BUSINESS CASE

for

ASHFORD INTERNATIONAL RAIL CONNECTIVITY PROJECT (ASHFORD SPURS)

Executive Summary

Project type: Rail

Project Location: Ashford International Station and railway route totalling 4.8kms

Project start date: June 2015 Project complete date: June 2018

Project development stage: Feasibility, detailed design, implementation

Promoting authority(ies) name: Kent County Council and Ashford Borough Council Project Manager's name and position: Stephen Gasche, Principal Transport Planner - Rail

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Structure of the Business Case

1. Introduction

- 1.1 Purpose of the Report
- 1.2 Transport Business Case

2. Project Outline

- 2.1 Introduction
- 2.2 Purpose
- 2.3 Aim
- 2.4 Objectives
- 2.5 Brief Description
- 2.6 Current Situation

3. Strategy Case

- 3.1 Strategic Fit
 - 3.1.1 National National Infrastructure Plan
 - 3.1.2 National Creating Growth, Cutting Carbon
 - 3.1.3 Regional Kent Route Study
 - 3.1.4 Regional Growth Deal and Strategic Economic Plan
 - 3.1.5 Local Growth without Gridlock
 - 3.1.6 Local Kent and Medway Growth and Infrastructure Framework
 - 3.1.7 Local Kent County Council Local Transport Plan
 - 3.1.8 Local Rail Action Plan for Kent
 - 3.1.9 Local Ashford Borough Council Core Strategy
 - 3.1.10 Local Ashford Borough Council, The Five Year Corporate Plan 2015-2020
 - 3.1.11 3.1.11 Ashford Borough Council, Local Plan to 2030
- 3.2 Case for Change
 - 3.2.1 Need for the Project
 - 3.2.2 Impact of the Project in overcoming barriers to growth
 - 3.2.3 What will happen if proposed Project is not funded by LGF?
 - 3.2.4 Justifying public sector support for the Project
 - 3.2.5 State Aid
- 3.3 Determining Success of the Project
 - 3.3.1 Project Outcomes
 - 3.3.2 Project Dependencies and Constraints
 - 3.3.3 KVB System Description
- 3.4 Case for Change
 - 3.4.1 Options Considered
 - 3.4.2 Preferred Option

4. Economic Case

- 4.1 Transport Assessment
- 4.2 Value for Money Statement based on Network Rail's Transport Business Case
- 4.3 Expected positive impact of the Project

5. Financial Case

- 5.1 Total Cost of Project, Funding Sources and Cash Flow
- 5.2 Funding Availability

6. Commercial Case

- 6.1 Procurement Route
- 6.2 Revenue Costs
- 6.3 KCC Section 151 Officer

7. Managerial Case

- 7.1 Delivery
- 7.2 Programme Schematic and Project Plan
- 7.3 Benefit Realisation Plan and Monitoring
- 7.4 Risk Assessment

Appendices

- Appendix A Letter of Ashford service commitment from Eurostar to Network Rail
- Appendix B Letter confirming commitment of partner funding by KCC for Phase 2
- Appendix C Letter confirming Network Rail funding commitment for Phase 2
- Appendix D Letter from Eurostar confirming service provision Dec 2016 to Dec 2017
- Appendix E Letter from Kent Invicta Chamber of Commerce in support of the Ashford International Rail Connectivity Project (Ashford Spurs)
- Appendix F Strategic Economic Case by Kent County Council & Ashford Borough Council
- Appendix G Letter from Eurostar reaffirming commitment to future service provision at Ashford

1. Introduction

1.1 Purpose of the Report

In January 2015, the Government Growth Deal Extension with the South East Local Enterprise Partnership provisionally allocated £2 million towards the delivery of the Ashford International Rail Connectivity Project (Ashford Spurs). This Transport Business Case provides robust justification for the investment of Local Growth Fund in this project. The Benefit Cost Ratio of the project at 2.86:1 demonstrates considerable benefits which will be achieved through Local Growth Fund investment in the project. The project will also deliver Wider Economic Impacts through supporting economic growth in the growth town of Ashford, further enhancing the VfM offered by the project.

This Transport Business Case adopts a proportionate approach to the scale of the project. It follows the DfT and HM Treasury's The Green Book 5 Stage Business Case approach, covering the project's strategic, economic, financial, commercial and management case. The Economic Case includes the calculation of a VfM score for the project by Network Rail following DfT WebTAG Guidance.

1.2 Transport Business Case

The Transport Business Case provides a proportionate approach to the level of Local Growth Fund invested in the project and the total project cost, estimated at £10.5 million. This Transport Business Case is compliant with the South East Local Enterprise Partnership (SELEP) Assurance Framework which requires the Transport Business Case to set out the strategic objectives of the project and the Value for Money (VfM) case of the project.

2. Project Outline

2.1 Introduction

The plans of Eurostar International Ltd to introduce new Eurostar trains have raised concerns about the future International connectivity of Ashford. The existing rail signalling infrastructure at Ashford International Railway Station is currently incompatible with the new international trains set to be introduced. The Ashford International Rail Connectivity project will upgrade the signalling system at Ashford International Railway Station, and will take forward the vehicle change and compatibility process to ensure the retention of international rail services to Ashford. Without the delivery of the project, international rail services will no longer be able to serve the station with adverse consequences for the local economy, employers, employees and residents.

This project has been initiated by Kent County Council (KCC) with the support of the Regions of Connected Knowledge (RoCK) Project, an EU-funded project through its Interreg IVB North-West Europe Programme. In progressing through the initial phases of project development (GRIP Stages 1, 2 and 3a), the project has gained the support of the Department for Transport (DfT), Network Rail (NR), High Speed 1 (HS1), Eurostar, the Office of Rail and Road (ORR), Kent County Council (KCC), Ashford Borough Council (ABC), Kent and Medway Economic Partnership, and the South East Local Enterprise Partnership. Kent County Council will retain oversight of the project, with infrastructure delivery being undertaken by Network Rail.

2.2 Purpose

The purpose of this project is to deliver infrastructure improvements to Ashford International Railway Station to ensure that International Rail services continue to serve the station. In doing so, the project will:

Ashford International Rail Connectivity Project (Ashford Spurs)

- safeguard approximate 1,000 jobs in Ashford which have been located in the town precisely due to its international rail service
- stimulate the creation of additional jobs by encouraging business location and expansion decisions based on the existence and future guarantee of the international rail service
- stimulate housing growth to match the growth in jobs
- support the creation of a further education hub adjacent to the international station with courses which attract students from other European countries
- support further economic growth in Ashford and in the wider East Kent region in line with regional planning objectives
- create a town in which people want to live, work and participate in business activity
- promote modal shift from road or air to rail transport, providing environmental benefits and a reduction in congestion
- continue to deliver international rail services from Ashford International for an estimated 195,000 passengers per year

2.3 Aim

The Ashford Spurs project aims to ensure that the appropriate level of signalling and station access to provide the required level of train protection is in place to allow existing and future international trains to call at Ashford International Station to support the continued growth of Ashford and East Kent, and prevent damage to the local economy caused by the loss of international travel links.

2.4 Objectives

Our criteria are that any solution should facilitate:

- The restoration of the base level (prior to December 2016 timetable reduction of the Ashford Paris service) of Eurostar services on all routes serving at Ashford International Station from March 2018.
- The introduction of the new Class 374 Eurostar trains serving Ashford International Station (by March 2018).
- An 'operational' route through Ashford International Station for the new Eurostar Class 374 passenger trains to access the Station via the Ashford Spurs (by March 2018).
- A cost effective solution through implementation and ongoing maintenance.
- Growth in jobs and the prosperity of the East Kent economy through the retention of international passenger services in Ashford.
- Provide an equivalent level of protection to the AWS / TPWS signalling system.
- Provide a solution that will allow operational access to Ashford International Station via the Ashford Spurs for any international trains operating to European gauge standards until the implementation of ETCS (or an equivalent compatible upgrade solution).

2.5 Brief Description

When Ashford International station opened in February 1996, the Eurostar trains in service were operating along the existing Mainline between the new international terminus at Waterloo and the Channel Tunnel. Ashford was served as part of this route. When phase 1 of the Channel Tunnel Rail Link (CTRL) was opened in 2003, the existing 'Spurs' were created to link Ashford station with the new CTRL route. The CTRL was completed in 2007 with the extension to, and opening of, St Pancras International, at which point CTRL was re-named High Speed 1 (HS1).

Throughout this period the retention of the ex-British Rail signalling system (AWS/TPWS) on the Ashford Spurs did not present a problem, as the Eurostar trains in service were the original stock (Class 373) which had used the Mainline route and so are compliant with this system.

The need for this project has arisen with the introduction by Eurostar of the new Class 374 trains, which are compliant with the modern European signalling systems (ETCS and KVB) but not with AWS/TPWS. These trains will be able to operate on the whole of HS1 and through the Channel Tunnel, but not, at present, on the Spurs which link HS1 with Ashford International station.

Kent County Council and Ashford Borough Council have worked in partnership since February 2012 with Network Rail Infrastructure Ltd, High Speed 1 Ltd, Eurostar International Limited and the Office of Rail and Road with the aim of delivering the necessary upgrade to the Ashford Spurs.

Prior to commencement of the project, a preliminary technical evaluation of the signalling options available was undertaken by Advanced Rail Technologies Ltd, who were commissioned by Kent County Council to produce a detailed technical report.

The project was then divided into three phases: GRIP 1 to 3a (business case development and project cost estimate), which was undertaken by Network Rail and financed by Network Rail, Kent County Council, Ashford BC, HS1, Eurostar, and the EU RoCK project. GRIP 3b to 5 (detailed design and procurement) is currently being financed by Local Growth Fund (LGF) (round 2) through the SELEP, for which KCC is the client. GRIP 6 to 8 (installation, testing, commissioning and close-out) will be financed by the final award of LGF (round 3). The delivery of the project will be managed by Network Rail.

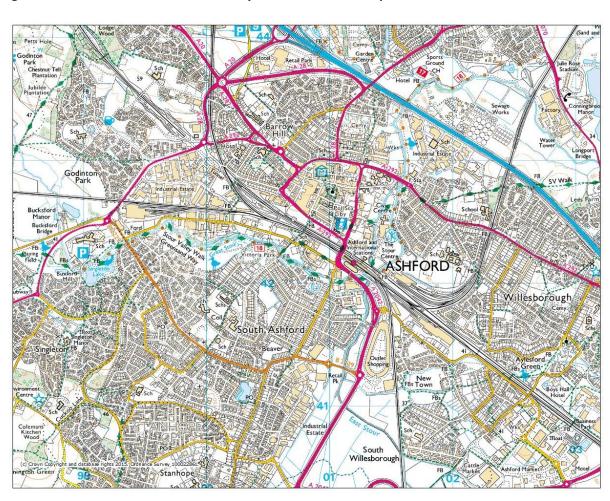


Figure 1.1 Ashford International Railway Station Location Map

2.6 Current Situation

Eurostar through its base service (prior to timetable change in December 2016) operated 79 services at Ashford in a typical week during the Summer period:

- 41 to and from Paris
- 14 to and from Brussels
- 14 to and from Disneyland; and
- 10 to and from Marseilles*

Ashford International Rail Connectivity Project (Ashford Spurs)

*During the Winter period the services to and from Marseilles are reduced to 2 each week, but the Winter ski service operates 4 trains to and from Bourg-St-Maurice.

