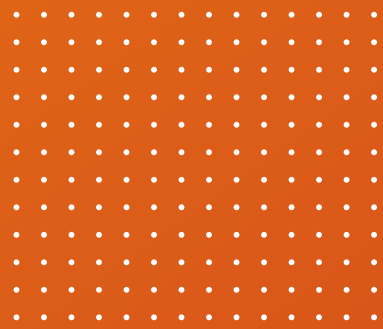# techUK recommendations for UK's G7 Presidency

Following a year of unprecedented disruption for the societies and economies of the world, working together to build back better and find common solutions is more important than ever.

2021 is a cornerstone year for the United Kingdom to drive the conversation about what comes next with our European and global partners. By hosting both the G7 Leaders' Summit in June and COP26 in November, the UK can shape crucial policy directions in response to the numerous challenges following the COVID-19 pandemic.

The technology sector has been - and will be - part of the solution to these challenges. As the whole world moved online, it provided the means and infrastructure for people to continue to work, meet and keep in touch with family and friends over the internet. Businesses of all sizes assisted governmental efforts to help children continue their education, provide support to the healthcare sector and connect communities with the most vulnerable. Digital technologies help to drive energy and resource efficiency in a way that is several times higher than their own environmental footprint. For tech solutions to be available quickly to as many people as possible across as many countries and regions of the world as possible, like-minded countries must work together on setting the rules for the digital economy.

We strongly encourage the UK Government to promote the measures below as part of the G7 community drive towards economic recovery and resilience. We call upon the UK to seek support for these policy actions and their inclusion in the G7 statement.

Meaningful steps are needed towards:

> **putting digitalisation at the heart of the economic recovery efforts and funding;**

> **maximising the potential of digital solutions in the fight against climate change;**

> **developing resilient digital infrastructures;**

> **preparing the workforce for the digital transformation, through concerted efforts on digital skills and diversity in tech;**

> **strengthening the multilateral system, through international cooperation on emerging technologies;**

> **promoting modern digital trade rules.**

Digitisation at the heart of the economic recovery

COVID-19 has forced organisations to adopt digital technologies at a fast pace, changing their business processes to cope with the realities of a socially distanced economy. This adoption is impressive and has helped keep many businesses afloat as firms have taken advantage of video conferencing, cloud computing and online marketplaces to continue to collaborate and find new ways to reach their customers.

The pandemic has shown us that more digitally advanced firms are better prepared to respond to crises. Since the start of the pandemic the most digitally capable firms have been the most likely to be able to continue to operate and grow, with revenue growth 8 times faster than the least digitally able firms.

To effectively recover from this crisis and increase our economic resilience we need to use this moment to work together with our partners and encourage firms across the G7 and beyond to put technology adoption at the centre of their plans for the recovery.

This will not happen on its own. In the UK most businesses have adopted technologies to find new ways of communicating internally and externally, however this initial adoption has not yet translated into the widespread uptake of truly productivity boosting technologies.

It is the combination of different digital services to create new channels of communication, collaboration and access to markets that drives productivity and revenue growth. Lloyds bank estimates that UK firms who use a combination of cloud-based IT systems, online accounting software and digital training tools have an annual turnover £262,000 higher than those that did not. However, while 65% of UK firms report having used digital tech to create new forms of communication, just 18% have used it to find new ways of selling and only 16% have used it to produce new types of goods and services.

Increasing productivity is vital for G7 nations as the main route for developed economies to increase living standards. The UK should take a lead in setting out plans to help smaller businesses invest in digital technologies, such as through grants and tax incentives for firms and encourage G7 countries to take similar steps in their own recovery plans.

At the multilateral level the G7 Summit offers an opportunity for members to work collaboratively to reduce barriers to the deployment of digital services and to set principals that will support their adoption.

> **Reducing barriers to digital trade.** Supporting investment in digital services across the world depends on common frameworks. Members of the G7 should therefore refocus their efforts to achieving a breakthrough in the JSI ecommerce negotiations at the WTO, covering, among others, data flows, mandatory localisation, access to source code and telecommunications, as well as aiming to achieve a solution at the OECD discussions on digital tax in 2021.

