EUROPEAN
COMMISSION

Brussels, 7.3.2016
SWD(2016) 58 final

COMMISSION STAFF WORKING DOCUMENT

on

the Ad-hoc Audit of the Pilot Phase of the Europe 2020 Project Bond Initiative

{SWD(2016) 60 final}

CONTENTS

1. Introduction

1.1 Purpose and Scope of the Evaluation

At the end of 2013, the Commission finalised an Interim Report that highlighted the developments and achievements since the launch of the pilot phase of the Europe 2020 Project Bond Initiative[1]. An external evaluation of the Pilot Phase of the Project Bond Initiative was concluded in June 2014[2] in the context of the Commission reporting exercise to the European Parliament and the Council on the implementation of the Pilot Phase.

In view of EU Regulation N°670/2012 (art. 1(1)), the Pilot Phase of the Project Bond Initiative required a full scale independent evaluation to be concluded in 2015, whose conclusions would enable the Commission to consider proposing appropriate regulatory changes, if deemed necessary.

This evaluation drew upon the results of the previous external evaluation concluded in June 2014 and was carried out in order to:

- assess the effectiveness, efficiency, relevance, value added and additionality of the Pilot Phase of the Project Bond Initiative, and
- draw lessons from the implementation of this financial instrument from its establishment until the time of the evaluation.

The evaluation covers projects approved by the European Investment Bank ('EIB') prior to 31 December 2014 and closed prior to 31 July 2015, in the eligible area (the 28 Member States of the European Union).

In particular, an assessment was made of the following issues:

a. The added value and additionality of the Project Bond Initiative compared to other Union or Member State instruments and other existing forms of long term debt financing;

b. The impact of the Pilot Phase of the Project Bond Initiative on the EU project bond market;

c. The achieved multiplier effect in relation to the EU budget; and

d. A comparative analysis of the competitiveness of the project bond solution

Seven Project Bond Credit Enhanced projects have been assessed up to the cut-off date[3], while one further transaction, i.e. the West of Duddon Sands OFTO project, which reached financial close in August 2015, has been acknowledged by the evaluation, but is not included in its scope. In addition, an evaluation of nine projects, which either were considered for Project Bond Credit Enhancement but in the end did not make use of the instrument, or closed with alternative financing solutions, was carried out for comparison purposes.

2. Background of the Project Bond Initiative

2.1. Short Context of the Initiative

Following the 2008 financial crisis, government spending on infrastructure projects reduced significantly, while banks were confronted with growing constraints on their lending capacity for financing long term infrastructure projects. At the same time, debt capital market financing, as an alternative source of financing for greenfield infrastructure, fell to record low levels. There was thus a

[1] http://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1431074029283&uri=CELEX:52013DC0929

[2] Ad-hoc Audit Report on the Pilot Phase of the Europe 2020 Project Bond Initiative, EY, 2014, http://ec.europa.eu/dgs/economy_finance/evaluation/pdf/mid_term_eval_pbi_pilot_phase_en.pdf

[3] Castor Gas storage (Spain), Greater Gabbard OFTO (UK), A11 motorway (Belgium), Axione (France), A7 motorway (Germany), Gwynt y Mor OFTO (UK), Port of Calais (France)

need to find ways to promote private sector financing of infrastructure projects without increasing public indebtedness.

Institutional investors, such as insurance companies and pension funds, retained an interest in the sector and with the right support were seen as a potential solution to fill in the infrastructure finance gap. In this context, the Project Bond Initiative was intended to facilitate institutional investment and provide a credible alternative to the traditional bank lending to projects especially in the transport, energy and ICT sectors where sources of financing were insufficient, by attracting institutional investors seeking the comfort of well rated investments[4]. The initiative was thus designed to bridge the gap between the typically low investment grade ratings of privately financed infrastructure projects and the higher ratings targeted by institutional investors, by raising the credit quality of project bonds issued by project companies.

2.2 Brief Description of the Initiative

The Pilot Phase of the Project Bond Initiative was built on over ten years of experience of using financial instruments to implement EU policies. To this extent, the 2007-2013 financial framework witnessed the launch of a new generation of financial instruments put in place in cooperation with the EIB, notably the Loan Guarantee Instrument for TEN-T projects, which aimed to attract long-term bank lending to TEN-transport projects. The pilot phase of the Project Bond Initiative was meant to market test the design of a cross-sectoral financial instrument which did not exist at European level at the time of its launch. The aim of the pilot was to test and improve the effectiveness of the instrument upon its full-roll out under the Connecting Europe Facility for the period 2014-2020.

The legal base of the Project Bond Initiative was adopted in the summer of 2012 by the European Parliament and the Council. The signature of the cooperation agreement between the Commission and the EIB on 7 November 2012 marked the first step in the implementation of the Pilot Phase of the Project Bond Initiative. Under this cooperation agreement, the Commission's role is to define sector eligibility criteria and provide the EIB with the capital contribution required to enable the bank to credit enhance project bonds. The EIB's role is to select and appraise projects according to its standards, to provide the product for the selected project and to carry out the monitoring.

This new instrument used for the first time the concept of the Portfolio First Loss Piece[5] approach under which the EUR 230 million EU contribution to the Project Bond Instrument serves as a "first-loss cushion". This means that the EU budget absorbs the first potential losses that occur on portfolio operations up to a pre-agreed level, while losses above this level are to be absorbed by the EIB contribution. Given that first losses are more likely to occur than losses above a specified level, the EU budget contribution allows the EIB to provide higher volumes of support to infrastructure projects worth over EUR 4 billion across the three sectors (i.e. TEN-T, TEN-E, ICT) and thus improves the leverage effect of EU budgetary funds (i.e. small amounts required from the EU budget compared to the large size of portfolio supported). In this sense, the risk sharing arrangements between the Commission and the EIB made a real difference in terms of shifting EIB priorities towards financing of projects in the TEN-transport, TEN-energy and ICT sectors.

When a project is considered eligible, the EIB provides a financing product (i.e. ' project bond credit enhancement') to project companies, which issue project bonds to finance at least a portion of the capital costs of a project. The credit enhancement is provided with the aim to enhance 20% of the senior debt (i.e. the project bonds issued by the project companies), under the form of either (i) a subordinated loan or a (ii) a letter of credit, which can be drawn if the cash flows generated by the project are insufficient to ensure senior debt service, or in order to cover construction cost overruns. The credit enhanced project bonds have thus an improved risk profile and credit quality, which facilitates their placement with long term institutional investors. This gives senior bond investors the benefit of

[4] The target rating uplift for which the credit enhancement was designed was A- or above.

[5] Under the PFLP risk sharing between the Commission and the EIB, the first loss piece is set at 95% for EC and 5% for the EIB for a portfolio of projects, up to a certain level of losses. If potential losses were to exceed the EC contribution, the EIB contribution would be used to cover such losses.

reducing probability of default in the construction and operational phases. This in turn widens the financing sources of infrastructure projects in terms of margin and tenor, and helps reduce the costs of financing.

The product is available until the scheduled final repayment date of the bonds, or earlier if preferred by sponsors and bond investors.

