

**Peter Mackie and Tom Worsley of ITS and Robert Cochrane of Imperial College** recently contributed evidence to the Independent Infrastructure Review commissioned by the Labour Party and led by Sir John Armitt CBE.

### **Establishing the Need**

- We do not think it is self-evident that the UK is suffering from an infrastructure deficit with the consequence that 'the economy falls behind'. That is a legitimate proposition which needs to be tested across the infrastructure sectors and compared with other known economic drivers such as human capital investment. As an example, the Review of Birmingham's economy and its prospects carried out in 2005 indicated that businesses considered its national and international transport connectivity to be a major strength. The major weaknesses were poor educational levels in the population, poor levels of diversification into new industries and poor use of new technologies.
- The Eddington Study pointed out that in developed countries, such as the UK, there is an existing infrastructure network on which the economy relies. As the population and the economy expand, this comes under increasing pressure, particularly in and around cities which are the most important locations of economic activity and growth. In the transport sector the absolute first priority is to maintain and operate the assets we have. There is an argument that transport capital has fared quite well relative to recurrent expenditure and that many of our city problems require very substantial renewal expenditure on elements bequeathed to us by earlier generations.
- A crucial issue is that of managing capacity efficiently. Some of the opposition to transport investment arises from the perception that the gains will be frittered away by failing to manage the capacity adequately whether through pricing or physical demand management. The case for investment would be more persuasive if coupled up to a deliverable plan for traffic management. To take a crude example, if we expand Heathrow but do not take action to ensure that it does not immediately return to operating at 99.2% of capacity, reliability will not improve.
- The third major issue is that we have to start any debate by defining and assessing the needs within a particular sector, rather than starting with particular solutions. Whilst new and inventive proposals are invaluable, they may turn out to be inappropriate or only offer partial solutions. Advocates of particular solutions in for example, power generation (water from high dams, combined cycle with gas mined through fracking, wind turbines, nuclear power) often see their proposed solutions as "silver bullets" and consider their opponents views and arguments as being somewhat misguided or even bizarre. Both needs and constraints in a densely

developed nation often lead to mixed strategies being optimal once proper account has been taken of all the constraints.

- The fourth issue is regional and particular to the United Kingdom. The most economically vibrant and congested part of the United Kingdom is the South East, a region with a population and economic output exceeding that of some European countries. It has diverged rapidly from the remainder of the UK over the last twenty years and now presents some very specific problems which need integrated policies which may differ from those needed for the country as a whole. The Eddington Report's maps show clearly that the major areas of congestion and lack of capacity on the road and rail networks are now and in the future in the South East out to about 50 or so miles from London. Problems of power generation and water supply are also likely to occur here and the division of the area into "regions" (South East England, East of England and Greater London) ignores the actual boundaries of the economic zone. The assessment of needs is important both for longer term strategy even where infrastructure is provided entirely by the private sector. It is even more important in transport as much of the infrastructure will inevitably have to be publicly funded and compete for funding with other public needs.
- There is a need for background forecasts of alternative futures into which new infrastructure will play. These obviously include demography and economy and resource price scenarios but go beyond that. Recent events in Devon (rail) and Workington (road) suggest that resilience to weather events need serious attention in planning priorities.
- Evidence based policy making is vital. Strategies need to be developed on the basis of evidence which itself can be interrogated and cross-examined. Evidence means spending serious money on collecting data, maintaining databases and developing forecasting models which link supply, demand and outcomes. In the transport sector, the decennial census and National Travel Survey are very important data sources. The analytical apparatus needs to be capable of operating at both strategic and tactical levels and at a range of spatial levels. As just one example, our current freight transport data base is extremely weak and the national freight transport model is over ten years old and based on an outdated freight transport hierarchy.
- This then leads to the institutional framework in which forecasting needs, appraising solutions, planning new infrastructure and implementation are carried out. There is a growing consensus that this is inadequate, but there are wide differences as to how and what direction it should change.

## **Diagnosis**

- It is possible to cite examples where infrastructure projects have been blown off course. The story of the A14 Cambridge-Huntingdon is a case in point. However, whether that is really due to a lack of political consensus or simply a public budget

crisis is an interesting question. It is difficult to argue that infrastructure investment should be totally exempt from public budget pressures.

