The Institution of Engineering and Technology

# Move forwards in the transport sector

with help from the IET

theiet.org/transport

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# Your industry is changing

Globalisation, climate and technological changes have all impacted on the transport sector over recent years and we are now on the cusp of real change with the rise of electric cars and the implementation of the associated infrastructure.

Not far behind is the promise of hydrogen-fuelled public transportation, autonomous vehicles and Mobility as a Service – which means huge change in the way we develop our road systems and infrastructure. Such changes will also impact on the wider business, with increasing new product development as the technology embeds across all areas of transportation. Added to this, is the consumer cultural-change, which needs to be managed to ensure trust in and adoption of the new transport systems.

With this in mind, we have brought together all of our activities and resources which relate to the transport sector. Whether you're working in industry, research, or you're studying, you'll find all you need to keep pace with changes and move forwards in your career.

By joining a multi-disciplinary, professional engineering institution such as the IET, you can keep up to date with industry developments, learn skills that are in demand and build your reputation in this dynamic and complex sector. Your industry is changing

# **Stay up to date with the latest engineering news**

*E&T* is the IET's award-winning monthly magazine and associated website for professional engineers. It covers all areas of engineering and technology, with analysis, news, innovation announcements and job advertisements.

It's available in print, online and via mobile devices. You can also keep up with the latest developments with our daily email newsletter, whitepapers and webinars.

To find out more visit eandtmagazine.com

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### Join us, join in

As Europe's largest membership organisation for engineers and technicians, membership of the IET means a Professional Home for Life? With us you'll find all the tools you need to develop, discover and succeed.

Put simply, the IET is where you belong.

Become a member today and have access to:

- Internationally recognised professional qualifications: CEng, IEng, EngTech and ICTTech.
- Professional services and support throughout your career.
- Over 100 local communities and technical networks worldwide.
- Over 1,700 events and networking opportunities per year.

- Extensive library containing digital and printed engineering and technology resources.
- Access to a range of unrivalled knowledge services.
- Online tools to log vour development and record your skills and achievements.

Join the IET today: theiet.org/join

Email us at: join@theiet.org Phone us on: +44 (0)1438 767648 or Text: 'IET Join' and your name to 07860 002793\*

# **Keep up to date with industry developments**

Explore the IET's resources and you'll find various ways to keep up with what's happening – both in transport and the wider engineering and technology industry.

**IET Communities** bring industry and academia together, giving engineers around the world a platform to network, learn and collaborate. They are open to IET members and non-members, enabling engineers and technicians to network, share and develop knowledge online or face to face. We bring engineers together by region, technical interest or career stage, so you're sure to find one that suits you.

If you're passionate about shaping the future of engineering, then why not get involved? There are many opportunities available, from attending committee meetings to bringing new ideas to the table, through to the organising, running and promoting of events.

- make new connections and expand your network
- learn new skills that will count towards your CPD
- contribute ideas for event topics
- gain a competitive edge when applying for jobs
- share your passion and inspire others

Visit our website and get involved! theiet.org/communities

### Transport networks

You can join any technical or geographical network which you feel is relevant to your career and interests. There are four IET technical communities which cover transport. These are:

- Aerospace Network
- Automotive and Road
   Transport Systems Network
- Power Electronics, Machines and Drives
- Railway Network



### **Events**

If you want insight and debate from top speakers on the engineering and technology topics that are affecting your role – then take a look at our latest events. They include seminars, conferences, technical visits, lectures and more.

IET events are a great opportunity to meet, network and debate with fellow engineers and practitioners and provide CPD hours which you can record on IET Career Manager.

For those presenting at major events, conference papers are automatically submitted for indexing on IET Inspec, IEEE Xplore and Ei Compendex.

Many of our events are live-streamed or available on-demand on IET.tv.

### Find out more theiet.org/events theiet.org/tv

# Awards and prizes

We recognise talent through a wide range of awards and prizes, including our Achievement Medals, Apprentice and Technician of the Year Awards, Young Woman Engineer of the Year Awards, and a variety of scholarships, bursaries and research awards.

Help us celebrate and support the future of the engineering and technology profession by promoting these prizes to your network and help us reward excellence by nominating talented engineers for our awards.

Find out more
theiet.org/awards

IET Partetter of

The IET Scholarship & Bursary Awards 2018

This is to cartify that Faizoast Pervaiz

is reached the IET Diamand Jubilee Scholarship supported by The David Family Found

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# Develop skills for the future

Want to build up the skills and knowledge that you need to remain relevant and progress?

Take a closer look at what the IFT can offer you.

### Training courses

Whether you want to hone your leadership skills, understand finances for clear decision-making or master project management - our professional skills training courses can help.

We have a range of courses that can be delivered in-company or through public courses, webinars and e-classes.

