



Built Environment Committee

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

Tuesday 10 January 2023

10.30 am

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

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Questions 30 - 46

Witness

I: Nick Smallwood, Chief Executive Officer, Infrastructure and Projects Authority.

Examination of witness

Nick Smallwood.

The Chair: Happy new year and welcome to the Built Environment Committee's evidence session in our short inquiry into infrastructure policy-making and implementation by government. Our witness today is Nick Smallwood, chief executive officer of the Infrastructure and Projects Authority.

I shall ask members to try to keep their questions fairly brief, and ask Mr Smallwood also to do so, because we can cover more ground that way. Each member of the committee should identify themselves when they first speak. There are labels in front of people to help with who we all are. Lord Berkeley will ask the first question.

Q30 **Lord Berkeley:** Thank you, Chair, and good morning, Mr Smallwood. I have been following your reports for a few years, and I am particularly interested in the traffic light system that you are developing; I think the committee will look at that later.

I am interested in the understanding of the IPA's remit. Linked to that, how does it co-ordinate with the National Infrastructure Commission, the UK Infrastructure Bank, the Cabinet Office, the Treasury and Ministers? This is quite confusing for people on the outside, so could you clarify who does what to whom?

Nick Smallwood: Hopefully I can. The IPA's remit is pretty well documented in the mandate that we published a couple of years ago to clarify that exact point. We administer and oversee the government major project portfolio, which covers the largest and most complex, novel and difficult projects across government; there are some 266 projects in it. We provide assurance gate reviews to the priority projects in that portfolio, and we provide data analysis and an annual report on the performance of the portfolio. We also head up the function of project delivery across government and provide all the toolkits and the standard for project delivery across government.

Last but not least, we give some idea of market confidence; we publish an annual national infrastructure construction pipeline, looking at what actual the commitment to market will look like in the coming years to give confidence to the market. We also provide a centre of excellence for private finance initiative offloading of redundant contracts.

That is what the IPA does. It complements the role of the National Infrastructure Commission, which is more of an independent body giving independent formal advice to Treasury on a regular basis about what it believes constitutes the needs and investment needs in infrastructure for the coming years.

The first ever national infrastructure assessment was published a couple of years ago, in 2020, and the response from government, co-ordinated by Treasury, with input from the IPA and departments, is an attempt to

say, "Given that assessment, what do we believe is affordable and deliverable in the next period?" That results in the national infrastructure strategy being our clear response to that space. It is the first time in a generation that we have had a very clear 10-year programme of work, with some £650 billion of investment across transport, housing, schools, hospitals, prisons and so on.

So NIC has a complementary role, and it is relatively independent. We tend to connect with it on a quarterly basis and compare notes, but it does a lot of very detailed deep-dive work to form its opinion in the national infrastructure assessment.

Lord Berkeley: Thank you. You produce all this wonderful information, and some of the results we debate in the House of Lords, such as the Ajax programme, which has had red traffic lights for several years. Who listens to this? Do Ministers listen to what you say and take action? How do you know whether they have?

Nick Smallwood: That is a really important point, and it is reason why we changed the traffic light system recently. A couple of years ago, I concluded that the five traffic lights constituting the assurance review allowed people to sit on the fence: everything was red/amber or amber/green, and nothing was fully red or green.

Lord Berkeley: It was.

Nick Smallwood: There was not enough rigour in deciding why something was assessed as a particular colour, so I changed the system to be very clear. Red means that you will not deliver on the cost schedule or benefits being stated. Amber means that you may, but certain conditions need to be met because you have significant risks. Green means that you are in very good shape and are on track to deliver. That change was quite abrupt and challenging for the departments to take on board. We then said, "What do we do to help projects that are red, because clearly that is not where we want to be?" I have a very small team of only 200 people, so we have to focus on government priority projects.

The Chair: How many people do you have?

Nick Smallwood: Our target operating number is 207. We have focused very much on whether we can do a bit of work in the early phases of a project is as not to set them up for failure. We did not have a lot of oversight of Ajax until it went off the rails, but we lean in for projects that are significant, important priorities and are red. I provided dedicated resource to Ajax, and I am pleased to report that, at its last gate review before Christmas, it got an amber rating, so it is climbing out of the hole that it dug for itself.

In our "response to red" programme, we give clear recommendations in the red review on what should be done to fix it. We then have an assurance of after-action follow-up 12 weeks later, and we sit with the

project team and review whether they did all the things that we recommended. If we are satisfied, we will re-rate the programme. We introduced that only 18 months or so ago, and 82% of projects that have had that 12-week review have moved to amber or green within the 12-week period. You can do that for projects that are at the SOBC/OBC phrase, but you cannot always do it for a project in execution that has the wrong estimate and the wrong execution strategy.

The system works. If a project is rated red again at the end of 12 weeks, we escalate it with a case conference and involve all the senior officials at the department and the Treasury, as well as the accounting officer. There is then a decision to be made about whether to stop and reset or stop the project completely and think again.

Lord Berkeley: So you wait until it is red and you have had these reviews before you speak to a Minister. That seems a bit late to me.

Nick Smallwood: No, I do not think that is the case. We basically follow the stage gate reviews, which follow a calendar programme showing when the project is ready for a particular stage gate.

The Chair: You are describing a project management office to government. That is best practice stuff that we have seen done before. You have experience at Shell, for example, and possibly other places. You go in, sit with them and get them back on track. You know what you are meant to be doing, but they do not; they are confused and demoralised by now. You help them to do that and get them back on track, and you bring a degree of independence as well as skill and technique and economic proficiency.

