

**Table Of Contents**

- Project Description
- Rationale
- Liquidity
- Outlook
- Transaction Summary
- Operations Phase Base-Case And Downside-Case Assumptions
- Operations Phase Risk Profile
- Final Rating Modifiers
- Rating Score Snapshot And Peer Comparison
- Related Criteria And Research

**Presale:**

**High Speed Rail Finance PLC**

This presale report is based on information as of Sept. 26, 2016. The ratings shown are preliminary. This report does not constitute a recommendation to buy, hold, or sell securities. Subsequent information may result in the assignment of final ratings that differ from the preliminary ratings.

Final ratings will depend upon receipt and satisfactory review of all final transaction documentation, including legal opinions. Accordingly, the preliminary ratings should not be construed as evidence of final ratings. If S&P Global Ratings does not receive final documentation within a reasonable time frame, or if final documentation departs from materials reviewed, S&P Global Ratings reserves the right to withdraw or revise its ratings.

**Project Description**

U.K.-based special-purpose entity High Speed Rail Finance PLC (HSRF) is proposing to issue up to £314 million of rated debt, comprising up to £184 million amortizing fixed-rate notes and up to £130 million bullet repayment fixed-rate notes. HSRF is a sister company of High Speed Rail Finance 1 PLC (HSRF1), which has £870 million senior rated debt outstanding, and High Speed 1 Ltd. (HS1; no rated debt). All senior secured debt issued by these three entities ranks pari passu. The proceeds from the issuance will be distributed to the sponsors.

HS1 (or the project operating company) operates the high-speed rail line connecting St. Pancras International station in London with the Channel Tunnel boundary in the South East of Kent, under a concession agreement (CA) with the U.K. Secretary of State, which terminates in December 2040. HS1 is responsible for the operations, maintenance, and renewal of the track and associated infrastructure, along with the four railway stations

---

**Primary Credit Analyst:**

Rachel C Goult, Paris 0033 (0) 620 091284; rachel.goult@spglobal.com

**Secondary Contact:**

Luisina Berberian, Madrid +(34) 91-788-7200; luisina.berberian@spglobal.com

See complete contact list on last page(s)

served by the route. The rail line provides track access to domestic and international high-speed traffic, plus a small quantity of freight traffic. HS1 has been in operation since 2007.

<b>Participants</b>	
Sponsors	Borealis Infrastructure (50%), Ontario Teachers' Pension Plan (50%)
Arranger	The Royal Bank of Scotland PLC
HSRF security trustee	Lloyds Bank PLC
Account bank	The Royal Bank of Scotland PLC
Concession counterparty	U.K. Secretary of State*
Operator	Network Rail HS (NRHS), guaranteed by Network Rail Infrastructure Finance PLC
Track users	London & South Eastern Railway Ltd. (LSER); Eurostar International Ltd. (EIL)
<b>Key project features</b>	
Sector	Rail
Concession Period	August 2007 – December 2040
Debt service reserve	12-month debt service reserve facility
Maintenance reserve account	No
Total senior secured debt amount issued by HSRF, HSRF1 and HS1, post new issuance	£1.85 billion (77% leverage)
<b>Key senior debt features</b>	
Distribution test	DSCR of more than 1.20x, one year backward and forward looking
Minimum S&P Global Ratings base-case ADSCR	1.44x
Average S&P Global Ratings base-case ADSCR	1.65x

ADSCR--Annual debt service coverage ratio. \*Guarantor of domestic underpinning agreement.

## Rationale

### Summary

Our preliminary 'A-' long-term issue ratings on HSRF's proposed debt reflects S&P Global Ratings' view of the project's operations phase stand-alone credit profile (SACP), which we assess at 'a-'. The project entered into operations in 2007 and hence there is no construction risk.

### Operations phase

The project benefits from a transparent and supportive regulatory framework that helps to mitigate operational risk and, combined with a strong competitive position and very low market risk, leads to a strong operational performance.

The ratings are supported by the following strengths:

- The project has a strong competitive position as the sole high-speed rail connection between London and continental Europe, via Eurotunnel.
- The majority of the project's revenues (about 90%) come from highly stable, inflation-linked regulated track and station related charges, paid by the two train operators: the domestic train operator, LSER (trading as Southeastern); and the international train operator, Eurostar International Ltd (EIL). Regulated revenues are supplemented by income from unregulated retail, car-parking, and commercial operations.

- Domestic rail services are underpinned by the U.K. Secretary of State, which in our view mitigates the project's exposure to the domestic market risk. Furthermore, the project could, if required, fully cover its debt service based on revenue from the domestic agreement only.
- The project's market exposure on international routes is mitigated by the obligation for train paths to be booked up to 12 months in advance and paid for irrespective of whether the service is run. The same advance booking and payment requirement applies to domestic and freight services. There is robust demand for EIL services. We therefore assess market risk as very low.
- The project continues to deliver a strong operational performance in terms of safety and track availability.
- The cost of operations is largely passed through to the track users. The track user charges are paid in advance of scheduled train services and include a fixed investment recovery charge (IRC), plus a regulated operations and maintenance renewals charge (OMRC) to cover the cost of the operations, maintenance, and renewal of the project's track infrastructure. Power and station usage charges are also applied. The regulated OMRC is reviewed every five years by the Department for Transport (DfT) and allows for full cost pass-through.
- HS1 places the renewals component of the OMRC and of the station use charge into escrow accounts to cover renewal of the track and the four stations.
- The project demonstrates relatively robust financial performance under our base case analysis, with a minimum annual debt service coverage ratio (ADSCR) of 1.44x and average ADSCR of 1.65x. This, combined with the relatively simple operations of the asset, very low market risk, and a strong competitive position, results in a preliminary operations phase SACP of 'a-'.
- As a result of the contractual protections summarized above, the project is extremely robust under our downside scenario, leading us to factor in a one-notch positive adjustment to our assessment of the preliminary operations phase SACP.
- The capital structure is predominantly fixed-rate debt. Further, the remaining interest rate and currency exposure is largely mitigated via a portfolio of swaps. None of the ratings on the financial counterparties constrain the preliminary rating.
- The debt benefits from a relatively high distribution covenant set at an annual debt service coverage ratio of 1.20x.
- The project is supported by robust liquidity in the form of a 12-month debt service reserve facility.

