

## Built Environment Committee

### Uncorrected oral evidence: Infrastructure policy-making and implementation in central government

Tuesday 29 November 2022

10.35 am

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Members present: Lord Moylan (The Chair); Lord Berkeley; Lord Best; Lord Carrington of Fulham; Baroness Cohen of Pimlico; Baroness Eaton; Lord Grocott; Lord Haselhurst; The Earl of Lytton; Lord Stunell; Baroness Thornhill.

Evidence Session No. 1

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Questions 1 - 14

#### Witness

**I:** Richard Threlfall, Global Head of Infrastructure, Government and Healthcare, KPMG.

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## Examination of witness

Richard Threlfall.

Q1 **The Chair:** Good morning. Welcome to the House of Lords Built Environment Committee's first evidence session in our short inquiry into infrastructure policy-making and implementation in government. Our witness today is Richard Threlfall, global head of infrastructure, government and healthcare at KPMG, but, as importantly, he chairs the advisory council of the Infrastructure Forum, an independent think tank bringing together organisations with involvement in UK infrastructure from a public, private and regulatory perspective.

Thank you very much for giving us your time today. It is very helpful. My name is Daniel Moylan. People will introduce themselves as they go round, partly for the record. There are also nameplates in front of members of the committee as a guide.

We have a number of questions that we will put to Mr Threlfall which are fairly general in character to allow him the capacity to roam, and we will ask further supplementary questions as we go on.

I will start with the first question. How do the Government define infrastructure? Does the definition vary across different parts of government?

**Richard Threlfall:** Good morning, Lord Moylan and your Lordships. Thank you very much for the honour of being asked to open the committee's evidence session.

To your question, in principle I believe that the definition of infrastructure should be drawn as widely as possible, ultimately because it is a system of systems. The more you break infrastructure down into individual pieces and look at it in particular isolated categories, the more you miss the capacity to see the big picture of infrastructure as a system; you fail, for example, to recognise the relationship between transport infrastructure and what that might mean for getting to a school or a hospital.

As it happens, the UK Government define infrastructure broadly. The definition in the Green Book is, "Infrastructure is a broad term relating to the assets, networks and systems that support the operation of a modern society and economy". I do not think I could disagree with that as a definition in principle.

You then asked whether the definition varies between parts of government. I am not sure that any other part of government seeks to define infrastructure as such, but the nature of the way we run government in this country is that each part of government tends to see infrastructure through the lens of its particular responsibilities. We might come later to the way the governance impedes, in my view, the ability to see infrastructure as a system.

At the definitional level, there is one outlier, a particularly circumscribed definition of infrastructure in relation to the National Infrastructure

Commission. It would be fair to say that, uniquely among all the bodies involved—the IPA, the Treasury, and anyone else involved in the centre of government—only the NIC’s foundation principle states that its remit is limited to economic infrastructure. Economic infrastructure again is defined in the Green Book. It is generally understood to refer to areas of infrastructure like transport, energy, waste management, and infrastructure that is, I guess, generally perceived to need to be run at a network level, nationally or regionally. The National Infrastructure Commission’s remit is narrowly construed on economic infrastructure.

Some of you may recall that in the debate over the remit of the National Infrastructure Commission at its founding there was a particular discussion over whether its remit should extend to housing. I remember Lord Adonis being particularly keen that it should, but the compromise reached in the end with the Treasury was that it does not have a direct remit for housing but that its remit allows it to consider the effects on housing of its deliberations on economic infrastructure.

You might note that the result of confining the NIC’s remit to economic infrastructure only is that it explicitly does not include things in the camp of social infrastructure. It does not include education, healthcare and so on.

**The Chair:** Is there a danger that the definition of infrastructure is so expansive that it includes everything? If you come at it as a purist classicist and consider a new housing estate, you would say that the infrastructure is the stuff that goes underneath—the pipes, the gas connections; if we are using gas or whatever it is—that has to be put in across the whole estate as a system, and that the houses are individual items that go on top. They are the structure, not the infrastructure. Is there a danger that government defines it so expansively that it loses its focus, or do you think that the system argument that you have just mentioned outweighs that risk?

**Richard Threlfall:** It is particularly important that the definition is drawn broadly, because, leaving aside the point I made before about the interconnectivity of systems, we are increasingly recognising the risk that if we think of infrastructure just in terms of pouring concrete and bolting steel together, we end up wasting a huge amount of money doing precisely that when there might have been a much simpler solution that involved something in the digital arena, for example. Had Africa thought of infrastructure only in terms of physical assets, it would have covered the country in lots of cables in order to provide the communications infrastructure, but it had the fortune of being able to leap that by just using digital connectivity instead. You can take the same analogy across to other parts of the infrastructure space.

It is a particularly important issue today—and I hope we will come back to this topic—because of the world’s challenge around climate change and the need to attain net zero as quickly as possible. A lot of the physical built infrastructure techniques are very carbon-intensive; cement and steel together are responsible for something approaching 7% of the world’s carbon emissions. The more we can look to what our infrastructure is trying

to achieve in terms of what outcome we are trying to achieve and the different ways of getting there, the more likely we are to avoid both the expense of physical infrastructure and the carbon implications of it.

**Q2 Lord Stunell:** I am an honorary fellow of the ICE and I have a relative who works on an HS2 project, just to be quite clear about that.

You have made it very clear that your understanding is that it would be better to include housing. I am very conscious of the fact that I was one of those who argued at the time that it should be included in the remit of the NIC. Could you say something about two aspects of the whole system in this respect? The construction industry builds houses and other infrastructure, so capacity, skills and so on are interlinked. Maybe the energy system ought to be linked more closely with the domestic sector as well. Could you perhaps develop that a bit for me and establish the way in which you see that this might be changed or improved?