> **Improving cooperation on cybersecurity.** As cyber security increasingly underpins the technologies citizens use to live and work online, businesses must have confidence that their systems are effectively secured. Increasing cybersecurity cooperation between the G7 countries will be vital to encouraging tech adoption. Efforts to improve the assurance of cyber technologies should happen across the G7 with collaboration ensuring that business isn't penalised and subject to multiple/complex regimes. The G7 should review the actions of the UK and EU who embedded cybersecurity partnerships in the UK-EU TCA and look at new methods of bilateral and multilateral cooperation on cybersecurity.

> **Enhancing regulator to regulator dialogues.** Innovative digital services are best developed when there are good partnerships between the industry and regulators. A good example of this is the UK's leadership in its use of regulatory sandboxes in AI and fintech. Promoting enhanced regulator to regulator dialogues will allow for the sharing of ideas, convergence on good regulatory practices as well as supporting the entry of firms to new markets by enabling trade facilitation and alignment on regulatory principals.

Digital Solutions in the fight against Climate Change

The global transition to low or zero carbon economies will require wholesale changes to systems, infrastructure, and businesses. Digital technology and connectivity can play a vital supporting role in meeting these challenges.

The Exponential Climate Action Roadmap showed that digital technologies have the potential to cut global emissions by 15% by 2050 and one third of what's needed by 2030 (equivalent to the combined carbon footprint of the EU and the US) through solutions in energy, manufacturing, buildings, agriculture and traffic management systems. And with the advent of 5G and IoT (by more effectively gathering and transmitting data) and AI and digital twins (unlocking more sophisticated data analytics), the sector can support even deeper emissions abatement. Indeed, the authors of the roadmap argued that the digital technology sector is probably the world's most powerful influencer to accelerate action to stabilise global temperatures well below 2°C. Further, a recent techUK report provided evidence that these emission reductions can be delivered whilst also supporting growth (for example, the UK could expect an estimated uplift of £13.7bn to UK GVA by 2030).

The digital sector is already well on track to reduce its own emissions, which represent 1.4% of the global total and is taking a strong lead in accelerating demand for 100% renewable energy. The sector can cut its footprint by more than 80% by switching to renewables and is already the largest global corporate off-taker of renewables. However, a key challenge for the sector is the design and product stewardship of electronics, which must move to circular systems in order to be viable in low-carbon economies. Well-meaning but conflicting regional circular economy design legislation, or restrictive export controls, risk weakening design signals to global manufacturers and undermining established repair and remanufacturing supply chains.

As, in parallel, holders of the current presidency of COP26, the UK has a unique opportunity to drive a strong climate narrative at the G7 talks. From a digital technology perspective, there are five aims that the UK Government should seek to achieve:

> **Continue to drive momentum for a high level of ambition (and alignment) in Nationally Determined Contributions (NDC)** to ensure the delivery of the objectives of the Paris Agreement.

> **Develop a G7 approach to the development of data sharing agreements** to support abatement of greenhouse gases, climate adaptation and eco-system monitoring.

> **Establish G7 support for the establishment of an International Centre for AI, Energy and Climate** to pool international research efforts to support the rapid deployment of promising AI technologies that support climate abatement.

> **Develop G7 support for a collaborative approach** to enhance support for the current model for developing international standards and incentives for circular design and business models for electronics.

> **Commit to removing barriers to business investment in renewable energy** so that companies can deliver on their decarbonisation strategies and support the roll out of subsidy-free and additional renewable energy capacity.

Developing resilient digital infrastructures

Telecoms is a sector where there is already strong international cooperation between regulatory bodies, although G-7 countries take a relatively siloed approach to these bodies.

The UK Government is currently bringing in a new Telecoms security framework (via the Telecoms Security Bill) which will enhance the already world-leading approach that our operators bring to cyber security. Part of the Bill seeks to remove high-risk vendors from UK infrastructure.

To compensate for the loss of a vendor in a relatively concentrated market, and also to take advantage of a potential global trend towards disaggregated networks, the UK has launched its Diversification Strategy. This seeks to expand the supply chain available to the UK's telecoms operators and has two aims; to ensure the resilience of telecoms equipment to the UK market at a competitive price as well as offering the potential for increased UK domestic capability as telecoms networks become more disaggregated.

