



# TECHNOLOGY SCOTLAND

## ANNUAL REPORT

# 2018

With Corporate Sponsors

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# MESSAGE

## FROM THE CHAIR

### Allan Colquhoun

Chairman  
Technology Scotland



Welcome to our 2018 Annual Report. It gives me great pleasure to report and reflect on another excellent year for Technology Scotland.

Technology Scotland exists only through the support and engagement of committed members, so I would first like to thank our growing membership. I must also thank our corporate sponsors, Enigma People Solutions and Scintilla IP, whose backing enables us to do so much more; and also finally to Scottish Enterprise for their continued support.

As you will read in this report, the Technology Scotland team has been incredibly busy; from the announcement of the £2m MaaS Investment Fund from the Scottish Government to writing a Scottish Photonics Vision paper, I am incredibly proud of what we have achieved.

I continue to be impressed by the level of engagement and support we have reached with the Scottish Government and its agencies. It has been a pleasure to watch Technology Scotland grow into a trusted partner to so many within the Scottish ecosystem, and our networks are now firmly on the radar of those who can help support our goals.

Please do take the time to read about our successes and plans for the future. I hope to see you at a Technology Scotland event very soon!

# WELCOME

## FROM THE CEO

### Stephen Taylor

CEO  
Technology Scotland



In my first ever annual report statement in 2016, I mentioned some momentous political events of that year including the Brexit referendum to take the UK out of the EU. Who would have imagined three years later we still have huge political uncertainty around Brexit, and as I write these few words we have just had an election to elect MEP's to the European Parliament. However in 2018, the Technology Scotland team was not standing still.

We launched our third network – Product Design Scotland – to complement Photonics Scotland (previously the Scottish Optoelectronics Association) and MaaS Scotland. We exceeded 120 corporate members in the year, and we had our most successful annual dinner to date, supported by Ivan McKee MSP, Minister for Trade, Investment and Innovation, when 200 attendees enjoyed a terrific networking evening.

We attended Photonics West, making new global connections, whilst representing and promoting Scottish photonics. The photonics community rallied around and we were able to raise sufficient sponsorship to attract both the EPIC and International Optoelectronics Association AGM's to Scotland, which in early 2019, attracted 220 visitors from 26 countries.

We started an Optical Design Workgroup, and launched our Opening up Photonics initiative to attract more women into photonics. And finally we announced our intent to publish a Scottish Photonics Vision Paper in 2019.

Outcomes in our Mobility as a Service network were no less satisfying. As a result of the MaaS Vision Paper published early in 2018, the Scottish Government announced the provision of a £2m MaaS Innovation Fund to help develop and upscale MaaS projects throughout Scotland. We are currently working hand-in-hand with Transport Scotland on the roll out of this competition which will be formally launched by Michael Matheson MSP, Cabinet Secretary for Transport, Infrastructure and Connectivity at our 2019 MaaS Annual Conference.

We were actively promoting the Scottish MaaS community at trade missions in Bavaria and Catalonia, holding joint workshops with Acció – Catalonia Trade & Investment, and supporting Scottish Enterprise at the Smart Cities Expo.

Finally, we would like to take the opportunity to thank our Corporate Sponsors, Enigma People Solutions and Scintilla IP, as well as the AFRC and our other sponsors who have helped to support our networks and activities in the last year.

The next twelve months with the further development of the Product Design network, the expansion of the Scottish photonics strategy, and the roll out of the £2m MaaS Innovation Fund promise to be the most exciting yet, and we look forward to the active participation of all of our community in pushing these terrific initiatives.

# ABOUT TECHNOLOGY SCOTLAND

Technology Scotland is the representative body for the **Enabling Technology Sector** in Scotland.

We support a vibrant community of industrial and academic organisations who are developing technologies to deliver product advancements in markets from healthcare and communications to manufacturing and mobility.

Technology Scotland delivers clear business value to members, providing a catalyst for growth and supporting the community through networking, collaboration, lobbying and thought leadership.