Find out more theiet.org/pd-courses

### Setting a new standard in engineering e-learning

Whatever your career stage, the IET Academy provides expert e-learning courses across a broad range of technical and professional

### Find out more theiet.org/academy-transport

or email academy@theiet.org

# Could mobility as a service solve our transport problems?

### Essential reading for all mobility service providers.

The way we assess our transport is changing. There is a move away from privately owned vehicles to short-term hire and demand-based travel

Mobility as a Service is seen as the possible next step, but what does MaaS mean and how can local authorities make the most out of it?

This report highlights the complex links between technology. infrastructure, users and commercial transport operations. It is essential reading for all senior transport authority professionals and transport operator leaders worldwide.

### Download your free copy theiet.org/MaaS-report

Develop skills for the future - Could mobility as a service solve our transport problems?



### Could Mobility as a Service solve our transport problems?

Developing a better understanding of MaaS. its evolutionary path. benefits unintended consequences and deployment challenges.



theiet.org/transpo

# **Access to the latest** transportation research

Advance and disseminate your knowledge as a practitioner, researcher or student using the latest engineering research with IET resources.

Explore our **Digital Library** containing IET scholarly peer-reviewed

ietdl.org

### Inspec Analytics

Our new research intelligence tool based on the renowned Inspec database. Monitor global engineering research trends to discover emerging topics related to the field of transport and much more.

#### Visit

### inspec-analytics.theiet.org

### iet.tv

Edited by Hussein Dia

Find inspiration for your next project by catching up with the latest presentations from our relevant conferences and lectures on iet.tv

### Visit

iet.tv



# Maintain best practice with IET Standards

### Ensure you're following best practice by referring to our expert Standards publications.

Our range includes Guides and Codes of Practice that provide guidance on emerging and established technologies, including the government-recommended Code of Practice for Electric Vehicle Charging Equipment Installation.

### **IET Wiring Regulations**

Ensure you're compliant with the latest IET Wiring Regulations (BS 7671). Order your copy of BS 7671:2018 and our practical guidance publications and find a wealth of resources to get you up to speed with the latest requirements. You can find training solutions, events, digital subscriptions and our free online Wiring Matters magazine direct from the experts at the IET.

### You'll find everything you need at theiet.org/18th-resources-pr

Find out more theiet.org/standards Access to the latest transportation research - Maintain best practice with IET Standards

# **Cyber security** in transport

As technology advances and our world becomes more connected the cyber security risks increase. This could have dangerous consequences in the transport sector.

For this reason, cyber security in transport was selected as a key focus area for the IET Transport Sector.

In the coming months workshops will be held and a report produced which will:

- identify the future cyber security risks associated with vehicles and their infrastructure
- raise awareness of these risks
- share best practice
- signpost to useful resources

### For more information please contact sep@theiet.org



### "

Rapid advances in technology are exciting. Our transport systems are evolving every day making people's lives easier, more environmentally friendly, more efficient and even improving safety. The use of new technology and determination to get new transport systems to market is challenging. Even under all the pressure, it is crucial we also consider the security of our transport systems. I believe that by building in security early and working together, we can achieve secure transport systems of the future.

### "

Pearl Noble-Mallock

# Help shape transport policy

On behalf of the profession, we strive to inform and influence government on a variety of engineering and technological issues. We believe that professional guidance, especially in highly technological areas such as transport, is critical to good policy making.

As well as utilising the expertise of our volunteer-led panels to respond to policy developments, we frequently invite and encourage our wider membership to contribute to our aovernment consultation responses. These have covered a range of transport topics in the recent past, from the future of aviation to electric vehicle charging.

Find out more about the IET's policy work, and how to get involved with the consultation process.



### Find out more

theiet.org/government-policy

# Other volunteering opportunities

There's a range of volunteering activities to choose from at the IET and the level to which you participate is entirely up to you!

### You can:

- become an assessor, mentor or Schools' Liaison Officer
- meet others who live and work in your area or who share your interests in the transport sector
- represent the IET on external bodies and organisations

Find out more theiet.org/volunteers

### Achieve professional recognition

Becoming professionally registered proves to employers, customers and peers that you've met standards of knowledge, understanding and competence. You'll be recognised for your skills and achievements and will earn the right to use letters after your name.

We are licensed to award Chartered Engineer (CEng), Incorporated Engineer (IEng) Engineering Technician (EngTech) and Information and Communications Technology Technician (ICTTech).

### Brand new!

Electrician EngTech is a new route to EngTech focusing on the competencies and experience specific to electricians.

### Find out more theiet.org/profreg

# **Continuing Professional** Development

Investing time in your Continuing Professional Development (CPD) will help you gain the relevant competencies, the recognised knowledge, skills and attributes you need to deliver results throughout your career.

Keep a record of your CPD and plan future activities using the IET's simple online tool – Career Manager

Find out more theiet.org/cpd

# Local authority guide to emerging transport technology

While there can be no doubt that investment in technology can deliver benefits in terms of better operation, increased accessibility and reduced costs, it is vital to ensure that procurement decisions made by local authorities are suitable for their needs.

