



The Institution of
Engineering and Technology

Self-driving vehicles – are we there yet?

Thursday 11th December 2025

Welcome

The event will start at 7:00pm

Introduction: Kevin Foster FIET, Chairman, Anglian Coastal Local Network

Presenter(s): Kirit Bedia and Paul Flowers, ECS

Questions: Live in the Atrium & via Q&A Messaging in Teams. In Teams, please type in your questions and these will be taken in a Q&A session at the end of the presentation.

Close: Approximately 8:15pm



Self-driving vehicles: are we nearly there yet?

Agenda

From sci-fi vision, to real-world deployments, connected and autonomous vehicles have come a long way in a short time. But how much more is there to do, before they become an everyday part of people's lives?

Together, Kirit and Paul will try to answer this familiar question: are we nearly there yet?



Kirit Bedia
Solutions Delivery



Paul Flowers
Delivery Assurance



Self-driving vehicles: are we nearly there yet?

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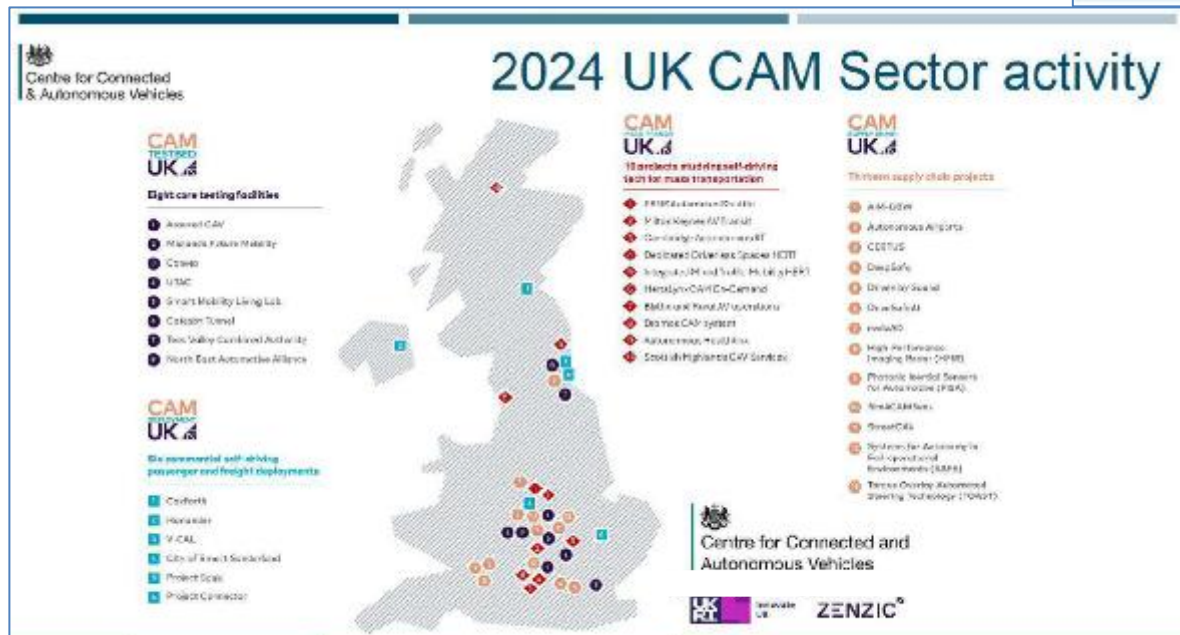
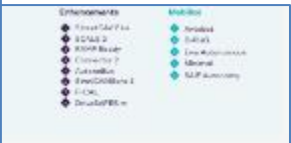
Together, Kirit and Paul will try to answer this familiar question: are we nearly there yet?

