The UK: Your Partner for Assistive Tech

GREAT
BRITAIN & NORTHERN IRELAND

Contents

Ministerial Foreword

The remarkable advances made by the UK's world-leading Assistive Technology companies demonstrate how innovation drives not only economic growth but also transforms lives. For this reason, I am delighted as the Department's Ministerial Disability Champion to introduce this 'Export offer' which sheds light on the outstanding accomplishments of the UK's Assistive Technology sector by highlighting the achievements of leading exporters in the field. These enterprises span various rapidly evolving and innovative sectors in the UK, including healthy ageing, telemedicine, and digital health.

The work of the companies featured in this document highlight how breaking down barriers to trade and promoting UK exports is critical to ensuring disabled people across the world have their needs met. UK companies are providing children across the world with the much-needed prosthetics they need to enable them to live complete lives whereas others use research conducted at the University of Oxford to maximise the vision of people with sight loss. The importance of breaking down barriers to trade can only be fully appreciated when you see the impact these innovations can have on the people who need them, especially where they address highly specialised needs with few alternatives.

I would like to thank colleagues from the All-Party Parliamentary Group, University College London, and the sector itself who fed into this work for their invaluable contributions. I look forward to further collaborations to help this sector fully realise its potential in international markets going forward, both to grow the sector and ensure those with assistive technology needs are fully catered for across the world.

Earl of Minto

Care Scribe

CareScribe

CareScribe is a UK-based company that focuses on promoting equity and inclusion within education and the workplace through cutting-edge technology. Their flagship product, Caption.Ed, is a revolutionary software tool that provides an alternative to human note-taking, transcription, and captioning, enabling users with disabilities or learning differences to access educational and professional content with ease. Additionally, TalkType is another innovative software tool developed by CareScribe that allows users to control their computer and build documents using voice commands. With a strong commitment to innovation and accessibility, CareScribe is leading the way in assistive technology and empowering individuals to reach their full potential, regardless of their abilities or learning differences.

CPR Guardian

CPR GUARDIAN

CPR Guardian has a significant human impact on older people and their caregivers. The device provides peace of mind to both wearers and their loved ones, with its fall detection feature alerting designated family members or caregivers in case of a fall. This reduces the risk of serious injuries and enables the wearer to remain independent.

The real-time monitoring feature has allowed caregivers to check on the wearer's well-being remotely, providing added security and reducing the burden on caregivers. This, in turn, has reduced stress levels and provided peace of mind to both the wearer and their caregivers.

Fall Detection not only provides physical safety for older people but also positively impacts their mental health. It has reduced the fear and anxiety of falls and serious injuries.

CPR Guardian Fall Detection has empowered users to live more confidently and independently, allowing them to go about their daily activities more confidently.

Hip Impact Protection

hip IMPACT protection

Hip Impact Protection has developed a series of products that will assist millions of elderly people, mostly women with osteoporosis, who fall and break a hip each year and which leads, in 30% of cases, to death within a few months. Better still, it can help to actually prevent falls by allowing, for the first time, all falls to be automatically recorded, and their causes to be analysed. HIP has designed and produced a proven wearable technology – Fall-Safe® – that eliminates hip fracture and promises to reduce the numbers of falls. It combines devices that can be comfortably worn 24/7 on the hip, including in bed, bath and shower with a sensor that detects all falls, without any false alarms, and can send alert messages to responders as well as uploading all relevant information on each fall to a falls database on the cloud. This database can then be analysed for common fall factors to facilitate interventions.

Innerva

innerva
together in motion

Innerva is the UK manufacturer of power assisted exercise therapy technology, which provides access to preventative and rehabilitative physical activity, especially for older adults and those living with long-term medical and health conditions.

Every day, tens of thousands of people across the UK, Europe and around the world have access to the life-changing impact of Innerva's unique range of equipment via gyms, rehabilitation and therapy centres and in retirement and care venues.

