COMMITTEE OF PUBLIC ACCOUNTS

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ADVANCE BRIEFING FOR COMMITTEE MEMBERS

From

Transport Infrastructure Ireland

Bonneagar Iompair Éireann
Transport Infrastructure Ireland

Contents

Public Private Partnerships (PPPs)

Policy Background

A PPP is a partnership between the public and the private sector for the purpose of delivering a project. There is a sharing of project risks between the public and private sectors. A PPP project benefits from an accelerated implementation though the availability of private sector funding. This is particularly the case in situations of limited public finances, where access to private sources of funding allows the progression of projects that would not otherwise be possible.

TII's (previously, the National Roads Authority) procurement of projects through a PPP mechanism originates from June, 1999, when the then Minister for Finance announced three pilot PPP roads projects for implementation by the Authority. Those projects were:

- the N25 Waterford By-Pass,
- the Limerick Southern Ring Road Phase 2, and
- the construction of a second bridge at West-Link on the M50 in Dublin.

In December 1999 the Government published the National Development Plan 2000-2006 which identified PPPs as an essential component in contributing to the financing and delivery of a significant programme of national road improvement schemes. Subsequent National Plans including the Infrastructure and Capital Investment 2012-16, the Stimulus Plan 2012 and Building on Recovery: Infrastructure and Capital Investment 2016-2021 all identified road schemes to be progressed using PPP.

The first phase (2003 – 2007) of TII PPP Contracts were awarded by TII were PPP Toll Concessions with one exception i.e., the M50 PPP Upgrade which had an existing tolling arrangement at West-Link and which was procured as a non-toll PPP, termed as a DBFOM PPP (Design, Build, Operate, Maintain & Finance). The last four road PPP contracts which were awarded in the time period 2013 to 2016 have also been procured as DBFOMs.

TII PPP Contracts

TII has entered into thirteen road PPP Contracts and also a PPP contract for the provision of motorway service areas.

Road PPPs

TII has entered into :

- Eight PPP Toll Concession PPP Contracts (see Table 1) all of which are in the operations phase, and
- Five Design Build Finance Operate Maintain (DBFOM) PPP Contracts (see Table 2) three of which are operational and two of which are in the construction phase.

PPP operated roads currently comprise some 33 per cent of the c.1270km of motorway/dual carriageway network.

Service Area PPP – Tranche 1

TII awarded a Motorway Service Area Contact in 2009. The Contract includes service stations at two locations on the M1 i.e., at Castlebellingham, County Louth and at Lusk, County Dublin and on the M4 at Enfield, County Kildare with each location incorporating a service area on each side of the motorway. The service areas have been operational since 2010 and the contract runs to 2034. All demand/revenue risk rests with the PPP Co.

PPP Schemes in Procurement

Service Area PPP – Tranche 2

TII undertook a tender competition for a further Motorway Service Area contract. The tender competition relates to the design, build, finance, maintain and operate ("DBFMO") basis and comprises of the following:

- Athlone service area: DBFMO of a service area located on the M6 motorway east of Athlone;
- Kilcullen service area: DBFMO of a service area located on the M9 motorway south of Kilcullen; and
- Gorey service area: The fit out and operation & maintenance of a service area on the M11 motorway north of Gorey. The construction of this service area was undertaken as part of the N11 PPP contract.

TII's decision on the appointment of the Preferred Tenderer (May 2015) was subject to a legal challenge. The legal challenge was subsequently withdrawn from the High Court in April 2017.

TII currently anticipates that the contract will be signed in May 2018 and that construction works would commence shortly thereafter. It is estimated that the Gorey Service Area fit out/operational readiness could be completed within a 12 – 16 week programme while the construction period would be approximately 12 to 15 months from contract award for full completion of both the Kilcullen and Athlone facilities.

Other than the Tranche 2 Motorway Service Area contract TII currently has no further projects in planning/procurement identified for delivery through PPP.

PPP Toll Concession Schemes

The table below lists TII's PPP Toll Concession Schemes along with the contract award, contract expiry and operations commencement date for each scheme.