In the Pilot Phase the initiative aimed to target between 5-10 projects and to achieve a multiplier effect of around 15-20 in terms of EU budget compared to the investment amount.

3. Evaluation Questions

In line with the Better Regulation Guidelines and the relevant Terms of Reference, this evaluation was carried out based on evaluation criteria, which include: effectiveness in achieving the objectives of the initiative, efficiency of Union spending, relevance, EU added value and additionality.

4. Method

The evaluation was based on a combination of stakeholder interviews, desk research and an analysis of a number of recent infrastructure transactions. The methodology employed was reliable by using multiple data sources and directly tying results to the projects being evaluated.

The evaluation made an individual assessment of the projects which have benefited from the Project Bond Credit Enhancement support, looking in particular into the following: the terms and conditions, its effect on the financial terms of the bonds (volume, terms and costs of bond issuance, underwriting and distribution process), the types of investors, the procurement process, as well as controlling creditor and procurement aspects. It also made a comparison with alternative means of project finance (including bank loans) in terms of price and non-price characteristics, and assessed whether the initiative created or corrected distortive effects on the market while recognising the objective of the initiative to help create a European project bond market. To this end, the evaluation made an assessment of the Project Bond Credit Enhancement product versus the financing provided to a number of EU infrastructure projects signed with alternative solutions recently.

Twenty-six interviews following a structured Interview Guide and covering multiple projects were conducted with a comprehensive range of balanced and relevant stakeholders selected in agreement with the Commission and in consultation with the EIB. The evaluation questions were tailored to address specific types of respondents. The breakdown of the stakeholders interviewed is as follows:

Category	No of stakeholders
Bond coordinator / Structuring bank	4
Bond purchaser	1
Contractor	1
EIB	2
Equity investor	6
European Commission	5
Initial bond issuer	1
Legal advisor	2
NGO	1
Procuring authority	2
Rating agency	1
Total	**26**

Source: Ernst & Young Analysis

4.1 Limitations of the method used

The evaluation kicked-off in June 2015 and was performed over a relatively short period of time, while the fieldwork phase, including the market survey, was carried out during the months of July and August 2015. As a result, the number of stakeholders interviewed was slightly lower than initially expected.

The desk research conducted was based mainly on publicly available information and opinions of the interviewed stakeholders. The information received faces limitations due to the confidentiality of the information on the assessed projects. Hence, individual responses of stakeholders to the evaluation questions could not be disclosed and the evaluation report does not give information as to the detailed breakdown of answers per type of respondent.

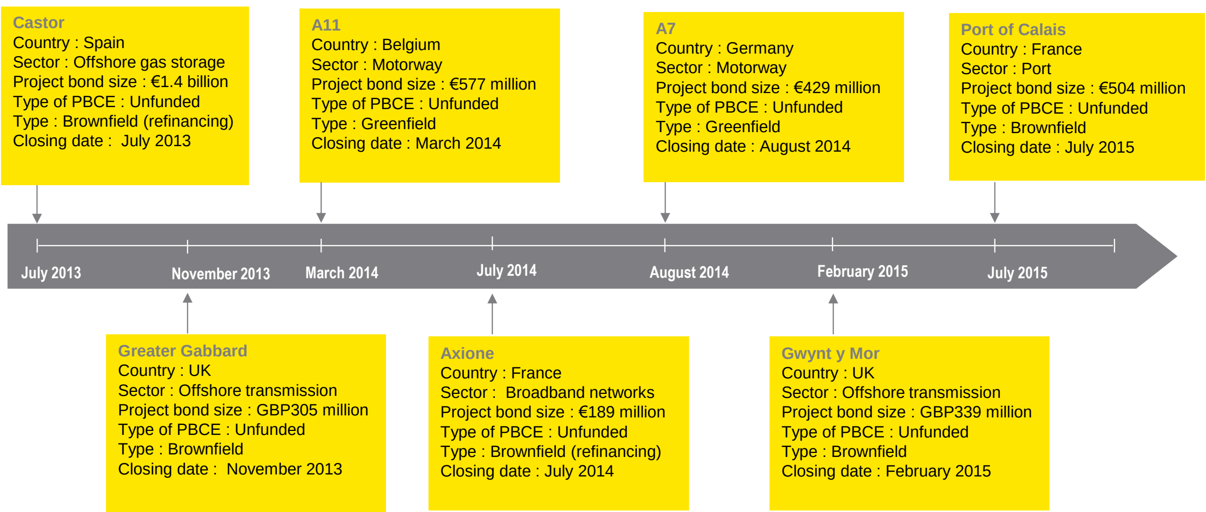
That being said, the data captured during the exercise is to a sufficient standard to meaningfully inform the evaluation process and support conclusions.

5. Review of Project Bond Credit Enhancement supported projects signed and expected to be signed as at 31 July 2015

The Project Bond Credit Enhancement solution was tested on a number of projects and applied on 7 beneficiary transactions. The evaluation also assessed a number of projects that did not use this product and found that some of these projects chose other financing solutions because of the availability of alternative competitive financing which made the testing of credit enhancement unnecessary. In other cases the credit enhancement was not selected because it was less competitive in the tender (e.g. in terms of overall costs or complexity of processes involved, etc.), or not needed by bond investors in case of a refinancing.

As of 31 July 2015, 7 transactions have been supported with a total Project Bond Credit Enhancement amount of EUR 612 million, which enabled the issuance of over EUR 3.7 billion in bonds[6]. The EUR 230 million allocated from the EU budget has been deployed in full.

The timeline below summarizes the projects closed as of 31 July 2015:



The table below shows the detailed list of projects closed and expected to be closed as of 31 July 2015. By sectors, most of the signed project bond credit enhanced projects were transport projects in the road (2) and port (1) sectors, and energy projects (3), followed by broadband (1). Out of the closed transactions, 5 transactions were signed with EU budgetary support. In addition to the 5 EU budget supported transactions, 2 transactions, i.e. the N25 New Ross Bypass and the Passante di Mestre, are expected to be signed with EU budgetary support in 2016 for a total project cost amount of EUR 1,300 million.

[6] One further transaction, i.e. the sale of the West of Duddon Sands OFTO project, also reached financial close in August 2015. This was a transaction without EU budget support. The size of the credit enhancement provided was of GBP 38 million which supported bond issuance of GBP 254.8 million; however this project was not included in the scope of this evaluation.

