



University of
Southampton
Faculty of Social Sciences

Impactful research *worldwide*

Faculty of Social Sciences



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Digitalising law *for global trade*



The current practice of international trade is unnecessarily paper-heavy. This makes international trade inefficient, costly and unsustainable. To be effective, electronic trade documents require legal recognition. Trade law was not well developed for this purpose.

Dr Liang Zhao's research has shaped and influenced the development of national and international law for recognising the legal effect of electronic trade documents. The International Chamber of Commerce estimated that digitalising trade documents could generate £25 billion in new economic growth by 2024 and free up £224 billion in efficiency savings.

In 2024, the United Nations Commission on International Trade (UNCITRAL) proposed a new Convention on negotiable cargo documents. Dr Zhao was invited to submit his expert opinions on the draft Convention. His major suggestions were considered and accepted for improving the provisions of the draft Convention. The United Nations General Assembly approved the Convention on Negotiable Cargo Documents in 2025. The new Convention establishes a uniform legal framework governing the negotiable cargo documents, aiming to facilitate trade finance, promote multimodal transport, and support the digitalization of global trade.

In 2022, the Law Commission published a consultation paper and called for responses to the draft Electronic Trade Documents Bill. Dr Zhao's submission to the Law Commission resulted in key modifications to relevant provisions in the Draft Bill that were subsequently adopted in the Electronic Trade Documents Act 2023. The Act is a vital development for the improvement of the efficiency and sustainability of international trade.

The Chinese Maritime Code 1993 (CMC) has no provisions on electronic transport documents. In 2024, Dr Zhao was invited by the Reform Committee to present his research, bringing his critical knowledge of English legal reform to debates in China. His recommendations for the amendments to the draft Amendment were considered by the Reform Committee, and some were accepted, modifying the relevant key articles as reflected in the new CMC 2025.

Dr Zhao's research has potential influence on digital trade practice. The digitalisation of trade cannot be achieved without the interoperability among different electronic trade systems. In the collaboration with Digital Container Shipping Association, Dr Zhao is working on a project of a legal framework for achieving legal interoperability between electronic trade document systems. The legal framework will enhance the interoperability and facilitate the digitalisation of global trade.

The adoption of Zhao's recommendations on trade document digitalisation substantially changed the detail of international and domestic law reform. It includes:

1. Improving the key provisions of the UN Convention on Negotiable Cargo Documents
2. Influencing UK's legislation: Electronic Trade Documents Act 2023
3. Shaping the provisions of the electronic documents in the Chinese Maritime Code 2025

Digitalising trade documents
could generate
£25 billion
in new economic
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and free up
£224 billion
in efficiency savings.

Dr Zhao's impact research is funded internally and externally by the grants, including:

- ESRC Impact Acceleration Account (IAA) 2023-2028
- Higher Education Innovation Funding (HEIF)
- Society of Legal Scholars Research Activities Fund
- University of Southampton Impact Fund
- Law School's Strategic Research Fund.

Tackling housing debt and eviction

Professor Lisa Whitehouse, Professor of Property Law, Policy and Practice, and Dr Tracey Varnava, formerly Research Fellow at Southampton Law School, drew on the experiences of those in debt and brought them together with key stakeholders in the housing possession process, to make recommendations to potentially prevent some households from losing their homes.

The research findings have already been presented to senior policymakers and MPs at a roundtable at Westminster and are being shared by independent charitable foundation abrdn Financial Fairness Trust who funded the report.



“It is vital that the voice of occupiers is put at the centre of proposals to improve the arrears and possession process and prevent the likelihood of people losing their homes. These voices need to be heard by those able to change things for the better.”

A potentially growing issue

Every year tens of thousands of households face the threat of losing their home due to rent or mortgage arrears. This has become even more prevalent with the COVID-19 pandemic and the cost-of-living crisis.

The impact this can have on the health and wellbeing of those involved, particularly children, can be significant as home is often associated with security, safety, community and wellbeing.

Despite this, little is known about the experience of occupiers of the arrears process, apart from the fact that a significant number do not participate in the arrears and repossession process or only do so when it is too late to save their home.

The Southampton research, led by Lisa, has gathered first-hand accounts from those with experience of rent or mortgage arrears. By putting this together with the views of key stakeholders in the housing possession process, the research has enabled the co-production of proposals to improve access to housing and debt advice and support.

Improving engagement and reducing evictions

The research is improving the lives of people in housing debt and under threat of eviction by identifying ways to improve meaningful communication between them and their housing provider.

It is also developing methods to raise awareness where people can access advice and support to help reduce the likelihood of court proceedings and eviction.

Lisa and Tracey carried out in-depth case studies in Southampton, Birmingham and Glasgow, to capture the views of people with lived experience of housing debt

and the threat of home loss, to better understand the extent to which they can access sources of help and advice. They also explored how they experience debt management systems and processes.

The opinions of those involved in the debt management process were also gathered to understand how they attempt to communicate with and respond to those in debt.

Future impact

The report produced proposals to improve engagement in the arrears and repossessions process. These include improving communication to encourage earlier engagement and attendance at court, addressing data and information deficits, ensuring fair communal service charges for social tenants and reforming the Universal Credit system.

Lisa said: “There are a lot of reasons why people don’t engage in the arrears and eviction process, but we have identified that communication and advice services provided by lenders and landlords could be improved to achieve earlier intervention and engagement that is critical for some people to stop the cycle of debt and anxiety.”

The team will be working with providers, particularly social housing providers to try and put these recommendations into place.

