# **Innovation Advisory Council for Wales**

## 25<sup>th</sup> January 2019, Swalec Stadium, Minutes

Present: David Notley (DN) (co-chair)

Kellie Beirne (KB) (co-chair)

Sue Bale (SB) Steve Smith (SS) Helen Swygart (HS) Ian Brotherston (IB)

Kirsten Bound (KBo) via phone

Apologies: Andy Middleton (AM)

Rhys Thomas (RT)

Secretariat: Alastair Davies (AD)

Philippa Costello (PC)

Guest Speakers: Mark Lewis (ML) (WG)

Denise Powell (DP) (IQE)

| Agenda<br>item |   | Action |
|----------------|---|--------|
| 1              | Welcome   |        |
|                | DN welcomed council members to the 17th IACW meeting.   |        |
|                | The minutes of the previous meeting were discussed, agreed and approved.  |        |
|                | Council members present were asked to indicate any direct or indirect conflicts of interest in the proposed agenda items. No new interests were recorded.   |        |
| 2              | Nesta 2019 Predictions  |        |
|                | KBo highlighted Nesta's recently published list of ten predictions for 2019 which focus on trends and technology breakthroughs:   |        |
|                | 1. The Global Race is on to Build "City Brains" – the   |        |
|                | <ul> <li>integration of Al into our everyday lives;</li> <li>2. RoboLawyers make legal services cheap and cheerful – automation in the legal sector, with apps and web-based services replacing visiting a solicitor's firm;</li> </ul> |        |
|                | 3. A random approach to innovation – randomly-allocated and distributed research funding;  Output  Description:   |        |
|                | 4. An MOT for your gut – finding out what's living in your gut;   |        |
|                | <ul><li>5. The mobility revolution gathers speed – the development of assistive technologies;</li></ul>   |        |
|                | <ol> <li>'Deepfake' videos get weaponised – new Al-based<br/>technology makes it possible to create fake videos of<br/>individuals which are nearly indistinguishable from the real<br/>thing;</li> </ol>                               |        |

- 7. Who do you think you're talking to? your right to know whether you're speaking to a human or a robot. A citizen's "right to know" will become the organisation's "duty to inform";
- 8. The beginning of the end of exams Al could start continuously assessing students, making exams increasingly unnecessary;
- Living with superbugs knowing someone who lives with an antibiotic-resistant infection which reduces their quality of life, and impacts on the healthcare systems and communities;
- 10. It's the end of the week as we know it in 2019, we'll finally abandon the idea of a "working week", and begin to reimagine work and society that matches our reality and life patterns.

#### 3 IACW going forward

This session focused on the remit and purpose of IACW over the coming year and how it intends to make an impact and add value.

DN updated Council on his recent meeting at the Senedd where he was asked to provide evidence on the Research and Innovation inquiry for the National Assembly for Wales Economy, Infrastructure and Skills Committee. A transcript of the meeting can be found at <a href="http://record.assembly.wales/Meeting/5149">http://record.assembly.wales/Meeting/5149</a>. The Committee will shortly be producing a report in to its findings.

PC to circulate Research England's Knowledge Exchange Framework (KEF) consultation which is inviting responses to develop a knowledge exchange framework. The consultation is open until 14 March. Should members wish to respond, please follow link - <a href="https://re.ukri.org/news-events-publications/news/re-launches-kef-consultation/">https://re.ukri.org/news-events-publications/news/re-launches-kef-consultation/</a>

A discussion was held on membership and it was agreed new and additional membership was needed. Agreement was given from Council for DN and KB to approach potential new members and if possible, attend the next IACW meeting.

PC to arrange dates every 6-8 weeks for the rest of the year for potential Council meetings. It is always easier to cancel a meeting than it is to arrange a short notice meeting. Dates can be used for subgroup meetings and quarterly IACW meetings.