**Richard Threlfall:** To your point about the interconnectivity in the supply chain, I have always believed that we should see the construction industry as the supply chain, as the means by which all the country's infrastructure is built, and that it therefore includes everything that sits within the social infrastructure space as well as the economic infrastructure space and so on.

Most of the larger construction firms in this country are providing both social and economic infrastructure solutions, so you are quite right. Whether there are issues of material supply or innovation, a particularly important topic here, or skills—there is currently a skills shortage—none of these issues, to which you refer, can be parcelled up into one type of infrastructure or another. They span across. We have, though, been doing some good work on specialist training on, for example, the skills you need for high-speed rail or for particular parts of the energy sector. So there is an argument for seeing the whole thing as a system because of those underlying issues.

Your point on energy is well made. Again, on the challenges of net zero and the urgent need to decarbonise our economy, if you look at this too narrowly—if you look, for example, at how much of the UK's total generating capacity today, approximately 80 gigawatts or whatever it is, is currently renewable and you move as fast as possible to a position where 100% of that generation is renewable, which in principle sounds like a good thing to strive to achieve, and it is—you forget the demand side of the equation, and you could end up building significant amounts of generating capacity that you do not need.

There could be a much more efficient solution, such as working on energy efficiency measures in homes; the retrofitting of homes for energy efficiency is particularly challenging, of course, and particularly important in today's conversation. That would help to reduce the bills that individuals, particularly vulnerable individuals, are having to meet to cover their energy costs, and just converting our generating capacity to a different source will

not necessarily deal with that. That is another reason why it is so important to see all this as a system and to see these interconnections.

Finally on this, Lord Deben pointed out to me the other day that the Committee on Climate Change had estimated that the UK, through a range of energy efficiency measures, could probably save something in the order of 50% of the total energy demand. You do not need to go to that length to recognise just what a significant impact you could have, particularly at the moment in the energy crisis, if you were to focus on those demand-side measures rather than simply trying to switch the supply.

**Q3 Lord Grocott:** My question possibly relates more to the time you spent at the Department for Transport, although I am sure your wider experience will be helpful.

How are decisions made on the need for infrastructure development and the value for money of different projects? How could this be improved? If I could add a layman's question on this, how on earth do you adjudicate between, for example, a new railway line and a new reservoir? I do not know where you start on decisions like that. I know what political decisions get made, but is there any objectivity in this kind of alternative?

**The Chair:** Can you bring cool, rational objectivity to these challenging decisions or, rather, can you tell us how you see government doing that? It is government's approach that we are interested in: how they make those decisions.

**Richard Threlfall:** There certainly needs to be rational objectivity in this. It is a good 22 years ago since I left the Department for Transport, so I am glad to say that I can draw on some of what I have been doing since then. This is a topic that exercises me greatly and has done for some considerable while.

My starting point would be that the UK has some of the world's most sophisticated approaches to making decisions on its infrastructure investment: the Green Book, which I referred to before; the five case business model for requiring projects to set out the strategic arguments for why they should be taken forward; the specialist guidance that sits in things like the Department for Transport's WebTag. These are not just objectively well-developed systems; they are systems that I often find the rest of the world is extremely keen to adopt. I have lost count of the number of countries that colleagues and I have taken the five case business model into, for example, because they see it as a very formal structure that they would like to adopt too.

That said, there are still some considerable limitations. I put those into two categories. The first is a limitation, again, in the governance. We have these sophisticated systems for making these decisions, but the governance, particularly at a central government level—less so at a city level—means that you very quickly drop down into decisions being taken within the individual siloes of individual government departments. I do not think I have ever seen any evidence of an attempt to try overarching

decision-making. Certainly at an administrative level you could argue that politics to some degree takes decisions on the significant projects.

Secondly, even if we were to accept or posit that those systems were state of the art five or 10 years ago, the world and society are demanding different lenses through which we make these decisions. Over the last five years, we have seen government introduce a social value in procurement framework, which requires a lens on the social value that projects apply, but it is not embedded in that appraisal framework. We have seen the Government pass net zero legislation and requirements on net zero down to the National Infrastructure Commission and the UK Infrastructure Bank, for example. Again, it is not integrated into the appraisal system.

There is a compelling diagram in the first couple of pages of the *Transforming Infrastructure Performance* document, the flagship document of the Infrastructure and Projects Authority, which I have to say is a great principle for how to go about driving a better approach to infrastructure in this country. It has the UN sustainable development goals across the top as the outcomes that we are trying to achieve in society, at the bottom it has the system of systems that I talked about a moment ago, and in the middle it has data and governance and decision-making.

As a theoretical framework for what we should be attempting to achieve in our UK infrastructure decision-making, it is exactly that, in my view. We want these outcomes, and here is a process to get there. The trouble is that the actual governance does not deliver that, because there is no methodological or governance system that joins up all these pieces so that it is directed towards the outcomes of the UN sustainable development goals or, indeed, of any other framework.

**Lord Grocott:** In this area of professionalism, if I can describe it as such, presumably you would never get complete agreement among the infrastructure experts that proposal A—let us say HS2, just to be non-controversial; I happen to be in favour of it—is unarguably, on all the objective criteria that we can apply, the right thing to do or the wrong thing to do. To that extent, experts in the area do not help, do they, because ultimately a decision of that magnitude will be made at a political level? Even if the politicians were guaranteed or required to obey the experts, which obviously no system could deliver, the experts would not agree.

**Richard Threlfall:** For sure. It is a bit like saying that a group of economists will come up with more answers than the number in the room. I have never been a big fan of the idea that because something is difficult we should not try to get as close to it as we can.

