

**Claims, Trains and Frames:**  
**The Case of High Speed Two**

by

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**A thesis submitted to the University of Birmingham for  
the degree of DOCTOR OF PHILOSOPHY**

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**December 2015**

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## **Acknowledgements**

My sincere and heartfelt thanks must firstly go to my supervisors who without which this process would not have been possible. They provided me with invaluable feedback and reassured me whenever I needed it. They helped to steer me in the right direction and made sure that I remained focused. I would not be where I am today without them. I would also like to thank my funders, the European Social Research Council that enabled me to complete the research.

I want to thank my friends at the University of Birmingham with whom I had numerous informal discussions and they provided me with words of encouragement and advice when I asked for it. Special thanks to Abena with whom I shared many of my concerns and she always knew how to cheer me up.

Finally I would like to thank my parents for their support throughout this long and difficult process both emotionally and financially. They made the experience as enjoyable as possible and reassured me I was capable of completing the project.

## **Abstract**

Although evidence is utilised by claims-makers to strengthen their arguments, quality evidence is not necessarily the precursor to driving or explaining policy decisions. Actors who share a common frame are more likely to perceive a policy problem and solution in the same way. Therefore, decision-making processes are not about finding the highest quality evidence to support decisions; they become about which actor is better at presenting a believable argument that will persuade others their claims are more agreeable.

Using a single case study design, qualitative methods are used to examine the role of evidence in the context of the construction of a new high speed rail network in the UK, High Speed Two (HS2). It examines how these actors frame the debate and how they negotiate evidence with one another in different policy environments, through a process of claims-making.

The study provides a new perspective to the High Speed Two debate, one which has received little attention in academic circles. A claims-making framework is utilised to provide a rich description of the naturalistic processes occurring in the decision-making processes of High Speed Two and it offers a sophisticated understanding of how evidence is interpreted and negotiated by policy actors. In addition, it unpacks and refines notions of argumentation which acknowledges the subjective nature of evidence.

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# **Chapter 1**

## **Introduction**

*'To our despair, mega-projects often develop lives of their own and their lives sometimes defy control by us mere mortals'*

(Engesser, 1982, cited Merrow et al., 1988)

### **1.1 The problem of evidence in mega-projects**

Engesser's observation on the power of mega-projects is as true today as it was in 1982. Projects like the Millennium Dome and the Channel Tunnel Rail Link (High Speed One) grip the political imagination and appear able to sustain themselves regardless of the countervailing evidence. These projects are often referred to as 'mega-projects'. They are understood as being large schemes or developments that are complex in nature and extremely expensive to construct (Flyvbjerg, 2005). One of the reasons that they are of significant interest to politicians and the general public is that investment in them places a considerable burden on a country's gross domestic product (GDP). Globally, there has been an increase in the number of projects that are considered 'mega' in nature. However, with a growing population there is an inherent need for increased large transportation projects so it is likely that transport mega-projects (MTPs) will continue to be built.

When deciding whether to proceed with a mega-project, decision-makers rely on evidence that is predominantly speculative rather than qualitative. It consists of cost-benefit analyses (CBA) which attempt to determine whether the benefits of the project will outweigh the costs. CBA is probably the most comprehensive method and theoretically sound form of economic evaluation available to decision-makers (Robinson, 1993). Evidence often consists of evaluations of other mega-projects in order to help determine what the costs of another

project might be. In fact, what counts as evidence often comes to be shaped by the accepted wisdom that the project is a 'good thing'. Politicians often see mega-projects as a way in which to leave a legacy and they know that the ones that develop the project are unlikely to be around at the end due to the longevity of them. This phenomenon of pursuing a project because it is a 'good thing' challenges the view that evidence is the precursor to a policy decision. It suggests that policy decisions come prior to evidence, at least in part. And rather than evidence being a 'neutral' component of the policy process, it is highly contested. The concept of evidence-based policy making emphasises a desire to make sure that policy decisions are informed by rigorously and systematically reviewed evidence and assumes that it is possible to make these decisions whilst eliminating politics and values from the process. It has been defined as an approach that 'helps people make well informed decisions about policies, programmes and projects by putting the best available evidence from research at the heart of policy development and implementation' (Davies, 2004:3).

These issues surrounding evidence in the decision-making process are important for a number of reasons (academically and in practical policy terms). Academically they are important because this rational model of policy making is subject to challenges from theorists that do not view knowledge as objective and value free. It raises questions about knowledge and power, rationality and politics. In practical policy terms, the attempt by government to reduce public expenditure and increase value for money means that evidence should have an even greater role to play in decision-making. It would appear that in the case study explored by this thesis that the project has received continued support from politicians despite concerns regarding the increasing costs and negative environmental impact. Decisions, then, emerge from politics, judgement and debate, as well as being deduced from empirical analysis (Head, 2008).

The thesis is concerned with how the UK Government makes decisions about mega projects, and more specifically about how evidence is utilised by policy actors within these decision-making processes. It challenges some of the assumptions of the concept of evidence-based policy making and claims that beliefs and values shape or frame the way in which we view a policy problem and in turn affect the types of evidence that policy actors draw on to formulate a solution. Obtaining more evidence does not necessarily lead towards policy decisions being made, because much of the policy process is about reconciling different value perspectives. Evidence is understood in the thesis as:

*Information or knowledge that supports a claim or conclusion. This includes (but is not limited to) scientific research, quantitative and qualitative data including both written, verbal and visual, expert knowledge, tacit information, policy evaluations, stakeholder or public opinion*

Policy making does not take place within a vacuum; it occurs within the context of values, ideologies and political beliefs. While values may be important in the process of defining policy problems and helping to define the criteria for policy objectives, the evidence-based policy making (EBPM) approach suggests that they can be quarantined from the analytical process of determining which means are optimal for the desired ends (Dror, 1971). This is one of the basic aspirations for the rational evidence-based approach but one that has been questioned as far back as Lindblom (1959) in the late 1950s who argued that ‘muddling through’ was a more accurate description of how decisions were made. It serves as a useful model for seeking precise solutions to well-defined problems; however, not all policy problems are well-defined. In regards to decision-making within government the course of action is often chosen because it the most agreeable or consensual. What this means is that if political actors cannot agree on a course of action then they will compromise with one

another in order to reach an agreement. This means that decisions can only be partially based on the best available evidence. This compromise can be thought of as a process of negotiation. If policy actors have different opinions about a particular issue or they frame it differently to one another then they will not necessarily share the same idea of how to solve the problem. The thesis focuses on these negotiations in a number of different policy environments within the case study of High Speed Two.

## **1.2 The Case Study**

The case study that has been chosen for this research project is a high speed rail project that is being developed in the UK. It is due to be constructed in two phases; phase one will be built between London and the West Midlands and phase two will continue from Birmingham to the North of England as far up as Leeds. There are considerations for a High Speed Three that could continue further into the North of England and include Scotland. Phase one is on course to begin construction in 2017 and the whole project is expected to be completed in 2035. For the last decade there has been a concern that the current rail network will not be able to cope with the increased demand (Network Rail, 2004). Passenger ridership figures indicate that the number of people using the rail network is increasing every year (Atkins, 2003). From this they have predicted, using forecast models, how much demand will increase by in the next fifty years and some believe that the current rail network will not be able to cope with this demand. Herein lies the issue; some believe that the only way to increase capacity sufficiently is to construct a new train line, whereas others believe that the current network can be upgraded to meet demand. Most accept that there is an issue with capacity but they have different opinions about how this issue should be solved. In 2001 the Labour government proposed that a new high speed rail network should be developed and constructed. The project has been taken forward by the Coalition Government of 2005 to

2010 and the Conservative government of 2015 have been committed to carrying on with the project. As mentioned previously, mega-projects have a large financial impact on those funding the project and with governments having to tighten the purse strings it is no wonder that there is a great deal of interest when the UK government suggested spending over £50 billion on a new high speed train network. The point that the project has cross-party support is important because the politicians are the main decision-makers.

The thesis follows the mega-project from its development in the early 2000s to the end of March 2015 when Parliament was dissolved before the General Election of May 2015. The reason that this time period has been chosen is because this is considered the development stage of the project. It was in 2001 that political discussions about a new high speed line began and it was in 2013 that the Preparation Act received Royal Assent following its successful passage through Parliament. By March 2015 the preferred route for phase one had been chosen and discussions are now beginning for phase two of the route. High Speed Two is an interesting case to study because it is the ‘biggest and most ambitious infrastructure project in the UK, and the first new railway to be built north of London in over 120 years’ (HS2 Ltd, 2015). It is the largest mega-project currently under development in Europe and its success or failure is likely to set the future tone of railway investment. Secondary data informs the majority of the research with empirical research focusing on 2012 to 2014. By conducting real time research rather than retrospectively, it brings the researcher much nearer to the subjects’ experiences. This immediacy of events is a benefit in terms of understanding the nuances of the use of evidence in the decision-making process.

The thesis makes a number of contributions to academic literature. Until now, previous research on decision-making in mega-projects has tended not to focus on evidence utilisation and how actors negotiate evidence with one another. Academics seem to prefer to take an evaluative approach that focuses on the cost benefit analysis of a mega-project. Therefore,

this project diverges in that it provides a different perspective to decision-making in mega-projects research as well as a new perspective to the chosen case study (HS2) that has not yet been explored. In doing so it improves understanding of the role evidence plays within the policy process. The thesis addresses how actors within the case study conceptualise evidence and how they understand the policy problem. By investigating the way in which people within the case study understand the policy problem and the various solutions paired with looking at what evidential resources they draw on, some conclusions can be made about the relationship between the two. For example, some inferences can be made about the types of evidence that particular groups favour.

Another contribution relates to the way in which evidence is negotiated in different environments. Decisions within mega projects occur in a multitude of places, and so by examining evidence negotiation in three different policy settings some conclusions can be made about the effect they have on evidence utilisation and negotiation. The researcher obtained access to an entire scrutiny process relating to the case study in one Local Authority and was actively involved. This ‘inside view’ of the evidence-gathering process was invaluable and one that most researchers are unable to experience.

### **1.3 Map of the thesis**

This section sets out the map of the thesis. Chapter two documents the use of evidence in policy making in the United Kingdom and discusses the concept from post WW2, followed by the initiatives in the 1970s such as the creation of the Central Policy Review Staff (CPRS) and the use of evidence within the policy process by the Conservative government of 1979 to 1997. From 1997 to 2010 the New Labour government developed a number of programmes and initiatives to increase the use of evidence within policy making and from 2010 to 2015 many of these programmes were either continued or altered by the Coalition government of

the Conservative and Liberal Democrat parties. The chapter makes reference to the various government initiatives and White Papers that influenced the use of evidence within Government policies. The purpose of the chapter is to highlight the issues faced by various governments to increase the use of evidence within decision-making and the inherent tension that exists between political judgement and evidence utilisation. Most importantly, the chapter demonstrates that there has been an assumption amongst politicians that more evidence will lead to better decision-making.

The literature regarding 'evidence' is introduced in chapter three which includes the different models of evidence as suggested by Weiss (1986; 1987) and Young et al. (2002).

The chapter also introduces the theoretical approach that the thesis adopts and the analytical framework that is utilised in future chapters. The analytical framework draws on multiple literatures which include how actors frame and construct a policy problem and their evidence, to how they choose their evidential resources to make claims and the claims-making process itself. A theoretical framework is used that acknowledges that the policy process is complex and problematic, and that the process is not a linear one. It also argues that evidence is continuously added to the policy process and claims are constructed and reconstructed in a number of different arenas. The first research question is addressed from a policy frames perspective drawing on social problems theory. The second research question which is concerned with claims-making and evidence utilises Toulmin's theory of argumentation (1958) and the claims-making framework according to Best (1987).

Chapter four focuses on evidence in a particular policy area: transport mega-projects (MTPs). The thesis is dedicating a chapter to the use of evidence in MTPs in order to provide a context for the case study. It is also important to highlight the difficulties encountered by policy actors within these projects in terms of evidence utilisation. This is due to the nature of

evidence that is often used to either support or oppose a large infrastructure project. For the purpose of this research, a number of different decision-making models have been examined in order to draw some conclusions about the way in which decisions are made and the role that evidence plays within these decisions. Firstly the chapter considers the literature that explores the definition of a mega project and what the main characteristics are. The literature review identified four key themes relevant to MTPs which include complexity, risk, uncertainty and deception. The chapter then focuses on how decisions are made within these projects, in particular the techniques used to gather and evaluate evidence. This establishes what the issues are and how evidence connects to policy making in MTPs. By identifying past approaches to decision-making in MTPs the thesis shows in the next chapter whether or not the processes within High Speed Two are path dependent or whether they have taken a different approach.

Chapter five provides a detailed documentation and discussion of the history and development of a specific project: High Speed Two (HS2). HS2 is the new high speed rail network being designed and built in the United Kingdom with the aim of resolving capacity issues on existing routes. It tracks the evolution of the venture from the rationale and development stage up to the present day. This further sets the context for the two empirical chapters later in the thesis. Secondly, the chapter explains the development of HS2 from the creation of the company HS2 Limited until the present day. Thirdly, the chapter sets out the main arguments being put forward by those in favour and those against the project. This highlights the key issues that those for the project consider answerable by HS2 and why the opposition to the project disagree with them or suggest a different solution. It is important to understand what the key arguments are informing the debate on HS2 because they are relevant in both empirical chapters and relate to the research questions within the thesis.

Chapter six considers all issues relevant to the research design and methods used throughout the duration of the research. The chapter begins by setting out the reasoning behind using a single case study approach in order to answer the research questions. The aim of research is to make sense of the meanings of the participants involved within the case of HS2; by understanding how they frame the policy issue and negotiate evidence with one another through a process of claims-making. The strategy of inquiry that informs the procedures is the case study design and research methods include participant observation of a community meeting, semi-structured interviews with policy actors and secondary data analysis of evidence presented to the Birmingham City Council Overview and Scrutiny Committee's review of HS2 entitled 'Maximising the Benefits of HS2'. All ethical considerations are discussed that are relevant to each approach. This is followed by a discussion about the data analysis being used in the thesis which relates to the previous chapter and the claims-making framework.

Analysis of the case study is provided in chapters seven and eight. Chapter seven concentrates on answering the research question: *How do actors within HS2 construct the policy problem?* This question is answered by drawing on two literatures including social problems theory and policy framing theory with an emphasis on the latter. Firstly the chapter explains how High Speed Two came to be on the political agenda . This provides both further background to the case study and sets out the reasoning behind the policy. Secondly, it focuses on how policy actors within HS2 have constructed and framed the policy problem. By examining the frames of those involved in HS2 and the types of evidence they utilise some conclusions are made about the relationship between a person's framing of an issue and their preference of evidence. In chapter eight the attention centres on Toulmin's theory of argumentation and the claims-making framework within the process of argumentation about HS2. It leads on from the previous chapter that sought to examine how

policy actors within HS2 frame and construct the policy problem. Firstly it answers the research question: *What evidential resources do policy actors within HS2 draw on?* And secondly, it demonstrates and analyses how the policy process for HS2 enables and constrains particular kinds of claims-making by the different actors involved in the process as it relates to the Toulmin model of argumentation and draws on other relevant theoretical frameworks. This chapter focuses on answering the final research question: *How are different forms of evidence negotiated between policy actors in different environments?*

In order to answer the question, data is taken from the community meeting in Castle Vale<sup>1</sup>, interview transcripts, media reports and a scrutiny review conducted by Birmingham City Council. This provides a number of different arenas in which policy actors must select evidence in order to present claims. This thesis suggests that actors negotiate the evidence through a process of claims-making and counter-claims. The chapter also shows that those in favour of the project have the advantage in terms of the claims-making process due to their resources and expertise as opposed to those against the project who are constantly in a process of offering counter-claims. The ways in which evidence is negotiated is dependent on a number of things which is discussed in this chapter including the setting in which the evidence is negotiated, the forms of expertise amongst stakeholders, the alliances that actors have with one another and the timing of events affects what evidence is used and how it is negotiated.

Chapter nine draws together the main conclusions from the thesis and reflects on the research process. It revisits the research questions in order to demonstrate the value of the arguments that are developed throughout the thesis. It summarises the key findings and explains the

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<sup>1</sup> Castle Vale is a residential estate located in Birmingham six miles north east of the city centre. The proposed route of HS2 will pass next to the estate.

contributions that the research makes to academic literature. The reflections consider the research process as a whole, discussing what can be considered a success and what issues were faced throughout the course of the project. Finally, some suggestions are made for further research that could be developed from the thesis.

# **Chapter 2**

## **Tensions between political judgement and evidence utilisation**

### **2.1 Introduction**

This chapter historically documents evidence utilisation by policy makers from post WW2 up until early 2015. The purpose is to demonstrate that there have been a number of efforts to increase the use of evidence within decisions but that an inherent tension exists with political judgement which has reduced the opportunities to do so. Attempts have also been made to improve the quality of evidence that decisions are based on but these attempts have also proved to be ineffective in some cases. What this chapter identifies is that an assumption exists, and has done for some time now, that more evidence will lead to better decision-making. It also highlights how policy actors give preference to specific types of evidence. The chapter looks more closely at the attempts by various reigning governments to increase and improve the use of evidence followed by examples that support the argument that this inherent tension exists. Some politicians believe that due to representative democracy they have been given the power to make policy decisions for the general public. However if they are requested to take advice and guidance from researchers then there will be some inevitable tension between them. This chapter is divided into stages that have been identified by the researcher rather than by terms of a Government. The stages are identified on the basis of initiatives because some span more than one term of government and more than one political party.

Stage one begins with the post WW2 period of the 1950s and continues to the end of the 1970s. In this era some politicians perceived social research as being of little value to the decision-making process. There was some tension during this time about the role evidence

should play and how much public money should be spent on research (Bale, 2012). However, some progression was made in terms of establishing a number of research bodies, such as the Social Sciences Research Council and the Bow Group, and attempts were made to make sure that decisions were informed by evidence (James, 1986). The Roskill Commission on expanding airport capacity for London acts as an example of politicians ignoring evidence in favour of their own agendas. Next the 1980s and 1990s saw a period of ‘rolling back the state’ which is classed as stage two. This refers to an era in which the Conservative Government had the intention of reducing public spending and adopting a private sector ethos which led to a decrease in the amount of government-funded research. Their research interests focused more on economic rather than social issues which mirrors their approach to governance. What is apparent from this period is a change in the way policy actors influenced decisions such as the rise of think tanks. Up until the 1990s there is evidence that ‘time and misunderstandings of the social sciences plus prejudice and suspicion got in the way’ (Nichol, 2001:ii).

From the late 1990s when the Labour Party took control, the concept of evidence-based policy making was born as it is understood today. The Party promoted the use of social research to influence policy decisions and coined the phrase ‘what works’ when deciding what course of action to take. The expression ‘what works’ came from New Labour’s desire to be ideology-free and pragmatic and focus on basing policy on evidence of what works. They developed a number of initiatives and commissioned a number of large scale studies in order to increase evidence utilisation (Alcock et al. 2013). However, some instances can be identified, most notably drug policy, that show politicians going against expert advice. The Coalition Government of 2010 to 2015 also promoted the use of evidence within decision-making and continued many of New Labour’s initiatives and programmes in order to ensure that policy was informed by evidence such as their ‘What Works’ centres. This is the third

and final stage that is explored in this chapter. The chapter concludes by discussing what the implications are for evidence utilisation and decision making.

## **2.2 Post WW2 era and evidence utilisation**

Looking further back in time to the 1920s and 1930s the literature identifies that Western governments supported little to no social science research and ‘made very little use of the results of such research produced with support from other sources’ (Bulmer, 1987:1). Few researchers graduated from universities (Payne et al. 1981) and many scholars within the natural sciences believed that the social sciences did not warrant the same recognition academically. This was because they believed their work was more rigorous and meaningful as it used mathematical and scientific techniques of measurement and deduction. By the time the Second World War began a slight increase in social survey research occurred due to the creation of the War-time Social Survey in 1940 and the increase in Ministries establishing their own information units. The War-time Social Survey<sup>2</sup> was established in 1940 with the support of the National Institute for Economic and Social Research with the aim of investigating questions of sociological importance. Several government departments requested for evidence to be collected about specific social and economic problems as well as investigations of more general factors affecting public opinion and morale. However, independent scientific sponsorship was lost in 1941 and many of the survey’s employees resigned. The Survey continued to exist under the surveillance of the Ministry of Information and work carried out was in response to departmental directives which would have been based on the preferences of the department in question. So although some efforts were made during this time period to inform decisions based on evidence, researchers were only able to conduct research based on departmental directives. The quality of the questionnaires during this time were not considered as robust as they are today as the majority of surveys in the

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<sup>2</sup> Now known as the Government Social Survey.

1940s used quota sampling and had a very narrow focus, only answering clearly defined research questions (ESRC, 2011). This may have been due to the lack of researchers and resources at the time. What the literature does reveal is that some policy actors recognised a need for evidence to inform decisions albeit a small amount.

Towards the end of the Second World War in 1944, the Department of Scientific and Industrial Research (DSIR) suggested that ‘post-war development would require the appointment of a council to look into the “psychological reactions imposed by modern life”’ (ESRC, 2011:4). However, the Medical Research Council, part of the DSIR, argued that sociology had not yet reached a stage of scientific development that an Advisory Council for Sociological Research could be justified as an official Government body (ESRC, 2011). This is consistent with the beliefs from the 1920s and 1930s amongst professionals in the fields of medicine and the natural sciences who did not view the social sciences as being able to make legitimate generalisations because they believed that human actions are not subject to the regularities that govern the world of nature (Coser, 1977). In other words, they did not believe that it was possible to apply the same methods of generalisation to the subject matter of human action because there were too many variables that could not be controlled. Also during this year, the Deputy Prime Minister commissioned Sir John Clapham to chair a committee that would ‘consider whether additional provision was necessary for research into social and economic questions’ (Bulmer, 1987:78). After two years of investigation the Clapham Committee concluded that social science research in the universities was inadequate because there were only 52 social science professors and readers in the UK compared to over 450 in pure sciences and medicine (ESRC, 2011), yet it recommended against the founding of a Social Science Research Council.

In 1946 the Government Statistical Service was created in order to produce evidence for policy makers that consisted of ‘hard facts about social conditions established by the now normative statistical methodology of social policy research’ (Payne et al. 1981:142).

Referring to evidence as ‘hard facts’ and using quantitative data is indicative of a government that wanted to apply scientific methods to social research. This may have been due to criticisms from the natural science scholars about the quality and value of social research as well as a desire to be accepted by the natural sciences by utilising methodologies that support epistemological and ontological beliefs of theirs. What this indicates is that the government at the time regarded the natural sciences highly which is evident by their desire to apply scientific methods to social research.

Another factor that increased social research during the 1950s and 1960s was the huge increase in the amount of spending in Britain on housing, health care, education and other social services. This led to a greater demand for evidence about disadvantaged groups in society and a greater interest in the impact of social and economic policies upon individuals and groups. Questions were asked about ‘whether services were reaching those for whom they were intended, or how far equity was being achieved required research to answer them’ (Bulmer, 1987:4). Prior to WW2 there was less demand for social science research and evidence by policy makers so there was a smaller supply of data. When the demand for research and evidence increased, so did the supply of researchers and evidence. With this being said, although the academic world experienced a take-off in the social sciences, the changes were slightly less dramatic within government. It was not until the 1960s that the interest accelerated in terms of expenditure on research and evidence utilisation within policy making. Bulmer (1987) has written in detail about the lack of social scientists, economists and sociologists that were available to influence decision-making. He noted that ‘in the early 1960s there were as many sociologists teaching in universities throughout the country as

there were historians teaching in Oxford alone' (Bulmer, 1987:2). Within government social science research was limited and until Harold Wilson took power in 1964 with the Labour Party there were less than fifty economists practicing in central government.

Two key reports were produced in the 1960s that led to an increase in social research; the Committee on Higher Education report (1963) and the Report of the Heyworth Committee on Social Studies (1965). The Committee on Higher Education expanded the number of places available for students to study the social sciences in universities and the Heyworth Committee was responsible for recommending the creation of the Social Sciences Research Council (SSRC) and recommended that social science research should be increased. This meant there would be more researchers which would in turn theoretically lead to more research being conducted. Discussions about the creation of a state funding body for the social sciences had been under discussion since the Second World War, however, it was not until the 1964 election of Prime Minister Harold Wilson that the political climate for the establishment of the SSRC became sufficiently favourable. Then in 1968, the Head of the Civil Service, Sir William Armstrong and the Secretary to the Cabinet discussed whether or not to create a long-term planning unit within the Cabinet Office, which would undertake economic, social and scientific research (Pollit, 1984). The Prime Minister at the time, Harold Wilson, decided not to proceed with the proposal but his reasons for not doing so are unclear. Two years later a White Paper was published entitled 'The Re-organisation of Central Government' (Cabinet Office, 1970) and it set out a plan to create a 'central capability unit' called the Central Policy Review Staff that would assist Ministers:

*'...to take better policy decisions by assisting them to work out the implications of their basic strategy in terms of policies in specific areas, to establish relative priorities to be given to different sections of their programme as a whole, to identify those areas of policy where new*

*choices can be exercised and to ensure that the underlying implications of alternative courses of action are fully analysed and considered'*

(Cabinet Office, 1970)

In 1971 Lord Rothschild, a former head of research with Shell International<sup>3</sup>, was appointed as director of the CPRS. The CPRS was considered a 'hybrid' as its membership consisted of both civil servants and outsiders from commerce, academia and industries. It was a strategic thinking unit that carried out a number of research projects varying in length and detail. Some of the issues that they addressed included ship-building, energy, nuclear power and the future of London as a financial centre (James, 1986). Staff advised Ministers on economic matters throughout the 1970s and helped to run Programme Analysis and Review (PAR), which comprised of a series of reviews of selected departmental programmes inaugurated in the 1970 White Paper (Gray and Jenkins, 1982) as well as giving private advice to the Prime Minister. During the 1970s there was a commitment to evaluating government programmes in order to understand how to improve them which can be likened to the emphasis that future government's placed on evaluation. There was a belief at this time amongst many politicians that rational policy-making was possible, based on consideration of long-term goals, policy outcomes and so on (Bulmer, 1987). In his book, 'Mediations of a Broomstick', Rothschild conceptualised policy analysis as 'political impartiality and intellectual honesty, analysing all evidence without concession to ministerial preconceptions, always reaching firm conclusions, never fudging a compromise' (1977:167). This approach to policy analysis resonates with the notion of evidence-based policy making. Rothschild was commissioned to conduct a report which was produced as a Green Paper and he 'attacked several well-established traditions in

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<sup>3</sup> Shell International Limited owns and operates oil and gas plants in the UK and internationally and performs downstream activities.

scientific research and was specific about how they should be changed in terms of organisation and finance' (Whitehead, 1978:11). Following his recommendations, there was tighter control on research commissioned by the government.

One of the ways in which we can assess the use of evidence by previous governments is to examine public inquiries and Royal Commissions of their time. They provide some indication about issues that were important to Governments during their time in power and their desire to collect evidence in order to reach some conclusions. Inquiries are set up for a number of reasons including accountability, reassurance, to establish the facts and learn from events to help prevent their recurrence as well as serving a wider political agenda for government (Walshe, 2003). They provide a valuable focus of the influence of social science research upon public policy (Bulmer, 1982). One such example of apparent disregard for social research by politicians is the case of airport expansion in London. Still to this day a prominent subject discussed in Westminster can be dated back to the late 1960s.

In 1968 an inquiry was established, chaired by Mr Justice Roskill, entitled the 'Third London Airport Commission' to determine whether or not a third airport should be built and if so, where. The Commission anticipated rapid growth in air transport between the late 1960s and the end of the century and concluded that a new airport should be built to the north west of London at Cublington between Aylesbury and Milton Keynes (Kay, 2012). The report was highly criticised for its reliance on cost benefit analysis (Mishan, 1970) and that it was argued that the 'quantitative findings of the Report cannot be used alone to decide the issue' (Mishan, 1970:223). They acknowledged that quantitative data had its limitations by saying this; however, they may have disagreed with the findings which led to this criticism. What else is striking is that the government at the time rejected its findings immediately and decided to build an airport at Foulness instead which was considered the most costly of all

four options in the Report. The Roskill Report had decisively rejected this option as he considered it too expensive to build and too far from London. Foulness was never built and shortly after it was suggested that Stanstead should be expanded. Roskill had also assessed this option and considered it not to be a viable answer to the capacity issue.

What this demonstrates is that politicians at the time rejected evidence presented to them in favour of another option that was based on their own preferences. Their political agenda trumped the evidence presented to them and they settled on an option that was less cost effective. This era was dominated by a lack of respect for social sciences coupled with politicians using their judgement rather than listening to specialist advice, something which is common within all three stages. It would seem that sometimes politicians utilise evidence when it supports their agenda and reject it when it does not. This has been referred to as policy-based evidence (Marmot, 2004). What this concept implies is that policy makers decide what course of action they would like to take and then look for the evidence to support the decision rather than the other way around (evidence-based policy making).

### **2.3 Rolling back the state in the 1980s and 1990s**

In 1979 Margaret Thatcher was elected as Prime Minister and she led a Conservative government that was quick to criticise the spending of previous governments. The defining feature of this government was its intention to 'roll back the state' (Hills, 1998). What this meant is that much of the politics revolved around cuts and restrictions in public spending because Margaret Thatcher argued that economic difficulties in the UK were mostly due to high public expenditure (HM Treasury, 1979). There were reservations among some MPs about the value of research in the social sciences (Posner, 2002) and some politicians argued that it should not be publicly funded which could in turn lead to more savings. It was clear that 'the social sciences in general and the SSRC in particular were in the firing line ever

since the Conservatives came to power' (Bulmer, 1987:353). In December, 1981, Lord Rothschild, the former director of the Central Policy Review Staff, was asked to lead a study that would be used to determine the fate of the Social Science Research Council (SSRC) which had only been in existence since 1965. The report was published in 1982 and shortly after it was agreed that the SSRC would remain but that its remit would be expanded beyond the social sciences, to include more empirical research and research of 'more public concern' (Rothschild, 1982). To reflect this, the SSRC was renamed the Economic and Social Research Council (ESRC) in 1983. This shift in focus from social to economic research reflects the preferences of the Conservative government during this time. For example, when the Audit Commission took over audit responsibilities for NHS trusts in the early 1990s, it conducted value-for-money studies on the cost-effectiveness of day-case surgery. The findings of these studies subsequently contributed to the development of a policy agenda that promoted the benefits of day-case surgery (Nutley and Webb, 2000). So one cannot argue that there was a complete disregard for evidence during this era and it is possible to identify different ways in which decision-making was influenced.

The situation regarding the CPRS was not as successful. Between 1974 and 1979, the CPRS suffered a decline in its audience due to 'economic crisis, the dominance of political expediency, political polarisation and the decline of the Cabinet' (James, 1986:431). It had little credit and by 1979 their audience in the Cabinet was small which was further reduced by Margaret Thatcher and in 1983 she sought to abolish the CPRS and was met with no opposition from her colleagues. Without the faith and support from Cabinet required by the CPRS it was deemed redundant by Lord Rothschild. This lack of support further strengthens the claim that some politicians did not have a great deal of faith in social research at this time. However, the CPRS did survive for thirteen years and had an impression on many different

government departments and is considered the Prime Minister's 'Think Tank'<sup>4</sup> of its time (Pope et al. 1986). During the 1980s an expansion took place in the number, type and variety of 'Think Tanks' (Parsons, 1995). These 'Think Tanks' aimed to influence the policy agenda through the creation of research and policy advocacy. They can be seen as organisations attempting to fill a void left by the Conservative government due to the decrease in social research being funded by the state and a desire to influence decision-making.

One notable organisation that was created later in the Conservative era is the Institute for Public Policy Research in 1988, which supported the idea that the policy process was centralised and inputs should be fed into the centre (Parsons, 1995). It produced, conducted and published research into, and promoted public education in the economic, social and political sciences. Policy knowledge, or evidence, during the 1980s came from an increasingly diverse number of places because the Conservatives reduced some of the traditional avenues for participation so people looked for other ways. This may have been due to the reluctance of politicians to acknowledge certain types of evidence from particular sources and their preference for economic data. Davies et al. (2000) argued that during the 1980s and into the 1990s 'there have long existed mechanisms for keeping research evidence at arm's length from government...this distancing or even the dismissal of research was particularly apparent with the ideologically driven government of the 1980s' (2000:19).

What is interesting about this time period is that government spending did not reduce under the Conservatives even though they had every intention of doing so. They reduced spending in certain areas but because of increased unemployment, an ageing population and a rise in lone parents in the 1980s, demand for welfare services increased rapidly so money was spent

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<sup>4</sup> A 'Think Tank' is considered to be an organisation that performs research and advocacy concerning political issues. They are usually non-profit organisations that sometimes receive funding from governments, advocacy groups, businesses or revenue from consulting or research related to their projects (Stone, 2006).

tackling these issues. Much has been written about the way in which ‘the gap left by the crumbling of the social democratic consensus was filled by a ‘new right ideology’ with the election of the Thatcher government in 1979’ (Nutley and Webb, 2000:19). Policy making throughout the 1980s and in part in the early 1990s was driven by this ideology. However, the concurrent development of a managerial agenda in the public sector led to a greater focus on programme evaluation, an increase in performance indicator systems and increased powers for audit and inspection regimes (Pollitt, 1990; Hood, 1991). These in turn provided systematic information on the effects of policy and practice interventions that was sometimes fed into the policy-making process.

#### **2.4 The evidence-based policy making movement**

It would be imprudent to suggest that prior to 1997 policy was not based on evidence and as examples in the previous section demonstrate, there were attempts made to increase evidence utilisation in policy making but these attempts were often met with some resistance by politicians. It is difficult to address the concept of evidence-based policy making without making reference to the New Labour governments of 1997 to 2010. They promoted the concept that policy should be based on ‘what works’ and driven by systematically reviewed, rigorous evidence and modern literature rarely discusses the approach outside the context of New Labour. If it is accepted that policy decisions were made on the basis of some evidence previous to 1997 then it is important to try to draw out from the literature how New Labour’s approach was different (if it was) and how they promoted its use. Evidence Based Policy Making (EBPM) is defined by one author as an approach that ‘helps people make well informed decisions about policies, programmes and projects by putting the best available evidence from research at the heart of policy development and implementation’ (Davies, 2004:3). The aim of evidence-based policy making is the *modernisation* of the policy making

process. Modernising policy making in turn involves the idea of 'professionalising'. The 'professional model' (Cabinet Office, 1999b) defines various stages which can be broken down into clear and distinct sets of management tasks. Professional policymaking 'involves the idea that there are specific skills which policy makers have to acquire in order to be "effective"' (Parsons, 2001:93).

Within this model the policy making process is perceived as being a 'highly mechanistic system which necessitates improvements in systemic communications and co-ordination (wiring- up and joining-up)' (Weerakkody, 2012:85). More professional/rational policy making is, to a large extent, dependent on the better use of evidence and the management of knowledge. The model excludes some central aspects of policy making: people, power and politics. It also assumes that if we have a policy problem then a systematic review of evidence will provide us with a solution. It does not acknowledge that policy actors may interpret a policy problem in different ways thus suggesting different solutions. With this being said, the Labour government promoted the use of evidence and rejected the belief that policy can be made based on ideologies. In 1997, the leader of the Labour Party at the time said in the manifesto for the 1997 General Election:

*'We will be a radical government. New Labour is a party of ideas and ideals but not of outdated ideology. What counts is what works. The objectives are radical. The means will be modern. Britain will be better with New Labour'*

Tony Blair in Labour Party Manifesto (1997)

Shortly after this manifesto, a Labour Government was elected into power with a landslide victory seeing them win the most seats the Party had ever held (Geddes and Tonge, 1997).

From the mid-1990s until the early 2000s the Party was referred to as 'New Labour' which

was taken from a conference slogan first used by the party in 1994 which was later seen in a draft manifesto published in 1996 entitled 'New Labour, New Life for Britain' (1997). What this shift explains about the party is that they wanted to be seen differently to previous governments and claimed that the Conservative government before them had shaped policy on the basis of political ideologies (Nutley, 2003) rather than evidence and that they were going to change and modernise the way in which policies were formulated and implemented. They closely associated with an agenda of EBPM coupled with understanding 'what works and why' within the central element of their political strategy of modernisation. The most notable document that sets out the modernisation agenda of New Labour is the 1999 White Paper entitled 'Modernising Government'. Within this document, the party sets out the key characteristics of 'modernised' policy stating that:

*'...this government expects more of policy makers. More new ideas, more willingness to question inherited ways of doing things, better use of evidence and research in policy making and better focus on policies that will deliver long term goals'*

(Cabinet Office, 1999a:16)

The document outlined a range of reforms to improve the functioning of government. It placed considerable emphasis on joined-up government<sup>5</sup>, a focus on meeting a diversity of customer needs and demands in the delivery of public services, and the use of use of targets and measures focused on results rather than inputs. However, Wyatt (2002) argues that the majority of the White Paper can be seen as a continuation and development of programmes of reform and change that had been implemented in the UK through the 1980s and 1990s.

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<sup>5</sup> Joined-up government was a policy to compel different government departments to work together and collaborate with one another.

Evidence-based policy making was recognised as a central element of New Labour's plans for the modernisation of government. For example, the Paper stated that:

*'...policy decisions should be based on sound evidence. The raw ingredient of evidence is information. Good quality policy making depends on high quality information, derived from a variety of sources - expert knowledge; existing domestic and international research; existing statistics; stakeholder consultation; evaluation of previous policies ...'*

(Cabinet Office, 1999a:31)

The notion that policy should now be based on evidence 'rather than based on unsupported opinion is difficult to refute' (Wells, 2007:23). There was little acknowledgement from New Labour that 'research-based evidence is also generated in different ways reflecting both the inherent nature of different policies but also the differing epistemological and ontological bases of different professions' (Wells, 2007:4). For example, the use of evidence in education is very different from areas such as medicine or transport policy. All these areas of policy employ different methodologies based on their suitability to generate evidence. Education research often utilises experimental or action research methodologies, transport policy relies heavily on cost-benefit analyses and medicine favours the use of randomised control trials and systematic reviews. This is why Davies et al. (2000) stress that it is overly simplistic to have a singular conception of EBPM based on a single epistemology. This being said, the UK Cabinet Office attempted to define its understanding of evidence in its 1999 White Paper *Modernising Government* into a singular definition, stating that evidence was:

*'expert knowledge; published research; existing research; stakeholder consultations; previous policy evaluations; the Internet; outcomes from consultations; costs of policy options; output from economic and statistical modelling'*

(Cabinet Office, 1999a:33).

The breadth of what was considered evidence during this time was therefore wide and dynamic (Shaxson, 2005). Marston and Watts (2003) supported this interpretation and listed a number of other sources of ‘evidence’ including photographs, literary texts, official files, autobiographical material such as diaries, newspaper files, ethnographic and observer accounts. In the same year as the White Paper was published, there were two important conferences held that focused on the role of evidence in the policy process followed by a special number on EBPM being published in the journal ‘Public Money and Management’. Parsons (2002) notes in his paper on EBPM that the ESRC ‘were also working on plans to establish a national resource centre for evidence-based policy’ (Parsons, 2002:44). This tells us that not only were New Labour drawn towards the concept of EBPM, but others including prominent organisations were eager to promote the approach. The underpinning rationale of New Labour’s position on evidence-based policy making was further expressed by David Blunkett, then Secretary of State for Education and Employment, who argued in a lecture to the ESRC in 2000:

*‘...rational thought is impossible without good evidence...social science research is central to the development and evaluation of policy’ and that ‘having ready access to the lessons from high-quality research can and must vastly improve the quality and sensitivity of the complex and often constrained decisions we, as politicians, have to make’*

(DfEE, 2000:4-24)

The ‘knowledge as power’ model contained within Blunkett’s speech is an argument that runs throughout the documents which provide the key texts for EBPM in the Blair

government which includes the papers '*Better Policy Making*' (Cabinet Office, 2001) and '*Modern Policy-Making*' (National Audit Office, 2001). Professional policy making, according to these documents, must be driven by evidence of 'what works'. New Labour suggested that EBPM involved the management of two types of knowledge: academic research and professional experience (Parsons, 2002). Once New Labour had established their place within Whitehall they set out and launched a series of major social and economic programmes. Among them were the Sure Start programme, New Deal for Communities, the Children's Fund and New Deals in employment. They all focused on delivering the government's strategy for social inclusion, neighbourhood renewal and community cohesion (Social Exclusion Unit, 1998). It has been argued that the rationale for these interventions is 'based on addressing the "wicked issues"<sup>6</sup> of policy making and seeking to join-up policies and agencies to address deep-seated social and economic problems' (Wells, 2007:4). There was a strong emphasis placed on identifying 'what works' as set out in the Labour Party Manifesto (1997) as well as seeking to inform delivery and mainstream service provision. The programmes were evaluated including longitudinal assessments of their impact as well as seeking to provide 'on-going feedback to government and the organisations and partnerships delivering the initiatives' (Wells, 2007:4). What is novel about New Labour's approach to evaluation design is their shift in focus away from value for money and towards better understanding how and why programmes work in different contexts. The commissioning of evaluations was a major component of New Labour's approach to EBPM, in particular within education, employment and communities.

Once New Labour had established their approach to evidence-based policy making they then focused on the collection and use of evidence by government. This is apparent in documents

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<sup>6</sup> Wicked issues are social problems that are defined differently by people and there is little agreement over a solution, for example, climate change.

such as 'Adding it Up' (Performance and Innovation Unit, 2000), 'Getting the Evidence - Using Research in Policy Making' (National Audit Office, 2003), 'Trying it Out: The Role of 'Pilots' in Policy Making' (Cabinet Office, 2003a), 'The Magenta Book: Guidance Notes for Policy Evaluation and Analysis' (Cabinet Office, 2003b) and 'Quality in Qualitative Evaluation' (Cabinet Office, 2003c). The government also set up the UK Centre for Evidence Based Policy where they intended to share and develop good practice in evidence based policy making. The 'Adding it Up' report represents a review of evidence-based policy making across government. The paper highlights the variation in the use and type of evidence across departments; however, it makes reference to quantitative data throughout. It refers to the United States as being a 'benchmark' for best practice in regards to evidence-based policy making. This is because in the United States ' there is a strong willingness to invest in gathering the necessary data; outside expertise is transmitted easily to government; and there is a richer environment for analytical debate' (Wells, 2007:5). Discussions about the United States and their use of randomised control trials<sup>7</sup> (RCTs) further supports the argument that New Labour favoured quantitative research methods over qualitative ones. They considered RCTs as the 'gold standard' for evidence-based policy making.

New Labour sought to set themselves apart from previous governments and worked towards the 'de-politicisation' of the policy process (Monaghan, 2011). However, a closer look at particular policy decisions indicates that they were only slightly more successful in increasing the use of evidence or its quality within decision-making and that evidence often became secondary to the preferences of politicians. There were a large number of policies created under New Labour that were criticised for being far from evidence-based. One of the most

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<sup>7</sup> RCT is a type of scientific experiment, where the people being studied are randomly allocated one or other of the different treatments under study. It is considered to be the most rigorous way of determining whether a cause-effect relation exists between treatment and outcome and for assessing the cost effectiveness of a treatment (Sibbald and Roland, 1998).

widely publicised issues of the time, the drug debate, is an example of evidence being ignored by politicians from the leading party. Towards the end of 2009 a ‘significant schism occurred between the New Labour government and the chair of the Advisory Council on the Misuse of Drugs (ACMD), Professor David Nutt’ (Monaghan, 2011:1). They disagreed about the classification of ecstasy in 2009. Nutt accused the government of ‘de-valuing’ the science in their decision-making process after claiming that both cannabis and ecstasy were less harmful than legal drugs such as tobacco and alcohol and should, therefore, be downgraded (Nutt et al. 2007). Their research placed twenty substances in a scale according to the harm they cause users and ranked alcohol as 5<sup>th</sup> with ecstasy being ranked far down the list at number 18. Professor Nutt publicly called for the new knowledge of drugs to be acknowledged as well as suggesting that the current classification system may not be fit for purpose (Nutt, 2009). Professor Nutt was famously dismissed for his criticisms government policies in 2009 when it was claimed that he overstepped his remit. This issue highlights the reluctance of policy makers to accept evidence presented by experts on a topic that is highly politicised (Monaghan, 2010). The preferences of politicians tend to favour zero-tolerance approaches to drug misuse. By accepting the evidence and advice of Professor Nutt they would have had to admit that previous government policy was inadequate and that they would change current drug policies to reflect the new evidence. It could also impact on public opinion and affect the number of votes that they received. By 2010 support for the Labour Government declined due to a number of reasons including their involvement in a war with Iraq, the negative economic issues the country was facing and the party was struggling with leadership issues (Giddens, 2010). This led to a change in government at the general election of 2010 which leads us to our final section of the chapter.