The ratings also reflect the following weaknesses:

- The amortization of the debt is relatively back-ended for a project reliant on growth assumptions. The new debt issuance has shortened the concession tail to one year from two years, and includes a bullet repayment of up to £130 million in December 2039. Consequently, the financial performance of the project, which has an inflation-linked revenue stream, deteriorates under long-term, sustained low inflation rates. We reflect this weakness by assigning a one-notch negative debt structure adjustment the preliminary operations phase SACP.
- The rail line requires relatively complex maintenance services. However, we think this risk is offset by the subcontracting of these services in full to NRHS under a fixed-price agreement until 2047, beyond the term of the debt, which is subject to adjustment every five years.

## Liquidity

We assess the project's liquidity as neutral. The project maintains a 12-month liquidity facility agreement through to March 2040 equal to the forthcoming 12 months of scheduled debt service (principal and interest, including amortization and interest of the offsetting swaps). In addition, it maintains a £65 million working capital facility through to March 2020 that is more than sufficient to meet its working capital needs. We assume that the project will readily

renew or replace the working capital facility at its maturity.

In addition, for the maintenance of the assets and replacement capital expenditure, the project maintains escrow accounts, into which it places the renewals component of the OMRC and of the station use charge. The cost-pass-through nature of these charges largely mitigates life cycle risk. The combined balance on these escrow accounts stood at £76 million in the financial year ending March 30, 2016, and we forecast that this will rise to approximately £120 million at the end of the next control period in March 2020.

## Outlook

The stable outlook reflects our view that the project will continue to deliver strong operational performance and benefit from a supportive and stable regulatory regime. The outlook also factors in the project's strong competitive position as operator of the sole high-speed train route connecting the U.K. to continental Europe, as well as our view that the minimum ADSCR of at least 1.4x under our base case is sustainable. The rating is supported by the project's strong contractual structure, including advance train path reservation and payment by train operators and an agreement guaranteed by the U.K. government underpinning domestic train paths. These help to provide performance resilience against stressed operating conditions.

### Downside scenario

We could lower the ratings if the project's financial profile weakened, for example, as a result of operational underperformance or reduced demand for international train paths, causing the minimum DSCR to fall below 1.4x and a weakened resilience to stress scenarios. A sustained weak inflationary environment could also lead to deterioration in the project's financial performance given HS1's inflation-linked revenue receipts compared to a predominantly fixed-rate debt profile.

We could also lower the ratings if the project becomes exposed to additional counterparty risk as a result of a fall in the ratings on swap counterparties or working capital facility providers to below the project rating level, or if the project incurs additional exchange-rate risk due to the issuance of a further tranche of foreign currency-denominated debt with a lower-rated swap counterparty. The account bank counterparty must be rated at least 'BBB-' to not constrain our 'A-' issue credit rating on the notes.