Forgive me, but I did not really answer your question about whether it is technically feasible to create this objectivity. I think it is, but it is not just government that is grappling with this now. One of the huge challenges facing the private investment community is that they are now under sustained pressure to direct their investments towards sustainability. Private equity, sovereign wealth funds, insurance businesses, all these entities that invest potentially huge sums in the world's infrastructure,

including quite a lot in the UK's infrastructure, are being asked to make as rational decisions as they can about which investments will genuinely wash their face and lead to the perception that they are in sustainable infrastructure.

We all recognise that this is incredibly hard. I have just ceased leading global sustainability for KPMG, so this has been a topic for me for the last couple of years. The business community generally is grappling with the expectation of reporting against a whole range of ESG—environmental, social and governance—standards within very short timeframes. You will be aware of the legislative moves in the US by the SEC and in the EU on the CSRD. Almost all businesses in the world that historically have reported only on their financial performance will, within a couple of years, be also required to report across a broad range of their environmental, social and governance footprint.

Flip that into the world of infrastructure investing and you then have a more complicated challenge, because infrastructure investors are not being asked simply to look backwards; they are also being asked to look forwards and say, "Of the various things that we could put our money into, which of those will be shown to be the most sustainable in the future?" That question then flips to the UK Government, for example. They need to follow suit or, even better, lead and say, "What are the methodological systems that we will create that will bring together all those considerations?" There will not be a right answer, but at least there will be a way of guiding everyone to a consensus on something that would do less harm and more good against a benchmark like the UN sustainable development goals.

**Q4 The Chair:** Following up Lord Grocott's question, is it not possibly a choice of priority? If you choose between a good railway project and a good reservoir project, the question then becomes a matter of affordability. Which should we be focusing on first? Is it partly affordability and partly necessity? Which gives better social value? Which fits into the system better, and so on? Is there any part of government looking at things in that light? Does the National Infrastructure Commission look at things that way? Where would decisions like that be made, where you are choosing between two goods and you might have to prioritise in time?

**Richard Threlfall:** If you narrow your envelope of affordability down to too much of an extreme, you end up with impossible questions like railway versus reservoir. In practice, a country like the UK can afford an envelope of quite a lot of good things, and at that level it is generally not such a stark choice.

Does any part of the system look at this? The National Infrastructure Commission does, at what I would call quite an academic level. We might talk about the NIC a little later. The quality of what it does at an academic level is really good. I was involved right at the beginning as a member of the national needs assessment committee that Sir John Armitt chaired, and we did precisely that. With the support of some excellent work from academics at Oxford and elsewhere, we created models that projected futures, if you like.

Nobody can predict the future, but you can put scenarios on the table and come up with some broad assumptions about what the needs of a country like the UK will be in energy mix, transport connectivity and so on. The NIC does this. I do not see any other part of government attempting to do that, and the nature of the NIC's remit and again the nature of the particular governance system that we have in the UK means that there is no one to hand over that intellectual thinking, if you like, to someone who then carries it into an actuality of decision-making.

**Q5 The Earl of Lytton:** Good morning, Mr Threlfall. I am a practising chartered surveyor, semi-retired anyway. I have some involvement in land acquisition, and every now and again a piece of major infrastructure comes along and darkens my threshold. I am advising somebody on the Rampion 2 interconnector at the moment. I ought to declare an interest as the inheritor of a 400kVA tower that sits on part of my land; the less said about that the better, perhaps. My daughter used to work for KPMG, but has no idea and no notion that this session is going on or the content of it, so I can put your mind at rest that I have not been delving into the darker parts of KPMG for this.

You started to lead us down a very interesting road and almost on the side of procurement. In several instances of major infrastructure initiatives over recent years, the rights of owners of land have been circumscribed or reduced; I refer to Crossrail, HS2 and the 2017 telecommunications code as three examples.

This matter was raised in another context in the Electricity and Gas Transmission (Compensation) Bill, a Private Member's Bill that had its Second Reading in the House of Commons and is being put forward by Dr Liam Fox. I have read that and the Minister's response, but is it your understanding that private property rights are an impediment to the rollout of national infrastructure schemes such that this long-established process of compulsory purchase and compensation going back to the 1960s is perhaps regarded in certain circumstances as no longer fit for purpose? Would you care to comment on that?

**The Chair:** We are not asking you a political question there or what your political views are about it, but just as somebody who looks at these things and is able to comment.

**Richard Threlfall:** I can see overtones of the piece in the *Economist* about four weeks ago berating the country's inability to build infrastructure because of local opposition.

You referred earlier to my role with the Infrastructure Forum; its president is Graham Mather, who some of you will know. The Infrastructure Forum has produced various thought pieces on this topic over the years. There is no question that, regardless of whether it is good or bad, there is always a visceral reaction to a road, a waste facility or whatever being on somebody's doorstep. It is only natural that the local population would find that objectionable. The hybrid Bill structure was introduced I cannot remember exactly how long ago in order to provide a vehicle for that, but we all recognise that it is quite a long and tortuous process. Within that



framework it still passes down a responsibility to agree mitigations and so on at the local level.

Graham and I have concluded on a number of occasions that it would be sensible to be able to give local populations or local landowners who are affected genuine compensation. If you are building a network infrastructure or something that is of benefit to the nation, by definition the benefit is to the nation but the cost is disproportionately carried in the locality where the particular asset lies or goes through. Without getting into the politics of fairness as such, it just seems that we make life harder for ourselves by not recognising that iniquity of impact: for the greater good, you will have this motorway cutting through the back of your house. Maybe it would be more sensible to create some sort of local fund or way of compensating more than the surveyor's value of the property for the impact that is inflicted.