In May 2010, a general election took place in which no political party achieved the 326 seats needed for an overall majority. The Conservative Party, led by David Cameron, won the largest number of votes but still fell twenty seats short. This hung Parliament led to the creation of a Coalition Government between the Conservative Party and the Liberal Democrats which was the first in British history to eventuate directly from an election outcome (Seldon and Finn, 2015). This meant that government programmes would have to involve compromises on the part of both parties. In the early months of the new administration it appeared that ‘little or no research or evaluation was commissioned by government or its agencies’ (Meager, 2011). During the first year it was revealed that the coalition government would aim to reduce public spending by £81 billion between 2011 and 2015 (HM Treasury, 2010). This had implications for policy makers and in such an environment, the need for robust, timely and accessible evidence of ‘what works’ and what offers best value for money would have been greater than ever (Meager, 2011). During the first year in office, the coalition government was accused of ‘having turned its back on evidence-based policy’ (LSE, 2014). However, it may have been too early to tell whether or not this apparent decline in the use of social research in policy making was permanent or temporary.

There are a number of examples that indicate the Coalition Government did not always acknowledge the evidence they were presented with. They have been criticised for a number of policies including the under occupancy charge and alcohol pricing<sup>8</sup>. One of the first pieces of legislation implemented by the coalition government was the Welfare Reform Act (Cabinet Office, 2012). The Welfare Reform Act gave the Government the power to introduce new size criteria, also known as the ‘Bedroom Tax’, ‘under-occupation penalty’ or

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<sup>8</sup> The Government’s policy to ban ‘below cost’ sales of alcohol was dismissed as almost wholly ineffective in reducing alcohol harm by alcohol and health NGOs and even by sections of the alcohol industry (Institute of Alcohol Studies, 2011).

‘removal of the spare room subsidy’ for housing benefit claims in the social rented sector. Under the criteria, which came into force on 1 April 2013, working-age households deemed to be under-occupying their council or housing association homes faced a reduction in housing benefit, resulting in them being obliged to fund this reduction from their incomes (NHF, 2013). The aim of this policy was to reduce the amount of spending on social housing and to encourage those ‘over-occupying’ to move into smaller properties allowing more space for larger families (Wren-Lewis, 2013). The Department of Work and Pensions utilised an economic model that estimated potential savings of £480 million in 2013/14 which was published in June 2012 (DWP, 2012). Research conducted into the effects of the ‘bedroom tax’ have indicated that twenty eight percent of those affected have fallen into arrears for the first time, only six percent have relocated to smaller properties and three percent of those affected have had legal action, such as eviction, taken against them (Buchanan, 2014). The manager of the Centre for Social Justice, a think tank set up by Iain Duncan Smith<sup>9</sup>, conceded that there were weaknesses in the policy and said that the CSJ recognised the extra social costs that the bedroom tax could cause (Duxbury and Brown, 2013). So the evidence indicates that the aims of this particular policy have not necessarily been met. However, the coalition government did not alter its stance on the bedroom tax other than to downgrade the projected savings from £480 million to £390 million (Butler, 2014).

Another example of the coalition government not responding to evidence presented to them concerns alcohol pricing. In 2010 Professor Kelly and Professor Michie argued that there was substantial evidence ‘about the effectiveness of alcohol pricing on reducing alcohol related harm but that it had not fed through to Government alcohol policy’ (Science and Technology Committee, 2011). The policy created in 2011 has been criticised for not reflecting the evidence about the level at which pricing effects behaviour. Either Ministers were unaware of

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<sup>9</sup> The Secretary of State for Work and Pensions.

relevant evidence, or they were aware of the evidence but choose not to reflect this in policy decisions. The Coalition government were committed to promoting the use of evidence within policy-making and it is clear that they had the intention of continuing the work of New Labour and endorsing their philosophy of ‘What works’.

In July 2011 the Coalition Government made a commitment to investigate the creation of a ‘NICE for social policy’<sup>10</sup> in the Open Public Services White Paper (HM Government, 2011), reiterated in the Department for Business, Innovation and Skills Innovation and Research Strategy (Department for BIS, 2011). It was also a key action in the policy section of the Civil Service Reform Plan (HM Government, 2012). The Plan stated that:

*‘There must be a clear focus on designing policies that can be implemented in practice, drawing on a wider range of views and expertise. At the same time, policy makers must have the skills and tools they need to do their jobs. And they should have a clear understanding of what works based on robust evidence. Policy resources should be focused on ministerial priorities, while improving the ability to scan the horizon better for threats and opportunities ahead’*

(HM Government, 2012:14)

During 2012 the government worked with the Economic and Social Research Council (ESRC), the Big Lottery Fund, Nesta and a wide range of partners in the public services, policy and academic arenas, ‘to identify sectors of pressing social need and major public spending, where an evidence base exists but there is limited authoritative synthesis and communication of this evidence base’ (Cabinet Office, 2013:1). In 2013 the government published a policy paper entitled ‘What Works: evidence centres for social policy’. The

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<sup>10</sup> NICE is the National Institute for Clinical Excellence established in 1999 to provide national guidance and advice to improve health and social care.

initiative was based on the principle that good decision-making should be informed by the best available evidence on both what works and what does not work. Within the paper it states that the new initiative:

*‘...will build upon existing evidence-based policy making through launching a series of independent specialist centres. These will produce and disseminate research to local decision-makers, supporting them in investing in services that deliver the best outcomes for citizens and value for money for taxpayers’*

(Cabinet Office, 2013:1)

The creation of the What Works centres meant that they would cover areas with public spending of over £200 billion and each would have a policy focus. They will be joined in a new What Works network by two already established centres including NICE and the Education Endowment Foundation. The list of new areas includes:

- Crime reduction
- Local economic growth
- Ageing better
- Early intervention

The policy paper claims that the centres will be independent of government and ‘will collate published evidence on the effectiveness of interventions, assess these using a common ‘currency’, publish clear synthesis reports and share findings in an accessible way with practitioners and commissioners and policy makers’ (2013:i). The What Works centres will also highlight where it is possible to further the evidence base. Some of the tasks that the centres will undertake include systematic assessments of relevant evidence, producing a common currency for comparing the effectiveness of interventions, publishing findings in a

format that can be ‘understood, interpreted and acted upon’ (2013:5) and advising policy makers to ensure that their work can be evaluated effectively.

Puttick and Mulgan (2013) wrote a short paper recommending five ways that the What Works centres can ensure that they maximise their impacts and avoid the mistakes of past evidence initiatives. They argue that these previous initiatives ‘often overly focused on supply rather than demand and use, and on academic research to the exclusion of other types of evidence’ (Puttick and Mulgan, 2013:1). The paper makes reference to the Nesta ‘Standards of Evidence’ (Puttick and Ludlow, 2012) which provides a shared language for understanding evidence underpinning particular policies or practices. The highest level (5) suggests that systematic methods of randomised trials and controls are still considered the most rigorous type of evidence to show ‘what works’. However, they acknowledge that ‘in many fields there is very little evidence of this kind’ (Puttick and Mulgan, 2013:2). The lowest level (1) states that ‘you can describe what you do and why it matters, logically, coherently and convincingly’ (Puttick and Mulgan, 2013:2) which suggests that a person must be able to argue their claim or case convincingly. These standards are similar to those suggested by New Labour who promoted the use of RCTs and systematic reviews.

Examples of initiatives promoted by the Coalition government include the ‘Sutton Trust-EEF Teaching and Learning Toolkit’ which is a collection of education research studies accessible to teachers and schools on ‘how to improve the attainment of disadvantaged pupils’ (Cabinet Office, 2013:7). The developers claim that the studies included have been rigorously evaluated. Another initiative under the Coalition government was the Family Nurse Partnership which is being evaluated in England through a formative evaluation of sites and a RCT to show how effective the programme is compared to other services. Further RCTs have been used to test strategies to improve tax collection. In February 2011, HMRC supported by the Cabinet Office Behavioural Insights Team began a trial to establish the impact of altering

the messages sent in letters to encourage tax debtors to pay tax owed. HMRC and BIT designed a suite of letters, which were sent to people owing self-assessment tax debts for the first time. The trial was on a large scale, comprising around 140,000 debts worth £290 million. The results were that letters which informed people that the majority of people in their area had already paid their tax, and which reminded people about the importance of paying tax for their local services, outperformed the control group letters by around 15 percentage points. When rolled out, it is estimated that using the highest performing letters would save the Exchequer around £30 million in additional tax revenue.

## **2.5 Conclusion**

There are mixed opinions about how far each previous reigning Government have based their policies on evidence. Examples were identified in the literature of initiatives and programmes that are designed to increase the use of evidence but there are also a number of examples of instances where political judgement has interfered with decisions. Politics is integral to policy making and attempts to exclude it have so far proved unsuccessful. Some level of judgement is needed in order to answer certain research questions such as how to decide what programmes are funded or whether education should be better funded than health care. However, the EBPM model serves as a useful tool for decision-making as it promotes consistent and [high quality decisions](#), and reduces the risk and uncertainties associated with decisions.

The ways in which the evidence is used in policy processes are largely determined by the beliefs and values of policymakers, as well as by considerations of timing, economic costs, and politics. How and when evidence is used often depends upon the political agenda and ideology of the government of the day, not the nature of the evidence, however compelling. It also depends on the way in which a policy actor prioritises different types of evidence. Nutley

et al. (2003) suggest that the best we can hope for is evidence-informed policy as there needs to be an acknowledgement of the other factors that influence decisions.

So if decisions are made based on a number of factors then the whole process becomes quite messy and as Lindblom argues, we 'muddle through'. If values and beliefs of policy actors affect the decision making process then it is important to understand them. One of the ways this can be achieved is by using framing theory to identify the way in which people think about and understand a policy problem. Over the last sixty to seventy years these problems have become more complex, and we see more and more issues being referred to as 'wicked' that cannot simply be solved by only appealing to evidence. In the next chapter the theoretical framework that is used to underpin the analysis in future chapters is presented.

# **Chapter 3**

## **Constructing the Problem and Negotiating the Evidence**

### **3.1 Introduction**

Evidence as a concept is understood in different ways by policy actors. There are a number of models that seek to explain different understandings as to how evidence is thought to shape or inform policy. The purpose of this chapter is to outline some of these models and explain how they can be used to comprehend the relationship between evidence and policy. The second part of the chapter introduces the theoretical approach that the thesis adopts and presents the analytical frameworks that are drawn on and utilised in the empirical chapters. The first empirical research question is concerned with how policy actors within the chosen case study frame the policy problem of High Speed Two (HS2). In order to answer this question the thesis draws on two relevant literatures: social problems theory and policy frames. Social problems theory argues that social problems are ‘socially constructed, both in terms of the particular acts and interactions problem participants pursue, and in terms of the process of such activities through time’ (Schneider, 1985:209). The literature acknowledges the use of claims-making by policy actors concerning a problem that there is little agreement over. This is coupled with a policy frames perspective which was developed by Schön and Rein (1994) to set out how policy actors construct a social problem through policy framing. It is another approach to policy analysis that focuses on the construction of social reality and the way in which policy actors attempt to impose order upon the social world which is open to an array of interpretations (Hajer and Laws, 2006). They are useful to the research because they allow the researcher to identify the positions that different policy actors within the case study adopt in order to understand and shape their claims.

The second empirical research question is concerned with discovering which evidential resources actors within the chosen case study draw on and thirdly, how they negotiate these with one another through a process of claims-making. In order to answer these questions the thesis draws on two main literatures: argumentation theory and the claims-making framework. Toulmin's theory of argumentation (1958) presents a model that provides a way of analysing the logical relationships between the constituent parts of an argument. He focused on the justificatory function of argumentation rather than the inferential function of theoretical arguments. The model serves as a tool for distinguishing between the ways individual policy actors construct their policy argument as opposed to claims-making which focuses on the way policy actors negotiate between their individual arguments. The claims-making framework (Best, 1987) acknowledges the complexity of the policy process and rejects traditional policy analyses of policy problems that assume these problems are well defined and there is implicit agreement in society about their presence and seriousness.

### 3.2 Models of the relationship between evidence and policy

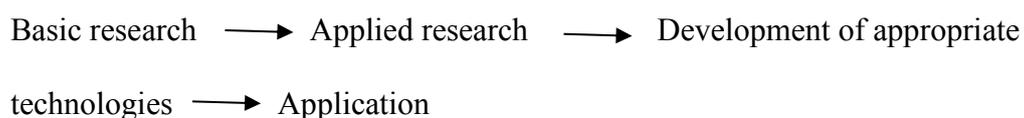
This section outlines four of the models used to understand how evidence is thought to shape or inform policy in order to explore the assumptions underlying the concept of evidence-based policy making. A number of different theorists (Weiss, 1979; Young et al. 2002; Monaghan, 2008) examined the use of social science research in the public policy domain and have extracted different meanings that have been associated with the concept. These models are set out in the following table:

Model	Is evidence central to policy?
Linear (also known as knowledge driven or problem driven)	Yes
Interactive	No
Political/tactical	No
Enlightenment	Yes

(Table 1: Models of evidence in policy making)

### 3.2.1 The Linear model

The first model of evidence utilisation is called the 'linear' model (or the 'knowledge-driven' and 'problem-driven' models according to Weiss, 1986) and is often referred to as the rational model or purist model by Booth (1988). According to Lindblom (1980:11), the linear model represents the 'typical' understanding of the relationship between research and policy. This stems from the statement that there is a general view that to make policies more effective, it is necessary to bring 'more information, thought and analysis into the policy-making process'. Young, et al. (2002: 216) distinguish between the two manifestations of the linear model by suggesting that in the knowledge-driven variety research 'leads' policy with the role for the expert 'on top'. By contrast, in the problem-solving model, research follows policy and the expert is 'on tap'. It derives from the natural sciences and makes a number of assumptions about the policy process and evidence. Its first assumption is that there is a linear application of research findings to policy-making. Weiss (1986) claims that the sequence is as follows:



Within this sequence, basic research highlights an opportunity, applied research is then conducted to define and test these findings, 'appropriate technologies are developed to implement the findings' (Weiss, 1979:427), and finally application occurs. This model is premised on the assumption that because knowledge exists, it will subsequently come to be used in policy-making. Similarly, the problem-solving model is also premised on a linear sequence of the evidence-policy relationship and suggests that 'research is used to fill gaps in

knowledge where problems have arisen' (Monaghan, 2008:224) but the steps are different from the knowledge-driven model because the policy decision drives the application of research. The expectation is that research provides empirical evidence and conclusions that help to solve a policy problem. What is implicit about this model is 'a sense that there is consensus on goals' (Weiss, 1979:427). The linear model is a static view of the evidence and policy relationship. It is questionable; as to how well, or poorly, this model describes data produced in the natural and physical sciences, let alone the social sciences. However, it is the most widely recognised as being the ideal model of the evidence and policy relationship. It provides a structured and sequenced approach to decisions which is beneficial for those trying to bring logic and order to decision-making.

### **3.2.2 The Interactive Model**

The next model suggested by Weiss is the interactive model which views research as entering the decision arena through an interactive search for evidence. She proposes that 'those engaged in developing policy seek information not only from social scientists but from a variety of sources -administrators, practitioners, politicians, planners, journalists, clients, interest groups, aides, friends, and social scientists, too' (Weiss, 1979:428). Unlike the linear process, this model suggests that the process is a 'disorderly set of interconnections and back-and-forthness that defies neat diagrams' (Weiss, 1979:428). This supports Lindblom's (1959) observation of the policy process as being a 'messy' one. In this account, research is just one element of a policy process. What often happens when a policy problem emerges is that several different groups of people come together and share their understandings and beliefs with one another in order to make sense of the problem. Social scientists are one such group as well as politicians, field experts, specialist groups and think tanks. It is unlikely that social scientists will have specific evidence to hand that relates explicitly to the policy problem.

They may have evidence that relates to a similar problem or scenario and so are able to engage with other policy actors in order to reach an agreeable policy response. Each group are able to contribute to an extent about certain aspects of the policy problem but are also able to learn at the same time. So the model recognises the contributions of different sources in shaping knowledge and accepts that evidence can have an indirect effect on policy. The model fits with an incremental view of the policy process. This view emphasises that the policy process is ongoing and experience, political judgement and pressure are also acknowledged. Therefore research and policy become mutually influential. For example, research agendas and policy decisions are shaped within ‘policy communities’ (Young et al. 2002) that contain a range of actors.

### **3.2.3 The Political/ Tactical Model**

This model sees policy as the outcome of a political process (Young et al. 2002). Weiss (1979) distinguishes between the political and the tactical model but Young et al. (2002) and Monaghan (2008) discuss them in parallel to one another. The model sees the research agenda as politically driven, ‘with studies commissioned and/or used to support the position adopted by the government of the day, the relevant minister, or perhaps the civil servants most closely concerned’ (Young et al. 2002:217). This does not coincide with the evidence-based policy making model which suggests policy decisions follow evidence rather than the other way around. In the political model research may be commissioned to confirm existing arguments and evidence utilisation may be selective to satisfy the short-term interests of policy-makers. In other words, research is political ammunition and is used to support a pre-determined position. For example, if a politician takes the position that all school children should be provided with school meals regardless of their parents’ income based on his beliefs then he will seek evidence that supports this position. In the political/tactical model, the

findings of research are less significant than the actual process of research taking place. It recognises that political imperatives are central to policy making and suggests that evidence often becomes “politicised” (Young et al. 2002; Monaghan, 2010).

### **3.2.4 The Enlightenment Model**

The final model is the enlightenment model which Weiss and Bucuvalas (1980a) suggest is the one that most closely typifies the relationship between research and policy formulation. Within this model, single pieces of research rarely have a direct impact on policy. Research is often addressed ‘not to the decision process itself, but to the context within which that decision will be taken, providing a framework for thinking about it’ (Young et al. 2002:217). It shares some similarities with the linear model in that evidence is central to policy making. It also highlights how research can be conceived as part of the process of policy-making, as opposed to just helping to shape the outcomes, as in the linear approach. It corresponds with what we might term ‘evidence-informed’ rather than ‘evidence-based’ policy making (Young et al. 2002). Much of social research is inspired by an urge to understand and explain rather than by a compulsion to provide policy solutions as we see in the linear models. The idea that research can be problem-solving is based on an assumption of the nature of the policy process, ‘which is rarely characterised by rational decisions made on the basis of the best information’ (Young et al. 2002:218). There is a mismatch between notions of how the policy process should work and its actual uncertain and unstable realities. Substantial amounts of money are committed to fund policy research yet it does not appear to contribute a great deal to solving policy problems. This paradox of policy analysis (Shulock, 1999) is due to the misconceptions about how the policy process typically works.

History suggests that policy makers and researchers do not always agree on what the desired outcome should be. This is often because they have different perspectives to one another because they work in different fields. An example of this is the classification of cannabis debate in 2004-2009. In 2001 the Commons' Home Affairs Select Committee conducted a major study that focused on drug use entitled 'The Government's Drug Policy: Is it working?' in which a number of recommendations were made that concentrated on education and harm reduction. The report recommended that cannabis should be re-classified from a class B drug to a Class C drug. There was also a report conducted by the House of Lords Science and Technology Committee the same year that recommended cannabis should be used for medicinal purposes. Three years later, cannabis was downgraded from a class B to a class C drug in January. There was a lot of media attention on this policy change and many of the public did not agree with the re-classification. Professor Nutt's findings from 2009 in 'Estimating Drug Harms: A Risky Business' found in his MORI polls that over half of those quizzed wished for a stronger categorisation of cannabis, with 32% believing that cannabis should be reclassified as Class A even though research suggested that it should not be reclassified.

In March 2005, the Home Secretary at the time (Charles Clarke) asked the Advisory Council on the misuse of drugs<sup>11</sup> (ACMD) to examine new evidence on the harmfulness of cannabis in order to determine whether they would change their stance on the classification of the drug. This request may have been spurred by the recent public opinion poll. The ACMD concluded that cannabis should remain a class C drug; a decision that was accepted by the Home Office. Then in 2007 Prime Minister Gordon Brown signalled that he would consider

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<sup>11</sup> The Advisory Council on the Misuse of Drugs makes recommendations to government on the control of dangerous or otherwise harmful drugs, including classification and scheduling under the Misuse of Drugs Act 1971 and its regulations. It is an advisory non-departmental public body, sponsored by the Home Office.

reclassifying cannabis as a class B drug (Woodward, 2007). This went against several expert recommendations and sparked renewed debates amongst MPs. Some argued that certain evidence indicated that more of the available cannabis was now stronger and so was more dangerous for people's health, whilst others thought that cannabis should remain a class C and admitted to smoking it in their youth (Batty, 2007). In May 2008, the government announced its decision to reclassify cannabis as a Class B drug under the Misuse of Drugs Act 1971. Following debates in both Houses of Parliament reclassification came into effect on 26th January 2009. What this case demonstrates is an example of a lack of consensus among all interested parties and the public which 'is ultimately a form of *political* policy making in which politics is the art of what is possible, rather than what is rational or what might work best' (Leicester, 1999:6).

### **3.3 Theoretical underpinnings of the thesis**

The thesis began with the premise that all social science knowledge is 'historically contingent, not universal across time and space' (Mulgan, 2005:225). This means that knowledge bases need to be constantly replenished over time and our different ways of being and living create different experiences of the world and meanings. The reality of policy making is 'messier, more contingent, dynamic, iterative and political' (Russell and Greenhalgh, in Glasby, 2011:50) than the evidence-based policy making model suggests. The policy making process does not consist of a series of technical 'stages' and the relevant types of knowledge for policy making go far beyond conventional research evidence; policy decisions do not usually occur as clearly defined decision points. By adopting this theoretical lens, it allows for the acceptance of multiple realities and the focus of the research is on understanding the processes through which meanings are created, negotiated, sustained and modified (Schwandt, 2003).

The thesis is concerned with understanding how people make sense of the data or evidence they collect or have to hand such as local knowledge. For example, the first empirical research question aims to understand how policy actors frame the issue of High Speed Two and the third empirical research question aims to explain how policy actors negotiate evidence with one another through a process of claims-making. The researcher argues that there is an interactive relationship between themselves and what is being inquired. The background and values that they have shape interpretation based on personal, cultural and historical experiences (Bryman, 2004). These views are consistent with a constructivist paradigm. It argues that realities exist in the form of multiple mental constructions dependent on their form and content on the person who holds them (Guba, 1990). This enables policy actors to provide a broader definition of evidence such as user opinion, expert advice and so on.

### **3.4 Constructing the Policy Problem**

At every stage of the policy process, whether in defining a problem, setting a goal, choosing a policy instrument, or evaluating a policy, choices must be made. These choices are based on particular interpretations of a particular context and are always, to some extent, subjective.

The first empirical research question that the thesis answers is:

*How do policy actors within HS2 frame or construct the policy problem?*

In order to answer this question the thesis draws on two main literatures which are social problems theory and framing theory. These two literatures are the most useful in understanding how and why policy actors construct an issue in a particular way. This is because the approach assists the researcher in identifying the positions which different actors adopt on a particular issue, the terms in which their arguments are couched and the evidence they cite for their positions. Social problems theory originates from sociology. During the late

1960s into the 1980s many academics argued that “facts” and evidence were not independent, direct observations, but embedded in our underlying implicit assumptions that form our understanding of the world (Aronson, 1984; Mulkay, 1979). Schneider defined social problems as problems that are socially constructed, ‘both in terms of the particular acts and interactions problem participants pursue, and in terms of the process of such activities through time’ (1985:209). Since the topic of social problems emerged the dilemma for many has been about how social problems are conceptualised and how they should be studied. It was Bulmer (1971) who campaigned for a change in the way they were viewed. He argued that social problems are products of a process of collective definition rather than objective conditions and social arrangements. This was developed further by Spector and Kitsuse who defined social problems as:

*‘the activities of groups making assertions of grievances and claims with respect to some putative conditions’* and argue that social problems theory should *‘account for the emergence and maintenance of claim-making and responding activities’*

Spector and Kitsuse, (1974:415)

Although this particular theory is concerned with ‘social’ problems, their definition is discussed in a similar way to policy problems. Public policy is inherently concerned with finding solutions to social problems. What determines whether something is a ‘policy problem’ compared with a ‘social problem’ is often a result of the literature of choice. Just as evidence-based policy making and research utilisation literature share similar traits, so does the literature that discusses policy and social problems. Hajer (1993) viewed political problems as socially constructed. He studied the global controversy of acid rain in the 1980s to demonstrate how evidence is utilised by competing coalitions and how they interpret a policy problem.

The central proposition of social problems theory is that social problems are the ‘definitional activities of people around conditions and conduct they find troublesome, including others’ definitional activities’ (Schneider, 1985:209). In short, they are socially constructed rather than objective conditions. Each social problem has its own story and unique natural history that has developed over time. The idea of natural history model was first raised by Fuller and Myers in 1941 but was considered ‘too rigid’ in its specification of a ‘common order of development through which all social problems pass’ by Spector and Kitsuse (1973:147). They proposed a heuristic four-stage natural history model derived from an extensive but informal survey of the histories of several social problems and from detailed histories of six social problems compiled by graduate students in a seminar on social problems:

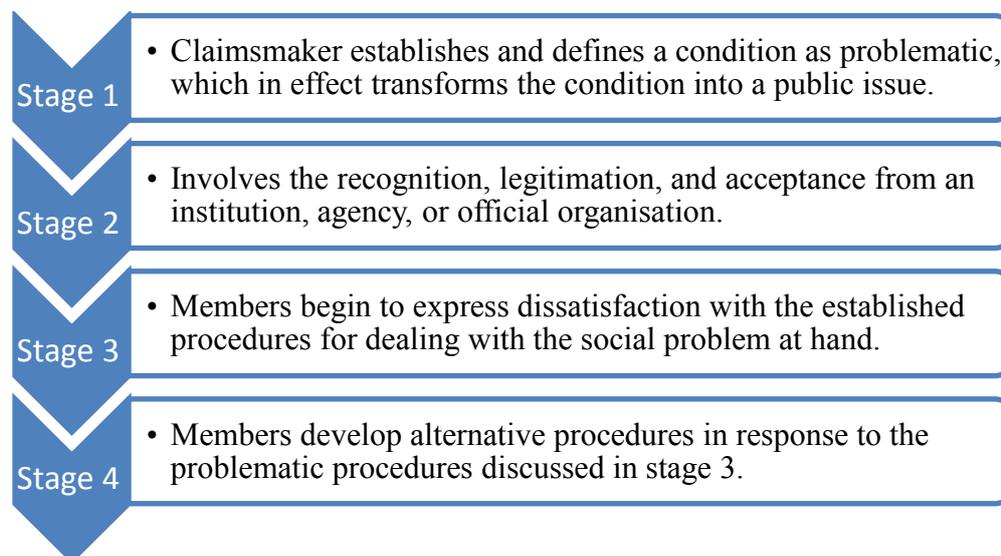


Figure 1: Heuristic four-stage natural history model, developed from Spector and Kitsuse, (1973)

Stage one is concerned with awareness and comprises ‘collective attempts to remedy a condition that some group perceives and judges offensive and undesirable’ (Spector & Kitsuse 1973:148). It focuses on the early stages of the policy process and their attempts of

groups or individuals to assert the existence of some problem, define it as undesirable, to publicise the assertions and stimulate controversy thus creating a political issue over the matter. Stage one is concerned with ‘how claims and grievances are formed and presented, the varieties and nature of the claims and grievances, strategies to press these claims and gain wider attention and support, the power of the group making claims, and the creation of a public controversy are important issues’ (Schneider, 1985:212). If one group ascertains that certain conditions are intolerable another group may claim that the conditions are fine as they are and there is no need for change. Such groups may ‘challenge the claims of the protesting group, mount their own campaign, and lobby against proposed changes’ (Spector and Kitsuse, 1973:151). This is an example of value conflict – each group has different value judgements of a particular condition which brings them into conflict with groups that do not share these values. A social problem may remain at this stage or transform into stage two, depending on whether or not a group’s claims are recognised.

Stage two begins with recognition of these claims by ‘governmental agencies or other official and influential institutions’. To continue beyond stage two a social problem must involve ‘an institution...to deal with the claims and complaints concerning the condition in question’ (Spector & Kitsuse 1973:154). They may do this through a number of channels including demonstrations, use of the media, or confrontation tactics. Social problems thus become ‘routinized in an organisation charged with doing something about the alleged conditions’ (Schneider, 1985:212). Social problems that reach this stage can still disappear. When policy actors claim a response is problematic, stage three begins.

Stage three is what can be thought of as the dissatisfaction stage. It is where claims and demands by groups re-emerge, expressing dissatisfaction with the established procedures for dealing with the policy problem and the failure to generate a condition of trust and confidence in the procedures as sympathetic to any complaints. Within the chosen case study

for this thesis dissatisfaction exists already and an institution is involved to deal with the claims and complaints. Claims and demands have already re-emerged and so it is stage four at which the empirical research focuses on.

Stage four is concerned with creating alternatives. It is marked by claimants' (policy actors) 'contention that it is no longer possible to 'work within the system' . . . ' and their attempts to develop alternative institutions (Spector & Kitsuse 1973:156). This stage occurs through the 'rejection of the response or lack of response of the agency or institution to their claims and demands, and the development of activities to create an alternative, or counter institutions as responses to the established procedures' (Spector and Kitsuse, 1973:147). This means sociologists of social problems 'should not concern themselves with the validity of participants' (their colleagues included) claims about conditions, but with how such claims and definitions are created, documented, pressed, and kept alive' (Schneider, 1985:212).

Documenting claims or definitions about conditions constitutes participation. The point is to account for the viability of these claims, not to judge whether they are true. And while social problems' participants attribute values to their own and others' activities, sociologists of social problems should not. Gusfield (1981) has characterized this stance as being "on the side" or neutral, rather than choosing "whose side" we are on (Becker, 1967).

Researchers of social problems are not expected to make independent assessments of the claims-making activities they investigate. It is not for them to decide whether or not the claims made by individuals are valid or 'true'. What is more of interest to them is 'how participants come to make these statements, what they take to be evidence of the conditions and to whom they direct their claims' (Spector and Kitsuse, 1977:126). Social problems theory is appealing as a starting point as it has a subjective component to it; it recognises the importance of language within claims-making and argues that social context facilitates definitions and claims. Spector and Kitsuse (1977) state that the activity of making claims or

demands for change is central to the core of what they call social problems activities.

Language plays an important role in policy making and actors must master the art of claims-making.

### **3.5 Framing the policy problem**

The second theory that the thesis draws on is framing theory. It has much in common with other interpretative or critical approaches to policy analysis which focus on the construction of social reality and the symbolic use of language within policy debates (Taylor, 1971; Edelman, 1977; 1988; Gusfield, 1981; Lakoff, 2004). Framing refers to the processes through which actors attempt to impose order upon an ambiguous social world open to a multiplicity of interpretations (Hajer and Laws, 2006:254). Exploring the specific framing of an issue within the policy process is important because it opens up certain policy responses whilst excluding others (Hawkins and Holden, 2013). Therefore, the competition to define the terms of the debate is a vital component of the policy process. How an issue is framed influences whether or not it is considered a political issue and thus enters onto the political agenda. Once it is on the agenda, the framing of the issue opens the way to certain types of evidence, who will be considered legitimate participants in policy debates, what coalitions of interest will form and what the policy responses might be as well as what will be excluded. Therefore, policy actors have an interest in how an issue is framed in order to satisfy their interests and objectives. Schön and Rein 'see policy positions as resting on underlying structures of belief, perception, and appreciation, which they call frames' (1994:23). They understood conflicts between frames as the cause of many policy disputes. These situations cannot be resolved merely by appealing to facts or persuasive arguments because 'conflicting frames determine what counts as a fact and what arguments are taken to be relevant and compelling' (Schön and Rein, 1994:23).

Schön and Rein (1994) used a theoretical lens that suggests humans construct knowledge and meaning from their experiences to set out how policy actors construct a policy problem through framing and its significance for how these problems are resolved. They argued that frames are ‘underlying structures of belief, perception and appreciation’ on which distinct policy positions depend (Schön and Rein, 1994:23). Policy frames construct a particular view of social reality and are underpinned by a set of broader institutional and meta-cultural frames. Whilst these frames ‘help to shape how particular individuals or groups perceive their interests, political actors can be highly instrumental, framing issues in ways that furthers their specific interests’ (Hawkins and Holden, 2013:55). Schön and Rein (1994) distinguished between two types of policy discourse which are a policy disagreement and a policy controversy. A policy disagreement indicates differences between parties that can be resolved by examining and evaluating scientific evidence. In contrast, a policy controversy refers to gaps between parties that cannot be solved solely by quantitative data. Political controversies emerge where mutually incompatible policy frames compete to define a given issue and to dictate the policy responses to it (Hawkins and Holden, 2013:55). What this means is that political contestation is a struggle between competing frames to define the terms of a policy debate (Edelman 1988). Schön and Rein (1994) focused on policy debates amongst decision-makers, and the possibility of resolving protracted policy controversies through a process of ‘frame reflection’. However, ‘framing approaches can be applied to the way in which policy actors located outside the institutions of government attempt to establish their particular framing as the predominant mode of thinking and speaking about an issue’ (Hawkins and Holden, 2013:55). By using this framing approach it is possible to identify the positions which different actors adopt on a particular issue, the terms in which their arguments are couched and the evidence they cite for their positions. Within public policy there are

numerous examples of disagreements amongst actors about how a policy problem should be solved. This is likely to continue as policy problems become more complex and intertwined.

As mentioned previously, the thesis assumes that the social world is open to a multitude of competing interpretations and meanings. People understand an issue in different ways and reality exists only in the context of a mental construct for thinking about it. According to Goffman, frames are ‘schemata of interpretation that guide individuals to locate, perceive, identify, and label events and conditions around them’ (1974:21). In other words they guide how people in a policy sphere identify problems, specify and prioritize their interests and goals, and make causal and normative judgments about effective and appropriate policies. Different frames reflect group’s ‘values contending for public recognition and validation’ (Yanow, 2000:11). This means that the policy process must be recognised as consisting of policy actors attempting to persuade their audience to accept their particular frame of an issue. This relates to the claims-making framework which considers the audience key in any discussions about the acceptance of evidence and claims.

In a policy formation context, framing, a device used by social actors to create inter-subjective significance, refers to the process of paying selective attention to the partial characteristics of a policy problem and naming them according to the goal, context and binding conditions of a policy issue. As a set of cognitive and moral maps, frames guide how people in a policy sphere identify problems, specify and prioritise their interests, and make causal and normative judgments about effective and appropriate policies. Framing ‘constitutes the social significance of the policy situation, redefines policy problem and suggests solution for the problem’ (Schön and Rein, 1993: 153). The theory emphasises that more and better evidence does not necessarily solve a disagreement amongst policy actors.

The case study being utilised by this thesis is a case of a frame conflict. The opposing interpretive communities both have well-articulated arguments and evidence. However, neither side is convinced by each other; and the schism between them seems to be widening. Is it the case that one side is right and the other wrong? Conventional policy analysis rooted in the positivist scientific tradition would offer little help in this situation because it does not take into account the beliefs and preferences of the parties involved. It also does not recognise that the same evidence can be understood differently by different groups of people. Taking an interpretive analytical approach may however, prove helpful. Examining what this policy means for the relevant interpretive communities and investigating the values upon which their frames are based could provide meaningful clues for moving toward resolution or at least greater understanding.

The main focus of research studies that utilise framing theory are explorations of discourses surrounding particular policy issues. The value of the approach is that it acknowledges that the interests around policy problems are not given externally, 'but are created in the policy-making process via discursive practice of idea generation and exchange' (Kang and Jang, 2013:2). This is in contrast to traditional approaches to policy analysis which assumes that policy problems and solutions are determined by preferences and interests that are fixed externally (Hajer and Wagenaar, 2003). Some examples of studies that utilise framing theory and discourses include the acid rain controversy (Hajer, 1993), airport expansion in the UK (Griggs and Howarth, 1998; 2013) and a study that explored the discourses surrounding the policy of siting a radioactive waste disposal facility in South Korea (Kang and Jang, 2013). In each of these studies, the researchers encountered a number of similar discourses relating to economics, the environment and modernisation (or progression). These academics highlighted the importance of the process of constructing or framing a policy problem in the policy process. These constructions develop in the contexts of historical discourses which

‘contain knowledge of how similar phenomena were dealt with in the past’ (Hajer, 1993:45). The focus in the framing literature on claims making within the public domain reflects ‘the importance of rhetorical framing in influencing the broader societal debates and the impact this has on policy debates’ (Hawkins and Holden, 2013:57). Framing theory offers a lens through which we are able to understand the process of political contestation between actors with differing agendas and priorities. However, the thesis does not wish to identify discourses, rather it is interested in identifying the frames that policy actors use within a debate and explore the relationship between the frames and the types of evidential resources that actors draw on within the claims-making process. It argues that the way in which a person frames a policy issue influences the choices they make about the evidential resources that they draw on and the way in which they present their claims.

### **3.6 Deconstructing the policy arguments**

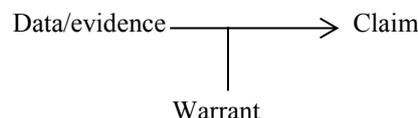
This section of the chapter discusses the contribution that argumentation theory makes to the thesis and how it assists in data analysis in the empirical chapters. The model used serves as a tool to allow the researcher to make the structure of arguments more transparent and provides a useful starting point for the analysis of claims and evidence. Argumentation theory is the study of how conclusions can be reached through logical reasoning; that is claims based, soundly or not, on premises. It includes studying debate, dialogue, conversation and persuasion. It studies rules of inference, logic and procedural rules in different settings. It includes debate and negotiation that are concerned with reaching mutually acceptable conclusions. It links a post-positivist epistemology with social theories and methodology often applies interpretive and framing theoretical approaches. This is an example of what Guba (1990) refers to as the ‘inter-breeding’ between theories. Argumentation theories give special attention to language and ‘the process of utilising, mobilising, and weighing arguments and signs in the interpretation and praxis of policy making and analysis’

(Gottweis, 2006:461). In accordance with the constructivist approach, argumentation theories do not consider policy analysis to be value free and argue that both policy making and policy analysis involve argumentation that needs to be at the centre of policy studies. It has its roots in European philosophy and theory and is always connected to considerations of the notions of logic, communication and persuasion. Argumentation is about attempts to convince another party, not about revealing truths as there can be no absolute standard for truth. It is a social activity and an activity of reason (Eemeren et al. 1996). When two or more people have a different opinion or standpoint about an issue then they are able to have an argument with one another about that issue. Argumentation is about justifying one's standpoint to another person or group or about refuting someone else's. The argument that is presented by an individual is subject to scrutiny by the audience.

Argumentation theory is appropriate for this research because the researcher is concerned with understanding how actors utilise evidence in order to convince others of their argument. It acknowledges the role of the audience who are tasked with accepting or refuting a claim presented by a person. The notion that argumentation is not about revealing truths and being about reasoning speaks to this research because evidence reviewed in chapter two suggests that reasoning falls quite short of reliably delivering rational beliefs and rational decisions. Reasoning can often lead to poor outcomes, such as the decision to build an expensive high speed train line perhaps; but it reveals that people systematically strive for arguments that justify their beliefs or their actions. There are three main categories of argumentation models: monological, dialectical and rhetorical. Monological models emphasise the argument itself and focus on the relationships between the components of the argument. Toulmin's model (1958) is perhaps the most well-known. Many have developed ideas set out by Toulmin such as Clark (1991) and Stranieri and Zeleznikow (1999). Dialectical models focus on the issue of fallacious arguments. They are 'rule-governed structures of organized conversations in which

two parties, or more, speak in turn in an orderly way' (Bentahar et al. 2010:224). Rhetorical argumentation, deals with arguments, which are both based on the audience's perception of the world, and with evaluative judgments rather than with establishing the truth of a proposition.

In 1958 Stephen Toulmin developed a model representing the layout of arguments. He believed that absolutism lacked practical value and so he aimed to develop practical arguments that focus on the way in which opinions or claims can be justified. He argued that theoretical arguments made inferences based on a set of principles to arrive at a claim. In contrast, a practical argument seeks a claim of interest first, and then provides justification for it. His theory (1958; 2003) stated that actors in a policy process are part of competing coalitions that argue about a chosen policy, and out of this argument decisions are made by policy makers, depending on the strength of each coalition's argument. His model has been used for the analysis, evaluation, and construction of arguments. It incorporates evidence, claims and warrants. He believed that the procedure of argumentation begins with the formulation of a problem in the form of a question. In regards to the level of single argumentation (micro-level), this will likely be the expressing of a standpoint or opinion. Then they must defend this standpoint 'in the event that it should be attacked...the standpoint put forward and to be upheld is called the claim' (Eemeren et al. 1996:139). Toulmin's layout of an argument is as follows:



(Toulmin, 2003:162)

He suggested that actors make claims about a particular issue based on evidence, and warrants are the hypothetical and logical statements that serve as bridges between the claim

and the evidence. Toulmin believed that the way in which to defend a claim is to appeal to evidence. Therefore there must be a stage in the process that consists of the construction of evidence to support the claim. The warrant is then justified by the actor for using the evidence concerned as support for the claim (the evidence-claim relationship). The reason that Toulmin distinguished between evidence and warrants is that ‘data are appealed to explicitly, warrants implicitly’ (2003:92). This suggests that when analysing an argument, one should be able to identify both the claim and the evidence each time but it may not always be possible to identify the warrant. In principle, the warrant is expressed as a general statement and its hypothetical form will be “if (evidence) then (claim)”. Warrants are defined as ‘statements which justify drawing conclusions from the grounds’ (Best, 1987:108). For example, in regards to the issue of drink driving a claims-maker might argue that even one person losing their life due to a drunk driver is one too many, and that, therefore, something must be done. Concluding that something should be done demands that a person accepts some warrant that the problem deserves attention. As Toulmin (1958:100) argued:

*‘Unless in any particular field of argument, we are prepared to work with warrants of some kind, it will become impossible in that field to subject arguments to rational assessment. The data we cite if a claim is challenged depend on the warrants we are prepared to operate with in that field, and the warrants to which we commit ourselves are implicit in the particular steps from data to claims we are prepared to take and to admit’*

This implies that for an argument to be persuasive, the people being persuaded must ordinarily belong to a field which deems the warrant valid. Or a person may be persuaded by another warrant, ‘perhaps one which the person making the argument would not find valid’ (Best, 1987:108). It is the warrant in which values most often come into play. It is assumed that the warrant is a rule without any exceptions, and that the accuracy of the warrant itself is not an issue. The data or evidence in Toulmin’s model refers to facts we appeal to as a

foundation for the claim (1958). It answers the questions of what is the proof, and why questions. According to Toulmin, the evidence can consist of a number of different data including statistics, quotations, reports, findings, or various forms of reasoning. Evidence is significant because it is the reasoning behind the claim and the basis of real persuasion. For Toulmin (1958) the evidence can sometimes be used as the backing for a warrant, or to confirm or deny that a warrant satisfies the conditions of a rebuttal. The claim is the statement that a claims-maker is asking their audience to accept. It is defined as the conclusion 'whose merits we are seeking to establish' (Best, 1987:102). It is also referred to as the thesis. Toulmin (1958) stated that people often start their argument with the claim and then present evidence to support the claim. If the audience do not agree with the claim or claims being made then argumentation is required in support of the claim. Toulmin argued that the degree to which a claim can justifiably be asserted depends on the quality of the argumentation that can be advanced in its support. However, the quality of the evidence does not necessarily mean that a claim will be accepted by the audience. In many instances a claim will not be accepted, regardless of the evidence presented.

Toulmin argued that in a more complex argument it is necessary to include qualifiers and rebuttals. Qualifiers are conditions under which the claim is true and rebuttals are statements which contradict the evidence or warrant (Toulmin, 2003). According to the model, these two elements are not vital in every argument but in a multi-layered, complex argument there is more than one piece of evidence and rebuttals are used to extend the argument further. A detailed argument on a complex issue such as HS2 may involve several simple arguments where the intermediate conclusions build up to an overall claim such as HS2 should not be built. The strength of the overall argument depends on the strength of the component parts.

For the purpose of this research, only the three (essential) elements of an argument are identified which includes the claim, warrant and evidence. Because it is not the aim of the

researcher to analyse the argument itself, it is not necessary to identify all the elements. The model is only serving as a tool for identifying the key components within the arguments presented in the data. The model does have some criticisms which are discussed below.