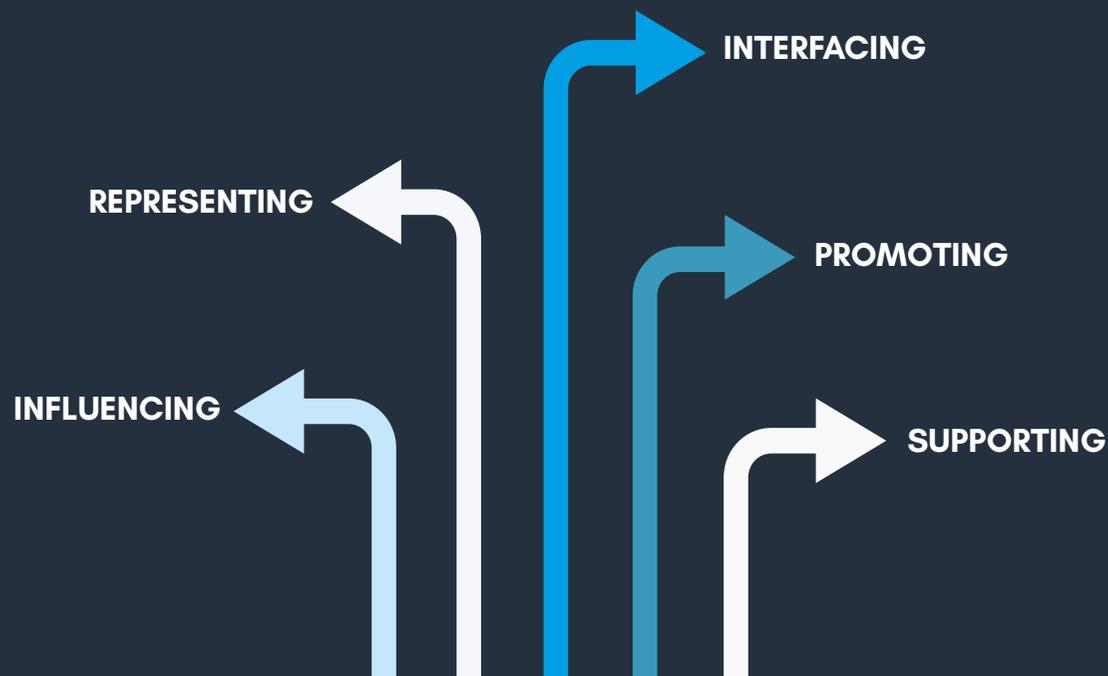
**Representing** industry interests to government

**Promoting** Scottish technology capabilities within the UK and internationally

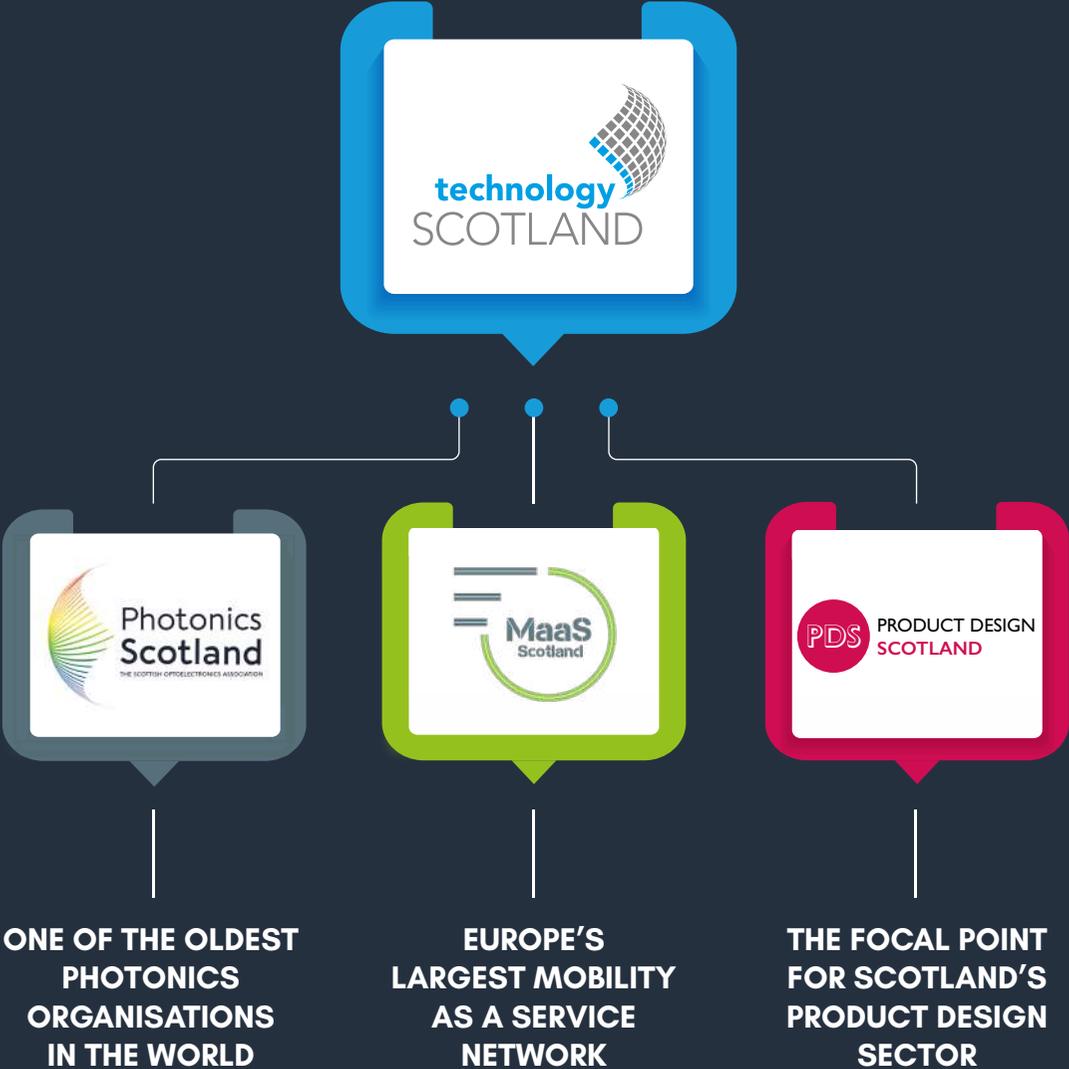
**Influencing** policy at both Scottish and UK government level