Climate displacement and the African Court

Contributing to a landmark advisory opinion



At a time when climate change is increasingly reshaping patterns of human mobility, new research from Southampton is helping to clarify how international law should respond to people displaced across borders by environmental and climate harm.

Dr Andrea Maria Pelliconi, Lecturer in Law at Southampton Law School and convenor of the ICON-S Interest Group on Climate Change & Migration, has recently submitted an Amicus Curiae brief to the African Court on Human and Peoples' Rights, co-authored with Lena Riemer (Central European University, Vienna) and Luca Scheid (Kammergericht, Berlin High Court). The submission will inform of the Court's forthcoming Advisory Opinion on states' obligations in the context of climate change, which follows the 2025 Advisory Opinions on climate change by the International Court of Justice and the Inter-American Court of Human Rights.

The Amicus brief focuses on the protection of individuals displaced across borders by climate change and examines how the existing legal framework of the African human rights system, as well as emerging practice of African states and regional and sub-regional instruments, should be interpreted and developed in light of human rights and climate law principles to address climate mobilities in the African context. The submission places particular emphasis on the principle of non-refoulement in cases where foreseeable climate harms threaten life and security, as well as emerging duties of cooperation, collective solidarity, and responsibility-sharing between states.

The submission builds on a wider body of collaborative research led and co-developed by Andrea and colleagues across institutions. This includes a series of international workshops bringing together academics, practitioners, and policymakers, including one held at the University of Southampton in June 2025, as well as a blog series exploring legal responses to climate displacement. Andrea has also contributed to book chapters and is lead editor of a forthcoming journal special issue dedicated to the topic.



“The research seeks to bridge the gap between academic analysis and legal practice.”



The work also builds on the contributions of Southampton Law School colleague Dr Dina Lupin, who organised a series of events convening an international network of academics, practitioners, and organisations involved in submitting Amicus Curiae briefs to the Court. This initiative has helped foster collaboration and exchange across contributors, strengthening the collective impact of these interventions and situating Southampton research as one of the leading hubs within transnational efforts to inform the Court's deliberations. Thanks to the Law School Strategic Fund, Dina and Andrea have also worked with PGR Ulvi Şahin who is producing a series of blogs and interviews with contributors to the Amicus process. These outputs amplify the perspectives of those directly engaged in the proceedings and have the potential to shape how judges approach the Advisory Opinion by foregrounding key legal arguments.

While climate change is increasingly recognised as a driver of displacement, there remains uncertainty about the scope of states' obligations toward affected individuals, particularly in cross-border contexts. By contributing directly to the advisory proceedings before the African Court, the research seeks to bridge the gap between academic analysis and legal practice. Advisory opinions from regional human rights courts can play a key role in shaping both domestic and international approaches, offering authoritative guidance on how existing legal principles should be applied in practice.

The Advisory Opinion is expected to influence not only legal developments within Africa but also broader global debates on climate change and human mobility, contributing to developing fair and sustainable approaches to climate-related displacement. As climate impacts intensify, ensuring that legal systems can respond effectively to displacement will remain a critical challenge. This work positions Southampton at the forefront of that conversation, contributing to efforts to shape more equitable and coordinated responses at the international level.

A framework for evaluating and monitoring equity in maternal health policies:

The inequities in maternal policy and care tracking (IMPACT) framework



“This collaboration taught us that evidence alone doesn’t create change, strong relationships and community inclusion do. Co-designing the IMPACT Framework proved that academic rigour and lived experience must work hand in hand if equity is to move from theory to practice. It’s a lesson that continues to guide how we collaborate to advance equity across maternity care.”

Julie Boddy, Joint CEO of White Ribbon Alliance UK

Persistent inequities in UK maternal health

Access to high-quality maternity care is a fundamental right, yet recent UK data shows rising maternal deaths and persistent inequities in maternal and newborn health. Disparities are especially pronounced among Black, Brown, and socio-economically disadvantaged communities, who face poorer access and outcomes. Addressing these inequities is both a public health priority and a legal obligation under the Equality Act 2010, which mandates inclusive, equitable, and non-discriminatory care across nine protected characteristics.

Evaluating equity in maternal health policy

In 2023, researchers at the University of Southampton conducted a rapid review of UK maternal and neonatal policy documents (2016–2022) to assess equity and inclusion. Ten policies were analysed across eight criteria. While most acknowledged disparities, few offered specific, costed responses. Only 40% recommended outreach services for marginalised groups, and just 30% allocated ringfenced funding. Although 70% aimed to improve access, only 20% monitored it for disadvantaged populations. Equity discussions were largely limited to ethnicity and deprivation, with other protected characteristics underrepresented.

The IMPACT framework – a tool for change

The work gained attention from advocacy and service user groups, prompting consensus on the need for a more nuanced, co-designed evaluation tool tailored to UK maternal health. In 2024, the University of Southampton and White Ribbon Alliance UK collaborated with stakeholders through workshops, surveys, and interviews to develop a revised framework.

The resulting Inequities in Maternity Policy and Care Tracking (IMPACT) framework is a practical tool that helps maternity systems, policymakers, and NGOs identify and act on the structural inequalities that drive harm. Co-developed by White Ribbon Alliance UK and the University of Southampton, the framework turns principles of equity into real-world evaluation and accountability.

Application and utilisation of the IMPACT framework

The NHS Race and Health Observatory (RHO) invited the University of Southampton team to support its Learning and Action Networks (LANs) in racially de-biasing maternal health policies using the IMPACT framework. The resulting tools were presented at the All-Party Parliamentary Group on Maternity in November 2025. As a result of this collaboration, the White Ribbon Alliance UK were invited by the RHO to join a successful consortium bid for NHS England’s Perinatal Equity and Anti-Discrimination Programme (PEADP), running from late 2025 to 2028. The programme supports NHS Trusts in tackling racism and inequity using data and lived experience. A simplified IMPACT tool will be distributed nationally, with training delivered to 150 Trusts. Co-branded resources will embed IMPACT into training and evaluation, with potential for long-term national integration.