### Upside scenario

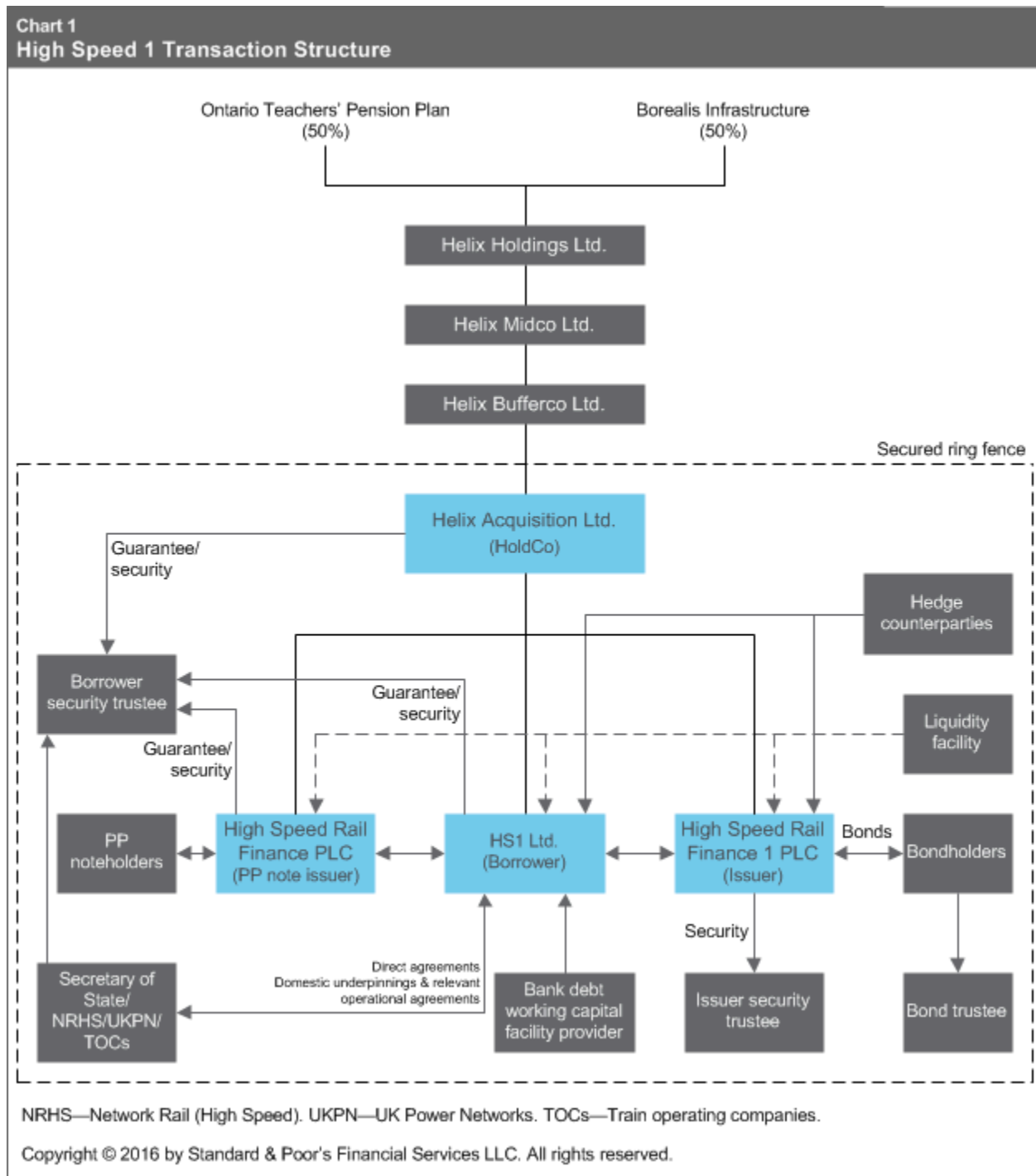
Following the new debt issuance, a positive rating action is unlikely, in our view, without a further significant improvement in our base-case projection of the minimum average DSCR. In order for us to consider an upgrade, we would need to see a minimum ADSCR of around 1.80x.

## Transaction Summary

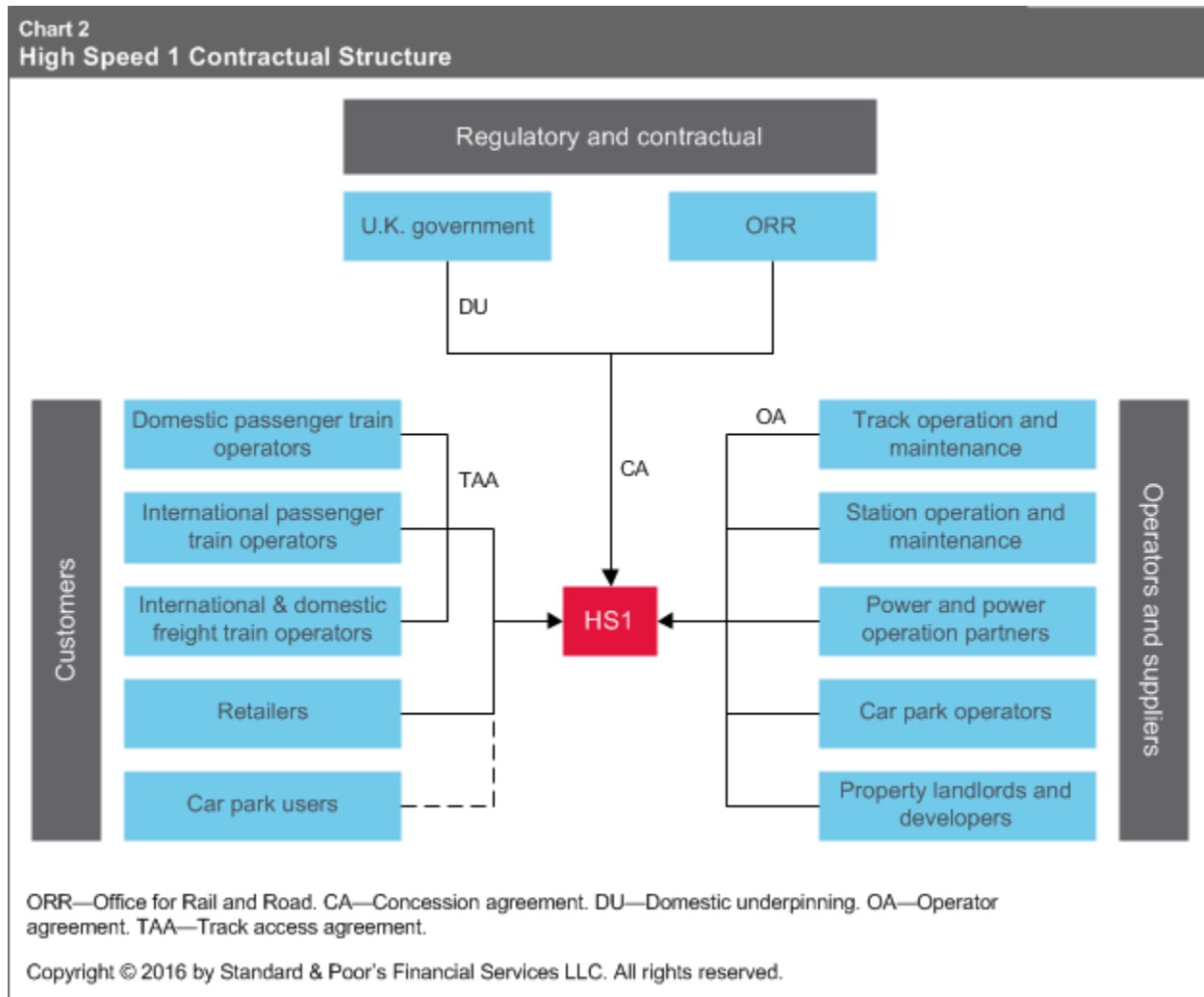
The activities of HS1 are financed through a combination of rated and non-rated debt issued by itself and by the sister companies, HSRF and HSRF1. HSRF's proposed up to £184 million amortizing fixed-rate notes due March 31, 2039, and up to £130 million bullet repayment fixed-rate notes due Dec. 31, 2039 will expire at least one year before the concession ends in December 2040. The new proposed fixed-rate debt ranks pari passu with all existing senior debt at