Table 1 : PPP Toll Concession Schemes

SCHEME	Description (Project Road*)	OPERATIONS COMMENCED	CONTRACT AWARD/ EXPIRY
M4/M6 Kilcock/Kinnegad – toll	40km motorway	2005	2003/2033
M1 Dundalk Western Bypass – toll	11km motorway & O&M 42km existing motorway with 361m cable stay bridge.	2004	2004/2034
M8 Rathcormac/Fermoy –toll	18km new motorway with 450m viaduct	2006	2004/2034
N25 Waterford City Bypass – toll	23km dual carriageway with 475m cable stay bridge	2010	2006/2036
N18 Limerick Tunnel - toll	10km dual carriageway with 900m immersed tube tunnel	2010	2006/2041
M3 Clonee/Kells – toll	50km Motorway & 10 km dual carriageway	2010	2007/2052
M6 Galway/Ballinasloe – toll	56km motorway	2010	2007/2037
M7/M8 Portlaoise/Cullahill – toll	40km motorway	2010	2007/2037

*Project Road relates to the extent of the works that the PPP Co is responsible for (operations, maintenance & lifecycle) throughout the concession period. The PPP Contract would also have provided for works outside of the Project Road which include link roads, access tracks and accommodation works, etc. These non Project Road works are taken over by the relevant local authority / land owner following completion and the PPP Co's obligations in respect of such non Project Road works is limited to a defects period.

PPP Toll Concession Schemes - Payment Mechanism

The core features of the PPP Toll Concession Contracts payment mechanism are as follows:

- The PPP Co is entitled to receive tolls from road users over the life of the contract. Toll rates were determined by TII pursuant to the Roads Act;
- Having regard to a tenderers' forecasts of toll revenue (based on TII determined toll rates and tenderers' traffic projections), tenderers were allowed to bid for construction phase grants (referred to as construction payments) and operational phase grants (referred to as operational payments) from TII, and
- Tenderers were also required to make revenue share proposals whereby a percentage of toll revenues, subject to traffic volumes exceeding specified traffic levels, would be payable by the PPP Co to TII as revenue share.

In six of the PPP Toll Concession Contracts, traffic risk rests entirely with the PPP Co. In the case of two of the Contracts, i.e. the M3 Clonee-Kells Scheme and the N18 Limerick Tunnel, the PPP Contract provides for a sharing of downside traffic risk (variable operation payments related to minimum traffic volumes referred to as traffic guarantee payments) between the PPP Co and the Authority.

Rationale for Variable Operation Payments (Traffic Guarantee) Mechanism

The rationale and necessity for introducing the variable operation payments related to minimum traffic volumes on these schemes arose due to:

- the Clonee-Kells scheme being larger in financial scale than the schemes in which TII had been involved previously and necessitated a significant debt funding requirement, and
- in the case of the Limerick Tunnel Scheme the realisation of traffic forecast to use the tunnel was very much contingent on the implementation of Limerick city centre traffic management proposals.

The variable operations payment mechanism provides that TII retains a share of the underlying traffic risk and, therefore, contributed to the "bankability" of the schemes. This facilitated a more competitive tender competition by assisting tenderers in negotiating competitive funding terms and facilitated greater banking competition. The mechanism means that the M3 Clonee-Kells and the Limerick Tunnel scheme can be considered hybrid PPP schemes in that as traffic risk is not fully transferred to the private sector, these schemes, although tolled, are comparable to DBOMF type PPPs on which PPP Cos do not bear traffic demand risk.

PPP Toll Concessions – TII Ongoing Payment Obligations

TII's future PPP payment obligations relate to Operation Payments, Variable Traffic Operation Payments (which as previously apply on the M3 Clonee-Kells and N18 Limerick Tunnel Scheme) and where instructed by TII variation payments.

Operation Payments

Appendix 1 provides projections of TII's future operation payment obligations on PPP Toll Concessions. These projections have been prepared on the assumption of an annual inflation rate of two per cent in line with Department of Public Expenditure & Reform requirements. The operation payment amounts payable are as specified in the payments schedule of the respective PPP Contracts and are subject to indexation. The operation payment amounts by scheme typically vary year by year and do not in all cases extend for the entire contract duration.

Variable Operation Payments (related to minimum traffic volumes)

Traffic guarantee payments are payable on the M3 Clonee-Kells and Limerick Tunnel Schemes where traffic does not meet threshold volumes specified in the respective PPP Contracts. Traffic guarantee payments on the M3 Clonee-Kells scheme are, subject to outturn traffic growth, expected to fall away over the next couple of years. Approximately €12 million has been paid to date on this scheme. Traffic guarantee payments on the Limerick Tunnel (approximately €34 million paid to date) are expected to continue for most of the concession term.