**Supporting** the community through events, workshops and forums

**Interfacing** to key national and international stakeholders



# TECHNOLOGY SCOTLAND NETWORKS



# ABOUT PHOTONICS SCOTLAND

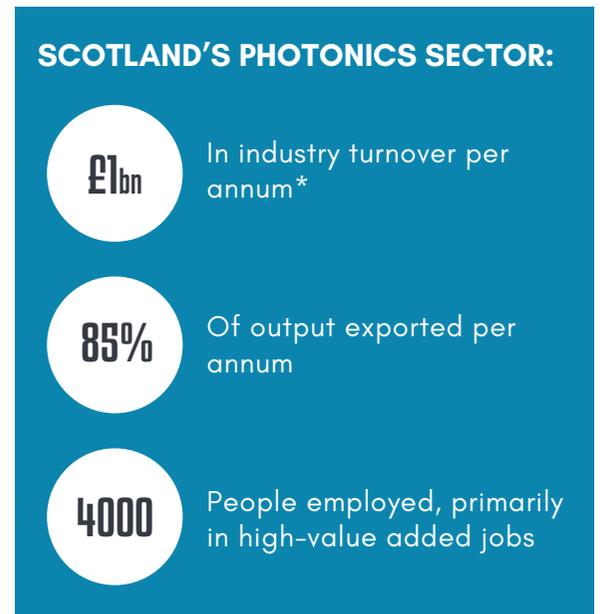
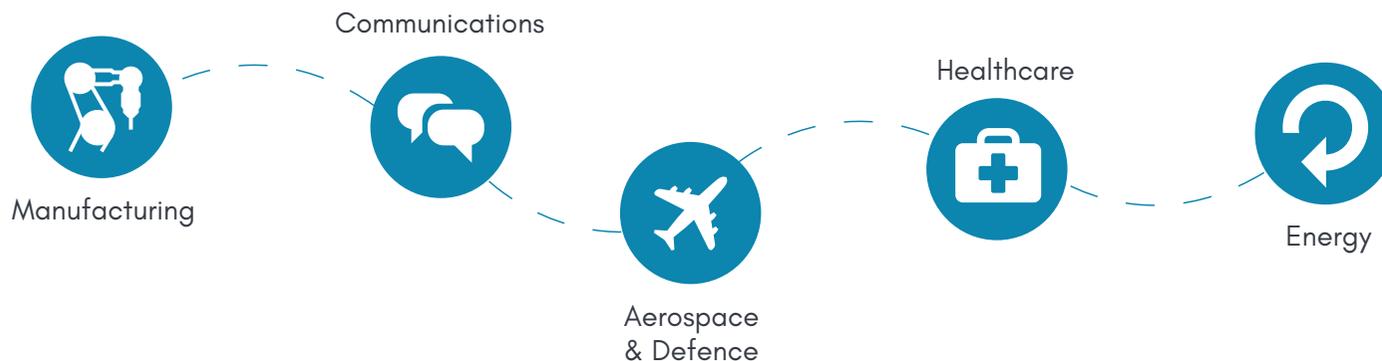
Photonics Scotland is a community for all photonics and photonics-enabled organisations in Scotland. We are the focal point for the sector and a trusted partner to our members allowing us to represent their views to a number of key stakeholders. We also facilitate a cohesive sector, providing a range of events, working groups and networking opportunities that help to drive collaboration between industrial and academic partners.

Ultimately, our goals are simple: to raise the profile of the sector, help grow this thriving cluster, and drive photonics innovation in Scotland.

Founded as the Scottish Optoelectronics Association in 1994, it is one of the oldest national photonics organisations in the world and remains one of the largest technology communities in Scotland.



## KEY SECTORS SUPPORTED BY SCOTLAND'S PHOTONICS SECTOR



\*UK Photonics: The Hidden Economic Engine, May 2018, The PLG and Innovate UK

# PHOTONICS SCOTLAND HIGHLIGHTS FROM 2018



## PHOTONICS WEST 2018

Photonics Scotland returned to Photonics West in 2018 after making it our mission to re-establish a strong Scottish Presence at the event, exhibiting alongside our member, QuantIC. In addition to attending a wide range of meetings and activities, which included speaking on behalf of the Scottish Photonics Sector at the SPIE Cluster Reception, we hosted a whisky reception in collaboration with the UK Department for International Trade.