Toulmin did not explain in much detail how he conceptualises evidence. When naming something as data he used the term ‘facts’ or the ‘truth’ on which the claim is based. This may be due to the theoretical lens that he has applied to his work. He assumed that the data will be accepted at face value, otherwise it risks becoming a claim itself that must be defended. However, this does not coincide with the assumptions in this thesis. The thesis argues that evidence itself is contested and not accepted at face value, and it is because of this that we have policy controversies. If a person frames an issue in a particular way then this will affect the way in which they interpret evidence and the claims that they make. Another issue with the model is that Toulmin believed that rationality can, in principle, be claimed for every sort of argumentation and that its soundness criteria depend on the nature of the problems at issue. However, this thesis argues that human beings are not always capable of rational activity, especially concerning highly contentious and emotive policy decisions. The model assumes rationality on both the side of who is arguing and on the audience. In order to address this assumption, an additional arrow should point towards the data/evidence to indicate that evidence is interpreted and not taken at face value. The process is not a linear one.

There have been critiques of Toulmin’s model in that it has its origins in foundationalism. This is a view about the structure of justification or knowledge. Foundationalist arguments claim that all knowledge and justified belief rest ultimately on a foundation of non-inferential knowledge. This model is useful for the research because it allows the researcher to separate an argument that they are reading into parts for analysis. The model separates two of the key aspects of the research which are claims and evidence. Rather than viewing arguments as rational activities the literature review sought out an approach that included argumentation as

well as negotiation of evidence through claims-making. This led to the work of Spector and Kitsuse (1973; 1977) and Bulmer (1971). They use a social constructionist lens to define, understand and study social problems that is quite distinct from previous perspectives. The model is useful for analysing argumentation, not so much as a model for its evaluation. In analysing spoken discourse and written texts, it allows the researcher to make the structure of argumentation more transparent and it provides a good starting point for the analysis of claims and evidence. The model is applied to the case study to distinguish between different elements of the argumentation process and to see whether or not the model fits the complexity of the HS2 debate.

The reason that there is a strong focus on the Toulmin model of argumentation within the research as opposed to other models of argumentation is that his diagram is very helpful to display premises and conclusions in an argument and to show how groups of premises support conclusions that can in turn be used as a premise in adjoining arguments. The approach allowed the researcher to look at two sides of the policy debate and examine their arguments, in particular, how propositions interact with each other and reveals the strengths and weaknesses in each argument. It was important to use a monological model because they stress the link between the different components of an argument and how a conclusion is related to evidence and they emphasise the structure of the argument itself. Alternative models of argumentation such as dialogical do not take into account the micro-structure of arguments and the audience's perception of such arguments. Rhetorical models of argumentation the emphasis is put on the audience rather than on the argument. The intention of the researcher was to use a model of argumentation that focused on the argument itself in order to deconstruct it.

### **3.7 Negotiating evidence using the claims-making framework**

Following on from argumentation theory, once the arguments have been deconstructed into the various elements, it is possible to concentrate on the evidence and claims being made. The thesis classifies claims within the case study using Toulmin's distinctions among evidence, warrants and conclusions as a framework. It conceptualises policy actors as claims-makers who play a role in shaping how a policy problem is constructed and perceived. Specifically, the thesis examines the role evidence plays in making claims about a particular policy and how these claims were constructed. It seeks to understand more generally the social construction of knowledge by policy actors, particularly those campaigning for or against the project. The claims-making framework recognises the power of language within policy making and politics. Analysing the claims of individuals and groups allows the researcher to understand how claims are used to promote and shape public policy (Meindl et al. 2002). Claims may have greater influence over another depending on whether or not it supports the interests of political and economic actors, or if it runs parallel with prevailing ideological visions within society such as a modernisation agenda. This section of the chapter explains what the claims-making framework suggests happens in the policy process paying particular attention to the role of evidence and how it is negotiated. Claims have received some critical examination (Aronson, 1984; Gusfield, 1981; Best, 1987). In particular, Gusfield argues that evidence used to support claims must not be viewed simply as objective evidence but should be seen in terms of rhetoric.

A claim is always an expression of an opinion and it does not necessarily have to be verbal. A claim also has a challenging nature calling on another for something due. The thesis defines a claim as:

*An expression of an opinion by a policy actor whose merits we are seeking to establish*

Claims are normative statements with varying degrees of assertion. They are not measured on their own merit, but rather by how effectively they appeal to the policy formation audience. A claims-maker inevitably hopes to persuade. Their goal is to convince other actors that something is a problem and that their solution to that problem is the right one. As Best pointed out:

*'while the success of claims-making may well depend, in part, on the constellation of interests and resources held by various constituencies in the process, the way claims are articulated also affects whether they persuade an move the audiences to which they are addressed'*

(Best, 1987:102)

This means that claims-making becomes a rhetorical activity. As he goes on to argue in another text:

*'Claims-making inevitably involves selecting from available evidence and arguments, placing these chosen arguments in some sequence, and giving some arguments particular emphasis. These are rhetorical decisions'*

(Best, 1993:41)

The claims that are made are then usually revised and reconstructed depending on how their audience respond to the claims or if the audience differs. They do this in order to attempt to make the claims more effective and persuasive. In these instances, 'even the most ingenuous claims-maker must become conscious of doing rhetorical work' (Best, 1993:41). A rhetorical perspective recognises that problems of action involve conflict between people; they are essentially contestable (Garver, 1978). One of the ways that the rhetoric approach enriches analysis of the policy process is the focus it places on the audience to the claims. These

rhetorical decisions will depend upon the nature of the claim, who the claimant is and who they are addressing. Rhetoric has received a poor press in modern times as it is often seen as something dishonest and undesirable (Garsten, 2006). However, there is an alternative conceptualisation of rhetoric provided by Booth (1974) that highlights its value in bringing to the fore the role of human agency and judgement in policy making. He defined rhetoric as the ‘art of discovering warrantable beliefs and improving those beliefs in shared discourse’ (1974:xiii).

And so the task in solving a policy problem is not necessarily to acquire more information like the EBPM model suggests, but to exercise practical reason. It was Aristotle who introduced this practical reason and it involves deliberation about moral and political issues, persuasion, reflection on values and disclosure of ideas. He acknowledged that in politics people must come to their decisions on the basis of claims and that there are multiple and varied perspectives in each decision. Aristotle ‘saw rhetoric as needed to make people see and understand the truth but also because some matters do not yield to a single, indisputable truth and the task before us is that of convincing others to see things in the same light as we, to define the situation in a particular way and to win others over to seeing it that way too’ (Finlayson, 2007:550).

Policy actors often disagree about the meaning and values of things. This contestability is more than just a difference of opinion. These differences are due to the parties involved having different criteria of assessment and approaching the dispute from a different context to one another. For the wicked issues or policy controversies there is often no agreed external evaluative standard; disputes are often not reducible to epistemological problems because people disagree not only about a particular policy problem but about what that policy problem is and what a resolution might look like. To believe something is to accept the many

kinds of reasons that can be presented for so believing it; to present and explain a belief to others is to present the arguments that are part of the belief. In a policy argument, statements about evidence provide the foundations for the discussion which follows. The evidence is socially constructed knowledge and claims-makers and their audiences may agree to accept evidence without question, or one or multiple parties may disagree with the validity of the evidence. Although definition might seem the logical first step in claims-making, it frequently follows an introductory example. For example, in the case of HS2 the discussion of a capacity problem on the WCML began before the debate for high speed rail did. Once a problem has been established through framing, claims-makers often try to assess its magnitude. The bigger the problem, the more attention it can be said to merit, so most claims-makers will emphasise a problem's size. They will argue that there is an urgent need for a solution to a particular problem.

Best (1987) suggested that there are three different types of estimates concerning the size of a problem. The first is incidence estimates which estimates the number of incidents or people affected. The more widespread a problem is, the more it demands attention. Growth estimates are concerned with claims that state a policy problem is getting worse or growing and unless action is taken there will be further deterioration. The third type of claims is range claims. By claiming that a policy problem's range extends throughout society serves as an important rhetorical function. This may make the audience feel that they have a vested interest in the problem's solution. Just as campaigners for the reclassification of cannabis from a C to a B argued that if we do nothing then the country will see a decline in mental health and the only solution is to reclassify the drug (Hope, 2008). The way in which claims-makers try to shape perceptions of social problems is by presenting examples or case histories. They also try to get the audience to imagine how they would feel in the same circumstances. This can invite sympathy and understanding, so the problem becomes less abstract and the claims easier to

comprehend. They will often insist that existing policies and resources cannot handle a problem therefore justifying the need for a new policy or an amendment to an existing one.

Claims-makers often emphasise consistency with past policy as this can be especially useful when they address institutions or bureaucracies. Other claims-makers may take a different approach and argue that 'a problem calls for a revolutionary break from the past' (Best, 1987:111). Such a claim can persuade those with little invested in past policies.

Understanding claims-making as it plays out in public policy can provide a vital tool. If an actor understands a claims-maker's values and interests and is aware of their connections to other claims-makers and other issues, they are better able to predict their reaction to their own claims. They may be able to anticipate potential counter claims that may arise and be ready with further claims to expose these counters. Certain groups and actors have made this a true art in public policy and a lot can be learned from applying their claims-making strategies and practices. In order to truly influence public policy, claims-makers need to think like policymakers and present their evidence in claims that appeal to the way decision makers think and feel about an issue. Claims-makers learn ways to mobilise and maintain public support; they learn how to get media coverage by constructing claims that are newsworthy; and they learn to identify key policy makers and recognise the levers which can move policy. The legitimacy of certain claims hinges on questions of generalizability, operational definitions and measurement, and data analysis. The relative legitimacy of competing claims 'is an issue that is fought out between different interest groups in the public arena and within the scientific establishment itself. In the final analysis, the legitimacy of such definitional claims rests on the adequacy of empirical documentation-documentation that is in turn subject to paradigmatic disagreements and political struggles' (Gillespie and Leffler, 1987:491)

Claims-making literature does not focus on the role of evidence within policy making. A small literature base exists concerning representative claims-making and a slightly larger one on political claims-making but neither address all the elements that are important to this study. The limitations of the literature are that it does not recognise how different types of evidence impact on claims or how claims-makers select evidence, on what basis, and how they negotiate with each other. The existing and somewhat outdated literature explains that claims-making is a ‘rhetorical exercise in which claims-makers use persuasive arguments to advance their position, status or goals’ (Mulcahy, 1995:450). Concepts within and concepts that have developed from the literature are the strength of claims, the specificity of each claim and the types of claims that are being made. Returning to Toulmin’s (1958) theory of argumentation, the structure of arguments was examined. He drew a distinction between the claim and the evidence we appeal to as a foundation for the claim. The link between the evidence and claim can only be established by reference to warrants. He argued that warrants act as ‘bridges, and authorised the sort of step to which our particular argument commits us’ (Toulmin, 1958:98). Rhetoric approaches have found his scheme useful in analysing more complex arguments.

### **3.8 Connecting the theorems**

The thesis addresses a number of research questions that have been answered by drawing on three main theories or frameworks. They are framing theory, argumentation theory and the claims-making framework. This section explains how they complement each other and why each has been used. The diagram below sets out the relationship between the three and how they relate to the research questions:

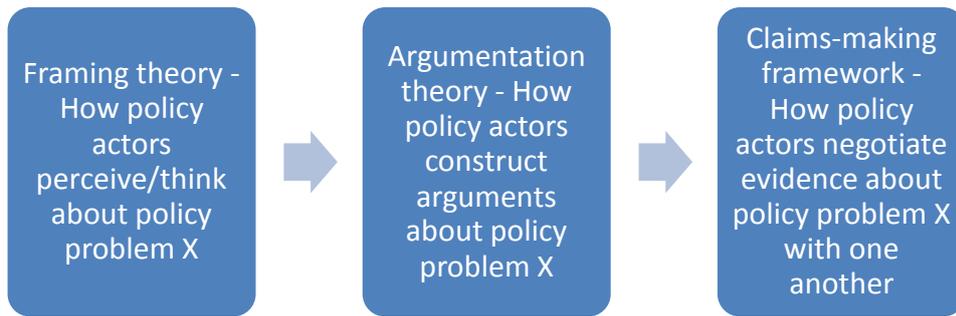


Figure 2: Connecting the Theorems

Initially, the aim was to explore the extent to which policies are based on evidence. In order to answer this some pilot interviews were conducted and participants were asked questions about their understanding of the role of evidence within the policy process. The participants discussed the policy problem in different ways to one another. What became apparent after conducting some of the pilot interviews was that some understanding was required about how policy actors came to present the claims and evidence that they did as this impacted on the types of evidence they drew on. Therefore a theory needed to be identified that would explain the way in which policy actors perceived a policy problem. When making a policy decision if the actors involved have different understandings of the problem that they are trying to solve then they will have different opinions of what the solution should be. This can be explained using framing theory. Policy actors that have different frames enter into a process of argumentation in order to persuade the audience (usually the public and/or decision makers) that the way in which they frame the issue is the “right way” and therefore their solution should be chosen. For example, people within a community have different understandings of what anti-social behaviour is and so they have different opinions when asked the question ‘how should we solve the anti-social behaviour problem in our area?’

Framing theory allows the researcher to identify the positions that different policy actors within the case study adopt in order to understand and shape their claims. This in turn has an impact on the types of evidence that they draw on in the process of argumentation. However, it is unable to explain how policy actors negotiate claims and evidence with one another. The claims-making framework is able to address this. It recognises the power of language and the importance of the audience within the policy process. It identifies the ways in which a person attempts to persuade their audience of a solution to a policy problem through a process of negotiation. What the claims-making framework does not explain is how claims and evidence should be identified so an argumentation model is used to deconstruct the arguments in order to analyse the way in which the evidence is negotiated. The model is very helpful for displaying evidence and claims in an argument and to show how groups of evidence support claims that can in turn be used as evidence in adjoining arguments. For example, within the chosen case study it is possible using the argumentation model to identify how the arguments interact with one another and whether policy actors that adopt different frames appeal to the same evidence and if so how.

The reason that framing theory and the claims-making framework complement each other is that they are both concerned with constructions of reality. Framing is ‘a process in which actors simultaneously create meanings of events and situations in the world and publicly apply these meanings to what they are confronted with (van Hulst and Yanow, 2009: 9). It involves (re)constructing policy issues and problems whilst the claims-making framework concentrates on the social organisation of claims-making, identifies the key policy actors within the process, attempts to show how claims-making is related to their interests and how claims-makers mobilise to affect a policy decision. Argumentation theory tends to be concerned with logical reasoning which does not necessarily support the theoretical approach of the other two theories. However, the thesis does not make any inferences about the logic of

the arguments presented, it only uses a model derived from argumentation theory as a basis for understanding and identifying arguments within the case study in order to analyse the way in which evidence is negotiated.

### **3.9 Conclusion**

This chapter demonstrated that the reality of policy making is ‘messier, more contingent, dynamic, iterative and political’ (Russell and Greenhalgh, in Glasby, 2011:50). Evidence is a product at the end of a long line of assumptions and choices at the levels of epistemology, theory, methodology, and methods (Crotty, 1998). Our understandings of existence and knowledge impact on our understanding of evidence and there are a number of models that suggest there are different ways that evidence enters the policy process and its role. Although the rational model of decision-making is useful for helping decision makers to deal with difficult problems in a complex environment by providing a well-defined step by step approach, the thesis is in agreement with the view that we should move away from this model of policy making and consider it more as indeterminate and ambiguous comparable with an interpretive approach. Policy makers are not simply responding to problems that exist in the community, but are constructing ‘problems’ through the policy problems that are offered in response. Problems are never objective but are framed within policy proposals where power undoubtedly plays an important role. How these problems are framed or constructed affects what can be thought about and acted on. Both framing theory and argumentation theory as well as the claims-making framework identify language as an important part of the policy process. It is through language that policy makers and other actors within the process communicate ideas and promote policies. Therefore, policy making is based on strategically crafted arguments. And policy is a ‘set of shifting, diverse and contradictory responses to a spectrum of political interests’ (Russell and Greenhalgh, in Glasby, 2011:54). Argumentation theory is preferable to the EBPM concept because it does not disregard its audience and we

must move away from this disembodied evidence, towards not only how evidence is constructed, but also by whom, for whom and how the evidence is negotiated and received by an audience. As Russell and Greenhalgh (2011) state, ‘evidence can no longer be considered as an abstract knowledge separate from its social context (in Glasby, 2011:60).

The thesis demonstrates how policy actors negotiate evidence with other policy actors and make claims based on evidence, beliefs and ideas. They enter into a process of argumentation and attempt to persuade others of the validity of their claims. They do this by presenting evidence and persuasion. The study of argument has the potential to illuminate dimensions of the policy process that remain hidden when policy making is studied through a predominantly rationalist lens, enabling a rich description of policy making. Acknowledging that in the messy world of policy making there is no single right answer, only good reasons to arrive at plausible conclusions, rhetorical theory directs analysis towards the human processes of judgement and justification, and thus supports critical inquiry into how evidence is constructed by policy actors. A social constructionist framework is very useful for understanding the public policy arena, and can explain why unfounded anecdotes can easily override rigorous scientific effort and investment. It provides a framework for examining the real world of negotiated order that lies at the heart of public policy formation. By viewing the policy process in this way, evidence is open to interpretation which allows the expertise and claims made by policy actors to be challenged. Rather than the limited EBPM approach and explanation, the claims-making framework can provide a rich description of the naturalistic processes occurring in the policy making process and it provides a more sophisticated understanding of the audience.

# **Chapter 4**

## **Evidence in Transport Mega-Projects**

### **4.1 Introduction**

The previous chapter explained the various models of the relationship between evidence and policy and set out the theoretical models used to understand this relationship. This chapter focuses on evidence in a particular policy area: transport mega-projects (MTPs). Mega-projects can be understood as being large schemes or developments that are complex in nature and expensive to construct. Investment in them places a considerable burden on a country's gross domestic product (GDP). Globally, there has been an increase in the number of projects that are considered 'mega' in nature. MTPs are a category of mega-projects. They are known for being the worst transport category in terms of finishing overtime and not on budget (Flyvbjerg et al. 2003). However, with a growing population there is an inherent need for increased large transportation projects so it is likely that MTPs will continue to be built. The case study in this thesis, as mentioned before, is High Speed Two. It is considered a MTP due to its size and complexity. It will be the largest rail project that has ever been built in the UK since the original railways were built in the Victorian era and it will also be the most expensive. The thesis is dedicating a chapter to the use of evidence in MTPs in order to provide a context for the case study. It is also important to highlight the difficulties encountered by policy actors within these projects in terms of evidence utilisation. This is due to the nature of evidence that is often used to either support or oppose a large infrastructure project.

Mega-projects have a number of similar characteristics regardless of their type. They require strategic and collaborative decision-making due to the number of different actors involved and the wide range of interests. The literature commonly focuses on the characteristics of

projects and evaluation ex-post. There are only a small number of authors that explore the decision-making processes of mega-projects. The majority of evaluation research seeks to explain the reasons behind the success or failure of a project and how projects could be delivered more effectively. For the purpose of this research, a number of different decision-making models have been examined in order to draw some conclusions about the way in which decisions are made and the role that evidence plays within these decisions. Firstly the chapter considers the literature that explores the definition of a mega project and what the main characteristics are. The literature review identified four key themes relevant to MTPs which include complexity, risk, uncertainty and deception. The chapter then focuses on how decisions are made within these projects, in particular the techniques used to gather and evaluate evidence. This establishes what the issues are in how evidence connects to policy making in MTPs. By identifying past approaches to decision-making in MTPs the thesis demonstrates in the next chapter whether or not the processes within High Speed Two are path dependent or whether they have taken a different approach.

## **4.2 Conceptualising a mega-project**

There are a number of different ways of understanding mega-projects; one common definition is that they are thought of as a very large investment project (Flyvbjerg et al., 2003). It is similar in nature to the definition of a project in that there are a number of stakeholders who share the aim of completing a task within time, scope and budget (Söderlund, 2004). What makes them ‘mega’ is usually due to their size and scope. Their defining features are the cost and complex causal relationships. Any infrastructure project that costs more than \$1 Billion US can fall into the category of ‘mega’ (Altshuler and Luberoff, 2003). Mega-projects display a number of other characteristics including their size, being large scale and are also geographically dispersed. They have continuous evolution and dynamism as well as large temporal scales (Lehtonen, 2014). For example, building a new

motorway would involve a huge deal of planning and design as well as costs in order to be constructed. The Millennium Dome in London was considered ‘mega’ partly due to it being one of the largest of its kind in the world. Due to the size of these projects there are a huge number of stakeholders and interested parties involved throughout. Certain actors may not be present for the entirety of the project, some could be involved for the duration and others may only be involved at certain times. Gellert and Lynch (2003) defined mega-projects as:

*‘projects which transform landscapes rapidly, intentionally, and profoundly in very visible ways, and require coordinated applications of capital and state power. They use heavy equipment and sophisticated technologies, usually imported from the global North’*

(2003:16)

This definition focuses on the visible transformation to landscapes and the need for co-ordination amongst stakeholders to complete a project. This leads to the next defining characteristic of a mega-project: the impact that they can have. Whenever a mega-project is built it often has an impact on communities, on budgets and on the environment. In many instances, opposition to these projects are based on the negative effects it may have on the surrounding environment (Griggs and Howarth, 1998; 2013; Huys and Annema, 2009). In terms of budget, global spending on infrastructure is the largest it has ever been as a share of world GDP (Flyvbjerg et al. 2009) and it is estimated that over the next ten years \$22 trillion US could be spent in emerging economies. In the UK alone, Kulcher (2013) reported that the UK Government plans to spend more than £100 billion on infrastructure projects. It is not surprising then that these mega-projects warrant a great deal of interest from a number of different parties. Due to the huge costs involved with them, they are often referred to as being controversial in nature. This is due to the potential displacement and impacts they can have to nearby communities and businesses. Gellert and Lynch (2003) claimed that they are

‘inherently displacing’. For example, when constructing a new road or bridge a person’s property may need to be removed thus displacing them from their home. This is why in many instances there is resistance to the building of certain mega-projects.

There are frequent issues with control within mega-projects in relation to who the final decision makers are on various aspects of the scheme, who is responsible for managing the project and who should be funding it (Frick, 2008). Following on from control issues, this can be due to the period of inception until realisation which can be several years. In a mega-project’s life span from design to construction there may be a change in the political environment, persons involved may retire or change their job and the project may encounter unexpected changes and uncertainties. A change in political affiliations of the Government responsible for the project can cause issues for a mega-project. In regards to the case study that is presented in this thesis, High Speed Two was envisioned by the Labour Government up to 2009, then the Coalition Government (Conservatives and Liberal Democrats) adopted the policy, and in 2015 there was another General Election in which the UK which saw yet another change in Government control (Conservative Party). The aim must be to have strong change management plans throughout the life cycle of the project. Another characteristic of mega-projects is that they are collaborative in nature. This could mean that they are part of a Public Private Partnership, a Private Finance Initiative or simply funded by the Government in full and delivered by private companies. This relates to the issues with control that some projects experience as it can be unclear who is responsible for certain aspects of it.

Sometimes the mega-project will depend on the use of new or unproven technologies and legislation. Often decisions are made between ‘on the one hand, innovative, relatively unknown technologies and, on the other, proven, less risky technologies, which may be regarded as outdated by some parties’ (Priemus, 2010a:1027). As Frick (2008) found in her evaluation of the Bay Bridge in San Francisco and Stoop et al. (2007) discovered when

evaluating the HSL-South line in Amsterdam, using innovative and untested technologies can have a detrimental effect on the decision-making process and cause delays in the project.

There are a number of authors who have conceptualised these projects in a different way. Del Cerro Santamaria (2013) perceived megaprojects in an urban context as large-scale development projects that sometimes have an iconic design component, that usually aim at transforming or have the potential to transform a city's or parts of a city's image, and are often promoted and perceived by the urban elite as crucial catalysts for growth and even as linkages to the larger world economy. Whereas Salet et al. (2013) considered mega-projects to be 'a loosely coherent accumulation of single elements framed as a single unitary package' (p.1985). They claimed that new projects usually just 'restructure' what is already there and complement existing networks. More often than not, when these mega-projects are unpacked we are able to identify a number of different smaller projects under the same umbrella. This is closely linked to a discussion by Lehtonen (2014) who raised the question of the extent to which mega-projects can be seen as projects. He provided an alternative perspective that understands them as being 'organic, open systems, co-evolving with their context' (p.283) and so they should be described as a 'programme of projects' (OMEGA, 2012). This means that boundaries defining these projects will be more vague and subject to change.

MTPs are developments that entail infrastructure investments such as roads, railways, bridges and tunnels. According to OMEGA Centre, MTPs should be defined as:

*'land-based transport infrastructure investments within and connecting major urban areas and metropolitan regions in the form of bridges, tunnels, road and rail links, or combinations of these. They are projects that entail a construction cost of over US\$1 billion (at 1990 prices), completed since 1990 and are frequently perceived as critical to the 'success' of major urban, metropolitan, regional and/or national development'*

(OMEGA Centre, 2012:2)

From this definition, MTPs are a category of mega-projects and they receive their name by being solely about land-based transport infrastructure. MTPs do share a number of characteristics, although they must still be considered as one-of-a-kind in nature (Lehtonen, 2014). As Lehtonen argued, 'despite their several common characteristics, mega-projects do not represent a homogenous group of entities' (2014:281). The next section of the chapter looks more closely at the recurring themes that have been identified within the literature that relate to large infrastructure projects which includes complexity, risk, uncertainty and deception.

#### **4.2.1 Complexity**

Complexity is generally used to characterise something that has a number of parts or layers where those parts interact with each other in a number of different ways. Much of the earlier definitions concerning project complexity focused on concepts of numbers, such as tasks, components and technical specialities as well as levels or depth and connectivity (Lessard et al. 2013). If something is considered complex it is often perceived as being complicated. What may seem to be a project with a single primary function, for example, building a bridge that connects two areas, but in practice it is often much more complex. Baccarini (1996) suggested that large projects in general are complex and since WWII had increased in complexity. He argued that project complexity could be defined as 'consisting of many varied interrelated parts, and operationalised in terms of differentiation and interdependency' (1996:202). A mega-project usually experiences an 'emergence of different purposes and interests in an ever-changing and unpredictable context of possibilities and constraints' (Salet et al. 2013:1984). More recent definitions of complexity have identified a conceptual distinction between project features that are inherent, those that are conditional and those that

are architectural (Lessard et al. 2013). Some examples of inherent features include the legislative context, the geological challenges, interdependence and the number of stakeholders involved. Examples of conditional features include governance structure and timing as well as financing. Lessard et al. (2013) argued that the architectural features ‘represents the project concepts that were actively chosen or shaped, given the inherent features’ (2013:11). Martens and van Weelden (2014) distinguished between two interrelated dimensions:

- Technical complexity of infrastructure projects
- Complexity of the societal and organisational context in which decisions have to be made

The first dimension relates to the ‘physical object of planning’ (2014:649). This includes aspects of the project such as its size, scale, and time. The second dimension relates to the external effects of projects such as effects on the economy and citizen well-being. This complexity leads to uncertainty about the characteristics and effects of MTPs. When examining complexity in large infrastructure projects it is important to recognise the interaction of both generic and unique features of a built area. Although there are often many generic patterns that occur in certain locations, there will usually be specific local conditions present such as the social fabric. Verweij and Gerrits (2012) argued that ‘a built area becomes even more complex if its social fabric is taken into account – individuals and social groups living, working, travelling and recreating in any given area – since it directly influences the existing and future infrastructure requirements’ (2012:43). If the same mega-project were to be built in two different cities there would be different outcomes. Some authors such as Hecht and Niemeier (2002), Lee (2008) and Yang (2007) focused on generic patterns of complexity whereas others gave more attention to idiosyncratic events (Anguera, 2006; Priemus, 2007; Walter and Scholz, 2007). There is no way to remove the complexity from a mega-project

due to its nature and many of the features that define a project's complexity are inherent. However, if the complexity is acknowledged by those involved and understood then they may be better equipped to deal with the complexity throughout the project. Due to mega-projects complex nature, risk and uncertainty are other common characteristics associated with the design, funding and construction of these projects.

#### **4.2.2 Risk and Uncertainty**

Risk is usually portrayed as the potential of losing something of value, weighed against the potential to gain something of value. It can also be defined as the intentional interaction with uncertainty. A course of action or decision is considered a risk if a person has a good understanding of the situation and can assess the chances of different outcomes in advance. This means that they might be able to produce a numerically balanced judgement. When a person believes they do not fully understand elements of a decision then they are considered to be uncertain. The reason that mega-projects are often laden with uncertainty is their lifespan. On average, mega-projects can span over a number of decades. In the Netherlands the decision-making process for infrastructure development 'takes about eleven years on average' (Verweij and Gerrits, 2012:41). Depending on the size of the project it can take up to thirty years or more. Another cause for uncertainty in mega-projects is the boundaries which are often subject to change. Even when they are 'precisely defined at the beginning, they often appear to change during the processes of decision making because of often unforeseen interrelationships with other developments' (Salet et al. 2013:1986). Because of long planning horizons and the complexity of mega-projects they are often defined as being 'inherently risky' (Flyvbjerg, 2009). Due to the huge costs of mega-projects the global economy often rests on the success of investments in these projects. A successful development could lead to an increase in investment and employment; if the project is not successful then it may hinder the economy rather than improve it.

Martens and van Weelden (2014) defined uncertainty as the ‘lack of reliable knowledge about the characteristics and future effects of infrastructure projects’ and ‘distinguish four causes that may give rise to uncertainty’ (2014:650). The first cause is due to the nature of evidence used within MTPs. There is no way to know exactly what will happen in the future and so evidence relating to future developments can only ever be predictions or estimates. For example, if a new metro line was built in a city then economists would usually predict the expected economic benefits using statistical modelling. However, there are a number of variables involved such as passenger ridership, the economic climate in terms of growth, and these variables cannot be controlled. Thus, evidence ‘used with regard to these variables is always disputable’ (De Bruijn and Leijten, 2007:53). The second cause relates to the system boundaries regarding the effects of projects, ‘as these boundaries directly influence the types of effects which will be taken into account in project analyses, thereby also shaping the results of the effect analyses’ (Martens and van Weelden, 2014:650). This means that the wider the system boundaries are then the greater the uncertainties will be. The third cause related to uncertainty is how different research methodologies can lead to different conclusions about a project. If there is no consensus on the methods used within MTPs then there is likely to be uncertainty within these projects. Lastly, Martens and van Weelden (2014) identified the issue of optimisation of desired effects as the fourth cause for uncertainty. They argued that:

*‘Decision-making about infrastructure is often about the comparison of alternatives and selecting the optimal option; however, which alternative scores best depends strongly on the variables that are taken into account and the assumptions that are used’*

(2014:650)

These four causes of uncertainty play a role in all decision-making processes but are more prominent in MTPs due to their size and scale. The second dimension of complexity, as discussed by Martens and van Weelden (2014) relates to the multi-actor environment in which decisions on MTPs are made. The larger the project, more actors are usually involved. They are likely to have a wide range of opinions and interests and will frame the project and its elements in a different way. This means that the project could be viewed from a number of different perspectives which are often ‘incompatible and lead to fundamentally different interpretations of the same situation, with no clear criteria to distinguish valid interpretations, even if actors agree about the reliability of the available information and the expected impacts of an infrastructure project (Martens and van Weelden, 2014:651). Therefore, evidence is ambiguous due to it being interpreted in a number of ways. For example, if there is an issue of connectivity between two areas in a city the actors involved are likely to have different opinions of how to solve this problem due to the way in which they have framed the connectivity issue. Their normative standards could lead them to potentially different solutions. It is difficult for one group of actors to claim that their solution is a better option than another group’s. The stronger the different interests amongst the groups then the stronger the incentives will be to make evidence more contested and devalue it.

There are different types of risks associated with mega-projects. The first being *ecological risks*. This relates to the effects that the project may have on the environment. Opposition groups to mega-projects, especially those concerned with transport, identify ecological risks with the hope of halting the project. By demonstrating through evidence that the ecological risks outweigh the benefits of the project is sometimes enough to halt or hinder it. An example of this is in Thailand where the National Council for Peace (NCPO) recently ordered state agencies to halt projects related to the Pheu Thai Government’s 350 billion-baht flood control and water resources management scheme (Blake, 2014). The water scheme was ‘one

of several infrastructure mega-projects worth a combined 2.35 trillion baht (approximately \$71 billion) that had raised the suspicions and ire of many government opponents, fearful that the borrowed funds would be used for nefarious purposes, such as buying rural votes, leading to environmental destruction and social division, while quietly feathering the nests of the select few who controlled the purse strings' (Blake, 2014). An example in which opponents to a project were not successful is the Tiergarten-Tunnel mega-project in Berlin. Those opposed to the development focused on asserting that 'the tunnel project would cause severe and permanent environmental damages to the Tiergarten Park' (Peters, 2010:95). They employed academic researchers to assist them in finding evidence that would offer an alternative environmental report. However, the university researchers 'deemed the ecological risks and possible permanent environmental damages to the Tiergarten Park to be less substantial than the activists had hoped, crushing their hopes of halting the projects on the basis of environmental arguments' (Peters, 2010:96). These are two instances where opponents to mega-projects raised concerns about the ecological risks of mega-projects with only one being successful.

The second type of risk associated with mega-projects is *financial risks*. It would be very difficult for economists to predict up to thirty years in advance what the economic and social situation would be for an area or country. As Priemus (2010b) stated:

*'Generally speaking, prognoses and estimates – implicit and explicit – are based on assumptions about trends in supply and demand, and hence the price developments in relevant markets. A whole host of factors come into play, such as the availability of engineers and other experts for the preparation phase; the supply of tradesmen, building materials, installations and raw materials for the execution phase; developments in energy prices; the overall economic situation; the capital market (including trends in long-term interest rates); inflation and the land market' (p.25)*

All of these factors need to be considered in the early stages of a mega-project as they can all create financial risks for the project. Another factor that could alter financial risk is mobility patterns. If a new high speed rail link is designed and built with the assumption of a certain amount of passengers to make the project financially viable may be affected by the increase in cheaper air travel provided by airlines such as RyanAir and EasyJet (Priemus, 2010b). In Europe, inland shipping is affecting the use of rail and road transport in terms of freight.

Once the project has been completed there are then *operational risks* which are associated with uncertainty about the performance of the infrastructure during its operating phase. Ward (2008) identified three key features of operational risk: high capital cost, long lives and costly post-construction modification. Economic appraisals typically assume around a twenty year operating life. However, many mega-projects such as roads and railways will exceed this estimate. As Ward stated, 'In some cases future operating costs (even after appropriate discounting) may substantially exceed the more immediate construction costs' (2008:2). Stakeholders are required to have a good understanding of the potential future costs and revenues of a mega-project in order to reduce uncertainty and risk. One-off events can also have an impact on the operational risks. For example, if an incident occurs such as the 2013 rail crash in Santiago de Compostela, Spain then investigations may lead to a change in maintenance or security protocols. Thirdly, operational risks can have 'significant cumulative effects' (Ward, 2008:2). Smaller scale problems encountered by mega-projects can have a cumulative effect if not addressed such as increased costs, shifts in organisational culture and lost efficiency. This is why in many instances a Government displays a preference for public-private partnerships in order to divide the risk between actors.

### 4.2.3 Deception

Deception is considered to be an act that propagates beliefs of things that are not true. It is associated with lying which is defined as ‘an assertion, the content of which the speaker believes to be false, which is made with the intention to deceive the hearer with respect to that content’ (Williams, 2002:96). The reason that intention is important within the definition is because if a person states something as being true when they know it to be false then they are deceiving another person but it cannot be considered deception if they have not intentionally misled someone. For example, if a person (A) were to inform another person (B) that they had an appointment at ten o’clock believing this to be true, but the appointment is at eleven o’clock then they are not being deceptive. Person (A) would only be deceiving person (B) if they knew that the meeting was at eleven and intentionally told them the wrong time. This leads us to the next issue which is how to identify deception. If one were to conduct research into whether or not someone had been deceptive then they would have to ask that person if they had intentionally misled people. In many instances it is unlikely that a person will admit to being deceptive. Therefore, the researcher cannot conclude that someone deceived another. At best they can suggest that it was a possibility, just as much as it could be a possibility that someone unintentionally misled another. Linsky (1963) and Barnes (1997) suggested that the definition of deception must include that the false belief is caused by evidence, and that evidence is brought about by the person in order to cause the other person to have false belief. For example, if a person intentionally deceives another and they have presented them with evidence that suggests something is true when it is not then they are being deceptive.

Much of the literature on large infrastructure projects argues that the majority of projects are only granted funding or planning permission due to certain actors being selective with the evidence. Some go as far as to claim that actors deceive others in order to get a project

approved. Flyvbjerg et al. (2003) claimed that in certain cases actors strategically manipulate information or processes in order to increase the likelihood of a project being built. They argued that ‘these actors purposely spin scenarios of success and gloss over the potential for failure’ (Flyvbjerg et al. 2003:173). They gave two different explanations for why stakeholders and other actors might use deception: the principal-agent problem and the sources of strategic deception. Principal-Agent (P-A) problems are defined by relationships where a principal engages an agent to act on their behalf. Large infrastructure projects such as a new bridge or road will consist of a multiple tier P-A problem. Flyvbjerg et al. (2003) identified three tiers of P-A relationships including taxpayers, National Government, Local Government, analysts, contractors and planners and each of these tiers interact with one another. National Government are responsible for allocating taxpayers money to projects that will return the most benefits for the least amount of money. Both local and national Government also know that they are unlikely to complete a mega-project during one term in Government. Therefore, they may provide inaccurate forecasts in order for the project to be approved and start construction. If the project does incur cost overruns they can blame the successive Government for these failures. Finally, the third tier that includes contractors and analysts interacts with local and National Governments. They have an incentive ‘to provide information that is compatible with pleasing the local government, having the project approved, and being re-engaged on the next project’ (Flyvbjerg et al. 2003:178). Flyvbjerg et al. (2003) suggested that they are often aware of the real costs of a project but do not necessarily divulge this information to the Government for fear of the project not being built. Similarly, contractors know that high costs could reduce the chance of funding and so in order to win the tender from Government they may deceptively state what the costs and benefits might be.

The other explanation for deception in large infrastructure projects is sources of strategic deception. This includes differences in actors' self-interest. Most stakeholders within a large infrastructure project have various incentives. Therefore those involved in the early stages when the economic case is examined to decide if a project should be approved may deceive others of the forecast costs and benefits. 'Political and economic self-interest also exists at the level of cities and states' (Flyvbjerg et al. 2003:179). A second source of strategic deception is the presence of asymmetric information. Sometimes the Government is not aware of all the relevant information regarding the mega-project. This means that in some cases the decision-maker may be easier to deceive. The presence of different risk preferences can also create a P-A issue. For example, 'if the principal is risk averse, the agent who submits a proposal for approval may have to downplay the possible risks of the venture in order to convince the principal' (Flyvbjerg et al. 2003:180). Finally, Flyvbjerg and his colleagues identified the issue of asymmetric accountability. In some instances, projects have multiple people or groups that are responsible for the success of the project. If the project is evaluated and considered a failure then it is often difficult for any one agent to be held accountable. This lack of accountability during ex-post evaluations of projects can lead to an agent promoting projects that protect them from being held accountable if they fail, 'which may not be the projects that maximise the principal's total payoff' (Flyvbjerg et al. 2003:180).

Mega-projects are prone to delusion and deception. It is argued that 'the most underestimated costs and the most over-estimated benefits is best placed to win political approval at an early stage' (Priemus, 2010a:1024). It is difficult to overcome deception in these projects as actors are often determined for a project to go ahead and so they are selective and/or manipulative with their evidence. One way in which projects could decrease the use of deception is for principals to be better informed and for there to be better incentives for agents such as

planners and contractors. Having strict forecast audits may also reduce the amount of deception present in mega-projects.

### **4.3 Decision-making within Transport Mega-Projects**

This section of the chapter offers a review of the literature that focuses on decision-making within transport mega-projects which provides the context for the case study which are discussed in the subsequent chapter. Decisions can be conceptualised as the ‘result of the search for the right course of action’ (Faludi, 1998:381). In making decisions people rely on evidence or knowledge to make informed choices. The decision-making process involves relevant actors who must identify and choose a solution to a question or problem through examining a number of options. At the end of the process a final choice is produced based on the values and preferences of those actors. As discussed in the previous chapter,

In regards to mega-projects, Priemus (2010a) argues that a mega-project is a solution, which implies that there is a problem that needs solving with the mega-project being the most advantageous response. Due to the size and scope of mega projects, there are always a large number of actors with a high number of dissimilar and shared viewpoints about what the right course of action should be. As MTPs are a category of mega-projects, they possess a number of the same issues. A decision about whether or not to build a mega-project contains within it a number of secondary decisions that must be considered such as where should the mega-project be built, what should it look like, what materials should be used, who should be involved at the various stages and so on. These choices must all be made prior to construction in order to receive planning approval. As mentioned above, a characteristic of a mega-project is that it often has a long life span and can take years to construct. Therefore, it is likely that many of the actors involved in the early stages of the project will not see it through until the end. A number of actors may only be involved at certain stages of the project, depending on

their role which adds to the complexity of the mega-project process. Another problem that can arise due to the life span of mega-projects is that certain events are very difficult to predict. If a country experiences a recession and the economy is affected then this can have a detrimental impact on a project.

Decision-making on mega-projects is ‘the prerogative of the public domain’ due to ‘the characteristics of infrastructure projects (affecting the lives and interests of many actors in society)’ (Martens and van Weelden, 2014:650). These public decisions are made in a context of increasing complexity. They often involve the comparison of alternatives and the most favourable option is usually chosen based on which variables are taken into account and the assumptions that are used. Bickerstaff and Walker (2005) stated that there has been an increase in the number of actors that claim a stake in decision-making on mega-projects over the past decades. Furthermore, interests and values have diversified over the same period. As a result, proposed projects are assessed from a variety of different perspectives or frames. Often, these frames are incompatible and lead to fundamentally different interpretations of the same situation, with no clear criteria to distinguish valid interpretations from less valid interpretations, ‘even if actors agree about the reliability of the available information and the expected impacts of an infrastructure project’ (Martens and van Weelden, 2014:653). In other words, actors involved in decision-making processes may adhere to different normative standards and different views about what the best course of action might be. This means that the evidence can be interpreted in different ways.

When making a decision about whether or not to construct a MTP, the first step is to conduct an analysis of the problem, because a ‘valid problem analysis is essential in order to determine whether a proposed alternative is effective, efficient and legitimate’ (Priemus et al. 2008:107). This involves asking questions such as what is the problem, what is it likely to be in the future and who is affected by the problem? Herein lies the first dilemma: if people

interpret the problem in different ways then they may have a difference of opinion on what the solution to said problem should be. Even if two people interpret a problem in the same way, they may favour a different solution to another actor's. So not only do mega-projects have a number of different decisions within in them but there is usually a wide range of views about what the best course of action should be. This adds to the complexity of the decision-making processes for these projects. After planning decisions have been agreed and a solution has been chosen, there are then a number of construction and operational decisions that must be made. Different types of data and evidence influences each of these stages of the decision-making process.

#### **4.4 Decision-making models of Transport Mega-Projects**

There is no single, unified decision-making model that is followed for all MTPs. As mentioned earlier, MTPs do share many characteristics but are also unique which means what may work in terms of decision-making for one project may not work for another. An in-depth literature review did not provide the thesis with one explicit example of how decisions are made. However, other literature that is not focused on MTPs provides a number of different models that are utilised by decision-makers and it is possible to compare these with some examples of MTPs and suggest what model most closely mirrors what occurs. For the purpose of this research, three models of decision-making have been selected and are discussed. They are the rational model, the normative model and the garbage can model. The rational model involves a cognitive process where each step follows in a logical order from the one before. It is most closely associated with the evidence-based policy making model presented in chapter two. There are a number of variations of the rational model but generally the steps are as follows:

- Define the situation/problem which will provide a question on which to base a decision
- Identify the most important criteria in regards to the process and result
- Consider all possible solutions/alternatives
- Calculate the consequences of each option versus the likelihood of satisfying the criteria
- Choose the most suitable option

(Adapted from Brooks, 2002)

Rational decision-making models assume that there is one suitable outcome that is better than others. It also assumes that it is possible to consider all potential solutions or alternatives in order to make a decision as well as understand what the future consequences might be.