There are three aims that the UK Government should be seeking to achieve in these areas as part of its G7 Presidency:

> **Develop a G7-wide approach to critical standards in Telecoms** (likely as part of a <u>wider, more comprehensive approach</u>). Standards are critical in the development of telecoms and influencing them can be a competitive differentiator for either companies or countries. The UK's Diversification Strategy rightly placed a strong focus on the need to develop standards, particularly around future telecoms generations as well as the push towards disaggregated networks. The UK Government should aim to improve the dialogue and information exchange between G7 members, national regulatory bodies and the private sector about standards-related developments.

> **Push for alignment on R&D, standards and development of 5G/6G and disaggregated networks – particularly Open RAN.** The industry is in places moving towards disaggregated networks (whereby telecoms networks are based on general purpose, vendor-neutral hardware). The UK could use this shift to build domestic capability in some of the vendor stack; but the technology needs to be supercharged to reach maturity in the medium term. Both new and incumbent suppliers of telecoms equipment and services need support to accelerate the deployment of disaggregated networks, the UK should therefore encourage greater cooperation among G7 members on R&D efforts. These efforts would build on the activity undertaken as part of the Diversification Strategy and ensure that the UK has access to a multitude of resilient and high-quality vendors.

> **Ensure good regulation of telecommunications services.** In the words of the GATS annex: Telecoms are the "underlying transport means for other economic activities". Without telecommunications services there would be no eCommerce, no digital trade, no digital economy. Since the basic principles of how to regulate telecoms markets were agreed more than 20 years agoi—and where liberalisation, competition and regulatory best practices have spurred the broader availability, affordability, investment and innovation in communications services— global internet traffic has increased by over 100,000 times. The UK Government should lead the G7 in supporting proposals put forward in the context of the JSI on eCommerce to review the WTO telecoms rules and to tighten-up its provisions so that they match better the level playing field that exists in the UK.

Preparing the workforce for the digital transformation

As more and more organisations are encouraged to adopt, deploy and use digital technologies, such as data analytics and cloud computing, it is important that we ensure that we have the right skilled professionals to support organisations to realise the full potential of the digital investment made within the modern workplace. It is also important to remember that not all organisations are at the start of their digital journey. As organisations mature in their use of digital technologies, such as cloud computing, it is important that resources are available to help businesses manage and use new digital assets.

Throughout the COVID-19 crisis employers have continued to recruit people for digital roles and techUK's own research shows people want to develop their digital skills. techUK's polling with Ipsos MORI during lockdown showed over 80% of those surveyed felt digital skills would become more important in the workplace post-pandemic. The data also showed that 58% of people were interested in gaining more digital skills in the next 12 months. This was significantly higher amongst those aged 16-24 (73%) and 25-34 (75%) – the two age groups that have been hardest hit by the economic fallout of the COVID-19 pandemic, with unemployment in the younger age group predicted to reach the one million mark by the end of the year by the Resolution Foundation.

Despite this, motivation continues to be a key factor in preventing people from upskilling or reskilling themselves. But we should not believe this is a uniquely British problem. If we look to our neighbours in Europe, data shows that 37% of people in the labour force there – farmers, bank employees, and factory workers alike – also lack sufficient digital skills, despite the increasing need for such skills in all jobs. And they too lack skilled ICT specialists to fill the growing number of job vacancies in all sectors of the economy. This points to an international competition for the right skills to turbo-charge the economy.

Changes to the labour market are features of every wave of technological innovation, which have been managed and resulted in more and better employment in the long term. The challenge in front of us is the speed and scale of this new wave of automation, the transition of work to new tasks or entirely new jobs which will require government and industry support. This has been accelerated by recent events; however, it is clear that technology will play a crucial role as we emerge from this crisis and start the economic recovery.

G7 members have already committed to supporting skills development, including lifelong learning and upskilling. Initiatives and policy measures are taking place at the national and regional levels to tackle digital skills gaps but the G7 offers the UK an opportunity to cooperate globally on this issue:

> **Empower people with digital skills to transition to high-growth tech jobs.** It is vital that we have the skills needed to seize this opportunity and meet the speed and scale of the new wave of automation. There is a clear opportunity in front of us: if we can coordinate and enhance the provision of training, we can take up this opportunity and make the most of the future ahead of us.