HS1, HSRF, and HSRF1 and represents an 18% increase in overall senior debt.

HSRF1's existing debt facilities comprise £610 million rated senior secured fixed-rate bonds and £246.5 million rated senior secured index-linked bonds, both due Nov. 1, 2038. Other project debt comprises a £98 million seven-year bank facility due March 31, 2022 issued by HS1 (not rated) and a total of £565 million unrated private placement notes falling due between March 2028 and March 2036 issued by HSRF (not rated).



The 109 kilometer of track runs from St. Pancras station in London to the Channel Tunnel boundary in the South East of Kent, serving three other stations along the route: Stratford; Ebbsfleet; Ashford International. The route is the U.K. leg of the Paris-Brussels-Koln-Amsterdam-London trans-European transport network priority project.



The contractual structure of the project can be seen in the above chart. The terms of the CA are regulated by the Department of Trade, which has taken over regulatory responsibility from the Office of Rail Regulation. HS1 also enters into Track Access Agreements (TAA) with the train operating companies (TOCs) that use the track. It also enters in to operating agreements with all asset operators and power suppliers.

## Operations Phase Base-Case And Downside-Case Assumptions

### Base-case assumptions

S&P Global Ratings' base-case forecasts train paths, operating costs, and macroeconomic assumptions for 2017-2040:

- International train paths: 18,500 services in 2017, falling to 18,000 services in 2018, a decline from 18,725 services

in 2016. No growth from 2018 to 2023, followed by cumulative steady total growth of 5,000 train paths through to the end of the concession in 2039. This profile reflects the tough operating conditions facing international traffic demand in the short term in light of larger train sizes, terrorist events in France, and the U.K.'s Brexit vote. Our medium-term growth forecast models the introduction of new services by EIL or a new operator to existing or new destinations, such as Amsterdam or Frankfurt.

- Domestic train path growth: Flat demand of 55,575 train paths per annum, which is just below 2016 levels (55,600).
- Freight train path growth: A flat 800 train paths per annum, in line with 2016 levels.
- Spot train path growth: A flat 130 train paths per annum, in line with 2016 levels.
- Unregulated revenue from retail and carparks: Moderate average growth in revenue for next two years, and zero growth thereafter.
- Operating costs: In line with management's forecast.
- Retail price index: In line with S&P Global Ratings' latest forecasts: 2016: 1.8%, 2017: 3.0%, 2018: 2.5%, 2019: 2.6%, 2020: 3.2%. We assume inflation gradually rises to 3.7% in 2027, followed by 3.0% growth thereafter.
- Corporate tax rate: 2016: 20%, 2017: 19%, 2018: 18%, 2019: 18%, 2020: 17%.
- Interest income: None, in line with S&P Global Rating's ADSCR calculation

### Base-case key metrics

- Minimum ADSCR: 1.44x in March 2020
- Average ADSCR: 1.65x

### Downside-case assumptions

- International train path growth: 18,000 services in 2018. No growth thereafter, plus two two-year shocks in each of 2021 and 2035 to reflect the impact of tunnel fires resulting in partial tunnel closures and capacity being constrained by 20% in two consecutive semesters. Traffic steadily resumes to pre-stress levels in the third year.
- Domestic train path growth: Train paths at the underpin level (53,248 train paths per annum).
- Freight train path growth: No change from base case, plus three-year shocks in each of 2021 and 2025 due to tunnel fires, with same 20% impact as on international trains.
- Spot train paths: None.
- Unregulated revenue: 20% below base case.
- Unregulated costs: 20% above base case.
- Retail price index: 1 percentage point below base case for the first 10 years. Then 3.0% after 2027, as in the base case.

### Downside-case key metrics

- The project performs strongly under our downside-case scenario, supported by the 12-month debt service reserve facility. The minimum base-case ratios remain above 1.2x at all times, leading to a downside assessment of 'aa'.
- We incorporate a notch of uplift within the rating to reflect the strong performance of the project in a downside-case scenario.

## Operations Phase Risk Profile

### Summary

The operations phase business assessment (OPBA) of '4' reflects our view of the project's transparent and supportive regulatory framework that helps to mitigate operational risk and, combined with a strong competitive position and very low market risk, leads to a strong operational performance.

## Performance risk

We assess HS1's performance risk to be relatively low. The maintenance requirements of the relatively new asset is predictable, albeit more difficult to implement than infrastructure projects such as schools or accommodation assets. All maintenance risk associated with the track is subcontracted to NRHS under an operator agreement through to December 2047 (beyond the term of the concession). NRHS has been performing well under the contract to date, with limited or no service interruption.