Details of the traffic guarantee threshold volumes, outturn traffic volumes to date, annual traffic guarantee amounts paid to date along with estimates of future traffic guarantee payments are included in Appendix 2.

Variation Payments

On a number of contracts TII instructed post contract award variations e.g. signage, safety barriers, landscaping etc. which give rise to ongoing annual payments. Projections of future variation payments are included in the financial commitment amounts listed in Appendix 1.

PPP Toll Concessions – PPP Co Payments to TII

PPP Toll Concessions Revenue Share Provisions

A revenue share mechanism incorporated in the payment mechanism in all PPP Toll Concession Contracts and is used as a means of sharing upside toll revenues between TII and the PPP Company. The purpose of the revenue share mechanism is to protect against "super-profits" accruing to the PPP Co in high traffic scenarios. TII currently receives revenue share from the M1 Dundalk Western Bypass and the M4/M6 Kilcock-Kinnegad PPP Contracts.

2017 was the first year that revenue share receipts from toll roads (currently M1 and M4 yield revenue share) exceeded TII traffic guarantee payments. Over the time period 2018-2025 revenue share receipts are expected to exceed traffic guarantee payments by somewhere between €20 million to €30 million.

Insurance Risk Sharing

All of the PPP Toll Concession Contracts, with the exception of the M4/M6 Kilcock-Kinnegad PPP Contract, contain mechanisms which provide for insurance risk sharing between TII and PPP Co. This mechanism provides that where insurance costs are subject to upwards/downwards movements then, subject to such cost variation falling within a contract specified percentage deviation, either (i) in the case that costs are lower the PPP Co is required to make gain sharing payments to TII and (ii) in the case where costs are higher TII will be required to make a cost sharing payment to the PPP Co.

As provided for in the respective PPP Contracts, Insurance Risk Share reviews are carried out at three yearly intervals. The insurance risk sharing provisions has given rise to PPP Co payments to TII reflecting reductions in insurance premiums over the period since the PPP contracts were awarded. TII has received in the order of €6.5 million from insurance risk sharing reviews.

Electricity Cost Risk Sharing

An Electricity Cost Risk Sharing mechanism is provided for in the Limerick Tunnel PPP Contract. No payments/receipts have arisen to date under this mechanism.

Oil Cost sharing

The M3 Clonee-Kells contract includes a provision in relation to potential payments to TII if oil prices are less than assumed by the PPP Co in their financial model at three particular time periods over the contract life. The three time periods relate to three timeframes during which the PPP Co has planned for major pavement renewal works (which are influenced by oil costs). The periods at which such repayments may arise are 2027, 2041 and 2052.

PPP Design, Build, Operate, Maintain and Finance (DBOMF) Schemes

Table 2 below lists the five PPP DBOMF (also referred to as Availability PPPs) contracts entered into by TII along with the contract award, contract expiry and in the case of the three schemes currently operational, the operations commencement year.

Table 2: DBOMF PPP Schemes

SCHEME	Description (Project Road*)	OPERATIONS COMMENCED	CONTRACT AWARD/ EXPIRY
M50 Upgrade	**Upgrade of 25km of 2+2 motorway to 3+3, Junction Upgrades and provision of auxiliary lanes / & O&M existing 10km**	**2007**	**2007/2042 (35 year term)**
N7/N11 Arklow/Rathnew (incl Newlands Cross)	**16km new build motorway / Newlands cross junction Upgrade & O&M 30 km of existing N/M11.**	**2013**	**2013 / 2040 (25 years post opening of new build M11)**
N17/N18 Gort to Tuam	**57km motorway**	**2017**	**2014 / 2042 (25 years post opening)**
M11 Gorey-Enniscorthy	**27km motorway**	**Q3 2019** **(per PPP Co works programme)**	**2015/ 2044 (25 years post opening)**
N25 New Ross Bypass	**14.6km of dual carriageway with 900m bridge**	**Q1 2019** **(per PPP Co works programme)**	**2016 / 2044 (25 years post opening)**

*Project Road relates to the extent of the works that the PPP Co is responsible for (operations, maintenance & lifecycle) throughout the contract term. The PPP Contract would also have provided for works outside of the Project Road which include link roads, access tracks, and accommodation works, etc. These non Project Road works are taken over by the relevant local authority / land owner following completion and the PPP Co's obligations in respect of such non Project Road works is limited to a defects period.