Nick Smallwood: Yes, indeed.

The Chair: Good. We will come back to other roles in a moment. For now, Baroness Thornhill has a question.

Q31 **Baroness Thornhill:** Nick, it seems to me that you have had your hands full recently and that you are desperately trying to improve the situation. Certainly from an outsider's perspective—my background is in local government—projects not running on time or on budget seem to dog us.

For clarification and from your experience, could you give us a little more on the life of a project from its approval to the planning process and its delivery? Obviously you are trying to improve things, but where are the real snagging points, the difficulties or the blockages that need to be changed to get things to run more on time and on budget? What happens when there is a real conflict, particularly a conflict with a capital-P—a political or even public conflict?

Nick Smallwood: That is a great question and at the heart of the challenge with major government projects. We are doing some of the most novel, complex and difficult projects on the planet. No one has done an HS2 before in the way we are doing it. No one has had the scale of the prison-building programme that we are taking on. Historically, even the

IT projects have been on unique, bespoke, tailored IT platforms that are coming to end of life. So we have difficult projects.

My experience there is that you have to put more time and effort into the front end. You do front-end loading, spending the time and energy to be clear on what outcome you need to achieve. We have been guilty in the past of rushing to action and appearing to rush to action, but the planning cycles for many of our projects are in years, not months—and they are complex; even with a hybrid Bill, for one of the joint venture partners on HS2 we have had to go back with 5,500 planning approvals to get their temporary works done.

So we have a very complex planning regime, and we have a degree of complexity across government, whether in departments, the Treasury and so on, and many stakeholders. Spending time being really clear about the outcome and the objectives and scope of the project is complex, but it is time that needs to be spent. We have done a bit of work recently to develop a project outcome tool. We have pushed opportunity framing, which is a technique that I have used in the private sector, and we are finding that to be very effective. It is basically a methodology to have a workshop with the key participants and stakeholders to get alignment before rushing to action and to get a decision road map to the various stage gates, so that we are much less likely to have late policy changes, missing key stakeholders' inputs to our projects.

That is the world that we are moving into, but it is not the world that I have inherited. There are many projects in the portfolio that did not have that and are therefore struggling as a result. You simply cannot assure goodness in a poorly developed project. The best you can do is hold out to deliver what you are predicting. So there is huge energy on my part to make sure that we do a much better job earlier. The best value is added before OBC. If, by that point, you are not clear what you are going to do and why you are going to do it, you will suffer late changes and additional costs in subsequent phases.

So that is what we do. On the life cycle, we have some good data now that shows how long it takes to do certain planning detail versus scope development and execution. Broadly, the planning life cycle is as long as the project life cycle. That is very difficult if you have to submit a development consent order and you have not developed the scope, which is what the planning regulations drive us to do. Actually, the DCOs are very constraining; if you need 30 vehicle movements in a day and not 20, you cannot change them. You then need to change your schedule, because it is premised on 30 vehicle movements.

We are now looking at some fairly sensible changes to the DCO planning regulations to allow us to be more pragmatic in developing these really big, complex projects, as you do not always have the detail when you have to submit the planning.

Baroness Thornhill: That is fascinating. Thank you.

- Q32 **Lord Grocott:** I want to ask about the powers of the IPA, specifically when things are going wrong. I tried to do the maths as you were describing the traffic light system. We know from the information we have that 27 were classified as red and that, after your period of evaluation, 82% of those moved to amber or green. I am interested in what happened to the projects—I make it five—that remained red. What, if anything, can the commission do about that? Were any abandoned? Are you able to enlighten us a bit about the process at that stage?

Nick Smallwood: I call them “enduring red” projects—the ones you do not want to have. You do not have a choice about some of them. I could give you examples from strategic defence projects, but I do not want to go into too much detail there. There are projects that you have to execute that will not deliver against their timeline. You then have to say what you can do to accelerate to the best possible outcome. We get involved in that work; the IPA leans in with the respective departments.

The emergency services mobile communications project in the Home Office simply has to happen, because the legacy hardware will fall over. However, that project was rated red, because it simply could not deliver to the budget in the timeline and there were huge technical problems with Motorola. We have now changed the leadership: we put in a new SRO and a new programme director—competent people now changing that programme. It will now deliver a successful outcome. The damage is done—it is already late and overspent—but we do take them seriously. I have to prioritise my resources. I can typically provide active support and advice to about 100 of the 266 projects. I simply do not have enough resources to do more than that. We are very selective about working on the priority of projects and not necessarily every red project.

- Q33 **Lord Grocott:** This is an unrelated question, but it is about the same statistics. You looked at 235 projects, according to our figures. Do you have information, and is it in any way relevant to your inquiries, about the regional breakdown of that expenditure? I am not talking about precise figures, but I am speaking as someone who lived and worked in a particular region of the country for many years and tended to think that we did not always get a fair slice of the cake. Do you have those figures?

Nick Smallwood: We absolutely have those figures. I mentioned that we publish the national infrastructure construction pipeline every year, typically in the autumn. I did all the work last summer and my team collated data on all capital spend, not just in the public sector but in the private sector, as best as we could obtain it from local authorities. We were ready to publish but were advised by the Treasury not to do so pending the Autumn Statement.

As a result, recognising the huge challenges of inflation, the departments in government are now looking at where they have to make some choices, pause, prioritise and reprioritise projects. So I will have to make some tweaks to that assessment before I can publish it, but I hope to publish it in the first quarter of this year.