Herein lies the issue in regards to mega-projects; they have a long lifespan which means it could be very difficult to predict what might happen in ten to twenty years or even longer in some instances. Another assumption that the model makes is that people are able to act rationally. The model attempts to negate the role of emotions in decision-making, however, this thesis argues that people are unable to be objective and are usually influenced by their emotions and values. If a person is going to lose their home due to a new motorway being built then they are unlikely to be able to ignore their feelings and emotions. Although the rational model makes some assumptions that this thesis questions, it remains one of the most utilised approaches for reducing risks and uncertainties associated with difficult decisions. It allows decision-makers to apply some level of logic to an otherwise messy process.

In response to the rational model in which it is assumed that we can know all alternatives, Simon proposed the normative model which is guided by decision-makers bounded rationality (Baron, 2004). The bounded rational decision-making models suggest that people

consider fewer options than are available, or choose an option that is not considered the most suitable, but is the best within current circumstances. The model claims that these people are satisficing. In regards to mega-projects, it would probably not sit well with the general public to know that decision-makers had not considered as many alternatives as possible due to the costs and impacts a project would have. They would want to know that decision-makers had reviewed as many options as possible before picking a solution due to the large costs involved. Even if this model was employed by decision-makers within MTPs it would be difficult to identify in the literature. It is unlikely those actors would admit to considering fewer options and if they did this subconsciously then we would not know. The DfT model (2014) (See appendix B) provides guidance on how to conduct a transport appraisal process but determining whether or not it had been followed would be difficult.

Similarly to the normative model, the garbage can approach grew from the rational model's inability to explain how decisions are actually made. It opposes the view that decision makers follow a sequential series of steps that begins with problem definition and ends with one solution. The garbage can approach claims that decisions result from a complex interaction between four independent streams of events: problems, solutions, participants, and choice opportunities. The interaction of these events creates 'a collection of choices looking for problems, issues and feelings looking for decision situations in which they might be aired, solutions looking for issues to which they might be the answer, and decision makers looking for work' (Cohen et al. 1972:3). The authors of this model liken the process to a garbage can because they say that these four streams mix together just as the rubbish in a garbage can does. In this way, attractive solutions can get matched up with a number of problems that exist at a given point in time. This model can be likened to the theoretical contributions made by Lindblom (1959) who argued against theories of rationality and claimed that decisions were made by 'muddling through' because we have limited rationality. We are therefore

‘satisficing’ as policy actors because we are unable to know all the possible alternatives and outcomes of a decision. It is more likely that decisions within MTPs follow this model due to their complexity. However, it is difficult to confirm this because not all processes are transparent at all stages and researchers may not be able to access this information.

In regards to MTPs, GUIDEMAPS (2004) presented a six stage model that explains how transport decision-making can be characterised (Appendix A). The stages represent ‘specific periods during which pre-defined types of work take place on the project...in each case, appropriate information is collected, resources are employed and outputs generated’ (2004:12). The Department for Transport (DfT) (2014) have also produced a document that sets out the transport appraisal process and divides it into three stages (Appendix B). The model is complex compared to the GUIDEMAPS example, but it follows a similar pattern. The DfT claimed that stage one of the process is concerned with option development and reporting, stage two is centred around further appraisal and stage three consists of project implementation, monitoring and evaluation. Both models state that the first stage in the process is to identify and define the problem, followed by option generation and development/assessment of these potential options. What differs from one project to another is the type of work undertaken at each stage and the resources required to complete each stage. In regards to MTPs, the problem definition and option generation stages alone can take a number of years. As part of the option assessment framework, a large infrastructure project uses the ‘Five Cases Model’ which include conducting research that looks at the strategic case, the value for money of a project, and the delivery, financial and commercial cases (DfT, 2014:4). These two models suggest that within transport projects, a rational decision-making model is favoured. However, even though decision-makers may claim to be adopting a rational approach and believes that they are, they may not be. For example, they may make a decision whilst following these different stages but the decisions they make within these

stages may not be rational or value free. Actors within an MTP will have framed the problem in a particular way which is based on their values and beliefs. Therefore, they will select and agree with evidence that supports these values and beliefs. If a person believes that the environment is more important than connectivity between two places then they are unlikely to support a project that will have a negative impact on the environment. Rational models also attempt to negate emotions from decision-making. It is unlikely that a person who is displaced by the construction of a MTP will not be influenced by emotions if they have to leave their home.

#### **4.5 Evidence within Transport Mega-projects**

Evidence plays an important role within decision-making processes, especially within MTPs. De Bruijn and Leijten (2007) argue that a lack of evidence often results in poor decision-making. This implies, similarly to the rational models of decision-making, that the more or better quality of evidence used results in more successful outcomes. There are also problems associated with miscalculation in regards to costs and benefits. These are often down to either errors in methodological approaches or strategic misrepresentation (Osland and Strand, 2010). There are a number of different types of evidence that is utilised by decision-makers at various stages of a mega project.

The most common source of evidence that influences MTP decisions comes from data provided by cost-benefit analyses (CBA) as it is the most comprehensive method and theoretically sound form of economic evaluation available to decision-makers. It is a systematic approach to estimating the strengths and weaknesses of alternatives that satisfy activities or actions. Decision-makers use the technique to determine options that provide a particular approach for the adoption and practice in terms of benefits in labour, time and cost savings (David et al. 2013). Its purpose is to determine whether or not a decision or project is

justifiable and feasible and it provides a basis for comparing projects or alternatives. It does this by comparing the total expected cost of each option against the total expected benefits, to see whether the benefits outweigh the costs and by how much. This means that policy actors who want decision-makers to choose a particular option have to show to them that their solution is the most beneficial in terms of cost. The use of CBA has been widely discussed in the literature on mega-projects (Jones et al. 2014; Olsson et al. 2012; Guhnemann et al. 2012) and its use is often critiqued. The main difficulties of using the approach are forecasting over long periods of time and having to deal with imperfect competition in transport-using sectors to obtain estimations of wider transport benefits. However, it remains a valuable tool when used as part of the appraisal process when the inputs are carefully assessed and other sources of evidence are used to complement the CBA.

There are different methodologies within CBA and each approach provides variations in terms of benefits. Today it is 'often taken for granted that cost-benefit analysis is needed to ensure "better regulation" and avoid inefficiency in government' (Ackerman, 2008:1). There are other similar approaches that are utilised in MTPs such as building life cycle cost (BLCC) and social benefit analysis (SBA) and they all place monetary values on each aspect of a project. For example, they will place a value on trees that need to be removed in order to build a project as well as placing a value on time saved whilst travelling. Increases or reductions in pollution as a result of a project will also be given a monetary value. Depending on the value they give these different things could alter what conclusions they make. This is why when evaluating a mega-project supporters often argue that costs are over-stated and detractors often argue that the benefits are overstated. Olsson et al. (2012) explored the differences in CBA methodologies amongst seven European countries. They concluded that results of each CBA were 'far from similar' depending on the applied national methodology. De Bruijn and Leijten (2007) also discussed issues with CBA, concluding that 'different

methods can lead to completely different conclusions about the social feasibility of a project’ (de Bruijn and Leijten, 2007:87). What this means for decision-makers is that they must decide, based on their judgement, which methodology of CBA to employ.

Similarly to CBA, environmental impact studies are now conducted for all infrastructure projects in the UK. The Government has published guidance and supporting material to ‘enable departments to understand and quantify, where possible in monetary terms, the wider environmental consequences of their proposals’ ([www.gov.uk](http://www.gov.uk)). Their rationale for taking wider environmental impacts into account is underpinned by existing guidance on policy appraisal. The Treasury Green Book (2011) also highlights the importance of trying to identify all costs and benefits including environmental. The actors go on to argue that ‘while impacts on the environment often do not have any market prices, it is important to try and use evidence on non-market values attached to environmental impacts where feasible’ ([www.gov.uk](http://www.gov.uk)) and provide ‘Tools for Environmental Valuation’. There is a desire for quantifiable costs and benefits and they state that only where it is not possible to provide monetised or quantified assessment should a qualitative assessment be provided of potential impacts. Public consultations are frequently carried out in the early stages of the decision-making process as well as stakeholder engagement to identify concerns, generate options and understand the current and future contexts (DfT, 2014). By consulting with the public, their input on matters affecting them can be considered and its main goals are improving the efficiency, transparency and public involvement in large-scale projects such as MTPs (OECD, 2006). Due to the large scale of mega-projects, there are usually great deals of people that are impacted upon. The types of data that consultations can produce are both qualitative and quantitative in nature. By consulting with other actors, decision-makers are able to develop an understanding of others’ ideas and beliefs or frames about a particular issue. They are able to ask what is important to people in terms of economic and

environmental benefits. Other sources of evidence include expert opinion, engineering studies, media coverage, and studies related to the technologies used. Different types of evidence are considered at different stages of a project. It is unlikely that one policy actor will be aware of or understand every aspect of a mega-project. This often leads to problems such as misinterpretations and a lack of knowledge or understanding to base decisions on.

#### **4.5.1 The problem of evidence**

Evidence within MTPs is often discredited throughout the course of the decision-making process (Martens and van Weelden, 2014). The public are frequently distrustful of evidence presented to them by Government and they also question evidence presented by neutral policy actors. This can have a substantial influence on decision-making within MTPs.

Projects are often delayed or cancelled in part because of the lack of trust in the evidence on which decisions should be based. Likewise, projects have been approved and implemented on what later was shown to be false assumptions and evidence. Not only do the public distrust evidence within MTPs, but those considered experts often discredit evidence that is in the public domain by revealing flaws in research designs and methodologies. Cost-benefit analyses are the most common source of evidence that actors seek to discredit because they are able to question the values that are given to certain aspects of the project that would not usually be monetised. For example, if a motorway is being built in order to reduce congestion then there will be a monetary value placed on the time saved by reducing travel time.

Different people will place a different value on the time saved depending on their framing of the problem which will in turn affect the cost-benefit analysis. There is also a lack of reliable knowledge about the future effects of MTPs (Martens and van Weelden, 2014). This is because 'hard' data about future developments do not exist, but are mere expectations or predictions. For example, constructing a new high speed line will be based on expected passenger ridership, economic growth and the development of competing modes; evidence

relating to these variables alone is highly disputed. Opposition to mega-projects often argue that it is impossible to predict at least twenty years into the future what the expected economic climate and people's behaviours will be.

Contested information within MTPs also raises some normative questions. Two trade-off issues arise including within the analysis and a trade-off between analyses. For example, when designing a new high speed train line environmental analysis may indicate that the construction of the line will reduce the amount of carbon dioxide emissions but it might also require the use of materials in construction that are scarce. This means that decision-makers must decide which is more important and make a trade-off between the two. The values and beliefs of decision-makers influences what is more important within trade-offs between analysis. A trade-off between analyses is concerned with questions of 'how to weigh the findings from different analyses against each other' (de Bruijn and Leitjen, 2007:89). For example, if we return to the case of the construction of a new high speed line, there may be a number of economic benefits but also a negative impact on the environment. A negative impact may be the destruction of an ancient woodland or wildlife habitat. Decision-makers must choose which they value more by weighing up the costs and benefits of different aspects of a mega-project based on their values and preferences.

Finally, evidence within MTPs suffers from the same theoretical issues as discussed in chapter three in regards to the nature of evidence. The thesis has adopted a social constructivist approach to research and it rejects the assumption that evidence can be objective and that we will perceive it in the same way. De Bruijn and Leijten claimed that 'it is reasonable to assume that no proper decision-making can take place without the right information' (2007:84). However, the social constructivist approach argues that there is no such thing as the 'right' information because what is presented in reality by one group of actors is in many cases 'a social construct that can be deconstructed and reconstructed by

other experts' (Flyvbjerg et al. 2003:61). This is not to say that all evidence is relative, rather that evidence within mega-projects is disputable and difficult to measure which leads to much of the information being contested. This is mostly due to the nature of the evidence and the project itself.

#### **4.5.2 Evaluating Transport Mega-Projects**

Economic evaluation of MTPs is important for investors, the government, users and society as a whole because of the large amount of costs involved and the impact they have on the environment and society (Korytarova and Hromadka, 2014). Actors want to know whether or not a project has been worthwhile and whether or not it has achieved the goals that were set in the beginning. If the project outcomes are consistent with the project aims then it is usually considered a success. For MTPs, project aims are generally based on estimated costs and benefits. Much of the literature that focuses on the evaluation of mega-projects tends to concentrate on 'pathologies' such as budget overruns, failure to keep to timetables and the delivery of expected social and economic benefits (Cantarelli et al. 2010; Flyvbjerg et al. 2003; Lehtonen, 2014). There are a number of different approaches and methods to evaluation for MTPs, the most common being cost-benefit analysis (CBA). Most evaluation research uses a narrow definition of project success and overemphasises the importance of accountability as the sole objective of evaluation of these projects, thus accountability is the dominant narrative in MTP evaluation literature. CBA and similar evaluation approaches are criticised for monetising costs and benefits. In a MTP, the loss of rural environments or urban green spaces are very hard to put a cash value on. There are alternatives to CBA such as measuring the social return on investment (SROI), multi-criteria analysis and positional analysis (PA). It is not the intention of the thesis to explore each of these approaches but to make the reader aware that there are a number of different ways evaluators could evaluate MTPs which results in different conclusions.

In regards to evidence, evaluators employ different techniques of gathering data and analysis depending on the approach they take. Cost-benefit analysis sets out to determine whether or not an MTP was a sound investment. It compares the total expected cost of each option against the total expected benefits to see if the benefits outweigh the costs and by how much. It is similar to SROI in that it expresses costs and benefits in monetary terms. Other techniques do not give all costs and benefits explicit monetary values. These different approaches to evaluation result in potentially different conclusions. Evaluators may also give different monetary values to certain variables. Olsson et al. (2012) conducted a study that examined the consequences of using different methodologies using CBA in railway infrastructure appraisal between seven different European countries. They found that results were 'far from similar' depending on the applied national methodology. For example, travel-time saving is usually the most important benefit in CBA. The UK has 'relatively high values for travel-time savings, long appraisal period and adjustments for GDP growth' (Olsson et al. 2012:34). Countries such as Sweden, Switzerland and Norway value travel-time savings between fifty six and sixty six percent whereas the UK values travel-time savings at eighty nine percent. Other studies have compared appraisal methodologies for infrastructure in Europe and they concluded that using different methodologies resulted in different outcomes (Odgaard et al., 2005; Lyk-Jensen, 2007). Due to the differences in methodologies for CBA and there being no unified agreement about which evaluation approach is the best or right way, and this enables evidence to be contested. Those who do not agree with a project may criticise the approach used and utilise another in order to decrease the supposed benefits. Travel-time saved in regards to MTPs has been contested in recent years due to the availability of WIFI and other resources on a train that now make it possible for people to work whilst they travel (DfT, 2009).

Although most evaluation research focuses on the ‘before and after’ of projects, a number of academics such as Verweij and Gerrits (2012) have now utilised different frameworks because ‘the dominant evaluation methodologies impede policy learning since they do not account sufficiently for the complex nature of policy systems’ (Verweij and Gerrits, 2012:41). Cantarelli et al. (2010) conducted a literature study of explanations and theories that are used on cost-overruns of transportation infrastructure projects. Their research concentrated on explanations rather than causes. They found that most research on evaluation in MTPs had a narrow focus and only a handful had a broad focus in terms of cost overruns in large projects. Cantarelli et al. (2010) argued that when research utilises models, assumptions, premises or concepts in their explanations, ‘the likelihood understanding the phenomenon of cost overruns increases’ (p.13). In their research they identified a number of studies and assess what theories are used to explain cost-overruns. They concluded that the most commonly used explanations are ‘economic rational behaviour, strategic behaviour, optimism bias, structure of the organisation, relationship between actors and actors’ values and their relationship to the environment (2010:15). Political explanations and agency theory are recommended as a basic theory to understand cost overruns. This is because the theory makes use of several disciplines such as politics, economics, and sociology, ‘which make the theory fairly complete’ (Cantarelli et al. 2010:16).

Verweij and Gerrits (2012) used a complexity informed framework to evaluate transportation infrastructure projects. They argued that ‘the locality or specific locality or contextualisation of a given project is important for explaining the outcome...hence there is a need for an ontology and epistemology that addresses the importance of contextualisation’ (p.40). They acknowledged that large-N quantitative studies that are variable-oriented, such as Flyvbjerg et al. (2003) provided an interesting insight into cost-overruns in MTPs, they ‘do not provide a detailed analysis of the idiosyncratic nature of such projects, even though specific events may

have significantly contributed to the project outcomes' (2012:42). Their complexity informed framework aimed to integrate both case-oriented and variable-oriented approaches in order to preserve complexity and allows the examination of multiple causal configurations. Lehtonen (2014) argued that 'no single evaluation framework can satisfy the multiple needs of mega-project evaluation' (p.280). He claimed that this is because although mega-projects share many characteristics, they do not represent a homogenous group of entities. He criticised mega-project evaluation literature of neglecting the context and multiplicity of rationalities. Lehtonen suggested that one way to address the emphasis on accountability and the narrow definition of success in mega-project evaluation is to adopt a modified version of 'network mapping'. This, he claimed, enables the 'exploration of the multiple accountability relationships as a central evaluation task, designed to reconcile learning and accountability as the central evaluation functions' (2014:278). Similarly to Verweij and Gerrits (2012), Lehtonen (2014) acknowledged the usefulness of studies such as Flyvbjerg et al.'s (2003), but recognised a need for giving greater attention to learning and reflexivity as key objectives of evaluation of these projects.

#### **4.6 Conclusion**

This chapter considered the literature that explored transport mega-projects and how decisions are made within these projects. MTPs are understood as being projects that adopt the word 'mega' from their size and budget. They must cost at least \$1 Billion US to fall into the category of 'mega' (Altshuler and Luberoff, 2003) and display a number of other characteristics such as their size, being large scale and being geographically dispersed. The literature review identified four characteristics that were common in mega-projects: complexity, deception, risk and uncertainty. They are considered complex because they often consist of many varied interrelated parts and have a number of different purposes and interests. Deception is a common theme identified by Flyvbjerg et al. (2007) who claimed

that a number of relevant actors purposely mislead others in order to obtain approval for a project. This, they argued, is why 'unfit' projects are often built and it is one of the reasons that they may be considered unsuccessful. Risk and uncertainty are entwined with one another and occur in mega-projects because of their long planning horizons and the time it takes to construct them. There are different types of risks including ecological, financial and operational.

The next section in the chapter focused on decision-making processes within MTPs and showed that there is no unified example of how decisions should be made. However, they do follow a similar pattern in terms of stages. It was noted that within MTPs there are a number of secondary decisions that must be made, many prior to construction. Due to the life span of MTPs actors are unlikely to be involved at all stages of the process. Of these actors, there can be a variety of opinions and perspectives which adds to the complexity of a mega-project. Not only are these decisions complex but they are often played out in the public eye. They are the prerogative of the public domain because they affect the lives and interests of so many people (Martens and van Weelden, 2014). The approach that MTPs most closely followed was the rational decision-making model. This does not mean that decisions are made rationally or that the author agrees with the assumptions set out in this model, but that the model follows a number of stages that begins with the definition of a problem and ends with a chosen solution. Policy actors may not agree on the solution chosen, nevertheless, one is chosen based on a consideration of possible alternatives.

Evidence plays an important role within decision-making processes, especially within MTPs. A lack of evidence often results in poor decision-making (De Bruijn and Leijten, 2007). This implies that the more or better quality of evidence used within decision-making processes on MTPs results in successful outcomes. However, evidence within these processes of MTPs is often discredited throughout the course of the process (Martens and van Weelden, 2014). The

public are often distrustful of evidence presented to them by Government and they also question evidence presented by neutral policy actors. Not only do the public distrust evidence within MTPs, but those considered experts often discredit evidence that is in the public domain by revealing flaws in research designs and methodologies. Within MTPs, evidence is usually contested due to the uncertain nature of evidence. Within the literature on mega-projects, evidence is usually discussed in terms of ‘contested information’. De Bruijn and Leijten claimed that ‘it is reasonable to assume that no proper decision-making can take place without the right information’ (2007:84). However, there is no such thing as the ‘right’ information because what is presented in reality by one group of actors is in many cases ‘a social construct that can be deconstructed and reconstructed by other experts’ (Flyvbjerg et al. 2003:61). This is not to say that all evidence is relative and that there is no deception within decision-making. Rather that evidence within mega-projects is disputable and difficult to measure which leads to much of the information being contested. This is mostly due to the nature of the evidence and the project itself. In order to decide whether or not to build a mega-project in the first place, research must be conducted to assess whether or not the project is viable and what the expected benefits should be. The evidence produced from research seeking to predict future benefits can only ever be predictions or estimates, thus it is easily disputable. For example, constructing a new high speed line is based on expected passenger ridership, economic growth and the development of competing modes; evidence relating to these variables alone is highly disputed. Opposition to mega-projects often argue that it is impossible to predict at least twenty years into the future what the expected economic climate and people’s behaviours will be.

What became apparent after conducting the literature review was that most authors centred their research on the evaluation of these projects and whether or not they can be considered successes. Although the thesis does not conduct an evaluation of a mega-project it was

important to mention the differences in approaches and methodologies within evaluation research because they can affect the data produced which in turn will lead to different conclusions about these projects. The thesis differs from the most common type of research on mega-projects because it focuses on a live case study rather than retrospective analysis. This immediacy of events is a benefit in terms of understanding the nuances of the use of evidence in the decision-making process.

# **Chapter 5**

## **The Case study - HS2**

### **5.1 Introduction**

This chapter provides a detailed documentation and discussion of the history and development of a specific transport mega-project: High Speed Two (HS2). It is the chosen case study of the thesis that will be explored in-depth. HS2 is the new high speed rail network being designed and built in the United Kingdom with the aim of resolving capacity issues on existing routes. It tracks the evolution of the venture from the rationale and development stage up to the present day. This further sets the context for the two empirical chapters later in the thesis. High speed rail (HSR) services are defined as ‘services faster than typical UK intercity limit of 200km/hour, typically over 250km/hour and up to 350+km/hour’ (Network Rail, 2009b:ii). High speed trains arrived in the UK with the opening in 2003 of the first part of High Speed 1 (then known as the 67-mile Channel Tunnel Rail Link) between London and Paris which was completed in 2007. However, this was actually relatively late to enter the high speed rail era as other countries in Europe such as France, Spain and Germany had already developed large high speed rail networks. Firstly the chapter provides the reader with an in-depth insight into the history of high-speed rail in the United Kingdom and where the rationale for High Speed Two (HS2) came from. This includes a discussion on the key documents that have influenced the debate. The current rail network in the United Kingdom was built during the 1840s into a national network which has seen both a decline in use during the fifties and sixties and an increase in use from the 1970s onwards. Rail travel demand has doubled in the past fifteen years and it is expected to continue to increase over the next twenty five years (DfT, 2009). This is one of the key issues for government and is

considered the main influence behind their policy created in 2009 entitled '**HS2: developing a new high speed rail network**'.

Secondly, the chapter explains the development of HS2 from the creation of the company HS2 Limited until the present day. In January of 2009, High Speed Two Limited was set up by the then Labour Government as the company that would be responsible for developing and promoting the UK's new high speed rail network. It is an executive non-departmental public body, wholly owned by the Department for Transport. They have commissioned a number of important research studies into the development of HS2 which are discussed. Thirdly, the chapter sets out the main arguments being put forward by those in favour and those against the project. This highlights the key issues that those for the project consider answerable by HS2 and why the opposition to the project disagree with them or suggest a different solution. It is important to understand what the key arguments are informing the debate on HS2 because they are relevant in both empirical chapters and relate to the research questions within the thesis. It concludes by explaining the significance of this project in understanding how evidence is negotiated by policy actors within a contentious decision-making process.

The decision was taken to focus primarily on arguments put forward by those for and against the project as opposed to those that are considered 'neutral' or 'undecided'. This is because the majority of available data centres on positions of for and against. The purpose of the research was to capture how those with a particular stance persuaded others of their position. Therefore, it seemed appropriate to capture their understanding of the case study. Efforts were made to capture some voices of the actors that considered themselves 'neutral' to the debate which will be presented in the empirical chapters.

## 5.2 The Rationale for High Speed Rail

High speed rail in the United Kingdom is not a new phenomenon; the rail industry has had the capacity to build high speed rail lines for several decades. However, our railway infrastructure has been unable to support safe running at such high speeds and, until the 1970s, the speed limit on British railways remained at one hundred miles per hour. In the 1970s, British Rail began to explore new technologies that would enable the use of high speed rail services in the UK. They did this by attempting to develop a train that would be capable of running on existing rail infrastructure whereas countries such as Japan and France decided to build new tracks for their high-speed rail systems. This is most likely because ‘at the time the UK did not suffer from lack of capacity on the conventional network’ (Sanchez-Mateos and Givoni, 2012:105). In 1973, the world experienced a global oil crisis which affected how decision-makers thought about motive power. During this time world oil prices quadrupled (Ikenberry, 1986). This was the end of cheap energy for most and this prompted the rail industry to rethink their choice in this power and British Rail later chose traditional electric overhead lines (Duffy, 2003). During the same period (1970s) British Rail developed and invested in the Intercity 125, which was also known as the High Speed Train (HST) (Owen and Phillips, 1987). This was considered the first high-speed rail service in the United Kingdom. It was thought of as a success because it was popular amongst users and passenger ridership had increased each year which they believed was good for the economy. This success led to British Rail exploring further options for new high speed rail lines.

The Channel Tunnel Rail Link, which is now referred to as High Speed One (HS1) was the first new mainline railway to be built in the United Kingdom for a hundred years. It was built to carry passenger traffic between the UK and Europe but is also capable of carrying freight trains. The project of building a tunnel between the two countries was considered as far back as the 1960s and it was agreed then that ‘serious modern consideration of the construction of

the Channel Tunnel commenced in 1957 when an Anglo-French Channel Tunnel Study Group was established' (Anguera, 2006:292). A White Paper was published by the Department of the Environment (DoE, 1973) and it was expected that a Hybrid Bill would pass through Parliament by 1975. However, a change in Government (Labour) led to the project being reassessed and later abandoned. It was then in 1979 that the project re-emerged under the new Conservative government and in 1986 the Prime Minister of the UK and the President of France 'issued a joint statement announcing the decision of the two Governments to facilitate the construction of a fixed link across the Channel' (Anguera, 2006:293). It took twenty years of studies and consultations in the 25 years leading to the construction of the Tunnel. Construction began in 1998 and was completed in 2003 and phase two was opened in 2007. There are conflicting opinions about whether or not HS1 can be considered a success. Those in favour of high speed rail claimed that it was a successful project that finished on time and under budget whilst reducing the need to travel to Europe by air (Major Projects Association, 2008). However, those opposed to the development of a new high speed line argued that a cost benefit appraisal of the Tunnel reveals that 'overall the British economy would have been better off if the Tunnel had never been constructed, as the total resource cost has been greater than the benefits generated' (Anguera, 2006:314).

HS1 provides an example of a mega-project in which actors have interpreted the outcome of the project in a different way. It depends on what factors are taken into consideration as to whether or not they interpret the project as a success. For example, Anguerra (2006) argued that some of the forecasts for HS1 such as passenger ridership and economic benefits were overly optimistic but the tunnel did bring large benefits in the form of increased competition and reduced prices for freight and passengers. The Tunnel also meant that passengers could travel to Europe without travelling by air or sea which created some environmental benefits which might be considered more important to some actors than economic benefits. Returning

to the rationale for a new high speed line, another reason that they were explored rather than developing trains to run on existing lines was the outcome of the modernisation programme of the West Coast Main Line (WCML) in 2004. The aim of this programme was to upgrade the existing infrastructure to ‘allow improved services delivered by new trains running at 140 miles per hour’ (National Audit Office, 2006:4).

Upgrades to the WCML took four years and was completed over three phases with the intention of improving punctuality, reducing journey times and increasing capacity. However, the project ‘proved overly ambitious and the programme quickly ran into difficulty’ (HoC Committee of Public Accounts, 2007:3). Modernisation of the WCML was estimated to cost around £3 billion but the final figure now stands nearer £9 billion (HoC Committee of Public Accounts, 2007). The line is still prone to overcrowding and it is likely to require further investment in the future. It has also been suggested that further modernisation of the line will cause severe disruption to services for passengers (Network Rail, 2011). This influenced the decision to pursue further research into a separate line. There have been a number of studies that have shaped the debate and a review of the main high speed rail documents in the UK is provided below.

### 5.3 The development of political commitment to HS2

The table sets out the main documents that have influenced the high speed rail debate from 2001 to 2014 including some of the key findings. They are discussed in more detail below:

Source	Document	Key Findings
Commission for Integrated Transport (CfIT), February 2004	High Speed Rail: International Comparisons	<ul style="list-style-type: none"> <li>• No apparent lack of capacity in UK at the time</li> <li>• International market differences between countries due to geographical and demographic factors</li> </ul>
WS Atkins, 2005	High Speed Line Study	<ul style="list-style-type: none"> <li>• Forecast overcrowding and capacity issues on current lines (especially</li> </ul>

		<p>WCML)</p> <ul style="list-style-type: none"> <li>• Suggested a new HSR line could be complete by 2016</li> </ul>
Sir Rod Eddington, 2006	The Eddington Transport Study	<ul style="list-style-type: none"> <li>• A new HS line would not significantly change the level of economic activity</li> <li>• Strong doubts about benefits</li> <li>• Not a sensible way to reduce UK emissions</li> </ul>
Greengauge 21, June 2007	High Speed Two: A Greengauge 21 Proposition	<ul style="list-style-type: none"> <li>• HSR is the best solution to capacity problem</li> <li>• Not as expensive as previously estimated</li> <li>• It will boost the national economy</li> </ul>
Labour Government, July 2007	Delivering a Sustainable Railway White Paper	<ul style="list-style-type: none"> <li>• Increasing capacity is the investment priority</li> <li>• Suggests four rail-enhancement options</li> <li>• Little mention of a new high speed rail network</li> </ul>
WS Atkins, March 2008	Because Transport Matters: High Speed Rail	<ul style="list-style-type: none"> <li>• Updating the business case for a N/S line</li> <li>• Suggests a HSR line on both East and West coasts</li> </ul>
Department for Transport, Jan 2009	Britain's Transport Infrastructure: HS2	<ul style="list-style-type: none"> <li>• A new (government) starting point to consider HSR</li> <li>• HS2 Limited created to work on specific planning</li> <li>• Capacity cited as the main issue for classic network</li> </ul>
Greengauge 21, 2009	Fast Forward: A High-Speed Rail Strategy for Britain	<ul style="list-style-type: none"> <li>• We can learn from other countries how to implement HSR</li> <li>• HSR is needed to form a key part of the nation's economic infrastructure</li> <li>• HSR needed to reduce carbon emissions and provide sufficient capacity</li> </ul>
Network Rail, August 2009	Meeting the Capacity Challenge: The Case for New Lines	<ul style="list-style-type: none"> <li>• Best solution to capacity problem is new lines</li> <li>• HSR can eradicate domestic air travel which reduces carbon emissions</li> <li>• The best route will be a line that travels from London to Scotland</li> </ul>
Department for Transport, 2010	High Speed Rail	<ul style="list-style-type: none"> <li>• HSR is the most effective way to increase capacity and improve connectivity in a sustainable way.</li> <li>• For every £1 spent, £2 in benefits will be realised.</li> <li>• The HSR network should</li> </ul>

		be connected to the wider European network.
High Speed Two Limited, 2013	The Strategic Case for HS2	<ul style="list-style-type: none"> <li>• The existing capacity of our transport networks is a significant inhibitor of demand</li> <li>• Analysis of the alternatives shows that rail investment is the best way to meet the rail capacity challenges.</li> <li>• A new railway line – and specifically a new high speed line – presents the best solution</li> </ul>

(Table 3: Key documents HS2 project)

In 2001, two privately sponsored proposals were developed by First Group and Virgin Trains to build high speed lines in the United Kingdom. Virgin Trains wanted to construct a new line and purchase a new fleet of trains that would be able to travel up to speeds of 210 miles per hour on the East Coast Main Line franchise. First Group proposed creating a line that would run from London to the South West and Wales and using a fleet that would be capable of running at speeds of 200 miles per hour. However, due to another external event in 2000, neither were welcomed by the Government. On October 17<sup>th</sup>, 2000 an Intercity 225 train from London King’s Cross to Leeds derailed near Hatfield station whilst travelling at 115 miles per hour. Four passengers were killed and a further 70 were injured (Murray, 2001). This led to a focus on developing the existing rail infrastructure and making sure that the network could operate reliably.

In 2004 a report commissioned by the Commission for Integrated Transport<sup>12</sup> was prepared by Steer Davies and Gleave<sup>13</sup> on high speed rail. The aim of the report was to:

<sup>12</sup> The **Commission for Integrated Transport** (CfIT) was an independent body advising the Government on integrated transport policy. It was abolished on 14<sup>th</sup> October 2010.

<sup>13</sup> **Steer Davies Gleave** is an independent consultancy working worldwide across the transport sector.

- *Investigate whether Britain's failure to invest in high speed rail results from differences in appraisal and decision making processes and criteria, or differences in transport markets or other factors, which mean that high speed rail is of less benefit in Britain than in other countries; and*
- *Make recommendations on how, if at all, Britain's appraisal criteria and processes should be changed to better capture the costs and benefits of high speed rail.*

(Steer Davies and Gleave, 2004:2)

The report raised questions as to why the UK did not already have a high-speed network. It highlighted the differences between the UK and other countries such as France and Japan and concluded that at the time there was no apparent lack of capacity on the classic rail network as the main reason for there not being a high-speed network. One of the key points that the report made was that there are international market differences due to geographical and democratic factors and that high speed rail may not necessarily be successful in the UK just because it has proven to be successful somewhere else (CfIT, 2004). The authors believed that any expected environmental benefits of building a new rail line are 'not themselves sufficiently great to provide a large part of the economic case for rail investment' (CfIT, 2004:61). It concluded by stating that 'the case for high speed rail construction in Britain is now stronger than it would have been in the 1980s, when many other European countries were building or planning their first high speed lines' and 'the priority for further work should be to seek means of reducing costs to levels closer to those seen elsewhere in Europe' (2004:69) if the UK decides to invest in high speed rail.

Then in 2005 the Strategic Rail Authority commissioned WS Atkins<sup>14</sup> to perform a feasibility study into the transport and business case for high speed rail. The feasibility report by Atkins entitled 'High Speed Line Study: Summary Report' (2005) suggested that 'a new high speed line is effective in relieving rail crowding problems and performs better in respect of relieving rail crowding than alternative investments such as upgrades of the existing networks, new lower-speed lines or highway upgrade programmes' (2005:ii). The main conclusions from this report were that overcrowding on the line is forecast in the coming years, that investment costs in high speed rail is large but that an economic case exists under specific conditions. It continued to suggest that a high speed line could be open by 2016 if work began as soon as possible.

In contrast to the WS Atkins (2003) report, another significant study that influenced the high speed rail debate in the United Kingdom is the Eddington Report (HM Treasury, 2006). The Eddington transport study was an examination by Sir Rod Eddington of the impact of transport decisions on the economy and the environment of the UK. The study was commissioned by the Labour Government and it aimed to advise 'the Government on the long-term links between transport and the UK's economic productivity, growth and stability, within the context of the Government's commitment to sustainable development' (HM Treasury, 2006:1). However, the report which was expected to strongly recommend investment in high speed rail did not. The report concluded that 'new high-speed rail networks in the UK would not significantly change the level of economic connectivity between most parts of the UK, given existing aviation and rail links. Even if a transformation in connectivity could be achieved, the evidence is very quiet on the scale of resulting economic benefit, and in France business use of the high speed train network is low'

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<sup>14</sup> **WS Atkins plc** (commonly known as **Atkins**) is a British multinational engineering, design, planning, architectural design, project management and consulting services company.

(2006:49). It went on to conclude that ‘a new high-speed rail line between two cities would not offer the economy significant new connectivity or trading opportunities, if those cities were already a day-trip away from each other by existing rail, road or air links (p.23) and ‘it is unlikely that building a high-cost, energy-intensive very high-speed train network is going to be a sensible way to reduce UK emissions’ (p.33). Although the report seemed to discourage the Government from pursuing the construction of a high speed line, they continued to consider proposals in favour of a new rail network.

Greengauge 21 was established in 2006 by Jim Steer who is a transport sector specialist as a not-for-profit company for in which ‘all those with an interest in a high speed rail network can come together and openly debate the merits of alternative routes, priorities and technologies, alternative implementation strategies and the economic and environmental benefits for Britain’ ([www.Greengauge 21.net](http://www.Greengauge21.net)). The organisation was developed for ‘all those with an interest in high speed rail network’ to come together and openly debate the merits of a project. In 2008, the company registered as a HSR Public Interest Group and in 2012 it became established as a HSR Industry Leaders Group to bring together industry expertise to help ensure that Britain’s high speed rail network is delivered successfully. So the company evolved from a not-for-profit company into a lobby group for HS2. Mostly rail stakeholders were involved in the company and from its creation high speed rail became increasingly popular as a solution to meet the expected increase in demand for rail transport on the West Coast Main Line and to gain economic and environmental benefits. This expected increase was generally accepted by all parties both for and against HS2.

Greengauge 21 (2007) published their proposal for high-speed rail that would cost an estimated £11 billion to build which is a significantly lower figure than suggested in the Atkins study (2003). The report argues that ‘it is time for Ministers to press the start button on planning Britain’s high-speed rail network. Not to do so would fly in the face of the advice

from government advisers Sir Rod Eddington (HM Treasury, 2006:v). The rationale in the report for building a high speed line is based on the claim that there is a need for more capacity on existing lines and the argument that a new line will reduce the negative environmental impacts caused by road travel and short haul air traffic. It is interesting to note the proposed cost that Greengauge 21 suggested for the HS2 project as we shall see further in the chapter how the estimated price of the project has changed over time. This has been a serious cause for concern and contention throughout the planning process of HS2. It illustrates the problems of generating a reliable evidence based for mega projects.

In July 2007 a White Paper was published on the future of railways entitled ‘Delivering a Sustainable Railway’ by the Department for Transport. The White Paper fulfilled the remit the then Government set itself in 2005 to provide strategic direction for the rail industry. The Railways Act placed a statutory duty on the Government to set out how much public expenditure it wished to devote to rail every five years and specify what it wants the railway to deliver. The 2007 paper set out a long-term ambition for the rail network stating that it wanted to provide a railway that:

- *Can handle double today’s level of freight and passenger traffic;*
- *Is even safer, more reliable and more efficient than now;*
- *Can cater for a more diverse, affluent and demanding population; and*
- *Has reduced its own carbon footprint and improved its broader environmental performance*

(DfT, 2007:7)

The report also claimed that £10 billion would be invested in order to increase capacity between 2009 and 2014 as this was the Labour government’s investment priority. This was to

reflect the increase in passenger demand on certain routes, especially the West Coast Main Line. The report suggested four rail-enhancement options that could make a future contribution to inter-urban capacity: 'a new dedicated freight line, a maglev, multi-tracking an existing line or a new all-purpose line' (DfT, 2007:65). It discusses each option and concludes that the Department for Transport believe that any future planning should focus on new line options. It acknowledges that 'long-term rail demand cannot be forecast with any accuracy, and rail provision cannot be planned in isolation' (DfT, 2007:67) and that all options would represent a substantial financial commitment of up to £30 billion which is the total enhancement budget available to the railway for between five and ten years. The report claimed that further analysis would be undertaken and they would deliver results in 2012 'before the benefits of other capacity measures are exhausted' (DfT, 2007:67). Much of the studies to this point have focused on a cost-benefit analysis of a high speed rail network, very much following the methodology reported in De Rus (2008). The focus of the reports is usually on the investment required on the one hand and the economic benefits, mainly in terms of travel time savings, on the other. The analysis is mainly restricted to the line in question without due consideration of areas beyond (but close to) the line or areas bypassed by it.

In response to the Eddington report (HM Treasury, 2006), WS Atkins produced a second report entitled 'Because Transport Matters: High Speed Rail' (2008). WS Atkins stated that their reasons for writing the report was to 'update the business case for a North-South high speed line' and 'see if the original business case still stood up given the capacity and journey time improvements being presented in the current High Level Output Specification and the 2007 Rail White Paper' (WS Atkins, 2008:5). The report suggested that a high speed network on both west and east coasts could provide a benefit of £63 billion to the UK economy. It concluded that 'better access to London through HSR connections benefits the whole of the

UK economy' and that 'high speed operation is essential to make the case for a new, segregated railway alignment economically and financially worthwhile' (WS Atkins, 2008:11). Although research into high speed rail up to 2009 has revealed a number of differences in conclusions as to whether or not the UK would benefit from a new high speed rail network, it seemed that plans to go ahead were well underway by the Government. They made it clear that they believed the only way to solve the capacity issue on the West Coast Main Line was to construct a new high speed line even though research was producing mixed evidence about the viability of a new line.

The rationale for building a new high speed line was mostly as a result of research conducted by Network Rail<sup>15</sup> which claimed that a new line would enable faster and enhanced services, cut journey times and increase capacity to relieve overcrowding on existing lines (DfT, 2009). The report set out a suggestion for the new HS2 line and was put forward after considering numerous alternatives, and roughly follows the alignment of the WCML. Lack of capacity on the UK rail network was expected mainly, or first, on the WCML, the rail corridor leading from London to Manchester through Birmingham, even though this line was only recently upgraded to increase speed and capacity. The report states that HS1 and Crossrail were both successful rail projects due to new companies being established early on to ensure that financial and technical decisions were given full consideration and thorough study. Then in February of 2009, Sir Rowlands sent an open letter to Lord Adonis<sup>16</sup> outlining his objectives for HS2 which were to increase passenger capacity, increase the speed of trains, provide more capacity for freight, to have a modal shift from car and modal shift from air (Rowlands, 2009). In response to this letter it was agreed by the government that by 2010

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<sup>15</sup> Network Rail are the Authority responsible for the UK's rail network.

<sup>16</sup> Lord Adonis was a Labour Party politician for five years. He served as Minister of State for Transport in 2008 and in 2009 was promoted to the Cabinet as Secretary of State for Transport until 2010.

HS2 Limited would provide a report including a route proposal to the DfT that would include consideration of a line that extended to the North of the country.

High Speed Two (HS2) is the new high speed rail network being designed and built in the United Kingdom with the aim of resolving capacity issues on existing routes. It is expected that the West Coast Main Line will have reached full capacity by 2025 and the only viable solution to resolve the capacity issue is to build a new high speed line between core cities.

The first phase of HS2 is expected to be open by 2026 followed by the opening of the second phase by 2035. In January of 2009 the company High Speed Two Limited was established. It was set up by the Labour Government and chaired by Sir David Rowlands<sup>17</sup>, with the remit to:

*'help consider the case for new high speed services from London to Scotland. As a first stage we have asked the company to develop a proposal for an entirely new line between London and the West Midlands. To reach a view on this, the company will need to assess the likely environmental impact and business case of different routes in enough detail to enable the options to be narrowed down. We expect work to be completed by the end of the year. The Government will thereafter assess the options put forward for the development of the new line'*

(Department for Transport, 2009:5)

Relatively soon after Network Rail's proposal was published in 2009, alternative plans emerged from High Speed Two with the Department for Transport (DfT, 2009) and from Greengauge 21 (2009). This is because all three had different opinions and provided their own evidence to suggest a different route from one another. They could not agree on what

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<sup>17</sup> Sir David Rowlands was the permanent secretary of the Department for Transport between 2003 and 2007 and the chairman for HS2 between 2009 and 2010.

route the new line should take. Although the first study used traditional cost-benefit analysis techniques and assigned weight to time-saving benefits, the second study ‘took a broader look at the economic benefits and focused on potential business relocations, concluding that HS2 would boost the economies of areas along the network as well as away from it’ (Sivaev, 2013:3). However, this was criticised by opposition to HS2 for failing to account for alternatives to HS2 and having methodological flaws in the cost benefit analyses. In contrast to the Eddington report (HM Treasury, 2006), the main findings from the report by the Department for Transport entitled ‘High Speed Rail’ were that ‘over the next 20 to 30 years the UK will require a step-change in transport capacity between its largest and most productive conurbations...high speed rail is the most effective way to achieve these goals, offering a balance of capacity, connectivity and sustainability benefits unmatched by any other option’ (DfT, 2010:8). After formally deciding to advance with a new high speed rail line, the government began its consultation process with the public on its high speed rail plans from March 2010 onwards. Although this was short lived due to the change of Government two months later. A more recent study, commissioned by the Coalition Government and undertaken by HS2 Ltd was published at the end of October, 2013 entitled ‘The Strategic Case for HS2’. The purpose of the report was to ‘explain step-by-step why HS2 is the best option to meet the capacity and connectivity challenges faced by the rail network’ (HS2 Ltd, 2013 at [www.gov.uk](http://www.gov.uk)). It refined the cost-benefit arguments by changing the focus back to the benefits of delivering additional capacity and used upgraded forecasting and evaluation techniques. As a result the benefit-cost ratio (including wider economic benefits) is estimated at 1.7 for phase one and 2.3 for the full network. This represents a decline from values of 1.9 and 2.5 reported previously (HS2 Ltd, 2013). This indicates a change in argument and claims which suggests that they may believe that their previous arguments were not necessarily persuasive enough.

