

# National Commission

## Stimulus paper – Digital futures

### 1 Background and context

The implications of digital futures for the governance of the public sector are numerous and complex. Digital futures, used here in the sense of transformational use of technology, artificial intelligence, machine learning and innovation, demands we get to grips with the governance of endless potential and risk. Although digital futures may not yet be entirely clear, the demand for future-proofing governance now is already with us, and to some extent is already being engaged with.

However from a review of recent from organisations, systems, agencies and government, it seems there is a lack of systematic and thoughtful reflection on significant implications for governance and even less on possible solutions and options. That is why the National Commission has chosen this issue as the focus for one of its three events in 2019. There is some evidence of an appetite for reflecting in depth on a range of issues relevant to governance, especially around ethics and risks relating to data and artificial intelligence. There is also evidence that the approach to governance thinking remains largely traditional using current models developed for a previous world, leaving the suspicion that lots of stuff is going on outside what would be currently seen as good governance, until issues get spotted or problems emerge.

This makes “digital” an ideal theme for the National Commission – one which requires clarification of its key lines of enquiry. That is the main focus for the session.

### 2 Digital drivers

The need to address governance is being shaped and driven by different dynamics including:

- articulation of the future potential of artificial intelligence and machine learning as defining our world
- a pressing need to provide solutions to long-standing social challenges under duress
- the articulation of both the huge potential and inherent risks in the rapid development and deployment of data
- demands from an active public for mirroring of the best of the private sector in the public realm
- focus in pockets of the public sector on large scale models of innovation and transformation beyond traditional professional and organisation boundaries
- stimulation of place-based, inter-agency collaboration by regional and national policies on policy and practice
- engagement with the more complicated interface between the private sector and the public sector across a range of issues
- the reality of automation on the world of work
- the potential for collective engagement in public governance and evidence of an appetite to do so.

There are obviously more. These multiple strands have led to a largely fragmented and silo-based engagement with specific issues of governance.

Some of the current thinking is asking fundamental questions about whether new models of governance and urgent skilling-up are needed to ensure governance around the digital future “shapes it before it shapes us”. Is this too late or naïve?

And also a sense that old models, based on evaluation, regulation, professional codes, and raising understanding and involvement, are being adapted rather than being rethought or reimagined. Is this really enough now and for the future?

### 3 Public Sector in 2030

What a citizen-driven, digitally-enabled public sector will look like in 2030 is also understandably an active area of discussion. This is necessary and important work provided it avoids the temptations of out-and-out futurology or embraces a drag-back to what can be seen from today's perspective from from-line leaders and the academic. The sense of a lack of trust in leadership and accountability in the public realm should not be underestimated. Active citizenship (however active in reality) and its consequences bring multiple governance challenges. The potentially critical distinction between governance and democratic engagement in relation to trust and legitimacy is fertile ground for resolution, but is often blurred in framing and discussion. The Commission is designed to surface the specific dynamic around governance.

### 4 Scope

Artificial Intelligence-related ethics is a useful reminder that this is not a blank canvas. Many issues might be seen to be covered already by developed governance models – healthcare research protocols, data protection policies, consent legislation, rights frameworks etc. But there is much more which is being challenged by AI, or appears to be.

AI also provides a useful checklist for the sheer range of governance issues (especially around ethics and safety) which may challenge current governance thinking and relevance:

- reliability and safety
- transparency and accountability
- data bias, fairness and equity
- trust
- effects on patients – deception and lack of clarity
- effects on healthcare professionals
- data privacy and security
- malicious use

### 5 Constraints and obstacles

There are also some fundamental constraints or obstacles which affect the governance of digital in the public sector in relation to new thinking and doing including:

- the complex organisational and delivery structures which predominate in the public sector
- the limited resources available to invest, the ever-present grip of Treasury control and the impact of a period of austerity and political uncertainty
- the prevalence of poor legacy technology and the limitations of current commercial arrangements between the public sector and partners
- the lack of a consistent risk appetite, and the tendency to risk averseness amongst enabling institutions and regulators
- the absence of public trust in political motivation and the integrity of public bodies.

These in themselves shape culture and thinking amongst current and potentially future leaders. Is this a substantial risk in framing of future governance which is being underestimated?

## 6 The use of guiding principles

Governance even on specific areas around the digital future still seems to be operating at the level of guiding principles rather than systematically working through governance implications at different levels – internationally, nationally, in the context of place and system and for individual organisations.