In that document, for the first time, we have done a detailed breakdown by region of where the spend actually is, where the contracts are going to be placed and where the projects sit.

Lord Grocott: Will you be able to give us specific information about that before we conclude our inquiry?

Nick Smallwood: We can give you that, yes. I can send you that separately.

Lord Berkeley: In answer to Lord Grocott's first question, you basically said that some of the red projects you were looking at were too late to cancel. Surely you should have looked at them earlier and made a recommendation to cancel, if they were too late. Some of the things, like Ajax, will go on for ever. Maybe they should have been looking at alternatives, but it sounds as though it is too late.

The Chair: I do not think Mr Smallwood said that they were too late. He was saying that the ones he instanced were projects that had to happen; the mobile communication system used by the blue light services will expire.

Lord Berkeley: Yes, I know.

Nick Smallwood: It is fair to recognise that the discipline has now stepped up. Now, if there is a red-rated review, it gets serious attention. We now have the after-action review and the case conference with the accounting officers. None of that happened: we used to issue a gate review, and you are right that people used to say for many months, "It's red, but I'll just crash on". That behaviour is changing substantially now, given the rigour of red, amber and green that we now have. Red really means that it is a problem, and the accounting officers have to respond and respect that.

The Chair: You mentioned 266 projects or programmes. Do we mean programmes or projects?

Nick Smallwood: It depends on whether it is a project or programme that meets the intent of the GMPP definition. The new hospitals programme is one of those.

The Chair: Do you count that as one?

Nick Smallwood: That would be one entry in the government major projects portfolio.

The Chair: But it has at least 40 projects going on within it, 40 being the magic number for this purpose.

Nick Smallwood: Yes.

The Chair: Does that not seem an awful lot? With 260-odd, how do you get to grips with the notion of priority?

Nick Smallwood: Of course, the IPA does not make decisions about which projects proceed and get approved; that is for the departments. I personally have a view that we are overprogrammed and trying to do too much. It might not even be the fact that we have 266. We have 266, not 235, because 235 are reporting data and the others are now joining and will report data in the subsequent quarter, so that figure fluctuates. We have doubled it in the last two years, primarily because the rigour that I have brought is to apply the criteria about what constitutes a GMPP project. Historically, departments chose whether it was a GMPP project.

The Chair: What project?

Nick Smallwood: Departments sometimes chose not to put a project in the GMPP when in fact it met the criteria. So we were quite rigorous in a reset two years ago, saying that, if one meets the criteria, it comes on. If it is a simple repeat reprourement and does not need a lot of rigour, we can have a conversation with the chairs of the major project review group, Alex Chisholm and Cat Little, about whether it comes straight back off the GMPP and we do not give it the additional attention. Every GMPP project gets a quarterly assessment and a review, even if the stage gate assessment is not done specifically by the IPA.

So we have a large portfolio. Is it too much? It is a question of what else the department is taking on. Some departments have a huge portfolio of sub-GMPP projects, and the capacity to do everything is restricted. We have a significant number of vacancies in the project delivery function right now and real challenges, given inflation and Covid's impact on projects and delivery. So it is an ambitious programme, for sure.

Q34 **Baroness Cohen of Pimlico:** Good morning. I have a background in this, having advised the Ministry of Defence until about 2005. The Ministry of Defence specialised in producing projects that were described as "unfunded", which ought to have meant dead in the water, although it never did and they were left to grow. I have a horrible suspicion that some of these, not just in the Ministry of Defence, are turning up on your red list. Have you ever said to the red list, "That is not going to happen. Take it away and think of something else. It's dead", as in the dead parrot sketch, or will this never happen?

Nick Smallwood: We had a change in behaviours at SR 21. For the first time, the IPA was asked to do a delivery confidence assessment on everything that the departments put forward in their SR proposals. So unless it was going to be funded, it did not get on the list. So we had a bit of a clear-out in 2021, and it would be interesting to see how many of those projects did not survive—I have not done the maths on that. More rigour was put into that whole forward look at what constitutes a project to be included in our future plans.

The national infrastructure strategy, as it relates to infrastructure, has been hugely helpful, because we have put our cards on the table and said that we are going to do four prisons, X number of hospitals, 50 schools a year and the major rail and road infrastructure plans, and these are all

clearly defined and documented. That is a huge help, because it allows you to better plan resources, give more confidence to the marketplace and get more clarity on how you are going to execute going forward.

Best practice is to see what National Highways and Network Rail do. They have a five-year programme that is agreed with Treasury and is very specific and clearly documented, and they have the funding to do only that and no more. If something increases in cost, they have to find a way to offset that cost increase, and that discipline and rigour are growing across the whole estate of major projects.

Baroness Cohen of Pimlico: Of your red projects, is there any possibility that you will at one point say, "Take that one away. It is dead". I am not asking you to say which.

Nick Smallwood: It is not for the IPA to stop projects; I do not have a role to play. Where I do have a role to play is telling Treasury and the department what is clearly not going to be delivered for the cost and on the schedule, and what the likely outcome will be. We then put pressure on Treasury and the department to make the decision.

There is a need to cull more projects in early phases. If we really cannot get our cost estimates and schedules correct and plans right at OBC, that is when you need to pause and stop projects, rather than investing ever-increasing amounts of capex post that point in time.