In recent years an IET and ITS(UK) joint task force have produced a series of handbooks for local authorities, which explain the potential benefits of new The Institution of technology. These guides offer numerous case studies highlighting recent implementations of new ideas, along with a roadmap for what is relevant and The Local Authority Guide to Emerging Transport upcoming in transport tech. The guides aim to: Technology promote strategic thinking 2017 - 2018 - help local authorities to deliver their objectives for local transport in a A practical guide to assist local authorities in planning. way that reduces cost through the use of emerging technology pecifying and procuring Vuture transport systems avoid investment in technology that will be overtaken in a few years' time challenge consultants providing guidance and support to local authorities 44 A vital tool for to consider alternatives decision makers plann. provide confidence in the future Find out more theiet.org/local-authority-guide

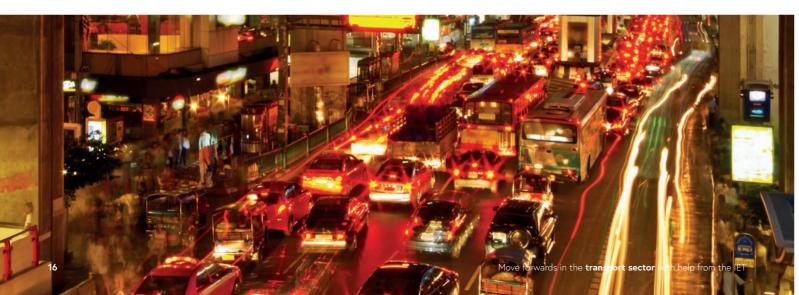
Achieve professional recognition - Local authority guide to emerging transport technology

# **Call for case studies**

# The IET is now looking for new case studies to feature in its next local authority guide to emerging transport technology, due to be published in 2020.

If you know of any recent implementations of new and emerging technology to create a more efficient local transport system, please get in touch with us through **sep@theiet.org**.

### Read the case studies from the last edition of the guide theiet.org/local-authority-transport-case-studies



# Roads fit for the future

We all hear a great deal about how connected and self-driving vehicles will help address traffic problems in the future decades, but what is not so clear is what technology is already available or coming in the next few years.

In our journey towards the future of mobility, the biggest challenge is making sense of the opportunities presented today by advancing technology and understanding the implications for the highway network in the short term.

This report will provide engineers working in road transport with an understanding of likely technology developments over the next five years, and the opportunities and challenges this may present.

# Keep an eye out for the report at theiet.org/roads-fit-for-future



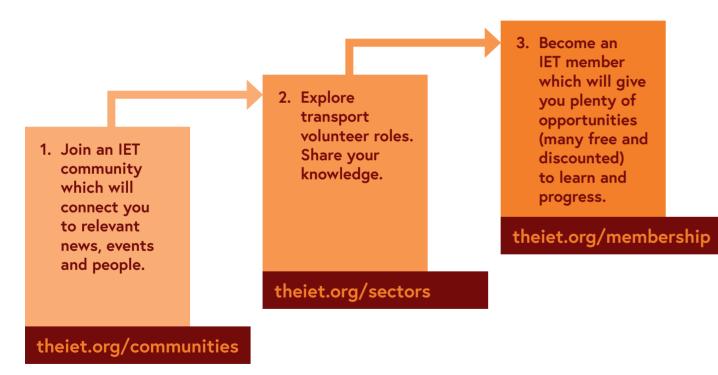


# Roads fit for the future

The technology, policy and goals which will deliver better mobility by 2025.

theiet.org/roads-fit-for-future

# Three easy ways you can learn more and progress... today!



### About the IET

As a professional engineering institution and a registered charity, we're working to engineer a better world, inspiring, informing and influencing the global engineering community and supporting technology innovation to meet the needs of society.

We have 169,000 engineer and technician members in over 150 countries, with headquarters in London and offices in Bangalore, Beijing, Hertfordshire, Hong Kong and New Jersey.

Reflecting the increasingly multidisciplinary nature of modernday engineering, our work celebrates and supports engineering and innovation across key areas, from design and manufacturing, energy, healthcare, and digitalisation to transport and the built environment.

Passionate about transport? We're here to help you take the next steps in your career.

Find out more theiet.org

Three easy ways you can learn more and progress... today! – About the IET





### Our offices

### London, UK

- T +44 (0)20 7344 8460
- E faradaycentre@ietvenues.co.uk

### Stevenage, UK

- T +44 (0)1438 313311
- E postmaster@theiet.org

### Beijing, China

- T +86 10 6566 4687
- E china@theiet.org
- W theiet.org.cn

#### Hong Kong

- T +852 2521 2140
- E adminap@theiet.org

### Bangalore, India

- T +91 80 4089 2222
- E india@theiet.in
- W theiet.in

#### New Jersey, USA

- T +1 (732) 321 5575
- E ietusa@theiet.org

### @ThelET 🔰 🗗 🖸 in 🙆 👂

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