**Q6 The Earl of Lytton:** I would like to fillet out the question of what you might call the community resistance to the thing for all sorts of visual and other reasons and look at the land acquisition process. It seems to me that there is some groupthink that the acquisition of rights in land for these infrastructure projects is somehow impeding the process. I have not been able to find anything in the literature that supports this, but the fact that we are faced with bits of legislation that do erode those rights and deny certain rights and entitlements that would otherwise have been in place suggests to me that there must be something somewhere that somebody has concluded is causing a delay. That is the bit I am trying to drill down to.

**Richard Threlfall:** Land ownership rights are not unique in this country; they are common all over the world. It is true that in most major infrastructure projects—major road schemes, railways and so on—generally the land acquisition process is the critical path item for proceeding with that scheme. In other words, it can take years and years to assemble all the land necessary to proceed with a scheme. In that sense, you are right; it is a laborious process. But it is not unique to the UK; I have seen it elsewhere as well.

Maybe it is worth reflecting whether there are things that could be done better. I remember a particular concern some years ago during the Dublin Port Tunnel project about the property damage that was being caused to properties that were above the line of the tunnelling. It was decided that a fund should be created that allowed surveyors to go from house to house and settle on the spot: "Yes, we agree. You have a crack there", or whatever, and "There's some money. We're sorry". It had an extraordinary effect in reducing the opposition to the scheme and narrowing the difficult conversations down to a small core, because so many of them were dealt with simply. It feels to me sometimes that we could make life easier for ourselves by having that flexibility of approach.

**Q7 Lord Haselhurst:** It does seem to make things more difficult the more experts you bring into the discussion about particular projects that should have priority, and when there are so many fingers in the pie—if I may be

put it in that slightly disrespectful way—between the National Infrastructure Commission, the Infrastructure and Projects Authority, the Treasury, and the Cabinet.

I have an intimate interest in one case in the past. In the wake of the Second World War it was believed that London at some point was going to need a third airport. The story was that eyes in the department for transport fed on the runway that the American air force had built for its bombers at Stansted, and that that was in the mix as a possible or most likely site, as indeed history has proved. But within a handful of years of keeping Stansted in play, Dr Beeching reported on the railway that ran between London and Cambridge passing Stansted, so the line capacity was substantially reduced by the taking up of rail lines. The consequences of that are now being seen.

It is very difficult to gain consent and avoid long political wrangles unless there are seen to be advantages to cover the sorts of disadvantages that might be felt by people having an airport very close to them, as in that case. A better railway, decisions on housing backed up by local road building, the provision of health service and sporting facilities are all the sort of things that go with a growth in population. It is very easy to get it wrong, because although there are some very clever people looking at these matters, experts do disagree.

How do we manage to find a clear path that everyone will stick to, because at the moment all projects are becoming hugely expensive, perhaps sometimes caused by the protests of citizenry, digging holes, doing one thing after another? How can we go on having a critical pattern for what we want to achieve long term when there are so many risks and multiplication of the sums of money involved?

**The Chair:** If you could answer this question with reference to the existing key nodes of the decision-making structure, which, as Lord Haselhurst said, will be the National Infrastructure Commission, the IPA, the Treasury, the Cabinet Office, that would be very helpful. Lord Haselhurst and I have spent too many years in the weeds of aviation policy around London, so we do not want to get dragged off into that particularly, do we? That is an example rather than an invitation.

**Richard Threlfall:** Crossrail 2 sprang to mind, but maybe we will not go there.

**The Chair:** I was in the weeds of that as well.

**Richard Threlfall:** Exactly. Can we add a few more bodies to this list?

**The Chair:** Yes, that would be very helpful.

**Richard Threlfall:** The UK Infrastructure Bank deserves to be considered in the mix, because clearly it is there to help to crowd in investment in projects that support levelling up and the attainment of the UK's environmental target. In that sense, its remit is very similar to that of the National Infrastructure Commission.

We should not necessarily confine ourselves to thinking just about central government and the outposts of central government, because, at the end of the day—to your point, Lord Lytton—all infrastructure ends up to some degree being local. The connectivity of the conversation between the local area and the national, in the case of economic infrastructure, is incredibly important and sometimes overlooked.

If we stand back, it is worth saying that in some ways we are doing this better than we were when I was at the Department for Transport more than 20 years ago, because then there was no proper system and everyone was bemoaning the terrible delays in trying to get major projects off the ground. That led eventually to the reform that we now have of the major projects planning system and the development of national policy statements.

In principle, that is a good thing. It has created a specific framework that allows us to take forward particularly difficult big projects that have national benefit but disproportionately local cost. However, as you may have seen in an article in the *Spectator* in the last few days, that system seems to be getting dragged down by a combination of the failure to update the national policy statements and the guiding framework for that whole system not being kept up to date in the way it needs to be. The system seems to be becoming more and more bureaucratic. The volumes of paperwork that have been put in in support of major schemes has quadrupled in the period since the system was launched. Everyone is getting drowned in paperwork, which in turn is slowing down the ability of government to respond quickly enough.

The other point goes back to the constellation of bodies. Each one of them has a particular responsibility and a remit, and in principle each one of those is a good responsibility and a good remit. But they seem to have a series of what I call bilateral relationships. The UK Infrastructure Bank has a bilateral relationship back to the Treasury. The National Infrastructure Commission has two masters, because it reports to the Cabinet office as well as to Treasury. The Infrastructure and Projects Authority has done outstanding things under Nick Smallwood's leadership, but it does not seem to have the responsibility to convene the conversation or the decisions that you are seeking. Therefore nobody does.

In practice, in the system we have, projects get put on the list, sometimes 20 years before, gradually gravitate up to the top through a particular department like Transport or BEIS, and the decision whether they go ahead or not basically gets taken there in line with the guidance and discussions with the Treasury. Again, it is bilateral. There is no Infrastructure Minister or Infrastructure Department. There is no systems discussion happening anywhere in the country, as far as I can see.