Q35 **The Earl of Lytton:** Good morning and happy new year to you. I want to follow up on a piece of information that was in our background papers. In 2017, savings were estimated to be £15 billion. Is there an update of that? If so, could you enlighten us on the latest estimate of savings? How does that relate, in global percentage terms, to the value of the basket of 266 projects that come within your purview?

Nick Smallwood: To be honest, I cannot do that right now, because huge complexity was introduced with the raging inflation last year. Material prices went up 26% within six months, so we have double-digit inflation across major projects and programmes. There might be savings, but they are more than offset by cost increases. We are trying to work through what the data tells us, so I do not have an updated figure on that for this year.

The Earl of Lytton: How will we know about the overall value for money from the claim, or the expectation, that was made back in 2017?

Nick Smallwood: We have work to do to look in more detail at the impact of inflation per programme and project and then look at the benchmark data for those projects and programmes. The national infrastructure strategy allows us to invest for the long term in things like building schools. We can now benchmark the cost per square metre for building schools of a given size, and we can do the same for prisons and hospitals going forward. The cost per square metre for schools and prisons and the duration of the build are coming down. But I have not

offset those costs with the inflationary pressures to get a clear picture. I need to do that work.

- Q36 **Baroness Eaton:** Good morning. It has been really interesting to hear about the complexities of your organisation and what you have to evaluate and assess. I found the traffic light system in particular most interesting.

My question is about after the event. What role does the IPA have in post-project evaluation, and are there ways in which this can be improved?

Nick Smallwood: The answer is yes, we can improve that space, and we have an opportunity to do so through stage gate assessments. If a project wishes to leave the GMPP, it should have a gate 5 review, which the IPA can conduct. We can bring much more rigour and attention to those reviews and hopefully get more interest from officials about what we learn and see from them. This has been recognised by the Treasury as well. Cat Little is sponsoring the Evaluation Task Force, and we are now putting far more energy into educating departments on how they should define benefits before we execute a project. It is missing the point if you go back and try to think about what benefits you realised, rather than being clear about what your ambition was in the first place and whether you delivered against it.

We need to do a much better job of defining the ambition in the first place, and the Evaluation Task Force and the evaluation academy will train people in being more rigorous in setting expectations and targets. We then need to be more rigorous at the end, in the gate 5 reviews, bringing the skills of the Evaluation Task Force to bear to have some degree of an independent view of how we did. That is all work in progress as we speak.

- Q37 **Lord Stunell:** This has been a fascinating session so far. Do you have the powers or the ambition to make sure that this post-evaluation happens? We have taken evidence from other bodies and organisations, and everyone says, "It's not us. We think it might be the IPA". There does not seem to be an effective reverse check, if you like, of a project delivered after five or 10 years or, indeed, after any interval of time. Perhaps you could address that point as well as how ambitious you are and whether you have the capacity and ability to take it forward.

Nick Smallwood: I am ambitious in that space. One of the key principles in *Principles for Project Success*, which we published, is lessons learned. You need the feedback loop of lessons learned, otherwise you continue to make the same mistakes. I have a personal interest in making sure that we have far more rigour in the gate 5 reviews. Whether I have the capacity to do all of them depends on how many projects finish in a given year, but, frankly, right now the number that leave the GMPP is manageable.

What is more important is that we need to do a robust assessment against an ambition, and there are a lot of projects on the GMPP that

have not stated benefits. They just have not gone to the rigour of putting in the detail of what their expected benefits will be. That is why the Evaluation Task Force is important in helping me to help departments to be clearer about what they aim to deliver and then, yes, I can apply the rigour at the end of the project.

There are some major programmes that are worthy of further detailed investigation. One example is Crossrail. It is no surprise that there was lots of angst that it was so overspent and so late. There are some significant lessons that we need to learn, not only for Crossrail but to apply to all our other major rail infrastructure projects. We are now doing a piece of work commissioned by the DfT and led by the IPA—one of my lead assurance reviewers is leading it—and we will publish that lessons learned report probably at the end of quarter 1 or quarter 2 this year. That will be a much deeper dive that we will then take to a forum that either I or Alex Chisholm will chair, the infrastructure steering group, where all the key infrastructure departments around government send their senior officials, and I can disseminate lessons directly to everyone who might be able to benefit from them.

Lord Stunell: Do you think that departments are in the mood, or have the obligation, to listen to that feedback and engage in that process?

Nick Smallwood: I think they will if we have the right vehicle to enact it. I am not a fan of having a lessons learned database where people have to read it and do something. I am a fan of knowing, as a project practitioner, what I expect to see and then checking whether they did it. If we have the lessons learned on Crossrail, it is very easy for me—leading assurance on HS2, the integrated rail plan and Network Rail projects—to check for those key lessons. Have I seen the evidence in this project that they have been dealt with? That will certainly provide my assurance team with the right rigour. I hope it will not take long for departments to realise that we will get serious about lessons learned.

The Chair: I should say, as a matter of interest, that I was on the board of Crossrail until May 2016, when it was all—

A noble Lord: Perfectly fine.

The Chair: —and I was replaced by the incoming mayor.

Q38 **Lord Carrington of Fulham:** You made a point that struck me as strange, which I think is the only way of describing it. You said that projects get approved and get under way—if I understand you right; I am paraphrasing a bit—with no definition of what the benefit outcome of the project will be. Did I understand that correctly?

Nick Smallwood: I said that there are some projects that do not have a fully detailed benefit statement. They are very broad, very high-level, not specific enough and not sufficiently detailed for us to be able to go back with rigour to assess whether they were delivered or not.

