



# Financing Public Private Partnerships

September 2015

BUILDING TEAM SPIRIT TOGETHER



**SOCIETE GENERALE**  
Corporate & Investment Banking



# OVERVIEW

## INFRASTRUCTURE MARKETS RECAP

- **MATURE PPP MARKETS**
- **EMERGING PPP MARKETS**

## CURRENT MARKET DEVELOPMENTS

## CASE STUDY

- **THE A7 GERMAN MOTORWAY PPP**

## CONCLUSION



# INFRASTRUCTURE MARKETS RECAP

# MATURE PPP MARKETS

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## ■ UK and Europe

- Long dated debt covering the whole concession term, typically up to 29 years.
- Floating rate debt fully hedged as fixed interest rate or inflation linked.
- French PPP projects usually include a substantial tranche of government guaranteed debt – ‘Cession Dailly’.
- Most financing provided by major European and international banks.
- Limited use of project bonds.

## ■ North America

- Long dated debt covering the whole concession term, typically up to or even in excess of 30 years.
- Fixed interest rate tax exempt bonds, mainly Private Activity Bonds (PABs).
- Also have the TIFIA, US government loan program, which provides low cost long term loans to some transactions.
- Most financing sourced from financial institutions and sophisticated bond investors.
- Limited use of bank debt, usually shorter dated repayable from milestone payments.

## ■ Australia

- Short to medium dated debt requiring a number of re-financings over the project life.
- Debt tenors usually in the 3 to 7 year range, occasionally 10 years.
- Floating interest rate loans hedged into fixed interest rate for the term of the debt.
- Public sector shares re-financing risk by adjusting payments for movements in underlying reference rate, but not credit margin.
- Most financing provided by Australian domestic banks and international banks active in that market.

# EMERGING PPP MARKETS

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## ■ India

- Structures generally 'loose' with Project company retaining a significant level risk.
- Generally strong support from sponsors to cover key elements of risk.
- Medium dated debt with a small bullet repayment at maturity.
- Debt tenors usually in the 10 to 15 year range.
- Most debt provided by Indian banks and particularly the main State owned banks.
- Limited interest rate swap market and no common reference rate.

## ■ South Africa

- Largely follows the European approach
- Long dated debt covering the whole concession term, typically 22 to 25 years.
- Floating rate debt fully hedged as fixed interest rate or inflation linked bonds.
- Most debt provided by the large domestic banks and financial institutions investing in inflation linked bonds.

## ■ Philippines

- Generally conventional risk allocation, after some failed experiments.
- Long dated debt tenors available up to 25 years.
- Limited swap market with only basic products available.
- Almost all financing provided by domestic banks who are liquid in both PHP and USD.



# CURRENT MARKET DEVELOPMENTS

# FINANCING SOURCES

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## ■ Bond markets

- The US remains the most liquid and sophisticated bond market with increasing appetite for infrastructure assets.
- The Euro bond market is continuing to develop but has been adversely affected by the latest Greek debt crisis.
- India has developed a domestic bond scheme for re-financing projects post construction completion to help recycle capital.
- Bond markets have become a bit nervous in the wake of the Chinese stock market crash.

## ■ Bank markets

- Most banks are liquid and asset hungry.
- Pricing has been coming under pressure for some time but now structures are being eroded in a most markets.
- A number of projects closed two to three years ago are being re-financed or re-priced to take advantage of the more aggressive market.
- It almost feels like 2007 all over again.
- An exception is Indian banks that are facing risk concentration concerns.

## ■ Government Financing

- To an increasing extent governments are providing grant funding to projects to reduce the requirement for more expensive private sector project financing.
- The UK Government and EIB provide guarantee schemes aimed at reducing the cost of financing rather than addressing a perceived lack of available private sector financing.
- The Australian States are increasingly supporting the re-financing risk inherent in the short dated financing structures.