**Lord Haselhurst:** Just continuing the point I was trying to make. Stansted is there now. Liverpool Street Station has no more capacity left, which makes it the unfortunate London departure point for people who wish to go to Stansted. The arrival of Crossrail 1 may have an ameliorating effect for some, and the justification for Crossrail 2 seems to be the success so

far of Crossrail 1 now that that has eventually opened. There is a huge development now taking place in Newham, around Stratford and so on, which again will knock all the expectations of figures to one side. How difficult is it to predict all these things and get it right with so many bodies involved?

**The Chair:** I think Richard has probably covered a lot of that in his answer already. Is there anything you want to add?

**Richard Threlfall:** I might just take one particular angle on the difficulty of predicting. For sure, it is difficult, but improvements in the power to analyse data that have been made even in the last five years are extraordinary. If you go back more than five years, being able to create a digital twin of Singapore, or being able to crunch all the data around a city or a state was an aspiration. Now we are at the point where it is possible to digest that data in very short periods of time. I was at COP 27 a couple of weeks ago, and a Norwegian organisation that does digital twin modelling had done a digital twin of four cities three days before we got there, in spectacular detail.

We are only scraping the surface at the moment of the ability of local or national government to start to use that power to create scenarios about the future and make intelligent evidence-based decisions about where we invest today's money, which is ultimately what it comes down to.

I will give one example from Australia, which might be illustrative of just how powerful this can be. The government of Victoria asked KPMG and a number of other organisations we were working with a few years ago if we would look forward to 2050 and hypothesise a world in which all vehicles were zero emission, digitally connected and ultimately autonomous. Nobody knows exactly what that future will look like, but the government of Victoria asked us for a series of scenarios of what it might look like and what this might mean for how people travel and where they live, what it might mean for land use planning and, very significantly, what it might mean for the fiscal position of the state. The last question they asked, which to me was the most interesting, was what it would mean for the energy generation requirements and distribution of the state.

Among that range of scenarios, the bit that was fascinating to me was that one scenario said that the generating capacity of the state needed to go up by 15% and another scenario said that it needed to go up by 200%. The primary reason for the difference was that in the 200% scenario it was assumed that the market was entirely laissez-faire—everyone would charge their cars at about 5 o'clock or 6 o'clock when they got home, and they would massively spike the generating need of the state. In the 15% scenario, a public policy approach was taken to the interaction of electric vehicles and the grid, and you could use the electric vehicles to help balance the demand on the grid and get a better outcome. It is that sort of use of data that would start to improve our decision-making.

Q8 **Baroness Thornhill:** Fascinating. I am almost reluctant to drag us into the weeds of local government. I am a former elected mayor, so it is no

surprise that I am particularly interested in the interconnectedness of the levels of government. My own experience has been of projects that are fairly minor in national terms but major in regional terms—a rail link and a new hospital. I watched the years roll by, took part in several public inquiries and lamented the loss of several millions of pounds, so I am particularly interested in the interface between that level of decision-making, be it regional, city or local, and the big decision-making, particularly where politics comes into it and how that can hijack a process, or not. In other words, how effective are things currently, and what do you feel are the barriers when you have to come right down to that level?

**Richard Threlfall:** This is another question that I have long been interested in. My experience includes 10 years advising Halton Borough Council on the Mersey Gateway project, which was an interesting object lesson in the connectivity of a small unitary authority with central government. I have seen this from the perspective of being within central government. I live in the north of England, as some of you may know, and I chaired the committee for the Institution of Civil Engineers that produced what was called the northern infrastructure strategy, which we did because it seemed nobody else was doing it, which tried to argue for greater regional governance of infrastructure planning.

This is all still very weak in this country at a number of levels. My personal experience of the connectivity between local government and central government is that generally the support from central government is nothing like as strong as I think would be helpful to local government. The position is obviously massively exacerbated by the fiscal inequality in this country between the power of central government and the power of local government.

These statistics are a bit old now, but I do not suppose they have changed. If you take the OECD as a whole, generally about 10% of GDP is within the control of a local authority, a local public body. In the UK, it is less than 2%, but we all know this to be because of the way the UK's fiscal structure is set up. It tends to undermine not just the buying power at a local level but confidence at a local level.

I have felt very strongly for many years that if you take part of the country such as the north of England, just look at the raw numbers and treat it as an economy, it should be hugely powerful. The north of England is about a £300 billion economy in its own right, and if you put that on a scale of European countries it would be in the top 12. Yet because of our system, the north cannot use that to take control of its own destiny and invest in its own future. Everything that a region or a city wants to do that involves any significant money ends up being in competition with others that is arranged by central government or having to beg for the money and its support to do things.

Staying out of the politics of that, what bothers me is that that holds us back, because we do not get the galvanising of energy, either at a public level or transferring to businesses in those regions, to get behind the place they feel they belong to.

**Baroness Thornhill:** So in effect you are advocating for a much stronger local government with more powers, including fiscal powers.

**Richard Threlfall:** Yes, ideally, and in the absence of getting there just a much more supportive structure from central government departments to local authorities.

Q9 **Lord Best:** The National Infrastructure Commission started in 2015 as an independent body and then became an executive agency of the Treasury. Just how much difference does it make to be this executive agency? I presume the main difference is that its advice to government, because it is an advisory body, will often be confidential; we will never know what is said to government Ministers or indeed to the Prime Minister. I wonder whether in taking a decision about onshore wind the commission is consulted and whether we will ever know what it said.