If this project is delivered, Eurostar is committed to continue with this level of service, utilising their new Class 374 trains on the Paris, and eventually the Brussels services. If the project is not delivered, the Paris service will be withdrawn completely from Ashford from the end of February 2018, and it is very likely that the remaining services would be withdrawn after 2018 as each of the old class 373 Eurostar trains is replaced by the new Eurostar trains.

3. Strategy Case

3.1 Strategic Fit

3.1.1 National – National Infrastructure Plan

The Government's 'National Infrastructure Plan' sets out the high level investment policy for Britain's rail network. This is set out in the individual Route Studies which Network Rail will develop for each part of the national railway network.

These objectives for the rail network are to:

- increase rail capacity, particularly into major cities
- reduce journey times
- strengthen connectivity
- improve reliability, safety and the passenger experience

The Ashford International Rail Connectivity Project will be the first example of the delivery of KVB on Network Rail infrastructure, supporting the development of International transport links, and as such will not only deliver the capability required for the new fleet of international trains or those of any future International operators at Ashford, but also provide Network Rail with a sample training location for future delivery elsewhere of KVB on the national rail network.

3.1.2 National - Creating Growth, Cutting Carbon

The continuation, and future development, of international rail services between Kent and Nord Pas de Calais will support modal shift from road and air to rail, and thus contribute to the national targets for reduction of carbon emissions.

3.1.3 Regional - Kent Route Study

The draft version of Network Rail's 'Kent Route Study' for Control Period 6 (2019-2024) has now been published. The public consultation period runs from 14 March to 30 June 2017, with the final version due for publication in September 2017. This study will include the future development of Ashford International station in its scope, while preserving the present platform capacity to serve the existing and future level of international rail services envisaged. The Kent Route Study will also recognise the wider need in Kent for investment to create additional capacity to meet the expected increase in demand for domestic rail services, especially those using High Speed 1 between Ashford International and London St Pancras.

3.1.4 Regional - Growth Deal and Strategic Economic Plan

The SE LEP 'Growth Deal and Strategic Economic Plan' included the Ashford Spurs project in the list of schemes which were the subject of successful bids for LGF funding. This Plan recognised the aims of the project as "... safe-guarding [Ashford International's] future and supporting the growth planned across Ashford and the wider Kent economy."

Ashford International Rail Connectivity Project (Ashford Spurs)

This project will contribute to the overall objectives of the SE LEP by safeguarding existing jobs, supporting the development of new jobs, and delivering housing growth through improved international rail connectivity between Ashford, Calais, Lille, Brussels and Paris.

3.1.5 Local - Growth without Gridlock

KCC's strategic transport delivery plan is set out in 'Growth without Gridlock' (KCC, December 2010). This plan recognises the importance of the county's international rail services at both Ebbsfleet and Ashford International stations:

"KCC's priority is to ensure that Ebbsfleet and Ashford continue to benefit from frequent services to a range of northern European destinations and we will lobby Eurostar and Deutsche Bahn to include a Kent station stop on as many of their services as possible."

The growth in employment as a direct result of the international rail services provided to and from Kent has been demonstrated by the decisions of several French companies to locate in and around Ashford since the opening of the international station in 1996. The removal of these services would demonstrably lead to the loss of existing employment created by these companies, and also to the loss of future employment growth from projected new company locations from France and Belgium.

3.1.6 Local – Kent and Medway Growth and Infrastructure Framework

The Kent and Medway Growth and Infrastructure Framework was published in September 2015, and sets out the overall strategy for economic development in Kent and Medway:

"The link between infrastructure and growth is well known – robust infrastructure can enable development and ultimately raise land values; alternatively, a lack of infrastructure can fundamentally limit development and restrict land values. Whilst some infrastructure can be clearly linked to particular development, much of it transcends individual developments and often individual local planning authorities.

Since the removal of Structure Plans and Regional Spatial Strategies five years ago, there has been limited ability to plan at the strategic level for housing and jobs growth and the infrastructure needed to facilitate this growth. Instead, it has been left to local planning authorities to fill in the gap left at this strategic level, relying on the duty to cooperate. In recognition of this, Kent's Leaders agreed it would be important to produce a pan-Kent and Medway Growth and Infrastructure Framework to bring together a clear picture over the Local Plan period to 2031 on:

- housing and economic growth planned to 2031 across Kent and Medway;
- the fundamental infrastructure needed to support this growth;
- the cost of this infrastructure;
- the potential funding sources across the public and private sector funding during this period: and,
- the likely public sector funding gap and work towards solutions.

This Growth and Infrastructure Framework (GIF) has therefore been developed working in close collaboration with Medway Council and Kent's twelve district authorities, as well as the health and utilities sectors. It provides a framework not only for identifying and prioritising investment in infrastructure, but also for testing the impact of innovation in the way in which we provide public services. The Kent and Medway Economic Partnership (KMEP) has been, and will continue to be, apprised of the GIF work and its findings. The GIF will help support KMEP in setting its priorities and in attracting investment to the infrastructure that will be needed to support the growth to which the Partnership aspires."

[Source: Executive Summary, Kent and Medway Growth and Infrastructure Framework, September 2015]

3.1.7 Local - Kent County Council Local Transport Plans

KCC's Local Transport Plan 3 (2011-2016) was published in April 2011. It set out clearly the objectives for the county's international rail services, and specifically recognised the importance of the continuation and development of international rail services at Ebbsfleet and Ashford.

"The European Union (EU)'s liberalisation of international rail travel in 2010 seeks to break existing monopolies in order to stimulate competition for services between EU Member States. Several train operating companies have expressed an interest in running services in competition with Eurostar between London and the Continent, although as yet only Deutsche Bahn has formally proposed and received permission to do so.

KCC's priority for international rail services is to ensure that Ebbsfleet and Ashford continue to benefit from frequent services to a range of northern European destinations. This will help to stimulate economic growth in Ashford and Thames Gateway Kent, as well as boosting tourism in other parts of the County."

KCC has now completed its consultation on Local Transport Plan 4 (2016-2031), which recognises the strategic significance of the Ashford International Rail Connectivity project and gives strong support to its delivery:

"Ashford International Station is linked to High Speed 1 by two sections of railway known as the Ashford Spurs. The signalling on these spurs needs to be upgraded to permit the operation of the new Eurostar Class e320 trains into Ashford International Station. We, working in partnership with Ashford Borough Council, have led a working group with all concerned stakeholders to fund, procure and deliver an upgrade to the signalling system. The delivery of the upgraded signalling system by Network Rail will enable Ashford to continue to operate as an international station, serving the new fleet of Class e320 Eurostar trains, as well as any future international rail operators such as Deutsche Bahn."

Local Transport Plan 4 (2016-2031) is expected to be approved and adopted by KCC in July 2017.

3.1.8 Local - Rail Action Plan for Kent

KCC has also published a 'Rail Action Plan for Kent' (KCC, April 2011), which sets out the policies and priorities for the development of Kent's rail network throughout the planned new franchise and beyond. This plan recognises the essential contribution to the county's rail network made by international services:

"KCC will continue to lobby for the retention and expansion of Eurostar services from both Ashford International and Ebbsfleet International, including the now planned through services to Amsterdam."

While the international services to Amsterdam to be introduced in December 2017 will not initially serve either of the Kent international stations, the Council is determined to work for the retention and expansion of Eurostar services at Ashford to Paris, Brussels and other European destinations. The submission to the SE LEP for Local Growth Fund funding for the Ashford International Rail Connectivity project is therefore essential if this strategic objective of the Council is to be delivered.

3.1.9 Local - Ashford Borough Council's Core Strategy

Ashford Borough Council's Core Strategy (July 2008), which has informed the Local Plan for the authority, recognises the significance of international rail services at Ashford in supporting the aspirations for housing and employment growth:

"In 2003, Ashford was identified as one of the Growth Areas in the Government's Sustainable Communities Plan. This role sets the context for this Core Strategy and for the levels of new housing and employment provision required for the Greater Ashford Urban Area over the Core Strategy period.

The scale of growth being planned for is based on a 2002 capacity study completed for the Council and its Ashford's Future partners. The growth figure is set well above the amount indicated by existing population trends in the Borough, providing for an accelerating rate of net inward migration and local population growth. This capacity study evaluated several growth scenarios for Ashford to meet the requirements of the Sustainable Communities Plan.

Following an assessment of social, economic and environmental factors, it concluded that Ashford town has the capacity to provide an additional 31,000 homes and 28,000 jobs over the period 2001 to 2031. This is based on Ashford receiving priority, due to its strategic growth status, in economic development, planning and transport strategies by all relevant stakeholders, at all levels of governance, together with associated capital investment in infrastructure, and a concerted effort to promote the town and its development opportunities.

The growth area agenda applies only to Ashford town and its immediate surrounding area; development needed to meet the growth area requirement will not be spread across the Borough. As a result, the Core Strategy establishes widely differing development profiles for the town, where rapid change and housing, employment and infrastructure is proposed; and the extensive rural area of the Borough, where the emphasis is on continued small scale change designed to protect the quality of the Borough's environment and heritage, balanced with the need to help foster strong local communities with limited growth in the most suitable locations."

The Core Strategy also recognises the importance of the international rail services at Ashford in support of these housing and employment growth targets:

"Some continental Eurostar services also call at Ashford International station, giving the town access to mainland Europe."

3.1.10 Local – Ashford Borough Council, The Five Year Corporate Plan 2015-2020

Ashford Borough Council has developed 8 big strategic projects which are critical to the delivery of the area's sustainable growth. The Council's Corporate Plan recognises these projects including the Ashford International Station Rail Connectivity project through the delivery of 4 key priorities.

Priority 1 - Enterprising Ashford: Economic Investment and Growth, identifies the specific objective:

"Well-planned and well-resourced infrastructure to maintain Ashford's prime location status.

Focus on delivery of infrastructure projects essential to Ashford's growth and connectivity: Junction 10A (M20), A28 improvement, station signalling upgrade for Eurostar."

3.1.11 Local – Ashford Borough Council, Local Plan to 2030

Ashford's draft Local Plan covering the period 2011-2030, which was consulted on in the Summer of 2016 and is currently being reviewed prior to being submitted, will allocate sites for development as well as establish planning policies and guidance, recognises the importance of Ashford's international connections in its strategic outlook:

<u>Strategic Development Requirements</u>

Ashford has always been a well-connected town in Kent with rail connections in 5 directions but since 2009, its prime location on the HS1 rail link to London St Pancras has resulted in a step-change in reducing journey times to the capital via the major new growth locations at Ebbsfleet and Stratford...The Eurostar rail service provides direct international rail connections from Ashford International station to Paris, Brussels and other Continental destinations.

Delivering a Sustainable Town Centre

Ashford International Rail Connectivity Project (Ashford Spurs)

Ashford also has a unique opportunity. High speed rail services give access to and from London in 38 minutes and this, coupled with the potential for an expanding range of rail services to the continent, places Ashford town centre in a very special position. Combining the three key factors of fast travel times, relatively low average house prices and the quality of life offered in the area, Ashford is now in a very competitive position in south east England to attract inward investment and jobs growth.

The Local Plan also notes the international rail link as an important draw factor for individual major upcoming developments:

The Commercial Quarter – "this is the new main business sector of the town intended to stimulate investment opportunities in new large scale office space based around a high quality environment with a location close to the domestic and international railway stations."

