**Smart Infrastructure and Systems programme**

Digital Twins Working Group

*The Digital Twins Working Group (DTWG) is an interdisciplinary, cross-market group that represents a diverse blend of technology companies involved in the development, adoption, and diffusion of digital twins. Bringing industry leaders together from a wide array of different backgrounds, the DTWG serves a source of critical but friendly advice for key stakeholders considering how digital twins can be leveraged to deliver on the UK’s net zero 2050 ambitions, to address regional inequalities post-COVID, and to accelerate R&D-led growth.*

2021- 2022 achievements

**Championing the role of digital twins**

* We published our landmark report on the future of the UK’s digital twin ecosystem - [Unlocking the value of digital twins in the UK](https://www.techuk.org/resource/techuk-launches-landmark-report-on-the-future-of-the-uk-s-digital-twin-ecosystem.html).
* We have worked extensively with the CDBB’s to develop the case for digital twins of the UK’s social housing assets.

**Drive public investment in digital twins**

* Continuous contribution to support the development of a UK Digital Twins Programme, and supporting innovation framework, by working with BEIS throughout the year.
* Delivered a pre-consultation briefing with BEIS on cyber-physical infrastructure for digital twins.

**Champion the role of digital twins at the heart of the net zero transition**

* Collaborated with partners to bring a digital twin to COP26, the international climate talks in Glasgow in November 2021.
* Collaborated with European Commission as it develops a digital twin of the earth, Destination Earth.
* Produced a whitepaper on the use cases of digital twins to support the energy sector’s transition to net zero - [Digital Twins for Energy](https://www.techuk.org/resource/new-techuk-whitepaper-highlights-the-power-of-digital-twins-in-the-energy-sector.html).
* Engaged with government and innovation bodies to highlight the role that digital twins could play in accelerating R&D commercialisation in green technologies and support “systems thinking.”

**Support the conditions that help digital twins to thrive**

* techUK held a series of roundtables with BEIS on the Cyber-Physical Infrastructure for digital twins in response to the call for evidence - **Enabling a National Cyber-Physical Infrastructure to Catalyse Innovation *Understanding the opportunities for connected digital twins***
* Published [the Apollo Protocol Report](https://www.techuk.org/resource/apollo-protocol-calls-for-common-language-across-digital-twins.html) – addressing the language barriers of digital twins between manufacturing and built environment. In collaboration with AMRC, IET, CDBB, CLC, Alan Turing Institute, – (Q3).
* We strengthen our relationship with the Digital Twin Hub and became part of the Advisory Council.
* Continuous guidance to techUK’s work on the National Data Strategy and National Innovation Strategy.

**Proposed Programme for 2023** – to be developed and agreed with the new Steering Board

**Elevating the adoption of digital twins**

We will continue to promote the opportunities for digital twin technology.

* Working with members to address challenges of implementation– short, medium, and long term.
* Address technology trust issues with deployment of digital twins.
	+ Looking to publish a guidance of adoption.
* Continue our work with the [Apollo Protocol Forum](https://www.techuk.org/resource/next-steps-for-apollo-protocol-to-be-revealed-at-live-launch-event.html).

**Market development**

* Exploring use cases and developing implementation scenarios for digital twins in different sectors.
	+ Infrastructure
	+ Aerospace
	+ Maritime
	+ Health
	+ Finance

**Policy and Regulation**

* Identify policy gaps and work closer with BEIS and DCMS.
* Contribute to techUK’s engagement with HM Treasury.

**Champion the role of digital twins at the heart of the net zero transition**

* Provide a guidance on how digital twins fit within the larger infrastructure sector.
* Continue to work with the Smart Infrastructure and Systems, and Climate and Environment groups to address climate challenges.