Lord Carrington of Fulham: How do they get approved?

Nick Smallwood: That is why the Evaluation Task Force has said that we simply have too many projects that should not have been approved, so we will put more rigour into projects' benefit statements. Of course, that space has become more complex. It was very straightforward in the days when you had a transport project and you calculated a BCR ratio. It is very different now; you have to consider levelling up, net zero and the social value framework. It is a more complex space, and it is not an exact science either. We just need more skills in that space. We are not strong enough, in my view, so these high-level statements do not cut it.

Lord Carrington of Fulham: Are there many of them? Are we taking large amounts of money on these sorts of projects?

Nick Smallwood: Yes.

Lord Carrington of Fulham: So there are big projects that have been done like this.

Nick Smallwood: GMPP projects, yes.

Lord Carrington of Fulham: Extraordinary.

The Chair: What does benefit look like to you? Take the programme of 40 new hospitals—whatever that means—which is a big part of your portfolio: are the benefits measured in terms of hospitals delivered and functioning, are they measured in terms of improved access for local populations to particular types of services, or are they measured in terms of health outcomes—improved cancer rates or whatever—in the population affected by the hospital so that you can say that people are now healthier? You see what I am trying to say. What does the benefit look like to you? What would you count as a benefit?

Nick Smallwood: The answer is that all of those would apply to the hospitals programme. The five-case business model says that you need to look at the financial market, commercial and so on. That is why it is so difficult to measure them on the immediate completion of a project. Health benefits, for example, typically pan out over a long period of time. A gate 5 review, in my view, is the start, not the finish, of the benefits assessment. For some of these big programmes, you would be wise to go later in life and look at the life cycle of the asset that was built. Did it do what you expected it to do over a longer period of time?

Defining those benefits can be quite broad. For the hospitals programme, are we lowering the unit cost per square metre of the hospital, are we delivering them in a shorter period, as well as all the clinical benefits?

Lord Grocott: Presumably it would be related largely to the people living in the particular area. The question is: of benefit to whom? The other side of the coin, presumably, is who is disadvantaged.

Nick Smallwood: Indeed. I do not know whether you have had a chance to read *Transforming Infrastructure Performance: Roadmap to 2030*, which the IPA published. We have an infographic in there that describes

putting the citizen at the centre of everything that we do. You do not build a railway to build a railway; you build it in order to achieve something else. HS2 is not just high-speed rail; it should include growth around the stations and putting enough energy into that. That goes outside DfT and cuts into DLUHC and other places.

Q39 The Earl of Lytton: Is there a basic friction between the local democratic process and the delivery of these infrastructure projects? I say that because, by the time it gets to the public, the thing is much more oven-ready than the public would like to think in terms of their input. I wondered whether there is an essential friction and how you see that panning out.

Nick Smallwood: There is a friction. Partly it is essential, but partly we could make it easier. Take offshore wind: it is fine until the cable comes ashore and then no one wants a cable coming onshore in their back yard. There is a hybrid Bill for High Speed 2, yet we have all the planning regulations controlling temporary works, vehicle movements and so on. So part of that friction is justified; how do you manage the challenges of a major construction for a local village population, for example?

In the DCO space, we need to sharpen our focus and not give people multiple opportunities to challenge the same thing. We need a degree of flexibility about relatively minor changes that allow us to deliver something on time or ahead of schedule, rather than creating delays through the planning process.

The Earl of Lytton: Do people have too much say or too many opportunities to say the same thing over and again?

Nick Smallwood: I think it is too many opportunities to say the same thing and make multiple challenges, rather than a window of challenge that is fair and democratic.

The Chair: Since Lord Lytton has raised that, I have a supplementary question to his question. We often tend to think that the big obstacle in planning terms to driving ahead with an infrastructure project, or even a housing development, is local opposition from members of the public. Are you finding problems, and are they increasing, with independent, unaccountable agencies of government popping up and putting blockages in your way, whether that is the Environment Agency, Natural England or bodies of that character, rather than members of the public and local communities?

Nick Smallwood: I do not personally have the data to give an opinion. I would say that most of the environmental bodies are active on all our infrastructure projects. There is huge interest as net zero gets more and more of a profile. Whether it is more than we had five years ago I could not say with data, but it appears to me that there are plenty of organisations and bodies that have a view and a say on all our big infrastructure projects.

The Chair: Including government-type bodies?

Nick Smallwood: Yes.

Q40 **Lord Haselhurst:** Good morning. You said in a background note about your role, personally and in the organisation, that you were at the heart of government. Is that entirely satisfactory? Do you look around and feel the benefit of being an independent statutory authority, or are there models overseas in other jurisdictions whose powers you would crave if they were offered to you? Do you feel that we have the best possible way of dealing with infrastructure matters, or are there other things that you would be pressing to happen?

Nick Smallwood: It is interesting that the IPA is seen internationally as providing best practice on infrastructure leadership in government. We have a small international group in my team who provide training and support—we have got through about 1,500 officials—and many Governments have now mirrored the IPA as an organisation, as a complement to how we work.

There are a number of indices. A global infrastructure hub set up by the G20 basically rates about 81 countries across the world in terms of various elements of infrastructure delivery. We are first for regulatory frameworks. We are probably 12th or 13th for governance and procurement, so we are not perfect in everything, but we are number one in a couple of areas.