Newtown Railway Works — "there is a strong opportunity to take advantage of the proximity of the domestic and international railway stations to attract people to [the Newtown Railway Works redevelopment] to enjoy the railway heritage and help to make a mix of potential uses viable."

3.2 Case for Change

3.2.1 Need for the Project

If the project is not delivered, the new class of international trains will no longer be able to serve Ashford International station after 2016. This is because the new Class 374 Eurostar trains, which are already in service with more trains planned to be introduced through to December 2017, will by the end of February 2018 have entirely replaced the existing Class 373 fleet on the London-Paris route as well as operating the new London – Amsterdam service. These new trains, as well as those which would be used by any other future international rail operator such as Deutsche Bahn, would not be compatible with the existing signalling system used on the spurs which link HS1 with Ashford International Station.

A letter of support from Eurostar International Limited is attached as **Appendix A**. This letter gives the following categorical assurances:

- that the Ashford to Paris service will be restored once the project is completed, tested and approved;
- that the existing services to Brussels, Disneyland, Marseilles and Winter ski resorts will continue to operate throughout this period using the existing Eurostar stock.

3.2.2 Impact of the Project in overcoming barriers to growth

The Ashford International Rail Connectivity project, if fully funded, will deliver the required signalling upgrade with the addition of the KVB on the Spurs, thus guaranteeing future access by all new fleets of international rolling-stock. The project is therefore key to the economic growth of Ashford and the wider East Kent area, as international rail services have demonstrated already the economic benefits of direct rail access to European destinations. For this reason the project is worthy of support from the SE LEP.

There are currently about 1,000 jobs located in Ashford due directly to the existence of international rail passenger services. Without the planned project, not only would these jobs be lost but also an estimated additional 1,000 jobs which could otherwise be created through the retention and expansion of these services would otherwise be lost.

This would account for £176m of additional productivity within the local area, measured through Gross Value Added (GVA), over a 10-year period from project commissioning [see the Strategic Economic Case Addendum 1: Productivity (Gross Valued Added) impact of the Ashford International Rail Connectivity Project (2016)].

These services are also key to population growth in Ashford, housing targets for which are predicated on the continuation of the international rail connectivity of the Borough and set out in the Ashford Borough Council's Core Strategy.

3.2.3 What will happen if the proposed Project is not funded by LGF?

If LGF is not provided, the project will not be able to be taken forward and International services will be reduced and eventually withdrawn at Ashford International station. Due to the scope of the project changing from ETCS to KVB in the Autumn of 2015, funding that was previously committed from the parallel EU TEN-T CEF bid was not able to be accessed as this funding is only eligible for ERTMS projects. The scope of this project was changed with the new introduction of KVB in June 2015 as a Class B system in the UK, which is now eligible to be implemented on the Ashford Spurs. KVB is a system already in operation at St Pancras and provides a more cost effective and technically deliverable solution at Ashford. All other funding routes have been investigated and with the LGF funding now representing almost 90% of the funding, the project would not be able to be implemented and Eurostar would cease to serve Ashford over time, and any new international operator would also be precluded from accessing Ashford International Station.

Failure for international services to serve Ashford International would have devastating implications for Ashford and the wider area. There are a number of international businesses which are currently located at Ashford. Without access to Eurostar services from Ashford International Railway Station, these businesses are likely to relocate to alternative locations, resulting in job losses in Ashford.

3.2.4 Justifying public sector support for the Project

Neither the Department for Transport (DfT) nor Network Rail is able to provide any additional funding required for this project, over and above the £580,000 committed by Network Rail to fund GRIP stages 1 to 3a (planning and design). The DfT's allocation for capital rail investment is fully allocated within the Control Period 5 (CP5) settlement with Network Rail for the period 2014-2019, and Network Rail is unable to add to their existing commitments which will fully utilise this CP5 funding allocation. Kent County Council and Ashford Borough Council have both investigated methods of funding the project internally; however in these difficult financial times for local authorities there are no local sources of funding that have been identified, and this project is considered to be beyond the usual scope of local authority projects.

The SE LEP is in a unique position to provide funding for transport infrastructure projects such as the Ashford International Rail Connectivity project, and is best placed to act as primary funder of the delivery stage for this project. As has been demonstrated above, the project will support economic growth by retaining and growing the employment offer in Ashford. As such, it is clearly in the public's interest that this project is delivered.

3.2.5 State Aid

The issue of State Aid had previously been addressed separately by the Department for Transport (DfT) in respect of the original parallel funding bid to the EU's TEN-T CEF. The DfT has engaged with High Speed 1 (HS1) and Eurostar to ensure that there is no beneficial gain – however unintended – to either the leaseholder of the international station (HS1) or the rail service operator (Eurostar). It has been established by the DfT that as HS1 is an open access railway route, there would be no particular benefit for Eurostar or for any other future international rail operator from the delivery of this project, as it would benefit (or not) any and all international rail operators and not just the present incumbent.

The issue of State Aid was also raised in respect of the leaseholder of Ashford International Station, HS1. As HS1 is in a unique position as the sole leaseholder, it has been necessary to establish that there would be no State Aid granted, however unintentionally, to HS1 as a result of the proposed investment. KCC has obtained legal advice, based on that provided separately by Counsel in respect of another LEP-funded project in Kent, that no such State Aid would exist. This legal advice is based on the provisions within the EU Community Regulation No 651/2014 of 17 June 2014: General Block Exemption Regulations (GBER), which enables Kent Legal Services (an independent trading arm of KCC) to advance lawful and compliant aid to be used in the application for LEP funding for the proposed upgrade of the signalling system at Ashford International station.

Based on this advice provided by Counsel on State Aid for another LEP-funded project in Kent, and also on the GBER regulations, the following summarises the legal advice obtained by KCC:

- "11.1 It is my view that the grant to be advanced to Network Rail for the delivery of the "signalling systems" and associated works is compatible with internal market under GBER. The applicable and general provisions of GBER which make this aid compliant and lawful are covered under Articles 56, 16 and 5. In addition to this, the Project also complies with the general provisions of GBER as follows: (a) the outcome of the aid will be for the benefit of the general public (b) it will not be commercially exploited (c) it is transparent aid under Article 5 (d) it has no cross border interest. I am told that the procurement department within KCC has been consulted on this matter, with the appointment of Network Rail being approved as the preferred economic operator who is able to provide the "signalling system".
- 11.2 The provisions of Article 6 (in the form of a business case) must be complied with before aid is granted. After it's been granted, all aid under GBER must be notified to the Commission using the State Aid Notification Interactive (SANI) system, within 20 working days of the aid being legally committed. This notification is light touch and is not the same as the formal notification process.
- 11.3 Counsel's advice (in particular paragraphs 26 to 41) dated 6th November 2015 and incorporated by reference also apply. This is because the considerations in the advice are relevant and similar to those examined for the award of aid under this Project. Therefore, it is my view that any aid granted for the delivery of the Project will be a compliant and lawful aid compatible with internal market."

[Source: Memorandum on 'Investment in Signalling at Ashford International Railway Station – State Aid (the "Project"), Kent Legal Services, 07.03.16]

The current international rail operator, Eurostar International Limited, has also provided a written assurance that the Ashford – Paris service will be reduced between December 2016 and February 2018 and then if required it will be suspended, and not withdrawn, and that it will be restored to its current level once the Ashford Spurs project is completed. This assurance makes very clear the fact that the Ashford - Paris service will be a continuation of a previous service, and not a new service. Consequently, the investment would not be regarded as State Aid in favour of the existing rail operator by enabling the introduction of a new service, as the service level outcome of the project will only be restoration of the *status quo ante* [Appendix D contains a letter from Eurostar confirming service provision Dec 2016 to Dec 2017].

3.3 Determining Success of Project

3.3.1 Project Outcomes

The primary intended outcome of the project is the retention and expansion of international rail services at Ashford. This table sets out the wider outcomes of the project:

Table 1 - Key Project Outcomes

Safeguard approximate 1,000 jobs in Ashford which have been located in the town precisely due to its international rail service

Stimulate the creation of additional jobs by encouraging business location decisions based on the existence and future guarantee of the international rail service

Stimulate housing growth to match the growth in jobs

Support the creation of a further education hub adjacent to the international station with courses which attract students from other European countries

Support further economic growth in Ashford and in the wider East Kent region

Create a town in which people want to live, work and participate in business activity

Continue to deliver international rail services from Ashford International for an estimated 195,000 passengers per year

3.3.2 Project Dependencies and Constraints

Network Rail will deliver the project in co-ordination with HS1 as it will be situated on the two operators' infrastructure. Grip stages 3 to 5 (planning and design) are being undertaken by Network Rail and their contractors, i.e. the design and planning of the new signalling system to ensure its compatibility with the new Eurostar (and other operators') international rolling-stock. The project is also dependent on the Vehicle Acceptance and Route Clearance work package, which is being delivered concurrently by Eurostar in partnership with Network Rail and High Speed 1.

While Kent County Council has been instrumental in acquiring, and bidding for, funding for this project, Grip stages 6 to 8 (the delivery, testing and commissioning of the project on the rail network) will be undertaken by Network Rail. This action, as well as the operation of the services by Eurostar, will be outside the control of the County Council, but will be subject to an Implementation Agreement between Kent County Council and Network Rail. The County Council will therefore be protected by this agreement for any direct liabilities arising from the delivery of the project, subject only to the commitment to fund the project in accordance with the LGF funding awarded through the SELEP. This is not foreseen as a problem or barrier to project delivery, but is stated here for information.

3.3.3 KVB System Description [Source: OP# 148655 Ashford International Spurs, dated 14.04.16, version 1]

Purpose of this Description

This description provides details as to the French based *Kontrol Vitesse par Balise* (KVB) overlay train protection system as used at St Pancras International Station and being proposed for use at Ashford International Station.

Note: Kontrol Vitesse par Balise or Contrôle de Vitesse par Balises which translates to Control Speed Beacon or more commonly referred to as Beacon based Speed Control System.

Project Overview

The connecting lines between High Speed 1 (HS1) and Ashford International Station known as the 'Ashford Spurs' are signalled with conventional colour light signals with AWS/TPWS providing protection against the risk of 'Signal Passed at Danger' (SPADs) and other operational irregularities. Eurostar International Limited (EIL) has introduced a fleet of modern rolling stock, the Eurostar Class 374, which does not incorporate

Ashford International Rail Connectivity Project (Ashford Spurs)

AWS/TPWS equipment on board, thus precluding the new rolling stock from stopping at Ashford International station.

There is a significant operational advantage in retaining Ashford as an alternative to stopping at other HS1 stations if those stations, or the Channel Tunnel itself, become temporarily out of action and at times of major perturbation, significant engineering works, security incidents, unforeseen incidents, and in the event of train failure and/or recovery.

The project aim is to ensure compatibility between track and train to enable the Eurostar Class 374 international rolling stock to call at Ashford International Platforms 3 and 4. Previous Client Remit documentation regarding this enhancement stated that an agreement was reached that the most efficient way to achieve this is through an enhancement to the infrastructure, rather than fitting legacy systems to modern rolling stock types.

The signalling objective of this project is to provide an overlay train protection system that is compatible with the new Eurostar Class 374 rolling stock in the Ashford International Station and Spurs area.