## 5.4 The emergence of opposition to HS2

It was in April of 2010 that the first major opposition group to HS2 was formed shortly followed by a large number of smaller groups. The largest three groups include HS2 Action Alliance (HS2AA), STOP HS2 and Action Groups Against High Speed Two (AGAHST). These voluntary national groups were set up to challenge the case for HS2. They all work with the numerous local groups that are situated around the United Kingdom in response to the Government's announcement on HS2. HS2AA stated that their approach:

*'...is focused on communicating a robust, evidence based, case that HS2 is not in the national interest. We believe that by setting out the facts about HS2 clearly and accurately and providing evidence where required we can set out why HS2 represents a bad deal for Britain'*

([www.hs2actionalliance.org](http://www.hs2actionalliance.org))

Similarly, STOP HS2 is a national campaign which formed after studying the HS2 proposals and their mission was to stop the construction of the line and 'facilitate local and national campaigning against High Speed Two' ([www.stophs2.org](http://www.stophs2.org)). Another national campaign group is AGAHST (Action Groups against High Speed Trains), which is a coalition of more than seventy organisations that are opposed to the scheme. The Right Lines Charter was set up in April of 2011 and is a charter that rests on four key principles including the 'call for a national transport strategy, better future-proofing of big transport proposals, effective public participation and a more strategic approach to minimising adverse impacts' (Right Lines Charter, 2011:2). Members seek to challenge the way and the context in which the HS2 proposals have been developed. Signatories to the Charter include Campaign for Better Transport, Campaign to Protect Rural England, Friends of the Earth, Greenpeace, RSPB, Chiltern Society, Environmental Law Foundation, RailFuture, Ramblers, Wildlife Trusts,

Woodland Trust, Civic Voice and the Society for the Protection of Ancient Buildings. All of these groups as well as other local organisations have set out to either stop the project all together or work with HS2 Limited to reduce any negative impacts the new rail network may have.

During the planning process of HS2, the United Kingdom experienced a general election on the 6<sup>th</sup> May 2010 which resulted in none of the political parties achieving enough seats for an overall majority. This resulted in a hung parliament which led to a coalition government being formed between the Conservative party and the Liberal Democrats. This meant that Labour was no longer in control of the HS2 policy and its development. The new Secretary of State for Transport, Philip Hammond, requested an urgent review of the proposed route because the Conservative Party had previously ‘advocated any new high-speed line be routed via Heathrow Airport, an idea rejected by HS2 Ltd’ ([www.hs2actionalliance.org](http://www.hs2actionalliance.org)). However, in July 2010 a report<sup>18</sup> by Lord Mawhinney<sup>19</sup> to assess ‘the various options put forward so far for a high speed station at or near Heathrow and the business cases in support of those options’ (DfT, 2010:4) concluded that HS2 should not connect to Heathrow until the construction of phase 2 had begun because ‘a direct high speed link to Heathrow fully funded from public expenditure, in the context of a high speed rail network extending only to the Midlands, is not likely to provide a good return on the public expenditure entailed’ (DfT, 2010:12). The evidence that supported this decision included advice from organisations including..., written evidence from organisations such as..., evidence from modelling and forecasts of passenger numbers and benefits, as well as site visits to potential high speed stations and visits to international hubs such as Paris and Amsterdam to ask their advice.

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<sup>18</sup>The review was commissioned by the previous Secretary of State for Transport, Lord Adonis.

<sup>19</sup> Lord Mawhinney is a member of the House of Lords since 2005 and was Secretary of State for Transport 1994-95.

In December, 2010 a slightly revised line of route for HS2 was published for consultation based on a Y-shaped route similar to the route proposed by the Labour government in March 2010. It was not until February 2011 that the Department for Transport undertook a national consultation on high-speed rail and stage one of HS2, including compensation arrangements. The consultation ran for five months and closed on 29<sup>th</sup> July 2011. This was shortly followed by a report by an independent company, Dialogue by Design who were commissioned to ‘analyse and report back on nearly 55,000 responses to the consultation’ and was published in January 2012. The 2011 consultation was one of the largest ever conducted by the DfT in which they wrote to ‘more than 172,000 people living or working near the proposed route. And it held 41 days of road shows visited by almost 30,000 people over a five month consultation period’ (DfT, 2012c). Responses to the consultation from those that argued in favour of the proposed network made comments ‘in support of the strategic case, stating that the capacity of the UK’s inter-city rail network needs to be enhanced and emphasising the benefits of high speed rail in this regard’ (Dialogue by Design, 2011:8). Responses to the consultation from those opposed to the proposed network ‘most often suggest that the economic case for new high speed rail connections is insufficient and that investments in the existing rail network would offer better value for money. They frequently refer to the proposed scheme as too expensive’ (Dialogue by Design, 2011:8). Another common suggestion was that HS2 will create a negative impact for communities along the line and that benefits will be restricted to certain areas. There were also many concerns about the negative environmental impacts a high speed network would create and questions were raised about the valuation of environmental aspects arguing that an Environmental Impact Assessment should have been part of the consultation process (Dialogue by Design, 2013). Shortly after the consultation process opposition groups decided to challenge the project in the courts.

## 5.5 Legal challenges to HS2

The policy 'High Speed Two' has so far faced a number of legal challenges from those who are opposed to the project. In January 2012, the Secretary of State for Transport confirmed that the Government planned to proceed with HS2. The DfT published the 'Economic Case for HS2: Updated appraisal of transport user benefits and wider economy benefits' (2012). Its intentions were to provide an update to the economic case for HS2, published in February 2011 and to revise the modelling and appraisal to reflect changes to economic forecasts, patterns of demand, Y-network development and forecast rail services without HS2 due to increased information (DfT, 2012). This led to the creation of a new opposition group, 51m. 51m is 'an alliance of councils that have come together to challenge the evidence base of the HS2 project. They are known as "51m" because that represents how much HS2 will cost each and every Parliamentary Constituency...£51 million, based on the original estimate of £33 billion' ([www.51m.co.uk](http://www.51m.co.uk)). The Local Authorities under this alliance wrote to the transport secretary at the time outlining their objections stating that they would seek a judicial review of the Government's decision to go ahead with the scheme. The councils say they were 'inspired by opposition to expansion at Heathrow, which ended in the abandonment of a third runway proposal' (Hayman, 2012). The judicial review was based on grounds on which the councils believe the decision to approve HS2 was flawed in terms of the consultation, compensation and the economic case. In total, four groups brought forward a legal challenge: 51m, two from HS2 Action Alliance, Heathrow Hub and Aylesbury Golf Club.

It was confirmed in July 2012 that the five cases from the groups would be heard together in December 2012. The High Court did not rule in favour of the opposition groups on nine of the ten broad areas of challenge presented against HS2 Phase one (from London to Birmingham). The Judge agreed it was lawful to choose to rule out upgrading the existing network as a credible alternative to HS2 and that the environmental assessment including

consideration of the impact on habitats and protected species had been carried out fairly and lawfully. The only challenge upheld was that the consultation process had been unfair ‘because not enough information was provided to consultees and the criteria by which compensation options were considered were not adequately explained - he also found that the government had not fully considered HS2 Action Alliance’s detailed consultation response on compensation’ ([www.gov.uk](http://www.gov.uk)). Opposition groups then chose to continue their legal challenge in the Court of Appeal and then the Supreme Court but were unsuccessful. The diagram below sets out the key dates of the legal challenge:

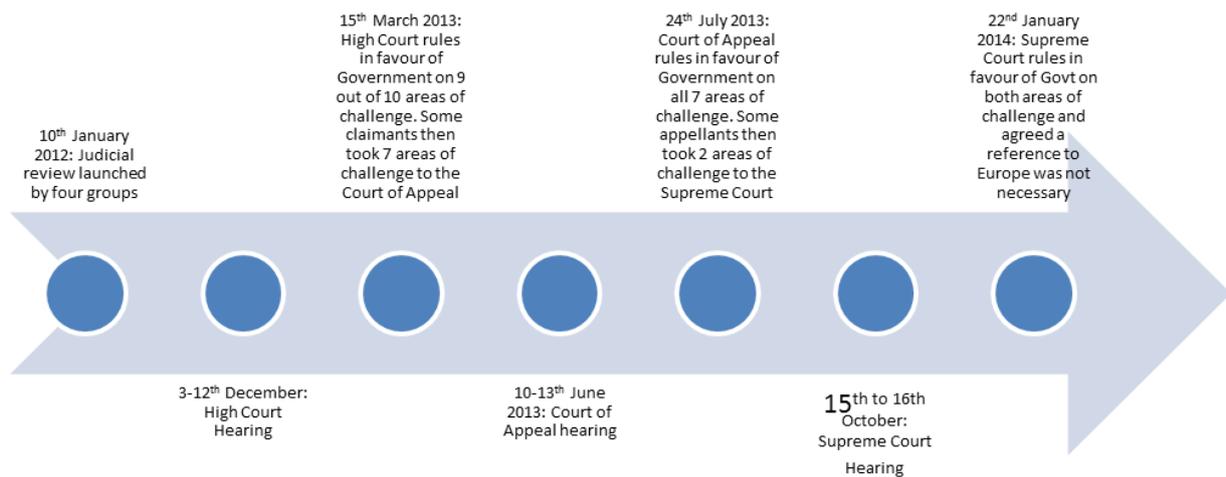


Figure 4: Timeline of legal events, taken from DfT, (2014)

The results were considered a ‘landmark victory’ for HS2 which meant that the path was now clear for HS2 to deposit their Hybrid Bill<sup>20</sup> to Parliament for phase one of the route between

<sup>20</sup> Hybrid bills are so called because they combine features of public bills and private bills. Essentially they are Government bills which affect certain individuals and bodies in ways that do not affect everybody. Transport

London and the West Midlands. The bill, entitled ‘High Speed Rail (London – West Midlands) Bill’ will secure the powers to construct and maintain phase one. The first reading of the Bill was in the House of Commons on the 25<sup>th</sup> November 2013 which was followed by the Bill entering the Committee stage in April 2014. During this stage detailed examination of the Bill took place and a Select Committee was set up to consider petitions made against the Bill. These petitions were then considered by the Select Committee which resulted in some amendments. The second reading took place on the 29<sup>th</sup> April 2014 in the House of Common which enabled the first opportunity for MPs to debate the general principles and themes of the Bill, as well as the Select Committee being set up. This petitioning period allowed all those directly or specially affected by Phase One of HS2 between London and the West Midlands to submit objections against the Bill during 29<sup>th</sup> of April and 23<sup>rd</sup> of May. There were a total of 1925 petitions made against the High Speed Rail Bill.

HS2 Limited hoped that by the end of summer 2015 the petitioning period for phase two of the Hybrid Bill would have commenced with an expected completion date of 2033 to 2035 for construction. The target date set by the Coalition Government for Royal Assent of the Bill was 2015 before the May General Election. This would have kept the project on track so construction of the new line could commence in 2017 with a completion date of the first phase by 2026. However, the Secretary of State for Transport at the time, Patrick McLoughlin admitted that legislation on HS2 would not pass through Parliament before the 2015 general election and that he blamed the hold up on outspoken opposition from MPs (Drewett, 2014). Royal Assent is not expected until the end of 2016.

## **5.6 The debate: For and against HS2**

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infrastructure bills tend to do this because they have different effects for different geographical parts of the route.

This section of the chapter sets out the main arguments that have been put forward in favour and against HS2. Initially, those in favour of HS2 placed an emphasis on the time saved per journey to justify their economic case which served as the basis for the rationale to build HS2. However, detailed scrutiny of the cost-benefit analyses used by leading academics which identified weaknesses and faults led to a shift in rhetoric. Capacity then became the leading argument in 2008 and it was claimed that the West Coast Main Line (WCML) would have reached saturation by 2026. This meant that the only viable solution would be to build a new high speed network (Atkins, 2008). However, this argument was also questioned because there is still a focus on improving services for those travelling to London and it does not take into account the overcrowding on the network in northern cities. Alternative solutions put forward by those opposed to HS2 have suggested that capacity on the WCML could be substantially increased at a much lower cost than that of HS2. After these two main arguments were discussed and evidence suggested that there may be other interpretations and explanations, those in favour of the project turned their attentions to emphasising the arguments for regeneration and employment benefits. Arguments focused on these two elements of the project are now central to the case in favour of HS2. Below are the key issues that have been debated in regards to HS2.

### **5.6.1 The effect on journey times**

At the beginning of the high speed rail debate, those in favour of the project claimed that one of the reasons HS2 should be built is that it would reduce journey times between major UK cities (DfT, 2009). The emphasis on high speed trains rather than improving or extending the classic network implied that speed was an important factor in the debate. However, figures used by the Department for Transport were highly criticised for using old data which was based on an assumption that business travellers did little or no work on trains. It did not take into account the increase in use of mobile phones and laptops and availability of Wi-Fi on

trains that meant more and more people are now able to work whilst on trains. It is also suggested by those opposed to the project that people will not need to travel as much for work because technology now allows people to communicate through other means that does not require them to meet face to face. This particular issue was one of the first to be criticised by the opposition. As mentioned above, time saved appeared to be the basis of the economic case in 2010 to 2011. However, once the opposition found flaws in the arguments put forward by HS2 Ltd there was a shift in focus to capacity and economic benefits.

### **5.6.2 Costs to the economy**

There has always been an assumed link between the supply of transport infrastructure and economic growth, even if such a link is often difficult to prove empirically (Zhenling, 2012). If such a link does exist, a precondition for transport investments to generate or facilitate such growth is that they improve accessibility (Banister and Berechman, 2000). Accessibility is key for any benefits from transport, and while many forms and definitions of accessibility exist a central element in accessibility measurement is travel time (see for example Geurs and van Wee, 2004; Van Wee et al., 2001). In the case of high speed rail, the name given to this mode of transport suggests travel time is assumed to be of particular importance. Travel time can be measured in different ways and accessibility is measured in reference to an activity or activities that can be undertaken in a specific location. On national and regional levels, empirical evidence show that often the wider social–economic impacts of changes in the transport network are the result of, and in a way rely on, changes in accessibility to the main economic, political and social centres, i.e. the main cities. This also holds in the case of HSR (Banister and Berechman, 2000; Givoni, 2006). In the UK context, Leuning et al. (2007) concluded that the circumstances of many UK cities are determined by their relative accessibility to London, while Chen and Hall (2011) also confirmed this in their analysis of the impact of introducing HSR (the IC125/225 train models) in the UK since the mid-1970s.

Arguments about the expected costs of the HS2 project and the impact it will have on the economy have been widely debated by both sides of the campaigns. As part of all government projects, economists must carry out a benefit-cost appraisal using a particular methodology. They must use economic models that place specific values on a number of different aspects and determine what the expected costs and benefits might be. HS2 Limited defines a business case as the ‘overall consideration of the factors influencing decisions on whether to proceed with a scheme. These cover: the strategic fit with wider objectives, value for money (covering the economic case and environmental considerations), commercial issues, financial affordability and how the project might be delivered’ (DfT, 2011:5). They define the economic case as an appraisal that covers ‘the full economic costs and full economic benefits of a scheme and to quantify these in monetary terms’ (DfT, 2011:5). They claim to have approached this on the basis of the HM Treasury Green Book (HM Treasury, 2011) and the Department for Transport’s Appraisal Guidance (DfT, 2013b). Due to the number of different approaches to cost-benefit analyses and the differences in opinion about what values should be placed on particular items there is often a number of different outcomes from an analysis. HS2 Limited revised their analysis at least twice. It is an area of research in which the evidence is purely based on data from forecasts and predictions. This means that evidence is widely contested on the basis of methodological differences.

Those opposed to HS2 are concerned about the expected cost of the project and whether it represents good value for money. They have noted that ‘HS2’s capital costs are far higher than the standard EU high-speed rail figures’ (Hawkins, 2011:15). Their main concerns are centred around the effect that such an expensive project could have on the economy. Ridley (2013) explored ten other project options and argued that for the same cost as HS2, the Government could complete several other projects including fixing all potholes and building a third runway at Heathrow Airport. Those in favour provide a counter argument that it is

‘not an either or situation’ (de Castella, 2013). The DfT has stated that they are trebling funds for major road schemes and that if HS2 were not built, it is unlikely that the funding would be invested only on transport projects. There have been several financial analyses conducted by a number of leading academics in order to identify any weaknesses in the business and economic case for HS2 (Hawkins, 2011; Savin, 2010; Aizlewood and Wellings, 2011; Wellings, 2013). All of these studies question the methodologies used by companies such as Atkins and KPMG as they do not agree with the forecasts they have provided. In terms of economic benefits, those in favour of HS2 claim that the project will create just over 40,000 jobs alone in phase one and phase two is forecast to support the creation of 48,700 to 70,300 jobs as well as around 7,000 houses (HS2 Ltd, 2013a). They also suggested that ‘the overall benefits to business...could be over £53 billion’ (HS2 Ltd, 2013b:99). Other benefits that have been transformed into monetary values include time savings, crowding benefits, improved reliability, car user benefits and wider economic impacts (HS2 Ltd, 2013a).

### **5.6.3 The environmental impact of HS2**

Following the Climate Act (2008) which made it the duty of the Secretary of State to reduce greenhouse gas emissions by 80 percent lower than the 1990 baseline for 2050 there has been a focus on these targets in related policies to meet the reduction targets. This has had an effect on transport policy in the UK which has led to an interest in projects that will either be carbon neutral or reduce greenhouse gas emissions. One of the ways in which they can do this is to reduce domestic air travel and provide better public transport options for the public and to reduce the amount of freight on our roads. Promoters of HS2 argued that the new rail network ‘can be part of a low carbon transport system in the UK that will allow us to meet the climate change targets established in the Climate Change Act’ (HS2 Ltd, 2013b). They claimed that HS2 will free capacity on the WCML thus creating more capacity for freight which will reduce road use. They also claimed that HS2 will reduce domestic air travel as it will provide

an alternative and fast way to travel between certain cities. They went on to argue that those opposed are merely ‘NIMBYs’ (not in my back yard) who are basing their arguments on environmental impacts when instead they are concerned about the effect the line will have on their house prices (Dominiczak, 2014).

However, the opposition to HS2 claimed that the project will have a detrimental effect on the environment and that the negative impacts will outweigh any positive ones. They also claimed that the new trains will use fifty percent more energy than Eurostar trains to run. The Eddington Report (HM Treasury, 2006) mirrors this criticism and predicts that the value of carbon saving over sixty years will be £3.2 billion. He argued that this was a poor return on investment based on a line priced at £33 billion. This figure has since increased and so the savings will be even less. The new high-speed rail network has been criticised for not taking into consideration the negative effects that the line will have on wildlife habitats, ancient woodlands and communities along the line of route. Several newspaper articles have focused on individual areas and the expected effects that HS2 will have such as the destruction of homes and areas of natural beauty. HS2 Action Alliance argue that:

*‘The route chosen for HS2 passes through irreplaceable natural habitats and unspoilt ecosystems. Constructing a railway line with a landtake equivalent to a four-lane motorway will have a devastating effect on the natural environment in these areas – over 130 wildlife sites on the first stage alone will be directly affected, including 10 Sites of Special Scientific Interest, an Area of Outstanding Natural Beauty and 50 ancient woodlands’*

(HS2 Action Alliance, 2013)

Environmental arguments have formed the basis of many of the claims put forward by those opposing HS2. This is explored further in a later chapter that focuses its attention on the way in which policy actors within HS2 frame the debate.

#### **5.6.4 Capacity for freight**

The WCML is the busiest mixed-used railway in Europe, carrying a quarter of all UK rail freight (HS2 Ltd, 2012) with five freight train operators. Much of this freight traffic uses the ports of Southampton and Felixstowe as well as the Channel Tunnel (HS1) for through freight services between the UK and Europe. It is expected that over the next twenty years there will be an eleven percent increase per annum in domestic unitised traffic and a six percent increase in unitised port traffic (Greengauge 21, 2011). The discussions about freight are linked to the environmental impact that HS2 will have. It is claimed by supporters of HS2 that, although rail freight will not use HS2 directly, there will be capacity released on the classic network by migration of passengers onto the new high speed line which would leave allow more freight to travel on the WCML. This implies that there will be less freight travelling on the roads as well. This is considered very important by those in favour of HS2 because of the requirements set out in the Climate Act (2008). They claimed that although HS2 itself will be ‘carbon-neutral’ it will decrease the amount of traffic on our roads thus reducing carbon emissions. However, those opposed to the project have raised concerns about how much capacity will be released on the WCML because the argument in favour of HS2 is based on the assumption that passengers will migrate to the new line. If a substantial amount of passengers do not migrate then there will be less opportunity for freight to travel on the WCML.

#### **5.6.5 Bridging the North/South Divide**

One of the most common arguments put forward by those in favour of HS2 is that investing in the project will bridge the economic divide between the North and South of the United Kingdom (HS2 Ltd, 2010; 2013). The North-South divide refers to the cultural and economic differences between the South of England, in particular the South East, and the North of

England. It has been argued that the gap between the two areas in terms of life expectancy and economic trends has grown to the extent that they are almost separate countries (The Economist, 2012). Spatial economists argue that the reason for the divide is due to a lack in connectivity between major cities and that improved transport systems will decrease the divide between the two areas. The North-South divide issue assumes that reducing journey times and increasing capacity on the rail network will help firms in the North compete more effectively for market share in the South or encourage businesses to relocate. The new rail line may actually increase disparities.

HS2 Limited's report entitled 'The Economic Case For HS2' (DfT, 2011) stated that 'It is difficult to analyse exactly where, geographically, the benefits of HS2 would accrue. Our modelling tells us where trips start and finish, but that does not necessarily tell us where the benefits would fall' (2011:32). This does not support the argument that HS2 could bridge the North-South divide; rather it suggests that they are unable to know this information in advance. However, in September 2013 KPMG produced a revised report entitled 'High Speed Two Limited: HS2 Regional Economic Impacts' which suggested that the Midlands and the North of England will benefit more than London from the project (HS2 Ltd, 2013b). Firstly the report estimates that the total annual productivity impacts for Great Britain in 2037 after investment in HS2 (2013 prices) will be £15 billion (HS2 Ltd, 2013b). Their analysis concluded that 'the productivity benefits accrue to all regions, with strong gains in the Midlands and the North. Though Greater London does well, it is not at the expense of everywhere else. In fact, areas outside Greater London and the Phase Two city regions account for around half of the total forecast increase in Britain's economic output' (HS2 Ltd, 2013b:56). Although their findings showed positive effects on the North of England, the evidence suggested that HS2 may not necessarily bridge the North-South divide. The conclusions are also based on a wide range of assumptions as planning of Phase 2 of the

project is yet to be finalised. Those opposed to the project argued that instead of building a new high speed network from London to the North of England the Government should focus on improving connectivity between cities in the North of England first (Ramchurn, 2013) rather than increasing the London-centric nature of the UK's transport system.

#### **5.6.6 The need for more capacity**

Another of the key arguments of those in favour of HS2 is that building HS2 is the only viable option to reduce crowding on the current rail network. Research conducted by Network Rail (2009) suggested that the WCML will be at full capacity by 2024. They claimed that occupancy on the line's commuter trains will increase by 26 per cent between 2011 and 2023 (DfT, 2012). Since 1995 there has been an increase in rail passenger growth every year. This has not been disputed by those against the project. However, they suggested that HS2 is not the most appropriate solution to the capacity problem and that there are less expensive options. Those in favour of the project expect that capacity on the WCML will increase by a number of current rail travellers changing to using high-speed rail. This expectation is not one that they can be certain of, as Hawkins (2011) states, 'it is very difficult currently to assess how holders of classic train lines franchises would respond – they may seek to slash their prices to generate increased demand' (2011:13). Opposition to the project have suggested that the current rail network could be upgraded at a fraction of the cost of HS2 to meet the capacity issues (51M, 2013; Stop HS2, 2014).

#### **5.6.7 Modernisation and competing internationally**

The WCML is the most intensively-operated railway line in Europe serving several cities. It is over 170 years old and many of those in favour of the project claim that the old infrastructure cannot cope with the increasing demands on it and that modernising our infrastructure with a new high speed line is the best solution (HS2The People's Railway,

2013). They also claimed that it is an opportunity for new technology to become part of our ageing transport infrastructure. Evidence is usually taken from case studies of other countries and their networks. In 2012 the Rt Hon Justine Greening MP (Secretary of State for Transport) argued in a report produced by the DfT (2012) entitled ‘High Speed Rail: Investing in Britain’s Future – Decisions and Next Steps’:

*‘Looking around the world, the evidence is clear – nation after nation is planning, constructing or already using high rail speed lines. High speed rail is transforming their societies and their economies. Self-imposed exile from this new frontier in travel would mean that Britain loses out, while our global competitors gain. We face a straightforward choice. We can take the short-term option – leaving our rail networks over-stretched and over-burdened and risk paying the price in lost business, lower growth and fewer jobs. Or we can take the long-term option – investing in our global competitiveness and our economic prosperity by pursuing high speed rail. High speed rail can transform our rail network in the same way that the motorways have transformed our road network’*

(DfT, 2012c:5)

Spain and France have the most extensive high speed networks in Europe and other countries are currently investing in new lines but due to the huge costs and the current economic climate they are reluctant to spend so much money on transport infrastructure at this time. In France, the high speed network breaks even in terms of economic benefits and in Spain it is a similar situation. Certain routes lose money and only a small number make a slight profit. In 2013, the French Government cancelled all new high speed projects in favour of intercity services because it was judged too costly (RFI, 2013). Spain and France are often used as case studies by those opposed to HS2 in their arguments because it appears that high-speed networks are not as successful now as they once were. However, there are countries that are

continuing to invest in high speed rail and they are often used as case studies for those in favour of HS2. China opened the longest high-speed line in the world last year and they plan to double the size of their network by 2015 (Stone, 2014). Japan also has a high-speed network that is considered a success.

### **5.6.8 Alternative options to HS2**

Many of those opposed to HS2 argued that there are other priorities that should be focused on in the current economic climate or that rather than building HS2 there are alternative and more economical solutions to some of the problems that HS2 seeks to solve. Considering alternative options to HS2 was at the centre of the legal challenges brought against HS2 Limited in 2012. However, the Judge ruled in favour of HS2 Limited stating that they had sufficiently investigated alternatives. A report by BetterthanHS2 argues that ‘there are better ways to improve capacity and speed on mainline services between London and the North. These alternatives can meet forecast demand, and will benefit more people, more quickly and at a much lower cost’ (2011:3). This was in response to a report commissioned by the DfT which considered road and rail improvement alternatives to the high speed rail proposition being developed by HS2 (Atkins, 2010). The analysis indicated that ‘the best performing package in terms of value for money was “Rail Package 2” (RP2) focused on the WCML’ (WS Atkins, 2013:3). This study was updated in 2011 to be consistent with the then latest assessment of the HS2 project and also to consider ‘new rail interventions and packages developed by the DfT (with some consultation with National Rail) as alternatives to the HS2 full network’ (WS Atkins, 2013:4).

After the consultation process of Phase one in 2012, another update was added to the study on alternatives to HS2 claiming that it had taken into account feedback from the consultation process as well as changes to the HS2 modelling methodology which had been updated to

incorporate revised demand growth on the WCML following completion of the West Coast Route Modernisation (WCRM) programme and associated timetable changes. The report entitled ‘HS2 Strategic Alternatives’ built on previous work and consultations and aimed to consider ‘the extent to which capacity and connectivity upgrades to the conventional rail network – representing strategic alternatives to constructing HS2 - could meet the strategic objectives set for HS2’ (2013:2). It went on to state that ‘consideration of alternative investment options is standard practice as guided by HM Treasury Green Book, and embodied in the DfT’s guidance for assessing the case for investment in major transport projects’ (2013:2). The study examined only those packages identified from the earlier studies as likely to offer value for money as strategic alternatives to HS2 Phase One and the “full network”.

## **5.7 Conclusion**

This chapter provided a detailed documentation and discussion of the history and development of High Speed Two starting from an overview of high speed rail in the UK and its evolution from a rationale and development stage up to the present day. A large amount of research has been conducted since the turn of the millennium into the need for and viability of a new high speed line. The evidence that has been produced from the research studies does not provide a clear path for policy makers to take. This is because some evidence supports the case for a new high speed line and other evidence suggests a new line is not needed.

Therefore policy makers must make a decision about which evidence to accept as the most important based on political judgement and values. This requires them to give weight to the evidence presented to them in the reports. How they weight the evidence depends on the way in which they frame the debate which is explored later in the empirical chapters.

Even though some of the evidence suggested building HS2 is not the most cost effective way of dealing with capacity issue on the current network the Labour Government of 1997-2010 supported the project whilst they were in power as did the Coalition Government that followed who also adopted the policy and continued with the development of the project. What is interesting is that the Labour government were the instigators of the project in the early stages of development but by 2014 there were doubts about whether Labour would commit to supporting HS2 if they won the 2015 General Election after the Shadow Transport Secretary questioned whether the project was ‘the right way’ to spend billions of pounds of public funds. Rising costs and new evidence coming to light may have been the reason behind this decision, or it could have been the lack of public support which led Labour to make these comments leading up to the General Election.

The legal challenges that have been made towards HS2 provide an indication as to how contentious the policy is. The section of the chapter that sets out the arguments for and against HS2 demonstrated how many different aspects of the HS2 project exist and the list is not exhausted. They are used in one of the empirical chapters to explore how policy actors frame the HS2 debate. The next chapter discusses the research design and methods utilised in the thesis.

# **Chapter 6**

## **Research Design**

### **6.1 Introduction**

This chapter sets out the justification for the chosen research design and research instruments. Firstly it discusses how the research questions were developed from the literature review in previous chapters and from pilot interviews conducted during the early stages of the research and how this resulted in the chosen design. It then sets out the reasoning behind using a single case study approach in order to answer the research questions. The research methods included semi-structured interviews with policy actors and secondary data analysis of evidence presented to the Birmingham City Council Overview and Scrutiny Committee's review of HS2 entitled 'Maximising the Benefits of HS2', Google alerts data on HS2 and other documentary sources. Each of the methods are explained in turn and how they relate to the research questions rather than addressing each research question. This is because data from each of the methods was used to answer more than one research question. All ethical considerations are discussed that are relevant to each method. This is followed by a discussion about how data analysis was conducted throughout the research process.

### **6.2 Developing the research design**

A successful research design provides the structure of the research and connects the empirical data to the study's research questions. This section addresses the design and choices taken by the author together with appropriate justifications. The literature review drew out a number of research questions regarding how policy decisions are made within mega-projects. Firstly, by acknowledging that mega-projects often go ahead because politicians believe they are a 'good

thing’, challenges the view that evidence is the precursor to a policy decision. There are a number of other factors that contribute to these decisions; two being the values and beliefs of an individual. Schon and Rein (1994) suggested that our values and beliefs shape, or frame the way in which we approach a decision. The way in which we frame a policy decision influences the evidence that we draw on. Actors within the decision-making process have different frames which results in differing opinions about the solution to the policy problem. Therefore, they must enter into a process of negotiation in order to reach the most consensual option. This negotiation involves drawing on evidence to present their argument to one another and can occur in a number of different environments. It was the desire of the researcher to address the following empirical research questions in order to gain a better understanding of evidence utilisation in mega-projects:

1. How do policy actors frame mega-project policy debates?
2. What evidence do they select?
3. How do they negotiate this evidence with one another in different policy environments?

The research questions are principally explanatory, ‘how’ and ‘why’ questions rather than predictive or concerned with frequency. They are therefore well suited to an interpretive, case study approach. Case study research (CSR) is concerned with understanding the complexity of events and processes within single or particular settings (Stake 1995), allowing the researcher to ‘retain the holistic and meaningful characteristics of real-life events’ (Yin 2009:5). It is the best design to use when the investigator wants to ‘understand real-life phenomenon in depth’ and where this understanding ‘entails important contextual conditions’ that are ‘highly pertinent’ to the phenomenon of study (Yin 2009:18).

Single case study analysis can, through the application of multiple research methods, provide an empirically rich and holistic account of specific phenomena. Stake (1995) suggested that it is contextual uniqueness of the single case that is of primary interest. Transport mega-projects were of particular interest because they are notorious for finishing late and over budget (more so than other mega-projects). As representation is difficult to defend with what will be an inevitably small number of cases Stake suggested choosing one that is best suited to answering the research questions. He (1993, 2003) dismisses typicality and representativeness as being unrealistic and unachievable in terms of the single case. For Stake, the primary criteria should be ‘opportunity to learn’ (1993:6). By this he means identifying a case where there is good access and a willingness to participate. This ensures that the researcher can maximise the learning opportunities.

The thesis applied the research questions to a case that had good access and a number of willing participants. At any one time, there are only ever a small number of mega-projects being designed and built due to their nature which presented the researcher with only a limited number of potential cases. The case study chosen encompassed a large geographical area and was prominently featured in the national media providing large amounts of secondary data for analysis. There are no other mega-projects of this kind currently being designed and built to compare to in the United Kingdom and accessibility issues limit the possibility of using an international case study for comparison.

Focusing on one particular case does not mean studying single phenomenon as the case study generated ‘a multitude of qualitative-interpretive, within-case “observations” reflecting patterns of interaction, organisational practices, social relations, routines, actions and so on’ (Yanow et al 2009:4). Although the research can be considered a single case study, it consisted of a number of sub-cases within the overall case. This in turn provided a range of different data sources for analysis.

The limitations of using a single case study are that it is difficult to generalise the findings to other mega-projects. However, the purpose of the research was to expand and generate theory on evidence utilisation and negotiation in decision-making within mega-projects which could be applied to other mega-projects. Rather than collect smaller amounts of data from a number of case studies, the choice was taken to focus on one particular case in order to gather an in-depth explanation about the intricate details of how evidence informs decisions.

The reason that a case study design is appropriate for this research is that the desire is to understand the social processes and complex practices by organising the data around themes and topics. By using this design it was possible to do this through data organisation which provided the most appropriate form of analytical handle on the data. As Mason argues, it enables the researcher to ‘make comparisons and build explanations in a distinctive way’ (2002:166). There was little to no control over behavioural events within this research. The only stage at which there may have been some influence is during the scrutiny process in which the researcher provided support for the scrutiny report, including feeding into question plans and contributed to the final Committee report. A brief discussion on researcher positionality is discussed later in the chapter.

### **6.3 The case study: High Speed Two**

In the previous chapter the case study was presented in more detail; this section provides a summary of the case and the reasons behind its selection. The chosen case study was a new high speed rail network that is being designed and built in the UK. It has been named ‘High Speed Two’ after the Channel tunnel rail link was referred to as High Speed 1. High speed rail arrived in the UK with the opening in 2003 of the first part of High Speed 1 (then known as the 67-mile Channel Tunnel Rail Link) between London and the Channel Tunnel and it was completed in 2007. This was actually relatively late in terms of development as other

countries in Europe such as France, Spain and Germany had already developed large high speed rail networks. In 2004 an extensive study was published on high speed rail networks and it raised questions as to why the UK did not already have a network. It concluded that at the time there was not a big capacity issue on the classic rail network (Commission for Integrated Transport, 2004). Then in 2005 and 2006 reports were published that had conflicting views over whether or not high speed rail was needed in the UK based on increasing capacity issues. A report by Atkins entitled 'High Speed Line Study: Summary Report' (2005) suggested that 'a new high speed line is effective in relieving rail crowding problems and performs better in respect of relieving rail crowding than alternative investments such as upgrades of the existing networks, new lower-speed lines or highway upgrade programmes' (2005:ii). In contrast to this, the Eddington Transport Study (HM Treasury, 2006:49) argued that:

*'New high-speed rail networks in the UK would not significantly change the level of economic connectivity between most parts of the UK, given existing aviation and rail links. Even if a transformation in connectivity could be achieved, the evidence is very quiet on the scale of resulting economic benefit, and in France business use of the high speed train network is low'*

Regardless of this report, since at least 2007 there has been a growing consensus amongst politicians in the UK that construction of a high speed rail network is needed because of a growing problem with capacity on the current rail network. The development of a second high-speed line was proposed in 2008 by the Labour government to address capacity constraints on the West Coast Main Line railway, which is forecast to be at full capacity in 2025. A report published by the Department for Transport in January 2009 described an increase of 50% in rail passenger traffic and a 40% increase in freight in the preceding 10

years in the UK and detailed a number of infrastructural problems (Department of Transport, 2009). The report proposed that new high-speed lines should be constructed to address these issues and after assessing various options concluded that the most appropriate initial route for a new line was from London to the West Midlands. After formally deciding to advance with a new high speed rail line the government began its consultation process with the public on its high speed rail plans.

Much of the studies to this point have focused on a cost-benefit analysis of a high speed rail network, very much following the methodology reported in De Rus (2008). The focus of the reports is usually on the investment required on the one hand and the economic benefits, mainly in terms of travel time savings, on the other. The analysis is mainly restricted to the line in question without due consideration of areas beyond (but close to) the line or areas bypassed by it. In 2009, the Labour government established High Speed Two Limited (HS2 Ltd) which was chaired by Sir David Rowlands to examine the case for a new high speed line. It is an executive non-departmental public body that is funded by grant-in-aid from the Government. The most recent study, published at the end of October, 2013 entitled 'The Strategic Case for HS2' has changed the focus back to the benefits of delivering additional capacity and has used upgraded forecasting and evaluation techniques. As a result the benefit-cost ratio (including wider economic benefits) is estimated at 1.7 for phase one and 2.3 for the full network. This represents a decline from values of 1.9 and 2.5 reported previously (HS2 Ltd, 2013).

The logic underlying the selection of HS2 is that a live case was essential in order to understand the complexities and messiness of the policy process. This would not be possible if the case was analysed retrospectively. Also, the aim of the research was to look at a policy issue that encompassed a wide range of decisions, different types of evidence and was multi-

actor. In terms of practicalities, Birmingham is part of phase one of the proposed route and many of the stakeholders are based between London and Birmingham. Therefore, several interview participants were identified within a 100 mile radius. From living in Birmingham there was an awareness of community meetings about the proposed rail project and gaining access was not difficult. The community meeting in Castle Vale was attended by a number of key stakeholders which provided a good networking environment for future interview participants. The researcher established a relationship with Birmingham City Council that enabled them to participate in and contribute to the scrutiny review of HS2 thus enabling access to a setting that most researchers are unable to observe. The placement provided an opportunity in which to obtain large amounts of empirical data that could be used to answer the research questions. Also, attending meetings meant the researcher could observe how different policy actors negotiated different types of evidence with one another. Hence HS2 was chosen because it presented a suitable and meaningful empirical context in which the research questions might be answered.

#### **6.4 Justifying the research methods**

The observation of a community meeting served as a preliminary research method that allowed the researcher to observe what sorts of claims were being made by policy actors, how they interacted with one another in that setting and what types of evidence were used. Other academics have focused their research on community meetings as a way to understand local democracy and how these meetings fit into the larger institutional context of citizen input into the policy process (Adams, 2004; Farrelly, 2009; Lowndes and Sullivan, 2008). Adams (2004) suggested that they are a good opportunity for attendees to convey evidence and information to one another and attract media attention as well as influence others opinions. Attending the meeting allowed the researcher to compare experience with the literature to see if it did provide a good environment for attendees to present and negotiate evidence with one

another. It did not provide in-depth data about how actors think about evidence and how they frame the policy issue. This is why interviews were required. Interviews enabled the researcher to explore the interviewee's experiences and it is a 'uniquely sensitive and powerful method for capturing the experiences and lived meanings of the subjects' everyday world' (Kvale, 2007:11).

### **6.5 Participant Observation of a Community Meeting**

In the early stages of the research a local community meeting was attended in order to experience how local residents interacted with other policy actors, what issues and arguments were causing most concern for attendees and to see what evidence and claims were presented by those present. As it was a public meeting it was not necessary to request field access. In research, gaining access to meetings or organisations can be very difficult as the researcher is often seen as an inconvenience to the organisation or group. However, in this instance it was relatively easy. Before entering the field it was important to know who would be present at the meeting, what the intentions of the meeting holders were, some information about HS2 and some general knowledge about large infrastructure planning projects. This enabled the researcher to have an understanding of the potential language being used and what to expect. At the meeting there were approximately fifty people in the room and it was set up so that the organisers of the meeting were sat facing the audience of mostly residents and community workers. There were employees from HS2 Ltd, Birmingham City Council, Castle Vale Community Housing Association and other key stakeholders at the front of the room. Robson (2002) identifies four different levels of participant observation. They are complete participation, marginal participant, observer-as-participant and participant-as-observer. This is an example of participant observation in which the researcher was a participant-as-observer. There was no interaction between the researcher and participants. By sitting at the

back of the room, the participants were unaware of the researcher's presence or motive for attending the public meeting. The meeting was not recorded as there was no informed consent, however field notes were taken and minutes of the meeting were available online to the public. Emerson et al. (1995) explain why researchers take field notes and what they contain:

*'In writing field notes ethnographers have as their primary goal description rather than analysis. But these contrasting terms – description and analysis – refer more to recognised kinds of writing than to separate cognitive activities. In that sense, writing field notes is a process of "analysis in description". Indeed, all descriptions are selective, purposed, angled, voiced, because they are authored'*

(Emerson et al., 1995: 105-106)

This was relevant when observing the community meeting. Due to there being no informed consent it would have been unethical to record the meeting. Although there was little risk to participants and knowledge of presence was unlikely to affect their behaviour it was decided that they would not be told they were being observed for research purposes. It is impossible to say that there is no observer effect even though presence of a researcher was not known. As Blommaert argues, 'you are never observing an event as if you were not there. You are there, and that makes it a different event' (Blommaert, 2006:27). It is difficult to claim that there was no observer effect but it is possible to claim that there was a minimal as possible effect due to the attendees being unaware of the researcher's presence and intentions. The community meeting can be considered a natural setting as it was at the community college building which participants were familiar with. Although attendees were unaware of the motive of the researcher, a select few already knew that there was a PhD student as a volunteer at the Castle Vale Tenants and Residents Alliance. By attending the meeting the

hope was to understand the context of HS2 within which the study is situated. In summary, the reasons for using a community meeting as a sub-case study were that it was easily accessible, no consent was needed and it was possible to observe the use of evidence in a natural setting. Also, there are few opportunities to be present in policy environments where evidence is presented and negotiated orally without being invited. Many of the occasions within this policy process in which evidence is negotiated is not accessible to me and so this community meeting provides a good opportunity to experience the use of evidence within HS2.

## **6.6 Interviews**

The first method for the research involved conducting semi-structured interviews with a number of relevant policy actors. This section discusses the sampling techniques, profiles of the interviewees and a discussion about how interview data enhanced the study. The interviews were used to explore how policy actors within HS2 frame the policy issue and how they conceptualise evidence. They also enabled the researcher to find out what evidential resources actors draw on within the policy process and describe in their own words how they interact with other policy actors. The interview questions were developed from an in-depth literature review of evidence within the policy making process and mega-projects as well as a review of media coverage of the case study.

### **6.6.1 About the interviews**

Qualitative interviewing is typically characterised as flexible, responsive and informal, enabling the interviewee to produce rich, detailed responses or ‘thick description’ (Mason, 2002). Unlike structured interviews they are designed to explore the distinctive features of specific contextualised events focusing in on the experiences, understandings and beliefs of individuals (Vromen, 2010). By using a semi-structured interview it allowed for a less formal

approach and covered the grounds that the researcher wished to cover through prompting. It is more appropriate for complex situations as the interviewee can be briefed before the interview in person about any complex concepts such as evidence. The main reasons for choosing this particular research method to answer the research aims were that questions can be explained which leads to less misunderstanding and an interview can be used with almost any type of population (Kumar, 2005). Trying to understand how an actor conceptualises a particular concept can be difficult and so if the interviewer is able to explain what they mean then more clarity ensues as opposed to closed questionnaires. By choosing a number of participants with different interests and beliefs it 'lends itself to building general theories about the nature of social phenomena' (Taylor and Bogdan, 1998:91).

