The 47th European Transport Conference
Annual Conference of the
Association for European Transport
09-11 October 2019: Dublin Castle, Dublin, Ireland

Conference Brochure

Where research, policy, and practice in transport come together
Why attend the European Transport Conference?

Benefits of attending...

Outstanding speakers
Each year the conference presents the opportunity to interact with a range of first-class speakers across the transport industry. The conference has a unique identity of a multi-disciplinary, multi-seminar format which encompasses research, policy, theory and practice.

Stimulating research sessions
Research sessions are a key element of the conference, with its reputation being built on the important collaboration and knowledge transfer between research, policy and practice. The conference focuses on drawing out the policy implications of research and not just concentrating on the design and operation of a model. Practitioners and policy makers are encouraged to relate their presentations to the research behind the implementation of schemes and policies.

The conference takes an open, participative approach to its programme. Members who join the programme committees vote to shape the contents of the conference itself, adapting it to the needs of the attendees accordingly.

ETC focuses on remaining relevant to the essential transport issues of the day, meeting the needs of the current members. As the conference evolves, it looks to recruit a more diverse, inclusive and representative Europe wide membership.

Networking with international colleagues
The conference provides a brilliant opportunity for all participants to engage with transport experts from around the world and become part of a specialist community. Attendance at ETC allows different groups to pose questions to fellow professionals and to assess what is possible within their community.

Conference programme
Delegates may download the conference programme from the website and will be provided with a detailed conference guide in Dublin. Online access to papers is provided to delegates prior to the conference.

Digital archive
Conference papers, dating from 1996, are archived on the AET website, where they can be downloaded easily and permanently for the international transport community.

Open access and publication of papers
The organisers of ETC - The Association for European Transport - believe that research papers being published openly online will help future progress in transport, environmental and technical areas.

Coverage of major themes
Programme Committees have their own identifiable programmes in the conference but also contribute papers and sessions to major themes.

System Dynamics - a one-day seminar organised by the Transport Models Programme Committee in conjunction with the Transportation Special Interest Group of the System Dynamics Society and coordinated by Dr Gillian Harrison of ITS, University of Leeds, UK.

Autonomous Vehicles - this will be a two-day+ seminar looking at the policy implications, methodology and on-street implications of AVs. There will even be a discussion session on the inevitability or otherwise of driverless cars.

Aviation - a one-day seminar looking at airport access, air cargo and policy issues surrounding the future of aviation.

Climate Change - papers will be threaded throughout the conference and there will be a session dedicated to PRIMAVERA, an EU Horizon 2020 project developing advanced climate models, for the benefit of governments, business and society in general.

In addition, the seminar on Data, introduced in 2018, will continue as will the highly successful Young Researchers’ and Practitioners’ Forum, first held in 2013.

Who should attend?
- Policymakers, transport planners and engineers from central and local government
- Providers of technical advice and consultancy
- Researchers, lecturers and students from universities, institutes and research bodies
- Analysts and advisers from banking and investment houses
- Environmentalists and lobbyists
ETC 2019: What can you expect?

The conference attracts transport practitioners and researchers from all over Europe providing access to in-depth presentations on policy issues, best practice and research findings across the broad spectrum of transport. Providing an annual event which people look forward to ensuring intellectual stimulation and informed debate.

The extensive range of topics and the multi-seminar approach makes ETC unique among transport conferences and it is well established as the premier event of its type. The conference programme covers supranational issues, national and local policy and the implementation of projects at a local level.

The conference presents a brilliant opportunity for networking and developing career-spanning professional relationships. Although sessions at the conference can be challenging in discussing matters of policy at the highest level, they can also provide good, basic education and training opportunities – it is truly a conference for all ages and all levels of experience.

As transport practitioners and researchers throughout Europe respond to the challenges of economic growth, social change, demographics and the need to become more sustainable, ETC provides a forum for the presentation of, and discussion on, solid and affordable responses.

ETC is a truly international conference for researchers, policy makers and practitioners with an informal, independent atmosphere where people can meet on equal terms.

Format of the conference

The conference duration is three days from Wednesday 09 to Friday 11 October. Optional social events are offered to delegates during the evenings and networking opportunities are available throughout.

ETC is a mix of plenary sessions, some debates and parallel workshop sessions. Each day, there will be a minimum of 9 concurrent streams, in sessions of 1.5 or 2 hours. Each session comprises between three and four papers presented in a themed seminar. The chair of each session ensures that there is ample time for discussion of papers and questions.