- Our view is that most transport infrastructure schemes which lack consensual support would probably fail to happen under any institutional arrangements made by a democratic society. The Aire Valley Motorway, Archway, M11-Hackney Wick, Twyford Down and the Newbury by-pass are the *via dolorosa* of contested highway schemes and Stonehenge and Bexhill/Hastings are current examples of schemes which have been mooted and delayed many times.
- Transport infrastructure is not quite the same as energy infrastructure. In the latter case, it is our appreciation that a national plan could identify demand growth, production plant locations, balance of fuels and transmission network with a relatively clear delineation to the issues to be covered in a local planning inquiry. With the exception of mega projects such as Crossrail, Heathrow runway three and HS2, transport infrastructure tends to be more spatially specific, to involve multiple options and for there to be no clear delineation between national and local needs. Our view is that the Planning Inquiry with a report to the Secretary of State responsible for planning decisions is quite a sensible way to organise the planning process for the large majority of transport schemes representing improvements to, and the removal of bottlenecks from, the existing network. Providing bypasses round villages and small towns has been for the most part a success story.
- There is a strong case for transport planning to be more closely integrated with land-use planning in order to help develop more coherent cross-sectoral business cases for investment. Our view, for example, is that articulating the true strategic case for HS2 has been quite handicapped by viewing it as a transport scheme rather than an integrated transport, land use and development scheme at nodes such as Birmingham centre, Birmingham International, Milton Keynes and Old Oak Common. The capacity story only becomes persuasive if it can be demonstrated that the capacity will be used to solve pressing social problems (eg housing the population). The issue is really one of joined up Government and a collaborative rather than competitive model of government.

### **Role of an Infrastructure Planning Commission**

- For the transport sector, we would favour a high level cut-off. That is, an IPC would do strategic forecasting of needs and potential schemes and might provide a route for mega-schemes to proceed through the system. If it is to do this successfully, it will need a skilled technical staff and it must be allowed to assess the full range of potential schemes. The current public "battle" over the provision of increased air capacity in the South East illustrates the difficulties it will face from special interests and political pressures. Another way of saying the same thing is to suggest it assumes the role of acting *pro bono publico* as distinct from the role of scheme promoter. However unless the public interest certificate actually replaced the Hybrid

Bill process, it is not easy to see how an IPC would deliver improved efficiency and certainty.

- Whatever the role, the articulation between the IPC, Government and Parliament is important. The story of the rail regulator tells us that the word 'Independent' can be acted on in haste and repented at leisure. And the history of the Strategic Rail Authority, which had some of the characteristics of such a body, and its relationship with the Department of Transport is an instructive example of the difficulties which would face a transport IPC with an even wider role.

### **Lessons**

- We are not completely convinced that the weakness of the planning system is at the heart of the problem. There are some changes which would definitely help without riding rough-shod over the views of those who have something to lose and little to gain. The absurdity of a full inquiry into Felixstowe South Container Terminal when it was merely an overdue modernisation of an existing facility is a case in point. Getting the planning, finance and political ducks in a row is a necessary key to approval in a democracy and delivery and generous compensation for loss of property as in the HS2 scheme is both just and helps to oil the wheels.
- Experience in China suggests that the absence of Western style planning inquiries may speed up infrastructure development, but it does not necessarily increase the efficiency of the system or the use of funds. There is a serious lack of coordination between the many uncoordinated Central and Local Government offices and some clear examples of over- investment in areas where funds are available, offset by inadequate facilities elsewhere.
- The real problem seems to lie much further back. The example of airport capacity in the South East is pertinent. We have known since 2003 that the region needs roughly one new runway every decade and we are now a decade behind the game. Yet our strategic planning process did not prevent a situation in which all the political parties in a national election had in their manifestos a commitment to no more runways which simply cannot survive rational analysis, whatever level of demand suppression is envisaged. This was not the fault of any one part of Government; there are (for example) strict rules about civil servants speaking to opposition parties about Departmental strategy development.
- But without an institutional framework which allows the development of a public and inter-party consensus on needs which have to be met and cannot be ignored, and a means of evaluating dispassionately and through an evidenced analysis the potential benefits of alternative solutions, the present battles seem likely to continue.

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