> **Work together to expand short modular digital skills courses**—in particular those accredited by industry and employers—to open up more accessible and affordable pathways for people looking to retrain for digital roles. More modular learning can offer easier avenues for people transitioning between sectors.

> **Cooperate on the narrative and framing around digital skills.** Digital skills are a facilitator for people to do jobs rather than for jobs themselves. Digital runs throughout every part of an organisation and therefore every employee. By demystifying what digital skills are and focusing on their analytical nature, we can further encourage uptake with a strong narrative. As tech becomes an integral part of work in sectors such as health, climate & sustainability, and financial services, there is an imperative to foster cross-pollination between tech and other areas in our approach to digital skills to ensure people have the knowledge to drive forward progress and help realise the full potential of technology.

Building cooperation on ethical and responsible adoption of emerging innovative technologies

As the world looks to recover and rebuild from the global pandemic public sector organisations and businesses alike will be looking at how innovative and emerging, data driven technologies, such as AI, can support and help in what comes next. This raises opportunities to supercharge the adoption, deployment and take up of digital technologies that can help countries and nations around the world to drive economic productivity and growth, create jobs, achieve sustainability goals, help public service delivery and support people in all aspects of their daily lives. However, the full economic and social power of emerging technologies will only be realised if there is trust and confidence in these technologies, amongst companies, public sector bodies and citizens in their adoption and use. The development and adoption of advanced digital technologies, such as AI, is already raising shared issues, challenges and risks that must be identified and addressed.

The UK is already a world leader in the debate and discussion about the importance of building a culture of data trust and confidence and how the ethical issues raised by emerging technologies can and should be understood and addressed. The UK is therefore well placed to help drive forward the global conversation about getting the adoption and deployment of emerging digital technologies right and identifying how and where multilateral cooperation on issues of data and digital ethics could support countries in the ethical and responsible take up and use of emerging technologies.
For example, the UK has in place bodies such as the Information Commissioners Office, the Centre for Data Ethics and Innovation and other world leading centres of excellence including the Alan Turing Institute, Royal Society, British Academy, Wellcome Trust and the Ada Lovelace Institute, plus an active ethics community that stands ready to support the UK in this global conversation.

The G7 therefore offers the UK an opportunity to convene and drive a conversation about how global cooperation in the following areas could be achieved at a time when the use of emerging technologies such as AI and automation is expected to increase dramatically:

> **Establish cooperation on the regulation of AI, fintech and other emerging technologies.** Such mechanisms should include specific provisions to maintain an ongoing regulatory dialogue including the sharing of information, experience, laws, regulations, implementations, compliance and best practices.

> **Work together to understand and share best practice on digital identity.** Well designed and governed digital identities can have a big impact on the economy. However, identity is not something bound by borders. National identities must be recognised in other jurisdictions for the smooth functioning of business. The UK should use the G7 presidency to demonstrate the growing potential of digital identity solutions across different sectors and deepen our understanding of international progress though the sharing of best practice. Working with international partners will help to make sure our standards are interoperable with those adopted abroad, so in the future you can use your digital identity around the world and UK businesses can trust digital identities created elsewhere. Countries should also work together to drive better digital identity literacy, which is core to driving uptake of digital identities.

> **Further measures to coordinate digital regulation.** The very nature of the internet means that online threats and harms are not constrained by international borders. G7 presents an opportunity for the UK to continue leading the way in coordinating with other regimes around the world, considering the diversity and nuance of the global digital landscape and the need for context and collaboration when regulating online content and competition. For example, the UK is setting up a Digital Markets Unit in the CMA to open up the dialogue between regulators, technologists and consumers while aiming to develop expertise in digital markets and form effective and proportionate regulation for the wide digital ecosystem. The Digital Regulation Cooperation Forum (ICO, CMA and Ofcom) is continuing to make progress on coordinating this activity with other forms of digital regulation, yet the UK should strive for the same principles to be adopted globally to support innovation and encourage global investment in digital businesses and markets.