Overview of all Project Bond Credit Enhancement operations signed / expected to be signed as of 31.07.2015

million EUR

	Status	Date of closing	Policy	Private bond investment	EIB bond invest-ment	Bond size	Other contri-butions[a]	Project costs	EU contri-bution	EIB contri-bution	PBCE size	EU multiplier effect[7]
A11	Signed	Mar 2014	TEN-T	433	145	578	80	658	n.m.	n.m.	115	n.m.
A7	Signed	Aug 2014	TEN-T	358	71	429	343	773	n.m.	n.m.	85	n.m.
Port of Calais	Signed	July 2015	TEN-T	504	-	504	359	863	n.m.	n.m.	50	n.m.
TEN-T, achieved				1,295	216	1,511	782	2,293	200	50	250	n.m.
TEN-E, i.e. Greater Gabbard	Signed	Nov 2013	TEN-E	365	-	365	55	420	10	45	55	n.m.
ICT, i.e. Axione	Signed	July 2014	ICT	189	-	189	68	257	20	18	38	n.m.
PBCE signed using EU support				**1,849**	**216**	**2,065**	**905**	**2,970**	**230**	**113**	**343**	**12.9**
N25 New Ross Bypass	Expected	n.a.	TEN-T	n.a.	n.a.	n.a.	n.a.	250	n.m.	30	30	n.m.
Passante di Mestre	Expected	n.a.	TEN-T	n.a.	n.a.	n.a.	n.a.	1,050	n.m.	170	170	n.m.
Expected PBCE using EU support				**n.a.**	**n.a.**	**n.a.**	**n.a.**	**1,300**	**n.m.**	**200**	**200**	**n.m.**
(1) All PBCE using EU support				**n.a.**	**n.a.**	**n.a.**	**n.a.**	**4,270**	**230**	**313**	**543**	**18.6**
Castor Gas Storage	Signed	Jun 2013	TEN-E	1,100	300	1,400	363	1,763	n.m.	200	200	n.m.
Gwynt y Mor	Signed	Feb 2015	TEN-E	458	-	458	61	519	n.m.	69	69	n.m.
West of Duddon Sands	Expected	n.a.	TEN-E	347	-	347	62	409	n.m.	52	52	n.m.
(2) All PBCE at EIB own risk				**1,905**	**300**	**2,205**	**486**	**2,691**	**n.m.**	**321**	**321**	**n.m.**
(1)+(2) Overall PBCE transactions				**n.a.**	**n.a.**	**n.a.**	**n.a.**	**6,961**	**230**	**634**	**864**	**30.3**

Notes (a) The other contributions include equity, grants and other funding necessary to cover the whole project costs ; *(b) n.m.= not meaningful; n.a.= not available*

Source: Ernst&Young evaluation report, based on EIB Operational report 2015

Therefore, the total project costs of projects supported from EU budget (including the costs of expected projects) amount to EUR 4,270 million. The resulting multiplier effect (computed as the ratio between the total projects costs divided by the aggregate amount of the EU contribution) is 18.6.

[7] The leverage or multiplier effect refers to the effect whereby the EU budget contribution to the credit enhanced transactions mobilises an overall investment exceeding the size of the budget contribution. The leverage is computed as the aggregate of the amounts raised to finance the credit enhanced projects (including inter alia equity, quasi-equity, subordinated debt, mezzanine debt and senior debt, referred to as "project costs") divided by the aggregate amount of the EU contribution provided.

6. Answers to the evaluation questions

A. Effectiveness *(extent to which the Project Bond Initiative pilot phase has achieved its objectives)*

- The Pilot was implemented under various circumstances to demonstrate the feasibility and replicability of the instrument. The evaluation makes clear that all the projects having reached financial close with Project Bond Credit Enhancement support met the eligibility criteria set under the Cooperation Agreement between the Commission and the EIB. Specifically, the pilot phase also supported two priority projects: one project (i.e. Greater Gabbard) considered as a TEN-E priority project under the former regime, and one project (i.e. Port of Calais) considered as a TEN-T core network project under the new TEN-T Guidelines. Indeed, after the launch of the instrument, the EU revised the concept of "priority projects" and also the list of priority and core network projects for TEN-E and TEN-T respectively[8]. With regard to the ICT and broadband networks, priority projects were not defined at the time of the launch of the initiative. The completion of priority and core projects is challenging as these projects are complex by nature.

- Furthermore, the Pilot Phase was useful in facilitating the development of the project bond market. The Project Bond Initiative pioneered the use of bond financing in different sectors, geographical areas and financing structures, and was instrumental in facilitating the development of first time capital market financing of projects, in particular of greenfield projects in the transport and energy sectors. To this extent, the initiative has made a very important contribution in raising awareness and in encouraging institutional investors to invest in infrastructure assets and reassess their business models By 31 July 2015, 7 projects were able to close with credit enhancement support under the initiative. The evaluation finds that the Project Bond Credit Enhancement was crucial to obtain debt financing for Castor project, which would not have been able to close given the conditions on the Spanish market at the time. Projects such as Axione, probably the A11 and to a lesser extent Greater Gabbard, required Project Bond Credit Enhancement to obtain capital market financing, but could have been financed with bank debt although at less favourable terms. For the other projects, bank financing was available and the credit enhancement solution was not critical to some of the bond investors, however it was selected by the Sponsor/Procurement Authority as the most competitive solution. The Port of Calais project is an exception because it would have been able to attract capital market debt without the enhancement but was not able to attract bank financing.

B. Efficiency *(extent to which the EU contribution allocated to the Project Bond Initiative pilot phase was commensurate with the outputs achieved)*

- The number of projects which received Project Bond Credit Enhancement support is in line with the initial target set by the pilot phase, i.e. 5 to 10 projects. As of 31 July 2015, seven projects were supported, one closed in August 2015, after the cut-off date and two additional Project Bond Credit Enhancement transactions are expected to close shortly in Q1 2016 bringing the total to 10 projects by the deadline of the pilot phase.

- The leverage achieved on the Project Bond Credit Enhancement transactions closed so far with the available EU contribution is 12.9, while the expected leverage of all Project Bond Credit Enhancement transactions to be closed with the existing EU budget support is 18.6 (EUR 4,270m in capital cost / EUR 230 m of EU budget contribution) which is fully in line with expectations. The overall expected leverage, which also includes projects signed at EIB own risk, is 30.3 (EUR 6,961 m in capital cost /EUR230 m of EU budget contribution) and well above expectations.

[8] The notion of priority projects, as defined by Regulation (EC) No. 680/2007 laying down general rules for the granting of Community financial aid in the field of European transport and energy networks, has been replaced by 'core network' projects in the TEN-T sector.

- The size of the Project Bond Credit Enhancement was sufficient to meet the needs of the projects supported with EU budget contribution. However, the EU contribution was not sufficient to support all the projects in the Pilot Phase, as two TEN-E projects (i.e. Castor and Gwynt y Mor) have been funded at EIB's own risk given the budget allocations per sector.

- Furthermore, the EU contribution size was sufficient to facilitate development of capital markets as an additional source of finance for TEN-T and TEN-E infrastructure projects, while for the ICT and broadband sector, the available contribution seemed to have been less efficient, as no additional project closed with debt capital market financing in the ICT/broadband sectors post the signature of Axione Infrastructure S.A.S's project which used the available budget. This may be the result of the fact that (i) corporate financing has traditionally been the preferred route for financing ICT/broadband projects and (ii) the small size of individual projects in this sector requires pooling or bundling of projects to create sufficient deal size for bond investors.