HS1 continues to demonstrate strong operational performance, with no safety or environmental issues. Performance against its performance indicators, such as "train delays in excess of five minutes or cancelled due to HS1 infrastructure attributable incidents" is strong, being 0.42% in March 2016, which is substantially below the specified performance threshold of 13% annually and 15% quarterly under the concession agreement. The moving annual average (MAA) delay per train rose up slightly from historical performance to 10.1 seconds in the year to March 2016 due to trespassing incidents but this has had a negligible impact on the project's financial performance.

## Market risk

In our view, the project's exposure to market risk on international routes is mitigated by all track access charges being received quarterly in advance, based on a pre-agreed annual timetable, and calculated by timetabled train services rather than passenger volumes. Hence, cash flow variability is low, supporting our very low market risk assessment. The U.K. government underpins HS1's domestic passenger services, which account for about 70% of the IRC revenue and 40% of total regulated revenues (under the base case). Hence, there is limited market exposure to domestic revenues.

We forecast that cash flow available for debt service will decline by around 12% over the life of the concession if the project operates in an environment comparable to our downside-case assumptions, without applying macroeconomic stresses.

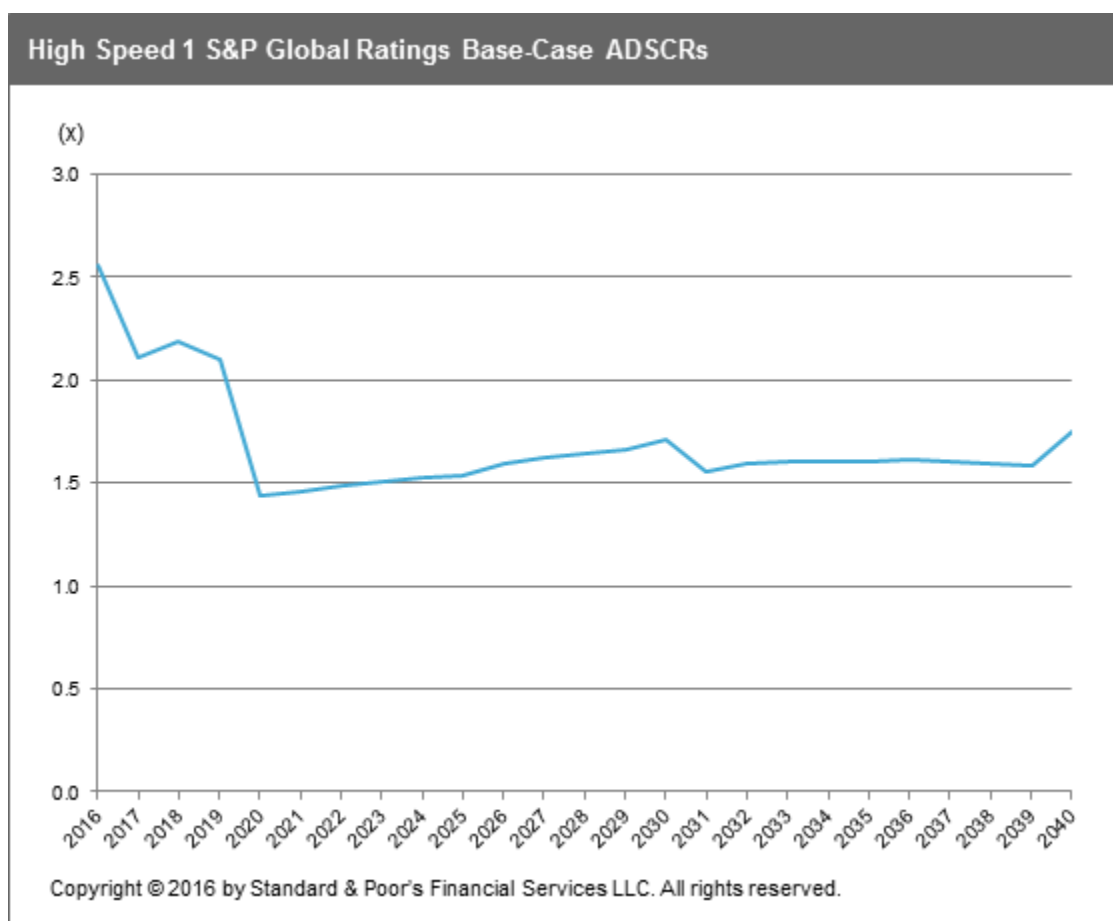
We assess the project's competitive position as strong, reflecting that HS1 provides the sole high-speed rail connection between London and continental Europe. The U.K. government has agreed not to fund any competing high-speed route over the life of the concession. The 2.5 hour journey time between Paris and London is faster than road or ferry alternatives and is not materially more expensive (reflecting the cost of ferries and fuel and road toll charges). Air travel is not a direct competitor as airports are located several kilometers outside city centers, adding considerably more travel time to the journey.

## Financial risk

Chart 1 shows the profile of our forecast base-case debt service coverage ratios following the proposed new debt issuance.



Chart 1



The minimum forecast ratio remains above 1.40x, which supports a preliminary SACP of 'a-' under our project finance operations methodology, given the project's moderately low business risk assessment.

We assign a one-notch positive adjustment to the preliminary SACP to reflect the robust financial performance of the project under the downside stress case. This is a reflection of the contractual agreement that supports domestic revenues and protection afforded to HS1 by the revenue payment mechanism, along with our expectations that international demand will not decline materially from current levels.