## SECURING EPIC AGM FOR GLASGOW 2019

With Photonics Scotland celebrating its 25th anniversary in 2019, plans for a special event to mark the occasion began in 2016, when we approached EPIC with a proposal to host their AGM in Glasgow - the first time in its history that the event would be held in the UK. With the terrific support of our members, we were delighted to secure the 2019 EPIC AGM in Glasgow, in addition to the International Optoelectronics Association AGM, creating the first ever Scottish Photonics Week.



## FORMATION OF OPTICAL DESIGN WORKING GROUP

Optical design is a critical yet often underappreciated aspect of photonics, with designers using new technologies and materials to optimise performance. After consultations with several of our members and discussion on topics including skills, software and current advancements, we created the Optical Design Working Group, designed to share knowledge and create networking and collaboration opportunities.



## LAUNCH OF 'OPENING UP PHOTONICS' INITIATIVE

With Technology Scotland committed to improving diversity and inclusivity across the Enabling Technology Sector, we joined forces with the University of Glasgow, IoP Scotland and the KTN to create a new event series. 'Opening up Photonics' consisted of panels designed to discuss and offer best practice suggestions regarding diversity and inclusivity in photonics, as well as celebrating female successes in this area.

## FUTURE OUTLOOK

The first half of 2019 saw Photonics Scotland launch its inaugural 'Scottish Photonics Week', a week-long series of events to mark its 25th anniversary and showcase Scotland's photonics expertise.

The week culminated in Photonics Scotland supporting the European Photonics Industry Consortium (EPIC) to bring its Annual General Meeting to Scotland, bringing together over 200 senior level delegates from 30 countries.

As well as being a showcase of Scotland's long and distinguished history in photonics, the event also provided an opportunity to look to the future through the launch of 'Photonics Scotland: A Vision for 2020'. This paper set out a series of recommendations that will support a vision to treble the size of Scotland's Photonics Sector by 2030.

These activities also provided the perfect back drop to announce the rebranding of the Scottish Optoelectronics Association to Photonics Scotland, a name that better reflects the growing influence photonics is set to have in the modern world. Under this new brand we look forward to working with our members towards realising the recommendations outlined in our vision paper.

# PHOTONICS SCOTLAND

## KEY ACTIVITIES: 2018

### JANUARY 2018

#### SPIE PHOTONICS WEST 2018

Photonics Scotland exhibited alongside QuantIC and met with photonics clusters from Australia, Canada, Mexico, the USA and Europe, as well as speaking on behalf of Scottish Photonics at the SPIE Cluster Reception. In the evening, we joined forces with the UK Department for International Trade to host a whisky reception, attracting over 300 delegates from around the world.

### MARCH 2018

#### OPTICAL DESIGN LAUNCH

Following demands from industry for a formal Optical Design working group, Photonics Scotland held an initial workshop in March 2018. We have since hosted a series of meetings for those working in the field to network, explore new collaboration opportunities, and stay up-to-date with recent advancements in the area.



### APRIL 2018

#### MANAGING CORPORATE GROWTH

With Scotland named as the UK's second-placed destination for FDI projects behind London, this event provided opportunity for members to engage and make contact with a range of expert speakers from Scotland's Enabling Technology sector who have been at different points in the investment process.



### JUNE 2018

#### PHOTONEX 2018

Photonics Scotland was delighted to be invited to chair and co-organise sessions at PHOTONEX Scotland last year. Dr Alastair McInroy chaired 'Advances in Photonic Techniques for Biomedical Sciences', followed by Technology Scotland and QuantIC, co-hosting 'Quantum Imaging - breaking new ground'.

### FEBRUARY 2018

#### PHOTONICS 21 MEETING

Photonics Scotland attended the annual Photonics 21 Public Private Partnership Annual Meeting, contributing to the road mapping process to define the themes for the new EU Framework Program 9 (FP9) to be called "Horizon Europe". Workshops were used to develop themes that address the major global challenges such as healthy living, smart mobility, feeding the world, a clean environment, and quality of life.

### APRIL 2018

#### EPIC AGM 2018

In April, the team travelled to Berlin for the 15th EPIC AGM. The visit was an excellent opportunity to promote Scottish photonics as well as discuss plans for the 2019 EPIC AGM to be held in Glasgow as part of the first ever 'Scottish Photonics Week'.



### MAY 2018

#### AACD CONFERENCE

The annual Advances in Analog Circuit Design conference was held in Edinburgh in May. Technology Scotland was delighted to organise such a prestigious conference, working alongside local companies including Analog Devices, Cirrus Logic and Dialog Semiconductor.



### AUGUST 2018

#### INNOVATE UK ROUND TABLE

Technology Scotland was kindly invited to host a roundtable session with Dr. Ian Campbell, Executive Chair of Innovate UK. We were delighted to host the session and welcome over 20 members, including those from the photonics sector, to the event in Edinburgh, and encouraged by how keen attendees were to engage, discuss their concerns, and share their thoughts.