- The product proved to be cost effective in terms of overall project costs and provided distinctive advantages in terms of design features (i.e. ticket size, possibility of deferred drawdown, a flexible maturity, solid security package). The evidence from the evaluation suggests that the Project Bond Credit Enhancement solution was significantly more competitive on 1 project (A7) and marginally competitive on 2 projects (Axione and Port of Calais), while for 1 road project the Project Bond Credit Enhancement option was preferred over the bank solution due to specific design features, which translated into improved competitiveness (A11). In a few instances, the Project Bond Credit Enhancement was the only financing option considered. The structuring of the product did however result in additional costs and extra time needed for financial structuring in a few cases. The evaluation could not assess to what extent the Project Bond Initiative competitiveness is due to the letter of credit pricing and to what extent this is a result of reduced margins on the bonds post credit enhancement.

- In terms of competitiveness of the initiative versus the projects financed with alternative solutions other than Project Bond Credit Enhancement, the evaluation mainly finds that the Project Bond Credit Enhancement was not tested as a preferred option primarily because it had not been considered more competitive than other financing in the tender process (e.g. in terms of overall costs or complexity of processes involved, etc.) (3 projects) or not desired by bond investors in case of a refinancing (2 projects) or because it had been non-eligible (1 project).

- With regard to competitiveness in terms of the qualitative features of the product, the evaluation finds that, compared with other financing solutions, the items most valued by the interviewed stakeholders are the tailored credit enhancement, transparency of investor base, extended capacity in terms of ticket size. Respondents also appreciate the flexible maturity of the product and the discipline brought by the EIB in the process, while others value the security package required for a bond financing with Project Bond Credit Enhancement support. Among the less favoured characteristics features the high complexity of the product.

- When compared to other financial instruments at a similar level of maturity, the instrument proves a more favourable take-up rate (vs. the Loan Guarantee Instrument for Trans-European Transport Network Projects), as a result of a broader applicability and better marketing efforts by the EC-EIB.

C. Relevance *(extent to which the Project Bond Initiative pilot phase proved relevant to address the market needs for the financing of priority projects in transport, energy and ICT, and contributed to the development of debt capital market financing of infrastructure projects)*

- The Project Bond Initiative responded to the market needs at the time of its inception and was relevant in terms of achievement of policy objectives of developing capital market financing for infrastructure projects and helping financing certain EU added value projects. Nevertheless, the market witnessed significant changes since the launch of the Pilot Phase, i.e. the current surplus of liquidity has led to some fierce competition amongst senior debt providers which in turn has resulted in lower margins, longer tenors and less restrictive terms and covenants for sponsors than at the launch of the initiative in 2012. The relevance of the Project Bond Credit

Enhancement product has thus been challenged by the current growing appetite of investors for projects with higher risk and in less mature markets.

- The risk-sharing arrangement between the Commission and the EIB, as well as the EU contribution, has been crucial to develop and implement the initiative, to allow EIB to target riskier, larger transactions and to widen the investor base. The outputs achieved were in line with the targets and objectives.
- The EU involvement in the initiative is primarily acknowledged as the kick-starter that contributed to the credibility and development of the Project Bond Initiative, while EU intervention in budgetary terms appears less visible to the market. The EIB role is seen as more important in the procurement phase of projects, but also post procurement during the life of the credit enhancement instrument such as in case the project is in a distressed situation.
- At an operational level in terms of implementation of the initiative, a number of clarifications of product features under the Project Bond Initiative Cooperation Agreement between the Commission and the EIB (such as coverage of hedging facilities) were needed, which led to additional processes and delays in the approval process of selected operations. While this may be considered unavoidable in the context of launching a new instrument in the market, the evaluation recommends smooth planning and delivery of the Project Bond Credit Enhancement solution in the future based on the experience already gained.
- With regard to the design of the Project Bond Credit Enhancement product, the evaluation finds that the product is well structured (particularly for Greenfield projects) and that the alternatives available on the markets serve less the market needs. Compared to other risk-sharing facilities, the Project Bond Credit Enhancement product features mainly valued are the credit enhancement and the ticket size (financing commitment). The following benefits of the instrument to private investors are listed: compared to insurance products provided by the private sector, the Project Bond Credit Enhancement offers a higher degree of certainty and deliverability, given that it is offered under the EU - EIB flagship, a better yield protection as a result of a 20% guarantee (versus a complete cover), an improved visibility of the investors involved which makes it easier to assess their credit quality, a larger capacity in terms of project size and risk coverage which enables both sponsors and procuring authorities to obtain more favourable conditions in terms of pricing.

D. EU added value and additionality

- The EU contribution in the risk sharing mechanism is seen as essential to develop the initiative and allowed EIB to target riskier and larger transactions and to widen the investor base.
- The Project Bond Initiative proved to be additional to the risk sharing facilities offered by the private sector (e.g. PEBBLE and other private sector insurance schemes) and to other forms of credit enhancement or insurance (i.e. market funded subordinated debt and EIB construction loans) as it offers distinctive advantages.
- If compared to other financial instruments launched by EU or Member States (i.e. the Loan Guarantee Instrument for Trans-European Transport Network Projects, the UK Guarantee Scheme and the Marguerite fund), the Project Bond Initiative is the sole EU financial instrument that addresses simultaneously (i) the enhancement of project bonds for (ii) greenfield infrastructure projects; (iii) throughout the EU and (iv) in the TEN-T, TEN-E and ICT/ broadband sectors. However, the evaluation finds overlaps between the Project Bond Initiative and the Loan Guarantee Instrument for Trans-European Transport Network Projects entailing traffic risk and on projects where bank and bond financing are both viable options.
- The upstream work of preparation of projects of the Pilot Phase with Member State administrations and project promoters and the negotiations leading to the establishment of the pipeline and to the closed transactions have brought significant added value in terms of the experience gained by all actors involved. The Project Bond Initiative, after three years of

operation, is considered as a now tried and tested alternative option for project finance, with features that are well known by stakeholders in capital markets.

7. Conclusions

Project Bond Credit Enhancement should continue to be available post Pilot Phase

The evaluation concludes that going forward, the Project Bond Credit Enhancement product is clearly needed by the market. While market conditions have evolved since the launch of the initiative to an extent that triggered a change in the type of credit enhancement needed, the evaluation points out that the additionality of the instrument needs to be assessed from a long-term perspective, as it is intrinsically linked to the economic environment (i.e. stage of development of capital markets, state of public finances, investment behaviour of the private sector, the regulatory environment, etc.). Based on these considerations, the evaluation argues that in the future the product is needed as it will be able to counterbalance the market volatility or uncertainty by providing long term and competitive solutions to finance crucial infrastructure projects in Europe. An extra argument in favour of the continuity of the product is that a temporary interruption in the use of the Project Bond Credit Enhancement might result in the loss of the knowledge gained and might put a stop to the market developments achieved so far with infrastructure still a new asset class for many investors. Further on, the evaluation stresses that the potential of the Project Bond Credit Enhancement product to add to the existing market alternatives may be further increased, given the complementarities with other EU initiatives (i.e. the European Fund for Strategic Investments) and financial instruments (i.e. Connecting Europe Facility). This is also relevant in the context of the transition towards a low carbon energy system. In order for the product to continue to be relevant/efficient/effective and additional to the market, the evaluation recommends a number of improvements, which are detailed in the next section.