> **Drive the debate on how to build trust in algorithmic decision making.** The UK should lead a discussion at the G7 Summit on the key issues that must be addressed to build trust in the development and use of algorithmic driven decision-making technologies. This is an opportunity for the UK to drive international debate on an issue that is core to the development and deployment of responsible, ethical, data driven innovations, and create a forum for building greater understanding and awareness of work already underway by existing international bodies and partnerships (such as OECD and Global Partnership on AI), and how these activities could be joined up, and for sharing best practice on how issues including trustworthiness, accountability, transparency, and bias, can be understood and how common solutions to overcoming these issues can be found.
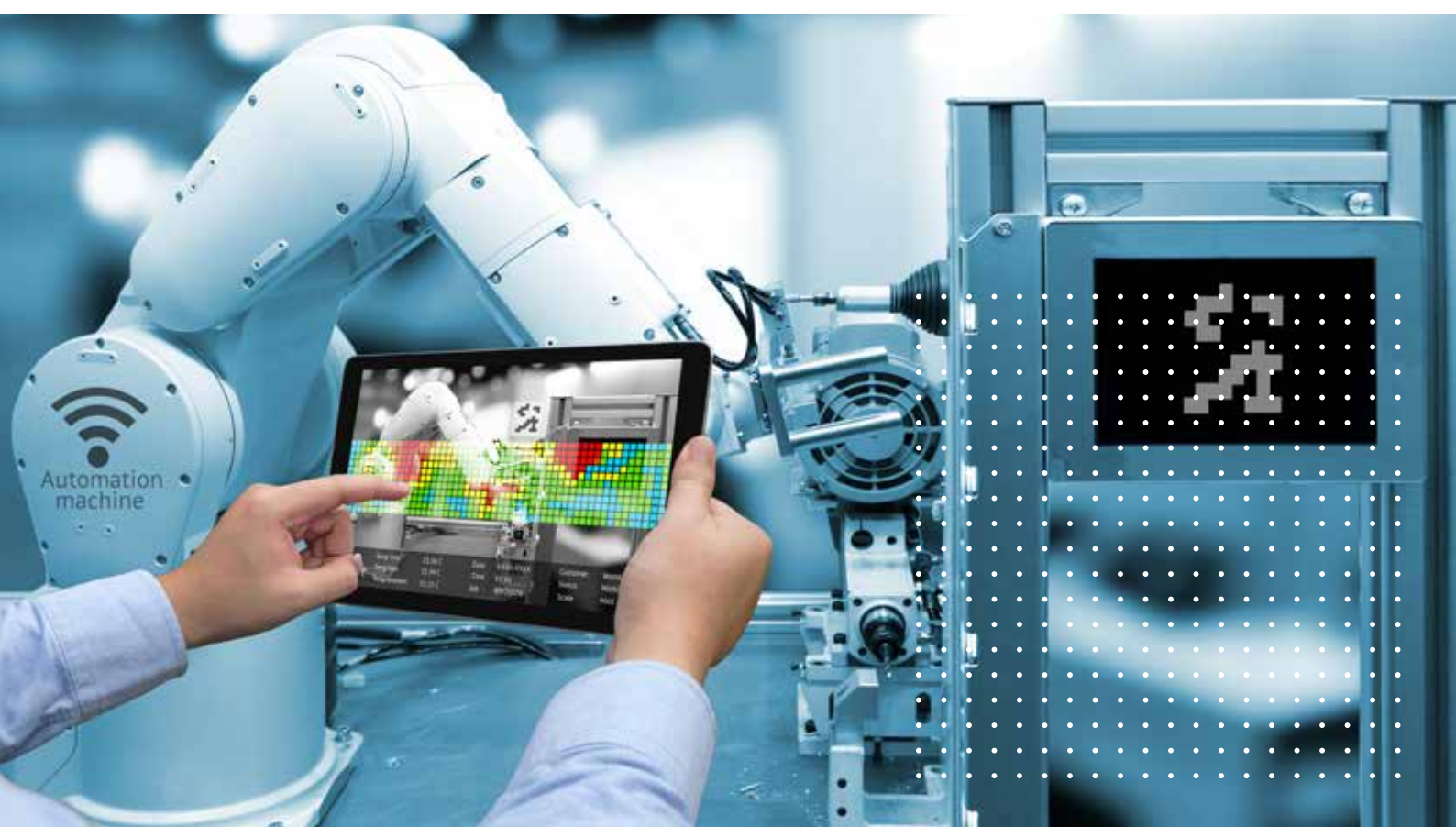
Promote modern digital trade rules