Special features

- Plenary sessions on key topics, with keynotes given by significant names in world transport
- Presentations of over 240 papers
- Driverless cars: inevitable or never debate chaired by UK Journalist Christian Wolmar.
- The opportunity to network with over 500 international industry professionals

Additional session

ECTRI will host a special session at this year’s conference on the BE OPEN European project.

ECTRI is engaged with more than 20 partners to create a common understanding on the practical impact of Open Science and to identify and put in place the mechanisms to make it a reality in transport research. The BE OPEN project commenced in January this year and will run for 30 months.

More information can be found at: www.ectri.org/project/be-open

Young Researchers’ and Practitioners’ Forum

ETC 2019 will once again include a special forum to engage young professionals. The forum is intended to provide a format which enables constructive and comprehensive feedback as well as additional time for discussion.

The Young Researchers’ and Practitioners’ Forum (YRPF) invites early career researchers and practitioners to present their work to the participants of the conference. Early-stage and experimental projects and research ideas are explicitly welcome. Volunteers who wish to be involved with YRPF are encouraged to approach Sally Scarlett during the conference or to email her at: sally.scarlett@setransport.org

ECTRI will host a special session at this year’s conference on the BE OPEN European project.

ECTRI is engaged with more than 20 partners to create a common understanding on the practical impact of Open Science and to identify and put in place the mechanisms to make it a reality in transport research. The BE OPEN project commenced in January this year and will run for 30 months.

More information can be found at: www.ectri.org/project/be-open

You can find more information on ETC 2019 at www.ectransport.org
### Timetable

**Wednesday 09 October 2019**  
0915-1030  
*Welcome from the Association for European Transport (AET)*  
Professor Pierluigi Coppola, Chair of the AET Board  
*Address from Ms Maja Bakran*  
Deputy Director-General for Mobility and Transport (invited)

**Thursday 10 October 2019**  
0900-0945  
*Plenary: European Transportation Research Perspectives*  
Maive Rute, Deputy Director General, Joint Research Centre, European Commission science and knowledge service

<table>
<thead>
<tr>
<th>Themes</th>
<th>Session 1 1100-1300</th>
<th>Session 2 1400-1600</th>
<th>Session 3 1630-1800</th>
<th>Session 4 1000-1130</th>
<th>Session 5 1130-1300</th>
</tr>
</thead>
<tbody>
<tr>
<td>System Dynamics</td>
<td>Connected and automated vehicles</td>
<td>Strategy and trends for future and urban mobility</td>
<td>Electric vehicle uptake</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Autonomous Vehicles</td>
<td>Autonomous vehicles</td>
<td>Autonomous vehicles</td>
<td>Autonomous vehicles - impact</td>
<td>AV debate</td>
<td>AV impact</td>
</tr>
<tr>
<td>Global Trends Impacting Transport</td>
<td>National transport policy strategies</td>
<td>Safety and people with disabilities</td>
<td>Signage</td>
<td>Primavera</td>
<td>Emissions/Air pollution</td>
</tr>
<tr>
<td>Planning for Sustainable Land Use and Transport</td>
<td>Inclusion</td>
<td>Land use and transport interaction (LUTI)</td>
<td>Hubs 2</td>
<td>Planning for passengers’ journeys – the role of technology</td>
<td>Planning for passengers’ journeys – modal perspectives</td>
</tr>
<tr>
<td>Local Public Transport</td>
<td>Autonomous vehicles</td>
<td>Hubs 1</td>
<td>Bus operation</td>
<td>Planning for passengers’ journeys – the role of technology</td>
<td>Planning for passengers’ journeys – modal perspectives</td>
</tr>
<tr>
<td>Rail Policy and Planning</td>
<td>Trains and behavioural response</td>
<td>Hubs 1</td>
<td>Rail: tackling the friction of distance and borders</td>
<td>Trains and trip timing behaviour</td>
<td>Rail: connecting economic and social activity</td>
</tr>
<tr>
<td>Global Trends Impacting Transport</td>
<td></td>
<td>Freight</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Freight and Logistics</td>
<td>Supply chain analysis</td>
<td>Autonomous vehicles</td>
<td>External costs analysis</td>
<td>Urban logistics</td>
<td>E-commerce logistics</td>
</tr>
<tr>
<td>Transport Economics, Finance and Appraisal</td>
<td>Ex-post evaluation</td>
<td>Appraisal strategies</td>
<td>Econometric analysis in transport economics</td>
<td>Aviation</td>
<td>Finance, delivery and innovation</td>
</tr>
<tr>
<td>Data</td>
<td>Air quality, weather and environment</td>
<td>Sustainable travel analytics</td>
<td>Data</td>
<td>Innovation in data collection and analysis</td>
<td></td>
</tr>
<tr>
<td>Transport Models</td>
<td>Big data</td>
<td>Analytics</td>
<td>Big model application</td>
<td>Agent-based modelling</td>
<td></td>
</tr>
<tr>
<td>Transport Models</td>
<td>Model applications</td>
<td>Big model application</td>
<td>Discrete choice and big model</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Young Researchers’ and Practitioners’ Forum</td>
<td>Sustainability</td>
<td>Autonomous vehicles</td>
<td>Public transport and data</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aviation</td>
<td></td>
<td></td>
<td>Aviation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intelligent Mobility - management and operations</td>
<td></td>
<td></td>
<td>Demand responsive transport</td>
<td>Mobility concepts</td>
<td></td>
</tr>
</tbody>
</table>