8. Recommendations

Recommendations on the effectiveness of Project Bond Credit Enhancement

Focus on projects with highest EU added value

The evaluation concludes that, given that the market for project bonds has been established, more focus should be placed on achieving *EU highest added value* projects under the Connecting Europe Facility. Appropriate solutions for these complex projects should be developed, which should for instance tackle cross-border constraints that might impede the completion of these projects. Rail projects make up an important part of the TEN-T projects and this sector has not yet been tested for the use of Project Bond Credit Enhancement given the relative lack of privately financed projects. This sector traditionally involves a high amount of public financing including grants to make projects feasible. In cases where financial instruments can attract private funding based on revenue risk, it is likely that the projects will require very long tenors. This may advocate for debt capital markets supported by credit enhancement. This use of financial instruments combined with public resources also applies to privately financed road transport infrastructure in countries where it is less likely that they will be able to develop economic viable projects.

Further develop the debt capital market financing for infrastructure projects

The evaluation suggests that the market for private placements of greenfield transportation projects has developed sufficiently to address the current pipeline for well-structured projects. The preferred route of ‘private placements’ with selected investors (who are familiar with greenfield risk and structure disbursements to project needs) does introduce a potential new concentration risk. While these institutional investors only have a small portion of their investments allocated to infrastructure assets compared to monoline insurers during the crisis, the greenfield market may become too dependent on a few active and experienced private placement investors. When the pipeline increases under Connecting Europe Facility and European Fund for Strategic Investments and perhaps liquidity becomes scarcer in the future and / or some of these investors reduce their investment allocation or face serious financial adversity, there may raise a shortage of liquidity, suboptimal pricing or even funding risk from capital markets investors for projects that are still under construction. This needs, however, to be seen in the context that capital markets are an alternative to other sources of financing and the allocations to infrastructure by these investors should increase over time as experience develops.

The evaluation recommends therefore that the Commission and EIB continue to facilitate further development of debt capital markets. Actions should be targeted to:

- Reducing the potential concentration risk by attracting more institutional investors amongst others
- Explaining procuring authorities the potential pricing benefits of increasing the pool of investors through the use of public listings as well as illustrating the pricing security and lower complexity of private placements

Recommendations on the efficiency of the Project Bond Credit Enhancement

Maintain a sufficient product utilization rate

Given its complexity, the product should be used on a recurring basis to prevent loss of knowledge and people losing the feeling with the product.

The evaluation recommends further knowledge build-up on Project Bond Credit Enhancement throughout EIB centrally and regionally so that the product is offered as widely as possible where appropriate. Moreover, the transaction delivery within the EIB by a specialist team should be maintained in order to leverage the expertise and market leadership gained.

Develop tailored solutions for TEN-E and ICT

In the ICT/ broadband and TEN-E sectors, the conditions to develop project bond financing are not always optimal. This would call for bundling of transactions to create sufficient deal size for bond investors. Bundling projects could reduce overall risk by diversification. Instead of bundling projects, a pool of funds (such as the European Long-term Investment Funds or ELTIF) could be credit enhanced by EIB based on the Project Bond Credit Enhancement mechanism.

In the TSO energy sector (part of TEN-E), regulatory constraints might favour a corporate financing scheme in certain jurisdictions. It should be investigated if the principles of credit enhancement can be applied, for example, to enhance loans or bonds for TSOs in the energy sector at corporate level. This would result in insurance or guarantee against the risk that bonds will not be repaid or repaid in full or that they will be repaid late. Similar to Project Bond Credit Enhancement, the insurance should have an uninsured portion.

Furthermore, where projects involve too many risks for equity investors, a first loss mechanism analogous to the Project Bond Credit Enhancement could be considered for equity investors.

Recommendations on the relevance of Project Bond Initiative

Better address current market needs

Credit enhancement seems to be most needed on certain projects i.e. projects located in Southern and Eastern Europe and projects involving substantial risk. Investors may also have bigger concerns about sovereign risks, such as a possible exit from the Euro zone or expropriation, and higher expected losses. For these risks, an insurance product (a full wrap) may be more suitable than a mezzanine product. There is currently no EU product that provides this guarantee, nor is it possible to provide it under Connecting Europe Facility where the Credit Enhancement is already maximised to 30%. Further investigation on the desirability of full wrapped bonds for very risky projects is recommended to address this potential market failure. In order to optimise the use of EU budgets there should be flexibility in reducing the enhancement for these projects when for instance the sovereign rating increases and political risk is reduced (which is possible during the long term of a concession).

Another hurdle for investors in non-euro countries is the currency risk. It should be investigated if the risk coverage of Project Bond Credit Enhancement product could be extended to include currency risk.

Improve the Project Bond Credit Enhancement design

The rebalancing mechanism[9] has been quite controversial and decisive in the use of Project Bond Credit Enhancement during the operational phase. The impact of the rebalancing mechanism on the credit uplift should be weighed against the attractiveness of Project Bond Credit Enhancement for equity sponsors (who decide on the use of the instrument).

In addition to this, phased payment of the Letter of Credit fee would make it more attractive in Net Present Value terms and it would be more aligned with the credit risk increases during the construction period.

Recommendations on the value added and additionality of the Project Bond Credit Enhancement

Maximise EU added value

Investors generally only have small allocation windows for assets rated below BBB- (speculative grade). Following the Pilot, in the future Project Bond Credit Enhancement should target more often sub-investment grade projects such as greenfield projects for toll roads and those involving volume risk and projects with complex technologies and weaker contractors.

Furthermore, the EU added value could be increased if Project Bond Credit Enhancement is provided to renewable energy projects such as offshore wind projects and interconnections of renewable energy sources.

Beside this, to prevent future case-by-case Commission approval procedures required for amendments and improvements of the instrument (e.g. inclusion of bridge lenders, hedge providers and potentially currency risks), further extension of the risk coverage offered by the product should be considered.

The instrument can be made more ‘open source’ by making it eligible for bank debt in addition to project bonds. To accommodate bank debt refinancing, according to some stakeholders, the EIB could consider to facilitate refinancing by preventing swap breakage costs by acting as a swap counterparty and keep the swap intact in case of a refinancing.

The interviews confirm there are other more important factors than public financial support to increase the pipeline of projects and achieve Europe’s infrastructure objectives. To eliminate barriers for a stable European project pipeline actions should be targeted towards (i) fostering conducive regulations, (ii) enhance the practise and build capacity at Member States level, (iii) market the EU initiatives and (iv) streamline the EU initiatives by increasing complementarity of European Fund for Strategic Investments and Connecting Europe Facility.

Mobilise the maximum amount of private financing and maximise the additionality

Project consultations should be fostered between sponsors and procuring authorities with the private debt sector before envisaging the inclusion of Project Bond Credit Enhancement for any individual project. Eventually grants could be considered if the project is not viable on its own.

Finally, to prevent any competition between EIB bonds and loans solutions, the Bank could strengthen the measures addressing the potential internal competition between its senior loans and the Project Bond Credit Enhancement solution.

8.1 Uses of the Recommendations

A number of the recommendations made by the evaluation point to improvements which have already been reflected in the design of the products to be offered under the Connecting Europe Facility and the European Fund for Strategic Investments, both launched in July 2015.