The most common design principles seem to revolve around:

- user or citizen focus
- protection, privacy and security
- inter-operability and larger system coherence and collaboration
- openness and transparency
- inclusion.

### Part 2 – Stimulus Resources

The following set of resources (reports, blogs, video clips) have been organised under individual themes to provide stimulus ideas for the session.

#### 1 Context – orientation to the big digital picture

Gates Foundation scenarios

[https://s3.amazonaws.com/gpei-tk/reference\\_links/en/2017\\_BMGF\\_-\\_Scenarios\\_to\\_2030\\_\\_\\_Themes\\_shaping\\_the\\_future\\_of\\_our\\_world\\_Summary.pdf?1505707298](https://s3.amazonaws.com/gpei-tk/reference_links/en/2017_BMGF_-_Scenarios_to_2030___Themes_shaping_the_future_of_our_world_Summary.pdf?1505707298)

Europe

<https://www.europeandataportal.eu/en/news/consultation-orientation-digital-europe-programme>

Health

<https://acmedsci.ac.uk/file-download/74634438>

[https://www.usaid.gov/sites/default/files/documents/1864/AI-in-Global-Health\\_webFinal\\_508.pdf](https://www.usaid.gov/sites/default/files/documents/1864/AI-in-Global-Health_webFinal_508.pdf)

Future Politics – one view of many

<https://www.theguardian.com/books/2018/sep/17/future-politics-living-together-in-world-transformed-by-tech-jamie-susskind-review>

#### 2 Government and digital

Government transformation - John Manzoni, Chief Executive of the Civil Service and the Permanent Secretary for the Cabinet Office

<https://www.gov.uk/government/speeches/civil-service-transformation-speech>

Governance as an enabler of public value

<https://www.publictechnology.net/articles/features/hackney-ict-chief-how-borough-putting-data-heart-policy-and-service-design>

### **3 Place and digital**

Smarter State as concept and reality

Two short You Tube clips on place-based collaborative leadership around digital

<https://www.youtube.com/watch?v=fW953icu6Q4>

<https://www.youtube.com/watch?v=SsrqAHQcbgc>

### **4 Governance at the interface**

Data collaboration between public and private sector

[http://www3.weforum.org/docs/WEF\\_Data\\_Collaboration\\_for\\_the\\_Common\\_Good.pdf](http://www3.weforum.org/docs/WEF_Data_Collaboration_for_the_Common_Good.pdf)

Local government digital declaration – what are the real governance implications of a collective intent?

<https://localdigital.gov.uk/declaration/>

Digital Boards – emerging principles and practice but are they really the answer?

<https://www.techuk.org/insights/reports/item/13951-what-makes-a-good-digital-board-report>

### **5 Health and the governance of digital**

Population health – interface of private, third sector and public governance required

[https://www.local.gov.uk/sites/default/files/documents/1%2077%20Digital%20public%20health\\_02%201.pdf](https://www.local.gov.uk/sites/default/files/documents/1%2077%20Digital%20public%20health_02%201.pdf)

<https://www.digitalhealth.net/2019/06/yorkshire-humber-care-record-population-health/>

Digital data and health

[https://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(19\)30814-1/fulltext](https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(19)30814-1/fulltext)

<https://www.gov.uk/government/publications/the-future-of-healthcare-our-vision-for-digital-data-and-technology-in-health-and-care/the-future-of-healthcare-our-vision-for-digital-data-and-technology-in-health-and-care#content>

Patient enablement

<https://www.techuk.org/insights/reports/item/15353-putting-patients-at-the-heart-of-artificial-intelligence>

Global Digital Exemplar programme – realism needed around expectations

<https://www.digitalhealth.net/2019/06/nhsx-ceo-weighs-in-on-nhs-digitalisation-projects/>

### **6 Smarter cities**

UK

<https://www.computerworld.com/article/3412328/best-smart-cities-in-the-uk.html>

London

<https://www.youtube.com/watch?v=n1-LizXwNUQ>

Manchester

<https://vimeo.com/240361046>

Hackney

<https://www.youtube.com/watch?v=E1pLOY4FLg4>

## 7 Principles and manifestos

<https://www.techuk.org/insights/reports/item/15318-the-rcgp-s-tech-manifesto-how-can-health-tech-help-the-gp-workforce>  
<https://files.constantcontact.com/1933707c201/750de966-9982-476a-bd24-8130959d3195.pdf>

## 8 Leadership

Role of CEO and senior leaders  
<https://vimeo.com/228218147>  
<https://www.publictechnology.net/articles/features/why-essex-council-has-broken-digital-convention>  
<https://digileaders.com/a-manifesto-for-the-future-of-public-services/>

## 9 Governance and Data

The need for international shared standards around data  
<https://www.bbc.co.uk/news/business-48784205>

And the problems the private sector is facing in getting their governance right.  
<https://www.bbc.co.uk/news/technology-47825833>

## 10 AI and ethics

Synthesis of social and political implications but how can the governance implications be made more specific and concrete?