**Richard Threlfall:** I do not believe the NIC was ever an independent body. It was proposed that it be an independent body, but the Government did not follow through with that and, as you say, turned it into an executive agency of the Treasury.

**The Chair:** George Osborne proposed it and proposed that it should be an independent body. By the time it was functioning, Phillip Hammond was Chancellor of the Exchequer and it was not an independent body. That is basically how it worked.

**Richard Threlfall:** Forgive me, but just to be clear on the history, some of you may know that I was vociferous at the time in arguing that it should be an independent body in statute.

I have already said that the National Infrastructure Commission does a very good job, and I would say that it has done a very good job in surviving. One of the key reasons why I was, and still am, very keen that it should be put on to a proper statutory footing was that it would not be vulnerable to changes in political leadership. It has done a very good job of surviving by being very solid, very academic in its work, very diplomatic in its relationships with the Treasury, and very circumspect and restrained in its public pronouncement. It is helped by the fact that there seems to be a very broad cross-political consensus on the importance of infrastructure in this country.

In a sense, it has turned out better than I expected, but it remains vulnerable because of its lack of statutory independence. You are asking us to posit a counterfactual, but it seems almost inevitable that it is less robust in its challenge to government than it would be if it was on that basis.

Today, there are probably a couple of things that I am more bothered about about the NIC than its statutory independence, and perhaps I will put these on your radar. One is its fiscal remit, which was another thing that I campaigned against years ago. It has a formal remit that it should only propose interventions that amount to between 1% and 1.3% of GDP all the way through to 2055. I have always argued that that makes no sense. It

should be asked to look at what the benefit of the investments should be regardless of the fiscal envelope required, because that would push the debate about whether we should be investing more in our infrastructure or not. However, it is not permitted to go there, so effectively it will never argue for more infrastructure. It is being constrained to the envelope of affordability that you referred to earlier, Lord Moylan.

I have always said that it is a pity that the NIC is constrained to look only at economic infrastructure. It is good that it has a net zero remit, courtesy of an update in its remit last year, but it has no remit that extends beyond that to the sustainable development goals. Those are other things that I think might be worth looking at.

**Q10 Baroness Cohen of Pimlico:** I should declare an interest. My husband, Jim Cohen, has been an independent adviser on probably the biggest European infrastructure fund, known as DIF. It started out being known as the Dutch Infrastructure Fund, but various international contributors rather objected to that, so it is now called DIF. He has been on it since 2003. He retired from Balfour Beatty in 2007, having been in charge of all the PFI schemes, which I mention as I see them mentioned somewhat derogatorily, and Balfour Beatty Rail.

The structure of the NIC worries me very much not only because it is not independent—I think you have dealt very comprehensively and clearly with why it jolly well should be—but because it has an enormous board of generally worthy people, which usually does not make for terrific decision-making. Do you think that, as well as being independent, it could be a bit smaller and more executive?

**Richard Threlfall:** I am hesitating slightly, because I do not have any insight into the decision-making process that sits within the NIC.

**Baroness Cohen of Pimlico:** Neither do I.

**Richard Threlfall:** My perception is that it is very academically driven, if I can call it that. I am not sure how much the board is driving the strategic direction of what the NIC does. That is partly an extension of its remit and the fact that it is not empowered to pursue whichever courses and avenues of interest it would choose for itself. Specifically, it has to propose to the Treasury the areas of remit that it would be interested in pursuing, and the Treasury, if it agrees, passes a remit back to the NIC to look into that matter. I suspect, therefore, that regardless of the size or the composition of the board, that would circumscribe significantly the ability of the board to feel that it was doing much more than providing good stewardship over the bureaucracy of the NIC as a body. That is my supposition about how it is working.

**Baroness Cohen of Pimlico:** It sounds right. I wondered also why it was not set up independently just as the Office for Budget Responsibility is. Surely there are analogies that could have been followed.

**Richard Threlfall:** The infrastructure forum that I referred to before made a very strong argument that the OBR was a perfect precedent for the

structure of the NIC to be set up in a similar way. There was a consultation at the time that many of us responded to, but I guess a political decision was taken at the end of the day that they did not want to go down that route.

**Baroness Cohen of Pimlico:** Sounds right. Thank you.

**The Chair:** Or perhaps not merely a political decision but one that was endorsed heartily by officials at the Treasury.

**Baroness Cohen of Pimlico:** Of course.

**The Chair:** It is not always the politicians who are to solely blame.

**Baroness Cohen of Pimlico:** No, of course.

Q11 **Baroness Eaton:** I would like to thank you for your responses to our questions so far. My background is in local government. I was previously the leader of the fourth largest metropolitan district in the country, in the north, and I fully appreciated your comments. My local authority, even of its size, was stuck out on a branch railway line, and you indicated very clearly how the desire for control of infrastructure to correct that anomaly was an issue.

My question is a very direct one. How effective is central government's supervision of the implementation of infrastructure projects, and what could be done to improve it?

**The Chair:** We have talked about the NIC at some length. I am not trying to lead you too much, but we could move perhaps to talking about the IPA, because that might be part of your answer.

**Richard Threlfall:** Indeed it will be. By the way I live within Bradford MDC. I would say that the supervision of the IPA is increasingly effective and has improved dramatically in the last few years. This is all being driven forensically by the IPA, which, as you will know, produces an annual report, and in the last few years has taken to putting red, amber and green ratings against projects in the portfolio. Perhaps to one's surprise it has been quite brave in red rating. I think 27 projects—11%—were red rated in the most recent report; we can debate whether it should be more or less. It did not green rate very many projects at all, so it is good that it is not pulling its punches in calling out where projects are struggling.