[9] A Project Bond Credit Enhancement rebalancing mechanism is triggered upon the occurrence of an event pre-defined, and consists of a mandatory drawdown by the project company of the entire undrawn and available amounts under the Letter of Credit in order to partially prepay outstanding senior bonds.

This table contains the summary of recommendations made by the evaluation, current policy on their implementation and issues for further consideration by the Commission.

	EFFECTIVENESS
1	The initiative should increase focus on projects with the highest EU added value under Connecting Europe Facility. Appropriate solutions should be developed which could for instance tackle cross-border constraints that might impede the completion of these projects, or could target for instance projects in the rail sector (which could derive benefits from debt capital market financing solutions), or in the road sector in certain geographies.
	Implementation In the selection of potential projects for financing under the Connecting Europe Facility Debt Instrument, the entrusted entity (i.e. the EIB) focuses the instrument where possible on where it can provide more value to the project promoter and to the EU and seeks to close projects which concern new or improved cross-border connections, or projects of common interest in certain (sub) sectors as defined in the respective Legal Basis.
2	The Commission and the EIB should further develop the debt capital market financing of infrastructure projects, by taking actions to (i) attract more institutional investors in order to reduce the potential concentration risk, and (ii) extend the scope and target riskier projects.
	Implementation The Commission will consider the benefits of widening the toolbox of financing sources (including via debt capital market) that fit the needs of projects in specific sectors / geographies being provided through the Connecting Europe Facility or through the support from European Fund for Strategic Investments. Furthermore, financing solutions with a sector scope beyond what was provided under the Project Bond Initiative, such as those provided under the Connecting Europe Facility, or having a larger risk absorption capacity, such as the European Fund for Strategic Investments supported financing, are already provided by the Commission and the EIB, creating thus additional opportunities for institutional investors.
	EFFICIENCY
3	Further knowledge should be built-up on Project Bond Credit Enhancement throughout EIB centrally and regionally so that the product can be applied by the bank, where appropriate. Moreover, the transaction delivery within the EIB by a specialist team should be maintained in order to leverage expertise gained.
	Implementation Given that project bond operations are relatively more complex than standard EIB loans, the Commission will consider any further coordination which could be organized with the EIB to prioritize the benefits of the added value when offering the project bond credit enhancement product, which could be important for a larger scale deployment of this financing solution in the future.
4	Specific financing and non-financing solutions replying to market needs for the TEN-E and ICT sectors should be developed (e.g. bundling to increase the project size, additional product features tailored to the particular needs of sectors).
	Implementation New tailored financial products for the specific needs of the Connecting Europe Facility-eligible sectors are already under preparation by the EIB, while new tools for pooling together energy efficiency investments via funds or risk sharing arrangements with financial intermediaries are under development and foreseen for support through the European Fund for Strategic Investments.
5	Furthermore, where projects involve too many risks for equity investors, a first loss mechanism

	analogous to the Project Bond Credit Enhancement could be considered for equity investors.
	Implementation European Fund for Strategic Investments provides support to equity investments in the form of direct equity, contribution to funds or loans. The credit enhancement product is already provided through the Connecting Europe Facility Debt Instrument and European Fund for Strategic Investments in support of debt operations for the financing of infrastructure projects. Consideration will be given to whether a tranched equity fund could be an envisaged option with the Commission subscribing to the riskiest "first loss" tranche in specific circumscribed situations.
	RELEVANCE
6	Current market needs should be addressed in a more appropriate way and the design of the Project Bond Credit Enhancement should be made more attractive, in particular on projects located in Southern and Eastern Europe and projects involving substantial risk. It should also be investigated if the risk coverage of the product could be extended to include currency risk.
	Implementation The purpose of the Project Bond Initiative was to establish precedents for debt capital market financing of projects in the TEN-T, TEN-E and ICT sectors, and offer a long term financing alternative. The findings of the evaluation show that these objectives have been achieved. As the evaluation further points out, the market conditions prevailing at the time of the launch of the Project Bond Initiative have evolved. New financing tools (i.e. the Connecting Europe Facility financial instruments and the European Fund for Strategic Investments support) have been developed in the meantime, maximizing the scope and applicability of the Project Bond Credit Enhancement in order to adapt to the changing times. Furthermore, it should be noted that the Connecting Europe Facility Debt Instrument is foreseen to deliver operations denominated in currencies other than euro.
7	To mitigate investors' concerns related to potential sovereign risks, an insurance product (a full wrap) instead of a mezzanine product could be offered as a more suitable alternative.
	Potential for implementation The Commission position taken so far has been that structuring the product similarly to monoline guarantees (i.e. full-cover guarantees) would create a moral hazard issue, as investors and sponsors would then not face the consequences of excessively risky projects and therefore would not place a limit on their risk-taking. This would also require a substantial EIB capital increase, since direct guarantees by the EU are not feasible. Finally, in addition to being more costly than partial guarantees, fully guaranteed project debt would be too similar to EIB's own products. The current view is that, under the Connecting Europe Facility Debt Instrument, the level of coverage provided by the letter of credit was increased up to 30% of the outstanding principal amount of the Senior Debt. The 30% limit is the result of extensive modelling and of the experience gained with the Loan Guarantee for Trans-European Transport Network Projects/Project Bond Initiative. The maximum 30% credit enhancement is subordinated since this is seen as crucial to have the necessary effect on ratings. Moreover, this degree of credit enhancement is seen as optimal to ensure adequate protection of senior investors, of the entrusted entity (i.e. the EIB) and of the European Union budgetary involvement.
8	The Project Bond Credit Enhancement design could be further improved (e.g. via introduction of a less stringent rebalancing mechanism and of phased payments of the Letter of Credit Fee).
	Implementation (i) The rebalancing mechanism has been provided by the EIB as a mitigant for potential risks which can be triggered only under extreme scenarios, therefore not automatically. This mechanism has also been incorporated in the structure of products offered under the Connecting