KVB System Overview

KVB is a safety device designed to correct any unsuitable actions of the Train driver and when the speed is considered dangerous. KVB is a permanent Speed Control System based on Information Point Transmission. It only applies to lines equipped with Lineside Signalling

The KVB system orders a Compulsory Emergency Braking of the Train, irreversible until the Train comes to a complete stop as well as the Traction Circuit Breaker re-set (traction power).

KVB is a French based speed control train protection system in use throughout France and at St Pancras International Station. Track mounted balises provide information to the train in respect of signal aspects and speed limits. The on-board equipment monitors train speed against permitted speed and limit of movement authority, taking account of the train's braking capability, and intervenes if it judges that the train speed is excessive.

The KVB system uses a balise based message, sending a command similar to the current UK train protection TPWS to provide a way of controlling the speed and braking of the new Eurostar Class 374 rolling stock.

KVB consists of:

- 1. The on-board installation, which comprises:
- An on-board computer (UEVAL) containing a processor, a communication unit and recording equipment
- A visual interface for the use of the driver, which:
 - o permits data entry regarding the train's speed, length and category.
 - o displays information about the state of the system. It does not replicate trackside signals for the driver (for example, the speed limits are not indicated). This is because the KVB is a train protection system, not a cab-signalling system.
- An antenna, placed under the locomotive, to receive information sent by the ground installations.
- 2. The ground-based installation, made up of:
- Beacons or balises digital or analogue transponders placed between the two track rails. These can
 be fixed beacons (sending a single set of information, e.g. placed at a point where there is a change
 of speed limit) or switchable beacons (sending a variety of messages, so that one signal can send
 different sets of information as required).
- A coder used as an interface between the existing signal and the switchable beacons.

The on-board computer generates two speed-thresholds based on the received signals from the balises. If the train is over the speed limit, passing the first speed-threshold, an audible alarm sounds and the control

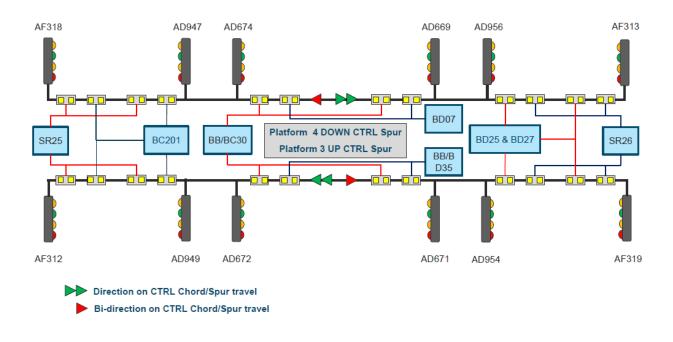
Ashford International Rail Connectivity Project (Ashford Spurs) panel indicates to the driver to adjust the train speed without delay. If the second speed threshold is passed, the KVB automatically engages emergency brakes on the train.

Figure 1.2 - KVB System Layout Graphic

Ashford International Spurs



KVB Layout Graphic



A better railway for a better Britain

V4: 23-Mar-16 / 1

3.4 Case for Change

3.4.1 Options Considered

Option 1	Do Nothing	This option would result in a worse situation than that which exists today. From February 2018, for the reasons stated above, Ashford would cease to be a viable international station in the long term, with only a minimal service remaining. This would inevitably lead to Ashford becoming uneconomic as an international station, with the subsequent removal of its remaining international services and all the economic disbenefits for Ashford and the wider East Kent region which would follow.
Option 2	Do Something – ETCS Level 1	ETCS Level 1 - part of the European Rail Traffic Management System (ERTMS) — would have the benefits of compatibility with all new European rolling-stock, and also the potential of EU funding without the need for any derogation from EU law. The disbenefit for Network Rail would be that this is currently an untried system in Great Britain, and that there is concern about the technical issues which may arise from overlaying this system on the existing AWS / TPWS system. At the Feasibility stage, this solution was identified as technically more difficult with a higher level of risk, as well as more costly to deliver than a KVB solution.
Option 3	Do Something - KVB	KVB is a tried and tested system used on HS1 on the approaches to St Pancras International, and also in France on LGV Nord on the approaches to Lille Europe and Paris Gare du Nord. The existing Eurostar trains are equipped with this system, and Network Rail knows that it would work compatibly with the existing AWS / TPWS system. However KVB is not eligible for EU funding as it is not a standard EU system. KVB has been re-designated, as of June 2015, as a recognised Class B system without a requirement for derogation from EU law, and the DfT has confirmed to Network Rail that KVB is therefore a viable solution for this project. It also has the benefit of operator and driver familiarity, which reduces operational and training risks.
Option 4	Do Maximum	This very disruptive option, to re-build the international platforms alongside HS1, to the immediate north of Ashford Station, would have been prohibitively expensive and would not have been funded. For these reasons this option was not pursued.

Table 2 - Assessment of Options against Project Objectives

Project Objectives	Option 1	Option 2	Option 3	Option 4
Provide an equivalent level of protection to today's	Х	✓	1	✓
systems				
Future Proof	Х	✓	1	✓
Technically acceptable to project stakeholders	Х	✓	1	✓
Cost effective solution	Х	Χ	1	Х
Deliverable as soon as practicable after the first new	Х	Х	1	Х
trains come into full service				

3.4.2 Preferred Option

The Technical Analysis was produced originally by ART Ltd in August 2013. This report provided the technical analysis for conversion of the Ashford Spurs to permit interoperability of existing and future international trains to and from Ashford International Railway Station. The ART report advocated either the ETCS Level 1 or the KVB solution, and these options were considered by all the partners to the project at a meeting in May 2014.

The partners to the project agreed at this meeting to support an ETCS Level 1 solution, as this would be eligible for EU funding and would provide the most up to date technological solution. At this stage KVB would also have required a derogation from EU law, as it was classified as a non-standard EU system. With the change in regulation, classifying KVB as a Class B system eligible to be overlaid on the Ashford Spurs, and with the Feasibility report by Network Rail identifying significant risk on costs and technical delivery for ETCS Level 1, it was decided in November 2015 to agree KVB as the most deliverable solution for the Ashford International Rail Connectivity Project.

In January 2016 Network Rail's south-east route investment panel approved the undertaking of the KVB feasibility study. A new team, Implementation Projects – Signalling South, was appointed to deliver the project, with the project sponsor for Network Rail representing the south-east route. Authority was granted to proceed with stages GRIP 1 to 3a as funding for these stages had already been approved. Development of the project beyond this stage is assured as funding has been secured by the client and their partners for GRIP stages 3b to 8.

There are no powers or approvals required outside Network Rail's own procedures for the delivery of option 3. The project will be delivered within the boundary of the existing railway route and so will be exempt from any requirements of planning law as it is classified as 'Permitted Development'. It will also not involve any large scale construction works. There are no environmental or heritage constraints as the site is located about 3 miles from the nearest AONB (near Wye), and about 12 miles from the nearest SSSI (Dungeness).

All safety considerations will be managed by Network Rail in accordance with their own strict safety procedures, and all works will be either off-site or within the boundary of the railway.

4. Economic Case

4.1 Transport Assessment

Category of impacts		Quantified/Qualitative impact (Large beneficial – La	rge Adverse)
Economy	Business Users and Providers	Benefits Maintain and improve journey times and user experience of cross-border business journeys between Kent and mainland Europe	Largely beneficial
		Prevent modal shift to road and air transport with consequential increased local road congestion – particularly when Operation Stack is in effect - which adversely impacts East Kent business travel	
		<u>Disbenefits</u> Passengers travelling from St Pancras or Ebbsfleet on the services that stop at Ashford International will have a slightly longer journey due to the time it takes to stop at the Station.	
	Reliability	Benefits Maintain reliability of Ashford as an international station on the international rail network	Beneficial
		Prevent loss of emergency passenger station stop, Ashford being one of three international stations on the UK section of the route and the closest to the Channel Tunnel, and the only Station that provides a route to take trains off the HS1 tracks when there are disruptions to services.	
		Retains an alternative Kent station stop, reducing reliance on Ebbsfleet International in the event of station engineering work or strong passenger flows exceeding the capacity of either station. This is particularly important as both areas continue to experience strong population and visitor growth, for example with the future opening of Paramount Park leisure resort near Ebbsfleet.	
	Regeneration	Benefits Investment safeguards jobs and future economic growth of Ashford as a growth town	Largely beneficial
	Wider Impacts	Benefits Retaining Ashford as the international station for the wider East Kent region, supporting economic growth. This project supports the marketing of East Kent as an international gateway, for example with the University of Kent's branding as 'the UK's European university'	Largely beneficial

Ashford International Rail Connectivity Project (Ashford Spurs)

Environment Noise		No change from existing	Neutral
	Air Quality	No change from existing	Neutral
	Greenhouse gas	Benefits Reducing air and road travel to mainland Europe through modal shift to rail	Beneficial
	Landscape	No change from existing	Neutral
	Townscape	Benefits Prevents closure of the international side of the station which would be a blight that would reduce the attractiveness of the station area and the town as a whole	Beneficial
	Heritage	No change from existing	Neutral
	Biodiversity	No change from existing	Neutral
	Water Environment	No change from existing	Neutral
Social	Commuting & Other users	Benefits Benefit cross-border leisure journeys between Kent and mainland Europe, and provide commuting service for existing daily commuters Disbenefits Commuters and other users from St Pancras and Ebbsfleet on the services that stop at Ashford International will have a slightly longer journey due to the time it takes to stop at the Station	Largely Beneficial
	Accidents	No change from existing level of absolute train protection	Neutral
	Physical Activity	No change from existing	Neutral

Ashford International Rail Connectivity Project (Ashford Spurs)

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Journey Quality	Benefits Enhancement in quality of journey to/from Ashford International through use of modern European rolling-stock	
	Reduction of journey times due to introduction of modern rolling stock	
	Reduces or eliminates the need to change to another mode of transport, depending on outward or onward journey. Ashford International is directly connected by rail to 10 of the 12 Kent districts, and to Brighton via East Sussex, whereas Ebbsfleet International is only connected to HS 1 and the eastern section of the North Kent line. Improves the journey quality for passengers who would otherwise need to travel by train or other means of transport to Ebbsfleet before their onward journey back through Ashford to their destination. Disbenefits Passengers travelling from St Pancras or Ebbsfleet on the services that stop at Ashford International will have a slightly longer journey due to the time it takes to stop at the Station.	Largely Beneficial
Reliability Option and non-use values	No change from existing	Neutral
Security	Benefits Retains Ashford as an emergency passenger station stop in the event of emergency situations in the Channel Tunnel or on HS1	Beneficial
Access to Services	Benefits Retains international passenger services for East Kent to Europe which is accessible to the public without need to travel via Ebbsfleet or another mode of transport Provides infrastructure allowing services to an increased number of destinations in Europe	Largely beneficial
	through modern rolling stock Retains capacity for international services in Kent above that provided by Ebbsfleet International alone	
Affordability	Benefits Prevents increased cost of travelling to Ebbsfleet International for equivalent journeys to Europe	Beneficial
Severance	No change from existing	Neutral

Ashford International Rail Connectivity Project (Ashford Spurs)

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Public Accounts	The implications of the project for Government	Neutral
	taxation would be neutral because:	
	(i) VAT is not payable on the public services	
	provided by Network Rail	
	Infrastructure Ltd, or by High Speed 1	
	Ltd, or by the passenger rail service	
	operator Eurostar International Ltd, or	
	by any of the contributing authorities,	
	and so VAT receipts would neither rise	
	nor fall;	
	(ii) Indirect taxes are not affected by	
	international rail services, as there are	
	no "low tax" shopping facilities at	
	either Ebbsfleet or Ashford stations;	
	(iii) Direct taxes and National Insurance	
	receipts would not be affected as the	
	existing employment generated at	
	Ashford would continue as at present.	
	There could be a beneficial increase in	
	Government income from these	
	sources as more international	
	companies locate in Ashford following	
	project completion.	
	Network Rail will need to incorporate the ongoing	
	maintenance costs of the signalling upgrade in its	
	Control Period 6 (2019-2024) (CP6) settlement with	
	the Government. This issue has been raised	
	directly with the Operations and Maintenance	
	team for the south-east route, who have	
	acknowledged the requirement to incorporate the	
	upgraded signalling system in the budget and	
	maintenance plan for CP6.	
	Eurostar, as a private Limited Company, would not	
	have any adverse effect on public finances.	