Additional work is also ongoing in collaboration with the charity Neurodivergent Births to develop tools for evaluation and planning of services from a neurodivergent perspective. Additional work with NHS Integrated Care Boards is exploring other opportunities to embed the framework within planning processes, as well as developing tools to support access to maternal health care for non-serving partners of military personnel.

Funding

Funding for this work has been received from the ESRC Impact Acceleration Account Mission Grant, the ESRC Impact Acceleration Account, the Higher Education Innovation Fund from the University of Southampton, and the NHS Race and Health Observatory.

Building inclusive pension protection and financial resilience

Financial resilience and security are important for individuals across the lifecycle, and especially in later life, where the accumulation of advantages or disadvantages is most evident.

The project on ‘Promoting Inclusivity in pension protection and other forms of saving among minority ethnic communities in the UK’ is a 3-year project funded by the Economic and Social Research Council’s call on Inclusive Ageing, and aims at better understanding the level and nature of inequalities in financial security between different minority ethnic communities. Working with project partners such as the Southampton City Council, the Department of Work and Pensions, Pensions Policy Institute, AgeUK and People’s Pension, the project aims at making recommendations to policymakers about building a more inclusive pension system in the UK.

The project is employing a mix of methodologies, including statistical analysis of nationally representative data in the UK, photovoice interviews and focus groups with individuals from minority ethnic communities in Southampton. The statistical analysis shows that individuals from Pakistani and Bangladeshi communities, and especially women among them, fare worse than individuals from other ethnic communities in terms of being employed in the first place, but also benefiting from workplace or personal pensions, and expecting to use savings in retirement. The qualitative data collection has shone a light on individuals’ different experiences of financial planning for later life, and the important role of family support networks as the quote below reflects:

“I think the culture is that the kids help you and you don’t really need to deal with it, the kids will get you by and that’s what they’re there for.”

Female, 45-54, Asian/ Asian British



The project team, led by Professor Athina Vlachantoni from the Centre for Research on Ageing and the ESRC Centre for Population Change – Connecting Generations Programme, and including Professor Yuanyuan Yin (Winchester School of Art), Dr Spela Mocnik (Centre for Research on Ageing) and Dr Saddaf Naaz Akhtar (now at the University of Liverpool) have also held Photograph Exhibitions and are engaging with primary and secondary schools in Southampton to co-design a boardgame and deliver training on financial resilience, in line with the schools’ curriculum and pupil empowerment programmes.



This training is already making a positive impact on the pupils’ financial knowledge and resilience as this quote reflects:

“It really made you think about how complicated budgeting really will get. And it kind of gives you a reality check in a way. I know a girl that didn’t really know what pension was. And then after, when she went home, she told me that she like researched about it.”

Secondary school pupil, Year 11



Beyond boundaries

The collaboration telling new stories about communities on the margins

Dr Laura Harris and Dr Sami Everett are interested in liminality: the state of being at the threshold or in-between. Liminal Waterway Countercultures brings together multiple partners across five countries, assembling researchers from several institutions (including Southampton and the University of Birkbeck, in the UK), artists, museums and an environmental NGO, for a series of thematically connected projects.

Each centres around communities living at the threshold between water and land, including the island of Culatra on Portugal's Ria Formosa; port-side urban high-rises in Marseille, France; and Liverpool's Merseyside docks.

"In all of these places, there's a story about intersecting crises," Sami explained. "There's the narrative of impending ecological disaster, and there's the increasing rigidity around questions of migration and nationalism across Europe. These are communities strongly impacted

by human mobility and cultural diversification." Across the project's multiple sites and strands, researchers are using a range of methods – audio-visual, literary, spatial and anthropological – to retrieve the submerged stories which are often drowned out by crisis narratives.

Disciplines in dialogue

Sami's work on cultural encounters led to the co-creation of the Liminal Waterways project with University of Birkbeck sociologist Dr Ben Gidley. Sami's ongoing research for the project centres on the Marseille site, where he is collaborating with filmmaking collective Les Écrans du Large to look at how maritime links between Marseille and the Maghreb have shaped migration and cultural exchange with a focus on Judeo-Arabic musics.

Based in the Department of Sociology, Laura has a background in the sociology of arts and culture: "I was trained in visual arts, but I found in sociology a disciplinary home for the critical approach I wanted to take, where I was more interested in what happens inside the gallery between people than in what was on the walls."

Laura's focus on "developing a methodology for how sociologists and artists can work alongside each other" caught Sami's attention when he heard her present at events for the Anniversary Fellows cohort. "She was a natural fit for the Liminal Waters project in that it's bringing the arts, ecology, and social sciences together," he said.

Visual partnership

Laura's theoretical thinking helps to connect the diverse strands of Liminal Waterways, and the various artists working across its sites. "I did a lot of thinking about how filmmaking and water are conceptually related to one another. At one of the team meetings in Marseille last year, I presented to the team on how we can think about filmmaking not only as a research practice, but one that is particularly well suited to water. We think about films as flowing - a lot of great moving image artists of the late 20th and 21st centuries have a watery component to their work."

She helped support the project's artists and other researchers with a visual practice, including Danielle Shaw from the University of Birkbeck, who leads on participatory photography work (which enables communities share their perspectives through taking photographs) at the Merseyside site.