KB updated Council on the recently held Wales Science and Innovation Advisory Council, chaired by Sir John O'Reilly. KB was recently appointed to sit on the Council. Membership of WSIAC includes representation from the UKRI board. It was agreed that a member of the UKRI board should come to an IACW meeting to provide an update on UKRI. WSIAC identified Wales' competitive strengths as:

- NHS and cancer research;
- Agritech and food resilience and security;

PC

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|---|---|------|
|   | <ul> <li>Public procurement;</li> <li>Regulatory technology linked to AI and data;</li> <li>Nuclear;</li> <li>Defence and cyber.</li> </ul>   |      |
|   | Should IACW and WSIAC jointly establish some areas of work that can be developed together?  |      |
|   | DN to draft options paper on subgroups and what they should be. Possible suggestions include:   | DN   |
|   | <ul> <li>International and Collaboration;</li> <li>Data – horizon scanning; trends/foresight;</li> <li>Public service procurement/challenges.</li> </ul>  |      |
|   | Subgroups to be established and there will be a requirement for members to meet in between regular IACW meetings.   | IACW |
| 4 | Vision for Co-Innovate  |      |
|   | ML and DP updated Council on the forthcoming Co-Innovate event which focuses on bringing people and organisations together around opportunities and capabilities.   |      |
|   | Several workshops will be held over the year which will form the basis of the main event. The first workshop will be held in early March and will be a high level scoping workshop for innovation and R&D leaders. It will centre on emerging technology themes:  • Sensing, measurement and inspection;  • Communications;  • Positioning, navigation and timing;  • Energy and power management;  • Advanced manufacturing and materials. |      |
|   | Industry and academia will be invited to a second workshop in June to further refine the challenges. Funding via Smart Cymru will be available for project partners to work up feasibility studies where more than one organisation is involved.  |      |
|   | The main conference will be held in December with the aim of sharing insights and knowledge. Extra capability will be available at the conference for any potential projects that are being developed.  |      |
|   | PC to provide SB's contact details to ML and DP re SEWAHSP's Healthtec challenge platform.  | PC   |
|   | PC to circulate slides.   | PC   |
|   | Council to respond to ML and DP with any thoughts and suggestions.  | IACW |
| 5 | IUK Update  |      |
|   | IB updated Council on ISCF Wave 3 themes which have been announced:   |      |

- Future of flight electrification of flight;
- Driving electric revolution big power drives;
- Commercialising quantum technology;
- Industrial decarbonisation decarbonising the big industry pollutors:
- Transforming Foundation Industry steel, cement, glass, ceramics – making them more efficient in energy terms;
- Smart sustainable plastic packaging;
- Manufacturing made smarter digital manufacturing;
- Accelerating detection of disease;
- Digital security by design fundamental changes to chips.

Some of the above have been announced as sector deals, but are not open or competitive until Summer/Autumn.

Strength in Places shortlist has not been finalised or announced. A  $2^{nd}$  wave is anticipated.

IUK has a new mission and vision statement which will come into effect from April. IUK will now have an emphasis on **business-led** innovation and will incorporate and recognise the societal benefits of innovation.

One of the proposals to replace EU Structural Funds is the UK Shared Prosperity Fund which will reflect the Industrial Strategy grand challenges. This has yet to be agreed.

### 6 Innovation Investment in the City Deal

KB updated Council on the work of the Economic Growth Partnership and highlighted the importance of the region. A recent sectoral analysis has been carried out by Cardiff University and WG Chief Statistician which identified the sectors where Wales has strengths in the region, where place needs to be key:

- Advanced Manufacturing;
- Fintech;
- Energy and environment;
- Cyber and defence;
- Lifescience;
- Digital.

KB has established an Investment Framework whereby the £500m Investment Fund has been split 3 ways, with the majority going into an Innovation Investment Fund.

A new Office of the City Deal is being set up and has moved to new premises. The office will shortly be recruiting.

#### 7 AOB

KB and DN to meet the Minister of Education on 19th March 2019.

The next IACW meeting is scheduled for 22<sup>nd</sup> March 2019, venue to be confirmed, followed by every 6-8 weeks after that.