4.2 Value for Money Statement based on Network Rail's Transport Business Case

The VfM Case has been developed using Department for Transport (DfT) appraisal criteria (WebTAG). The appraisal compares the capital costs of the scheme against the benefits in terms of value of time saved to passengers, who would otherwise need to access international train services elsewhere on the rail network or travel by other modes of transport, and the disbenefit in terms of value of time to those passengers who do not require international rail services to stop at Ashford International. It is recognised that this narrow assessment of travel time savings does not take into account the strategic economic impact of international services from Ashford International for the wider East Kent area. The wider economic impacts are presented in sections 3.2 and 4.3 of this document.

Using this DfT WebTAG methodology, the Transport Business Case gives an appraisal of "High Value for Money" and a BCR score of 2.86

A comprehensive Discounted Cash Flow WebTAG appraisal is not possible for this scheme as the guidance does not align adequately with international transport schemes and due to a lack of access to the necessary data. This includes revenue and indirect tax implications, due to the lack of available train counts and

Ashford International Rail Connectivity Project (Ashford Spurs)

revenue data. As such, the appraisal has adopted a relatively 'light touch' to establish value for money, which understates the value of the proposed enhancement to passengers. At this stage of the project development this Transport Business Case gives a good assessment of the value for money of this scheme, but potential changes to the parameters, either in terms of project costs, service demand, mode of transport used, or time penalties for travellers do provide challenges in creating certainty within the figures provided, and changes could see the BCR value either increase or decrease as the project is delivered.

Assumptions

- The current annual passenger numbers boarding and alighting international services at Ashford International is 196,560, with 6 trains per day stopping at Ashford in each direction. It is assumed that stopping patterns remain the same and that 1% annual passenger growth occurs during the appraisal period.
- The asset life is 35 years, but future benefits are discounted to a base year (at 3.5% for the first 35 years, then 3.0% in line with WebTAG guidance).
- There is a 60/40 split between leisure and business users. The appraisal applies the value of time at £0.68 per minute for business users, where is has been assumed that all passengers travel over 200km, and £0.08 for leisure users, as per WebTAG (2010 prices).
- The appraisal assumes that the capital cost is the only cost to the public sector (i.e. no rail subsidy, and any additional operating costs are absorbed within existing industry processes).
- If services were to no longer call at Ashford International this would give through passengers a journey time benefit of four minutes in both directions.

The appraisal does not account for non-user benefits (e.g. reduction in road congestion) or wider economic benefits in the Ashford and East Kent area. This appraisal should be reviewed in conjunction with the Strategic Case included as part of this bid.

Capital Costs

The BCR value has been calculated based on a Net Present Value (NPV) which includes GRIP 3 Optimum Bias. The current Anticipated Final Cost (AFC) to deliver the infrastructure required is £10,462,062 (2016 factor prices). The Present Value (PV) capital costs amount to circa. £7,101,000. This:

- Excludes sunk costs of circa. £1,891,000;
- Includes QRA at 20%, but excludes KCC risk;
- Has GRIP 4 optimism bias applied;
- Has been converted to 2010 prices; and
- Has been discounted over the appraisal period as per WebTAG

Benefits and Disbenefits

The current direct journey time between Ashford International and Paris averages at 2h25m including checkin (sourced from the Deutsche Bahn journey planner using 2016 timetables). Should the project not go ahead, the journey time travelling from Ashford International to Paris Nord via Ebbsfleet, including interchange and check-in time, averages at 3h29m. Although other journey options are available, this comparison is used as a proxy for all journeys.

This equates to a journey time saving of 64 minutes for the 196,560 passengers who board or alight at Ashford International on a yearly basis, if the current service is maintained through the planned enhancement. When applying the WebTAG value of time assumptions to business and leisure users, this equates to an annual monetised journey time benefit of £3,985,293.

Journey time disbenefits have been calculated for those passengers on international services who are not boarding or alighting at Ashford International and would otherwise receive a journey time saving of 4 minutes were the services no longer stopping there.

A high level analysis shows that approximately 25% of all the services (6 tpd in each direction) stop at Ashford International and therefore a quarter of the 10.01 million annual Eurostar passengers would be affected by a change in journey times, minus those who board and alight at Ashford. When applying the WebTAG value of time assumptions to business and leisure users, this equates to an annual monetised journey time disbenefit of £3,078,359.

Over the 35 year appraisal period, the net benefit is circa. £20.5 million in 2010 prices.

Results

The user benefits (PV) minus costs (PV) gives a Net Present Value (NPV) of the scheme of £13.2m over the 35 year appraisal period. The Benefit Cost Ratio (BCR) for the scheme is 2.86. This BCR represents high value for money (VfM) based on the DfT's VfM assessment guidance, indicating that the costs of the scheme are fully covered by the socio-economic benefits.

Sensitivities and risks

There are a number of risks to the high value for money case presented for Option S1, as follows:

- Escalation of capital costs: There is a risk that the capital costs of the scheme could increase. A sensitivity test, S1 SEN1 has therefore been undertaken to examine the case where the capital costs (excluding sunk costs) increase by 50%. This gives an NPV of £9.7m and a BCR of 1.91, regarded as medium value for money according to DfT guidance.
- An increase in the journey time disbenefit: The main appraisal option assumes that passengers not
 boarding or alighting at Ashford International receive journey time disbenefit of 4 minutes, as they
 would otherwise receive a journey time saving were the scheme not to go ahead. A sensitivity test, S1
 SEN2, has been undertaken to look at the case where the journey time disbenefit increases to 5 minutes.
 The results show the BCR falls to 0.44, regarded as poor value for money.

Conclusion

Given the assumptions for the main appraisal option, the Ashford Spurs scheme has a high value for money case when comparing the user benefits to the capital costs of the scheme over the 35 year appraisal period. It is important to note that the non-user and revenue impacts, which would further strengthen the case for the scheme, have not been included in this analysis.

As Option S1 SEN2 shows, an increase in the journey time disbenefits for passengers not boarding or alighting at Ashford could undermine the case for the scheme. However, given the significant strategic implications of the scheme, this appraisal should be reviewed in conjunction with the Strategic Economic Case included as part of this bid and the decision should not be made on the Benefit Cost Ratio (BCR) calculation alone. The Strategic Economic Case demonstrates the strong benefits of the project and importance to the East Kent region.

Table 3 - Value for Money Case as developed by Network Rail

	Present Values in 2010 prices and values (£)	Sensitivity test SEN1: escalation of capital costs Present Values in 2010 prices and values (£)	Sensitivity test SEN2: increase in journey time disbenefit Present Values in 2010 prices and values (£)
PVB	20,309,757	20,309,757	3,122,969
PVC	7,101,446	10,652,170	7,101,446
NPV = PVB - PVC	13,208,311	9,657,587	-3,978,477
Initial BCR = PVB/PVC	2.86	1.91	0.44
Adjusted BCR (+10% for wider impacts)	3.15	2.10	0.48
Qualitative Assessment	Large beneficial	Beneficial	Not beneficial
VfM Category	High value for money	Medium value for money	Poor value for money

[Source: Ashford International rolling stock compatibility – Transport Business Case, Network Rail Infrastructure Ltd, April 2016]

4.3 Expected positive impact of the Project

The Strategic Economic Case (SEC), which was prepared by Kent County Council and Ashford Borough Council (ABC) to support the funding bids, suggested that Ashford International Rail Connectivity Project would safeguard 1,000 jobs and create a further 1,000 new jobs in Ashford and the surrounding area over the first 10 years of the life of the project. The SEC is appended to this report as **Appendix F.**

Existing employment profiles indicate that the project will enable the retention of international companies currently located in Ashford, and also maintain Ashford's international status supporting new commercial activity in the Borough.

There is clear evidence that Ashford has attracted investment from firms with business requirements for strong transport links with France and Belgium. The absence of Eurostar services would impose additional costs and delay to these businesses. It is possible that it would risk a loss of business to Ashford, if the additional costs outweighed the other advantages that Ashford presents; however, even if existing Eurostar customer businesses were to remain, the ability of Ashford to attract new investors with similar transport requirements would obviously be severely reduced.

Businesses with international rail requirements located in Ashford

- **SBE** (Société Boulonnaise d'Electronique), a French-based IT repair and servicing company, established its UK subsidiary at Ashford in 1996 because of its Eurostar services. It is now one of the town's largest employers, with over 1,000 people working at the Ashford site. SBE has indicated that it is interested in more international services.
- **Givaudan**, a Swiss-based flavour and fragrance company runs a product development and production base at Ashford, linked with sister sites in Paris and production elsewhere in Europe
- Olivier Cadic moved a computer software company from Paris to Ashford in the 1990s, and now runs a number of electronic publishing and other businesses from Kent.
- **Coty Inc**, a beauty product manufacturer, runs its UK manufacturing operations from Ashford, with sister sites in Chartres

Initial estimates show that the retention of international Services in Ashford would safeguard approximately 1,000 local jobs and would enable a further 1,000 jobs through future development. These figures are considered to be conservative and do not take into account the true impact on the wider East Kent area.

5. Financial Case

5.1 Total Cost of the Project, Funding Sources and Cash Flow

Table 4 demonstrates the composite funding profile for the project and dependency on LGF funding. Sunk costs represent those already spent within 2015/16 and 2016/17 within table 4.

Due to the fact that the project is still within GRIP Stage 4, estimates are still included for risks and cost uncertainties that represent a considerable proportion of the overall costs. Value engineering and due diligence is being undertaken by the partners on a regular basis to review these costs and reduce the overall requirement on the budget, however the full costs are requested to be allocated to the project at this stage to ensure delivery of the project by the end of February 2018, and commissioning of the capital works in the summer of 2017. Further updates of the budget will be provided to the SE LEP at the completion of key GRIP stages, to provide actual costs and hopefully reduce the overall requirement of SE LEP funding through this process.