For full details of the presentations and times, please refer to the conference timetable.
<table>
<thead>
<tr>
<th>Themes</th>
<th>Thursday 10 October 2019</th>
<th>Friday 11 October 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Session 6 1400-1530</td>
<td>Session 8 0930-1100</td>
</tr>
<tr>
<td></td>
<td>Session 7 1600-1800</td>
<td>Session 9 1130-1300</td>
</tr>
<tr>
<td></td>
<td>Session 8 1400-1600</td>
<td>Session 10 1400-1600</td>
</tr>
<tr>
<td>System Dynamics</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Autonomous Vehicles</td>
<td>AV traffic management</td>
<td>Automated vehicles</td>
</tr>
<tr>
<td></td>
<td>AV traffic management</td>
<td>Discussion session</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Automated vehicles</td>
</tr>
<tr>
<td>Global Trends Impacting Transport</td>
<td>Climate and resilience</td>
<td>Aviation</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Automated vehicles</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Autonomous vehicles</td>
</tr>
<tr>
<td>Planning for Sustainable Land Use and Transport</td>
<td>Cycling</td>
<td>Uncertainty</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Discussion session</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Autonomous vehicles</td>
</tr>
<tr>
<td>Local Public Transport</td>
<td>Planning for passengers’ journeys – passengers’ perspectives</td>
<td>Planning on the big scale</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Cable cars</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Technical visit</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Go-ahead Ireland</td>
</tr>
<tr>
<td>Rail Policy and Planning</td>
<td>Rail cargo developments</td>
<td>Rail and perception</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Regulation and reform</td>
</tr>
<tr>
<td>Global Trends Impacting Transport</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Freight and Logistics</td>
<td>Skills in freight transport</td>
<td>Intermodal policy: discussion session</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Rail policies</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Modal shift policies</td>
</tr>
<tr>
<td>Transport Economics, Finance and Appraisal</td>
<td>Combined appraisal across planning and transport</td>
<td>Economy and land use</td>
</tr>
<tr>
<td></td>
<td></td>
<td>New components/techniques/tools 1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>New components/techniques/tools 2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Energy and emissions</td>
</tr>
<tr>
<td>Data</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mobile data</td>
<td>Survey</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Policy and data driven decisions</td>
</tr>
<tr>
<td>Transport Models</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Agent-based modelling</td>
<td>Agent-based modelling and big model applications</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Modelling leisure and simplification</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Car ownership</td>
</tr>
<tr>
<td></td>
<td>Model development</td>
<td>Assignment</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Microsimulation</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Specific modelling issues</td>
</tr>
<tr>
<td>Transport Models</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Workshop</td>
<td>Transport models</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Understanding travel patterns for routine journeys</td>
</tr>
<tr>
<td>Young Researchers’ and Practitioners’ Forum</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aviation</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Air and aviation</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inte ligent Mobility - management and operations</td>
<td>Safety</td>
<td>Mobility as a service (MaaS)</td>
</tr>
</tbody>
</table>

For full details of the presentations and times, please refer to the conference timetable.
Discover Dublin!

Dublin offers so many memorable experiences to visitors with an abundance of museums and galleries within easy walking distance of the conference venue, as are the two famous cathedrals of Dublin: Christ Church and St. Patrick’s. Dublin Castle itself holds many attractions, the Chester Beatty Library, the Garda Museum, the Chapel Royal and the State Apartments.