The UK has been a major beneficiary of the rise of digital trade with over 67% of service exports worth £190.3 billion being digitally delivered. Early UK trade deals since leaving the European Union, in particular the UK-Japan Comprehensive Economic Partnership Agreement (CEPA), have recognised this importance and established that the UK is serious about an ambitious digital trade policy. But much as technology moves fast, so does trade policy. Already countries such as New Zealand, Australia, Singapore and Chile are moving ahead of the UK in what they are attempting to do in the digital realm. As the UK seeks to recover from COVID-19, it should continue to strive to lead the world in digital trade.

The large majority of digital trade is business to business. UNCTAD figures show that of the worldwide e-commerce sales in 2015, 90 per cent were in the form of business-to-business e-commerce.

The growth of the digital economy has created vast new policy questions requiring international cooperation to find solutions. Examples include the work of the OECD on "Going Digital" which seeks to equip policy makers with the tools they need to deal with digital transformation, including the development of AI principles. In 2019, the G20 under the presidency of Japan held the first joint Trade and Digital Economy ministerial meeting to reflect the important interlinkage between the two areas. In 2020, the Saudi Arabian G20 presidency continued this work by convening a G20 Digital Economy Task Force. Likewise, the 2019 G7 had a major focus on digital issues and digital technology featured heavily in the G7 Finance Ministers meeting, though in this case the momentum was not maintained into the US presidency, in part due to COVID-19 related postponements. Nevertheless, forums such as these can play a significant role in shaping the wider policy questions around digital trade. The UK should ensure it is a proactive leader in international forums such as the G7 in pushing for steps that facilitate and enable digital trade.

The UK should seek to use its G7 presidency to advance a modern digital trade agenda. Aside from increased regulatory cooperation, the UK should cooperate with partners on a number of areas:

> **On data.** Data is an essential foundation to the entire global economy. Enabling the cross-border flow of data must be a part of future UK's international strategy, as should preventing the forced localisation of data. The definitions of data should include financial data, which should not be treated differently to other categories of data. Concerns around regulatory and law enforcement access can be mitigated both in domestic UK law and through international agreements which the UK should seek to join or replicate.

> **On tariffs.** The re-emergence of tariffs as an offensive weapon in economic disputes is a troubling development. UK should seek to extend the protections offered by the WTO's Information Technology Agreement and do all it can to protect the moratorium on digital tariffs. To allow the imposition of customs duties on electronic transmissions would undermine a key enabler of the digital economy.

> **On intellectual property.** Intellectual property rights are an enabler of innovation. The UK should work with like-minded partners to prevent the mandatory transfer of source codes, algorithms, and encryption keys and digital content. In other areas, new technology is transforming traditional notions of intellectual property. UK can enable the development of innovative AI by supporting the use of open government data and text and data mining, while fully respecting intellectual property rights.

> **On trade facilitation.** Digital trade can also play a role in facilitating the flow of other goods and services. E-commerce platforms have opened global markets in goods for SMEs. The UK should seek to standardise *de minimis* thresholds to help the cross-border trade of small packages. Working with international bodies and other partners, the UK should secure the recognition of e-signatures and expand paperless trading, helping to bring all aspects of trade into the 21st Century. Cooperating on mechanisms for trade promotion and guidance should also be a priority to enable smaller companies to take full advantage of trade relations.

techUK

FOR WHAT COMES NEXT

About techUK

techUK is a membership organisation that brings together people, companies and organisations to realise the positive outcomes of what digital technology can achieve. We collaborate across business, Government and stakeholders to fulfil the potential of technology to deliver a stronger society and more sustainable future. By providing expertise and insight, we support our members, partners and stakeholders as they prepare the UK for what comes next in a constantly changing world.

linkedin.com/company/techuk

@techUK

youtube.com/user/techUKViews

info@techuk.org