Challenging narratives

An upcoming exhibition of these photographs at the Museum of Liverpool is just one of many outputs from Liminal Waterways. There will also be a major project-wide 2027 exhibition in Rijeka, Croatia, showcasing audiovisual creations, an interactive digital map and an exhibition catalogue with reflections from across all of the project sites.

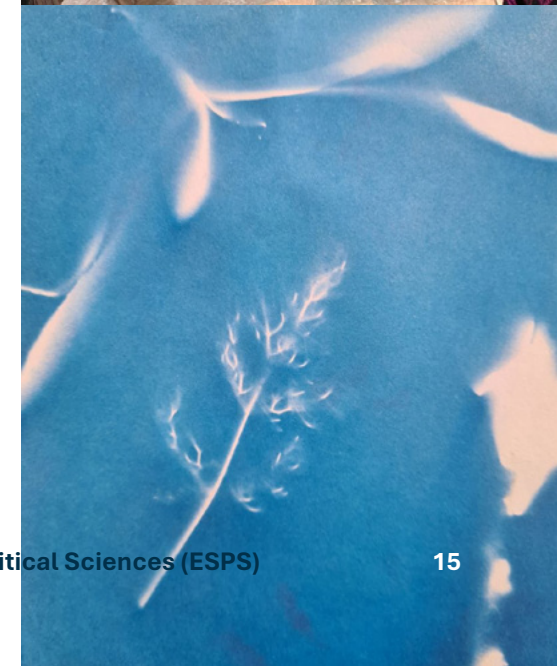
The hope, said Sami, is that the project's outputs can help "change the tenor of crisis language" around water and migration. "It sounds quite vague, but in fact this language permeates a lot, from policy through to academic literature." There is another narrative which can challenge this, the researchers argue – one of 'creative alternative forms of life' formed by the meeting of difference at society's margins. "Studying these places, you gain a perspective on people working together across language and cultural barriers, and that though it's not always easy, there's much more fluidity and much more comradeship than we often give credence to."

Space to explore

Another dimension of the project's impact, said Sami, is the way it has shaped the researchers' practice and created models for collaboration by bringing together civic society, artistic and social science components. "It's intersectoral as well as interdisciplinary."

Liminal Waterway Countercultures is funded by the Arts and Humanities Research Council under the HERA/CHANSE scheme (Humanities in the European Research Area/ Collaboration of Humanities and Social Sciences in Europe).

You can find out more about the project at <https://liminalwater.uni-graz.at/de>



Promoting inclusion in schools

through students' voices



A major challenge facing education systems internationally is to find effective ways of responding to student diversity in order to develop inclusive schools. Professor Kiki Messiou's earlier research, carried out collaboratively in five European countries, involved primary and secondary schools. It demonstrated how children's voices were a significant means of ensuring that all students participate in schools and can assist in the development of inclusive thinking and practices.

Using these understandings, Kiki established the School Voices Research-Practice Partnership involving ten primary schools in Southampton and Hampshire. Working collaboratively with schools and with the support of university researchers (Dr Jay de los Reyes and Dr Vivienne Kachollom Rwang) and PhD students led to the following impacts:

- Enhanced teachers' capacity to use various methods to engage with students' voices and have dialogues with them.
- Better understandings of student differences and a refinement of practices in ways that enable all students to participate and achieve in lessons.
- Reformed school cultures, becoming more inclusive through meaningful student involvement.
- Developments in students' confidence and research skills. So far, around 140 students from schools were supported to become researchers, using a range of participatory methods, such as visual images, sticky notes, observations, interviews and learning walks. They then used these methods to collect and analyse data from their peers.
- Informed policies and practices more widely. Each of the participating schools' policies have been informed by these ideas, which have also become part of their school improvement plans. Messiou's work has also informed European policy developments through the European Agency of Special Needs and Inclusive



Education. Through the World Educational Research Association International Network "Student Voice for Promoting Equity and Inclusion in Schools" her approaches have been adopted by researchers in other countries, who have supported schools in bringing about improvements in their practices.

Key moments:

During an event at the University of Southampton, students from various schools in the partnership collaborated with student-researchers from different schools in co-producing Student Researchers Guides. These will be used when preparing other student researchers in the future.

These developments were reported in the local press, highlighting the impact that student researchers have had on their school.

“Becoming a student-researcher made me more confident and brave speaking to people.”

“I learnt that not just the teacher can contribute or do everything. We pupils have that major role too.”





Mrs Newman leading an activity session

Effective mentorship for teacher retention

“The research enabled me to get a wider view on ECT standards within the local county, including helpful and effective discussions on what productive (and unproductive) ECT mentorship looks like across subjects.”

ECT year 1

Evidence-based, collaboratively designed pathways to research impact

Research led by Dr Achala Gupta and Mrs Rachele Newman has generated ways to strengthen mentorship for early career teachers (ECTs) in school settings, thus addressing the urgent educational challenge of teacher retention.

This work demonstrates how research-informed collaboration can drive change in professional culture, policy enactment, and practice, aligning with Southampton's commitment to impact-oriented scholarship linking research, practice, and policy.

Dr Gupta and Mrs Newman (the Research Team) carried out a research project that investigated how school actors enacted the 2019 Department for Education's Early Career Framework (ECF). Using qualitative data from leaders and ECT programme coordinators, mentors, and ECTs across four school types (local-authority, faith-based, multi-academy trust and independent) in the south of England, the study highlighted the importance of school context in shaping the relative success of policy enactment. As part of this project, the Research Team held focus groups with stakeholders from partner schools, where participants identified practical priorities for successfully implementing the mentorship provision.