- UK Landscape
- Is it real?
- How does it work?
- How well does it work?
- What next?
- Q+A



Self-driving vehicles: UK landscape

10 years of UK Government investment



Self-driving vehicles: UK landscape

Centre for Connected & Autonomous Vehicles

- plans of self-driving taxis and bus services will be brought forward by spring 2026, following assessment and testing the UK one of the world leaders in this technology
- cutting-edge innovation, regulation and trial safety will be the core priorities of the centre - with the UK's best autonomous vehicle engineers and the most advanced test tracks
- industry could create 38,000 jobs and add £42 billion to the UK economy by 2035, helping deliver the Plan for Change for cutting through to support certainty

Nearly 40,000 taxis could be created, roads could be safer, and billions could be added to the economy as self-driving vehicles pilots are set to start in England from spring 2026.

Today (22 June 2025), Transport Secretary Neil Alexander has confirmed that the government will fast-track pilots for spring 2026, introducing self-driving commercial pilots in England's roads.

From winter 2026 to pilot self-driving taxis and bus services without a safety driver for the first time - which could be available to members of the public to book via an app - before a potential order rollout when the full autonomous regulations are implemented from the second half of 2027.

Transport Secretary Neil Alexander said:

"The future of transport is arriving. Self-driving cars could bring jobs, investment, and the opportunity for the UK to be among the world leaders in new technology.

"With road safety at the heart of our plans and legislation, we continue to take bold steps to create jobs, boost British industry, and drive innovation to deliver our Plan for Change."

Science and tech R&D to receive £84bn boost

The new £84bn R&D package will be used to "supercharge" the UK's fastest-growing sectors, from tech and life sciences to advanced manufacturing and defence.

It forms part of the government's plan for "invest in Britain's renewal" through the Modern Industrial Strategy, which is now scheduled for release at the end of June 2025.

The £30bn "twinper funding package" - worth more than £2.5bn a year in 2025/26 - will help stimulate regional economic growth, position the UK as a leader in emerging technologies and create more jobs in the R&D sector.

Reveals said: "Britain is the home of science and technology. Through the Plan for Change, we are investing in Britain's research to create jobs, protect our security against foreign threats and make working families better off."

The R&D package includes up to £30bn allocated to regional authorities. These authorities will have the power to decide which R&D initiatives the investment will be spent on in their regions.

The first of the spending review announcements was made last week when Reeves revealed £3.5bn will be invested in local transport in city regions in Northern England, Midlands and the South West.

Industrial Strategy

Our approach

The government's priority mission is to deliver strong, secure, and sustainable economic growth to boost living standards for working people in every part of the UK.

We need a new relationship between business and government, where government provides investors with strategic certainty, enabling them to create wealth.

Our modern Industrial Strategy provides a new approach for a new era. It is robust, strategic, and long-term - a 10-year plan to make the UK the best country to invest in.

By 2030 the UK will be recognised as the best place in the world to start, grow, and invest in Advanced Manufacturing. Our ambition is to reach the annual business investment in the sector from £21 billion in 2025 to £38 billion in 2030, driving growth across the economy.

Department for Transport

Department for Business & Trade

Centre for Connected & Autonomous Vehicles

£2.5BN BOOST FOR UK AUTO

CAM Pathfinder

£150M

The Department for Business and Trade today also announces over £300 million for specific UK automotive manufacturing firms and projects. This includes over £100 million of capital investment for UK automotive manufacturing via the ATF, approximately £140 million in combined Government and i £150m Connected

CAM PATHFINDER

Building future mobility services for the UK

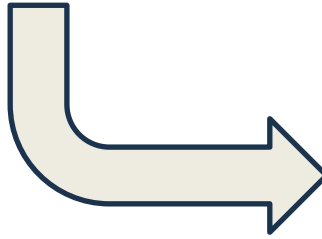
Pioneering CAM technology in the UK is fuelling global demand, exports, investment, and sustainable growth across key industries. The CAM Pathfinder programme offers a further £150 million to grow the UK CAM ecosystem. You can learn about the competitors supporting CAM innovation through this page.