### **6.6.2 Limitations of interviewing**

There are some disadvantages to interviewing which include time-consumption, cost, the data quality, bias and emotion. Interviews themselves can take a lot of time as well as transcribing. Travelling to interviews was expensive as some interviewees did not live locally. The quality of the data often depends on the quality of the interaction and the quality of the interviewer. As Kumar notes, 'the quality of the responses obtained from different interviews may vary significantly' (2005:131). In regards to emotion and bias, the interviews were difficult to conduct because the case study is live. Being a live case, interviewees came into the interviews with their own agenda and it was difficult at times to steer the interviewees in the direction that the interviewer wanted. Emotions were still very prominent with some interviewees and they were more interested in arguing either for or against the project rather than discuss the evidence and claims-making process of which they were a part of.

Two rounds of interviews were conducted over the course of the project; six pilot interviews and eight subsequent interviews. The guiding format of the interviews was based around key

themes identified in the initial literature and policy review. In pilot interviews with experienced managers, communicators and educators in the public, private and NGO sectors were explored with a view to establishing their relevance and appropriateness for future interviews. The questions did not focus on HS2 as the case study had not been chosen at this point but the key themes remained the same. It became apparent in the pilot interviews that certain questions about the nature and conceptualisation of evidence proved difficult for interviewees to answer and so the interview guide was amended. Subsequent interview guides were designed to accommodate a range of differently placed interviewees with the intention of using them flexibly in a manner suited to each individual's specific professional role and experience. In practice the original interview schedules served only as a broad indicative framework of issues to be explored. Understood as a collaborative and interactive process, the interviews were guided both by the experiences and perceptions of interviewees as well as the researcher's own framework. The outcome of this style of interviewing meant at times focusing down on particular issues or themes whilst at others going off on tangents to the original schedule. In discussions that explored experiences of the policy process and in more conceptual reflection over how they understood issues such as 'evidence', or 'claims', the researcher evolved a style of 'vignette' questioning aimed at getting them to explore real life experiences so as to avoid getting text book answers to questions (Mason, 2002; Wilks, 2004). 'Vignette' questions proved particularly useful in generating reflective thinking and helped ground beliefs and accounts of behaviour in particular lived contexts.

All interviews were recorded and transcribed and interviewees were offered the opportunity to receive a summary of the transcription to check for accuracy or edit if they felt this was necessary. However, no participants took the opportunity to view a summary of the transcribed material. The table below provides an example of interview topics that were discussed:

- Motivations for being involved in the case study
- How do they conceptualise evidence?
- What types of evidence they rely on to make claims
- How they negotiate evidence with one another
- Utilisation of social media to present claims

Figure 3: Interview topics

### **6.6.3 Sampling**

It is important when sampling to identify and choose participants that belong to the relevant population of actors within HS2. The purpose is to question what is needed from the sample in terms of answering the research questions (Mason, 2002). The sample needed to provide access to data that allows the researcher to empirically and theoretically develop some arguments about claims-making within the chosen case study. Therefore, interviewees were identified by conducting an online search of organisations involved in the production and use of evidence in relation to HS2. The nature and purpose of the research was outlined in introductory emails and fully explained to participants prior to the interviews, along with the uses intended for any data produced. The email invited them to take part in an in-depth interview and covered details pertaining to the aims of the research and broad thematic areas. Of the emails that were sent out, the response rate was somewhat lower than expected. Eight interviewees were chosen based on their position on HS2 and their role within the policy process. Two of the interviewees were contacted after being recommended by another interviewee. It should be noted that in no way were participants made to feel obliged or coerced into being involved in the research. The case study was chosen due to its characteristics and sampling for proportionality was not the main concern. Hence just as High

Speed Two was selected as a case study through a process of purposive sampling so interviewees were initially identified on the basis of their relevance to the research questions and the theoretical and analytical framework employed.

#### **6.6.4 Interview Participants**

Thirty people were contacted and a request was made for an interview with them. This number of participants is recommended by Patricia Adler (2012) as a guide for students conducting qualitative research. However, she acknowledges that for each study the answer of how many participants are necessary will differ from project to project. The aim was to include a range of perspectives on the case study including those for, against and those that consider themselves impartial or neutral. A total of eight people agreed to participate in the study. This may appear to be a small number of participants; however the interviews were very in-depth and ranged from one hour to two and a half hours. The interview data was supported by large quantities of primary and secondary data in the form of participant observations, High Speed Two related documents and the media. .

The profiles of the research participants were as follows: three were in favour of the project, two were opposed to HS2, and three claimed to be neither for nor against the project. Two of the participants are local residents that could be impacted by the construction of the new high speed line, four of the participants were directly linked to the project because of their careers in either local government or the rail industry and two of the participants are involved with HS2 but only to a certain extent. A number of organisations were approached but many were unavailable for an interview including HS2 Limited. Many of the respondents to emails directed the researcher to their websites for information as they were too busy to participate in an interview. One of the problems with choosing a live case study is that those highly

involved in the project may not have much time for interviews. The table below sets out a description of each interviewee whilst retaining anonymity

<b>Profession</b>	<b>Interest in the project</b>	<b>For or against HS2?</b>
Retired academic	Lives near proposed route	Against
Rail magazine editor and retired rail industry employee	Writes about project and consults on certain issues of HS2	For
Transport manager in the West Midlands	Company is involved in HS2 project	For
Rail engineer	Lives near proposed route	Against
Manager at a well-known organisation that provides research and expertise on transport issues	Organisation provides research and advice to HS2 Limited	Neutral
Rail consultant	Provides expert advice to HS2 Limited	For
Chief executive of a community organisation	Area that they serve is affected by the project	Neutral
Council worker	Conducts research into the effects of HS2 for the area in which they work	Neutral

(Table 2: Interview participants)

## **6.7 An Ethical process**

Ethical considerations are an important part of the research process because they can ensure that a researcher's findings are trustworthy and that the welfare and rights of the participants are protected (Social Research Association, 2003). Ethical review is required when the research involves human subjects. Ethical approval is 'also a requirement of the University of Birmingham's Code of Practice for Research. If you do not obtain full ethical approval for

your study, you are at risk of disciplinary action' (University of Birmingham, 2015). The research undertaken in this thesis has passed a University of Birmingham ethical review. The following sections set out the ethical considerations of the researcher.

### **6.7.1 Consent and withdrawal**

Ethical research requires that all participants agree to the research before it commences. Informed consent implies two related activities: 'participants need first to comprehend and second to agree voluntarily to the nature of their research and their role within it' (Israel and Hay, 2006:61). It entails informing the participants of the 'overall purpose of the investigation and the main features of the design, as well as of possible risks and benefits from participation in the research project' (Kvale, 2007:27). Consent of participants within this research was both informed and voluntary. Formal consent was sought in writing using an information sheet and consent form. Both the interviewer and participant retained copies of signed forms. The initial consent form covered one interview, the exchange of feedback, and the possibility of further contact to arrange a follow up interview. Participants were informed of their right to withdraw from the research prior to the commencement of the interview both verbally and in the information sheet provided. Following interviews, participants were verbally given the option of withdrawing from receiving feedback or participating in follow up interviews. All subsequent communications contained a disclaimer to the effect that further participation is optional and that the participant may withdraw at any time. Following interviews participants were given two months to withdraw their data from the study. After two months, interview data was used in line with the purposes outlined in the participant information sheet. However participants retained the right to withdraw from follow up work at any stage. The primary concern when it comes to ethical responsibilities of the researcher is their duty of care towards the research participants. Due to the case study

being live it was extremely important that the confidentiality of respondents was kept and they remained anonymous throughout the thesis.

### **6.7.2 Confidentiality**

Confidentiality in research 'implies that private data identifying the subjects will not be reported' (Kvale, 2007:27). Research participants often do not want data published that makes them potentially recognisable to others. A range of measures were taken towards ensuring the confidentiality of participant data. Participant names and employing organisation were anonymous and non-attributable in accompanying transcript extracts, both in the PhD thesis and in any other research outputs. Participants were not identifiable by name through their responses to interview questions; as well as in the interview data and anything that is published with extracts from the interview data. Primary research data and research evidence is accessible in confidence to other authorised researchers for verification purposes for reasonable periods after completion of the research; data will be preserved and accessible for ten years. This period is in accordance with current University guidelines. These guidelines can be found at <http://www.ppd.bham.ac.uk/policy/cop/code8.htm>. Data has been stored in their original form. Storage media will not be erased and/or reused, but will be stored securely. The principal investigator complies with the Data Protection Act (1998). By undertaking ethical research, the steps that were taken to ensure the protection of the participants' identities were clarified to them and assurances were given during interviews.

### **6.7.3 Storage and disposal of data**

Respondents were told that they were able to choose not to be recorded when interviews were conducted but all agreed to be recorded. They were informed if they wanted the tape recorder turned off then they could request this. All data for this project was stored in

accordance with the Data Protection Act (1998). Transcripts, recordings and code sheets have been stored in a separate file under separate passwords. All data is stored on an encrypted laptop computer; any back-ups made were similarly encrypted. Raw data and participant identities are only accessible by the principal investigator, though supervisors have access to transcript extracts. Participants have the right to access all data pertaining to their own interview on request, and were reminded of this when interview summaries were sent. Interview summaries were sent to participants by email or post using recorded delivery in one instance. All data will only be used for the purposes of the PhD and nothing else. Data will be stored for ten years.

#### **6.7.4 Minimising harm**

One of the aims of ethical scrutiny is the attempt to balance the risk of harm against the potential for benefits that can accrue to participants (Social Research Association, 2003). Consideration has been given to different types of harm and the likelihood of their occurrence and how they can be minimised in this project. Psychological stress is more common as a consequence of social research as opposed to physical harm (The British Psychological Society, 2010). Harm is often overlooked by researchers and one should never anticipate the emotional effects questions can have on respondents. To reduce psychological distress to participants selection and use of language was carefully considered and participants were shown respect and courtesy. In regards to harm to the researcher, which is equally important, all interviews took place in either public locations or in the offices of participants. As a precaution the researcher left travel plans accessible to their supervisor or family to ensure their location is known during field work and carried a mobile phone in case of emergencies.

## 6.8 The scrutiny review

Scrutiny in local government was formally created by the Local Government Act 2000. It is ‘an independent function led by local elected councillors that works with local people and other local bodies to help improve services’ ([www.cfps.org.uk](http://www.cfps.org.uk)) and call executive (Cabinet) members and chief officers to account for their actions. Councillors not holding cabinet positions are eligible to sit on overview and scrutiny committees in which they can ‘work across party lines to collect information and draw out conclusions and recommendations on a consensual basis’ (Coulson, 2011:108). The reason for participating in the scrutiny review was to explore how actors within HS2 engage with the process of presenting and negotiating evidence and claims. The setting took place within Birmingham City Council’s scrutiny review of HS2 and its benefits initially focusing on the way in which organisations are invited to present evidence, how they respond to a call for evidence and the nature of the evidence they present. One of the reasons for taking evidence in an Overview and Scrutiny (O&S) meeting is that it helps committees to reach conclusions and the evidence supposedly strengthens those conclusions. When making recommendations to Cabinet and Council, the O&S committee cannot compel the executive to take up its recommendations. However, by using evidence it increases the ability of the scrutiny committee to persuade. If recommendations are backed up with reasons, based on evidence including information surrounding the issue and the opinions of stakeholders, experts and other interested Parties then the recommendations begin to have some force. In theory, ‘evidence-based work carries more weight with the executive and is a crucial accountability mechanism’ (Sandford and Maer, 2004:39). By taking evidence from officers and cabinet members, back-bench councillors have an opportunity to pursue a line of questioning with those who have executive power. This allows for both decisions and actions, as well as policy positions to be examined. Questions can be asked in full council as well as committee, but in full council

there is rarely the opportunity to take a line of questioning. Evidence also allows information to become public. By questioning officers on their reports, the committees can ask for additional information, which is put into the public domain. It is therefore an incentive for officers to maintain performance levels and for cabinet members to have real reasons for their decisions.

In September 2013 the Birmingham Economy & Jobs and Transport, Connectivity and Sustainability Overview and Scrutiny (O&S) committees joined together to undertake a joint review entitled '**High Speed Two: Maximising the Impact for Birmingham**'. Other councils have investigated the pros and cons of HS2 but none have undertaken a review into how their area could maximise the impact of HS2. As the project progresses it is likely that other councils affected by the high speed line will undertake similar reviews, especially if the Hybrid Bill is passed. On the 20<sup>th</sup> September the scrutiny office published a 'Call for Evidence' on their website as well as contacting key stakeholders individually and requesting that they submit some written evidence as well as an invitation to come to one of two meetings to join a discussion with the two committees. The online 'Call for Evidence' listed a selection of questions and key lines of enquiry that would be discussed at the two meetings in November. People were given six weeks to respond to the call and were advised that Birmingham City Council 'are not looking to re-open the debate as to the pros and cons of HS2 – these have been well debated elsewhere. Rather, we are looking forward to the introduction of the Hybrid Bill later this year and ensuring that Birmingham is well placed to realise the promised benefits' (BCC, 2013:1). There were four key lines of enquiry that were asked and these include:

1. *What are the opportunities and challenges for Birmingham and the wider region in relation to:*
  - *The local economy and inward investment;*

- *Connectivity (including digital and local, national and international transportation issues for goods, people and services);*
- *Employment;*
- *Sustainability and the natural and urban environments;*
- *Design (including planning), heritage and culture.*

2. *How will these benefits be realised?*

- *What are the infrastructure and planning requirements needed to yield the benefits?*
- *How are plans for local transport links – including rail, bus, metro, cycling and walking – developing?*
- *How will Birmingham residents be supported to get the jobs generated by HS2, both in construction and later?*
- *What resources / investment opportunities are available for this?*
- *Who are the key partners and how are they being engaged?*
- *How are innovative and creative future-focused ideas being collected and included in the planning?*

3. *What is the passenger perspective on the wider rail/bus/metro connectivity issues and on the stations' general utility (including modes of movement between stations) for users?*

4. *What messages should the City Council be conveying to Government, and what asks should be made?*

The ‘Call for Evidence’ concluded by stating ‘An Inquiry is only as good as the evidence it receives. We would welcome a written statement of your views and experience on any of the above points, along with any other comments or ideas you might have. We will collect all the written submissions and use these as evidence to support our work’ (BCC, 2013:2). In terms of sampling, who is included in the scrutiny review has implications for the claims that can be made about conclusions and recommendations at the end of the process. This review undertook predominantly purposive sampling which involves selecting particular organisations with characteristics relevant to the review that are thought to be most informative (Patton, 1990). There were a total of fifteen responses to the call for evidence in the evidence packs from a number of different organisations. The response length from each organisation or person was as follows:

<b>Response</b>	<b>No. Pages</b>
Professor Kathryn Moore, Professor of Landscape architecture, Birmingham	12
Greater Birmingham Chamber of Commerce	3
The National Skills Academy for Railway Engineering	24
Centro	14
Dr Mike Hodder, Planning Archaeologist, BCC	7
Black Country Local Enterprise Partnership	2
The Birmingham Group	4
Shilpi Akbar, Assistant Director of Employment, BCC	3
Birmingham City Council	105
High Speed Two Limited	5
Marketing Birmingham	20
West Midlands Campaign for Better Transport	9
Campaign for Rail West Midlands	4
Railfuture West Midlands	2
Birmingham Friends of the Earth	2

It was not necessary to seek consent from anyone as the data was publicly available and anonymity was also not an issue. Whilst this placement provided a large amount of written empirical data, the experience also allowed the researcher to observe policy actors

negotiating evidence with one another in meetings. Field notes were taken in all the meetings attended, both public and private, in order to observe the process by which claims were presented and the evidence was negotiated and then how this in turn led to the creation of a scrutiny review document.

## **6.9 Researcher Positionality**

It is important for a researcher to consider their positionality within their project because research represents a shared space, shaped by both researcher and participants (England, 1994). The researcher must identify and acknowledge their biases wherever possible because ‘just as the participants’ experiences are framed in socio-cultural contexts, so too are those of the researcher’ (Bourke, 2014:2). Through researching the case study for the project some opinions were formed about High Speed Two and its effects on communities and the environment. This was unavoidable; however, some attempts were made to reduce this influence in two ways. During interviews the researcher made sure not to provide their own personal opinion even when asked by participants. Due to the immediacy of events, many of the participants sought the researcher’s opinion on the project as well as validation for their arguments. Every effort was made to remain neutral during interviews by refraining from answering opinion-based questions by participants. During the scrutiny process at Birmingham City Council, involvement included obtaining evidence for the scrutiny report and writing parts of the report. In order to reduce impact on the process, the researcher did not write any recommendations or give opinions when possible. This reduced the influence of the researcher on the scrutiny process.

## **6.10 Documentary sources**

Although interviews and empirical data from the scrutiny review were a primary means of encountering evidence negotiation between policy actors, documentary sources also played a

valuable role in answering the research questions. This included newspaper articles, policy documents, research papers, reports and social media data. Documentary sources proved invaluable for the research because they provided an understanding of the case study, direct quotes to cross reference with the interviewees, empirical data to apply the theoretical framework to and also as a source of interviewees. Many of the participants were chosen by reading about them in news stories and then contacting them to request an interview. This section explains how each type of documentary source was used and the following section explains how the data was analysed.

### **6.10.1 Google Alerts**

Google Alert is an automated web search service that began in 2003 which enables a person to receive email notifications any time the search engine Google finds new results on a topic that interests you. For example, you could get updates about a particular news story or find out when people post something about a topic. Results are sent to subscribers by daily email. The topic of High Speed Two (HS2) was set up as an alert on Google so each day all online news stories containing HS2 were detected and sent as a document via email. The alert was active from 15<sup>th</sup> July 2013 to the 24<sup>th</sup> June 2015. During this time daily emails were received which contained anywhere from between one and seven news stories. Over twenty three months a minimum of seven hundred articles were received and read. The reason for using this service is that it provided updates on all online media coverage about the chosen case study which was then utilised in the empirical research to provide support for the findings and data references to the stories the interviewees told. Media coverage indicated how the project was being discussed by policy actors at the time, who some of the key stakeholders are in the project, and what evidence they were choosing to present in the media.

### **6.10.2 Policy documents**

Throughout the case a broad corpus of electronic and printed policy documents was assembled. The majority of relevant documents are available on the HS2 website which at the time had a total of 288 policy documents authored by HS2 Ltd and the Department for Transport. A benefit of choosing this case study was that almost all policy documents are available in electronic form online. In regards to documents that were not specifically related to high speed rail but transport in general, were collated into an electronic folder and utilised in mapping the case study chronologically.

### **6.10.3 Research papers and reports**

A number of research studies have been conducted to assess the viability of a high speed line by various individuals and companies. Most of the studies were commissioned by those in favour of HS2 with the aim of creating more evidence to justify their claims. There are fewer reports commissioned by those opposed to HS2 mostly due to a lack of financial resources. These documents were used to provide an insight into the claims that were being presented and the evidence that was used to support these claims. The cost benefit analysis of the project is at the centre of many of these reports and is used to justify or criticise HS2. The approaches to CBA were analysed in order to understand the values that were being given to various elements of the project. Other documents include the evidence packs from the scrutiny review that provided fifteen different responses from a number of stakeholders in the Midlands. A lot of the responses were presented in report form and set out the position of the respondent as well as their claims and supporting evidence.

#### **6.10.4 Social media**

During the research project the researcher had the benefit of working with a colleague on a project concerned with policy ideas on social media in 2013. In particular, the focus was on data collected from Twitter. One of the topics that data was collected on was HS2. A number of ‘tweets’ concerning HS2 were obtained which provided some initial data on how people discussed the issue of capacity, and identified a number of arguments and claims being presented both for and against the project. This influenced some of the interview questions further into the research. Some of the Twitter accounts that regularly posted about HS2 and ones that were specifically set up to present evidence and claims about the project were followed as well as a number of online blogs of both supporters and opponents of HS2. This provided an understanding of how people were discussing the project, what they emphasised the most and who they engaged with on social media.

#### **6.11 Data analysis**

This final section outlines the approach to data analysis. It was a continual process during fieldwork which involved writing up interview notes, transcribing, observing meetings and drafting chapters. The first data collected was from a field note taken whilst at the community meeting in Castle Vale attended in late 2012. As mentioned before, the reason the meeting was attended was to gain an understanding of the types of discussions that were being held between policy actors and what evidence they were utilising to present their arguments. Any evidence mentioned was identified and notes were taken of the way in which speakers were presenting and receiving claims. From this it was possible to gain a better understanding of the issues that were important to local residents that would be affected by the project and some insight into how those in favour of the project justified their claims. The field note acted as an insight into the main issues concerning the case study and it influenced the

interview questions asked of the participants. After the meeting some engagement with several of the attendees occurred in order to request interviews with them.

The rest of the field notes were taken whilst on placement at Birmingham City Council during meetings concerning the scrutiny review. Notes were taken in all the meetings with both Council staff and in the evidence gathering sessions which were open to the public.

Analysis of the field notes involved highlighting any discussions about evidence that would be used in the reports and how they planned on presenting it. Notes were made in the evidence gathering sessions of any discussions or comments that the researcher considered were relevant when attendees were discussing the case study. For example, the way in which they spoke about the evidence that was supporting their claims was important as well as how they rejected claims of those that had a different opinion.

The evidence packs that were created for the meetings were predominantly used to identify what claims were being presented by the respondents and what evidence they were using to support these claims. Firstly, each of the two evidence packs were read and as many claims as could be identified were highlighted. Toulmin's model of argumentation was then applied to some of the responses in the evidence packs in which attempts were made to locate the claim, the evidence and the warrant. From this a decision was made about how useful Toulmin's model was as a tool for deconstructing an argument.

The data provided from the Google Alert on HS2 was used for a number of different purposes. Firstly, it was useful for tracking the case chronologically as all key events were documented in the media and it was useful to refer to in order to clarify dates. Each day notes were taken of what the media was focusing on in regards to HS2 in order to establish the key points of interest. Secondly, framing theory was applied to the data in order to identify the ways in which groups of policy actors framed the debate based on the arguments they put

forward either for or against the project. For example, how local residents along the line of route and the types of media coverage they received was documented. Any evidence within these news stories was then cited. Due to their nature there was not a large amount of evidence cited within the news stories but the Google Alerts data did provide an insight into how policy actors are portrayed in the media by others and the way in which they discussed the case study. When evidence was cited a note was made of the type of evidence it was which led to some inferences being made about what types of evidence different policy actors drew on. Some interview participants were identified from media stories that provided contact details online.

Familiarisation with the interview data began as soon as the interview process commenced by listening to the recordings. The pilot interviews with experienced managers, communicators and educators in the public, private and NGO sectors served as a tool for refining the interview questions once the case study had been chosen. From these interviews it was clear that discussions of evidence with the participants would probably be difficult because they struggled with questions about conceptualisation. In terms of reading the interview data, this was a three stage process. Firstly the data was read and coded in a literal way almost as a story; then the theory was applied to the data through a narrative lens within the context of the claims-making framework. The data was viewed in a reflexive way in order to determine if there were any limitations and the theory needed adapting. The interview data existed in two forms: electronic audio files and as verbatim written text. Firstly everything that related to evidence, opinions and claims-making was 'free-coded'. This resulted in several codes which were then refined into a smaller number with more specific titles that centred on the research questions. The codes were organised by grouping them meaningfully and identifying conceptual relationships between the codes. They were derived from research questions and

key concepts and themes that emerged during the data collection, data management and analysis stages.

Computer-assisted qualitative data analysis software is available and is capable of performing a wide variety of functions including sorting and coding. However, they are only able to provide logical or numerical analysis and do not help with interpretation of complex areas such as evidence negotiation and framing. The decision was made to code the data manually rather than using a computer programme because the programme was unnecessary as it did not provide the analytical sophistication needed to identify frames within the data or concepts of evidence. Preference was given to having paper copies of the transcripts set out on the desk whilst conducting analysis rather than only being able to view one at a time. Different data sources were then compared with one another in order to identify any similarities and differences that emerged. Categories were given a code name and the coding system refined as new themes emerged.

## **6.12 Conclusion**

This chapter has set out the approach to research design, methods and data analysis. The chosen methods offer a complementary way of analysing evidence utilisation and negotiation in a mega-project. Secondary documents such as policy papers and media stories provided a chronological record of events prior to and during the empirical research. Then the interviews and scrutiny review provided greater insight into how policy actors frame the case study and how they negotiate evidence with one another through a process of claims-making. In summary, the data included:

- Six pilot interviews
- Eight interviews ranging from one to two and a half hours

- A field note from an observation of a community meeting in Birmingham
- Overview and Scrutiny documents totalling 216 pages
- Over 700 newspaper articles sourced from Google Analytics
- Over 280 policy documents published on the HS2 Ltd website
- A number of research papers and reports; and
- Several hundred tweets from Twitter accounts associated with the HS2 project

The chapter also documented and justified the specific details of the research methods used.

Purposive sampling was used for the interviews because it was the most appropriate means of interview selection. Choosing participants that had experience and knowledge of the case study resulted in valuable data. The interviews were all conducted face to face bar one because of their availability and the questions they were asked derived from the research questions. The process of data analysis has also been explained. By setting out the research design in detail readers are able to check the validity and reliability of the work. The next chapter provides an in-depth overview of the case study High Speed Two.

# **Chapter 7**

## **The Framing of High Speed Two**

### **7.1 Introduction**

This chapter employs frame analysis to examine the ways in which policy actors within HS2 frame and reframe the policy debate and explores the impact this has on the types of evidential resources they draw on. It tells the story of the policy through frame conflict as a notional lens in order to answer the research question: *How do actors within HS2 frame the policy problem?* The majority of actors within HS2 accept that there is a capacity issue on the current rail network; the conflict arises because they have different ideas and beliefs about how the goal of increasing rail capacity should be achieved. Since 1995 there has been an increase in rail passenger growth every year. Railways all over the UK are considered to be under pressure with parts of the WCML almost at capacity in terms of the number of trains it can carry as well as passengers. Rail capacity is dependent on two things: how many people each train can carry, and how many trains there are. The WCML is under stress because there is more demand for train services than there are train paths available. Research conducted by Network Rail (2009) suggested that the WCML will be at full capacity by 2024. They claimed that occupancy on the line's commuter trains will increase by 26 per cent between 2011 and 2023 (DfT, 2012). Some in favour of the project have argued that building HS2 is the only viable option to reduce crowding on the current rail network. In order to meet rising demand they claim that there will need to be more trains. Others have suggested there are alternative ways of increasing capacity that does not involve building a new line.

Schon and Rein (1994) identified three main traditions of policy research that have evolved since the 1950s. These traditions contain a view of 'how policy is made, how it ought to be

made, how disputes arise, and how disputes can be settled' (1994:10). The first model, policy science, is concerned with policy choice as its central question. It argues that policy actors are capable of being rational and since World War 2 is considered the dominant approach to theory and practice. We can compare it to the 'linear' or 'knowledge-driven' models suggested by Weiss (1986) and Young et al. (2002) in chapter three which views actors as rational and derives from the natural sciences. The second model of policy research is called 'politics' by Schon and Rein (1994) with the perspective that policy making is a process of political contention and policy outcomes are the products of a competitive political game. Other academics that have written about research models (Weiss, 1986; Young et al. 2002; Monaghan, 2010) also identified a political model in which policy is seen as the outcome of a political process. The model recognises that political imperatives and evidence are central to policy making. The third model that Schon and Rein identified is that of consensual dispute resolution which accepts the political model and 'proposes a theory and practice of mediated negotiation, rooted in a model of economic rationality, for setting policy disputes in such a way as to achieve joint gains' (1994:10). They do not identify the enlightenment model as Weiss and Bucuvalas (1980) and Young et al. (2002) which they consider to be the one that most closely typifies the relationship between research and policy formulation.

These three models share the same assumption: policy makers are rational actors who choose the strategies of political action that they believe to be best suited to the achievement of their ends, which are rooted in their interests. Schon and Rein argued that these models are inadequate for explaining or coping with policy controversies. They claimed that because all three are versions of instrumental rationality, and they cannot explain the intractability of policy controversies. This is why they suggested a fourth alternative framework 'which sees policy positions as resting on underlying structures of belief, perception, and appreciation'

(1994:23) which they call “frames”. They identify policy controversies as disputes in which contending parties hold conflicting frames. A party’s framing of an issue shapes their policy decision; determines what they consider evidence or facts to be, and what arguments they take as being relevant and persuasive. These frames are tacit which means that they are exempt from conscious attention and reasoning. This empirical chapter utilises the HS2 debate as a case for understanding how policy actors engage in framing to persuade their audience to accept their point of view on contested issues. The reason for choosing this example is because proposed mega-projects frequently give rise to prolonged disputes between actors. Within a mega-project it is inevitable that there are a wide range of actors with a number of different values and opinions about why the project should be built, what its purpose should be and how it should be delivered. These actors also bring different expertise to the project and levels of understanding vary.

In chapter three the differences between a policy disagreement and a policy controversy were discussed. A policy disagreement indicates differences between parties that can be resolved by examining and evaluating scientific evidence and a policy controversy refers to gaps between parties that cannot be solved solely by appealing to data (Schön and Rein, 1994). Policy controversies emerge where mutually incompatible policy frames compete to define a given issue and to dictate the policy responses to it. They are considered immune to resolution by appeal to the evidence and tend to be obdurate, long-term and are rarely resolved. Frames affect conflicts by determining how people define issues and they influence preferences for dispute resolution. For example, a person’s frame within HS2 influences their preference for how to solve the capacity issue on the current rail network. HS2 can be considered a policy controversy because it is a long-term debate and one that has so far eluded resolution. It is highly polarised and involves a complex array of stakeholders. The

first section of the chapter explains why HS2 is considered a policy controversy rather than a debate as distinguished by Schon and Rein (1994). The second part of the chapter focuses on how policy actors have framed the controversy followed by an in-depth review of the evidential resources that they draw on. The purpose of this is to identify whether or not policy actors of certain frames rely on particular types of evidence which they will then use to make claims.

## **7.2 A new high speed line on the political agenda**

The emphasis of early feasibility studies for a new high speed line between 2001 to 2004 was that a new railway line would need to be constructed in order to meet demand on the current West Coast Main Line (WCML). However, the Labour Government at the time chose not to pursue this particular policy. The Eddington report (2006) assessed all modes of transports and concluded that although investment in high speed rail was recommended, it did not suggest that a high speed rail link would be the most cost-effective option to obtain higher capacity on the rail network and therefore should not be built. It was not until 2007 that the Labour Government acknowledged the findings of a proposal from Greengauge 21<sup>21</sup>, led by Jim Steer, for High Speed Two. It evaluated options for high-speed rail in the UK and recommended an £11 billion route from London St Pancras and Heathrow to Birmingham and the North West, which they christened 'HS2'.

Whilst one report recommended a new line be constructed, in July 2007, the Transport Secretary at the time delivered a white paper on the future of the railways (<http://webarchive.nationalarchives.gov.uk>). The report outlined the government's strategic plan for the railways until 2037. It overlooked high-speed rail options, the government opting

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<sup>21</sup> Greengauge 21 was established in 2006 as a not for profit company with an interest in HSR. The company seeks to carry out research and bring forward evidence so that a full and open debate on HSR can take place.

instead for "further study" stating that freight lines were too expensive. What these studies tell us is that there were mixed opinions about whether or not a new high speed network was viable or cost-effective and if it would solve issues on the current rail network prior to the decision to proceed with HS2. This means that whoever was involved with deciding to construct HS2 believed that it was the most suitable option. What we may never know is their underlying motivations for proceeding. They may have genuinely believed that it was the best option or they may have wanted to leave a legacy and be known for building the biggest transport mega-project in years. Either way, from reviewing the literature it is clear that the main driver for research within these studies was to increase capacity on the current rail network.

A key event occurred in 2008 when Parliament approved the Climate Change Act (2008). It established the 'world's first legally binding climate change target' stating that they 'aim to reduce the UK's greenhouse gas emissions by at least 80% (from the 1990 baseline) by 2050' ([www.gov.uk](http://www.gov.uk)). This is significant within the HS2 debate because this Act required Governments to reduce their carbon emissions. One of the ways in which they could do this is to reduce the amount of freight on our roads by transferring it to rail. The current rail network is unable to increase freight use due to lack of capacity and building a new line may resolve this issue. This Act was shortly followed in 2009 by the publishing of a study by Greengauge 21 into high speed rail which was far more extensive than other proposals and it called for a full, integrated high-speed network totalling around 1500 kilometres. On the 11<sup>th</sup> March, 2010, a high speed rail link from London to the Midlands and the North was announced by the government based on suggestions made in the 2009 Greengauge 21 study. It is unclear whether or not the Climate Act acted as a catalyst for the project or the decision to build HS2 was already taken and it added support for the decision.

### **7.3 Framing and reframing within HS2**

This section identifies the most documented ways in which the debate about HS2 has been framed by those involved that are for and against the project. It does this by firstly exploring the ways in which those for the project frame the controversy including a discussion about the types of evidential resources they draw on. Then the way in which those opposed to the project is explored. The purpose of this is to investigate whether the way in which a person frames a debate impacts on the types of evidential resources they draw on and the claims they make within the policy process.

#### **7.3.1 Economic-developmentalism**

Although increasing capacity has been the dominant argument used by those in favour of HS2, for some individuals the secondary arguments or supporting claims are centred on economic growth, productivity and competitiveness. They claimed that constructing the new high speed network will lead to almost 25,000 full-time jobs being created (Temple ERM, 2013) with other published analysis estimating that HS2 will create 50,000 jobs at its peak (Greengauge 21, 2013). Both studies relied on alternative methodologies to reach their estimations. Another economic argument presented by those in favour is that the new high-speed line will bridge the perceived economic divide between the north and south of the country. The North-South divide refers to the cultural and economic differences between the South of England, in particular the South East, and the North of England. It has been argued that the gap between the two areas in terms of life expectancy and economic trends has grown to the extent that they are almost separate countries (The Economist, 2012). A report published by KPMG in 2013 entitled 'High Speed Two Limited: HS2 Regional Economic Impacts' suggested that the Midlands and the North of England will benefit more than

London from the project (HS2 Ltd, 2013b). The report estimated that the total annual productivity impacts for Great Britain in 2037 after investment in HS2 (2013 prices) will be £15 billion (HS2 Ltd, 2013b). Their analysis concluded that ‘the productivity benefits accrue to all regions, with strong gains in the Midlands and the North. Though Greater London does well, it is not at the expense of everywhere else. Areas outside Greater London and the Phase Two city regions account for around half of the total forecast increase in Britain’s economic output’ (HS2 Ltd, 2013b:56). Their findings show positive effects on the North of England, however, the conclusions are based on a wide range of assumptions as planning of Phase 2 of the project is yet to be finalised.

Initially one of the key arguments put forward by those in favour of the project was the value that decision-makers should place on time-saved by using high-speed trains to reduce journey times. They claimed that the value these decision-makers should place on time-saved should be high based on the assumption that business travellers did not work on the train. By reducing time spent on the train it was suggested that people could spend more time working. It did not take into account the increase in use of mobile phones and laptops and availability of Wi-Fi on trains that meant more and more people are now able to work whilst on trains. In the early development of the project, research focused on journey time savings. HS2 Limited claimed that ‘by applying the values of working and non-working time...we calculate the average benefit to each rail passenger between London and the West Midlands region at around £6.70 per trip in 2009 values and prices as a result of the journey time savings’ (HS2 Ltd, 2011:8). However, by 2013 documents published in favour of HS2 mentioned that journey times will be reduced but do not emphasise it as being one of the key arguments for building the new high-speed line. This is partly due to increased criticism by those in opposition about what the value for time-saved should be. This can be identified as what Rein

and Schon referred to as reframing. Reframing is the ‘process of changing the way a thought is presented so that it maintains its fundamental meaning but is more likely to support resolution efforts’ (Sprangler, 2003).

These examples indicate that there are a number of arguments framed around economic growth which the thesis labels as the **economic-developmentalism** frame. This means that framing of HS2 is concerned with economic growth, productivity and competitiveness constitutes the foremost and single-minded priority. Their arguments attempted to show that by building HS2 certain areas will see an increase in the economic output and more jobs could become available to residents. Those who have framed the issue of HS2 in this way tend to have business interests. Examples of groups considered to be economic-developmentalists include the Birmingham Chamber of Commerce, Atkins, KPMG, Arup and Marketing Birmingham. They do not focus as much on the environmental impact of the project but prefer to frame the issue in a way that shows HS2 as an opportunity for growth and claim that if it is not built that the UK economy could become stagnated, therefore, the only solution is to build HS2. The evidential resources that these actors usually rely on consist of forecast models and estimations. Historically, demand and growth forecasts for large infrastructure projects have been inaccurate (Flyvbjerg et al., 2003) so depending on these for evidence may not be the best support for their claims. Some of the problems associated with ex-ante appraisal include problems with modelling, anticipating the future and behaviours and using methodologies with large elements of subjectivity. In particular, cost benefit analysis which may include putting monetary values on things which are not bought or sold such as travellers’ time or loss of landscape.

### 7.3.2 Ecological Modernisation

There are also a number of actors within the policy debate of HS2 who are less concerned with the monetary benefits the new high speed line could bring and more concerned about having the ability to connect smoothly and efficiently across the United Kingdom. They are particularly interested in promoting sustainable development as a central story line with the emphasis being on how areas can be regenerated and existing structures improved by constructing HS2. The concept of sustainable development is an approach to development ‘that looks to balance different, and often competing, needs against an awareness of the environmental, social and economic limitations we face as a society’ ([www.sd-commission.org.uk](http://www.sd-commission.org.uk)). It does not just focus on the environment; it is about ensuring a strong society that meets the needs of people now and in the future whilst promoting wellbeing and inclusion. Living within ones environmental limits is one of the central principles of the concept. An implication of not doing so is climate change. Following the Climate Act, 2008, placed a duty on the Secretary of State to reduce greenhouse gas emissions by 80 percent below than the 1990 baseline by 2050 there has been a focus on these targets in related policies to meet the reduction targets. This has had an effect on transport policy in the UK which has led to an interest in projects that will either be carbon neutral or reduce greenhouse gas emissions. Some of the ways in which they suggested this can be achieved is to reduce domestic air travel, provide better public transport options for the public and to reduce the amount of freight on our roads. Promoters of HS2 argued that the new rail network ‘can be part of a low carbon transport system in the UK that will allow us to meet the climate change targets established in the Climate Change Act’ (HS2 Ltd, 2013b). They claimed that HS2 will free capacity on the WCML thus creating more capacity for freight which will reduce road use. They also claimed that HS2 will reduce domestic air travel as it will provide an alternative and fast way to travel between certain cities. They went on to argue that those

opposed are merely ‘NIMBYs’ (not in my back yard) who are basing their arguments on environmental impacts when instead they are concerned about the effect the line will have on their house prices (Dominiczak, 2014). This frame has been labelled **ecological modernisation**.

Examples of groups that adopted this frame include some local authorities such as Birmingham City Council, the Campaign to Protect Rural England, the Royal Society for the Protection of Birds, and the Campaign for Better Transport. Framing the issue in this way has led to these groups pursuing evidence that suggests HS2 will support sustainable development and improve our living environment. In September 2013 the Birmingham Economy & Jobs and Transport, Connectivity and Sustainability Overview and Scrutiny (O&S) committees joined together to undertake a joint review entitled ‘**High Speed Two: Maximising the Impact for Birmingham**’. The key lines of enquiry focused on exploring how Birmingham and the West Midlands could maximise the benefits available from the project such as opportunities related to sustainability and the natural urban environment as well as design, heritage and culture. They also investigated not only this project but how plans for other local transport links could benefit and develop from HS2. Their evidential resources came from a number of different sources submitted to them in the form of two ‘Evidence Packs’ which were used in scrutiny meetings. Within the responses there was a great deal of economic data which did not necessarily answer the lines of enquiry. Some responses contained expert opinion and the smaller groups referred to local knowledge and design studies. One group that presented evidence is the Campaign for better Transport. It is considered one of the leading authorities on sustainable transport. They argued that the ‘Government’s plans for High Speed rail can help meet carbon emissions targets - but only if supported by a set of bold policy initiatives which are not currently in place’

([www.bettertransport.org.uk](http://www.bettertransport.org.uk)) and it must be part of a wider transport strategy. Other actors within this frame included Kathryn Moore, a professor of landscape architecture from the Institute of Art and Design at Birmingham City University. She published a report that investigates what the opportunities are with HS2 for landscape, spatial development, conservation and urban regeneration. The report synthesised three studies:

- HS2LV: REINVENTING THE REGION, a spatial, conceptual proposal devised over 18 months to transform what is in effect, a singular, linear engineering project into an iconic landscape infrastructure (see attached proposal note).
- The forthcoming article “How can new and redeveloped stations on the UK’s proposed HS2 line add value to the surrounding landscape?” (Moore, 2014), published in the 2014 Annual Report for “Railway Terminal World” (available Nov 25<sup>th</sup> 2013); and
- DVD HS2LV REINVENTING THE REGION (produced by Arup and Kathryn Moore, October 2012)

(Birmingham City Council, 2013:1)

The evidential resources that this frame draws on are rather varied. This is because they are concerned with both the economic aspects of the project and the environmental ones. They claimed that the project should be designed and built but it should be done so in a way that is considerate of the surrounding landscape and not at its expense. Not only did they cite some of the same arguments as the economic-developmentalists, they also presented claims that indicate the project will have a positive effect on the environment by providing regeneration to areas and value to spaces near to the train line. This means that design and planning studies as well as environmental impact data become relevant sources of evidence.

### 7.3.3 Economic Modernisation

There are also a number of actors within the project of HS2 who are keen to promote the new high speed line because they claim the current railway network is in desperate need of modernisation as it is struggling to cope with the pressure of increased capacity. Due to the network being over 170 years old, and being the most intensively-operated railway line in Europe, they claim that the old infrastructure cannot cope with the increasing demands on it and that modernising our infrastructure with a new high speed line is the best solution (HS2: The People's Railway, 2013). The empirical data indicates that people with a career in the rail industry are most likely to adopt this frame which in this research is labelled **economic modernisation**. They framed the debate in a way that emphasises the economic benefits as the previous frames do but also stress that there are a number of other benefits to be gained from constructing a new HSR network such as 'catching up' with our competitors and becoming leaders in HSR. They also claimed that it is an opportunity for new technology to become part of our ageing transport infrastructure which relates to the modernisation part of the frame. When interviewing actors that have framed the debate in this way they all recited their experience of dealing first hand with the pressures of an ageing rail network. For example, one interviewee said that:

*'we have a rail network that was built by the Victorians, we need to move with the times and realise that it isn't going to work forever. We need a new line'*

(Interviewee 5, retired engineer)

They argued that a culmination of things have led to the need for a new high speed line such as privatisation in the 1980s, the closing of several train lines and a lack of funding being spent on the current infrastructure. Interviewee 7 said:

*'they (the government) privatised the railways in the eighties which was possibly the worst thing they could have done. That and closing lots of the lines, well they need to open some again in my opinion and build some new ones'*

(Interviewee 7, anti HS2 campaigner)

No other group of individuals referred to historical information such as this in order to support their claims. These individuals are relying on their experiences of working within the rail industry as evidence and often refer to passenger ridership figures to stress the urgency that something needs to happen sooner rather than later. Other evidence is often sourced in the form of secondary data from case studies of other countries and their networks. The three countries that are usually referred to include Spain, France and Japan. They are deemed successful by HS2 Ltd in having a high speed rail network that promotes regeneration and development. The HS2 Ltd report that centres its investigation on these three countries refers to them as 'competitors', arguing that the UK is far behind them in terms of rail infrastructure. In 2012 the Rt Hon Justine Greening MP (Secretary of State for Transport) said in a report produced by the DfT (2012c) entitled 'High Speed Rail: Investing in Britain's Future – Decisions and Next Steps':

*'Looking around the world, the evidence is clear – nation after nation is planning, constructing or already using high rail speed lines. High speed rail is transforming their societies and their economies. Self-imposed exile from this new frontier in travel would mean that Britain loses out, while our global competitors gain. We face a straightforward choice. We can take the short-term option – leaving our rail networks over-stretched and over-burdened and risk paying the price in lost business, lower growth and fewer jobs. Or we can*

*take the long-term option – investing in our global competitiveness and our economic prosperity by pursuing high speed rail. High speed rail can transform our rail network in the same way that the motorways have transformed our road network’*

(DfT, 2012c:5)

The economic-modernisers did not agree with the argument that it is possible to upgrade existing lines and open old ones in order to deal with the capacity issue. They believed that the only solution is to build a new line and that it ‘may as well be’ a high speed one. As mentioned previously, the key issue that all frames centre on is how to increase capacity on the current rail network, in particular, on the WCML. All policy actors within HS2 agreed that there is a lack of capacity but they had different beliefs about how we should solve the issue. Economic-developmentalists and economic-modernisers preferred to discuss the economic benefits that can be gained from increasing capacity on the current network. They see the ‘existing capacity of our transport networks as a significant inhibitor of demand’ (HS2 Ltd, 2013:11). The ecological-modernisers tended to cite arguments based on the benefits of improving connectivity between major cities when discussing capacity. Now the chapter focuses on the frames that are against HS2.