Through public engagement and knowledge exchange, the research team designed a Toolkit introducing the Culture, Conditions, and Curation (3Cs) conceptual model for school-based mentorship. The Toolkit launch event was attended by leaders from 15 schools across Hampshire and neighbouring counties. Participants applied the Toolkit to their local contexts to produce effective actions (e.g., one school leader used it to train 30 mentors in schools associated with their Trust). The Toolkit was also shared at practitioner-focused conferences hosted by the Southampton Education Forum and the National Association of School-Based Teacher Trainers.

The launch event attendees joined the Mentorship Network for ECT Coordinators (co-founded by the Team). This curated community of practice Network, with more than 30 members, holds meetings termly, focusing on providing peer support and shared problem-solving around mentorship practice, thus directly impacting participants' approaches, resulting in improved ECT mentorship offers across schools.

Building on this momentum, the research team co-developed a professional development (CPD) package with four school leaders from the Network. Titled 'Creating an Effective Environment for Teacher Professional Learning', the package embeds evidence-informed principles from the Toolkit and responds to diverse school contexts, thus systematically supporting school-level modifications to existing mentorship provision, and in doing so, contributing to improving teacher retention.

The project has directly informed national policy discussions through evidence submitted in response to the UK and Welsh parliamentary calls on teacher recruitment and retention. These submissions, cited in policy reports, have contributed to the framing of evidence around mentorship as a retention mechanism, extending the project's reach from local practice to national policy discourse. Building on this, the research team, in collaboration with some Network members, have recently published a Policy Brief.

“The research enabled me to get a wider view on ECT standards within the local county, including helpful and effective discussions on what productive (and unproductive) ECT mentorship looks like across subjects.” - An ECT.

“I think for me one of the major benefits was hearing the feedback from the ECTs about what they valued and wanted...It cemented as well how crucial the mentor-mentee relationship is for ECT progress and how important it is that ECTs value mentor meetings and see them as purposeful rather than tick-box activities.” - An ECT mentor



A still from a video developed as part of the CPD package

in collaboration between the University of Southampton and ECT coordinators from



Dr Gupta, with attendees, listening to a group of participants during the launch event

“I am in the ‘review’ stage of our offering at the moment...my ‘plan’ phase is really going to focus on the toolkit and ensuring that the messaging of what ECTs are actually receiving and what they want is central to what we provide going forward.”

A School Leader

Funding sources and relevant outputs:

- 2023-24 Small Grant by The Society for Educational Studies (Research Project)
- 2023-24 University of Southampton Impact Fund (Toolkit)
- 2024-25 Higher Education Innovation Funding award (CPD package)
- 2025-26 University of Southampton Impact Fund (Policy Brief)

A resourced provision toolkit

The inclusion of students with special educational needs and/or disabilities (SEND) in mainstream schools is a priority in the English education system. Achieving meaningful inclusion requires removing barriers to learning and participation for all students.



Specialist facilities, such as resourced provision (RP) and specialist units, recently renamed as 'inclusion bases', are often used to provide targeted support in dedicated spaces within mainstream schools. While these facilities provide valuable personalised assistance, they can also unintentionally limit opportunities for students with SEND to learn and interact alongside their mainstream peers.

Understanding specialist facilities as inclusive services

Dr Strogilos' research has contributed to the understanding of specialist facilities either as a 'safe space' for individual and small groups support, or as an 'inclusive service' for the whole school, where staff in the specialist facilities supports mainstream educators to include students with SEND in the mainstream curriculum. This research, conducted with school staff, students with SEND and their parents in three schools in Hampshire, explored how specialist facilities can be transformed into inclusive services. It led to the co-creation of a RP toolkit that supports schools in this process. The toolkit sets out eight key areas for development, each accompanied by inclusive practices and case study examples to help schools reflect on and strengthen their provision.

Shaping the future of specialist facilities

This work has already influenced both school practice and national policy. Many Local Authorities and multi-academy trusts have circulated the toolkit across their schools, providing highly positive feedback on its practical value. The research has also attracted national attention from the Department for Education (DfE), prominent SEND organisations, commercial partners and influential parent-led groups. The toolkit is cited in the 2026 DfE's 'SEN units and resourced provision Insights from expert interviews' report as a resource that provides guidance and examples of effective practice to help inform the future development of a national operating framework for SEND units and resourced provision.

Dr Strogilos has been invited to present his research findings to DfE policymakers and analysts, as well as at national practice- and policy-focused events including the Westminster Education Forum and the

Inclusive Provision for Students with Special Educational Needs and/or Disabilities

A Resourced Provision Toolkit



Institute of Government & Public Policy. He has also been asked to contribute to workshops organised by major organisations such as nasen and Whole School SEND. Most notably, he has been appointed to the 'Specialist Units and Resourced Provision Guidance Steering Group', coordinated by nasen and the Council for Disabled Children, with oversight from the DfE. This group will play a central role in shaping upcoming national policy and guidance on specialist facilities in mainstream schools.

Dr Strogilos continues to work closely with policymakers and key stakeholders to support schools in removing barriers to learning and participation, ensuring that all students can experience meaningful inclusion within mainstream education.



Improving national statistics

Since it was established in 2009, the Centre for Population Change (CPC), funded by the UKRI/ESRC, has become a leading centre for demographic research and statistical innovation. Its work develops data-driven methods to estimate and forecast UK population dynamics, shaping policy and planning at local and national levels.