Table 1

Debt Structure Profile Post New Issuance					
	Issuer	Debt amount at Sept. 26, 2016 (mil. £)	Maturity	Interest	
U.S. private placement tranche A	HSRF	340.0	March 30, 2028	Fixed: 3.79%	
U.S. private placement tranche B	HSRF	117.0	March 30, 2031	Fixed: 4.21%	
U.S. private placement tranche C	HSRF	58.0	March 30, 2031	Floating: Libor + 1.64%	
U.S. private placement tranche D	HSRF	50.0	March 30, 2036	Fixed: 4.72%	
Incremental amortizing fixed-rate notes	HSRF	184.0	March 30, 2039	To be determined	

**Table 1**

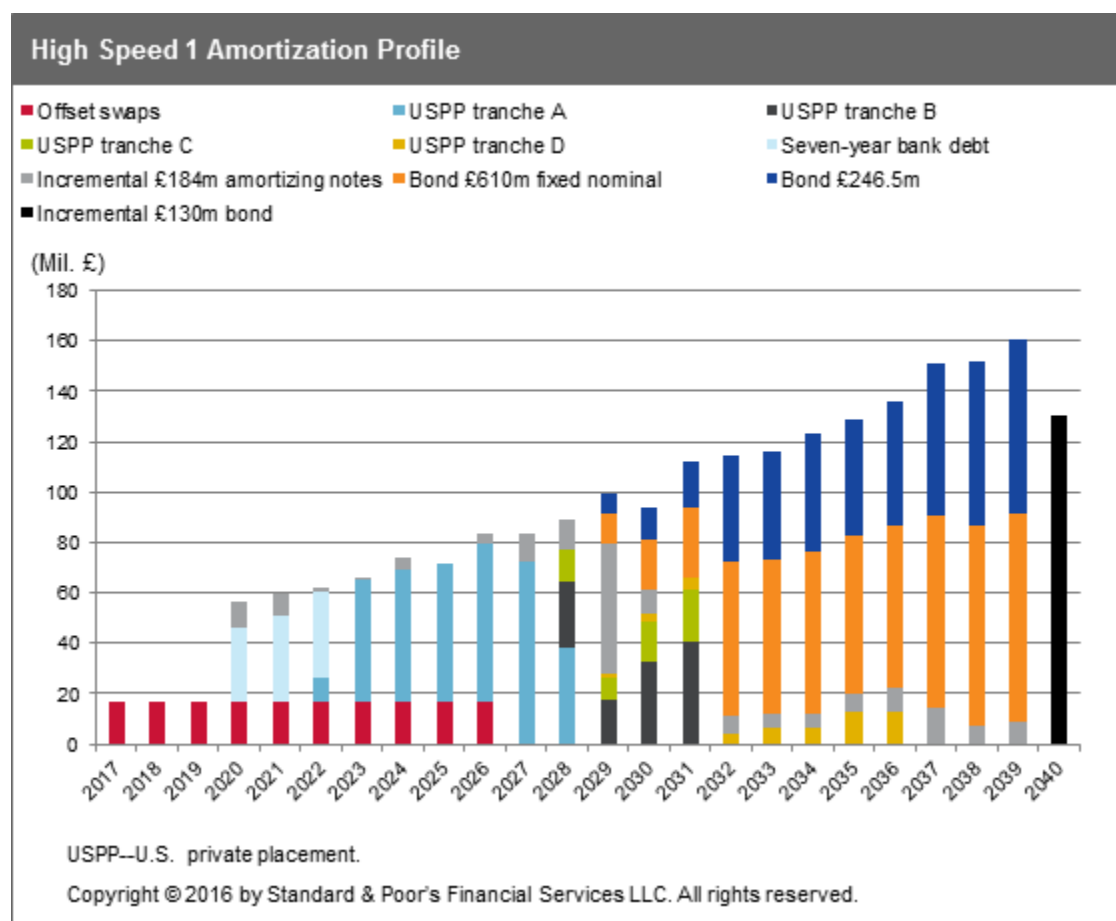
**Debt Structure Profile Post New Issuance (cont.)**

	Issuer	Debt amount at Sept. 26, 2016 (mil. £)	Maturity	Interest
Incremental bullet repayment fixed-rate notes	HSRF	130.0	Dec. 31, 2039	To be determined
Bond £610 million fixed nominal	HSRF1	610.0	Nov. 1, 2038	4.375%
Bond £246.5 million	HSRF1	260.2	Nov. 1, 2038	1.566%
Seven-year bank debt	HS1	97.6	March 31, 2022	Libor + 1.5%/2.0% (All-in rate 2.35%)
Working capital facility	HS1	65.0	Dec. 31, 2040	Floating: Libor + 1.25%
<b>Total</b>		<b>1,911.8</b>		

HSRF--High Speed Rail Finance PLC. HSRF1--High Speed Rail Finance 1 PLC. HS1--High Speed 1 Ltd.

The new debt issuance has shortened the concession tail to one year from two years, and includes a bullet repayment of up to £130 million in December 2039. The amortization of the debt is relatively back-ended for a project reliant on growth assumptions. Consequently, the financial performance of the project, which has an inflation-linked revenue stream versus a predominantly fixed-rate capital structure, deteriorates under long-term, sustained low inflation rates. We reflect this weakness by assigning a one-notch negative adjustment to the preliminary SACP.

**Chart 2**



Interest rate and currency exposure is largely mitigated via a portfolio of swaps.

