

## **Terms of reference for the ITRC-MISTRAL Client Group**

### **Background**

The UK Infrastructure Transitions Research Consortium (ITRC) has developed unique capability for national infrastructure assessment, which is intended to inform strategic decision making on infrastructure policy and investment in the UK and, in due course, around the world. The ITRC's analysis has informed the work of government, regulators and utility companies. The ITRC's NISMOD national infrastructure systems model has been used to analyse the National Infrastructure Plan for Infrastructure UK and is now underpinning the National Needs Assessment being led by Sir John Armitt.

ITRC has now been granted another £5.3million of research funding by the Engineering and Physical Sciences Research Council (EPSRC) to continue its research for another five years. MISTRAL's aim is to develop and demonstrate the next generation of models, methods and tools that are needed to inform strategic infrastructure system decision making across scales from local to global.

The MISTRAL programme provides the opportunity to develop a next version of NISMOD which provides a shared platform for exploration of complex strategic challenges for national infrastructure systems. It is anticipated that this capability will be used by those responsible for infrastructure systems in government and industry. The window of opportunity is tight, as uptake by key decision makers and an enduring legacy need to be in place by the end of the MISTRAL programme.

The MISTRAL programme formally started in February 2016 and detailed design of the research plan is now under way. Central to this is the development of NISMOD 2.0 over the next two years. On the same timescale, the ITRC is committed to providing evidence and analysis to inform the National Infrastructure Assessment, which will be undertaken by the National Infrastructure Commission during the current parliament.

### **Aims of the ITRC-MISTRAL Client Group**

The aim of the ITRC-MISTRAL Client Group is to provide high level guidance and advocacy to ensure that:

1. the ITRC's research in the MISTRAL programme, and in particular development of NISMOD 2.0, is directed at the most important strategic questions for national infrastructure in the UK; and
2. the outputs of the MISTRAL programme, and in particular development of NISMOD 2.0, are taken up as widely as possible
  - a. to inform strategic infrastructure investment decisions in government and industry, and also
  - b. to engage diverse stakeholders in informed discussion about futures and options for national infrastructure.

To this end, the Client Group will:

1. help to focus the questions that ITRC could inform with the research and development being carried out in the MISTRAL programme;
2. advise on the design of NISMOD 2.0 so that it is orientated towards user needs. This may involve facilitating interactions between ITRC researchers and technical specialists within the client group members' organisations;
3. provide "user-pull", so that decision makers in government and industry are ready and waiting to receive and make use of the research outputs, methodologies and evidence; and
4. act as advocates for the ITRC's work when the opportunity arises.

### **Membership of the Client Group**

The ITRC-MISTRAL Client Group will involve senior representatives from government, regulators, infrastructure sectors and the consultants.

Members of the Client Group should:

1. hold influential positions within ITRC stakeholder organisations;
2. be highly motivated by the potential for national infrastructure systems analysis to transform investment decision making; and
3. be prepared to fulfil the responsibilities of the CG, as outlined above.

### **Working arrangements**

After two initial start-up meetings, the Client Group will meet roughly every six months. Ad hoc meeting may take place between members of the Client Group and ITRC researchers in the intervening months.

At the first meeting

1. The Client Group will be briefed on the ITRC research, the NISMOD modelling capability, the National Needs Assessment and MISTRAL.
2. The Client Group will review the infrastructure decision making landscape in government and industry in order to identify strategic opportunities for embedding the research in key decision points.
3. Proposals for the legacy of MISTRAL will be discussed, including the ambition to convene a community with shared interests in strategic infrastructure assessment.

At the second meeting the ITRC will feedback on the initial design of NISMOD 2.0 and on the timescale for the developments, so the Client Group can harmonise this with evidence needs within their organisations.

Subsequent meetings would guide delivery of the strategy for ensuring a lasting impact from the research.

## **Governance of ITRC-MISTRAL and the role of the Client Group**

The executive decision making body in the ITRC is the Programme Management Committee (PMC) which is chaired by Prof Jim Hall, who is Principal Investigator (PI) of the MISTRAL programme.

The Client Group advises the PMC. Representatives of the PMC (~4 including the PI) will be invited to the Client Group meetings.

In addition, the ITRC's funders (EPSRC) require external academic oversight of the programme. This will be provided by an International Academic Advisory Board (IAAB).

Both the Client Group and the IAAB will provide input into EPSRC's mid-term review of MISTRAL, which will take place in 2018.

The ITRC has already explored possible transfer of its methods and models to other countries worldwide. Development of an international version of NISMOD is an objective of the MISTRAL programme.

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