# CASE STUDY



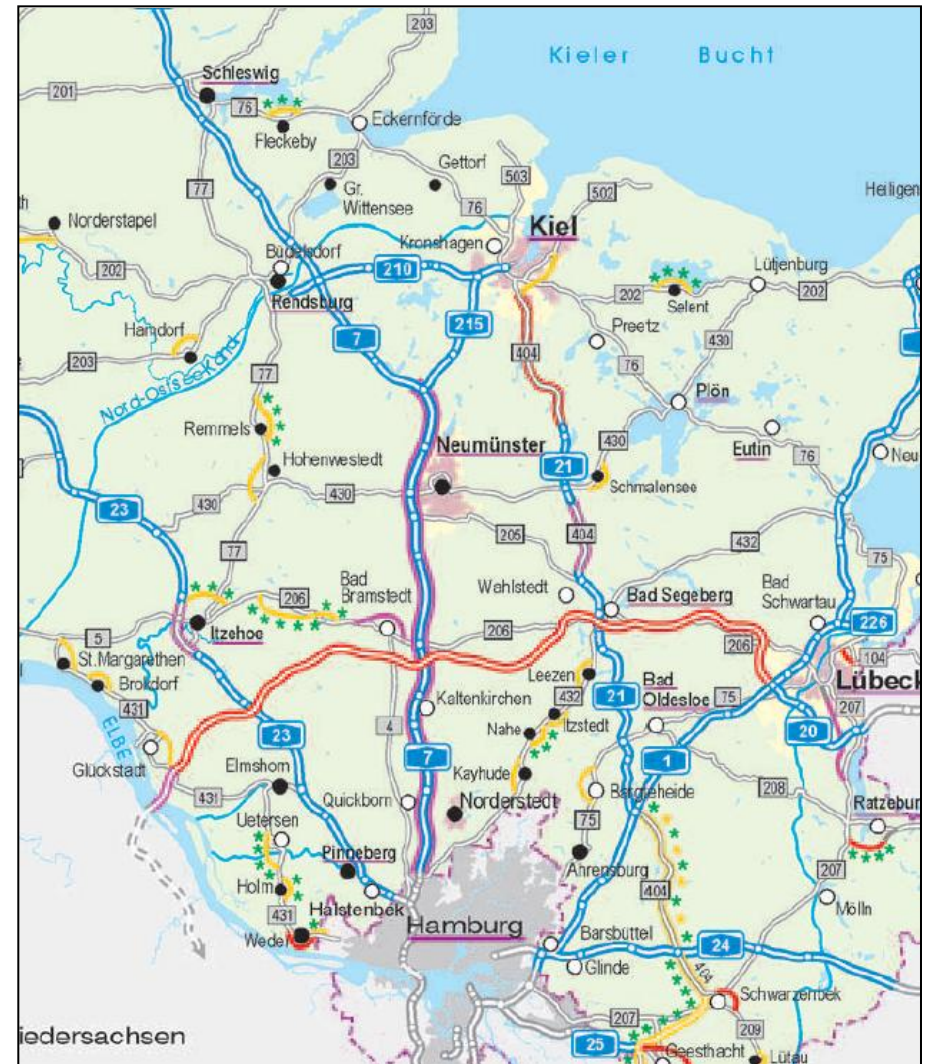
# THE A7 MOTORWAY PPP PROJECT

## Consortium and Advisors

- The Via Solutions Nord Consortium comprising Hochtief, Kemna and DIF achieved financial close for the A7 Motorway PPP Project with a EUR 750m project bond financing.
- SG acted as Financial Adviser, Structuring and Rating Adviser, Sole Global Coordinator, Joint Bookrunner, Mandated Lead Arranger and Swap Provider

## The Project

- 30-year availability based concession contract with the Federal Republic of Germany under the German A-Model framework.
- 4-year construction period involving the widening of a 65km section of the A7 motorway north of Hamburg.
- Total construction cost c.EUR 600m.
- Fully committed finance required for BAFO bid with no market MAC protection.
- Tight timetable and the German authorities required the Preferred Bidder to achieve financial close within 10 weeks of being appointed.