Table 4 - Composite Funding Profile

ASHFORD SPURS - COMPOSITE FUNDING PROFILE										17.02.16
					2017/	2018				
Project Costs	2015/16	2016/17	2017/18	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	2018/19		Totals
	£	£	£					£		£
COWD GRIP 1-3	667,063									667,063
COWD up to P11	007,003	98,769								98,769
Forecast NR PM GRIP 3-5		104,414	571,406							675,821
Forecast NR PM GRIP 6			191,101							191,101
Other NR Project Management Costs Grip 4 & 5		9,880	70,403							80,283
Other NR Project Management Costs GRIp 6 GRIP 4 & 5 3rd Party Costs (Contractors/Consultants)		51,000	24,780 901,294							24,780 952,294
GRIP5 Welfare Amenities		3,000	24,500							27,500
Gin 5 Wenare Americaes		3,000	0							27,550
			0							(
										(
GRIP 6 KVB System Materials		790,416	459,084							1,249,500
GRIP 6 Installation		43,193	570,515							613,708
GRIP 6 Track Diagrams GRIP 6 MDU Training		0	250,000 200,000							250,000 200,000
GRIP 6 Welfare		0								25,000
GRIP6 Welfare Amenities		0	7,000							7,000
GRIP 6 Schedule 4 Costs			120,000							120,000
Forecast GRIP 7 & 8			-,					65,019		65,019
			_							(
Cost Escalation		0	73,537					1,788		75,325
Estimating Uncertainty			562,128					7,148		569,276
Risk - KCC		0	1,764,913							1,764,913
Risk - NR										(
Risk - Eurostar										(
Strategic Risk and Reserve @ 36%	667.062	4 400 672	2,093,638	404.554	700 220	4.467.220	2 025 422	26,638		2,120,276
Sub-Total	667,063	1,100,672	7,909,299	481,661	769,220	1,167,229	2,835,423	100,593		9,777,628
Risk Fund @ 2%	13,341	22,013	158,186	9,633	15,384	23,345	56,708	2,012		195,553
Fee Fund @ 5%	33,353	55,034	395,465	24,083	38,461	58,361	141,771	5,030		488,881
ree rana g 5/0	55,555	55,05	555, 105	2 1,000	50, 101	50,501	111,771	3,030		100,000
Total costs	713,757	1,177,719	8,462,950	515,377	823,065	1,248,935	3,033,902	107,635	0	10,462,062
Funding Sources	2015/16	2016/17	2017/18					2018/19		Totals
	_									
	£	£	£					£		£
LGF2	0	2,000,000	1,000,000					2,000,000		5,000,000
LGF3	0	, ,						1,800,000		4,800,000
2013	0	0	3,000,000					1,000,000		4,800,000
Local contribution total	0	2,000,000	4,000,000					3,800,000		9,800,000
		, ,	, ,					,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
KCC & Partners	96,949	0	0					0		96,949
EU RoCK project	23,051	0	0					0		23,051
Network Rail (NRDF)	580,000	0	0					0		580,000
Total funding	700,000	2,000,000	4,000,000					3,800,000		10,500,000
Cash Flow	2015/16	2016/17	2017/18					2018/19		Totals
Casii Flow	2013/10	2010/17	2017/10					2010/13		Totals
	£	£	£					£		£
Project Surplus / deficit	-13,757	822,281	-4,462,950					3,692,365		37,938
								-		
Drawdown of LGF from other LEP funding	-13,757	0	-4,462,950					0		-4,476,707
Repayment of LGF to other LEP funding	0	822,281	0					3,692,365		4,514,646
Net use of other LEP funding	-13,757	822,281	-4,462,950					3,692,365		37,938
Drainet rangument to LED										37.030
Project repayment to LEP										37,938
	l									ļ

5.2 Funding Availability

Table 5 demonstrates the availability of funding to support delivery of the project.

Table 5 - Funding Availability

Type of Funding	Funding Source	Please identify how secure the funds are	When will the money be available?
	LGF 2	Secured with agreement by SE LEP	September 2016
	LGF 3	Secured with agreement by SE LEP subject to approval of satisfactory Business Case by SE LEP Accountability Board on 26 May 2017	June 2017
	Borrowing		
Public	Income		
	Other		
	KCC & Partners	Secured	July 2015
	EU RoCK Project	Secured	March 2016
	Network Rail	Secured	January 2016
	Total Contribution	£10,500,000	
Deliver	Please list all developers		
Private	Private Developers Total	Nil	
	Other Funding	Nil	

6. Commercial Case

6.1 Procurement Route

Kent County Council (KCC) is the client for the project. The first phase was GRIP 1-3a (planning & design) and as such KCC entered a Basic Services Agreement (BSA) between KCC and Network Rail Infrastructure Ltd. This phase of the project could only be delivered by Network Rail, and so KCC agreed internally a 'Single Source Justification' to procure this phase of the project from Network Rail through the BSA.

The BSA protected KCC, limiting the Council's legal and financial obligation to £213,000 for this phase of the project. In practice, the partnership funding from all sources for GRIP stages 1 to 3a was capped at £120,000. The balance of the costs of GRIP 1-3a was met by the Network Rail Development Fund at £580,000, and there was no liability on the part of KCC for any other costs associated with the project.

The procurement by KCC of this phase commenced in July 2015 and was completed by September 2016, with Network Rail funding having been approved by Network Rail's South-East Route Investment Panel in January 2016. To deliver this feasibility stage and bring in the required expertise for the KVB solution, Network Rail contracted Systra to support their in-house teams.

KCC and Network Rail entered a Development Services Agreement (DSA) for the next phase of the project: GRIP 3b – 5 (detailed design and procurement). Again to support their in-house expertise, Network Rail has contracted AMEY /SYSTRA who will work with their design consultants to produce a set of detailed designs and other necessary information to allow the procurement of materials and delivery contractors for the physical works. This contract was placed in February 2017, putting in place the external support required to complete the project.

At the same time as the detailed design stage, Eurostar are undertaking vehicle acceptance and route clearance procedures for their Class 374 trains to ensure they can access Ashford International in February

Ashford International Rail Connectivity Project (Ashford Spurs)

2018. This does not fall under the costs of the project and is being undertaken by Eurostar as part of their commercial operations.

A separate Implementation Agreement (IA) will be agreed between the same parties to cover the final phase: GRIP 6-8 (delivery, testing, commissioning and close-out). The IA governs enhancement work on and about the controlled railway infrastructure to provide detailed design and implementation of the Ashford Spurs project, with the contracting strategy agreed between NR acting as construction manager and KCC as project promotor. Network Rail proposes to utilise a cross-industry consulted template agreement for this purpose and will follow internal corporate governance structure and reviews to enter into the Implementation Agreement. Network Rail operates a corporate governance structure to manage the spending of public money and associated accountability, and reporting of the same, as is set out in its 'Investment Framework Consolidated Policy & Guidelines'.

In this case the project will seek authority to spend from the internal monthly South East Route Investment Panel, or Route Large Projects Panel if the Anticipated Final Cost of the project exceeds £10m. The project will be required to present a summary including the business case and risks (both business and financial). The installation of the equipment will be undertaken by Network Rail staff to deliver the completion of the project. The current estimate for implementation of the physical works is via Network Rail's internal Works Delivery function via a works agreement form (WAF). Network Rail will manage the safe implementation of this project as System Operator through the Route System Review Panel (SRP) complying with the Common Safety Method (CSM).

6.2 Revenue Costs

The future maintenance costs of the signalling upgrade will need to be included in the determination of the funding settlement for Network Rail's Control Period 6 (CP6) (2019-2024). They will not be met by revenue grant from any of the funding parties to the project. This issue has been raised directly with the Operations and Maintenance team for the south-east route, who have acknowledged the requirement to incorporate the upgraded signalling system in the budget and maintenance plan for CP6.

There are no other revenue costs directly arising from delivery of the project.

6.3 KCC Section 151 Officer

The designated Section 151 Officer at Kent County Council is Andy Wood, Corporate Director of Finance and Procurement. He is the statutory officer with responsibility for oversight of all the Council's financial and procurement policies and practices, and fulfils this designated statutory role on behalf of the Council.

His contact details are:

Mr Andy Wood
Corporate Director of Finance and Procurement
Kent County Council
Sessions House
Maidstone
Kent
ME14 1XQ

03000 416854

andy.wood@kent.gov.uk

7. Managerial Case

7.1 Delivery

The project's sponsoring authority is Kent County Council.

The project sponsor is Stephen Gasche, Principal Transport Planner – Rail, at Kent County Council.

His contact details are:

Mr Stephen Gasche
Principal Transport Planner – Rail
Kent County Council
Invicta House
Maidstone
Kent
ME14 1XX

03000 413490

stephen.gasche@kent.gov.uk

Following approval of the project by Network Rail's South-East Route Investment Panel, KCC and Network Rail entered a Basic Services Agreement (BSA) to cover stage GRIP 1 to 3a of the project. The BSA protected KCC and limited the Council's financial liability to a maximum of £213,000, all of which was financed from stakeholders' grants and external match-funding. The balance of the £700,000 estimated cost for this phase of the project was funded by Network Rail.

Stage 3b to 5 of the project is supported by a Development Services Agreement (DSA) between KCC and Network Rail, with a maximum spend authority of £5,627,000. This allocation of LGF (round 2) was approved by the SE LEP Accountability Board on 16 September 2016, and included the sum of £627,000 in addition to the £5,000,000 previously allocated. As this phase of the project is now expected to be delivered within the original £5,000,000 allocation, there will no longer be a requirement to draw down the additional allocation of £627,000 from the final tranche of funding allocated to GRIP 6 to 8.

GRIP stages 6 to 8 of the project will be supported by an Implementation Agreement (IA) between KCC and Network Rail, with a maximum spend authority of £4,800,000. This allocation of LGF (round 3) was approved by the SE LEP in their Growth Deal (Round 3) in February 2017, subject to approval of the full business case by the SE LEP Accountability Board on 26 May 2017.

The total funding allocation for the project is therefore £10,500,000, and the expected planned project delivery date is now February 2018, with monitoring and evaluation in 2018/19. KCC has obtained assurances from Eurostar that the operator intends to continue serving Ashford beyond this date (see Appendices A and G).

The delivery of the project is being overseen by a Project Board, comprising officers from Network Rail, Eurostar, High Speed 1, Southeastern, the Office of Rail and Road, Ashford Borough Council, Kent County Council and the Department for Transport. A Roles & Responsibility Plan details the workstreams overseen by the Project Board and lists those who attend Project Board meetings to represent and update on each workstream. Additional representatives are invited to Project Board meetings from within these organisations or other appropriate organisations as required. Figure 1.3 shows the Project Board organisational interfaces.

Ashford International Rail Connectivity Project (Ashford Spurs)

Figure 1.3 – Project Organisational Interfaces

Ashford International Spurs (KVB) Project Organisational Interfaces: GRIP 4&5



This Project Board is responsible for ensuring that each phase of the project is delivered on time and on budget, and that each party to the project is committed to its delivery. Mark Ellerby, Senior Commercial Scheme Sponsor, South East Route, Network Rail, has been charged by the board with the role of overall programme management for all work streams, including the delivery of the KVB signalling solution, Vehicle Acceptance and Route Clearance, Funding, and required Agreements. A programme plan has been developed and a critical path analysis has been developed and is monitored by the Board at their monthly meetings.

The Project Board are also committed to keeping stakeholders up to date on developments on this project. The project was presented to the Kent Rail Summit on the 16 May 2016, to key rail stakeholder groups, local authorities and the press, to ensure visibility of the project within the local area and the rail industry. The project is also reported quarterly to the Ashford Strategic Delivery Board which is made up of key public sector stakeholders including the local MP, Rt Hon Damian Green.