	Europe Facility Debt Instrument to support the rebalancing of senior debt, and hence provide additional comfort to senior investors through deleveraging in extreme scenarios of project debt service shortfalls. More limited liquidity shortfalls would be met by the Project Bond Credit Enhancement product (if the unfunded variant is used) without rebalancing. Agreed acceptable levels for Rebalancing have therefore been an important part of EIB's negotiations with Sponsors. The Project Company may also be entitled to one /or more equity cures in respect of a Project Bond Credit Enhancement Rebalancing event, as a means to protect investments. (ii) The current position is that having a Letter of Credit fee payment in installments, while retaining the right to demand guarantee coverage would require that fee payments due over time are equivalent on a net present value basis to upfront payment of the Letter of Credit Fee.
	EU ADDED VALUE
9	The EU added value of the initiative should be maximized by (i) providing Project Bond Credit Enhancement to sub-investment grade projects and projects in sectors such as renewable energy, (ii) extending its risk coverage, (iii) making it eligible for bank debt and (iv) eliminating barriers for a stable and transparent project pipeline (e.g. improving the regulation framework for infrastructure, fostering early exchanges with EUROSTAT on the statistical treatment of potential Public Private Partnership projects).
	Implementation Achieving high EU added value on the projects supported through EU budget represents a high priority. With this objective in view, under European Fund for Strategic Investments and Connecting Europe Facility, the Project Bond Credit Enhancement is already focused on deployment where possible to projects in less mature markets or sectors (ports, airports, innovative transport solutions, renewable generation). Moreover, the Connecting Europe Facility Debt Instrument foresees significant improvements in the design of the credit enhancement product, such as the possibility to enhance senior debt provided by banks (i.e. not only bonds). Last but not least, at EU level, besides the measures foreseen by the Investment Plan for Europe to improve the investment environment, a number of actions are currently being implemented, such as the Capital Markets Union, the Energy Union, the Digital Single Market Union, the Single Market Strategy and the Better Regulation Package, which aim to provide greater regulatory predictability. In the infrastructure sector, there is continuous work on project identification to support the development of a credible and transparent project pipeline (European Investment Project Portal ('EIPP')) and on providing, with the help of the EIB, stepped-up technical assistance /advisory (through the European Investment Advisory Hub ('EIAH')).
	ADDITIONALITY
10	Consultations between sponsors and procuring authorities with the private debt sector before envisaging the inclusion of Project Bond Credit Enhancement for any individual project should continue to be fostered.
	Implementation It is important that the EU budget provides highly additional support to projects. As referenced in the evaluation report, the Port of Calais transaction is an example where first the funding gap was assessed before a call for grant support was made, thus ensuring the alignment of these processes. It has been assessed that procuring authorities need to engage in consultations with the private sector in order to identify the most suitable solution for supporting projects.
11	EIB should consider strengthening the measures addressing potential internal competition between its senior loans and Project Bond Credit Enhancement solution.
	Implementation A larger scale deployment of the credit enhancement solution may increase the EIB's internal competition between its senior lending and the credit enhancement product and may encourage

	the bank to continue to promote the highest value added operations as a policy priority while ensuring efficient organization set up to manage any internal competition issues.

ANNEX A – PROCEDURAL INFORMATION

The evaluation process was sufficiently thorough to provide valid answers to the evaluation questions using robust information derived from in-person interviews with relevant stakeholders and a review of key documents and programmes. The data sources used were appropriate and the findings offered are reliable, informative and conducive to the development of clear and significant lessons learnt.

The evaluation work was carried out over less than five and a half months from the date of contract signature and was organised in three distinct phases:

- Inception Phase – five weeks

  The Inception Phase included a kick-off meeting, the documentary review of key documents, project assessment and benchmarking, preparation of the field phase and data collection tools, preparing Interview Guides for stakeholder interviews, validation of the stakeholders to be contacted and delivery of the Inception Report.

  During this phase, the analysis and findings were mostly based on the following:

  - the kick-off meeting between external consultants, the Commission and EIB
  - information provided by the Commission and the EIB, including:
    - Six-monthly reports from the Commission and EIB
    - The pipeline of eligible projects for the Project Bond Credit Enhancement product
    - The generic term sheet for the Project Bond Credit Enhancement product
    - EIB Project Bond Initiative financial statements
    - Operational reports on the Project Bond Initiative from EIB to the Commission
    - The pipeline schedule for the Project Bond Initiative
  - Third party data providers, a.o.:
    - Inspiratia
    - Infrastructure Journal
    - Moody’s
    - Standard & Poor’s
    - Project Prospectus for publicly listed projects

- Fieldwork Phase – eleven weeks

  The Fieldwork Phase included the following steps: conducting interviews with omission and EIB officials and other stakeholders, performing case studies on similar projects that did not make use of Project Bond Credit Enhancement, completing the initial desk research, analysis of the data collected and formulating answers to the ad-hoc audit questions, internal quality review.

- Reporting Phase – three weeks

In the course of the evaluation, Ernst&Young delivered an Inception Report, a draft final report and a final report, including an executive summary and technical annexes.

A steering group was established consisting of officials with experience and knowledge of the activities being evaluated and policy and programme evaluation. It was charged with preparing and overseeing the evaluation. The steering group facilitated the access of the contractor to appropriate sources of data, checked the factual accuracy and focused the work as it progressed, participated in the formulation of recommendations with the evaluator and was responsible for the quality assessment of the final report.

The steering group met in the presence of the contractor at the launch meeting of the evaluation and also, again, after the receipt of the inception report and the draft final and provided feedback to the evaluator on their contents. The contractor took into account the steering group's observations and comments and informed it regularly on the progress of the work. A workshop was organised to mark the end of the evaluation process and to allow the consultants to present the findings of the final report, which Steering Group members, as well as other Commission services attended.

The evaluation steering group was coordinated and chaired by ECFIN L3.

ANNEX B – STAKEHOLDERS' INTERVIEWS

Twenty-six interviews have been conducted as part of the project with several interviews covering multiple projects. The selection of the stakeholders interviewed was done in agreement with the Commission and in consultation with the EIB.

The interviews conducted with each interviewee typically lasted two hours, and followed a structured Interview Guide, agreed with the Evaluation Steering Group members.

The table below gives an overview of the groups of stakeholders interviewed:

Breakdown of interviewed stakeholders per type

	Number
Bond coordinator / Structuring bank	4
Bond purchaser	1
Contractor	1
EIB	2
Equity investor	6
European Commission	5
Initial bond issuer	1
Legal advisor	2
NGO	1
Procuring authority	2
Rating agency	1
Total	**26**

Based on the tender specifications, for each evaluation question, a set of judgement criteria was developed and discussed with the various stakeholders, as detailed in the table below.

Effectiveness

Question	Judgment criteria
Did the Project Bond Initiative help achieve priority projects on the TEN-T, TEN-E and ICT and broadband networks?	Proportion of beneficiary projects of the Project Bond Credit Enhancement that are priority projects
	Feedback on the role and support that the Project Bond Credit Enhancement gave to the beneficiary projects
To what extent has the Project Bond Initiative helped mobilise additional volume of financing for infrastructure projects in the TEN-T, TEN-E and ICT and broadband sectors?	Extent to which senior debt investors would have supported the beneficiary projects without the Project Bond Credit Enhancement
	Extent to which sponsors have benefited indirectly from the Project Bond Credit Enhancement
To what extent has the Project Bond Initiative encouraged debt capital market financing of infrastructure	Evolution of capital market financing of infrastructure projects since the establishment of the Project Bond Initiative pilot phase
	Appreciation of institutional investors toward project bonds since the establishment of the Project Bond Initiative pilot phase