## SEPTEMBER 2018

### EPIC VISIT TO GLASGOW: AGM PLANNING

As part of our preparations for the EPIC AGM, Photonics Scotland was delighted to host Carlos Lee, Director General of EPIC, to Scotland for a 2-day visit in August. Carlos had the opportunity to catch up with EPIC members and sponsors, as well as visit local organisations including Fraunhofer and UniKLasers, to discuss the sector in Scotland, its growth, and how it stands to benefit from hosting the EPIC AGM.



## OCTOBER 2018

### EUROPEAN PHOTONICS ALLIANCE BERLIN

Photonics Scotland was the first UK cluster to participate in the European Photonics Alliance (EPA) - an active network of European Digital Innovation Hubs and clusters. The EPA was formed in the expectation that in the next framework program (Horizon Europe), an interregional funding mechanism will be set up to benefit collaboration between clusters in different countries. Photonics Scotland agreed to represent other UK clusters and agencies such as the UK CPI, and The North East and South West regions, who were unable to attend, and with whom we enjoy close relationships.

## NOVEMBER 2018

### T@CST: COMMERCIALISING QUANTUM TECHNOLOGIES AND ATOMIC CLOCKS

In November, Stephen Taylor was invited to speak at the inaugural 'T@CST' forum. Alongside an illustrious list of keynote speakers, Stephen gave a market summary illustrating the exponential growth in photonics and quantum technologies, with the global photonics market expected to exceed US \$1trillion by 2025, and quantum sensing expected to exceed US \$3billion by 2030.



## SEPTEMBER 2018

### WORKFORCE OF THE FUTURE

With skills development being such a key topic for the future of Scotland's technology sector, do companies need to adapt to millennials entering the workforce today? This event, in collaboration with ESS, Cirrus Logic and Full Circle, explored what can be done to prepare for the future of work, and how companies can attract, understand and retain the people they need.



## OCTOBER 2018

### OPENING UP PHOTONICS

In October 2018 we were delighted to welcome around 50 professionals from Scotland's photonics community to a new initiative focusing on increasing diversity in the sector, 'Opening up Photonics'. Together with the University of Glasgow, IoP Scotland and the KTN, this proved to be a great launch event, with panellists from industry and academia discussing topics such as unconscious bias and job adverts.



## DECEMBER 2018

### SCOTTISH PHOTONICS STRATEGY ANNOUNCEMENT

Following consultations with our members and industry, Photonics Scotland was pleased to announce its first Scottish Photonics Vision Paper. The release of the paper will coincide with Scottish Photonics Week, which will celebrate its 25th anniversary, along with welcoming the EPIC AGM and IOA AGM.

# ABOUT

## MaaS SCOTLAND



MaaS Scotland is the focal point for Mobility as a Service (MaaS) activities in Scotland, establishing a formal network for the vibrant Scottish MaaS eco-system, and facilitating initiatives that will deliver the benefits of this transformational opportunity to Scotland.

A joint venture, operated by Technology Scotland and ScotlandIS, the group has made significant progress as it approaches 2 years of operation, growing to a membership of over 70 public and private sector organisations from across the MaaS supply chain making it the largest network of its kind in Europe.

## SHAPING OUR FUTURE TRANSPORT SYSTEMS

### THE POTENTIAL IMPACT OF MaaS

#### INCLUSIVITY AND COMMUNITY

- Significantly improve transport provision for those without access to a car
- Improve access to transport services for those with disability or living with poor health
- Enhance connectivity for island, rural and semi-rural communities

#### ENVIRONMENT AND HEALTH

- Reduce carbon emissions by increasing patronage on public transport and encouraging vehicle sharing
- Incentivise active travel such as cycling and walking
- Manage travel behaviour in key areas of poor air quality

#### SUSTAINABILITY AND EFFICIENCY

- Maximise efficiency of existing transport assets
- Manage supply and demand curves for Scotland's busiest transport routes
- Improve planning and policy decisions through better visibility of traveller needs and behaviours

# MaaS SCOTLAND HIGHLIGHTS

## FROM 2018



### £2M MaaS INVESTMENT FUND ANNOUNCED

Following on from the publication of our paper, 'Mobility as a Service: Positioning Scotland for an Emerging Global Market', we were delighted that the Scottish Government included the creation of a £2M MaaS Investment Fund in its Programme for Government in September. We are working with Transport Scotland towards launching this fund later in 2019.



### RURAL CONNECTED TRANSPORT WORKSHOP

In May 2018, MaaS Scotland and Innovate UK ran a joint workshop exploring the challenges and opportunities in rural connectivity. This recognised the important role that MaaS and other future mobility solutions will play in delivering improved transport services to support our rural communities. The event was extremely well attended, highlighting the demand for new services in this area.



### 2018 MaaS SCOTLAND ANNUAL CONFERENCE

Late June saw the return of the MaaS Scotland Annual Conference, in glorious weather in Edinburgh. The event saw around 150 attendees gather from across the MaaS ecosystem to hear expert presentations on areas as diverse as user-centred design and service disruption. Attendees were also given a flavour of what colleagues in Europe are developing through speakers from Spain, the Netherlands and Austria.