Are we sufficiently independent? When I inherited the IPA, it was working between the Treasury and the Cabinet Office. I understood that that was a legacy, on the basis that the IPA was the joining together of the Major Projects Authority, which sat in the Cabinet Office, and Infrastructure UK, which sat in the Treasury. When they put those two together in 2015, they decided that that was a model that they wanted to sustain. I give direct financial advice to Treasury on funding models—for Sizewell, for example. We are seen as independent of departments, which works, yet we have a foot in the Cabinet Office to connect me with the various departments around government. So I think that the IPA, along with the independence that the NIC brings, is a winning formula.

I do not feel like I do not have sufficient powers to intervene. I can very easily raise issues with the No. 10 delivery unit or the Chancellor and his team in Treasury and highlight when things are going wrong, and we do. A former Minister of Health stood up and showed the Prime Minister a chart of the 40 hospitals and the dates when they would all be finished. When everyone had left the room, the Prime Minister said to me, "Is that true?" I said, "No, it's absolute rubbish. It doesn't exist. There aren't even 40 hospitals named to be built yet, so you can't tell me how long they're going to take". We have sufficient independence to give an honest and fair opinion, and we do not hold back. In the assurance gate reviews, not everyone wants to get a red-rated review.

The Chair: Right at the beginning, Lord Berkeley asked whether Ministers listen to you, and you are saying that they do. When you knock on their door and have something to say, they will listen. But is there a

case for more systematic engagement with infrastructure on the part of Ministers—I am not making particular suggestions; I am just throwing examples in the air—anything from a Minister for Infrastructure to a Cabinet committee on infrastructure to a department for infrastructure? Maybe you are the department. Well, you are not; you are the Government's project management office.

Do you think that your job would be easier and more effective if there were some sort of more systematic structure? It seems to exist at official level—as you said, there is an infrastructure steering group bringing civil servants from departments engaged in infrastructure together for various purposes—but we feel a void at ministerial level.

Nick Smallwood: That is an interesting observation. When I first joined government in 2019, the then Chancellor launched Project Speed as an ambition to drive the duration of our major projects to a shorter duration. They were simply too long. Part of that was planning, part of it was a lack of governance structure, and part of it was that we are not very productive in the UK infrastructure industry. That focused team involved Ministers. Periodically, we would get all the major department Ministers together and have a Project Speed summary of where we were on the pathfinder projects. That brought attention, for sure, so I can imagine that if we got that structured correctly, it would help, not hinder.

The Chair: You mean that Project Speed has slowed down.

Nick Smallwood: Project Speed has been subject to distraction over the last few months, let me put it that way.

The Chair: It is interesting how government initiatives never seem to be terminated.

Q41 **Lord Carrington of Fulham:** I want to come back to international comparisons. You mentioned Project Speed just now, which clearly raises the issue as to how we compare to other countries doing projects. The obvious one for high-speed rail is probably France, which seems to manage to put through high-speed rail developments much more rapidly than we do, and seemingly at lower cost. There are also places where there are clear political changes that allow them to do it, such as China.

There is also the example of the US, where they need to do something about their infrastructure, which often is more laggardly than perhaps it should be. They throw money at the problem. I remember, notably, a flyover that got destroyed in California. They basically said to the contractor, "We'll pay you a lot more money if you get it done in a shorter time". Surprise surprise, the contractor got it done in a much shorter time.

Do we have any lessons to learn from these or, due to their speed and cost control, are these projects all "loser-y"? Do we have such different problems of density of population, archaeology and so on that we do not have very much to learn from them?

Nick Smallwood: You can always learn, even if it is that you are doing things better than they are. I do not think you should not look.

Recently I set up the project benchmarking hub, which is internal to the IPA hub, and I want departments to populate it with their actual out-turned data, while my team will be looking nationally and internationally at what others are doing. We have started fairly modestly, because I have only limited resource at the moment to do it. We looked at prison building and who was building prisons at the lowest cost. Surprise surprise, it is Turkey. I do not think you would want to be incarcerated in a prison in Turkey if you look at what they do for cost per square metre, but that informs us about whether we are making wise choices when it comes to what it is costing us per square metre.

With regard to rail, we are a hugely densely populated island. We typically have far more tunnelling and far more complex legacy rail infrastructure to work around, which costs us money; there are lots of roads to cross and bridges that you have to put in, which all escalates the cost. So there is not one answer to everything. We need to look to understand. If I take elements of HS2—road bridges, for example—and benchmark them, what does a stand-alone bridge cost in France versus what it costs in the UK? I would love to do comparators that were independent of population density, and we are starting to get that kind of dialogue going because we need to drive to a better place.

That said, if you try to do things quickly, it will cost you money and bring risk. I am not an advocate of schedule-driven projects unless there is a public benefit and a public need. The vaccines task force did a great job of delivering just that—hats off, they did the right thing and invested wisely—but to do that in the rail infrastructure project would probably add 11% to 20% to the project unnecessarily.

The Chair: To do what exactly?

Nick Smallwood: If you ruthlessly drive a project to the fastest possible schedule, you will typically waste some money. If you go too quickly, you start making choices in construction when you have not finished the design work, and then you have to revisit the construction work, which can result in it being a blow-out and having a longer duration than you originally envisaged. You have to be careful and cautious in this area.

I repeatedly share with colleagues that a well-developed and well-executed project will typically have a shorter duration than an average project and have a lower cost, if you get it right—the optimum cost is in a good place. The costs then go up exponentially if you go too quickly.

Lord Carrington of Fulham: Are you brought in early enough in a project?