CPC's Modelling Team, a collaboration between Professors Erengul Dodd, Peter Smith and Dr Jason Hilton (Southampton), with Professors Jon Forster (Warwick) and Jakub Bijak (Oxford) has focused on mortality modelling, analysing life expectancy trends, projecting future mortality and measuring uncertainty. Conducted at the University of Southampton, this research has advanced demographic modelling and directly shaped Office for National Statistics (ONS) practice, underpinning National Population Projections (NPPs) which are used for planning by policymakers, as well as by stakeholders working in social security, healthcare, and insurance.

The work was initiated through an ONS-commissioned project to improve life table estimation methodology. The research team developed novel statistical methods to model mortality across all life stages using linked approaches that capture uncertainty at older ages within a simplified Bayesian framework. These innovations were employed by the ONS to produce the English Life Table 17 which estimates the average number of years people will live at any given age. English Life Tables have a long history dating back to the 19th century.



The team then developed a new mortality projection model using Generalised Additive Models (GAMs) to ensure smoothness across age, cohort and time, and parametric models for older ages with sparse data. This hybrid approach also integrates expert opinion on long-term mortality improvements, producing more reliable projections. The ONS employed this model in the 2022-based NPPs, published in January 2025. This marks a major shift in national statistical practice, replacing the previous ONS approach with a more time and cost-effective, rigorous, transparent, credible and reproducible model.

Because of this, the methodology benefits multiple public sector bodies that rely on accurate demographic projections. The Government Actuary's Department uses ONS projections for pension and fiscal modelling, and the Department for Work and Pensions relies on them for the UK's pension and social security systems. The NPPs are also used in subnational population projections, which guide planning across English local authorities and health geographies in decisions related to housing, education, labour markets, and healthcare provision. The Office for Budget Responsibility also draws on NPPs to inform fiscal and economic forecasts, including assessments of the working-age population and long-term fiscal sustainability. The research team are also using their expertise in Bayesian statistical modelling and demographic rate estimation to advise the ONS.

Rigorous statistical modelling helps turn uncertainty into understanding. Our collaborative work with the ONS has shown the importance of continuously developing how we measure and estimate populations. Robust yet flexible methodologies help the country plan responsibly and confidently for changing population needs and our ageing society.

Professor Erengul Dodd, University of Southampton

Key impact moments

- The team developed a computationally efficient mortality estimation and projection methodologies that smoothly integrate GAMs with parametric models, incorporate uncertainty and expert opinion, and provide robust estimates across all ages, including older ages where data are sparse or non-existent.
- The research into estimating mortality has been used by the Office for National Statistics in developing the decennial life tables, the English Life Table 17.
- The ONS integrated the team's mortality projection model into the 2022-based National Population Projections, marking a major shift in national statistical practice.
- The NPPs inform government-wide planning, including pension, fiscal, and local population decisions across the Department for Work and Pensions, the Government Actuary's Department, the Office for Budget Responsibility, and local authorities.





New method boosts COVID-19 contact-tracing in Thailand

A model for global outbreak control

A team of researchers, led by Dankmar Böhning and supported by Rattana Lerdsuwansri and Patarawan Sangnawakij from Thammasat University, has developed a powerful new method to measure the effectiveness of contact-tracing efforts during the COVID-19 pandemic in Thailand.

This breakthrough helps health authorities understand how well they are tracking the virus's spread and where they might need to improve.

Using a special technique called “capture-recapture,” the team found that Thailand’s contact-tracing managed to reach about 83% of possible cases, with an accuracy range between 74% and 93%. This means that most cases were successfully tracked, but there were still some missed—an important insight for health officials working to strengthen contact-tracing efforts. Better tracing helps to quickly identify and contain outbreaks, which is especially crucial at the start of an epidemic when timely action can prevent wider spread.

The impact of this research goes far beyond Thailand. This method can be used in other countries, particularly in the early stages of an outbreak when quick, accurate contact-tracing is essential. By showing how to measure and improve tracing efforts, this method gives health teams a powerful tool to limit virus transmission and keep communities safer.

Since its success with COVID-19 in Thailand, the method has also been used to assess contact-tracing during an Ebola outbreak in the Democratic Republic of Congo, proving it can adapt to different types of infectious diseases. With its flexibility and effectiveness, this approach is setting a new standard for managing epidemics.

Thailand’s contact-tracing managed to reach about

83%
of possible cases

To build on these findings, Thailand has formed a working group with experts from across the country and from Germany, the Netherlands, and Italy. They meet regularly to improve and update the method. The World Health Organization has also taken an interest, aiming to add this approach to their toolkit for managing infectious disease outbreaks worldwide.

Through this research, Thailand is not only enhancing its own health response but also offering a valuable tool to the global community—a method that could improve contact-tracing everywhere, making epidemic control faster, more accurate, and ultimately saving lives.



Disorder is *good*

Taming disorder in self-assembled materials with topology

Whether it's the intricate patterns in the Alhambra or in the book of Kells or the silicone processor in a smart phone, regularity features in human constructs. Achieving regularity on the nanoscale (comparable to the diameter of DNA's double helix) is too costly or impossible with current technology, which is a major issue.

This is a serious problem because the ability to structure materials on the nanoscale offers the exciting prospect of giving them incredible mechanical or optical properties, such as the passive cooling films developed at the University of Colorado which lower the temperature by 10°C.

Order is not the only route to success. For instance, while butterfly wings do not have perfectly ordered proteins, their optical properties produce stunning, vivid colours. The key feature here is the subtle balance between order and disorder. Without knowing how to look at it, it's difficult to detect the underlying pattern in the variability. This structured disorder streamlines fabrication without sacrificing material reliability. This phenomenon is called Disorder is Good (DiG).

