

Cross Party Group on Science & Technology

Wednesday 5 December 2018 – 6pm

Committee Room 4, The Scottish Parliament

1. Attendance

MSPs: Clare Adamson MSP (Convener); Iain Gray MSP (Deputy Convener); Finlay Carson MSP

Non MSPs: Craig Denham, Paul Stuart, William Hardie (all RSE); Mark Dames (BT Scotland); Kathleen Hill; Hugh Barron (Geological Society); David Coyne (Skills Development Scotland); Gavin Gibson (Edinburgh Mathematical Society); Stuart Fancey (SFC); Fred Young (PSTT); Sylvia McKay; Andrew Manches (Young Academy of Scotland); Alison McLure, Iain Moore, Rebecca Douglas (all Institute of Physics); Lis Bardell, Kate Barclay (both MSP staff)

Apologies received from: Jackie Baillie MSP; Liam McArthur MSP; Patrick Harvey MSP.

2. Minute of previous meeting

The minute of the Annual General Meeting held on 3 October 2018 was confirmed.

3. Presentation by Mark Dames on the *Automatic... for the People?* Report

The Convener introduced Dr Mark Dames of BT Scotland to present on ‘Getting Scotland Ready for the Fourth Industrial Revolution’ and the joint BT Scotland / SCDI / RSE / ScotlandIS report ‘Automatic for the People’.

Dr Dames took the Group through productivity trends for Scotland since the late 1990s, noting that while productivity growth in Scotland has been better than the UK as whole, it is now slipping with weak business investment, Brexit, and structural challenges in key high productivity sectors like oil and gas all making closing the gap, both with the rest of the UK and internationally, increasingly difficult.

Artificial intelligence could transform the productivity and GDP potential of Scotland. Necessary steps, however, to invest in the different types of AI technology will be required to realise potential gains. One study suggested that the impact of AI across Scotland’s economy could boost annual GDP by up to £16.7 billion by 2030.

The perception exists that AI and automation will both create jobs and destroy them. This may prove to be the case as different sectors will be impacted in different ways. Automation may replace manual and repetitive jobs, while roles requiring empathy, business decision- making or creative intelligence will always require real people.

Governments and business need to work together to help people adjust to new technologies through retraining and career changes. A culture of adaptability and lifelong learning will be crucial to the spreading the benefits of AI and robotics throughout society.

Various countries, including Germany, China, Finland and France, already have defined AI strategies. At the UK level the recently-published Industrial Strategy aims to support the development of new technologies and position the UK at the forefront of the industries of the future. AI and data also link to the other 3 Grand Challenges (the fourth being AI and data itself): clean growth; the future of mobility; and an ageing society.

Scotland currently lacks any bespoke estimates and mapping on the scale of the Fourth Industrial Revolution. The ‘Automatic... for the People?’ report published by BT Scotland, RSE, ScotlandIS and SCDI built upon several previous reports, including ‘Digital Solutions to the Productivity Puzzle’ and ‘Smart Citizens, Smart City Regions: Delivering Digital Public Services in Scotland’.

The report made various key recommendations, including stressing the need:

- For a national focus, led by an inclusive Scottish Commission on the Fourth Industrial Revolution
- To develop regional opportunities and take immediate action to support ‘at risk’ areas
- To support local communities, businesses and social enterprises to collaborate and innovate
- To design education, skills, training and lifelong learning and employment for the new world of work
- To challenge and support businesses, and encourage ‘Fair Work’ technology partnerships
- Take a global lead in developing safe, innovative and ethical data strategy
- Develop a ‘fit for the Fourth’ infrastructure, including digital and smart infrastructure
- Keep under review and test longer-term policy options for inclusive growth
- Promote Scotland’s strengths in traditional industries and attractions

4. Discussion / Q&A

Dr Dames answered questions from members of the Group and there was general discussion touching on a number of areas including: the ethical dimension of allowing important decisions to be made using AI; the types of jobs which are likely to be most affected by the revolution, and how to support those transitioning to new roles; the importance of education and the support of parents and carers of the young people being educated to successfully embracing the opportunities presented; the need for the benefits to be fairly spread across Scotland.

5. Proposal for CPG quarterly newsletter

It was proposed that a quarterly newsletter giving members of the CPG the opportunity to share their work with one another and receive follow up information on topics which the Group had addressed could add value.

It was agreed that the Secretariat would look into taking this forward.

6. Date of next meeting

The next meeting of the Group will be on 8 May 2019 and address the topic of Big Data. The speakers will be confirmed in due course.

7. Any other business

Meeting close 7.45pm