### SMART CITIES WORKSHOP

In November, as part of a series of events at the Smart Cities Expo in Barcelona, MaaS Scotland and MaaS Catalonia held a joint workshop to explore collaborative opportunities between the two regions. The workshop was part of a wider collaboration between Scottish Enterprise and ACCIO (Catalonia Trade and Investment) which was formalised at the Smart Cities Expo event.

## FUTURE OUTLOOK

2019 promises to be a significant year for MaaS in Scotland, built around the launch of The Scottish Government's £2m MaaS Investment Fund.

We are excited to see the opportunities that this will create and look forward to helping both Transport Scotland and our members maximise the impact that this fund will bring, using it as a catalyst for future investment and development that will support MaaS upscale across Scotland.

2019 will also see the publication of Scotland's CAV strategy, another area of huge opportunity for Scotland and the MaaS community. We will continue to highlight the role of MaaS in the integration of connected and autonomous vehicles within our current transport system, ensuring that the benefits are realised by all those living in our cities and rural areas.

Finally, we look forward to welcoming you all to our 3rd Annual Conference and Dinner on the 20th June in Edinburgh. This year promises to be our biggest yet and a number of high quality speakers have already been confirmed. This year's themes will include rural connectivity, accessibility and inclusion, sustainable and active travel and governance and business models.

# MaaS SCOTLAND

## KEY ACTIVITIES: 2018

### FEBRUARY 2018

#### PUBLICATION OF MaaS SCOTLAND POSITIONING PAPER

MaaS Scotland published its paper, 'Positioning Scotland for an Emerging Global Market'. The paper proposed the creation of a MaaS Working Group to explore the role of MaaS in future transport strategy and recommended the creation of a MaaS Investment Fund to support pilot projects across Scotland



### MARCH 2018

#### BUSINESS MODELS WORKSHOP

MaaS Scotland and the KTN ran a half day workshop to explore potential business model ideas relating to MaaS, focussing on the ability to create sustainable services for a range of use cases. This involved discussions on disruptor models across multiple different sectors.

### MAY 2018

#### RURAL CONNECTIVITY WORKSHOP

MaaS Scotland and Innovate UK ran a joint workshop exploring the challenges and opportunities in rural connectivity. This recognised the important role that MaaS and other future mobility solutions will play in delivering improved transport services to support our rural communities.

### SEPTEMBER 2018

#### £2M MaaS INVESTMENT FUND ANNOUNCED

One of our proudest moments of 2018 was The Scottish Government announcement of a £2M MaaS Investment Fund as part of its 2018-19 Programme for Government. The funding, requested as part of MaaS Scotland's positioning paper earlier in the year, will help facilitate growth and innovation in this area, building on Scotland's existing strengths and skills.



### MARCH 2018

#### TRADE MISSION TO BAVARIA

MaaS Scotland joined an SDI-organised trade mission to Bavaria. Attendees were given a fantastic opportunity to promote their products and services to a range of customers and stakeholders in the Bavarian Mobility cluster. For MaaS Scotland it was an opportunity to not only promote our members but also highlight Scotland as a leading location for MaaS.



### APRIL 2018

#### MaaS SCOTLAND 1 YEAR ANNIVERSARY

In April, MaaS Scotland officially marked its one year anniversary! We were delighted with the rapid progress made in our first year of operation, growing to become the largest network of its kind in Europe with representation right across the MaaS supply chain.

### JUNE 2018

#### MaaS SCOTLAND ANNUAL CONFERENCE 2018

Late June saw the return of the MaaS Scotland Annual conference. The event saw 150 attendees from across the MaaS ecosystem gather to hear expert presentations on areas including user-centred design and service disruption. Attendees were also able to hear from speakers from Spain, The Netherlands and Austria.



### SEPTEMBER 2018

#### SECURITY OF AUTONOMY WORKSHOP

Held in collaboration with AESIN and NXP, this workshop provided an opportunity for automotive and security engineers, policy makers, and researchers to offer their expert insight into the ongoing discussion of how best to tackle the evolving challenges that surround cyber security and other aspects of autonomy.

## SEPTEMBER 2018

### ITS WORLD CONGRESS 2018

MaaS Scotland attended the ITS World Congress in Copenhagen. This is a key global event in mobility and an opportunity to keep up to date with developments in MaaS and the wider intelligent mobility sector. MaaS Scotland met with multiple international organisations to promote work ongoing in Scotland as well as attending the MaaS Alliance Plenary meeting.

## OCTOBER 2018

### EUROPEAN TRANSPORT CONFERENCE

In October, MaaS Scotland was delighted to be invited to host a panel session as part of the 2018 European Transport Conference in Dublin, 'Winning over the sceptics - delivering MaaS on a national scale'. The session was hosted in partnership with Jacobs, a member of MaaS Scotland and a global driving force behind some of world's greatest engineering feats.