ZENZIC

DRIVE35

Automotive funding opportunities

- The DRIVE 35 grant funding initiative, £2bn to 2030 in capital and R&D funding, plus an additional £500m R&D to 2025
- CAM Pathfinder, £132m additional funding to 2030, alongside the Automated Vehicles Act 2024
- EV supply chain investment via the National Wealth Fund, combining its suite of financial products with grants and other HMG instruments
- Updating the ZEV Mandate, so that manufacturers have greater flexibility in complying, easing the legislation
- An Automotive Technology Strategy in 2026, developed with industry to target our investment programmes and underpin our industrial policy
- Up to £98m to 2030 to support SMEs to take up advanced technologies via our Made Smarter programme
- International technology partnerships, leveraging our IP to boost industry ties and maximise foreign direct investment
- Our new Battery Innovation Programme, £452m to 2030 to support next-gen battery R&D and develop safety standards
- Clustering EV manufacturing, starting from a pilot with the NE and WM to generate a blueprint for other areas across the UK
- £15.6bn for Transport for City Regions, empowering local leaders and driving demand for UK-based bus manufacturing



£35M

Next Round

Mobilise

Demonstrate

Enable

Feasibility

ASDE

NUIC

NUiCO

Birmingham ITS World Congress

25-29 October 2027












ERTICO

nec

the **nec.co.uk**

Self-driving vehicles: UK landscape

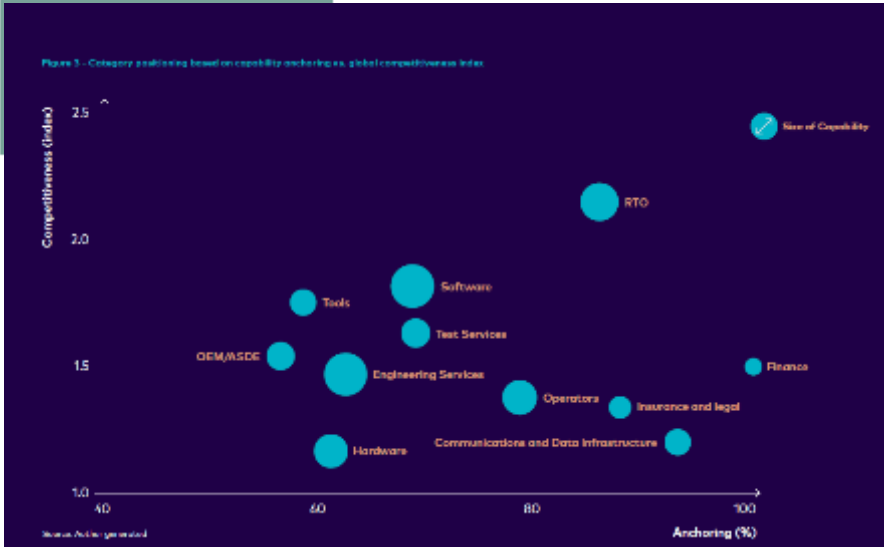
The opportunity for UK CAV Industry

 CAVS	 £650bn GLOBAL MARKET	 £41.7bn UK MARKET	 49k UK JOBS
 CAV TECHNOLOGIES	 £100bn GLOBAL MARKET	 £6.4bn UK MARKET	 23k UK JOBS
 GROSS VALUE ADDED	 £6.3bn UK GVA from CAVs	 £2.7bn UK GVA from CAV technologies	



**Maturing the UK
CAM Supply Chain
2024/25**

Connected Places Catapult
Market Forecast
 For Connected and Autonomous Vehicles



Self-driving vehicles: is it real?