Nick Smallwood: That is good question. I would say that we increasingly are, which is borne out by the fact that we have offered the project opportunity profiling tool, we now offer opportunity framing

workshops and we have the Routemap suite of products, which are all focused on that very early phase. It is a constant battle, because projects say, "Leave me alone. I know what I'm doing", until they find that they do not. But we are increasingly getting invited to the table, certainly for the more complex, larger projects; we have, for example, embedded people in the 40-hospitals team to help it, because that is difficult.

Lord Carrington of Fulham: The impression that I get from HS2—I have sat on various inquiries into it in the past—is that what you are talking about was probably not done at the beginning of it.

Nick Smallwood: I do not believe so. In my view, the scope is gold-plated, and it is too late. I had that conversation before the final investment decision was made, but going back and changing the scope would have cost us more money and caused delay. That is why it is so important to get it done before OBC and do what you were going to do.

Q42 **Lord Berkeley:** I will continue on the international comparison that Lord Carrington mentioned. You mentioned population density as a factor, and I am sure you are right if you compare French railways with UK ones. Looking at Germany, however, Berlin airport must be one the best examples of how not to build a new airport, and the same is true for Stuttgart railway station, which is years late and miles over budget, so we have things to learn in both ways.

Nick Smallwood: I agree, and that is why you should not be blinkered and look at just your own backyard. It is helpful to understand who has perhaps not made wise choices and done things well. I have delivered projects on five continents and lived on four, so I have had a good opportunity to look around and see how the Chinese do it and what you would not wish them to do in projects in the United Kingdom.

The Chair: The Turks built their airport.

Nick Smallwood: They did, but the Chinese are now building airports at an alarming rate. I visited Guangzhou in around 2017, and the airport was the size of Schiphol airport, but they were about to make it five times bigger. That city has a population of 22 million; the scale is just unbelievable.

The Chair: When Denver, Colorado, built its new airport, it provided it with 12 runways. If we had limitless land, we could have a 12-runway airport for London, but we do not need one, and Denver certainly does not, but it has them. Why would you want 12 runways in Colorado? They are great people, and there is nothing wrong with it, but it seems a bit excessive.

Lord Grocott: In answer to an earlier question, Mr Smallwood, you mentioned obstacles in the way of speeding up or delivering on major infrastructure projects. That must involve the extended parliamentary process, at least in part. The classic example, which is easy to get paranoid about if you are a supporter of it, is HS2, which seems to be pulled up by the roots nearly every 10 minutes. People are still talking

about scrapping it, when there are earthworks all over the place near where I live. Are you saying that too much of the procedure is involved in the parliamentary process and the private Bill process, which could be speeded up and where the same issues keep coming up?

Nick Smallwood: I have not seen that as much. I have with major rail infrastructure, of course, because it goes through so many major constituencies and is a big issue. But, in general, I do not think that would be a fair statement about projects; I have not seen them held up by Ministers. If they are well developed, well scoped, well prepared and well planned, we get good support, not surprisingly, from the departments. It is the stand-out ones, if you will—HS2 is one—that become difficult. But, in general, I do not see the parliamentary process as a challenge.

Lord Grocott: I cannot help making the observation that the most phenomenal infrastructure project that the United Kingdom has seen in the last 250 years was building a whole rail network in about 30 years in the middle of the 19th century. We are taking as long to build one railway line.

The Chair: It was the private sector in those days, you see; it was all done with private capital at risk, for a profit. That is what the private sector can do: it can build an entire rail network in 30 years.

Lord Berkeley: With no consultation.

Lord Grocott: Going bankrupt all over the place.

The Chair: Going bankrupt is part of the advantage of the private sector, because the asset remains and transfers, with lower capital encumbrance, to a new owner. One of the great benefits is that people can go bankrupt. The railway is still there; it has been built. Brilliant.

Lord Stunell: I was going to mention skills and capacity.

The Chair: Please do, because we have time, and it is a very important issue.

Q43 **Lord Stunell:** To what extent is the pipeline constrained by a lack of skills and capacity in the industry, or a lack of preparatory work and so on? You mentioned lower productivity, but could you perhaps link those things together? To what extent does the IPA see itself as having a role in delivering advice to various agencies in government in that respect?

Nick Smallwood: I mentioned the £650 billion ambition of the national infrastructure strategy. We will struggle to deliver that unless we have two fundamental shifts. First, we need to invite and invest more into the construction sector to grow that population and community with the right skills. Secondly, those skills need to change, because the industry needs to change and modernise. I was out in the oil and gas world for 38 years before coming here, and it looks the same as it did 40 years ago; it just has not modernised. Yet the automotive, aeronautic and oil and gas

worlds have moved on. Digitalisation and technology are already in front of us, available and mature, but they are not being used in UK construction.

The Chair: Is that not partly because they do not make any profits and they do not have any capital?

Nick Smallwood: They get paid the revenue to do it the long way, rather than using technology to take hours and time out.

So we are pushing through the transforming infrastructure programme, and I am a really strong advocate of pushing modern methods of construction and digitalisation. We now have a digitalisation and infrastructure guide in the government project delivery framework. I have published a suite of how-to and best-practice guides, and pockets and seeds of excellence are now appearing. One of them was on Hinkley Point, which sadly is not one of our investments; it is now leading the way on using a data lake and digital technologies to drive its performance on that project, not only in the build phase but in how it will commission, operate and start up that asset. So there is huge opportunity.