Chester Beatty Library: Free admission. Described by Lonely Planet as 'not just the best museum in Ireland but one of the best in Europe', the Chester Beatty is the pre-eminent Irish museum promoting the appreciation and understanding of world cultures with holdings of manuscripts, rare books, and other treasures from Europe, the Middle East, North Africa and Asia.

Garda Museum: The Garda Museum and Archives is an interesting exhibition about the history of An Garda Síochána and information on policing in Ireland before 1922.

Chapel Royal: Designed by Francis Johnston (1760–1829), the foremost architect working in Ireland in the early 19th century, and architect to the Board of Works, the chapel contains one of the finest Gothic revival interiors in Ireland.

State Apartments: these richly decorated rooms are used by the Irish government for official engagements including policy launches, hosting of State Visit ceremonial, and the inauguration of the President every seven years. The apartments and their collections form an accredited museum.

Information about visits to local landmarks will be made available to delegates.

Getting around in Dublin

Great news for ETC 2019! The National Transport Authority (NTA) will be providing all delegates with a TFI Leap Card covering their local travel for the three days of the conference. Don’t forget to download the Journey Planner App: www.transportforireland.ie/smartphone-apps-for-android-and-iphone-available-now/

Technical visits and social events

- Pre-conference drinks reception on Tuesday 08 October at Dublin City Council, sponsored by ITS Ireland 1915 – 2100 hrs
- Civic Reception on Wednesday 09 October at the historic Dublin City Hall hosted by Dublin City Council, 1900 – 2000 hrs (250 delegates)
- Conference Dinner Thursday 10 October at the Round Room, Mansion House Dublin with pre-dinner drinks sponsored by Aimsun
- Technical Visits, including:
  - The Dublin Port Tunnel
  - Irish Rail Control Centre
  - The LUAS tram/light rail system
  - Exciting special pre-conference visit to the Belfast Glider on 08 October, meeting at 1200 house. (£35/€40)
- Running Tours: Two early morning running tours will be held on Thursday and Friday of the conference with the option to choose from advanced or a more leisurely pace. These are a good way of keeping fit while seeing some of Dublin’s landmarks and getting to know fellow delegates.

Left: The 2018 running tour takes a well-earned refreshment stop
Right: Pool in Dublin’s Garden of Remembrance
The Association for European Transport

The Association for European Transport is currently comprised of around 200 corporate and individual members, based in over 35 countries. It was formed in 1998 to develop a network of transport professionals across Europe.

Members receive discounts on publications and on attendance fees for the European Transport Conference and, more particularly, they are able to shape the conference by becoming members of the Programme Committees and of the Association Council.

Membership is open to both individuals and organisations, with a sliding scale of membership fee based upon the size of the organisation.

Benefits of membership to our Association include:

- Discounted member rates at the European Transport Conference
- Facilities for publishing and disseminating research findings, and sharing practical experience
- Growing your network with members throughout Europe
- The opportunity to help shape future conferences by participating in programme committees
- The opportunity to participate in the running of the Association via the Board of Directors and the AET Council

To find out more about becoming a member of the Association for European Transport, please contact Sally Scarlett by email on sally.scarlett@aetransport.org

The Association General Assembly

The Association for European Transport will hold its General Assembly during the conference. The annual business of the Association will be conducted as well as the election of members to the AET Council. The General Assembly is open to all who are interested but only current members of the Association are eligible to vote at the meeting.

Programme Committees

The Programme Committees lie at the centre of the planning and delivery of ETC. They reflect the membership of the Association and cover a wide span of interests and professional experience. Opportunities exist to join a Programme Committee and there will be presentations during ETC.

However, Sally Scarlett is always happy to answer questions about their role and activities at: sally.scarlett@aetransport.org

The Programme Committees (and their chairs) in place for ETC 2019 are:

- Planning for Sustainable Land Use and Transport (Danielle Snellen, PBL, NL)
- Transport Models (Peter Davidson, Peter Davidson Consultancy, UK)
- Transport Economics, Finance and Appraisal (David Simmonds, David Simmonds Consultancy, UK)
- Intelligent Mobility - management and operations (Gav Jackman, Aimsun, UK)
- Freight and Logistics (Thierry Vanelslander, University of Antwerp, BE)
- Local Public Transport (Iain Macbriar, QV Associates, UK)
- Rail Planning and Policy (Mark van Hagen, NS, NL)
- Global Trends Impacting Transport (Jan Kiel, Panteia, NL)
- Data (Johnny Ojeil, Arup, UK)
- Young Researchers’ and Practitioners’ Forum (Ines Kawgan-Kagan, TU Berlin, DE)

Conference organisers - TfTP

Training for Transportation Professionals (TfTP) manages the European Transport Conference on behalf of the Association for European Transport.