Innerva works in partnership with the Advanced Wellbeing Research Centre at Sheffield Hallam University, while Oklahoma State University reported life-changing benefits for a group of 70+ year-old adults over a 12-week study:

- Improvements in muscle strength between 24% and 50%
- Mobility and agility increased 22%
- Balance increased 33%

The UK government recently awarded Innerva a £1.1m grant to provide solutions to remove barriers to exercise for older adults as part of its Healthy Ageing Challenge.

As one older adult, with severe mobility and weight issues put it: Innerva has "given me my life back".

Koalaa

Described by users as a “break-through” technology, Koalaa are the world’s largest provider of soft, comfortable upper limb prostheses. Koalaa prostheses are made of a patented fabric socket & passive terminal devices that connect to a lockable wrist unit. This combination allows clinicians (& patients!) to fit a Koalaa in 15-30 minutes in one appointment without casting; creating a whole new paradigm shift in clinical care.

Suitable for children from 6 months old and healthy ageing adults; users are able to eat, write, and move as short as 48 hours after surgery (using our “Day 1” Sleeve). Patients report quicker recovery, better adaptation and a happier experience.

All of these innovations combined create a unique functional offering at affordable prices. Available in the UK, USA, Spain, Ukraine, Mexico, & Argentina; Koalaa are looking for new opportunities with healthcare systems, distributors, clinic(ians) and charities.

Oxsight

OXSIGHT

Building on research from the University of Oxford, Oxsight was established in 2016 to develop innovative solutions for sight degeneration that balance style, functionality, and intuitive technology. Since then, it has grown into an organisation with a global presence (UK, Europe, India, South Africa, China etc) helping people with visual impairment take back control of their vision.

The Oxsight Onyx device has been designed for people with central and general field vision loss caused by conditions such as Macular Degeneration, Stargardt's and Glaucoma. It provides an affordable, versatile, and lightweight solution for people with visual impairment, and enables them to maintain independence, study, work, and avoid social isolation.

The Oxsight Onyx consists of a headset with a camera in the middle that captures images in real-time, which are then processed and projected onto screens located in front of the eyes.

The Oxsight team has enabled the development of powerful smart glasses and they continue to look for novel ways to expand the field of vision and enhance light and shape detection.

Phoenix Instinct

Phoenix Instinct founder and CEO Andrew Slorance is a wheelchair user driven to evolve assistive technology. His products are designed from an end user's perspective and aimed at active, independent, wheelchair users.

The Phoenix i is the world's first light weight, AWD, hybrid wheelchair. Designed with high aesthetics to empower the user and a full carbon fibre, kevlar construction.

The i features power assisted front castor wheels in combination with manual rear wheels giving AWD, hybrid functionality not before seen on wheelchairs. The result is extraordinary agility and manoeuvrability with total ease of effort. With intelligent start stop and electronic braking the intuitive power assist is controllable even in the most confined spaces. High torque assists ascending slopes while electronic braking gives controlled descent. Slorance says "The goal is to kickstart a new era of smart wheelchairs."

Phoenix roller bags are the only wheeled, wheelchair compatible travel and shopping bags in the world. Through direct sales and dealers Phoenix bags have brought new independence to over 4000 customers in the UK, EU, Australia and USA.

Pretorian

Pretorian TECHNOLOGIES

Pretorian Technologies is a highly innovative provider of digital assistive technology products for persons with disabilities. Pretorian takes great pride in using its abilities to help those less fortunate than themselves and who need a little extra help to achieve the things the rest of us take for granted. Their mission is to provide those people with that help, and in turn, empower them to get the most from life. They do this by continually innovating their assistive products, listening to their users for what adaptations are required; all whilst developing and manufacturing their products entirely in-house and exporting them to over sixty countries.

Pretorian Technologies is an ISO9001 registered company and all its products are fully compliant with the European Medical Device Regulations, MDR.