Efficiency

Question	Judgment criteria
How does the target leverage of the project bond instrument compare with the achieved (and expected) leverage on the signed (and expected to be signed) Project Bond Credit Enhancement transactions?	Comparison between the targeted multiplier for the Project Bond Credit Enhancement when the instrument was established and the achieved multiplier for the beneficiary projects of the Project Bond Credit Enhancement
	Comparison of leverage on projects with EU budget support and projects at EIB's own risk
Has the size of the EU contribution allocated to the initiative been sufficient/ appropriate to achieve the related policy objectives?	Extent to which the level of the EU contribution was sufficient to meet the needs of the targeted projects (i.e. was the EU contribution appropriate for the size/volume of Project Bond Initiative projects)
	Feedback from stakeholders on the appropriateness of the EU contribution allocated to the initiative
To what extent are the Project Bond credit enhancement and the resulting bonds competitive with other available sources of financing?	Comparison matrix between Project Bond Initiative and other bank and non-bank financing solutions
	Satisfaction of financing community and procuring authorities with Project Bond Credit Enhancement
	Pricing differential between the Project Bond Credit Enhancement solution and other financing options for the projects (if applicable
How does the Project Bond Initiative compare to the other risk-sharing facilities in terms of results at a similar stage of maturity of the instrument?	Take-up rates of Project Bond Initiative versus other risk sharing facilities (e.g.) LGTT in the first three years of operations
	Satisfaction of project stakeholders of Project Bond Initiative compared to other risk sharing facilities (e.g. LGTT).
	Comparison of the Project Bond Initiative versus other risk sharing facilities in terms of achieving policy objectives in the first three years of operations

Relevance

Question	Judgment criteria
To what extent has this funding been better able to match the requirements of long-term infrastructure projects, for example in terms of product design and maturity of projects?	Comparison matrix between Project Bond Initiative instrument and other sources of funding available to infrastructure projects
	Instrument mapping – benchmarking of the Project Bond Credit Enhancement versus other public and private financial instruments and funding sources for infrastructure projects
	Feedback from bond investors on the product design

Question	Judgment criteria
Has the EU involvement in both reputational and budgetary terms increased the credibility of the Project Bond Initiative vis-à-vis investors	Knowledge of investors on the role of the EU in the Project Bond Initiative
	Feedback on sufficiency of financial support and expectations
Has the funding been a relevant response to the achievement of related policy objectives?	Extent to which the Project Bond Initiative has contributed to the achievement of the initial policy objectives
	Extent to which the Project Bond Initiative pilot phase reached its own objectives set out at its establishment
	Comparison with other policy options aimed at increasing investment in EU priority projects
Would other forms of credit enhancement or insurance better correspond to market needs?	Satisfaction of financing community with Project Bond Initiative
	Usage of other financing instruments other than Project Bond Initiative
	Feedback on the modalities of Project Bond Initiative
How, if necessary, could the Project Bond Credit Enhancement solution be made more attractive?	Comparison matrix between Project Bond Initiative and other bank and non-bank financing solutions
	Satisfaction of financing community with Project Bond Initiative
	Feedback on the modalities of Project Bond Initiative

EU Added Value and Additionality

Question	Judgment criteria
What is the EU added value of the Project Bond Initiative to TEN-T, TEN-E and ICT and broadband projects?	Number of TEN-T, TEN-E and Digital Agenda projects which had other financing alternatives other than Project Bond Credit Enhancement
	Extent to which the presence of the Project Bond Credit Enhancement led to improved conditions for TEN-T, TEN-E and Digital Agenda projects
	Feedback from stakeholders regarding how well the Project Bond Credit Enhancement addresses a market gap/ failure
To what extent and by which means can the EU added value of the instrument be maximised?	Satisfaction of financing community with Project Bond Initiative
To what extent has the EU contribution to the Project Bond Initiative been additional over the market alternatives available for long-term debt financing?	Number of projects for which other capital market solutions, besides Project Bond Initiative, were considered
	Pricing differential between the Project Bond Credit Enhancement solution and the available alternative financing solutions
How can the EU budget best be used to mobilise the maximum amount of private funding?	Reasons provided for failure to close financing of large European infrastructure projects, and in particular, trans-European projects
	Ranking of attractiveness of various available financial instruments by institutional investors
	Survey of most important investment criteria for

Question	Judgment criteria
	institutional and other infrastructure investors
To what extent is the Project Bond Initiative coherent with other relevant EU or Member States financial instruments? Are there any overlaps or contradictions, for example in terms of risk sharing, design etc. across these instruments?	Mapping of EU and national financial instruments

ANNEX C – TECHNICAL METHOD USED

The evaluation methodology was based on a combination of stakeholder interviews, desktop research and analysis of a number of recent infrastructure transactions. The methodology was designed with a view to ensuring data reliability and the soundness of analyses.

In particular, the evaluation listed projects which have benefited from the Pilot Phase of the Project Bond Initiative, the terms of the credit enhancement for each project and the impact on the project's financial viability, the financial terms of the bonds issued (i.e. the volume, terms and costs of bond issuance, underwriting and distribution process) and the types of investors, if this is already known, the controlling creditor and procurement aspects as well as the effect of these projects on the wider bond markets in Europe. It also provided an assessment of the risks involved in the projects, as well as a comparison of the Project Bond Credit Enhancement product with alternative means of project finance, including bank loans.

The evaluation methodology was based on desk research, which included analysis of the following:

- assessment of market uptake in the form of a list of beneficiary projects selected by the EIB Board of Directors before December 2014,
- assessment of implementation of Pilot Phase of the Project Bond Initiative so far
    i. for all projects having reached financial close with Project Bond Credit Enhancement supported bonds issued : the terms and conditions of the credit enhancement, the financial terms of the bonds (i.e. the volume, terms and costs of bond issuance, underwriting and distribution process), the types of investors, if this is already known, the controlling creditor and procurement aspects, the impact on the project's financial viability, an assessment of the risks involved, an analysis of the various features of the Project Bond Credit Enhancement product design, whether the project led to the creation or correction of distortive effects, if any, as well as a comparison (including a cost comparison) with the competing financing solutions,
    ii. in case of the projects having reached financial close without a Project Bond Credit Enhancement supported bond issued: the terms of the winning bid if available and a comparison with the Project Bond Credit Enhancement solution (both bank and non-bank)
    iii. in case of the project being at preferred bidder stage: a mention of the number of cases and the likely time to financial close
    iv. in case of the bidding process being on-going: a mention of the number of projects for which this is the case

Apart from the above list of projects, for the purpose of comparison, the evaluation also made an analysis of other projects that have permitted alternative financing solutions.

Based on the information obtained from the above research, the evaluation carried out an assessment on the following:

a. the added value and additionality of the Project Bond Credit Enhancement product compared to other Union or Member State instruments and other existing forms of long term debt financing
b. the impact of the Pilot Phase of the Project Bond Initiative on the EU project bond market,
c. the achieved multiplier effect in relation to the EU budget,
d. a comparative analysis of the competitiveness of the project bond solution, covering, inter alia, a comparison of the non-price characteristics of the Project Bond Initiative, the costs of Project Bond Initiative product versus the cost of alternative means of project finance, including bank lending, and its advantages and disadvantages in terms of integral lifetime cost to the project .

The desk research conducted was based mainly on publicly available information and opinions of the interviewed stakeholders, hence the information received faced limitations due to the confidentiality of the information of the assessed projects. Furthermore, for confidentiality reasons the exact number of interviewed stakeholders who advocated a certain view could not be disclosed.

That being said, the data captured during the exercise is to a sufficient standard to meaningfully inform the evaluation process and support conclusions.