#### **7.3.4 Eco-centric Environmentalism**

There appeared to be two main groups of actors that were opposed to the project: those that are concerned with the negative environmental impact the project may cause and those that claim HS2 is not the most economical way to increase capacity on the current rail network.

The frame that centres on an environmental point of view in this research is labelled **eco-centric environmentalism**, in other words, the conservation of nature. It has been argued

that ‘seven Sites of Special Scientific Interest (the very best of our wild places), three

Wildlife Trust nature reserves, 66 Local Wildlife Sites and 25 proposed Local Wildlife Sites

are all directly affected and will be damaged or destroyed by the line for Phase 1 between London and Birmingham. A further 92 wildlife sites are indirectly affected' (<http://www.wildlifetrusts.org/hs2>). These figures do not include the expected number of wildlife sites damaged by phase two of the project. Eco-centric environmentalists argued that the economic benefits of constructing HS2 do not outweigh the negative effects it would have on the environment and that these natural habitats and unspoilt ecosystems are irreplaceable. They also argued that the project will not reduce carbon emissions as suggested and that it will create a great deal of noise pollution. HS2 Ltd published their 'Environmental Impact Assessment' in 2013 which was required by law and Parliamentary rules to accompany the Hybrid Bill. HS2 Ltd's aim is to ensure that, during construction of the project significant adverse environmental effects will either be avoided or mitigated.

Unsurprisingly, groups that framed the debate in this way are often environmental or wildlife groups as well as people concerned with the conservation of particular heritage sites.

Examples include the Chiltern Society, the Wildlife Trusts and English Heritage. For these groups, evidential resources often come in the form of visual aids and secondary data analysis. Supporters of HS2 have already declared that the project will take a particular route so these groups are tasked with identifying what will be affected by the new train line. They do not have to spend a great deal of money on research in order to demonstrate what the negative environmental impacts will be. What they must do though is have the ability to persuade others that we should value the environment more than expected economic benefits. Local residents along the proposed route of HS2 also tended to adopt this particular frame in order to shape arguments and claims as this is the most accessible for them. They are unlikely to gain support for arguments based on self-interested reasons such as depreciating house prices and so must adopt a way in which to frame their disagreement that will persuade others

to frame the issue in the same way. For these people, evidential resources come in the form of local (and tacit) knowledge. In interviews they stressed that they wished to conduct their own research but that they just could not afford to:

*'There are some things on which we wouldn't mind doing that like we wouldn't mind commissioning our own noise studies which we don't believe the HS2 limited ones but so far we haven't found the money to do that or indeed the expertise I mean I'm sure we could but...'*

(Anti HS2 campaigner, interviewee 1)

In regards to issues of the environment and HS2 local residents are at less of a disadvantage in terms of evidential resources. They had local knowledge of their areas that they can draw on as well as the evidence base of environmental groups and the impact of infrastructure projects. Although much of the scientific and technical data is specific to HS2, the environmental impact of the project is not dissimilar to other large infrastructure projects. The train line will cross through a number of ancient woodlands and wildlife habitats and this will have a negative impact on the environment. The only defence that HS2 Ltd and their supporters can use is that they will try to minimise the negative environmental impact. This is potentially why many of those opposing the project adopted the environmental discourse because it is the one that they can most easily defend and the evidential resources are more accessible and persuasive.

### **7.3.5 Economic-environmentalists**

Another frame identified within the empirical data has been labelled **economic-**. These actors were concerned with not only the negative environmental impacts the project may have but they also argued that the best way to solve the capacity issue is to improve existing train lines

and not build a new rail network. They based this on both economic and environmental arguments. These actors claimed that the forecasts for future demand on our railways can be met by lengthening trains, decreasing the number of first class carriages and increasing the length of train platforms. They have relied heavily on the research conducted for other high speed rail projects which they consider to have been not so successful as well as critiques of evidence that supports the project such as the report entitled 'High Speed Fail' (Hawkins, 2011) and the Institute of Economic Affairs report entitled 'The High Speed Gravy Train' (Wellings, 2013). Both these reports took data produced by HS2 Ltd and attempt to find faults with the economic modelling and the methodologies used. By decreasing the expected benefits of HS2 they were able to argue that updating the current railways will be adequate to solve the capacity issue. They also referred to lesser known research reports that are concerned with the viability of re-opening old lines. In the 1980s and 1990s several train lines were closed but could still be operational if re-opened. They believe this, combined with the upgrading of existing lines, will meet the demand for extra capacity. Whilst those in favour argued that demand will continue to increase, economic-environmentalists claimed that demand will only increase for a few years and then it will remain the same because less people will use public transport and travel for work. Just as those arguing in favour rely on international case studies as evidence for successful HSR projects, economic-environmentalists also refer to these case studies but interpret them in different ways due to their framing of the issue and claim that they have been failures, rather than success stories. The empirical data indicates that there is one main account of what the problem is (lack of capacity) and a number of different solutions that are warranted. Whether or not a new train line is needed has been at the centre of this debate. From Schon and Rein's (1994) definition it is clear that the case of HS2 can be categorised as a policy controversy. This is because in a policy controversy, two or more parties contend with one another over the definition of the

problem and vie for control of the policy-making process. Typically, these actors enter into the process on the basis of their interests in the policy situation. For example, companies such as KPMG and Atkins may be attracted by an opportunity for profitable development and local residents along the line of route may be concerned about the effect on house prices that the project may have. Each frame has constructed its view of social reality through a process of naming and framing. They described what is wrong with the present situation of capacity on the current rail network in such a way as to set the direction for its future path. From a problematic situation that is rich and complex such as HS2, each frame ‘selects and names different features and relations that become the “things” of their story’ (Schon and Rein, 1994:26). This thesis also focuses on whether different groups or frames use different types of evidence to supplement arguments. The types of ‘evidence’ that were presented to support various claims were categorised into a number of different groups. They included statistical or numerical data which comprised presentations of numeric data or other statistics including mentions of statistical analyses such as passenger ridership figures. Economic models include mostly cost benefit analyses and demand/growth forecasts. Anecdotal or personal experience included evidence offered in the form of personal narratives, whereas prior experience with a particular area such as the rail industry or engineering industry was intended to capture discussion of an experience from a career perspective rather than a personal experience. Study results captured non-specific mentions of studies and their results and expert opinion refers to any time another actor was referred to as being a credible source of information. Below is a table that identifies the main features in each of the frames that are composed from interview transcripts as well as the evidential resources that they refer to:

	<b>Economic developmentalism</b>	<b>Ecological modernisation</b>	<b>Economic modernisation</b>	<b>Eco-centric environmentalism</b>	<b>Economic environmentalism</b>
<b>Features</b>	Capacity, growth, connectivity, speed, competitiveness	Capacity, connectivity, regeneration, sustainable development	Capacity, modernisation, technology, competitiveness	Capacity, conservation of the environment	Capacity, alternatives, growth, sustainable development
<b>Evidential resources</b>	Statistics, numeric data, economic modelling, expert opinion, study results	Environmental study results, Statistics, numeric data, economic modelling, prior experience of regeneration and sustainable development	Statistics, numeric data, prior experience of working in the rail industry	Anecdotal/personal experience, environmental study results  Counter-claims to the numeric data of economic developmentalists	Statistics, numeric data, environmental study results, expert opinion (primarily engineers and rail industry workers)

(Table 4: Frame features and evidential resources they draw on)

These are not the only types of evidence and features within each of these frames, however, they were the most documented for each group as identified in the empirical data. The vast majority of evidence used by frames in favour of HS2 is used to support scientific, economic, and implementation claims. Those with a background in economics preferred statistical and numerical data. Organisations, in particular HS2 Ltd, have produced a disproportionately large amount of the evidence that is cited within this case study. They have access to funding, resources and expert advice which has meant they have been able to conduct research to produce evidence that is specifically centred on this project. Those against HS2 relied primarily on personal stories and anecdotal experience as evidence. They referred to local knowledge of the area in which they live to highlight the negative environmental impact the project could have. In terms of statistical, numerical data and study results they were limited in resources. There are only a small number of documents published that criticise the economic data presented by those in favour which are mostly written by economists that disagree with the methods and approaches used in the economic models. These are

considered to be primarily made up of counter-claims rather than new ones. Opposition groups also depend on referring to case studies of other countries that have high speed rail and have selected evidence that suggests it is not very successful. This put the opposition at a disadvantage in terms of evidential resources. However, it has not stopped these opposition frames from making any less claims and arguments than those in favour of the project. They have received just as much, if not more media coverage throughout the process and have also been allowed to attend Select Committee meetings in order to petition against the project.

In the dominant school of policy studies, evidence is seen as a tool for grounding policy in fact and reason and guarding against the political agendas of policy actors (Banks, 2009; Stoker, 2010). Within framing theory, the role of evidence is to legitimise the claims being presented by the policy actors and shape public consciousness about the issue of capacity. This view is in disagreement with the evidence-based policy making model that suggests actors seek evidence to make better informed decisions. What the interview data from the case study has shown is that these frames are resistant to refutation by appeals to evidence. Almost all of those interviewed that did not support the project made it clear that they did not accept the majority of evidence being presented by those in favour and attempted to either discredit it or dismiss it as being irrelevant. They went as far as accusing HS2 Ltd of lying in order to persuade their audience:

*'...they lie, they deceive, they're economical with the truth, they're not straight forward'*

(Anti HS2 campaigner, interviewee 1)

A person may not be intentionally dishonest; they may simply be interpreting data differently to another person. As Schon and Rein argued, 'those who construct the social reality of a situation through one frame can always ignore or reinterpret the "facts" that holders of a second frame present as decisive counter-evidence to the first' (Schon and Rein, 1994:30).

Evidence is not objective, it is subjected to interpretation by competing frames and it is possible as we shall see in the next chapter for one frame to reinterpret “facts” and present a counter claim that is supported by the same evidence.

A frame impacts on the types of evidence a person relies on. However, from analysing this case it appeared that resources are a more significant factor. Those against the project were at a disadvantage in terms of finance and access expertise which means they were unable to produce as much evidence as those in favour of the project. This did not appear to weaken their argument or lead to them presenting fewer claims in the policy process. A comparison of the process of production and the framing of the initial policy problems suggests that evidence plays an important role in problem-framing. The analysis presented here suggests that evidence has little bearing in situations where there is frame conflict amongst different policy actors and communities. A policy solution is likely to ‘make sense’ to most interested parties provided they share a common diagnosis of the problem. The role of evidence, then, is not to fix or solve policy problems, as rational-actor policy models suggest. Instead, its role is to help construct a common ‘frame’ through which meaning is applied and resolution sought. Although much evidence has been used throughout HS2, it has been done so selectively. It appears that what each side sought was a warrant and backing to strengthen its own case. In situations of frame conflict between policy communities, the political stakes are higher and policies become politicised. In these situations, evidence is more likely to be used selectively for political gain than might otherwise be the case in less contested policy domains.

#### **7.4 Conclusion**

This chapter examined the ways in which policy actors within HS2 frame the debate by identifying a number of different frames and their features. By focusing on the evidence that is presented by each frame it is possible to make some inferences about the inclination of

particular frames to particular types of evidence. For example, those who frame the policy in an economic-developmental way tended to select numerical and statistical data. Whereas those opposed to the project that live along the line of route selected anecdotal and personal experience. This may be due to their paradigmatic approach but it is more likely that it is due to their resources. Those opposed stressed in their interview that they wanted to conduct empirical research that consisted of numerical data but they did not have the funding. This desire to produce quantitative data suggests that within policy-making quantitative data is considered more valuable than local knowledge. The most important finding from this research so far is that it appears the quality of evidence is not as important in the policy-making process as some models would like us to believe such as the evidence-based policy making model. What matters is whether or not the evidence is in agreement with the frame of an actor and their argument. Those opposed to the project are unwilling to accept the cost-benefit analysis of the project that suggests the economic benefits outweigh environmental damage it will cause because of the value they place on the landscape. So the decision-making process is not about finding the highest quality evidence to support decisions which legitimises them; it becomes about who is better at presenting a believable argument that will persuade others their claims are more agreeable. The next chapter uses Toulmin's model of argumentation to deconstruct some of the key arguments within HS2 in order to identify the evidence and claims. From this deconstruction it then explores how the evidence is negotiated with other actors through a process of claims-making. This involves considering what environments they negotiate with one another in, what outlets they use to present claims and in what way.

# Chapter 8

## Negotiating the evidence through a process of claims-making

### 8.1 Introduction

In the previous chapter different frames utilised by policy actors within HS2 and the effect that these frames have on the types of evidential resources these actors draw on were identified. This chapter focuses its attention on the way in which these forms of evidence are negotiated through a process of claims-making. Firstly, Toulmin's refined model of argumentation is used to deconstruct a number of key arguments put forward by those in favour and those against the project. The purpose of this was to demonstrate the justification for the alteration made to the model in the theoretical chapter. Also it supports the argument that claims-makers select and interpret evidence rather than accepting it at face value as Toulmin suggests. In other words, evidence is a tool for both legitimising claims and decisions and persuading an audience that a particular course of action is the most suitable. The claims that the model is applied to are as follows:

<b>Claim 1</b>	<i>There is insufficient capacity on the current rail network to meet demand</i>
<b>Claim 2</b>	<i>High Speed Two will create over 50,000 jobs</i>
<b>Claim 3</b>	<i>HS2 will generate significant carbon benefits</i>
<b>Claim 4</b>	<i>Improving the current network will meet demand so there will be sufficient capacity</i>
<b>Claim 5</b>	<i>Building HS2 will not bridge the North/South divide</i>
<b>Claim 6</b>	<i>HS2 will cause overwhelming and irreversible damage to the environment</i>

(Table 5: Claims addressed in chapter)

Secondly, the chapter explores how evidence is negotiated between claims-makers in different policy environments. Data was gathered from the community meeting in Castle Vale, interview transcripts, news articles from Google Alerts and the scrutiny review conducted by Birmingham City Council. This provides a number of different arenas in which policy actors must select evidence in order to present claims. A feature of the framework that enriches our analysis of this case study and the policy process in general is the recognition of an audience. A good claims-maker will have mastered the art of appealing to a range of audiences, shaping and presenting their evidence in a way that best suits their audience. The concept of evidence-based policy making does not acknowledge the role of humans in this sense. For example, if HS2 Ltd have to present their case to policy makers they are likely to emphasise the economic benefits of HS2 and present rigorous, quantitative evidence. If they were at a public meeting where residents affected by the high speed rail link were in attendance then they would be more likely to present claims and evidence that appeal to this audience. So it is not necessarily about having the ‘best’ evidence, it is about whether or not actors are able to appeal to their audience and persuade them of their case. By exploring a number of different environments some conclusions can be drawn about the difference in audiences and the effects they have on the way in which actors present claims and the evidence they refer to. Some conclusions are also made about the nature of evidence within transport mega-projects, in particular, the planning stages.

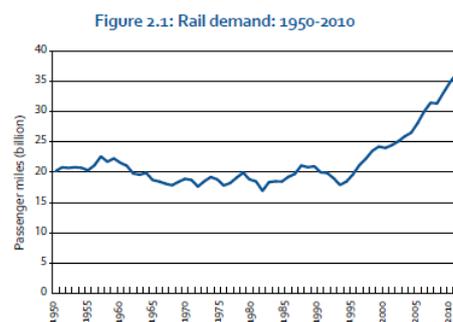
## **8.2 Deconstructing the arguments**

### **8.2.1 Supporting claims for HS2**

There are several arguments that have been presented by those who are in favour of HS2. The first claim presented is:

*There is insufficient capacity on the current rail network to meet demand*

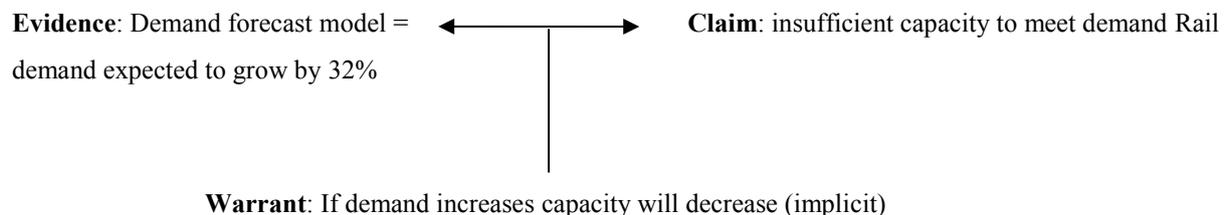
This claim is considered as being probably the most important in terms of justifying why a new high speed network should be built. As mentioned in the previous chapter the key issue for this policy is the perceived lack of capacity on the current rail network and the action that should be taken to solve the problem. Those in favour of HS2 were tasked with convincing their audience that building the new high speed line was the only viable solution. The evidence that they cited for this claim was to show firstly that there is indeed a capacity issue on the current network. They used passenger figures provided by the rail industry which provides a comprehensive database of every ticket sold, which allowed them to identify the station of origin and station of destination of the ticket, to determine whether this number has risen each year:



Estimated Rail Demand 1950 – 2010 (HS2 Ltd, 2013:15)

This graph demonstrates that rail demand has increased over the past sixty years between 1950 and 2010 based on the database. What they must do is convince their audience that this demand will continue to increase over the next sixty years by using demand forecasting models. These models are ‘used to predict the demand to travel and, in many cases, to assess the impact of these forecasts on the level of service offered by the transport network. They ‘are also used to estimate the impacts of changes in transport networks caused by investment in capacity or decisions about managing demand by means of pricing or other interventions’ (Worsley, 2012:3). There are a number of different models that can be used by analysts to

predict how many people will use the rail network. However, these are predictions and not considered factual. No one can determine exactly what the demand will be. However, those in favour of HS2 had to convince their audience that these forecasts are extremely likely and that ‘the existing capacity of our transport networks is a significant inhibitor of demand’ (HS2 Ltd, 2013a:11). The point being made is that the evidence is being interpreted to suit the claims-maker in this instance and they are choosing evidence that supports their claim. They are ignoring available evidence that suggests there is an alternative solution to solving the capacity issue on the WCML. If we were to apply the refined model of argumentation to this, it would be as follows:



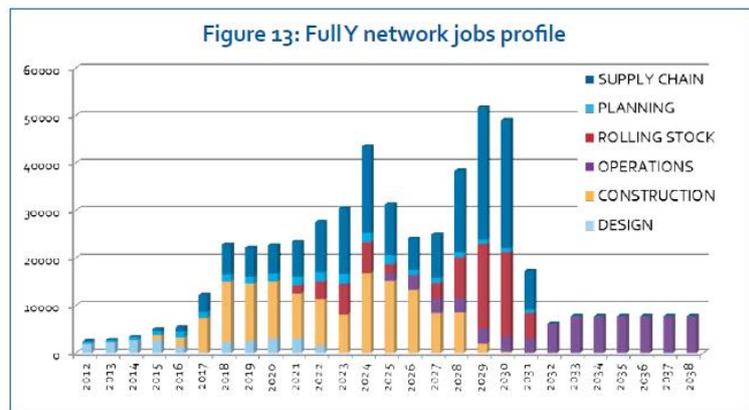
Each element of the model is identified. It shows that the evidence is interpreted in order to make the claim by introducing another arrow to the model. The claim is based on the assumption that rail travel will increase. As mentioned previously, actors within HS2 do not disagree that there is a capacity issue; they disagree on how much rail demand will increase by and the solution to the problem depending on the way in which they frame the issue. This can be considered a policy controversy because two or more parties are contending with one another over the definition of the problem and are vying for control of the policy-making process. Therefore it becomes a process of argument in which competing sides must convince their audience that their chosen resolution is the most agreeable.

The next claim that the chapter explores is concerned with the expected number of jobs that the project could generate. An economic argument in favour of the project was based around the claim that building the new train line will create a large number of jobs. They argued that

there will be a number of employment opportunities during the construction phase and once the line is built there will be permanent jobs to maintain the train line and stations. One such claim (2) that was highly cited by these actors is as follows:

***High Speed Two will create over 50,000 jobs***

Estimates released in 2013 by HS2 Limited indicated that they believed while HS2 is being built it will create 24,600 full-time construction jobs and that other published analysis, using alternative methodologies, have estimated that, at its peak, HS2 will create 50,000 jobs, as illustrated in the graph below:

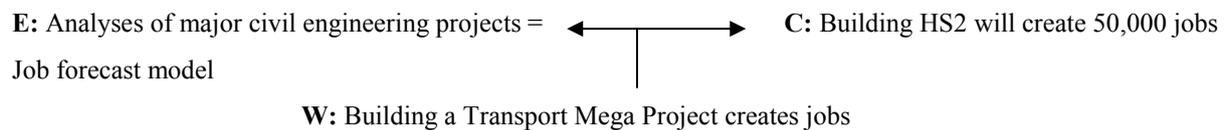


Expected number of jobs created by project (HS2 Ltd, 2013b:29)

The approach used here has been to estimate job calculations from ‘bottom up’ principles wherever possible. Detailed relationships have been developed between cost budgets, physical outputs, wage rates and employment, by type of job and skill level, drawing on a number of evidence sources and ‘coalface’ industry expertise. This includes the National Skills Academy for Railway Engineering’s published work on jobs and skills in the railway industry, as well as benchmark evidence from other High Speed Rail projects, including HS1 and TGV. The approach work and outturn results were reviewed by Industry Leaders Group<sup>22</sup>

<sup>22</sup> UK companies brought together to create a ‘centre for excellence’ for high-speed rail. Some members include RIA, Atkins, Bechtel, Carillion, CH2M Hill, Parsons Brinckerhoff and Siemens.

(ILG) member organisations and been refined in light of such. Once again, similarly to cost-benefit analyses, these job calculations are merely estimates of potential jobs that may be created if the project goes ahead. Different methodologies would produce different conclusions because they include different factors and the weight that they give to these factors varies. Opposition to the project selected different sources of evidence and argued that HS2 will end up ‘destroying more jobs than it creates’ (Gilligan, 2013). So once again these actors must persuade their audience that their arguments are the most convincing through selecting particular supporting evidence. The refined model according to the Toulmin might look like so:



As mentioned in the previous chapter, ecological-modernisationists were concerned with sustainable development and potential environmental benefits that the project may create rather than focusing on the possible economic benefits. Although the project was not designed with the intention of reducing carbon emissions (Environmental Audit Committee, 2014), because of the Climate Act 2008 there has been a focus on the environmental impact the project will have. HS2 Ltd set up a low carbon focus group to ‘explore sustainable construction options and to help define HS2 Ltd's design approach to ensure efficient delivery, innovation and the realisation of carbon savings’ (HS2 Ltd, 2013b:48). In 2011, the Transport Select Committee concluded that ‘at best, HS2 has the potential to make a small contribution to the Government’s carbon-reduction targets’ (HoC Transport Committee, 2012:54). They argued that it could nonetheless produce less carbon than alternative



These examples of claims in favour of the project all share something in common which is that they are based on a number of assumptions. This is common in the planning and development stage of mega projects (Flyvbjerg, 2005). Rather than acknowledging their assumptions, policy actors within HS2 attempted to convince others that their argument is based on unquestionable evidence.

### **8.2.2 Opposition claims to HS2**

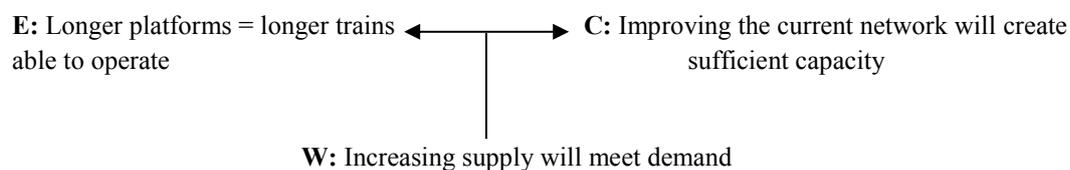
This section of the chapter focuses on the claims presented by those opposed to the project. It presents three counter claims that mirror those above in terms of subject. One claim is about the capacity issue, another is about the economic effects of the project and the third relates to the potential environmental impact of the project. As mentioned earlier, capacity is the key issue within the HS2 debate and both sides have different views about how the problem should be solved. Those in favour believe building HS2 is the only viable solution whereas those against the project believe that there are ways of solving the problem without having to build a new high speed line. They claim (4) that:

*Improving the current network will meet demand so there will be sufficient capacity*

There were mixed opinions amongst those against HS2 as to what the most appropriate alternative should be but they believe these alternatives meet capacity requirements more effectively and more quickly than HS2. An opposition group argued that ‘alternatives to HS2 indisputably more than meet even the Department for Transport’s optimistic rail forecasts and offer a better, low risk incremental option for future investment’

([www.hs2actionalliance.org](http://www.hs2actionalliance.org)). Probably the most commonly cited alternative is Atkin’s development in 2012 known as Rail Package 2. The improvements suggested in this package

were assessed at over twice the value for money of HS2 in 2012. Another option was developed by the opposition group 51M which improved on the DfT’s best alternative. It was called the ‘Optimised Alternative’ and would triple standard class capacity from a 2008 base and only cost a tenth of what the HS2 project would cost. However, those in favour disagreed that this option would create the capacity needed over the next thirty years. This issue of capacity becomes about who is able to better convince the audience that their solution is the better option. This claim would be presented like so in the refined Toulmin model:



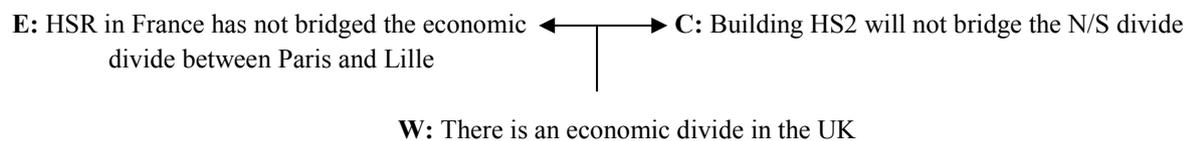
Another claim put forward by those in favour of HS2 was that the project will decrease the perceived economic divide between the north and south of England. They argued that improving connectivity between major cities and reducing journey times will increase economic activity in places such as Manchester and Leeds. However, some people argued that the city that will benefit the most is London and ‘government claims for “transformational” benefits are based on belief, not impartial evidence’

([www.hs2actionalliance.org](http://www.hs2actionalliance.org)). The counter claim (5) presented by the opposition would be as follows:

***Building HS2 will not bridge the North/South divide***

There has been some disagreement between academics about this particular issue over whether high-speed rail helps or hinders deprived regions. The main type of evidence that actors from both sides drew on is to select examples of other HSR countries in which they believed a new high speed line has bridged an economic divide between regional areas. For example, Lille in France is considered to have improved economically since being connected

by HSR to Paris, whereas other cities such as Lyon have seen an increase in unemployment since the TGV line was built which is often referenced by those in opposition to the project (Waddell, 2014). Opposition groups argued that in France, Spain and South Korea the evidence suggested it is capitals that benefit by drawing more wealth to the centre. This could result in Birmingham becoming part of the South East labour market (Tomaney, 2013). Harford (2013) suggested that history does not support the claims being made by HS2 Ltd in terms of regeneration. Once again we see a mixed picture in which both sides of the argument were able to cite evidence from other case studies that suggest different outcomes. If we employ Toulmin's refined model once again this is how the argument could look:



Other evidence that opposition groups referred to in relation to this claim are job creation estimates produced by HS2 Ltd and KPMG. They critiqued the methodologies employed by these groups and claimed that the assumptions made led to over-estimations of the economic benefits that will arise through the construction of a new high speed line. This is one example of many from the data identifying opposition groups challenging the methodologies used and assumptions made by those in favour of HS2. Their goal was to identify weaknesses in their argument because they are at a disadvantage in terms of evidential resources.

What the key issue has been for those opposed to the project is the possible effects that HS2 will have on the environment. It is undeniable that the construction of a new high speed line will impact the environment but the value placed on this differs amongst actors depending on their framing of HS2. Most of those in favour of the project argued that the economic benefits outweigh the environmental costs whereas those against believed the opposite. It is the task

of each side to persuade their audience that their evidence and argument is stronger than their opponent's. Eco-centric environmentalists depended a great deal on local knowledge and expertise as an evidential source. Not only did environmental groups frame the issue in this way, but many local residents that live along the proposed route. They claimed (6) that:

***HS2 will cause overwhelming and irreversible damage to the environment***

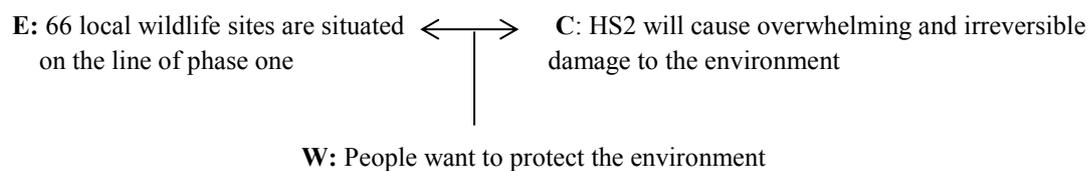
After reviewing the proposed lines of route for phase one of the project opposition groups believed that 'seven Sites of Special Scientific Interest (the very best of our wild places), three Wildlife Trust nature reserves, 66 Local Wildlife Sites and 25 proposed Local Wildlife Sites are all directly affected and will be damaged or destroyed by the line for Phase 1. A further 92 wildlife sites are indirectly affected' ([www.wildlifetrusts.org](http://www.wildlifetrusts.org)). The map below identifies the sites that will be affected along phase one of the proposed line of route:



Wildlife sites affected by the HS2 project ([www.wildlifetrusts.org](http://www.wildlifetrusts.org))

Environmentalists were not satisfied with the environmental impact research that has been conducted by HS2 Ltd and argued that no value has been put on the potential lost output from farming or tourism during the construction and operation of HS2. The value placed on the

countryside that would be destroyed by tracks for HS2 is a mere £1 billion. This is extremely small in comparison to the estimates that suggested ‘HS2 could boost the economy by £15 billion every year’ (DfT and HS2 Ltd, 2013:5). As mentioned above, those in favour of HS2 were unable to argue that the project will not have a negative impact on the environment. Instead they stated that they will do whatever they can to reduce the damage that will be caused. The refined Toulmin model would look like so:



We can see from these examples that High Speed Two is a highly contested policy controversy with little agreement over what course of action should be taken. They highlight how actors can frame an issue differently which in turn affects the evidential resources they use.

The chapter now concentrates on one particular illustration of this by using the case of high speed rail in France. High speed rail was developed in France during the 1970s by Alstom and SNCF (Société nationale des chemins de fer français). The first service opened between Paris and Lyon in 1981 which was followed by the opening of several other high speed lines such as the LGV Atlantique, the LGV Méditerranée and the LGV Rhône-Alpes. There have not been a great deal of protests in France against the building of these train lines apart from some opposition to the construction of the LGV Méditerranée line as environmentalists argued that it was unnecessary. Other complaints have been from residents in towns and villages near the train lines which have led to the SNCF building acoustic fencing along large sections of the LGV to reduce noise pollution. Those in favour of building HS2 viewed France as a success story of high speed rail whereas those against building HS2 argued that it

is no longer successful and we should abandon our plans for a new line. The question then arises of how do these competing sides take the same example and use it as supporting evidence for their argument?

By exploring what evidence they refer to we can see how they have been selective in what they present and how they have interpreted it differently. Below is a table taken from HS2 Ltd's 'International Case Studies Review' (2014) to highlight successful global HSR projects. The French examples indicate that passenger ridership on one line was higher than predicted, that four of France's lines have positive ex-post financial return and that there has been a modal shift from air and road to rail travel. What this table does not include is evidence that suggests the TGV has seen a fall in passenger numbers since the economic crisis of 2008 with operating margins falling from 29% to just 12% in 2013 (Court of Auditors, 2014). It also does not include data that indicates 'most of the lines are running at a loss and even the profitable ones are not earning enough to cover their cost of capital' ([www.theeconomist.com](http://www.theeconomist.com)). It also does not take into account that France is a much larger country than the United Kingdom which means travelling by air between major cities is sometimes preferable in terms of time saved. If we take HS2 as an example, Leeds is currently the furthest city the line will serve which is only 313km away compared to Lyon which is around 500km from Paris. There are few people that currently travel by air between London and Leeds so it is unlikely that there will be a modal shift as great as in France.

Table 2: Measures of success

Measure	Examples of success
Patronage/Passenger use	France has experienced higher than predicted passenger volumes on the Paris-Lyon rail corridor  Japan has experienced a steady increase in passenger use on the Tokaido Line
Commercial viability	TGV Sud-Est, Atlantique, Nord and Interconnexion had positive ex-post financial return and were able to cover operating costs and make a contribution to capital costs  During the Japanese National Railways era, the Tohoku and Joetsu Shinkansen lines were profitable when considering only operation costs, but not when capital costs were included
Modal shift	Figure 3 identifies modal shift on the line from Paris-Lyon (1981-84) and Madrid-Seville (1991-94) from air and road to rail travel.  Modal shift from air to rail has been reported in China, Taiwan and between the Netherlands and France.

### Measures of Success and Examples (HS2 Ltd, 2014:18)

The review of case studies by HS2 Ltd identified Lille as an exemplar of a city which has experienced significant economic growth and regeneration benefits as a result of having a connection to the high speed rail network. The city used its location on the TGV Nord line as a catalyst for major growth (Greengauge 21, 2006) and has transformed from an industrial city in decline, to a business success story. However, opposition to HS2 argued:

*‘The impact of high speed rail in regenerating central Lille has been dwarfed by massive public regeneration funding. This, not HSR, has been the primary catalyst for growth. Moreover, the wider regional impact of the concentration of growth in central Lille has been to accelerate inequalities between Lille and other nearby towns. Further, between 1999 and 2009, the rate of unemployment in Lille actually increased in relation to the rest of France’*

(Geddes, 2015)

Looking at other evidence selected from the French example it is clear that the country is still committed to investing in HSR. There are four extensions to existing lines currently being built which will shorten journey times for a number of cities and there are plans for new lines

to be built by 2030 including the first section of a line from Lyon to Milan. However, a recent Court of Auditor's report suggested that the French network had not reached its promised target for passengers carried (CoA, 2014). It also claimed that no French high-speed line could be said to be covering its total capital investment and maintenance costs. This example highlights the nature of evidence utilisation in the policy process and how actors select relevant data for their claims. The next section explores how they negotiate evidence with one another in different environments.

### **8.3 Evidence negotiation by claims-makers**

#### **8.3.1 The Community Meeting**

Public participation is a key feature in policy decision-making and community forums are often provided by local councils as a way for members of the community to 'meet the people who make decisions that affect the local area; find out more about what is happening to improve the neighbourhood' and a chance for people to have their say 'about plans and changes for services and facilities in the area' ([www.leicestershireforums.org](http://www.leicestershireforums.org)). In recent years public participation has increasingly contributed to policy decision-making (Bickerstaff and Walker, 2001; Martin and Boaz, 2000; Barnes et al, 2003; 2007; Roberts et al, 1999; Rowe and Frewer, 2005). While participation is typically seen as a progressive enabling mechanism, drawing the public and policy makers closer together (Rowe and Frewer, 2005), much of the emphasis is on how decision makers engage the public through participatory mechanisms such as citizens' juries and consultations (Fishkin, 2009). These meetings can provide an opportunity for claims-makers to interact with the public as their audience and attempt to persuade them that their framing of HS2 is preferable. The more support they gain then the less resistance they will face when decisions are made on the Hybrid Bill. The community meeting took place on an evening in December, 2012 in a community building on

the Castle Vale estate in Birmingham. The aim of the meeting as advertised by HS2 Ltd was to involve representatives from the community and HS2 Ltd to:

- *discuss potential ways to avoid and mitigate the environmental impacts of the route, such as screening views of the railway, managing noise and reinstating highways;*
- *highlight local priorities for the route design; and*
- *Identify possible community benefits.*

[www.hs2.org.uk](http://www.hs2.org.uk)

Attendees were invited through their various organisations and an announcement was placed in the local newspaper (Tyburn Mail) which informed residents of the meeting. A number of leaflets were printed to advertise the meeting and were posted through people's doors on the estate. There were around fifty people present in the meeting with over half of this number made up of local residents who had concerns about the project and the negative impact it might have on their area. At the beginning of the meeting it was highlighted by the Chair that the forum was not intended for local residents to attend but for representatives who would feed the information back to them. This angered many of the residents who had attended as they argued that:

*'The meeting, itself, was well attended by residents and it was good to see that level of support and attendance for the meeting. What I found less impressive though, was the statement made at the start of the meeting, by HS2 representative Donovan Bailey, stating that it wasn't a public meeting and should only have been for the community organisation to attend and feed the information back down the rest of the Castle Vale residents. I am sorry, but I have to completely disagree with that drivel. As one resident said at the meeting, every person on Castle Vale who is going to be affected by the building, operation and/or changes*

*caused by HS2, has a right to be there in person to see how they will be affected, for themselves, and to voice their concerns directly to the HS2 representatives'*

[www.tyburnmail.com](http://www.tyburnmail.com)

Some inferences can be made about the way in which the room was organised and the representatives who would address people. Firstly, the room was set up in a similar way to a traditional classroom environment. There were more or less straight rows of chairs facing the front of the room. This kept attention focused on those at the front and it allowed for little discussion to happen amongst those in the audience (Rosenfield et al. 1985). If sat in rows the audience is less likely to respond during discussion, but are also less disruptive (Sommer, 1977). So the setup implied that those in the audience listen to those at the front of the room. If the meeting holders intended the meeting to be more interactive they may have set up the room with chairs around a table so everyone can interact and no one is deemed to be at the front addressing an audience. The lack of communication meant that attendees felt as if they were treated in a dismissive way and that their opinions did not matter:

*'All in all I, for one, was not at all impressed with HS2 or their proposals, or the way in which they engaged with the residents (or lack, thereof). They seemed not to understand, or care, about our concerns'*

Although residents were able to voice their opinions there was little acknowledgement of their concerns and HS2 Ltd were often unable to provide clarity on some of the points raised. They appeared unsure of many of the answers to the questions. It is worth noting that this uncertainty is not apparent in documents that campaign for the high speed line. The language used is almost factual and very assertive about the benefits of HS2 yet in regards to the design and construction phase there are uncertainties that become apparent. There was also

some debate about whether HS2 Ltd were being dishonest in regards to what information they were presenting. A local resident wrote:

*‘During the meeting, a big bone of contention was whether HS2 were actually telling all communities the same information, or whether they were telling each individual community what they wanted to hear. The specific point that seemed to catch HS2 out was whether the train tracks were going to be laid on the north side or the south side of the M6. Apparently, residents at the previous meeting were told that HS2 had not decided which side of the M6 the tracks were going to be lain. I was not at the previous meeting, so I cannot comment on that, but HS2 were telling Castle Vale residents that the tracks were definitely going on the south side of the M6, which would affect properties on the Vale, but there were a number of attendees of the previous HS2 community meeting maintaining that they had been told, by HS2, that no decision had been made. This just makes me question the HS2 account of that meeting and their motives for having these meetings’*

[www.tyburnmail.com](http://www.tyburnmail.com)

Attendees stated that they were frustrated by the lack of information and the restrictive and formal nature of the meeting. This was also apparent in a study conducted by Crompton (2013) which interviewed a number of people involved in HS2 who described ‘the problems they faced in understanding the complexity of the case of HS2 and there was a perception that much of the information distributed by HS2 Ltd was not in “plain English”. Perhaps more worryingly, ‘interviewees harboured concerns that information had been withheld which made it difficult for people to respond to the consultation’ (2013:7) which resonates with what is being said about this particular community meeting.

According to claims-making literature, a successful claims-maker sympathises with the audience and relates to them on a personal level (Best, 1987). They do this by trying to get the audience to imagine how they would feel in the same circumstances. This can invite sympathy and understanding, so the problem becomes less abstract and the claims easier to comprehend (Best, 1987). One attendee who was noticeably different from his colleagues was the Director of External and Parliamentary Relations. This gentleman remained quiet throughout most of the meeting and only addressed the residents when the meeting became uncontrollable. Residents were complaining about the compensation package they would receive or lack of and HS2 Ltd spokespeople started to look panicked and unsure of what to say. The Director of EPR spoke to the residents in a comradely manner by sympathising with them and sharing their experience. He stated that he too would be affected by the construction of HS2 but that he understood it was for the greater good. This utilitarianist response appeared to calm the audience and return control to HS2 Ltd. This was noticed by the resident who authored the letter:

*'I did note that there seemed to be a HS2 'spoiler' who seemed to pipe up every time questions got too heated for the HS2 panel. I found this extremely disconcerting and unwanted distraction from HS2 answering our concerns (which was probably the point of having them there).'*

Although many Councils along the line of route have declared their support or opposition to HS2 there are some that have remained neutral within discussions. If claims-makers are able to capture these groups in support of their argument then it will without doubt make their case stronger. In any policy debate those who have the support of stakeholders usually find it easier to persuade the public that their argument is legitimate and valid. Legitimacy is the 'justification of a particular state of affairs with a rationale that a relevant social audience

considers acceptable' (Mulcahy, 1995:450). If a person accepts an argument as legitimate then they are accepting certain claims about it as valid. Those opposed to HS2 have argued that pro-HS2 campaigners have blinded stakeholders with evidence and claims to the point where they give their support without being fully aware of the implications. In this example of a community meeting the types of evidence being presented by HS2 Ltd were very technical and complex so it was difficult for recipients to understand. The local residents had only local knowledge at this stage as evidence but they did not present many claims in this meeting, rather concerns about the impact on their area.

### **8.3.2 HS2 in the Media**

The media is possibly the most widely used arena by policy actors and stakeholders to make claims and negotiate evidence in both orally and written. It acts as a channel between groups and the public and two of the ways in which it influences public perceptions about HS2 is through the volume of coverage and accuracy of reporting. Coverage of HS2 when the project was first announced was vast but over the last five years volume of coverage has varied. Claims presented in the media play a key role in ordering and maintaining audience perceptions of social reality. Media messages may “cultivate” certain perceptions among readers, and thus may shape the ways in which readers define situations and interpret the world around them (Ogle et al.2003:4). In regards to claims-making the media has an important role because it is a key outlet for information which is interpreted by the public. The information provided by the media plays a role in influencing people’s perceptions of the world.

Not long after, in April and May of 2010, once the scheme had been announced, groups mobilised to fight the plan with those who were in favour. Voices from these groups used

different strategies to persuade and shape beliefs about HS2, leading to claims and counterclaims that were complex and emotional. Some national newspapers (Telegraph, Independent) and the BBC initially presented a neutral stance on HS2 in 2010 and 2011 whereas the Guardian had a biased approach from the offset with headlines including ‘Our village will be ripped in half if HS2 goes ahead’ (Guardian, 2010) and ‘Local heartache over route of high-speed rail route’ (Guardian, 2010). Local newspapers also varied in coverage and it was predominantly only local areas that would be affected by the route that reported on HS2. Industry newspapers like Rail News devoted many stories to the project. Due to the coverage by local newspapers on HS2 being mostly against the project, when evaluating the articles it would seem that the majority of media coverage is negative towards HS2. Some appear to offer a balanced argument but many choose to report the more sensationalist stories. The media often tries to present itself as being objective, however, ‘media content is rhetoric in that its form and content necessarily reflect a certain set of motives and values’ (Ogle et al. 2003:3). For example, newspapers are often restricted to a certain word length in articles which sometimes leads to ideas being presented simply and conclusively. Writers may also cite multiple others in an attempt to show that their story was thoroughly researched. They may also be pressured by the public to present answers to provide solutions which may also shape their article. This is the nature of journalism and the style of writing.