# THE FINANCING SOLUTION

## Multi-sourced Financing

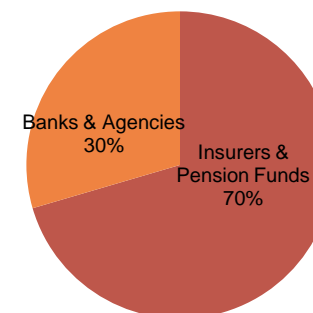
- EUR 430m of senior secured notes were privately placed with seven institutional investors, with SG as Global Coordinator.
- The notes were rated A3 by Moody's, benefiting from a 1.5 notch uplift due to the EUR 86m EIB Project Bond Credit Enhancement (PDCE).
- Construction milestone payments from the Authority were bridged with a EUR 82mM revolving Milestone Bridge Facility arranged by SG.
- Milestone Bridge Facility included a tranche of standby financing to bridge construction delays.

<b>Issuer:</b>	Via Solutions Nord GmbH & Co
<b>Amount:</b>	EUR 429,137,000
<b>Bond Rating:</b>	A3 (stable)
<b>Issue Price:</b>	100%
<b>Coupon:</b>	2.957% (s.a.)
<b>ISIN:</b>	XS1102504443
<b>Form of Offering:</b>	Senior Secured / Reg S
<b>Listing:</b>	Unlisted
<b>Global Coordinator:</b>	Société Générale Corporate & Investment Banking

## Project Bond Placed with a Diverse Investor Group

- Good institutional appetite for the bonds, which were c. 2x oversubscribed.
- Key investors – Aegon, AXA, EIB, Nationale-Nederlanden Levensverzekering Maatschappij, KfW, MassMutual and Sun Life

## Allocation by Investor Type



## TRANSACTION HIGHLIGHTS

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- The first project bond financing executed in the German market and the largest A-Model road project awarded to date.
- The bidding stages attracted huge appetite from institutional investors eager to invest in high quality assets in Germany.
- Firm commitments provided at a fixed spread for the final bid submission, valid for a six month period to cover the extended final tender and closing phase.
- The First EUR bond in which a group of investors have subscribed to a deferred draw structure through a construction period exceeding four years.
- Unlike previous greenfield PBCE project bonds which have been public bonds placed effectively with a single investor, this project bond was privately placed with seven north American and European investors.
- The delivery of a geographically diverse investor group in this transaction shows the global advancement of capital markets participants now able to provide highly structured financing solutions which incorporate EIB enhancements and negate the cost of carry traditionally associated with capital markets financing.
- Innovative PBCE structure developed to allow release of PBCE post construction completion:
  - securing efficient pricing of the PBCE Facility without any adverse rating impact;
  - avoiding typical PBCE “poison pills” linked to PBCE Rebalancing and PBCE Tail Reserve requirements
- The final negotiation and documentation process followed a tight deadline to achieve financial close within nine weeks.

**A landmark transaction attracting huge appetite and one that will serve as a template for future PPP transactions in Germany, and the rest of Europe**

# CONCLUSIONS

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## ■ Bond markets are continuing to develop

- Investors are attracted to the infrastructure asset class with stable underlying cashflows.
- Investors are getting increasingly comfortable with project construction risk and limited recourse structures.
- Investors are showing more flexibility in their approach to the infrastructure market.
- However, bond markets are more volatile and can close in periods of uncertainty.

## ■ Bank markets are getting increasingly aggressive

- The bank market remains a more reliable and robust source of financing than the bond market.
- There is still strong appetite amongst banks for debt in PPP projects.
- There is no discernible change in bank appetite with the phasing in of the Basel III capital requirements.

