Irish universities and 2 Institutes of Technology (Dundalk and Tralee). Since 2005, we have been working on various aspects of software engineering, in a wide variety of domains, from medical devices and connected health to financial services and public administration. We have partnered with over 100 commercial businesses across Europe in that period.

In particular, we have been working over the last few years on aspects of “Smart Cities”, with projects including the development of a Digital Strategy for Limerick City & County Council and the Smart Docklands project with Dublin City Council.

A key focus of our research has been the human processes and systems that are supported by software systems, recognising that delivering value from the implementation of information systems depends on many factors.

It is our view that Ireland in 2040 should be an exemplar of the successful use of technology in government, at both local and national level, in engaging with citizens and in delivering efficient and effective services targeted to the needs of the country and its people.

We are concerned that there is little or no discussion in the position paper around the use of technology, software, smart solutions, connectivity nor autonomous systems as fundamental to society in Ireland in 2040. It is important to include technology as a fundamental part of the ‘infrastructure’ which is discussed throughout the document.

Looking at specific sections of the paper:

In 2.3.3, there is no exclusive mention of technology and communications. A further bullet point could be added:

*“Prioritise the development of a telecommunications infrastructure which would enable the introduction of smart and connected solutions for national benefit.”*

### **3: People’s Health and Well-Being**

In 3.2 a point could be added:

*“Technology is being increasingly used to support healthcare and wellbeing which can have significant effects on society as a whole. Smart ageing and smart healthcare are being discussed and solutions are being implemented sporadically by individuals and by organisations. However, maximum effectiveness is unlikely to be attained unless these developments are undertaken in a strategic manner nationally.”*

In 3.3 a point could be added:

*“The National Planning Framework will need to consider how technological developments such as connected health and ambient assisted living can support Health and Well-Being. Such developments support both healthcare (for example, people with chronic diseases, older persons to continue living at home, people who could receive healthcare support through technology) and well-being (for example, people living on their own, those developing nutrition and fitness plans, security monitoring within the home).”*

#### **4. A Place-Making Strategy**

Within ‘Where to Next?’ a bullet could be added:

*“Strategically implementing technological solutions in smart cities so that our urban societies and people can benefit.”*

Key Questions:

It is important to recognise that technology can and should play an important role in the development and growth of our cities. Through effective use of technology, people within cities can be connected, and they can also be connected to rural areas. Thus, technology can support both urban and rural ‘place-making’.

#### **4.2 Opportunities for our Regions**

Each of the opportunities should be taking technology, its use and its potential into account. Any Regional strategy should consider smart solutions and how people and areas should be connected.

For example, 4.2.17 makes the assumption that everything will remain the same ‘be more prevalent within urban locations’. I would suggest that if smart solutions were used effectively, we could be working towards change. This seems to imply that we are happy with ‘Business as Usual’. However, radical change could disrupt this.

Within ‘Where to Next?’ there needs to be consideration to implementing infrastructure which allows for smart solutions – connecting people, hardware and software.

Therefore, to answer ‘Key Questions’, there must be an investment in technology infrastructure and also in smart solutions.

In 4.2.18, given that it does not require a physical presence, development of a software industry within rural Ireland is a very natural industrial cluster which could be developed.

*Under ‘Where to Next?’ an additional bullet could be included:*

*“Aligning development with the growth of software and technology internationally.”*

Key Questions: certainly the development and growth of a strong software industry cluster could be supported.

## **6 Equipping Ireland for Future Development – Infrastructure**

6.1.1 Technology is very important and should be included.

Under 'Where to Next?', an additional bullet could be included:

*"Understand how smart and connectivity can provide us with a more effective use of systems such as healthcare and transportation."*

#### Key Questions

We need to examine how technology (smart and connected) can support society, and how the infrastructural requirements can be implemented. We need to develop solutions to existing requirements e.g. in the same way as we no longer need to travel to banks to do our everyday banking, there may no longer be a need to travel to the local doctor to do our everyday healthcare. This has to be considered in the light of social isolation, especially for the older persons in our community, but other infrastructures could be put in place to support these.

#### Next Steps

If there are any further opportunities to engage in the process of developing the Department's strategy in this regard. We would be delighted to participate. Please contact:

Brendan O'Malley  
General Manager  
Lero – the Irish Software Research Centre  
Tierney Building  
University of Limerick

██████████

██████████

████████████████████