<https://wellcome.ac.uk/sites/default/files/ai-in-health-ethical-social-political-challenges.pdf>  
<https://www.techuk.org/insights/reports/item/14994-guest-blog-the-tipping-point-for-ai-and-what-it-means-for-all-of-us>

AI in health as a challenge now  
<http://nuffieldbioethics.org/wp-content/uploads/Artificial-Intelligence-AI-in-healthcare-and-research.pdf>  
<https://www.techuk.org/insights/news/item/15558-pwc-report-ai-in-healthcare-a-perspective-on-the-practicalities>  
<https://www.pwc.com/gx/en/industries/healthcare/publications/ai-robotics-new-health/ai-robotics-new-health.pdf>

## 11 Digital and work – governance implications

Two Guardian summaries  
<https://www.theguardian.com/commentisfree/2018/aug/06/automation-destroy-millions-jobs-change>  
<https://www.theguardian.com/technology/2019/jun/26/rapid-robot-rollout-risks-uk-workers-being-left-behind-reports-say>

People, power and technology  
<https://doteveryone.org.uk/report/digital-understanding/>

Counter Intuitive thinking  
<https://www.oxfordeconomics.com/publication/download/295191>

Trends go back further than you think  
[https://www.oxfordmartin.ox.ac.uk/downloads/academic/The\\_Future\\_of\\_Employment.pdf](https://www.oxfordmartin.ox.ac.uk/downloads/academic/The_Future_of_Employment.pdf)

In Health - still on the nursery slopes in its thinking on implications for future workforce and governance implications of digital?

[https://www.hee.nhs.uk/sites/default/files/documents/Topol%20Review%20interim%20report\\_0.pdf](https://www.hee.nhs.uk/sites/default/files/documents/Topol%20Review%20interim%20report_0.pdf)

## **12 Governance implications and regulation**

<https://futurecities.catapult.org.uk/resource/hyperconnected-city-regulation-governance-report/>  
<https://www.youtube.com/watch?v=wh1pFWtUjG4>

Governance of Digital Identity

<https://www.techuk.org/insights/reports/item/14707-techuk-publishes-digital-identity-white-paper>

## **13 Technology for good**

[https://www.nesta.org.uk/blog/10-ways-were-championing-tech-for-good/?utm\\_source=Nesta+Weekly+Newsletter&utm\\_campaign=b784dc2fc5-EMAIL\\_CAMPAIGN\\_2019\\_07\\_22\\_01\\_18&utm\\_medium=email&utm\\_term=0\\_d17364114d-b784dc2fc5-181850681#](https://www.nesta.org.uk/blog/10-ways-were-championing-tech-for-good/?utm_source=Nesta+Weekly+Newsletter&utm_campaign=b784dc2fc5-EMAIL_CAMPAIGN_2019_07_22_01_18&utm_medium=email&utm_term=0_d17364114d-b784dc2fc5-181850681#)

<https://media.nesta.org.uk/documents/Compendium-of-Innovation-Methods-March-2019.pdf>

## **14 Risk, governance and ethics in digital futures - reports**

<https://www.mckinsey.com/business-functions/mckinsey-analytics/our-insights/confronting-the-risks-of-artificial-intelligence>

[https://www.turing.ac.uk/sites/default/files/2019-06/understanding\\_artificial\\_intelligence\\_ethics\\_and\\_safety.pdf](https://www.turing.ac.uk/sites/default/files/2019-06/understanding_artificial_intelligence_ethics_and_safety.pdf)

## **15 Some Practical Obstacles**

[https://www.instituteforgovernment.org.uk/sites/default/files/publications/Digital\\_Transformation\\_final\\_WEB.pdf](https://www.instituteforgovernment.org.uk/sites/default/files/publications/Digital_Transformation_final_WEB.pdf)