To apply this approach to artificial systems, researchers first need to characterise disorder and identify any structures that may be present. Such a feat is now possible using a new mathematical tool: topological data analysis. This is based on topology, a part of mathematics devoted to the study of shape. Topology has been used, for example, to characterise the shape of human lungs and bones allowing a deeper understanding of serious diseases. So far, the primary use of topological methods in data analysis has been visualisation and classification.

The research team, which includes [Professor Jacek Brodzki](#), [Professor Malgosia Kaczmarek](#), and [Professor Giampaolo D'Alessandro](#), has combined innovative experiments with breakthrough methods from topological data analysis to quantify emerging structure in disordered nano-assemblies and classify their response to light. The aim is to design a new generation of controllable nanosystems at a fraction of the cost of the current methods.

In this project, the research team positioned topology as a key component of materials design. To achieve this, they created a new topological measure of the degree of disorder. By doing so, they can give a mathematical answer to the question "is my room more disordered than yours?" They demonstrated the power of this approach by applying it to surfaces with nanoscale structures and have shown that they can pick up nearly ordered structures that may not be perfect but are 'good enough' to give the required optical response.

As a result, the research team created a new technical paradigm: 'fabrication through controlled disorder.' Their findings show that, indeed, Disorder is Good.

The results demonstrate the robustness, and the universality, of the topological tools and metrics the research team developed. They can be applied to quantify different complex and structured materials from nanopillars on a glass surface, to patterns in liquid crystals, to any image or three-dimensional data set.

The original question was "Is disorder good?" Researchers have taken the first step in answering this question, and they can now say how disordered disorder is. This has already been extremely useful in identifying disordered optical surfaces that have an optical response like that of perfectly ordered ones.

This project is just the beginning. This research can be applied a step further to classify different types of disorder in other ways. For example, a room can be disordered because there is paper scattered around or because its inhabitant is not aware of the existence of a laundry basket. Can researchers link different disorders to different physical or engineering properties? For example, can they say that Type A gives increased tensile strength, while Type B has more vibrant colours? It is true that not all disorder is good, but perfect order is not the answer either.

The research team has associated the optical properties with the nature of the disorder by bringing together:

Pure mathematics to identify structure in disorder

Numerical modelling to predict optical response

Experimental physics to build and measure structured surfaces



Shaping employment policy *from the heart of government*



Funded by the ESRC, Dr Jane Parry is the UK Parliament's first Thematic Research Lead for business, economics, and trade. She spends three days a week embedded in Westminster, working with the House of Commons library Economic Policy and Statistics team, and alongside the Parliamentary Office for Science and Technology. A sociologist of work, she has brought her research expertise directly into Parliament during a period of major change in employment and job quality policy. This has ensured that academic evidence played a central role in shaping national debates and decisions.

Improving landmark reform in workers' rights

Arriving in parliament in September 2024 proved well timed. The Government introduced its wide-ranging Employment Rights Bill the following month, described as 'the biggest shake-up in workers' rights for a generation.'

Jane co-authored the first parliamentary briefing on the Bill and supported select committee inquiries into employment rights, guiding committees to relevant academic evidence and expert witnesses. She also worked with the Public Bill Committee on amendments and submitted evidence on her team's Acas-commissioned research on flexible working, one of the Bill's core themes. In addition, she led a parliamentary paper on 'good work' and the Employment Rights Bill.

The Bill received Royal Assent in December 2025 and is now being implemented in phases.

Making the evidence on remote and hybrid working count

In January 2025, the House of Lords launched a special inquiry into homeworking in the UK, aiming to produce the largest-ever consolidation of evidence on the subject. This inquiry aligned with Jane's research on hybrid and remote working.

Jane worked closely with the committee to ensure its findings reached beyond parliament, publishing a Parliamentary Insight piece to inform policymakers and an article for The Conversation to make the evidence

clear, accessible, and usable for employers. Her research was widely cited in the committee's final report, which highlighted the diversity of hybrid working models, emphasised equalities benefits for parents and disabled workers, and challenged persistent myths about productivity. Ensuring these messages are widely understood is vital to creating fairer access to good-quality hybrid work in the future. Jane also worked with parliamentary HR professionals to support the use of this evidence in refining internal hybrid working policy.

Building lasting strategies

Jane's work with select committees has sparked a new research project examining how academic evidence is used across Commons and Lords committees in Westminster and in the devolved legislatures, the barriers committees face in accessing the evidence, and the role of embedded academic advisors (SpAds). She aims to use these findings to help parliament strengthen committee processes and learning resources around academic evidence, and is now collaborating with devolved legislatures to share knowledge across parliaments.

Above all, the secondment has given Jane deep insight into how parliamentary scrutiny works and how researchers can build lasting impact strategies that align with policymakers' needs. She has developed these ideas with Tiffany Withers at Public Policy Southampton through a new Parliamentary Impact Programme that supports the next generation of researchers in engaging confidently and effectively with public policy.

“The biggest
shake-up in
workers’
rights for a
generation.”





Clienting in major projects

The University of Southampton Business School (USBS) recently welcomed distinguished delegates from both industry and academia to launch a much-anticipated and timely report titled **Clienting in Major Projects. Beyond Outputs, Towards Outcomes.**

The report marks a significant milestone in a project born from a collaborative effort between USBS academics, Prof Jeni Giambona and Dr Nicholas Dacre, who built on Emma-Jane Houghton FICE's initial idea on how to client differently, and continued to examine how we can client better to ensure a more connected approach to how we deliver major projects.