### **Operations phase counterparties**

**Revenue counterparty.** Approximately 70% of the project's IRC revenue is provided by the domestic train operating company (TOC). The IRC represents around 55% of total revenues under our base case. The majority of this revenue is directly guaranteed by the U.K. government under the agreement put in place in January 2015. In addition, the U.K. Department for Transport maintains step-in arrangements that would enable it to take over a failing domestic TOC and directly operate its service. We therefore see the U.K. government as a material and irreplaceable counterparty, and we assign our counterparty dependency assessment of 'aa' based on our rating on the United Kingdom (unsolicited, AA/Negative/A-1+).

We do not assign a CDA to the specific domestic TOC, currently Southeastern. The domestic TOC is awarded a franchise agreement for a limited time period and replacement of the domestic TOC does not impact the domestic revenue receipts due to the upfront payment mechanism. Historically, a change in the franchisee has not resulted in any disruption in revenue receipts.

All remaining IRC revenues come from the international train operating company, EIL. We do not consider EIL to be a material counterparty to this project. In our view, due to the strategic nature of the route, it will be operated by another service provider if required without material interruption in the service.

**Operations counterparty.** We consider the operations and maintenance (O&M) counterparty to be irreplaceable and assign a CDA of 'aa', which does not constrain the rating on the project. The current O&M of the track is provided by NRHS, supported by a guarantee granted from the sovereign entity, Network Rail Infrastructure Ltd. The operating agreement under which NRHS operates assumes the infrastructure will be operated in accordance with industry standards. NRHS retains performance risk and the responsibility for safety under railway regulation, in line with operator role on transport projects.

Operation of the electricity distribution infrastructure and supply is provided by U.K. Power Networks (UKPN) under a performance-based finance lease agreement (through to 2057). The electricity distribution market is wide in the U.K. and we believe that UKPN can be replaced if necessary without material disruption. We therefore do not assign a CDA.

### **Financial counterparties**

**Swap counterparties.** The ratings on the project debt are weak-linked to the ratings on the swap counterparties, as the terms of the swap do not fulfill our criteria requirements for collateral and timely replacement. The project's hedging policy states that HS1 may enter into swaps with counterparties rated 'A-' or above and that the swap counterparty is committed to taking corrective action when its rating falls below investment grade. There is no requirement, however, for the counterparty to both post collateral and to replace itself. The replacement language in the swap agreement is therefore not compliant with our criteria (see "Counterparty Risk Framework Methodology And Assumptions," published June 25, 2013, on RatingsDirect). The project maintains interest rate and cross-currency swaps with a number of rated counterparties: National Australia Bank, BNP Paribas, Bank of Nova Scotia, Royal Bank of Canada and Lloyds Bank. All of these entities are rated one notch higher than HSRF's debt and hence do not constrain the issue credit rating (ICR). Should the rating on any of the entities fall below the ICR, we will assess the impact of this counterparty failing to fulfil its obligations under the swap.

**Liquidity and working-capital facility providers.** The 12-month forward looking liquidity facility is provided by three financial counterparties: National Australia Bank, Bank of Nova Scotia London Branch, and BNP Paribas. The terms of the liquidity facility require that the counterparty is rated at least 'BBB' and that, should the rating fall below this level, it must be replaced within 60-days. The replacement period is in line with the required remedy period stipulated in our

criteria to support transactions rated up to 'A'.

The ratings on the project debt are weak-linked to the ratings on the six £65 million working capital facility providers, each of which provides £10.8 million: The Royal Bank of Scotland, Lloyds Bank, Canadian Imperial Bank of Commerce, Scotiabank (Ireland), BNP Paribas, and Export Development Canada. All of these entities, except RBS and Scotia bank (Ireland), are rated one notch higher than HSRF's debt. We forecast that the size of the facility is in excess of requirements and hence we can, in our view, exclude these two weakest financial counterparties without having an impact on the liquidity position of the project. Hence, the project debt rating is not constrained by the ratings on the working capital financial counterparties.

**Bank account provider:** RBS is the project's account bank. The replacement language in the accounts agreement and the recently executed deed poll is now compliant with our criteria, according to which the exposure to an account bank rated 'BBB+' permits a maximum potential rating on the supported security of 'A+'. The account bank counterparty must be rated at least 'BBB-' in order not to constrain our 'A-' rating on the project.

## Final Rating Modifiers

There are no other modifiers that have an impact on the rating.

## Rating Score Snapshot And Peer Comparison

The best peer for HS1 is Channel Link Enterprise Finance PLC (CLEF), which we rate one notch lower than the project at 'BBB+'. CLEF has a stronger minimum DSCR (1.7x) than our 1.44x base case for HS1, but HS1's cash flows are more resilient under our downside-case scenario. Furthermore, the rating on CLEF incorporates a one-notch downward adjustment for the weak distribution test (backward-looking only).

**Table 3**

	High Speed Rail Finance PLC	Channel Link Enterprise Finance PLC
<b>Operations Phase SACP (Senior Debt)</b>		
Operations phase business assessment (1=best to 12=worst)	4	4
S&P Global Ratings base-case ADSCR minimum	1.44x	1.7x
S&P Global Ratings base-case ADSCR average	1.65x	2.6x
Preliminary operations phase SACP	a-	a-
Downside analysis	aa (+1 notch)	a (no impact)
Debt structure (and forecast average DSCRs)	Negative (-1 notch)	Negative (-1 notch)
Liquidity	Neutral (no impact)	Neutral (no impact)
Comparable ratings analysis	Neutral (no impact)	Neutral (no impact)
Counterparty rating adjustment	Neutral (no impact)	Neutral (no impact)
Operations phase SACP	a-	a-
<b>Modifiers (Senior Debt)</b>		
Parent linkage	Delinked (no impact)	Delinked (no impact)
Structural protection	Neutral (no impact)	Fair (-1 notch)

**Table 3**

<b>Ratings Score Snapshot And Peer Comparison (cont.)</b>		
	<b>High Speed Rail Finance PLC</b>	<b>Channel Link Enterprise Finance PLC</b>
Senior debt issue rating	A- (prelim)	BBB+

ADSCR--Annual debt service coverage ratio.