StreetCAV – Project Highlights

Dec 23: 20m of formally validated data in UK presence, our first data to arrive in the UK and every leading university in the Gull Campus

Dec 23: As part of our commitment to annual leading CAV supply chain activities, we hosted our first cohort of Robotaxi Engineers from the MSc programme at Cranfield University

Dec 23: Our commercial testing work at Cranfield to assess vehicle performance

Dec 23: 20m of formally validated data in UK presence, our first data to arrive in the UK and every leading university in the Gull Campus

May 24: Adjunct Park introduces with key stakeholders to develop case for CAVs in improved commercial network offering

Apr 24: Work with DVSA to secure strategic vehicle access and road trial on pilot

Mar 24: Zenix CAV Innovation Day – Peter Gosselin

Jan 24: BT and ECE join the consortium, and we demonstrate the shuttle at Ascot Park to now sit CEC, Adjunct Park

Nov 24: Smart City Experience Centre opens and China wins 'Gold of the Year' with global coverage

Going go addition

Dec 24: Go database from K9000 allows us to see road network support

Sept 24: Works on 1111000 in 18 for Keynes, wrap design on tickets, GENEX

Cambridge, UK

Project locations...

SCAPE
Self-driving cars in the city



Self-driving vehicles: how does it work?



Shuttle operates as a 'Level 4' autonomous vehicle that conforms to the Highway Code

Within a defined route, can operate without a driver, navigating potential hazards

Multiple onboard sensors and advanced decision-making software offer a safe and comfortable experience

Option to 'platoon' vehicles to add extra capacity, on-demand

Accessibility features include an automated, retractable platform for wheelchair users; extensive testing undertaken with La Trobe University, Victoria, Australia

Registered as a 'prototype' vehicle for use on UK roads, and insured for operation; ongoing insurance industry and DVSA engagement as a precursor to homologation

100% Electric, no steering wheel

UK regulations will enable removal of onboard 'Safety User In Charge' by 2027

Self-driving vehicles: how does it work?



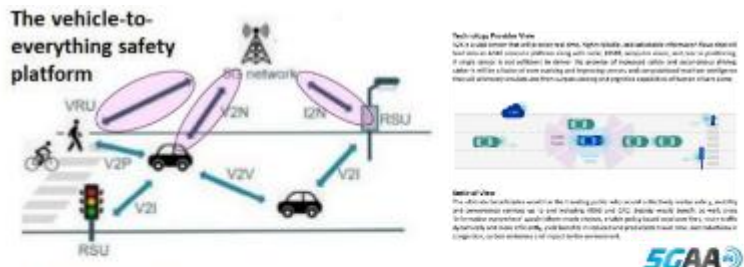
It's about much more than the vehicle..



...Autonomy-as-a-Service



Self-driving vehicles: how does it work?



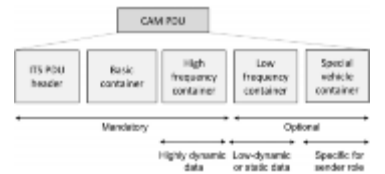
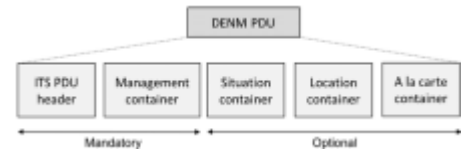
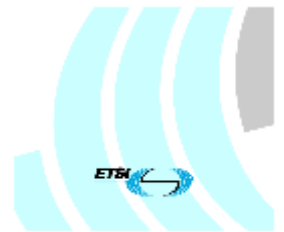
The V2X Safety Platform connects shuttles, signals and sensors, improving shuttle awareness and enhancing onboard decisions

An intelligent transport solution that strengthens the Safety Case and builds passenger trust