So how are these claims channelled through the press? Many of the actors involved in HS2 provide the media with various press releases. They also write letters to the editor which they hope will be published. This platform allows them to present claims and evidence to those who may be undecided about HS2 or produce counter claims to their opponents. Social media and the internet have also provided claims-makers with a new platform for presenting claims and evidence. Twitter enables actors to debate with each other and blogs allow actors to write

about HS2 which can sometimes be viewed by many people. Claims-making does not just take place in traditional environments; we can see it in several places and digital spaces. In regards to more traditional environments interviewees were asked about their perceptions of the coverage of HS2. Those in favour of HS2 felt that media coverage was biased and did not provide a balanced argument in most cases. One interviewee said that he did not bother to give interviews or provide comments now to certain media publications. However he did think that in most cases they did present both sides of the argument in regards to the national press:

*'I don't bother giving comments to \* and others like them anymore because all they do is find some right wing nut to give a counter argument or comment so I just don't bother anymore'*

*'I think probably the media are now more negative but as the media are they do try and maintain some sort of balance I suppose so if you get a lunatic from one side they'll find a lunatic from the other side to go and give the opposing point of view and then say it's balanced it's still lunacy'*

(Retired academic, Interviewee 1)

He was less impressed with local newspaper coverage of the debate stating that they were definitely biased but that he did not blame them considering who their audience were.

Intermediary groups found it slightly harder to participate in media discussions. One interviewee said:

*'firstly we've found it very difficult to talk to the wider world about this because a view which says when somebody says well what do you think about HS2? It depends um it's not something that the media find particularly interesting because they're much more interested in talking to people who are gung ho supporters or more likely the people who are really strongly opposed'*

(Retired engineer, Interviewee 5)

Anti HS2 campaigners initially campaigned for the rail project to not go ahead. Their arguments were not based so much on rigorous evidence because they had not yet mobilised to conduct their own research. They relied on local knowledge to argue against HS2. Headlines such as ‘High-speed rail line threatens quiet life of historic Ladbroke’s villagers’ (Guardian, 2010) with an emotive picture of a local disabled person below the headline were in many newspapers. Once the anti-HS2 campaigners had commissioned their own research they were able to debate about the economic case for HS2. From 2011 to 2012 the focus was on presenting counter claims to the business case. Then from late 2012 onwards there was more of a focus on the environmental debate. This is most likely due to the public consultations at the time. Those in favour of HS2 framed the problem from the beginning with an emphasis on the economic benefits of HS2. However, claims and evidence presented by opposition left HS2 Ltd and its supporters having to reframe the issue. They then focused on the capacity issues of the West Coast Main Line arguing that HS2 was needed in the UK as the current line could not cope with the amount of passengers and freight. They attempted to win support from those who use the WCML through reframing the argument and presenting different claims. As Beck argued:

*‘Claims-makers learn ways to mobilise and maintain public support; they learn how to get press coverage by constructing claims which are newsworthy; and they learn to identify key policy-makers and recognise the levers which can move policy. These lessons may come through personal experience, or through watching the successes and failures of other claims-makers promoting other issues, but the result is increasingly polished claims’ (1992:115)*

From an in-depth analysis of media coverage from 2010 to 2015 there is very little in the way of pro-HS2 stories compared with anti-HS2 stories. Those in favour have presented less

claims in the media and released fewer statements than those opposed. The reasons for this are unclear but further research may be able to provide some insight. So should the media be blamed for the way in which the HS2 debate is covered? Their aim after all is to increase readership and present interesting stories. They cannot help that people are often more inclined to read eye-catching headlines rather than neutral, in-depth discussions. Maybe this is why so many groups and organisations have moved towards using social media to present claims and negotiate evidence.

### **8.3.3 Social Media**

Until the last decade or so policy actors have had to rely on the media to present many of their claims to the general public. One interviewee said that '*social media is so important these days...people respond to things in seconds*' (Retired engineer, Interviewee 5). Within the last decade social media websites such as Facebook, Twitter and Tumblr have emerged and provided policy actors with another platform to voice their opinions and make claims. Academics have reported on their relationship using many different case studies (Mulcahy, 1995; Ogle et al, 2003; Harrington et al. 2012). Social media, however, and its role in the policy process is somewhat under-researched. There has been little rigorous evaluation of the causal influences of social media. As such, its ability to contribute to social change remains contested. The benefits of utilising social media include being able to reach a wide range of people almost instantaneously, recruit supporters, increase interactions with others and cultivate leads. HS2 Ltd has profiles or accounts on Twitter, Facebook, LinkedIn, YouTube and Vimeo. HS2 Ltd produced a social media policy document in July of 2012 stating 'how HS2 profiles and accounts, and content published on them, will be managed by HS2 and in particular by the HS2 Digital team' (HS2 Ltd, 2012:2). Those opposed to the project have criticised HS2 Limited's use of social media claiming they are incompetent and slow to

respond despite having a media team designed to deal with social media sites. They have been criticised in 2012 for not updating their Facebook account, not responding to tweets and have been accused of monitoring the twitter feeds of Stop HS2 campaigners.

The most popular of social media sites used by actors within HS2 is Twitter. It is used not just for 'tweeting' but providing links to blogs and research by actors. Almost all of the campaign groups within HS2 have an active twitter account and one can view daily debates between various actors. They use the digital arena to present claims, counter-claims and persuade audiences of their argument. Blogging is also popular amongst HS2 actors and it is possible to access new blog articles on a weekly basis. One interviewee said of Twitter:

*'It's quite fun actually it's like a chess game because if you've only got a hundred and forty characters to play with you've got to use them in a way that lays the ground for the response to the response so it's like almost laying a trap for an opponent for them to fall into so you can go along with the killer line which is a bit like playing chess and I quite enjoy that as an intellectual exercise I mean I know that's not what people tend to think of Twitter but I do find it quite fun'*

(Rail consultant, Interviewee 4)

He went on to stress the importance of using social media to present claims and have open debates with 'opponents'. Social media enables claims-makers to present evidence to an audience that has become more demanding for increased transparency. It has broken down communication barriers for those in positions of power to local communities. It is an area in which researchers are struggling to keep up with the technological advances and the anonymity that some social media sites allow means that sampling can often be difficult.

### 8.3.4 The Scrutiny Review of HS2

This section explores how actors within HS2 engage with the process of presenting and negotiating evidence and claims in an official government setting. The name of Birmingham City Council's scrutiny review was entitled '**High Speed Two: Maximising the Impact for Birmingham**'. The online 'Call for Evidence' listed a selection of questions and key lines of enquiry that would be discussed at the two meetings in November. People were given six weeks to respond to the call and were advised that Birmingham City Council 'are not looking to re-open the debate as to the pros and cons of HS2 – these have been well debated elsewhere. Rather, we are looking forward to the introduction of the Hybrid Bill later this year and ensuring that Birmingham is well placed to realise the promised benefits' (BCC, 2013:1). There were four key lines of enquiry that were pursued and these included a question about the opportunities and challenges for Birmingham in relation to the economy, connectivity and sustainability; a question about how benefits can be realised, what the passenger perspective is on connectivity issues, and what message the Council should be conveying to Government. By selecting the key lines of enquiry the scrutiny team were expressing what they deem to be relevant issues and it is exclusionary in nature as they only requested evidence on these particular points. They were unwilling to revisit the debate about whether or not HS2 should be built. There were a total of sixteen responses to the call for evidence in the evidence packs from a number of different organisations.

The responses varied in the way in which they submitted responses. This is demonstrated in the table (appendix A). The table includes the name of the organisation, the way in which each organisation responded and a list of the data they used in their responses. From the table one can see that the responses ranged from detailed reports quoting secondary data to letters that included no data, only suggestions. Not all responses answered all of the questions included in the four key lines of inquiry suggested by the Call for Evidence listed above.

None of the responses included primary data that had been collected especially for the scrutiny review. They relied on either secondary data or data that had been used for other reports and research on HS2 and expert or personal experience. Most of the responses failed to address question three or provide a limited answer which asked the passenger perspective on the wider connectivity issues and on the stations' general utility for users. Although some consultations had been carried out none of the organisations presented findings from consultations. All of the responses that included statistical data regarding demand and growth forecasts rely on the Centro commissioned research conducted by KPMG. This research has been controversial and its methodologies questioned by a number of leading economists (Graham, 2013; Overman, 2013). The responses also varied in size. They ranged from two pages to twenty pages and Birmingham City Council's response spans 105 pages. The types of organisations that have responded have implications for the claims that can be made about conclusions. There was only one response from an environmental organisation which is quite brief whereas the majority of responses were from organisations concerned with transport and the economy. Smaller community groups and local residents are also under-represented in the list of responses. These groups are often engaged within a different setting such as a community meeting or forums. Marketing Birmingham appeared to have used the most amounts of secondary data for their report compared with RailFuture and Campaign for Rail West Midlands who chose not to include any data within their response.

What was different about this environment compared with the community meeting and the media is that almost all of the attendees were in agreement that HS2 should be built. There were some concerns about the exact details but there was no one present that objected to the construction of a new high speed line. As mentioned in the previous paragraph, there were several claims presented and supported by evidence in the documents but when speaking in the meeting, policy actors presented claims whilst rarely referring to evidence. Evidence

becomes implicit because the claims-maker is aware that their audience already shares their frame or a similar frame and they do not need to use evidence to legitimise their claim. They know that the claim will be accepted and their audience will be convinced without referring to evidence. Toulmin (2003) argues that only the warrant can be implicit but this data indicates that evidence can also be implicit depending on the policy environment. This further supports the claim made by this thesis that evidence is used to persuade an audience to support a particular view.

#### **8.4 Conclusion**

This chapter used the refined model of argumentation presented in the theoretical chapter to highlight the subjective and selective nature of evidence within the policy process. A number of examples were identified within the case study, perhaps the most interesting was French high speed rail. In this example both actors for and against HS2 referred to France as an exemplar of why we should or should not build a new high speed line. They selected different evidence to support their claims and ignored evidence that did not. The evidence-based policy making model suggests that policy actors are rational and capable of leaving politics, ideas and values out of decision-making. The empirical data suggests otherwise and indicates that people take a position and then look for evidence based on their choice. If they disagree with evidence they attempt to disprove it by producing counter claims and new evidence.

The chapter also focused on the way in which evidence is negotiated between claims-makers in different environments. In the community meeting it was clear that HS2 Ltd and their colleagues were at an advantage in terms of knowledge and evidence. Local residents could only rely on local knowledge and what they had read so far in the media. HS2 Ltd presented very detailed data to support their claims but it was difficult for attendees to understand. If the residents could not understand the evidence then they were not in a position to refute it at

the time. The next environment examined was the media and social media. What is evident from this data is that claims-makers use the media as a platform for presenting claims to a wide audience. Due to the nature of the media there is little attention paid to intermediary groups. Sensationalist stories provided by those for and against are more appealing to them. Although the media was seen as a useful platform, most interviewees disagreed with how they and their arguments were portrayed. This may be why they prefer to utilise social media such as Twitter to present claims. In the local government setting of a local authority that is in favour of HS2 we see that evidence can become implicit in nature. This may be because the audience already shares a similar opinion to the claims-maker and so they do not have to legitimise their claims with reference to data. What these two empirical chapters tell us about the role that evidence plays within contested policy processes is that traditional evidence utilisation models are too simplified and that the process is much more complex. There are many things that affect evidence utilisation such as political judgement, values and beliefs, how a person conceptualises evidence, the environment and the audience. Another difficulty faced within the planning process of transport mega projects is that the majority of claims are all predictions. No one really knows exactly what will happen if the Government does or does not build the new high speed network. If it were possible to predict the future with accuracy then no mega project would ever fail. What is important to remember though is that, more often than not, there are unexpected occurrences that affect a mega project during its lifespan and these are not always planned for so they cause problems. One cannot expect all factors to be considered before it is built. Therefore the goal of those in favour is to predict as accurately as possible what the costs and benefits will be and persuade decision-makers to agree to fund the project.

# **Chapter 9**

## **Conclusion**

### **9.1 Introduction**

The conclusion chapter is divided into four parts; firstly it explains what the researcher set out to achieve. Secondly, the main findings are discussed in relation to each of the research questions. Thirdly, the key contributions are presented including both theoretical and empirical. Finally, the chapter provides reflections on the research process and outlines an agenda for further research.

### **9.2 Aims of the research**

The main aim of the research was to explore the process by which policy actors select evidence to support their claims and how they negotiate this evidence with one another in different policy environments within High Speed Two. Critiques of the rational, evidence-based policy making model argue that it is impossible to remove values, beliefs and politics from the decision-making process (Sanderson, 2002). Rigorous research designs are able to reduce the effects of these factors on the decision-making process to an extent but it is impossible to completely remove their effects from the process. Framing theory was used to identify the ways in which people think about or 'frame' the policy issue in order to assess whether their framing of the issue impacted on their evidence utilisation. There was an expectation at the beginning of the research project that a person's frame would affect the types of evidence that they drew on and the claims that they would make. To establish whether there was a relationship required firstly identifying frames within the data and then asking what types of evidence were associated with each frame. From this some inferences could be made about the relationship between the two.

Secondly, the research intended to examine a number of different policy arenas in which evidence was negotiated to compare the use of evidence within HS2. The reason for this was to establish whether evidence was utilised differently by claims-makers in different environments. The first environment was a community meeting in which local residents of Castle Vale were provided with information about the mega project and they had the opportunity to ask questions and voice their concerns. This particular environment was important to observe because there was an imbalance of knowledge and power and it was vital in the early stages of the research to discover what the concerns were of various parties, how they interacted with the “experts” of the mega project and what the positions were of key stakeholders in relation to the project.

The second environment was an overview and scrutiny process at Birmingham City Council. Attendance at a number of meetings with scrutiny officers and two evidence gathering sessions enabled the researcher to observe how evidence was selected and negotiated in a quasi-governmental setting. The experience provided essential data for understanding how claims-makers presented evidence to an audience that was mostly in agreement with their position. It also provided an insight into how evidence was interpreted by the scrutiny officers and how they used it to inform their final report and recommendations.

The third environment that the thesis examined was the media (including social media). The media enables claims-makers to reach a wide audience in the hope of persuading the audience to share their opinion about a policy issue. The difference between the media and social media is that social media provides all citizens with a mass mediated platform to distribute claims publically. The press still functions as ‘cultural gatekeeper of newsworthiness’ (Maratea, 2015:114) and newspapers only publish particular stories, but social media allows claims-makers to disseminate claims to a global community without the need of acknowledgement by the press. Until now, the majority of research on claims-making

focused on the media rather than social media. This is because the use of social media is relatively new to the last ten years. By exploring claims-making in the media and the online world, the researcher was able to examine how policy actors use these channels to reach audiences and whether they present their arguments in a particular way in this environment.

### **9.3 Main findings**

The initial assumption of the thesis was that evidence is not the precursor to a policy decision; selecting evidence to support a claim is a product at the end of a long line of assumptions and choices and decisions are based on strategically crafted arguments as opposed to solely being based on objective evidence. Policy making occurs within the context of values, ideologies and beliefs. Therefore the policy process is about reconciling different value perspectives which leads to the most consensual option. The role of evidence within decision-making is to help construct a common frame through which meaning is applied and resolution sought. Evidence has less relevance in situations where there is frame conflict amongst policy groups. This is because a person's frame determines what they consider to be evidence and what arguments they take as being relevant. If two people have conflicting frames then they will not be in agreement about what the chosen course of action should be. Therefore, a policy decision is based on which actor or group of actors is most effective at presenting a believable argument that will persuade others to support their claims rather than about finding the highest quality evidence to support or legitimise decisions. By studying the way in which people frame a policy issue and negotiate evidence with one another, some conclusions were made about evidence utilisation and how decisions are made.

The main findings of the research are set out under four headings below and relate to each of the research questions. Firstly, findings from the literature review regarding the relationship between political judgement and evidence utilisation are summarised. This is followed by

summaries of findings of the three empirical research questions relating to how actors frame the chosen case study, what evidence they draw on and finally, how they negotiate their evidence with one another in a number of policy environments.

### **9.3.1 Political judgement and evidence utilisation**

The first research question developed from an initial literature review on evidence utilisation in decision-making processes by UK Governments. The purpose of the second chapter was to historically document that, despite efforts from UK Governments since the end of the Second World War to increase the role of evidence in decision-making, there has been little success. The chapter identified several examples of politicians ‘ignoring’ evidence or interpreting it differently when making decisions about airport expansion, drug policy and housing policy as examples. What this means for evidence-based policy making is that politics, judgement and beliefs are not excluded from policy making and they should be acknowledged when explaining the mechanics of the decision-making process. Although the evidence-based policy making model provides a useful approach for decision-makers to make systematic and logical decisions, it does not explain why policy actors perceive policy problems in different ways and why they select evidence and interpret it differently to others. Therefore, a more interpretive theory was needed to understand these phenomena.

### **9.3.2 Frames within HS2**

The second research question centred on the way in which actors within HS2 framed the policy problem. Chapter seven told the story of the development of HS2 and its policy through frame conflict as a notional lens in order to answer the research question: How do actors within HS2 frame the policy problem? The data revealed that the majority of actors within HS2 accept that there is a capacity issue on the current rail network; the conflict arises because they have different ideas and beliefs about how we should achieve the goal of

increasing rail capacity. In the context of public policy, this is what Schon and Rein (1994) refer to as 'intractable policy issues'. They argued that it is important to attend to the very framing of the issue in order to understand how policy actors might reach a solution to the problem. More and better evidence does not necessarily solve the problem or allow actors to reach a consensus. Framing theory assisted in explaining contestation between policy actors. The purpose of identifying the frames was to investigate whether the way in which a person framed the debate impacted on the types of evidential resources they drew on and the claims they made.

Five frames were identified that describe the ways in which actors perceived the policy problem of HS2. These frames were considered to be the most dominant amongst those either for or against HS2. In other words, these frames were the most commonly identified in the empirical data. The most common frame that was identified amongst those in favour of the project was the economic-developmentalism frame. Arguments they gave for building the new high speed line often focused on the economic benefits the project would bring to the United Kingdom, in particular, the North of England. In comparison, those against the project predominantly focused their arguments on the environmental impact that the project would have. They claimed that the negative effects that would occur on the environment and the loss of peoples' homes outweighed any economic benefits that would be created. Griggs (1998) suggested that people that adopt an eco-centric environmentalist position tend to select this frame because they believe it will receive the most support from an audience. He refers to a 'volvo-vegan' alliance between middle class individuals and environmentalists who support the same cause in order to halt a project such as this.

Particular frames identified more with certain types of evidence, however, evidence selection and utilisation was primarily based on the resources available to the claims-makers. The table

below presents the features of each frame and the most common types of evidential resources that they drew on:

	<b>Economic developmentalism</b>	<b>Ecological modernisation</b>	<b>Economic modernisation</b>	<b>Eco-centric environmentalism</b>	<b>Economic environmentalism</b>
<b>Features</b>	Capacity, growth, connectivity, speed, competitiveness	Capacity, connectivity, regeneration, sustainable development	Capacity, modernisation, technology, competitiveness	Capacity, conservation of the environment	Capacity, alternatives, growth, sustainable development
<b>Evidential resources</b>	Statistics, numeric data, economic modelling, expert opinion, study results	Environmental study results, Statistics, numeric data, economic modelling, prior experience of regeneration and sustainable development	Statistics, numeric data, prior experience of working in the rail industry	Anecdotal/personal experience, environmental study results  Counter-claims to the numeric data of economic developmentalists	Statistics, numeric data, environmental study results, expert opinion (primarily engineers and rail industry workers)

### 9.3.3 Evidence utilisation within HS2

The third research question explored the types of evidence that actors within HS2 utilised.

The purpose of this question was to establish whether the way in which a policy actor frames HS2 has an effect on the types of evidential resources that they draw on. As the literature suggested that the way in which someone frames an issue will impact on what they consider to be evidence and what arguments they consider relevant there was an expectation that particular frames would favour certain types of evidence more. However, the data indicated that resources had more of a significant impact on the types of evidence people drew on rather than their frame. It also revealed how all actors, regardless of their frame, weighted systematic, rigorous and scientific evidence as more relevant than evidence such as local knowledge or qualitative surveys.

There was an imbalance of evidence generation between those for and against the project. Looking at the types of evidence being presented by groups of actors, there was a definite difference between those in favour and those against. The volume of evidence produced by those in favour was greater than those against the project. The types of evidence also differed; those in favour produced many more scientific or technical studies that contained quantitative data compared those against who relied heavily on local, tacit knowledge. They did not have the resources to fund their own studies. Most importantly, those in favour of the project had the resources to conduct cost-benefit analyses of the project which are the dominant types of studies that policy actors within a mega-project appeal to in order to determine whether or not they should proceed with a project. This led to those against the project being embroiled in game of catch-up with those in favour of the project. They predominantly presented counter claims in response to the claims put forward by those in favour of the project.

However, in terms of media attention and argumentation those opposed to the project appeared to warrant much more interest in their stories and claims. The media is an important channel for claims-makers because it provides a platform for them to reach members of the public and it can influence public perceptions about a project. Some of the interviewees viewed the media in a negative way as they felt that they were sometimes misinterpreted. Neutral or intermediate interview participants stated that they found it difficult to present claims in the media and they were under-represented. They believed that the media preferred sensationalist or dramatic stories such as the loss of houses because of the construction of the high speed line as opposed to a more neutral view of the project.

Social media was considered a useful channel by claims-makers to reach an audience of people that might be undecided or neutral. It enabled them present claims instantaneously without having to go through the 'cultural gatekeepers' within the media. Twitter was by far the most utilised application where claims-makers interacted with each other. The data

revealed how claims-makers engage with one another via Twitter and one interviewee likened it to a game of chess in which they would lay ‘traps’ for their opponents. Blogging was another way in which claims-makers utilised the internet to reach a wider audience.

### **9.3.4 Claims-making and negotiating evidence within HS2**

The final research question focused on how policy actors within HS2 make claims and how they negotiate these claims with one another in three policy environments – a scrutiny review process, a community meeting and the media (including social media). What the data revealed is that the audience of the claims-maker had an effect on the way in which they presented their evidence and claims. In the scrutiny review process, data and warrants were not always present in arguments – based often on whether or not they were trying to persuade because the audience had a different frame. Those that shared the same frame did not need to convince of their argument so didn’t always refer to evidence.

One of the most significant findings of the research was how policy actors interpreted an experience or situation within the project. The data revealed how different groups cherry-picked evidence from the same situation in order to support their claims. In the example of international high speed rail, both those for and against the project referred to rail projects in France and Japan yet presented different evidence from the example in order to support their claims. Therefore, selecting evidence to support a claim is a product at the end of a long line of assumptions and choices; decisions are based on strategically crafted arguments rather than objective and systematically reviewed evidence.

## **9.4 Key contributions**

The research project provided analysis of the case study that has until now not been conducted. It also provided a theoretical contribution in the way of a refinement of the

Toulmin model of argumentation. Finally, it contributed to how evidence negotiation is understood in different policy environments of a transport mega-project. The following sections explain the significance of these contributions.

#### **9.4.1 A new perspective on High Speed Two**

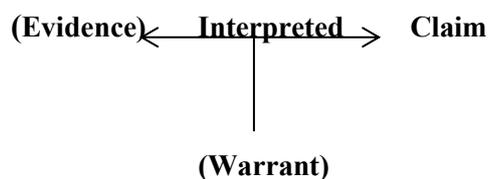
The High Speed Two project is somewhat under-researched due to its infancy. The thesis is original because it provided one of the first in-depth analyses of the project, and is the first of its kind to analyse framing and negotiations of evidence and claims within the project of High Speed Two. The immediacy of events was crucial for understanding the nuances of evidence utilisation in the decision-making process. The researcher was able to observe real-life examples of claims-making which would have been impossible had a case been chosen retrospectively. The importance of providing this new perspective is that it presents an analysis of the largest mega-project ever to be designed and built in the UK and it widens understandings of the role of evidence within decision-making in transport mega-projects and allows for comparisons to be made between other projects.

#### **9.4.2 Refining the Toulmin model**

One of the key contributions that the thesis makes is a refinement of the argumentation model presented by Toulmin (1958). According to Toulmin, the way in which to construct a claim is to appeal to evidence. The warrant is defined as ‘statements which justify drawing conclusions from the’ evidence (Best, 1987:108). One of the assumptions that this model made is that the warrant is a rule without any exception and that evidence is taken at face value. Toulmin did not go into great depth about how one should conceptualise evidence and argued that if evidence is not taken at face value then it risks becoming a claim itself that must be defended. At the early stages of the research this was not considered a limitation as the purpose of utilising the model was to deconstruct arguments within the data. However,

what became clear after attempting to apply the model to the empirical data was that it was not as straight forward as first thought.

Using the evidence packs from the Birmingham City Council scrutiny review on HS2, attempts were made to identify a number of claims and then locate the evidence and warrant in the data. Indeed, as Toulmin suggested, the warrant was often implicit in nature. However, it became apparent that the evidence was often implicit as well. Claims were made and there was no reference made to evidence in all instances. As mentioned in section 9.3.4, evidence was interpreted and understood differently by each frame. This led to the suggestion that the Toulmin model should not be a linear process but should rather look more like this:



What this model demonstrates now is that evidence and claims can be interpreted by policy actors and that the process is not a linear one. Evidence is not resistant to interpretation and is interpreted differently depending on a person's framing of the HS2 debate. The implication of this for the evidence-based policy making and similar models is that rather than viewing evidence as objective facts that we can appeal to, evidence is interpreted information about a given issue. Evidence is often contested as we can see from the empirical data and one way that this can be explained is by claiming that the evidence itself is interpreted in different ways. If evidence was interpreted in the same way by all actors then it would not be contested. The brackets represent the implicit nature of the two components – sometimes they are identifiable and other times they are not depending on the audience.

### **9.4.3 Understandings of evidence negotiation**

The thesis provided a rich explanation of how evidence is negotiated by claims-makers within the case study of High Speed Two. The majority of research conducted on evidence utilisation in mega-projects is done so retrospectively and focuses on the success or failure of the project. This project is unique as it focused on a live case study and it expanded and generated theory on evidence utilisation in decision-making which could in turn be applied to other mega-projects. The findings present a number of implications for rational decision-making type models such as the evidence-based policy making approach.

Firstly, these models assume that evidence is accepted at face value and not interpreted by policy actors. The thesis demonstrated that claims-makers interpret evidence differently and cherry pick evidence that supports their arguments. They refuted rigorous, scientific research because it did not coincide with their particular frame. One interviewee went as far as accusing HS2 Ltd of lying about their evidence and wanted to conduct his own noise study because he did not believe the results of HS2 Ltd's. Decision-makers need to acknowledge that within a policy controversy there will be actors that do not accept evidence that is in contrast with their values and beliefs. Therefore, the goal of decision-makers should be to reach an agreement on the most consensual solution. Secondly, rational decision-making models assume that the process is a linear one. The thesis exposed claims-makers who changed the way in which they presented claims in different environments depending on their audience. When the audience shared a similar frame and accepted the arguments the claims-maker did not provide evidence to support their claims because they knew that they would be accepted. If an audience rejected the evidence then claims-makers revisited their data, reframed it and presented it in a different way thus creating a more 'messy' process. The implication of this in

Until now, the claims-making framework has mostly been applied to the negotiation of claims and evidence in the media as opposed to social media. This is because social media has only been used by policy actors within the last ten years or so. The thesis provides an original contribution to the small evidence base of claims-making within social media. It is the first of its kind to apply the framework to a mega-project.

### **9.5 Reflections**

There was an assumption that there would be a very good response rate to the invitations to potential interview participants that were sent out. However, it was not as high as expected so a decision was taken to conduct more in-depth interviews with those that had agreed to participate. In hindsight the invitation could have been extended to a larger sample with the intention of increasing the number of interviews. This may have provided a wider perspective on the policy in question. Although the project will eventually be a national project, phase one of the project is based between the West Midlands and London, and most of the data available related to this particular phase. The north of England is experiencing the very early planning stages of the project and much of the decision-making so far has not been discussed in the public domain. Therefore, if the sample size was extended, it is likely that the participants would have been associated within the geography of phase one of the project rather than phase two.

The case study itself led the researcher to question its suitability due to it being a live project rather than a retrospective case. It was appropriate to choose a live project because the intention was to understand the social processes and complex practices in real time. One of the issues experienced whilst dealing with a live case study was the constant influx of new potential data. In hindsight it may have been preferable to select a more definitive time period

in which to collect data with an end date rather than waiting until nearer the end of the project to decide. The Google Analytics data kept to a strict timeframe, but additional data did not have an agreed timescale until towards the end of the project.

When reflecting on the process, it can be useful to consider alternative research methods that may have been appropriate for answering the research questions. One approach which centres on the question of how policy actors within HS2 frame the debate could be to use Q-methodology. It is used by researchers to systematically study individual's personal points of view on a particular topic or issue. It uses statistical applications of correlational and factor-analytical techniques to 'provide researchers with a systematic and rigorously quantitative means for examining human subjectivity' (McKeown and Thomas, 1988:5). Q studies explore correlations between people by asking them to decide what is significant from their perspective. 'Participants are required to sort a predefined set of statements (the Q-sort) relating to the issue at hand, which are then subjected to statistical analysis and further interpretation by the researcher' (Venables et al. 2009:1092). It is another way in which to reveal shared viewpoints around a topic within a particular population of actors. This would have produced some interesting data for the research.

## **9.6 Agenda for further research**

Part of the reflection process involves thinking about the ways in which this research project could be developed further. Firstly, the research could be extended by applying the refined Toulmin model of argumentation to other data sources from HS2 to determine whether or not evidence was implicit in other policy environments. This would further test the claim that evidence can be implicit within an argument as well as the warrant if the audience shares a similar frame. Although the thesis only applied the simple model of argumentation to the data, it could be beneficial to apply the six component model to the data to determine whether

those additional components are presented by claims-makers. Data could be sourced from the evidence submitted to the High Speed Rail Bill Select Committee and the model could be applied to test the refinement of the model and the extended model. The data is published online so there would be no issues with access.

Secondly, the research questions could be applied to other mega-projects and transport projects to build on the findings of this thesis in relation to evidence utilisation. The research could involve selecting other mega-projects and identifying the frames and associated evidence to establish whether there is a correlation between them. The way in which claims-makers present evidence and negotiate claims could also be explored. The literature review highlighted a selection of other cases, most notably Griggs and Howarth (2013) who conducted research into UK air travel that shared similarities in terms of the consistency between the debates about UK air travel and the proposed High Speed Two project. The policy problems of airport capacity and rail capacity can be labelled as wicked policy issues that defy rational and equitable policy solutions. Both Griggs and Howarth (2013) and the thesis have identified similar narratives amongst those in favour of airport expansion and HS2. They argue that there are economic benefits, that there is a capacity issue, and that the UK is behind other developed countries in terms of modernity in our transport infrastructure. Those against airport expansion and HS2 both refer to the ‘environmental destruction’ (Griggs and Howarth, 2013:288) that could be caused. It is likely that the research approaches in this thesis could be transferrable to other policy problems.

Thirdly, a more detailed analysis of claims-making in other social media platforms such as Facebook would provide further insight into the way in which claims-makers utilise social media. The thesis primarily focused on data gathered from Twitter and online blogs because they were the most utilised platforms by interviewees. HS2 Limited have their own Facebook account as do many of the opposition groups. Analysing posts from their accounts would

provide further insight into the ways in which these groups utilise social media to present claims and explore the interactions, if any, between different groups.

### **9.7 Concluding remarks**

The thesis offered an insight into the intricate decision-making process of High Speed Two. Examining such a prominent transport mega-project provided an understanding as to how policy actors come to think about a policy problem (or frame it) and how they negotiate evidence with one another to reach the most agreeable solution. It demonstrated that more evidence does not necessarily lead to a better policy decision and if we are to better understand how evidence is selected and negotiated then a more interpretivist approach is required.

Although recent interpretivist theorists have attempted to discredit the rational, evidence-based policy making approach this project has shown that it still remains the most dominant and popular model within policy decision-making because it is a helpful tool for those attempting to make logical and systematic decisions.

Studying an intricate case such as High Speed Two was important because the outcome of the project is likely to set the future tone of railway investment. However, with the recent ‘Progress with preparations for High Speed 2’ report (2016) from the National Audit Office suggesting that there is only a sixty percent confidence in phase one being delivered by 2026, it may be some time before the project becomes a reality.

## APPENDIX A

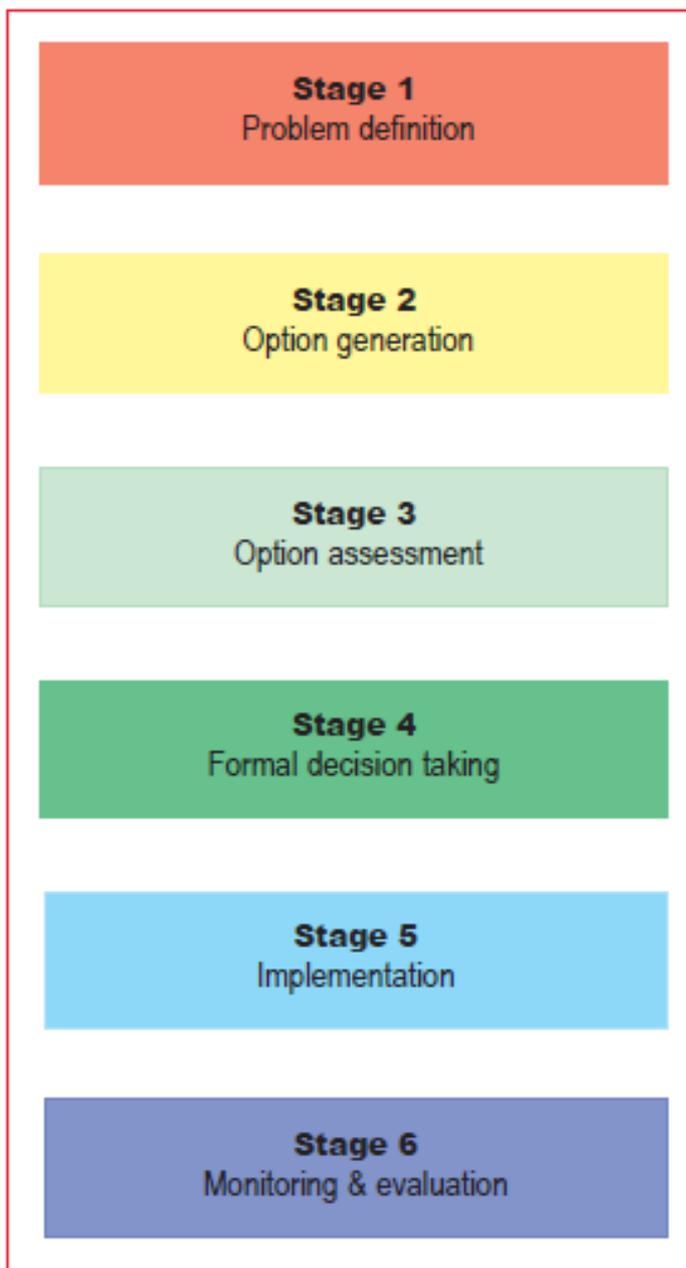
<b>Name of Organisation</b>	<b>Form of response (and length)</b>	<b>Data used</b>
<b>Birmingham City Council</b> (The local government body responsible for the governance of Birmingham which is a metropolitan district)	Report: divided into five sections and relevant appendices (105 pages)	Responses to: Phase 1 Design Refinement Consultation, Phase 1 Draft Environmental Statement Consultation, Phase 1 Property & Compensation Consultation. Centro KPMG summary, HS2 WM Connectivity Strategy
<b>HS2 Ltd</b> (ALO responsible for developing and promoting UK's HSR network, owned by DfT)	Short chapter with six headings. Appendix includes one table and one map (5 pages)	Centro KPMG report (mostly economic case modelling August 2012)
<b>Marketing Birmingham</b> (Birmingham's strategic marketing partnership responsible for Bham's leisure and business tourism programmes)	Report that addresses all the criteria from the 'Call for Evidence' plus other information they deemed relevant (20 pages)	Centro KPMG report, European Cities Monitor 2010, CBI/KPMG Infrastructure Survey 2013, Marketing Birmingham Investment Team, German Marshall Fund of the US Policy Brief: Planning High Speed Rail Stations for Sustainable Urban Development (European Case Studies 2011), 2013 Perceptions Survey TNS/Regional Observatory, Deloitte (2013) Unlocking Potential chapter, Tom de Castella for the BBC, Office of Rail Regulation data, Centro report, Airports Commission proposals for providing additional airport capacity 2013, WM Economic Forum 2013, GBSLEP 2013, ONS population survey 2012, CrossRail, International Union of Railways 2011, Carbon Impact study Greengauge 21 2012
<b>West Midlands Campaign for Better Transport</b> (An independent charity providing research/practical solutions to transport problems, pressuring local/national Gov to adopt them)	Report divided into four sections with the final section addressing the specific questions put forward in the 'Call for Evidence' (9 pages)	White chapter on railways 2007, Briefing Chapter on Rail Capacity ATOC 2012, Centro briefing chapter on Transforming Rail Travel 2012, Greengauge 21 Capturing the Benefits of HS2 on Existing Lines 2011
<b>Campaign for Rail West Midlands</b> (Rail users campaigning and promoting for development of rail services both passenger and freight)	Letter followed by short response with 4 headings and two concerns (4 pages)	No data presented
Railfuture West Midlands (Independent organisation campaigning for better rail services for passengers and freight. Voluntary group representing rail users with 20k affiliated and individual members)	Letter to review including four areas where they have a special interest and hope to address some of the bullet points in the 'Call for Evidence' (2 pages)	No data presented
Birmingham Friends of the Earth (Not for profit organisation that seeks to advance the principles of sustainability and positive environmental	Written with five headings commenting on all of the key issues put forward in the 'Call for Evidence' (3 pages)	Friends of the Earth Briefing on HS2

change. They work on local issues such as transport, planning and environmental justice issues)		
Prof. Kathryn Moore, Professor of Landscape Architecture (has published extensively on design quality, theory, education and practice)	Report synthesising three studies including a proposal to develop the HS2 Landscape Vision which has several illustrations. Concludes with a pg of people who endorse the project (12 pages)	HS2LV: REINVENTING THE REGION proposal and forthcoming article 'How can new and redeveloped stations on the UK's proposed HS2 line add value to the surrounding landscape?' (Moore, 2014)
Greater Birmingham Chamber of Commerce (A membership-based business support organisation that exists to connect its members to opportunity)	Report addressing points 1, 2 and 5 of the 'Call for Evidence' request (3 pages)	Transport Studies Unit study chapter entitled 'The spatial effects of High Speed Rail: capturing the opportunity' (2013), Centro Connectivity Package, Bham Chamber of Commerce, HS2LV: REINVENTING THE REGION
The National Skills Academy for Railway Engineering (established with wide railway industry support to help tackle current and future skills needs within the railway engineering industry)	Powerpoint presentation slide layout including picture, tables and graphs (24 pages)	Data including current workforce numbers, spend by client on Future Programme, workforce geography, workforce age profiles, recruitment forecasts, skills forecasting and HS2 skills forecasting (unsure on sources of all data: not referenced)
Centro (Responsible for delivery of public transport in the West Midlands representing the seven Metropolitan District Councils of the West Midlands: Birmingham, Coventry, Dudley, Sandwell, Solihull, Walsall and Wolverhampton)	Letter followed by report entitled 'Statement of Evidence' including a number of challenges followed by responses to all inquiry questions with a map in the appendix. The report includes a table detailing potential funding sources for the HS2 connectivity package schemes (14 pages)	Centro KPMG report, Centro Public Consultation exercise Spring 2013
Dr Mike Hodder, Planning Archaeologist, BCC (born in Sutton Coldfield and has been involved in the archaeology of the area for many years as well as studied in Bham)	Response including context, list of historic environment considerations et c under 6 headings concluding with a list of opportunities for info gain and building reuse. There are three maps in the appendices of heritage assets affected by HS2 (7 pages)	List of heritage sites and maps
Black Country Local Enterprise Partnership (An organisation with the aims to increase the conditions for enterprise in the BC)	Letter to the O&S manager (2 pages)	No data presented
The Birmingham Group	Letter with a number of bullet points including the main points they want to draw to BCC's attention (4 pages)	Set of principles that 'should' underpin the cultural dimension of HS2 developments
Shilpi Akbar, Assistant Director of Employment, BCC	Two page response written as a letter including appendices of Job Charters for New Street and John Lewis (4 pages)	Centro KPMG report and GBSLEP remit

<p>Greater Birmingham &amp; Solihull LEP (Led by businesses and local authorities with the aim of driving sustainable private sector growth and job creation in the area)</p>	<p>Report including foreword, followed by 8 sections including key 'facts' and figures, opportunities and challenges, jobs and skills, key asks for BCC (10 pages)</p>	<p>Albion Economics HS2 Job Analysis 2013, HS2 Growth Task Force 'The Challenge' 2013, and Centro KPMG report</p>
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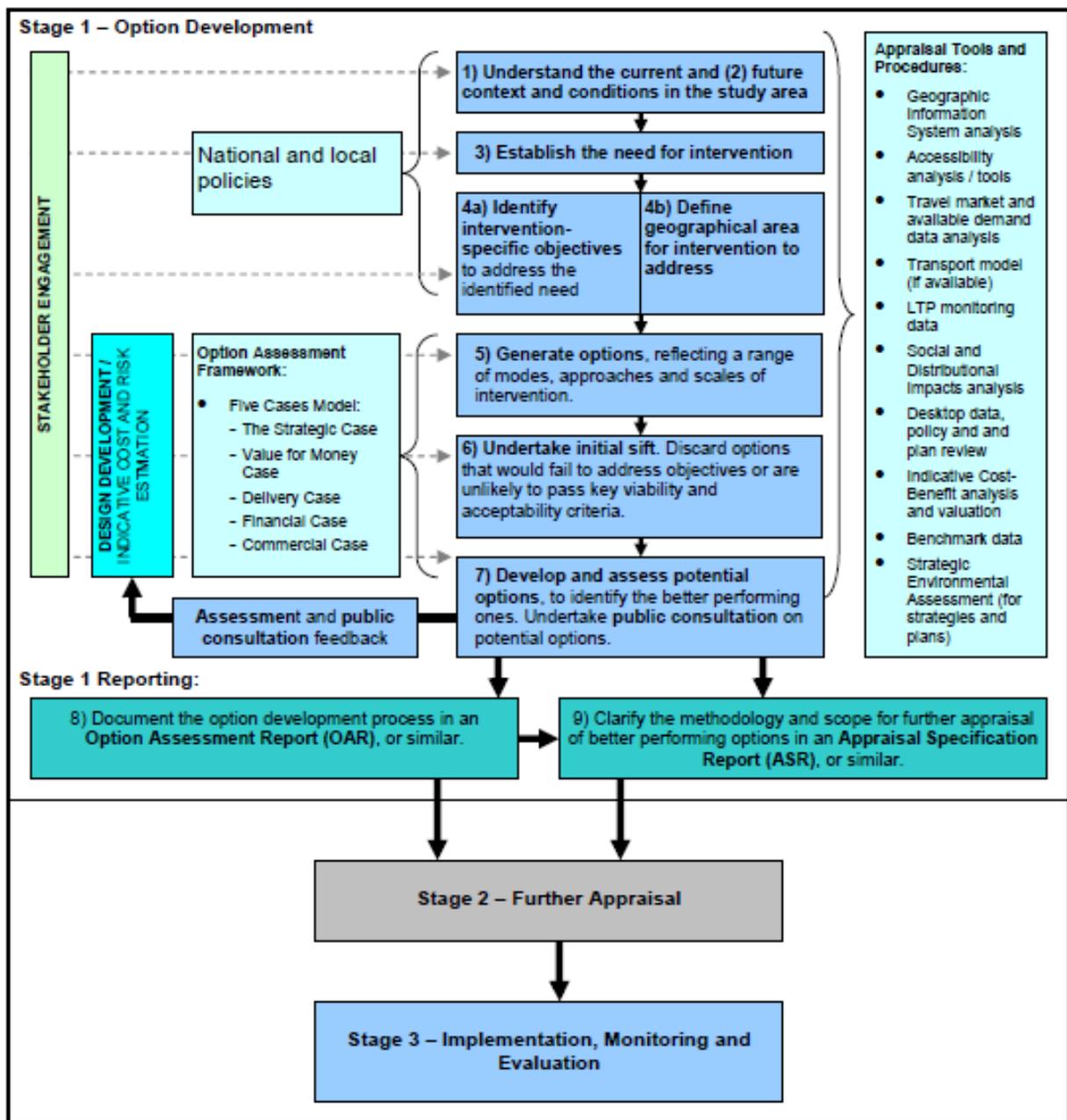
**APPENDIX B**

**GUIDEMAPS (2004) Stages of the transport decision-making process:**



**APPENDIX C**

**DfT (2014) Transport Analysis Guidance: Transport Appraisal Process:**



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