In addition to this the Kent Invicta Chamber of Commerce Ashford Economic Development Group also receives regular updates to keep businesses informed. A communications group has been set up with representatives of each of the partners, which meets regularly and is led by Network Rail. In addition to this stakeholder engagement, greater communication and discussion with the rail operators that use Ashford International will be undertaken as part of the development and delivery of the Programme Plan.

The delivery of projects through Kent County Council's Local Growth Allocation is overseen by a robust management approach to ensure accountability, transparency and effective decision making. KCC's Project Governance Structure is shown in *Figure 1.4* below. The Kent County Council Project Manager provides detailed monthly reporting on project progress to the Council's LGF Programme Board, based on the Project Board's monitoring of the project. The LGF Programme Board meets every two months to monitor individual scheme progress. This includes discussion of activities completed to date, activities to be completed during the next month, reporting of project risk and key project issues. This meeting is chaired by Kent County

Council's Major Schemes Project Manager, Lee Burchill. Attendance at this meeting includes KCC's Bidding Team, KCC Project Managers and KCC's Framework Consultants, Amey.

The LGF Programme Board then provides reporting to LGF Sponsoring Group. KCC's LGF Sponsoring Group is attended by Senior Officers, including the Corporate Director. This meeting discusses high level programme progress to date, financial process and any key issues arising. Escalation reports are presented to this group to enable informed and effective decision making. The decisions of this group incorporate the recommendations of the Kent and Medway Economic Partnership.

Members of the Project Board met with senior representatives from Eurostar on 24 February 2017 to determine a resolution of the potential Ashford - Paris service gap, and also to seek an assurance from Eurostar to the company's continued commitment to serve Ashford. Both of these assurances were provided by Eurostar, who also agreed to demonstrate their continued commitment to services at Ashford with a further letter to Kent County Council *[Appendix G]*.

All partners to the project have a media representative on the project's media group, which is activated as required to respond to any news items concerning the project and its impact on international rail services. The media group recently issued a joint media statement welcoming the award of Local Growth Fund (round 3) for the project, which was very well received throughout the East Kent area.

Figure 1.4 - KCC Project Governance Structure



Local Growth Fund Sponsoring Group

Monthly meeting to discuss high level progress and resolve issues arising

Highlight Report & Escalation Report

Local Growth Fund Programme Board Meeting

Monthly meeting to discuss LGF programme progress to date

Highlight Report & Progress Update

PMGG Steering Group Meeting

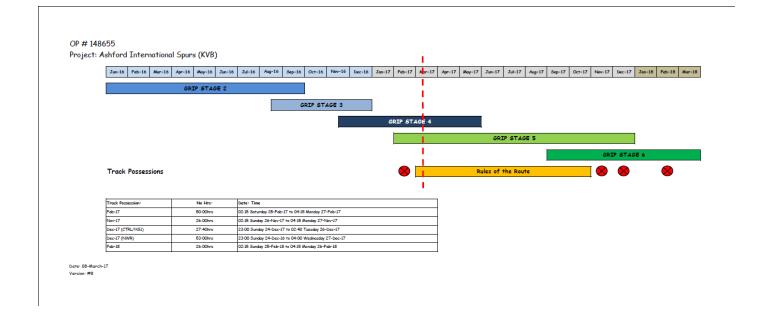
Overseeing the delivery of the project, risk and issues. Reporting to LGF Programme Board Meeting

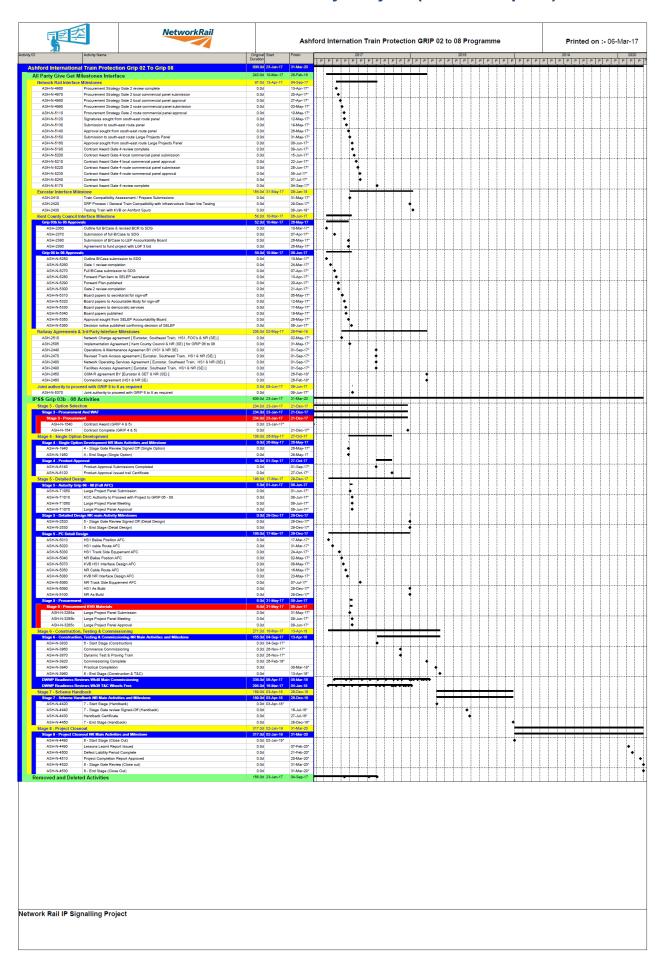
Ashford International Rail Connectivity Project (Ashford Spurs)

7.2 Programme Schematic and Project Plan (Preliminary Definition Executive Summary)

The following Programme Schematic and Project Plan (Preliminary Definition Executive Summary) have been prepared by Network Rail, and represent the present projected timescale for preparation, delivery, testing and commissioning of the Ashford International Rail Connectivity Project.

Figure 1.5 - Ashford International Programme Schematic GRIP 3a and Project Plan





7.3 Benefit Realisation Plan and Monitoring

The Project Board will manage the project to ensure that it delivers the projected net benefit and High Value for Money demonstrated in the transport business case provided by Network Rail. The projected output in terms of houses and jobs will be monitored locally in the period following project delivery. Ashford Borough Council and Kent County Council analyse government employment statistics on an annual basis to determine growth in the economy of Ashford Borough and Kent. This, in addition to statistics provided by Locate in Kent, the inward investment agency for Kent, will be monitored on an annual basis, alongside figures provided by Eurostar for services from Ashford and passengers travelling through the station.

The use of Ashford International Station by Eurostar (and any other international operator) will be monitored by Kent County Council in the period following completion of the project. The expectation at present is that the level of service will be equivalent to that which is offered today, as Eurostar has given a written assurance that the Paris service will be re-instated on completion of the project and that the other services will continue as today. Eurostar are invited regularly to the Kent County Council and Ashford Borough Council Joint Transport Board, to present on developments within their services. This provides members of both councils with the opportunity to scrutinise service performance, benefit realisation and future proposed developments at Ashford International Station.

It is anticipated that once the new signalling upgrade has been installed and has been operating for a period, Eurostar – and potentially other international rail operators – will consider an increase in their services at Ashford. While there is no specific indication of any additional services at present, Kent County Council and Ashford Borough Council would encourage a future daily return service to Brussels and Amsterdam, once the new London – Amsterdam service is ready for enhancement following its introduction in December 2017. There is no indication whatsoever of any plans to reduce, or remove, services from Ashford on a permanent basis, and Eurostar have repeatedly given assurances of their intention to continue to serve Ashford International.

Ashford Borough Council currently monitors commercial activity in the town and is aware of the international companies located there. This monitoring will be used to demonstrate that the existing level of international business is at least maintained, and that any uplift in business activity following completion of the project is reported as required. It is proposed that an evaluation of the impact of the project be carried out 10 years after the implementation of the new signalling by Ashford Borough Council and Kent County Council, through their roles in assessing the economic impact.

7.4 Risk Assessment

The following risk assessment identifies the principal risk issues, measures their likely impact on project delivery and describes the appropriate mitigation measure:

Overall Project - Risk Management Plan (5 = High, 1 = Low)

Identified risk	Impact (score 1-5)	Likelihood (1-5)	Score	Mitigation	Risk owner	Risk Funder	RAG Status
1. The Business Case for Grip 6 to 8 not approved by SE LEP in May 2017	5	1	5	Separate working group established to deliver the Business Case following meetings with SDG to understand the requirements and areas for improvement Considerations on the implications for information that needs to be produced to inform the Business Case to be submitted in March 2017 for consideration at the May 2017 SE LEP Accountability Board.	Kent County Council and Ashford Borough Council	No other funding identified if unsuccessful. This would cause serious delay to the delivery of the project.	
2. Network Rail do not achieve internal authority to continue to deliver Grip 6 to 8 at the June 2017 South East Route Investment Panel	5	1	5	Network Rail providing internal updates on progress and ensuring timely delivery of the reports and outcomes from GRIP 3b to 5. Papers submitted to the Panel requesting approval to move to Grip 6 to 8.	Network Rail	Network Rail	
Clawback of funding for Grip	5	1	5	Feasibility stage completed with identification of costs and barriers.	Kent County Council and	Kent County Council	

			Risk Management plan for early identification of issues and proposed solutions. So project	Ashford Borough Council		
3	2	6	Progresses beyond Grip 5. Network Rail to seek agreement in advance to continue delivery based	Network Rail	Network Rail	
			on approval of the funding. Work underway to deliver the funding agreement between KCC and NR before the end of June 2017.			
5	1	5	Mitigated through the detailed design and planning, and Risk Management plan.	Kent County Council and Ashford Borough Council	Kent County Council	
3	2	6	Strong project management and risk assessment. Risk and Fee Fund payments agreed to mitigate the risk to the project budget.	Network Rail	Network Rail	
4	2	8	Possessions strategy in place including Feb 2017, November	Network Rail	SE LEP funding allocation for Kent projects	
	3	3 2 5 1 3 2	3 2 6 3 2 6 3 2 6	identification of issues and proposed solutions. So project progresses beyond Grip 5. Network Rail to seek agreement in advance to continue delivery based on approval of the funding. Work underway to deliver the funding agreement between KCC and NR before the end of June 2017. Mitigated through the detailed design and planning, and Risk Management plan. Strong project management and risk assessment. Risk and Fee Fund payments agreed to mitigate the risk to the project budget.	Risk Management plan for early identification of issues and proposed solutions. So project progresses beyond Grip 5. 3 2 6 Network Rail to seek agreement in advance to continue delivery based on approval of the funding. Work underway to deliver the funding agreement between KCC and NR before the end of June 2017. 5 1 5 Mitigated through the detailed design and planning, and Risk Management plan. Kent County Council and Ashford Borough Council 3 2 6 Strong project management and risk assessment. Risk and Fee Fund payments agreed to mitigate the risk to the project budget.	Risk Management plan for early identification of issues and proposed solutions. So project progresses beyond Grip 5. Network Rail to seek agreement in advance to continue delivery based on approval of the funding. Work underway to deliver the funding agreement between KCC and NR before the end of June 2017. Mitigated through the detailed design and planning, and Risk Management plan. Management plan. Metwork Rail Kent County Council Council and Ashford Borough Council Risk assessment. Risk and Fee Fund payments agreed to mitigate the risk to the project budget. Possessions strategy in place Network Rail SE LEP funding allocation