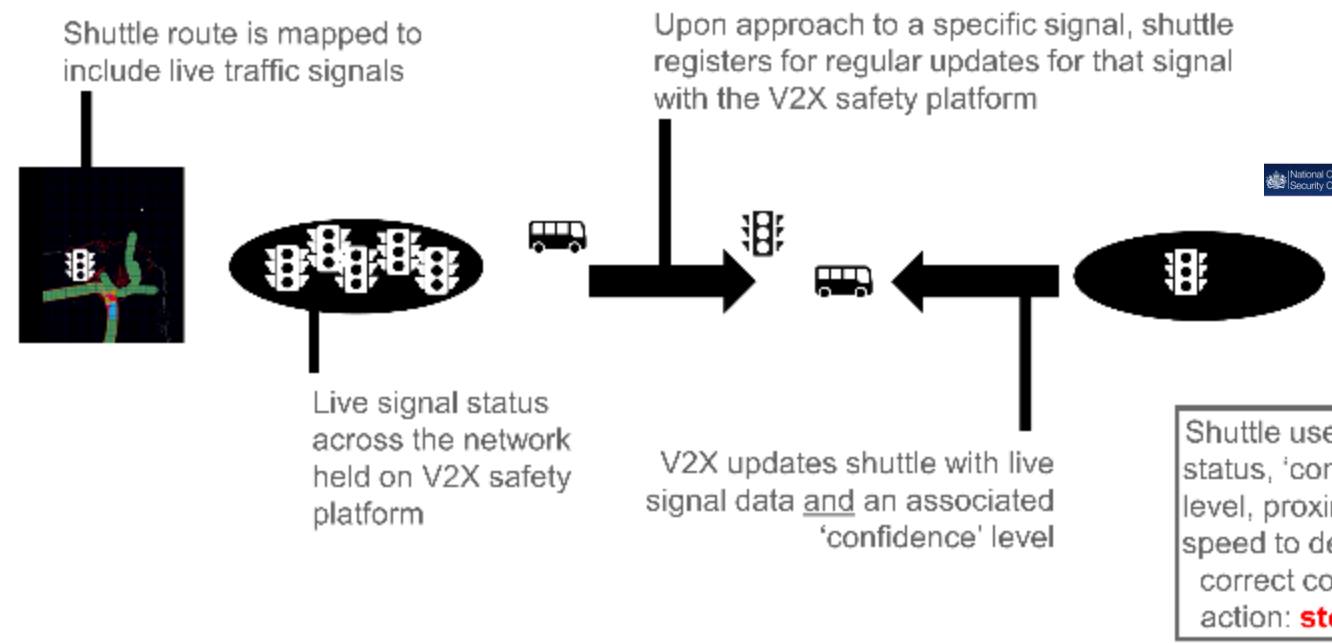


Balances passenger and road user experiences as part of a co-operative Intelligent Transport System

Standards-based, modular, scalable, extensible; the precursor to a 'Transport AI' solution



Self-driving vehicles: how does it work?



It's time to act

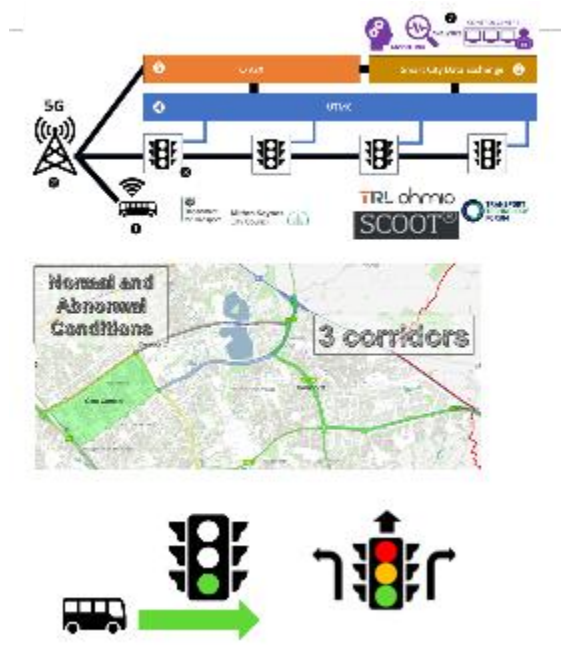
National Cyber Security Centre

In the **transport** sector, alongside government and industry, we have used our role as the National Technical Authority for cyber security to consider cyber security risks related to critical emerging technologies, such as Connected and Autonomous Vehicles (CAVs); gaining insights from innovative projects such as the new self-driving shuttles in Milton Keynes city centre.

TRL Software



Self-driving vehicles: how does it work?