On where it could be improved, there are a lot of projects in that portfolio—266 at the latest count, I think. There are about 200 staff in the IPA, so in practice it cannot get into more than a fraction of that set of projects in any great detail. There is huge expertise in the IPA today, but because the body is quite small in some ways compared to the scale of the pipeline, a more useful thing for the IPA than showing the projects that are red rated would be for it to be able to offer more projects mentoring and guidance and so on, recognising that in many cases authorities that are taking these things forward do not have great expertise to be able to do that and would appreciate that support. I think that would help.



There are a few other bits and pieces on this, if I may. The good things that we have seen from the IPA over the last few years under Nick Smallwood's leadership include the *Transforming Infrastructure Performance* document, which I referred to, looking at the pressure on modern methods of construction, the use of digital twins, offsite manufacture, the use of information. All of that is absolutely right and what we should be doing, but we should be doing it a lot more quickly. I would argue that the infrastructure/built environment construction sector is still a decade behind other sectors in its adoption of technologies and digital techniques, but at least the pressure is coming from the IPA, which is a good thing.

I do not think I have touched on the project route map before, which is effectively guidance on how one would progress a project in a very systematic way. It is one of those documents that has been carried all over the world.

**The Chair:** The project—?

**Richard Threlfall:** The project route map. These are documents that we should be proud of, because the intellectual calibre of them is very high, as seen in the way other organisations pick up on them.

It is clear that there is still something missing, because we can still see quite a lot of privately driven attempts to plug gaps. Project 13 has been running for a number of years and the Institution of Civil Engineers has been stewarding it. It is effectively an attempt to create a whole framework around good project practice and delivery, and is being driven by a whole set of private organisations coming together. That initiative is on the verge of publishing—in February next year, I believe—the infrastructure governance code, which has been long outstanding. Imagine a corporate governance code on how one should run a corporate body properly. Nothing has ever said what governance the specific requirements of running a project vehicle needs. That is due out in February, as I said, and will be very welcome.

It is interesting, again, that no part of that has been promulgated by government but has been driven by an association of private and third-party organisations in the sector.

Q12 **Lord Carrington of Fulham:** I am interested in the interaction with the financial analysis of these projects, because you cannot control a project unless you have a financial framework in which to judge it.

It seems to me, as an outsider in this, that one problem of our major infrastructure projects is that they overcome the inability to reconcile the financials with the political necessity by downplaying the financials. For example, when they proposed HS2—Lord Berkeley knows much more about this than I do—they estimated £30 billion or £35 billion to build the bit between London and Birmingham. It has come in at over £100 billion to do it.

Either that was gross incompetence or they could not put enough

uncertainty into their calculations to be able to do a statistical model of what the costs would be—a fan chart, as the Bank of England tends to do. One suspects that it was deliberate to ensure that they got political approval, because the cost looked so low and they then just added on the money, which they probably guessed they would have to do later in any case. The same happens with power stations.

The whole financial control structure is subjugated to the political necessity of the project, which means that all these projects end up costing vastly more than they should and running completely out of control, way outside anybody's capacity to tell people how to control costs, and consequently they get into a dispute with the public. That may be an extreme example, and deliberately so. Is that right? Is the financial control of these projects as bad as it looks from the outside?

**The Chair:** May I supplement that by giving the counterpart? In addition to possibly underestimating actual costs, which is Lord Carrington's proposition, there is also the question of how you estimate and put a value on the social benefits and environmental benefits on the other side so as to make the two sides balance. Are they inflated? There is always a suspicion that they might be. Perhaps you could take both sides of the cost/benefit equation into account when you give your answer.

**Richard Threlfall:** I might refrain from commenting on specifics and declare—

**The Chair:** I think you would be wise not to comment on the specifics.

**Richard Threlfall:** —a particular interest as somebody involved with the Project Representative role for HS2.

First, the problem of habitually underestimating of major project cost is legend across the world. It is not confined to the UK or to the public sector. Sometimes it is genuinely because it is very difficult to foresee all the challenges. That has been codified into the system called optimism bias, which the UK Government have been imposing as a system and deliberately adding quite big percentages—in double digits; 20% or 30%—on to projects at their early stage to recognise the phenomenon that project promoters, for whatever reason, habitually underestimate the cost of taking projects forward.

There is often a genuine difficulty, and there is an incentive, which could be in a corporate context as much as in a government context; if you want something approved, you come up with a number that you think will be more acceptable rather than less.

To your countervailing point, Lord Moylan, absolutely. It goes back to the point I made very early on about how we run the risk of simply seeing things very narrowly in a financial cost-benefit equation. If there is anything in society that we should properly be recognising the wider benefits of, I would argue that it is infrastructure. The point of investing in infrastructure is to improve the societies in which we live—to improve the economic growth, prosperity and competitiveness of the country and so

on. All these things are terribly hard to capture in a number, so they do not tend to be captured in a number. Therefore, the system tends to try to reduce it down to the things that are relatively easy to measure, and you often end up with projects that you see could have transformational change for a country or community, but the cost-benefit says that it is marginal because we only measure that narrow bit.

**Q13 Lord Carrington of Fulham:** I will move you on to the other part of my question. The problem with this is that it then makes controlling or monitoring the project virtually impossible, because you get all these add-ons that are costed in a different way to the original project and therefore the Government cannot control the costs in the way they need to. Consequently, contractors, aspirants for these political projects or whatever, get away with blue murder.

**Richard Threlfall:** It is clearly very difficult. Again, speaking not just for the UK but for the industry as a whole, the use of data—financial, performance or whatever—within this industry has been very weak since time immemorial. We are starting to get to a position where we can genuinely connect digitally what is happening on the worksite right the way through to the board and start to make decent decisions. It was only three or four years ago that a major UK plc contractor told me that the data that came to their board came three months late and therefore never actually formed the basis on which they made any decision, which is clearly an absolute nonsense.