Please direct all correspondence about the European Transport Conference to:

European Transport Conference,  
c/o Training for Transportation Professionals,  
Forester House, Doctors Lane, Henley-in-Arden,  
Warwickshire, B95 5AW.  
Telephone: +44 (0)1564 793852  
Website: www.tftp-training.co.uk

Conference management team

The conference is managed by representatives from the Association for European Transport and Training for Transportation Professionals.
Booking details

The Conference’s move to Dublin has provided a great opportunity to involve more colleagues from Ireland and to encourage first time attendees to become part of the ETC network.

To maximise networking opportunities offered by the event, we would encourage delegates to attend the whole conference. Therefore, an attractive package is available for the full three days of the conference. However, attendance on single days is also possible. The conference ‘Rover’ ticket also allows organisations to book for the full three days and send a different delegate on separate days.

Attendance fees

Everyone who attends the conference pays the appropriate attendance fee for one, two or three days. This includes speakers and Programme Committee members. Members of the Association receive discounts on their attendance fees according to their category of membership. In addition, ECTRI members benefit from the same discount as AET Organisation Members. A 50% discount will be available to attendees:

- From new member states of the European Union (those who joined in 2004, 2007 and 2013)
- Young professionals (under the age of 26 or with less than 5 years’ professional experience)
- New offer for 2019: Full Time Students only £100 / €118 plus VAT for three days

Attendance information

Venue and location
The conference will take place at:
The Printworks, Dublin Castle, Dame Street, Dublin 2, Dublin, Ireland.

Accommodation and travel
Delegates are responsible for their own travel plans and medical insurance. As Dublin is a prime location for business and pleasure, we recommend that ETC attendees book their travel and accommodation as early as possible to avoid disappointment. For help sourcing accommodation, please contact Sabrina Winter on: sabrina.winter@aetransport.org

Visa and entry requirements
Delegates who need a visa to attend the conference should ensure they apply early to the Irish Embassy in their own country as the processing of visas can take some time. The Association is able to write letters in support of visa applications but only for those who have booked and paid for their conference place. For more details please contact Sabrina Winter: sabrina.winter@aetransport.org

Satellite meetings
In recent years, a number of research consortia and other project groups have held their management or dissemination meetings during or adjoining the conference. This can prove to be a convenient time if a number of the group members already plan to attend the conference. If you would like to book a meeting room, please contact Sabrina Winter: sabrina.winter@aetransport.org

Sponsorship and exhibiting
There are opportunities to sponsor all or part of the conference such as the plenary sessions, themed seminars, the Conference Dinner, Welcome Reception, conference bags, mini guide, the timetable and conference badges. There will also be space for exhibition displays at reasonable rates. Please contact Sabrina Winter: sabrina.winter@aetransport.org

Many thanks to our confirmed sponsors and exhibitors
Aimsun: Bags and pre-dinner drinks and exhibition.
PTV: Timetable and exhibition.
Jacobs: Lanyards & Badges
ITS Ireland: Icebreaker Reception
Exhibitors: AECOM, Arup, Caliper, Citilabs, Doppelmayr, INRO, ioki, Jacobs, Nationwide Data Collection, Optibus, Peter Davidson Consultancy, Swiftly, Tracsis, the Transport Planning Society and the European Commission’s Joint Research Centre.

Conference language
The language of the conference is English and all presentations will be made in English. Delegates are advised that it is necessary to have a good standard of spoken English to take full advantage of the conference.

How to book your place
You can book your place for ETC 2019 online or download a booking form at: www.aetransport.org

*All fees shown are subject to 20% VAT

<table>
<thead>
<tr>
<th>AET Members</th>
<th>1 Day</th>
<th>2 Days</th>
<th>3 Days/ Rover Pass</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individual Member</td>
<td>£300</td>
<td>£588</td>
<td>£795</td>
</tr>
<tr>
<td>Organisation Member</td>
<td>£280</td>
<td>£575</td>
<td>£760</td>
</tr>
<tr>
<td>Non-Members</td>
<td>£340</td>
<td>£670</td>
<td>£930</td>
</tr>
</tbody>
</table>

*ECTRI members benefit from the same discount as AET organisational members

10% discount for 3 or more Rover tickets purchased by the same organisation

ECT is supported by:

@EuTransportConf
#etcdublin2019