Adapting signal behaviour to prioritise shuttles

Handling filter lights enables route optionality – different routes at different times

Integration with strategic Urban Traffic Management and Control system

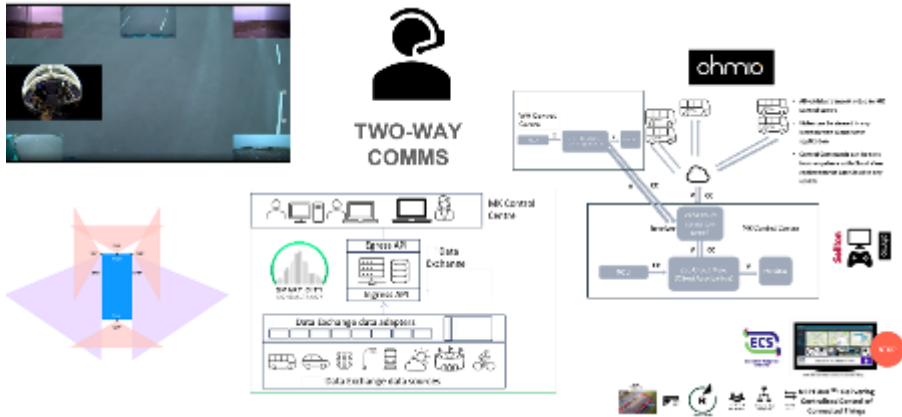
Extending coverage and offering better network performance under both normal and abnormal conditions

A truly co-operative Intelligent Transport System that balances passenger and wider driver experiences

TRL Software



Self-driving vehicles: how does it work?



A state-of-the art, highly integrated Smart City Control Centre solution

Providing centralised assurance and oversight for services operating in multiple locations

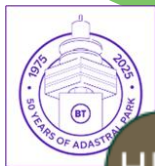
Readying for removal of onboard Safety Drivers: remote monitoring, remote control

Provision of Local Authority dashboard, Passenger App and elapsed time analytics

Driving commercial viability of autonomous operations



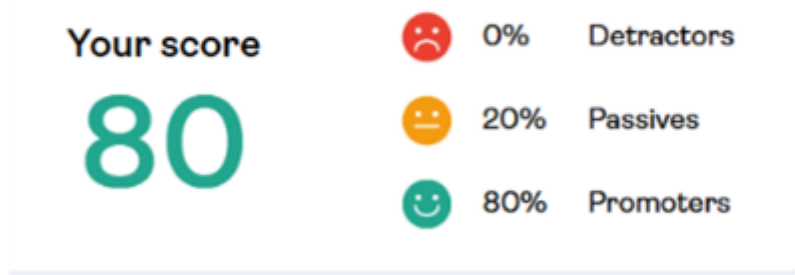
Self-driving vehicles: how well does it work?



HUB 0.5-mile circular route

3 Day event **DigiTech Centre**

DigiTech Smart House



"fantastic"
"comfy"
"not sure about other drivers"

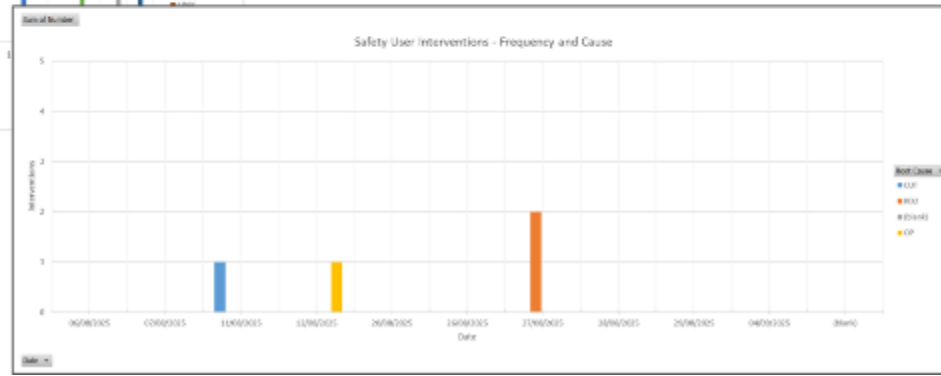
"it was amazing"
"feels like there is a driver onboard"



Number of journeys: **200+**
 Number of operational hours: **75+**
 Distance covered: **900km+**
 Number of incidents: **Zero**
 Passengers carried: **1000+**
 Net Promoter Score: **95%**
 Number of detractors: **Zero**



Self-driving vehicles: how well does it work?