**The Chair:** Richard, you are half way through a tunnel and you hit an obstacle, or it is an archaeological site or the best preserved skeleton of a Tyrannosaurus rex that has ever been discovered in the history of the universe, or whatever it might be. Instantly, in the scenario you are describing, you can see that your costs are going to rise. What do you do? You still have to build the tunnel, you still have to deal with the obstacle. You will still spend the money, so does it help to have that instant figure? Is it better than knowing three months later?

**Richard Threlfall:** It is a combination of things. Good project management, by reference to whatever precedent, bore holes, data you could get before you start, would always have created floats and allowed for certain eventualities. Of course, you cannot always legislate for the best ever dinosaur turning up right in the route of your tunnel. Within reasonable bounds there is a body of understanding about how much these particular projects tend to overrun, to cost and so on.

I do not think the fact that some of this stuff is very difficult or that occasionally you will hit unforeseen dinosaurs should prevent us from trying our level best to do this as well as we can. One of the things we should be doing today, which we are not doing, is harnessing data properly to do that. If you started to do that, you would ideally have a properly open-book relationship that carried all that data back to the sponsoring departments and others in government who need to know.

Maybe five years ago, the National Infrastructure Commission produced a very powerful report called *Data for the Public Good*, which basically argued that all this data should be publicly available to the proper authorities, not just put on the internet, so that we could have much better decision-making on an holistic basis. We are still a million miles away from doing that. Nearly all this data is kept quite confidential even within public bodies, bizarrely, rather than being shared in a way that allows everybody to collaborate and to work out together the best thing to do.

**Q14 Lord Berkeley:** Mr Threlfall, it is good to see you, and welcome. You have given us some very interesting bits of information today. I want to follow on from Lord Carrington's questions and talk about central government supervision. You mentioned the Infrastructure and Projects Authority and the traffic lights system. I have been watching those for years. It includes the MoD as well as roads, railways and nuclear power stations, things like that. It does surprise me that when a project has had a red traffic light even for six years and I ask, "What are Ministers doing about it?", I get the answer, "Nothing", which I find very worrying.

Last week I met the former accounting officer of Network Rail, who has retired, and we talked about the fact that he had to cancel the extension to the electrification of the Midland main line because he could not guarantee that it could be delivered within the price that had been approved by Parliament. The Secretary of State, who was Patrick McLoughlin at the time, was pretty upset about this, but accepted the decision because the accounting officer had said that it could not be done.

Where are we with all these accounting officers from Crossrail, HS2, the MoD? Hinkley Point is different; I do not want to go into detail on that, because that is a financing deal, but people will be worried about the consequence of cost overruns there. Where are we with the accounting officers' role either in signing things off, not just for costs now but for future outturn costs, or in seeking a ministerial direction? Has that fallen into disrepute?

**Richard Threlfall:** If anything, there has been quite significant progress over the last few years to create much more formal systems within government for the accountability of project owners. You are talking about the ultimate accountability of a Permanent Secretary and Ministers, but, at the level of the control of the project, formal remit letters now go out. None of that existed five years ago. The formal structure has been created of formally writing and saying, "You are the senior responsible officer for this particular project and this is the way you need to operate". That is good.

The other thing we have not touched on at all but maybe I should have is the focus on the major projects academy which the IPA has driven in trying to raise the level of expertise and capability among individuals in driving projects forward.

**Lord Berkeley:** Are these Civil Service individuals?

**Richard Threlfall:** Yes, that is correct.

**Lord Berkeley:** The major projects academy's audience is the Civil Service.

**Richard Threlfall:** Correct. Your question was about whether, when things go wrong, we have the political guts to cancel things. I would argue that the real focus is, perhaps rightly, about trying to find the different ways of improving the capability to drive projects forward effectively, to monitor them and to do everything that you would do to minimise the number that end up on the red list in the first place.

**Lord Berkeley:** What about a few politicians going into this major projects academy for a quick look? Where are the politicians in this? They get advised that this is going well or going badly, but you said earlier when you talked about the reduction in demand for energy that no one politician, apart from the Prime Minister, has an overall view on it. They will start fighting, as they are on windmills at the moment. Is there a solution?

**Richard Threlfall:** This in a sense brings us back full circle to the question of whether there should be a responsibility somewhere in the heart of government for looking across infrastructure as a whole, and to Lord Haselhurst's questions about the difficult decisions about prioritisation between different infrastructure and which projects to stop or delay when they seem to be off track, and so on. That just does not exist within our system today.

**Lord Berkeley:** What is your solution? Sorry, that is a bad one.

**Richard Threlfall:** You lead me to posit that we need a Minister for Infrastructure, but I do not think that is the answer of itself. You could easily put a title on somebody, but that does not change the underlying realities. If you look around the world, there are quite a lot of Ministers in different countries who carry the Minister for Infrastructure title, but unless the system creates that responsibility, in practice you have not done anything.

I would be tempted to look at a more collective responsibility. If there was a ministerial committee that brought together all the Ministers with big infrastructure responsibilities, and someone properly appointed to chair those, you would start to look at the infrastructure challenges as a whole. The US has just set up such a committee to drive the Biden Government's investment in infrastructure. It might be worth looking at that as a model. It is called the Infrastructure Implementation Task Force.

**The Chair:** Richard, it has been a fascinating session, and we are very grateful that you have given us so much of your time. You have certainly given us lots of questions to think about for when we take evidence in the new year from the National Infrastructure Commission and the IPA. Perhaps we should even think about the Infrastructure Bank as well. You have very much helped us to frame what we were already thinking, but you have given us a tremendous amount of detail and background to it. Thank you very much indeed for that.