## ■ What does the future hold

- Increasing use of bond financing with a more diverse pool of lenders.
- Banks continuing to be major providers of debt and to provide backstop financing.
- Governments striving for better value for money in PPP financing structures.



# APPENDICES

SG CIB Infrastructure Project Finance  
G Munro biography

# SG INFRASTRUCTURE FINANCE EXPERTISE

- SG has a longstanding and well established track record of providing financial advisory services, arranging debt and securing capital markets financing for the infrastructure sector.
- The infrastructure team has remained at the forefront of the infrastructure market, globally, for the past 20 years.
- SG has a track record of developing unique / pathfinder and innovative financing solutions for clients
- SG's market-leading position is consistently recognised by awards and league table rankings by leading trade publications.



#1 Corporate & Investment Bank:  
Energy/Infrastructure and transport  
sector

2014 TLF



#1 Advisory and Arranging in the  
Infrastructure and Asset Based Finance  
Group

2013 LMDA



Bank of the Year  
Europe and Africa

2014 INFR JOURNAL



Best Arranger of Project Finance Loans

2011/2010 EUROWEEK



#1 Ratings Agency Advisory  
Worldwide

2014/2013/2012/2011 EM

## 2015 League Tables

#	Financial Advisor	USD 'm	Market share
1	<b>Société Générale</b>	<b>21,538</b>	<b>19.11%</b>
2	Macquarie	10,392	9.22%
3	UBS	7,421	6.59%
4	HSBC	6,978	6.19%
5	BBVA	5,819	5.16%

Source: IJGlobal H1 2015 League Tables

#	MLA	Trans's	Market share
1	BBVA	7	4.2%
2	BNP	7	4.5%
3	Credit Agricole	6	5.5%
4	<b>Société Générale</b>	<b>5</b>	<b>3.9%</b>
5	Sumitomo Mitsui	4	5.2%

Source: IJGlobal H1 2015 League Tables. European Transport deals

### Transport

- Airports
- Ports
- Roads
- Rail

### Utilities

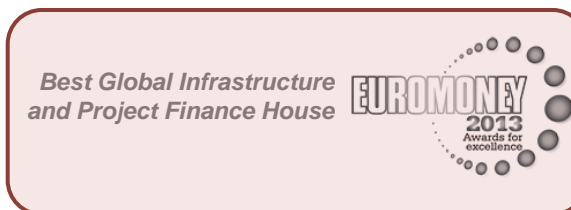
- Gas distribution / storage
- Electricity distribution
- Water

### PPP

- Hospitals
- Schools
- Defence
- Accommodation

### Renewables

- Wind
- Solar
- Waste to energy



# REGULAR AWARD WINNING DEALS



## 2014 Deal Awards

- A7 – European Road Deal of the Year (PFI), European Project Bond Deal of the Year (IJ)
- N17/N18– European PPP Deal of the Year (PFI)
- Budapest Airport – European Refinancing Deal of the Year (PFI)
- I-4 – Americas Transportation Deal of the year (PFI)
- DCT Gdansk– European Port Deal of the year (IJ)





















## 2013 Deal Awards

- L2 Rocade Marseille – European Availability Deal of the Year (PFM)
- Castor – European Refinancing Deal of the Year (PFM)
- Arqiva Refinancing – Europe Corporate Deal of the Year (PFI), European Telecoms Deal of the Year (PFM), Telecoms Deal of the Year (IJ)
- FPSO N'Goma – African Oil & Gas Deal of the Year (PFI)

## 2012 Deal Awards

- **Nimes- Montpellier** – European High-Speed Rail Deal of the Year (PFM)
- **Open Grid Europe** – Global M&A Deal of the Year (PFI), European Oil & Gas Deal of the Year (PFM), Best Project Finance Deal of the Year (Euroweek), Acquisition Deal of the Year (IJ)
- **APRR** – Infracore Deal of the Year (PFI), European refinancing Deal of the Year (PFM)
- **Aeroporti Di Roma** – European Airport Deal of the Year (PFM)
- **TGI** – European Social Infrastructure Deal of the Year (PFM)