Scanning Pens

Scan • Listen • Understand

scanningpens.com

Scanning Pens is a global provider of portable assistive reading technology, giving people of all ages and neurodiversities vital access to literature. Their reading pens have been distributed to schools, workplaces and prisons in more than 100 countries, including the US, France, Spain, Italy, and India: with over 50% of their business coming from international sales.

The impact of their technology is instantaneous, with millions of individuals who once struggled with reading now having the confidence and flourishing in their literary pursuits. In a study conducted by George Dixon Primary school in the UK, it was found that students on the Dyslexia Pathway who were falling behind in their reading increased their reading age by 10 months on average in just over 8 weeks after using a scanning pen.

Scanning Pens also provide the customer with a wealth of valuable resources following a purchase, including booklets, training, video tutorials and webinars. Thanks to these helpful resources, teachers and trainers have been able to successfully implement pens into their establishments.

Soloc

Soloc
Magnetic Innovation

The Soloc patented single hand belts are developed to promote wheelchair independence for people with reduced hand function.

The major problem with lap-belts is they require the use of two hands and a degree of dexterity to connect, meaning people with limited dexterity and mobility must rely on care support to perform the connection.

The Soloc range of lap-belts are designed to assist people who do not possess the dexterity / mobility to connect and release a standard lap-belt unaided.

The Soloc “Solo” belt can be connected and released with a single hand, this was developed for people with only single hand use.

Where people have very limited dexterity in both arms we developed the “Freedom” belt, you simply fold down the belt arms with the palm of your hand or wrist and the units magnetically align and connect when brought together.

On release the belt arms retract back over the arms of the chair automatically to allow easy entry and exit which is another major issue for some people.

Text Help

texthelp®

Founded in 1996, the Texthelp Group is a world leading inclusive technology company that helps all people to understand and be understood. They believe that inclusive technology is a powerful tool for supporting neurodivergent individuals to succeed in school and at work.

From a single product designed to support dyslexia within education, Texthelp has grown to a suite of literacy, numeracy and accessibility tools. This includes the release of a workplace version of their core product that enabled them to expand into the workplace sector.

Their products include Read&Write, Equatio®, OrbitNote® and ReachDeck®. These tools empower different learning and workstyles, and can benefit everyone.

In recent years, they've acquired new companies and established a global presence with market leading products sold to the UK, USA, Norway, Sweden, Denmark and Australia. These recent acquisitions have also given Texthelp access to more innovative technology and the ability to reach a greater number of end-users across more geographies.

Think Smartbox

Smartbox

Smartbox is a leading creator of assistive technology, dedicated to enabling communication and access to technology for people with disabilities. Their flagship software, Grid, empowers individuals with limited or no speech by offering vocabularies, symbols, text, and apps on dedicated Grid Pad tablets accessed with eye tracking, head tracking, joysticks, and buttons for those with physical impairments. Grid is also available for download on iPads and touch devices.

Founded in 2006 as a family-run business, Smartbox takes pride in developing assistive technology that benefits disabled individuals worldwide. With support from over 400 team members across the United Kingdom, United States, and Germany, as well as a vast global partner network spanning 40+ countries, Smartbox ensures accessibility and inclusivity. Their commitment to delivering the best speech-generating technology is driven by the belief that everyone has the right to communication and engagement in the world.

Approximately 1 in 200 people, including those with conditions like cerebral palsy, motor neurone disease, autism, and Parkinson's disease, could benefit from Alternative and Augmentative Communication (AAC) solutions. Smartbox continues to innovate and enhance the lives of individuals by making communication more accessible and technology more inclusive.

Tunstall

Tunstall has been at the forefront of technology innovation for the health, housing and social care markets for 65 years, working with social care providers, healthcare services, housing and retirement living providers and charities in 18 countries. Its pioneering software, hardware and services enable providers to deliver integrated, efficient and person-centred care in the community, and empower people to live more independently and with an improved quality of life.