A linked element that is important but that we have not talked about today is skills in government project professionals. We need to grow our skills. We have numbers across all departments, but I have a concern that we do not have the depth of skill and capability. So the IPA has launched the Government Projects Academy, and we intend to assess and accredit all of our project practitioners across government, from foundation level up to master practitioner level, and to make sure that, for our major projects and programmes, we have the right levels of master practitioners sitting in the seats of the project and programme directors, rather than what I would call gifted amateurs, who are loyal civil servants but perhaps do not have the requisite skills to do what is needed. Even if you do not fill that space and do a lot of the project work in a department, you have to have a sufficiently intelligent client mindset in government to be able to manage the supply chain—we have some work to do there.

So we have launched the academy and started the assessment and accreditations. This has been well received across the departments, but we have the hard yards to do because there are 16,000 project professionals across all departments.

Q44 **Lord Best:** I declare that my only link to the IPA is that I have served throughout its duration on the sponsor body for the restoration and renewal of Parliament. You were our partner in that failed enterprise, but thank you for your help in that none the less.

My question is whether one can judge the IPA to be, and to go on being, a success. I think you have explained to us that evaluation is extremely difficult and this is an ever-moving target. I noted that President Biden has set up an infrastructure implementation task force on some dramatic scale. You mentioned, but we have not heard much about it, an

evaluation task force, which I think is linked to your own academy. Everything you say is reassuring and sounds great, but we do not have the evidence that the techniques that you use and the approaches that you take are actually successful. Will we ever get to that point? Will your new task force now make a difference? Will we be able to evaluate you in a meaningful way?

Nick Smallwood: I hope you can. The challenge in this space is the longevity, the long duration, of the projects. The projects that we are putting all the energy and effort into now to set up for success will not conclude for 10 to 15 years in some cases. We have doubled the number of green projects in the last two years, which is slow and steady progress. We are assessing and putting in more competent people. We are seeing the Response to Red programme having an impact. We are giving sage advice to Treasury, which is supporting us in not investing in projects that are not ready. So we are starting to have an impact. Will you easily be able to measure it in the near term? That will be more challenging, because the projects are of such long duration.

The Chair: Will we ever be able to measure it?

Nick Smallwood: I think you can, yes. I encourage you to put a baseline in the sand for what is a reasonable expectation of the number of red projects to have in the government major projects portfolio, and when we should show hard evidence of cashable savings in all projects reported in the IPA annual report. That is an ambition that the PAC wants to have and that we will have to work towards getting. That is very difficult if the projects have not put it in the first place, but we will fix that and then we can do the assessments at the end.

Lord Berkeley: You mentioned Hinkley Point. That is financed with a regulatory asset base, as I understand it, rather like some of the railways.

The Chair: No, it is not.

Nick Smallwood: It is not. It is a contract for difference.

Q45 **Lord Berkeley:** All right, it is different, but I still have a question. It affects the customer at the end of the day, so should you not be including that in your traffic lights? Many of us think that it is wildly over budget. That may or may not matter, but it would be quite nice to have your monitoring and comments on that as well.

Nick Smallwood: It is not on the GMPP, because it is not getting direct public funding.

Lord Berkeley: No quite.

Nick Smallwood: It is basically a contract for difference with a strike price agreed for electricity, so any cost overrun is down to EDF's purse. That was the benefit of agreeing the strike price. The downside is that renewable prices have brought the strike price for electricity substantially

lower than what was agreed. For Sizewell there will be a different contracting model; it will be the rateable asset base, and it will come on to the GMPP.

- Q46 **The Chair:** When I was on the board of Transport for London, we set up an independent project management advisory authority, so to speak, internally. It was a project management office, but it did not have much clout. The independent people we brought in, who were part-time and whatever, formed a real channel of communication with board members. Very often you would get a paper coming to a board committee on a project, but it was the paper at the end from IPMA that you would read to find out what the paper was actually telling you, because it was fairly straightforward and direct. So I understand the function that you are carrying out, in a way.

I want to be clear in my own mind that that is not only the core of your function but, as you have described it, almost the totality of your function. That is what you do. You are the project management office for government projects, and you try to get stuck in at every gate stage, right from the beginning, as far as you can. From the earliest gates, all the way through, you are there checking what is going on, and then you report it to someone.

That is what worries me slightly. When I was on the board of TfL, you would be reporting it to a board committee that was really engaged with these things. My worry now is that you are not reporting it to what I consider the equivalent level. You are going back to the departments and saying, "We don't agree with you about this". Maybe you are engaging with Permanent Secretaries, I do not know, but it is the flow back that concerns me. I understand what you were doing, but it is where it goes afterwards and how it impacts things that I am worried about.

Nick Smallwood: For the major programmes, like 40 hospitals and HS2, there are ministerial boards. We are represented on those boards and it gets reported to them. There is strong interest in anything in the form of a stage gate assessment by the IPA. I think we have the right clout and the right focus for those really big programmatic schemes at the top of the government priorities. Does it happen for all GMPP projects? No, there is not a board for every GMPP project; that is just impossible for us to manage with the resources that we have.

The Chair: It would be possible for you to manage but it might actually be beneficial to the Government if they had boards that were looking at projects or some sort of governance structure, even if it put greater strain on your resources.

I am very grateful. I will give Members one last opportunity to ask any final questions, because we have just gone over the hour. Does anyone have any last questions? I do not want to cut anyone off. No. With that, I want to thank you very much for what has been, at least for me, an extremely informative session.

Noble Lords: Hear, hear.

The Chair: We are very grateful for your time. Thank you very much for coming.