## NOVEMBER 2018

### MaaS ALLIANCE PLENARY MEETING

MaaS Scotland attends Plenary Meeting of the MaaS Alliance, hosted by RACC in Barcelona. As one of over 70 members within the network, the plenary meetings are an excellent platform to receive updates on recent activities and initiatives as well as fostering relationships with key stakeholders from across Europe.

## DECEMBER 2018

### SMART CITIES WORKSHOP

As part of a series of events at the Smart Cities Expo in Barcelona, MaaS Scotland and MaaS Catalonia hold a joint workshop to explore collaborative opportunities between the two regions. The workshop was part of a wider collaboration between Scottish Enterprise and ACCIO (Catalonia Trade and Investment) which was formalised at the Smart Cities Expo event.

## SEPTEMBER 2018

### RURAL TRANSPORT CONVENTION

The Rural Transport Convention brought together a range of stakeholders eager to improve transport services within our rural communities. Building on the Rural Workshop in May, MaaS Scotland spoke on the opportunities presented through technological solutions, from dynamic services and routing to re-purposing of current assets.



## OCTOBER 2018

### CAV SCOTLAND SUMMIT

The CAV Scotland Summit highlighted Scotland's desire to be a key partner in the development and testing of connected and autonomous vehicles. MaaS Scotland presented on the role of MaaS in the integration of these vehicles within our current transport system, ensuring that they are adopted and utilised in a way that brings maximum benefit to our cities and rural areas.

## NOVEMBER 2018

### CARNET URBAN MOBILITY SYMPOSIUM 2018

MaaS Scotland is invited to speak at the Annual Urban Mobility Symposium organised by CARNET, a cooperation platform for the mobility industry based in Barcelona. The event provided MaaS Scotland with the opportunity to present the development of MaaS in Scotland to a European audience, highlighting the vibrant ecosystem in Scotland and Government interest.



# ABOUT

## PRODUCT DESIGN SCOTLAND

With a long tradition of innovation, entrepreneurship and commercialisation, the product design sector is one of Scotland's key "hidden" industries.

Through advances in technology, designers are providing innovative products across a number of global markets, including healthcare, energy, communications and mobility. Integration of these technologies into viable, efficient and commercially attractive products is key, and the partnership between technology and product design is becoming ever more important.

Product Design Scotland has been established to support the product and industrial design sector in Scotland. The network aims to be the focal point for the community, raising awareness of the critical importance of design to future growth and competitiveness and creating a thriving, collaborative network to drive innovation.

By working with companies and organisations across Scotland, we plan to support the sector through:

**Promoting the value of strategic design** to government and industry

**Raising the profile** of Scotland's product/industrial design sector

**Increasing visibility** of those operating within relevant supply chains

**Improving competitiveness** through collaboration and knowledge exchange

**Creating new networks** to shape the future of design in Scotland



**Product Design Scotland announces new Network Sponsor, AFRC**



The University of Strathclyde's Advanced Forming Research Centre (AFRC) are delighted to sponsor Product Design Scotland (PDS), recognising and supporting the strong product design base in Scotland.

The AFRC's Product Realisation team supports our clients' high Integrity product development, with a strong focus on method of manufacture and how to qualify unconventional methods. Participating in Product Design Scotland strengthens our network allowing us to signpost clients to PDS who can match enquiries outside our own remit to appropriate service providers.

The AFRC looks forward to helping support, promote and raise the profile of Product Design in Scotland, as well as strengthening our own relationship with the other participating organisations.



Technology Scotland  
**ANNUAL DINNER**  
18 NOVEMBER 2018 | 6.00PM - 9.00PM  
WITH KEYNOTE SPEAKER, BESTSELLING AUTHOR AND FUTURE LEADER  
**MARK STEVENSON**  
MINISTER FOR TRADE, INVESTMENT AND DEVELOPMENT  
Sponsored by  
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Technology Scotland  
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Sponsored by  
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ENIGMA  
The Edinburgh International  
Golf & Country Club  
18 November 2018

**TECHNOLOGY SCOTLAND**  
ANNUAL DINNER 2018

# TECHNOLOGY SCOTLAND

## MEMBER ORGANISATIONS

 adept-optical.com	 aesin.org.uk	 strath.ac.uk	 Annequin Associates	 ansonsconsulting.co.uk	 arcadis.com	 arnoldclark.com	 laserdamage.co.uk	 bytetoken.com	 ccldesignelectronics.com
 censis.org.uk	 cdtphotonics.hw.ac.uk	 ceresholographics.com	 chromacitylasers.com	 ciqual.com	 cisco.com	 cms.law	 codeclan.com	 coherent.com	 commuterhive.com
 como.org.uk	 Consult NJ	 cstglobal.uk	 cubic.com	 datavita.co.uk	 designled.com	 digitaltreetop.co.uk	 Driven to Deliver	 dukosi.com	 edinburghcentre.org
 edinst.com	 ember.ltd	 enigmapeople.com	 enterpriseclub.co.uk	 ess-holdings.co.uk	 Flying in Fog	 fraunhofer.co.uk	 fujitsu.com	 gassensing.co.uk	 georgehazel.com
 givei.ca	 glasgow.gov.uk	 glasgow.gov.uk	 helia-photonics.com	 helia-photonics.com	 hw.ac.uk	 hitrans.org.uk	 hiyacar.co.uk	 holoxica.com	 horiba.com
 Hugh Hunter	 i4pd.co.uk	 ibigroup.com	 im23.io	 jacobs.com	 j-teq.co.uk	 kelvinnanotechnology.com	 Kik Engineering	 leanip.co.uk	 uk.leonardocompany.com