As technology advances and solutions become increasingly digital and cloud-based, Tunstall is working closely with its customers and partners to enable them not just react to events, but to predict and even prevent them, using data-driven insights. The focus is on creating a more connected world that fulfils the potential of technology to offer intelligent care and support, and give people greater choice and control about how they live their lives.

WeWalk

WeWALK

There are approximately 253 million visually impaired people worldwide, and many rely on the white cane, a simple tool primarily designed to provide ground-level obstacle detection. By equipping the white cane with modern technology, WeWALK delivers a safer and more independent mobility experience to visually impaired people. WeWALK is more than a product; it is the first step in a societal transformation that fosters social inclusion by empowering visually impaired people.

The WeWALK Smart Cane can detect above ground obstacles by using a front-mounted sensor, warning the user with haptic feedback. The smart handle pairs with the accessible WeWALK smartphone app using Bluetooth to access connected mobility services, including navigation, exploration, and public transport. These features can be controlled from the smart cane's inbuilt touchpad, allowing the user to place their phone in their pocket for singlehanded navigation and added safety. In addition, the smart handle has a speaker and microphone to provide audio feedback. New smart city integrations and services are constantly being added via software updates, making WeWALK an ideal personal hub for the visually impaired community. Strong R&D partnerships with Imperial College London, RNIB, and Microsoft enable WeWALK to shape the future and change the lives of visually impaired people with cutting-edge technologies. WeWALK accessible technology solutions have reached tens of thousands of users spread across 59 countries. WeWALK was selected as Amazon's Startup of the Year, named a TIME Best Invention, and was an Edison Awards gold winner, appearing in more than 750 media outlets, including CNN, BBC, Forbes, and Bloomberg. WeWALK also received an honourable mention in World-Changing Ideas, a major annual award by Fast Company that recognises products, companies, and designs that are pursuing innovation for the good of society.

Case Study

How TEAM BRIT is pushing the boundaries of motorsport through Assistive Technology

Team BRIT – Changing Motorsport, Changing Lives

Team BRIT is the world's only competitive team of all-disabled racing drivers.

Born from a charity set up to support injured troops, the team was formed in 2015, with the long-term goal of becoming the first all-disabled team to race in the Le Mans 24hr.

The team's success in supporting disabled drivers into motorsport is in large part due to its ground-breaking innovation, which has led to the creation of the world's most advanced racing hand controls.

The technology has been continually refined over the past 13 years to become the enabler in its operation. Today, the team supports up to 10 drivers racing against able-bodied competitors in mainstream racing championships.

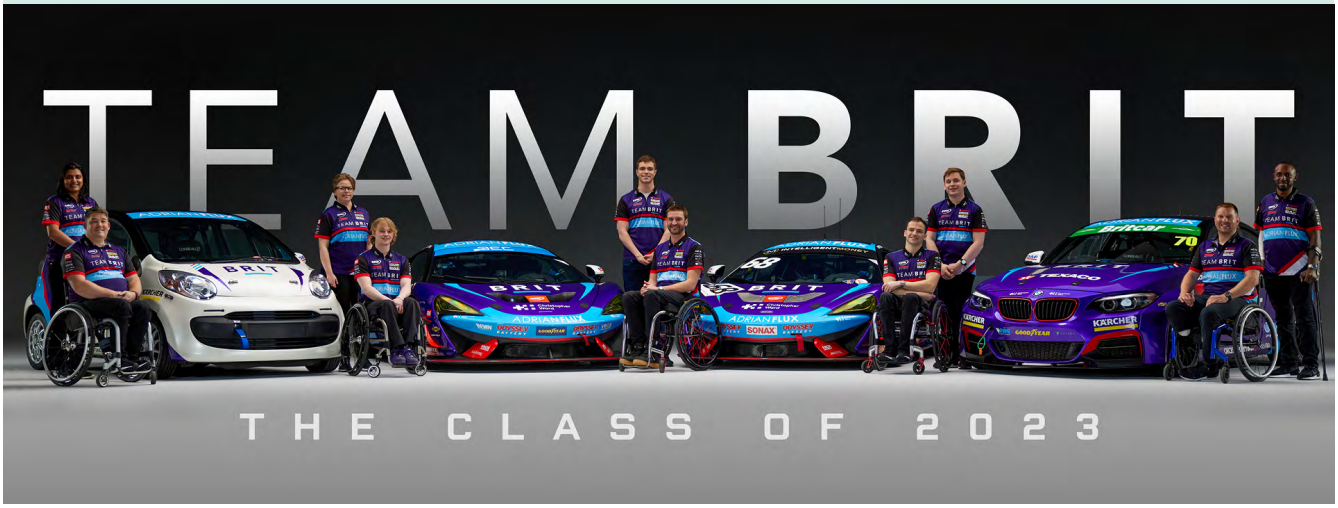
The controls enable Team BRIT drivers to keep both hands on the steering wheel at any time, removing the need to place one hand on a push / pull control, as seen in traditional adapted cars. This levels the playing field and means that a disabled driver has the same ability to manoeuvre a high speed chicane as their able-bodied counterpart.