# A KEY PLAYER IN THE PROJECT BOND MARKET

Toll Road	Metro Line	Power Plant	Waste Facility	Wind Transmission	PPP road	Pipeline
 <p>Indiana Toll Road Senior Secured Notes Due 2025, 2035, 2040</p> <p>USD 1,050,000,000</p> <p>Joint Bookrunner</p> <p>2015 USA</p>	 <p>Lima Metro Senior Secured Notes Due 2034</p> <p>USD 1,154,923,000</p> <p>Joint Bookrunner</p> <p>2015 PERU</p>	<p>EIF Pio Pico, LLC</p> <p>Senior Secured Notes Due 2041</p> <p>USD 443,000,000</p> <p>Exclusive Lead Placement Agent</p> <p>2015 USA</p>	 <p>AVR Senior Secured Notes Due 2021, 2024, 2026</p> <p>GBP 16,000,000 EUR 220,000,000 USD 75,000,000</p> <p>Co-Manager</p> <p>2014 NETHERLANDS</p>	 <p>WETT Holdings, LLC Wind Energy Transmission Texas, LLC Senior Secured Notes Due 2024, 2034</p> <p>USD 490,000,000 USD 150,000,000</p> <p>Joint Placement Agent</p> <p>2014 USA</p>	 <p>Via Solutions Nord Senior Secured Notes Due August 2043</p> <p>EUR 429,137,000</p> <p>Sole Global Coordinator Joint Bookrunner Sole Rating Advisor</p> <p>2014 GERMANY</p>	 <p>Enbridge Pipelines (Southern Lights) L.L.C. Enbridge Southern Lights L.P. Senior Unsecured Notes Due 2040</p> <p>USD 1,061,000,000 CAD 352,000,000</p> <p>Joint Placement Agent (USD) Joint Bookrunner (CAD)</p> <p>2014 USA / CANADA</p>
Gas field	Transmission Line	PPP Road	Airport	Telecom Infra	PPP Road	Gas Storage
 <p>Delek &amp; Avner (Tamar Bond) Senior Secured Notes 144A- RegS 2016, 2018, 2020, 2023, 2025</p> <p>USD 2,000,000,000</p> <p>Joint Lead Manager</p> <p>2014 ISRAEL</p>	 <p>Abengoa Transmisión Sur S.A. Senior Secured Notes Due April 2043</p> <p>USD 432,000,000</p> <p>Co-Manager</p> <p>2014 PERU</p>	 <p>Via A11 NV Senior Secured Notes Due September 2045</p> <p>EUR 577,900,000</p> <p>Bond Advisor to the Public Authority (Via Invest)</p> <p>2014 BELGIUM</p>	 <p>Aeroporti di Roma S.p.A. Senior Unsecured Notes Due February 2021</p> <p>EUR 600,000,000</p> <p>Joint Bookrunner</p> <p>2013 ITALY</p>	 <p>Arqiva Financing plc Senior Unsecured Notes Due June 2030</p> <p>GBP 164,000,000 Joint Bookrunner</p> <p>Section 4(2)/ Reg D Notes Due June 2025 USD 358,000,000 GBP 163,000,000 Dealer</p> <p>2013- 2014 UK</p>	 <p>Marseille L2 Bypass PPP Advising &amp; arranging for Bouygues consortium</p> <p>EUR 162,000,000 Financial Advisor Lead Manager and Joint Bookrunner Rating Advisor</p> <p>2013 FRANCE</p>	 <p>Watercraft Capital S.A. Senior Secured Notes due December 2034</p> <p>EUR 1,400,000,000</p> <p>Joint Bookrunner Structuring Bank</p> <p>2013 SPAIN</p>
Toll Road	Airport	LNG Plant	LNG Vessel	Gas Transmission	Wind Farm	Pipeline
 <p>Autopistas Metropolitanas de Puerto Rico 144a/ Reg S Notes Due June 2035</p> <p>USD 435,000,000</p> <p>Joint Bookrunner</p> <p>2013 PUERTO RICO</p>	 <p>Brussels Airport Senior Secured Notes Due December 2020</p> <p>EUR 500,000,000</p> <p>Joint Bookrunner</p> <p>2013 BELGIUM</p>	 <p>Sabine Pass Liquefaction, LLC 144A/ Reg S Notes Due 2021/ 2023</p> <p>USD 2,000,000,000 USD 1,500,000,000 USD 1,000,000,000 USD 2,000,000,000</p> <p>Joint Bookrunner</p> <p>2013-2014 USA</p>	 <p>Meridian Spirit Section 4(2)/ Reg D Notes Due December 2030</p> <p>USD 195,000,000</p> <p>Joint Bookrunner Sole Ratings Advisor</p> <p>2013 NORWAY</p>	 <p>Vier Gas Transport (Opengrid) Senior Unsecured Notes Due June 2020, 2025</p> <p>EUR 1,500,000,000 EUR 1,500,000,000</p> <p>Joint Bookrunner Sole Ratings Advisor</p> <p>2013 GERMANY</p>	 <p>Oaxaca II &amp; IV 144A / Reg S Notes Due December 2031</p> <p>USD 298,700,000</p> <p>Joint Bookrunner</p> <p>2012 MEXICO</p>	 <p>Dolphin Energy Limited Senior Secured Notes Due December 2021</p> <p>USD 1,300,000,000</p> <p>Joint Bookrunner</p> <p>2012 UAE</p>