In major projects, success hinges not just on delivery but on clarity of purpose and outcomes. Too often, programmes default to tracking activities rather than the benefits they are meant to deliver, causing value to fade under pressure. Effective client organisations counter this by continuously reviewing outcomes and aligning procurement strategies to reward progress against those outcomes, not just ticking boxes. This shift discourages adversarial behaviours like lowest-cost tendering and fosters collaboration.

This report presents the Major Projects Clienting Framework (MPCF) designed to help client organisations shift from purchasers of goods and services to orchestrators of delivery ecosystems. The framework is based on research conducted by Prof Jeni Giambona and Dr Nicholas Dacre, USBS, and it incorporates practitioner surveys, senior professional interviews and a workshop with industry leaders.

How can we client better through MPCF?

The report presents practical ways for client organisations to move away from procuring outputs and start stewarding outcomes in major programmes. The proposed framework includes the following three main insights.

1. Client organisations should aim to develop all six dimensions (see Figure 1) simultaneously instead of adopting linear capability building. As an integrated system, the MPCF operates through constant interdependence, meaning that progress in one dimension can either enhance or limit advancement in others.



“Clients do not arrive with all the answers. The complexity, interdependencies and uncertainties inherent in major projects mean that solutions must be co-created across delivery ecosystems. The client’s role is therefore not to specify every detail or control every decision, but to orchestrate the collaborative processes through which answers emerge from suppliers, users, regulators and technical experts. This orchestrating role recognises that effective clienting is about convening capability, not commanding it.”

Emma-Jane Houghton FICE, AWE

2. The client role should no longer be seen merely as that of a purchaser. Instead, it must evolve into that of a strategic orchestrator, someone who manages a diverse network of stakeholders. This expanded role goes beyond technical expertise, requiring capabilities in ecosystem coordination and outcome stewardship.
3. Client organisations are to reconsider how they define success, shape decision-making processes and reward performance across the delivery ecosystem. For sustainable transformation to take root, culture and procedures must change. Organisations need to embrace outcomes, clearly defined and linked to agreed requirements, instead of focusing purely on outputs.

The presentation of the framework was followed by a panel discussion chaired by Hannah Vickers, featuring thoughtful contributions from Martin Buck, Emma-Jane Houghton FICE, Associate Professor Nicholas Dacre and Professor Jeni Giambona. The engaging conversation and insightful comments that followed reaffirmed that the way we approach clienting in major projects is a topic of great importance, and that a shift towards orchestration is both needed and welcomed.

“In today’s world, the challenges we face require a departure from traditional approaches to embrace systems methods that provide holistic solutions to systemic challenges. Clients are in an ideal position to orchestrate ecosystems, providing the leadership that convenes all stakeholder groups involved in infrastructure major projects. Our report presents an innovative framework accompanied by recommendations, diagnostic questions, and illustrative vignettes that demonstrate how orchestration can work in practice.”

Professor Jeni Giambona, Professor of Systems Thinking and Associate Dean (Knowledge Exchange and Enterprise), USBS





3rd Operations and Supply Chain Management (OSCM) Symposium on Blockchain Research:

Artificial intelligence, blockchain and *sustainable supply chains*



The University of Southampton Business School successfully hosted the 3rd Operations and Supply Chain Management (OSCM) Symposium on Blockchain Research on 1–2 September 2025. The symposium was co-chaired by Dr Yu Gong and Professor Jeni Giambona, Associate Dean of Knowledge Exchange and Enterprise, under the leadership of the USBS Dean, Professor Laura Costanzo.

This year's symposium focused on the theme "Artificial Intelligence, Blockchain, and Sustainable Supply Chain Management", drawing together leading scholars and practitioners to explore the future of operations and supply chain management.

The event featured distinguished keynote addresses from Professor Suresh Sethi, Professor Yu Xiong, Professor Glenn Parry, Professor Steve New, and Professor Maneesh Kumar. A series of panel discussions (with contributions from Professor Li Zhou, Professor Bing Xu, Professor Suresh Sethi, Professor Byung-Gak Son, Professor Martin Kunc, and Dr Ting Zhang) and paper sessions (with presentations from Dr Alex Zarifis, Dr Shuangqi Yan, Liukai Wang, Hang Yu, and Jingyang Yan) further enriched the academic exchange.

The symposium also benefited from the contributions of dedicated session chairs, including Professor Sabu Padmadas, Professor Mario Brito, Dr Behzad Hezarkhani, Dr Soroosh Saghir, Dr Fanzhuo Zeng, and Dr Xiaoyan (Kelly) Xu.

A special acknowledgement is extended to VeChain, represented by Jay Zhang and Chen Zhang, whose generous sponsorship made the event possible. Participants also had the opportunity to learn about VeChain's pioneering blockchain and sustainability solutions.



Reflecting on the event, Dr Gong said:

"It has been a privilege to co-chair this symposium with Professor Jeni Giambona. The conference offered a great opportunity for industry professionals, policymakers and academics to come together, exploring actionable strategies that translate theoretical insights into practical solutions for a more sustainable future.

We are deeply grateful to all our speakers, panellists, session chairs, participants, and the organising team, especially Anna Seitanidou, for their commitment and contributions in making this symposium a success.

The OSCM Symposium series continues to provide a platform for advancing research and fostering collaboration in the field. The next symposium will be hosted by the University of Sheffield, chaired by Professor Francisco Saldanha da Gama and Dr Jason Wang."

Faculty Highlights

In the past 12 months, academics from the Faculty of Social Sciences have:

Been awarded

46 research grants of which the Faculty led on 32

Delivered

51 key-note speeches

Been awarded

17 prizes

Been involved in organising

39 conferences and other events

Held

33 Public engagement events

Find out more
www.southampton.ac.uk