Significant reduction in number and type of user interventions



Self-driving vehicles: what next?



CONCEPT	STRATEGY	OPERATIONAL	TECHNOLOGY	REGULATORY	SAFETY
CONCEPT	STRATEGY	OPERATIONAL	TECHNOLOGY	REGULATORY	SAFETY
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Autonomy-as-a-Service

First-mile, last-mile

Best-of-breed operations

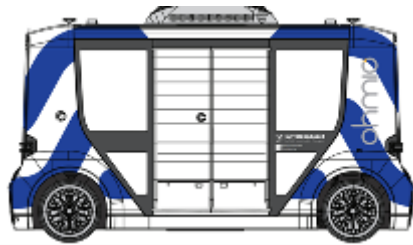


Continuous capability improvement
Assembly, manufacture, homologation

Strong UK position
Driving growth and productivity



Integrated, environmentally friendly transport solutions



Adastra enabled



ECS: elegant, custom-built software



Thank you



Kirit Bedia
Solutions Delivery



www.ecsolutions.co.uk



Come and visit us at Adastral Park



Paul Flowers
Delivery Assurance



www.smcccl.co.uk



Come and visit us at Adastral Park or
in Milton Keynes





Thank you for your attendance

Future IET Anglian Coastal Local Network events:

- 14 January 2026 (hybrid), **From Advice Notes to Intelligent Automation**, Dave Milham, Chief Architect, TM Forum
- 24 February 2026 (hybrid), **CityFibre 5 years on**, Clayton Nash, Strategy Director, CityFibre
- 23 April 2026 (online only), **The Cavity Magnetron**, Prof. Peter Grant, Emeritus Professor, The University of Edinburgh

For more details and how to register please visit:

<https://engx.theiet.org/local-networks/ea1>

Event CPD Certificate and Slides/Video will be posted on this site.

Anglian Coastal



The volunteers of the IET Anglian Coastal Network organise events and other activities covering engineering and technology topics for engineers and also members of the public who have an interest in engineering and technology. Even if you're not a member of the IET, you're still welcome to join us at any of our events.

We cover the areas of Norfolk, Suffolk and north Essex. Over the past few years we have organised a large number of highly successful Webinars when face-to-face meetings have not been possible. We are now able to resume face-to-face events. We aim to retain many of the benefits of the Webinar format where practical. Most of the lecture events will be hybrid offering both face to face attendance or online options. We also organise occasional visits to places of engineering interest (e.g. Bentwaters Cold War and Bawdsey Radar museums).

Blogs and Articles (New!)

This is a new feature. Please visit [Blogs and Articles by Anglian Coastal LN](#) to view our blogs and articles on IET EngX.

Contact us

We're always looking for ideas and suggestions for events and visits etc so if there is something you would like us to organise, or to help you to organise, please get in touch: angliancoastaln@ietvolunteer.org.

Was this helpful?

Yes (28)

No

In this Article

Blogs and Articles (New!)

Contact us

Car parking in Ipswich (face to face event)

Foothold (needs your help)

Watch one of our event videos

CPD Certificates for our events

Previous event information (slides and videos)

Our committee

Created over 4 years ago

Updated 3 months ago

Upcoming Events

Optical Fibre in the BT inter-exchange Network – where we are and how we got here

8 Oct 2025 7:00 PM to 8:45 PM

Point to Point Microwave Radio Systems

6 Nov 2025 7:00 PM to 8:45 PM