# FUTURE OUTLOOK

## 2019 ONWARDS



### INNOVATION

- » Provide events that encourage collaborative responses to key innovation challenges
- » Facilitate creation of best practice approaches to technical challenges
- » Create roadmaps to guide innovation and highlight opportunities
- » Encourage cross-sectoral collaboration to address Global Grand Challenges



### INVESTMENT

- » Support members to identify funding routes and secure proportional share of ISCF funding
- » Highlight areas where Government investment could unlock growth opportunities
- » Promote Scotland's technology and skills internationally to encourage inward investment



### INTERNATIONALISATION

- » Attend international events to promote Scottish technology and expertise
- » Work with the Directorate for International Trade and Investment, SDI, and other partners to support trade missions to key export markets
- » Create links to international networks in important global economies
- » Connect Scottish companies to Scotland's export infrastructure



### INCLUSIVE GROWTH

- » Support initiatives that promote social mobility and gender equality in the Technology Sector
- » Work with Scotland's academia and industry to promote STEM career choices
- » Ensure 30% female representation across all Technology Scotland Boards by 2020

“It was great to see the innovation community in Scotland coming together to encourage growth in the sector. A great team!”

- TS event attendee, 2018

# MEET

## OUR SPONSORS



**ENIGMA**  
PEOPLE SOLUTIONS

**Ben Hanley**  
Founder and Director,  
Enigma People Solutions

Enigma People Solutions is delighted to continue our partnership with Technology Scotland, helping to build strong relationships across the Enabling Technology sector in Scotland. We're proud to support and contribute to an organisation that is a vocal advocate for the Scottish Technology sector, and an essential component to its growth. We hope to continue to support Technology Scotland in promoting Scotland's world-class engineering teams and to support the membership as each company strives to achieve.

With the UK employment rate currently at a record high, there is a clear demand for talented people. However, with the shifting goal posts of Brexit, there still remains a degree of uncertainty, and the consequences of this are being felt throughout the recruitment industry. Although the full effects of Brexit are yet to be seen, companies are already struggling to identify and attract people with the key, technical skills and experience required.

Whilst we observed a clear reduction of applicants from the EU recently, we were happily surprised to find that five of the last six vacancies we filled before Christmas were non-UK residents, including a Slovakian national living in Germany, moving to a VP of Engineering role in Scotland.

Perhaps a quirk of circumstances, though we believe it demonstrates a caution and reluctance from home-grown talent to move jobs, and more confidence from experienced international professionals, who see Scotland as a positive destination for their careers to thrive. Irrespective of what the future holds, it will be interesting to see if this continues post-Brexit.

As an award-winning technology search firm, Enigma People Solutions specialise in recruiting hard-to-find, experienced and skilled engineers into leadership roles across the Emerging Technology industries. Our executive search offering includes a three-stage consultancy, delivery and management process; a more detailed description can be found on our website:

[www.enigmapeople.com](http://www.enigmapeople.com)



**SCINTILLA**

**Peter McBride**  
Founder and Patent Attorney  
Scintilla IP

Scintilla is a European Patent Attorney firm, providing straight-talking intellectual property services so that our clients can add value to their businesses and maximise their competitive advantage.

Our clients enjoy our responsive service and commercially-focused attitude. We act for a mixture of startups, Universities and large corporations operating across sectors including photonics, semiconductors, internet of things, artificial intelligence, fintech, engineering and energy.

After being founded six years ago, we have assembled a team of technical experts to counsel innovators working in the fields of physics, electronics and software - our patent attorney staff include those with PhDs in physics and electronic engineering.

This technical focus together with our robust internal processes gives us the

professional approach you might expect from a large firm, while still retaining the flexibility and tailored approach that comes from working with smaller firms. We understand that effective IP advice depends on first understanding our clients' commercial objectives, and we take the time to understand the context that influences and informs intellectual property decision-making.

Being involved with Technology Scotland is a natural fit for us, due to our technology focus and also to our desire to keep learning, to connect people, and to share our expertise and opinions with the community.

We're a friendly bunch and would be happy to have a chat about all things IP - why not get in touch for a free of charge initial consultation, or just speak with us at the next Technology Scotland event!

**Website:** [scintilla-ip.com](http://scintilla-ip.com)

**Phone:** 0141 255 0295





### Email

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[info@technologyscotland.scot](mailto:info@technologyscotland.scot)



### Website

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[www.technologyscotland.scot](http://www.technologyscotland.scot)



### Social

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