Gavin MUNRO

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## Managing Director, Head of Infrastructure Finance, Asia Pacific

- Gavin heads up the Infrastructure Project Finance team at SG Hong Kong, specialising in the transportation sector. Prior to his transfer to Hong Kong, Gavin was Head of Project Finance at SG London, where he was involved in advising on a broad range of infrastructure projects and other limited recourse financings.
- Over the years Gavin has advised on a wide variety of projects around the world:
  - Advising SMRT and Alloy MTD on the LRT1 metro project in the Philippines.
  - Advising GVK Hancock on the Alpha Mine Project in Australia for the supporting rail and port transport infrastructure.
  - Advising Bouygues and Basil Read on their bid for the N1/N2 Winelands Toll Highway in South Africa;
  - Advising Cintra and Budimex on the financing for the A1Toll Motorway Project in Poland;
  - Advising Murray & Roberts and G4S on their bids for the latest round of PPP prison projects in South Africa;
  - Advising the Hochtief Airport and Goldman Sachs Infrastructure Partners Consortium on their bid for Chicago Midway International Airport;
  - Advising the Hochtief Airport Consortium on their original bid for the privatisation of Budapest Airport as well as their subsequent purchase of the airport from BAA;
  - Advising the Bouygues, Bombardier and M&R led Bombela Consortium on their bid for the Gauteng Rapid Rail Link project in South Africa;
  - Advising the Celtic Roads Group, formed by Dragados, Royal BAM and National Toll Roads, on the first Irish toll road projects;
  - Advising Trans African Concessions on the re-financing of the Maputo Corridor Toll Road Project;
  - Advising the Hochtief and Bilfinger Berger led consortium on their bids for the Greek toll road projects;
  - Advising the Amey Lex Consortium on the C-Vehicles Project to provide the UK MoD with a fleet of construction vehicles and ancillary support services.
- Qualified as both a Chartered Accountant and Advocate, he had several years' merchant banking experience, mainly in the areas of corporate reconstruction and project finance prior to joining SG in 1997.

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3 activities  
quality selectivity  
**team spirit**  
integration  
clients  
distribution  
key pillar of the Group  
exemplary adapt  
efficiency transformation alignment  
financial engineering **expertise** environment  
risk management **responsibility**