## Related Criteria And Research

### Related Criteria

- Key Credit Factors For Road, Bridge, And Tunnel Project Financings, Sept. 16, 2014
- Project Finance Operations Methodology, Sept. 16, 2014
- Project Finance Transaction Structure Methodology, Sept. 16, 2014
- Project Finance Framework Methodology, Sept. 16, 2014
- Country Risk Assessment Methodology And Assumptions, Nov. 19, 2013
- Counterparty Risk Framework Methodology And Assumptions, June 25, 2013
- Project Finance Construction And Operations Counterparty Methodology, Dec. 20, 2011

### Related Research

- High Speed Rail Finance PLC Proposed Issuance Assigned Preliminary 'A-' Rating; Outlook Stable, Sept. 23, 2016

## Analytical Team

### Primary Credit Analyst:

Rachel C Goult, Paris 0033 (0) 620 091284; rachel.goult@spglobal.com

### Secondary Contact:

Luisina Berberian, Madrid +(34) 91-788-7200; luisina.berberian@spglobal.com

### Additional Contact:

Infrastructure Finance Ratings Europe; InfrastructureEurope@spglobal.com

Copyright © 2016 by S&P Global Market Intelligence, a division of S&P Global Inc. All rights reserved.

No content (including ratings, credit-related analyses and data, valuations, model, software or other application or output therefrom) or any part thereof (Content) may be modified, reverse engineered, reproduced or distributed in any form by any means, or stored in a database or retrieval system, without the prior written permission of Standard & Poor's Financial Services LLC or its affiliates (collectively, S&P). The Content shall not be used for any unlawful or unauthorized purposes. S&P and any third-party providers, as well as their directors, officers, shareholders, employees or agents (collectively S&P Parties) do not guarantee the accuracy, completeness, timeliness or availability of the Content. S&P Parties are not responsible for any errors or omissions (negligent or otherwise), regardless of the cause, for the results obtained from the use of the Content, or for the security or maintenance of any data input by the user. The Content is provided on an "as is" basis. S&P PARTIES DISCLAIM ANY AND ALL EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, ANY WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR USE, FREEDOM FROM BUGS, SOFTWARE ERRORS OR DEFECTS, THAT THE CONTENT'S FUNCTIONING WILL BE UNINTERRUPTED, OR THAT THE CONTENT WILL OPERATE WITH ANY SOFTWARE OR HARDWARE CONFIGURATION. In no event shall S&P Parties be liable to any party for any direct, indirect, incidental, exemplary, compensatory, punitive, special or consequential damages, costs, expenses, legal fees, or losses (including, without limitation, lost income or lost profits and opportunity costs or losses caused by negligence) in connection with any use of the Content even if advised of the possibility of such damages.

Credit-related and other analyses, including ratings, and statements in the Content are statements of opinion as of the date they are expressed and not statements of fact. S&P's opinions, analyses, and rating acknowledgment decisions (described below) are not recommendations to purchase, hold, or sell any securities or to make any investment decisions, and do not address the suitability of any security. S&P assumes no obligation to update the Content following publication in any form or format. The Content should not be relied on and is not a substitute for the skill, judgment and experience of the user, its management, employees, advisors and/or clients when making investment and other business decisions. S&P does not act as a fiduciary or an investment advisor except where registered as such. While S&P has obtained information from sources it believes to be reliable, S&P does not perform an audit and undertakes no duty of due diligence or independent verification of any information it receives.

To the extent that regulatory authorities allow a rating agency to acknowledge in one jurisdiction a rating issued in another jurisdiction for certain regulatory purposes, S&P reserves the right to assign, withdraw, or suspend such acknowledgement at any time and in its sole discretion. S&P Parties disclaim any duty whatsoever arising out of the assignment, withdrawal, or suspension of an acknowledgment as well as any liability for any damage alleged to have been suffered on account thereof.

S&P keeps certain activities of its business units separate from each other in order to preserve the independence and objectivity of their respective activities. As a result, certain business units of S&P may have information that is not available to other S&P business units. S&P has established policies and procedures to maintain the confidentiality of certain nonpublic information received in connection with each analytical process.

S&P may receive compensation for its ratings and certain analyses, normally from issuers or underwriters of securities or from obligors. S&P reserves the right to disseminate its opinions and analyses. S&P's public ratings and analyses are made available on its Web sites, [www.standardandpoors.com](http://www.standardandpoors.com) (free of charge), and [www.ratingsdirect.com](http://www.ratingsdirect.com) and [www.globalcreditportal.com](http://www.globalcreditportal.com) (subscription) and [www.spcapitaliq.com](http://www.spcapitaliq.com) (subscription) and may be distributed through other means, including via S&P publications and third-party redistributors. Additional information about our ratings fees is available at [www.standardandpoors.com/usratingsfees](http://www.standardandpoors.com/usratingsfees).

STANDARD & POOR'S, S&P and RATINGSDIRECT are registered trademarks of Standard & Poor's Financial Services LLC.