AJIII	ora micriation	iai itali	Commedia	vity i i	Oject (Asiliora Opars)			
	the Programme				2018. The project is also using Riles			
	timeframe or				of the Route during overnight			
	earlier				white periods between February			
					2017 and November 2017 for			
					additional survey work,			
					installations and testing to			
					minimise time required in formal			
					possessions.			
					Requirements monitored through			
					strong project management and			
					risk assessment. Risk Funding			
					incorporated within the overall			
					budget to mitigate requirement.			
8.	Project delay due	5	2	10	Strong project management and	Network Rail	SE LEP funding allocation	
	to long lead				development of an installation and		for Kent projects	
	procurement of legacy KVB System.				procurement strategy. Early			
	legacy KVB System.				discussions with suppliers to			
					source products from existing			
					stocks. Early procurement of			
					known products required to			
					mitigate time pressures.			
9.	Budget creep	5	2	10	Scrutiny and robust analysis and	Kent County	SE LEP funding allocation	
	through new costs				challenge of project costs, risks and	Council,	for Kent projects	
	or escalation of				assumptions	Ashford		
	existing costs				Review of full costs in Feb 2017 to	Borough		
					feed into Business Case for SE LEP	Council,		
						Eurostar and		
					funding.	HS1		
					Strategic Risk and Reserve built			
					into budget due to the installation			
1		1	1	i	=	1	1	

				of a new product on Network Rail track and the challenges of delivery.			
10. Increased costs through changing exchange rates and value of the £ against the Euro, when purchasing French equipment and expertise	2	4	8	Assessment of impact of exchange rates through the budgeting and project management processes. Consideration through Procurement Strategy development.	Network Rail	SE LEP funding allocation for Kent projects	
11. LGF Round 3 funding profile per year does not match spend profiles, creating cash flow risks for the project.	1	5	5	SELEP and KCC have considered how this project could receive funding in earlier years through the re-programming of the full SELEP LGF and Kent allocations.	Kent County Council and SELEP	SE LEP funding allocation for Kent projects	
12. If a fixed price arrangement is agreed NR risk of any cost escalation above fixed price.	3	2	6	Good Management and detailed design, contract brief to mitigate cost escalation above the fixed price contracts.	Network Rail	Network Rail	
13. Design Risk and Risks as to the effectiveness of the System. Barriers identified that restrict Velaro Class 374s from accessing Ashford International.	5	1	5	Network Rail project management and quality assurance processes.	Network Rail	Network Rail	

				Oject (Asiliora Spars)	T	1	
14. Installation of KVB disrupts access for Class 373s or other operators.	5	2	10	Eurostar project management through the Vehicle Acceptance and Route Clearance work stream. Network Rail project management and quality assurance processes. Early testing to identify issues.	Eurostar	SE LEP funding allocation for Kent Projects	
15. Cost of undertaking the Vehicle Change Process increases	5	2	10	Robust project planning and risk management of this process. Agreement of budgets and resources by Eurostar to deliver these actions.	Eurostar	Eurostar	
16. Access barriers identified that require improvements to the track, power supply, Station and trackside infrastructure (outside the signalling) increases the costs to the project.	5	2	10	Early identification of any additional costs outside of the scope of the existing project budget risk register. Ashford International not within UIC standard tolerances, small difference in tolerances, and risk of works to be required. Further work to be undertaken by Eurostar, Siemens and NR to provide accurate train data and Ashford International Station tolerances. Test train to be arranged, pulled through the station by Eurotunnel Krupp rescue diesel, to ensure the path of the train is within the	Network Rail	Eurostar and HS1	

			y -	tolerances of the Station. Any power issues to be mitigated through operational procedures as is currently the case.			
17. Risk of trains being wrongly routed into platforms 5 & 6 as signalling is not being delivered to facilitate these platforms.	5	1	5	Network Rail project management and quality assurance processes. Mitigation to be built into the design and operational procedures.	Network Rail	Network Rail	
18. Eurostar do not continue services from Ashford International in the Medium to Long-term	5	2	10	Letter of commitment provided by Eurostar dated 3 rd March 2017. Continued discussion and dialogue required to identify challenges and opportunities.	KCC and ABC	Eurostar	
19. The ORR does not accept KVB as an acceptable product to overlay on the Ashford Spurs.	5	1	5	Early application and continued dialogue with ORR over the application requirements. DfT have agreed product approval through the South East Route System Review Panel. Updates provided to the panel prior to submission.	Network Rail	Network Rail	
20. There is a delay in obtaining product approval and acceptance by the ORR.	4	1	4	Early application and continued dialogue with ORR over the application requirements. DfT have agreed product approval through the South East Route System Review Panel. Updates provided to	Network Rail	SE LEP funding allocation for Kent Projects	

				the panel prior to submission.			
21. Any additional costs in maintenance are not budgeted for and accepted therefore creating a barrier to the implementation of the project.	5	2	10	Early discussion between HS1 / Network Rail and Eurostar on the funding of ongoing maintenance of the KVB system. This needs to be agreed as an additional maintenance cost for NR / HS1 from start of operation to 31.03.19. From 01.04.19 this needs to have been included in the new maintenance budget for Kent route / HS1 for Control Period 6. Both Kent County Council and Ashford Borough Council have raised this through the CP6 consultation by Network Rail. This has also been raised with Operations and Maintenance Team for the South East Route for inclusion in maintenance and budget for CP6 (2019-2024).	Network Rail and HS1	Network Rail / HS1 / Eurostar	
22. Accountability risk through separate commissioning of design and installation.				Amey / Systra have been commissioned to undertake the detailed design. NR works team will be undertaking the installation of the works. Strong project planning with clear roles and responsibilities need to be identified, as well as the specification of instruction that will	Network Rail	Network Rail	

ASITIOTA INTERNATION	iai itali v	<u> </u>	Vicy I I	be passed between Amey/Systra and NR works to ensure design is delivered. Strong monitoring of installation			
				on the ground, and compliance with plans.			
23. Political, Economic and Reputational Risk of the suspension of some services from Ashford	5	2	10	Meeting held with on the 24 th Feb 2017, and agreement provided by Eurostar to continue current level of services through to the end of February 2018 and the programmed implementation of the project	KCC / ABC / Eurostar / Network Rail / HS1 / DfT	Eurostar	
24. Risk to business, the Kent Economy and Eurostar of delay to delivery beyond the current project timetable.	5	1	5	Mitigate through strong project and programme management, continued discussion and lobbying of funders and key partners. Continued discussion with Eurostar around service provision from Ashford that could be offered if delay beyond timetable takes place.	KCC/ABC/ Eurostar/Netw ork Rail/HS1/DfT	Eurostar	

*Likelihood Scale

Likelihood	Score	Meaning
Very high	5	More than 1 chance in 10
High	4	More than 1 chance in 25
Medium	3	More than 1 chance in 50
Low	2	More than 1 chance in 100
Very Low	1	More than 1 chance in 1000

**Impact Scale

Impact	Score	Meaning
Very high	5	Potential for many months delay
High	4	Potential for a many weeks delay
Medium	3	Potential for significant delay
Low	2	Potential for a few days delay
Very Low	1	Likely impact resolved within 2 days

***Red-Amber-Green (RAG) Status

RAG Status	Meaning
Green	Risk currently being managed
Amber	Risk uncertainty, work ongoing to determine scale and resulting mitigation
Red	Risk requiring solution to be put in place to mitigate the risk

In addition to the risk assessment provided above, and to support good governance, project management and risk management, the Project Board have developed a series of documents that provide the process for key decisions to be made, the Roles and Responsibilities for each of the project partners, and a detailed risk register to support budgetary assumptions and the programme plan.

The risk register and programme plan are key items on the Project Board agenda at each monthly meeting to ensure that these are kept up to date and reviewed on a regular basis alongside the development and delivery of the project.

Network Rail Risk Fund and Fee Fund

Network Rail, through its Industry Risk and Fee funds, is able to offer a level of cover to protect their liabilities to the promoter of the project against contractual and Rail Industry specific risks. Typically these are the low probability, high impact risks specific to rail industry conditions. The application of this methodology means that Network Rail can avoid charging the promoter of the project for each risk individually and up to the maximum liability. In a more 'commercial' environment a contractor would 'price' for these risks on a profit basis. Network Rail does not operate on that basis; rather any claims will be made against a collective fund to which all third party promoted schemes contribute on a similar basis.

The Project Board made the decision to incorporate the Network Rail Industry Risk and Fee funds to mitigate these instances arising, and to reduce the overall cost of project bids for funding. If the Industry Risk and Fee Funds had not been put in place, the overall amount of funding for which the bid was made would be considerably greater to cover these risks and ensure the project could be progressed.

Background information: 'Investment in the Network' document (http://www.networkrail.co.uk/wp-content/uploads/2016/11/11452_Investing-in-the-network.pdf) which describes Network Rails policy, authorised by the ORR, for investment in the Network by other parties.

Below is an excerpt from Appendix C of the document:

"Network Rail Fee Fund

We have established a fund – the Network Rail Fee Fund (NRFF) – to cover our potential contractual liabilities to the promoter. For each scheme, we will charge a fee (see Table 1). We will pool all such fees to meet relevant claims against us which are substantiated and our liability for contractual breach and negligence of an agreement is capped at the level of the value of the works and/or services being provided (or £100k whichever is the higher) (although liability for death, personal injury and fraud is uncapped). This cap on liability for breach and negligence applies to both emerging costs and fixed price agreements. However, in the case of fixed price implementation arrangements, there would be no cap in respect of our obligation to deliver the works/services for the agreed fixed price.

The Network Rail fee is agreement-specific. For example, Network Rail will charge a fee of 5% of the aggregate costs for services provided under a Basic Services Agreement. While on a Basic Asset Protection Agreement, Network Rail will charge 10% of the aggregate costs.

Industry risk fund

As well as the NRFF, there is also an industry risk fund known as the Industry Risk Fund (IRF). The IRF provides appropriate funding support for industry risks. Typically these are the low probability, high impact risks specific to rail industry conditions. For each scheme, Network Rail will charge an Industry Risk fee (see Table 1 within the 'Investing in the network document') as well as the Network Rail fee. Network Rail pool these Industry Risk fees to meet relevant claims for industry risk.

Dealing with industry risks

In the event of a liability arising from an industry risk where the resultant costs are more than £10k, these costs would fall to the IRF and not to the promoter.

The IRF covers two broad categories of risk for the promoter:

- 1. risks which are typically regarded as 'employer' or 'government' risks in a traditional project financing or Private Finance Incentive (PFI) transaction (for example, mandatory changes resulting from a discriminatory or specific change of law); and
- 2. risks relating to events arising elsewhere on the network which have an impact on:
- the project which results in disruption to the works (for example, disruption caused by a safety critical event), and
- the network itself where, due to the project's existence, that impact is greater than it would otherwise be."

Figure 1.6 Eurostar train in platform 4 at Ashford International at one of the 12 signals (AD 669) where this project will deliver KVB to upgrade the existing signalling system. This signal controls access to the eastern Ashford Spurs, which link Ashford International Station with High Speed 1 towards the Channel Tunnel and on to Paris and Brussels.