Based on fly-by-wire technology, the Team BRIT hand controls feature a wheel with accelerator and brake paddles, and rocker switches for gear shifting.

The team's technology and experience is regularly shared across the world, with drivers and organisations learning from its best practice and technological expertise.

Innovation is at the core of the team's ethos, and bespoke adaptive technology is continually developed to meet the specific needs of drivers. A current project involves the creation of technological solutions for Deaf racing drivers, and its adaptive racing simulators, fitted with hand controls, enable disabled people to enjoy online racing as a hobby or to prepare for a racing career.

A not-for-profit business, funded by corporate sponsorship, Team BRIT is striving for true equality across motorsport – with technology at its core.



Company Directory

CareScribe

- https://carescribe.io/contact-us/
- https://carescribe.io/

CPR Guardian

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Hip Impact Protection

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Innerva

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Koalaa

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Oxsight

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WeWalk

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How Department for Business and Trade supports companies

The Department for Business and Trade (DBT) supports UK companies in the Medical Technology and Assistive Technology sectors to export their innovations for the benefit of patients globally. Through a network of dedicated officials working in key markets across the world, bespoke advice to exporting companies is provided alongside a busy programme of trade missions, trade shows, and market briefings.

This document was created by DBT to highlight the globally competitive innovation being created in the UK in the field of Assistive Technology. Each of the listed companies have innovations which push boundaries and are ready to export to new markets. The companies listed in this document were selected from among hundreds for their impact, innovativeness, and potential to expand to new markets.

Companies seeking to access support from the DBT Life Sciences team to expand their export operations should reach out to: lifescience@businessandtrade.gov.uk.

Notes

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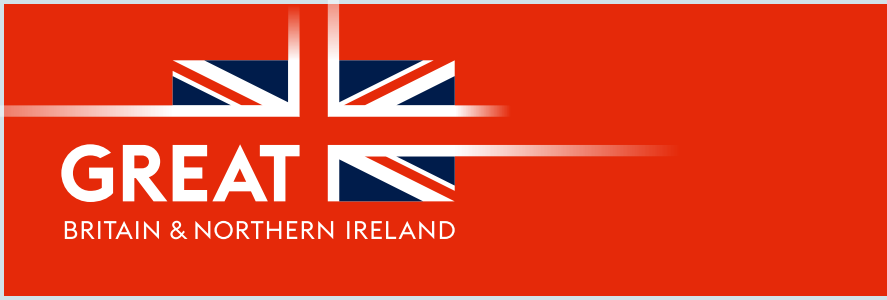

Department for Business and Trade

The UK's Department for Business and Trade (DBT) has overall responsibility for promoting UK trade across the world and attracting foreign investment to our economy. We are a specialised government department with responsibility for negotiating international trade policy, supporting business, as well as delivering an outward looking trade diplomacy strategy.

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