PPP DBOMF Schemes – Payment Mechanism

On DBOMF contracts, the upfront design and construction costs are financed by the private sector who in turn are remunerated by payments (termed Unitary or Availability Payments) made by the contracting authority (in the case of road schemes, TII), with such payments commencing once the service (road) is available for use.

In addition to the road schemes listed below, the DBOMF approach has also been utilised in other State sectors, e.g. to procure schools, courthouse buildings and primary care centres.

TII Payment Obligations on DBOMF Schemes

The table below details the Base Annual Availability Payment Amount (AP) per scheme and also the 2018 AP having regard to the applicable indexation arrangements on each of the contracts. Payments are made monthly on DBOMF contracts. The table also includes the Indexed 2018 Annual AP calculation for the N25 New Ross and M11 Gorey/Enniscorthy schemes though as stated above AP payments do not commence until the road becomes available for use.

Scheme	Base AP Amount	Base Date	2018 Indexed AP
M50 Upgrade	€ 20,857,559	Jan-06	€22,851,296
N7/N11 Arklow-Rathnew (incl Newlands Cross)	€ 16,647,000	Jan-10	€16,807,562
N17/18 Gort to Tuam	€ 32,613,974	Jan-10	€33,006,378
N25 New Ross Bypass (Under Construction)	€ 11,813,000	Jan-14	€11,839,344
M11 Gorey-Enniscorthy (Under Construction)	€ 18,183,000	Jan-14	€18,223,393

The above payments, adjusted for indexation, continue for each year of the contract term. Projections of future AP payments, indexed on the assumption of an annual inflation rate of 2 per cent, are included in the TII PPP financial commitments listed in Appendix 1.

Variation Payments

On a number of contracts TII instructed post contract award variations e.g. additional operational & maintenance duties and these instructed variations give rise to additional payments. Projections of future variation payments are included in the financial commitment amounts listed in Appendix 1.

Risk Sharing on DBOMF Schemes

Insurance Risk Sharing

All of the DBFOM Contracts, similar to PPP Toll Concessions Contracts, provide for insurance risk sharing between TII and PPP Co. Where insurance costs are subject to upwards/downwards movements then, subject to such cost variation falling within a contract specified percentage deviation, either (i) in the case that costs are lower the PPP Co is required to make gain sharing payments to TII and (ii) in the case where costs are higher TII will be required to make a cost sharing payment to the PPP Co.

As provided for in the respective PPP Contracts, Insurance Risk Share reviews are carried out every three years. No risk sharing payments/receipts have arisen to date on DBOMF contracts.

Motorway Service Areas – Tranche 1

Under the terms of the PPP Contract construction risk and demand risk were transferred to the PPP Co. On expiry of the 25 year concession term the PPP Contract provides for the service stations to be handed back to TII. The PPP Contract provides that the service area at handback must satisfy residual life criteria.

Tranche 1 Payment Mechanism

TII Payments to PPP Co

The PPP Co received construction payments totalling c. €47.1m (as tendered) as a contribution to the PPP Co scheme construction costs. There are no operational payments on this contract.

PPP Co Payments to TII

TII receives revenue share payments from the PPP Co. The contract provides for an annual minimum underwritten revenue share payment to TII. However, the revenue share payment receivable by TII can exceed the PPP Contract annual underwritten amount where sales volume thresholds across fuel, food and retail sales exceed threshold levels specified in the contract.

The guaranteed or underwritten revenue share payable by PPP Co to TII over the Tranche 1 contract term is €47.295m (nominal). In each of the years since operations commenced revenue share receipts have exceeded the underwritten amount payable by PPP Co to TII in the year. TII has received c €6.5m in revenue share payments to end 2017 which exceeds the underwritten revenue share amount for the same period of €3.1m.

Underwritten Revenue Share – 2018 - 2034

The remaining underwritten revenue share (from 2018 until 2034) is €44.2m with the amounts payable per annum as below.

2018	2019	2020	2021	2022	2023	2024	2025	2026
€1,015,960	€1,276,049	€1,362,659	€1,508,006	€789,942	€1,253,939	€1,449,229	€2,361,710	€2,876,162

2027	2028	2029	2030	2031	2032	2033	2034	Total
€3,103,845	€3,508,589	€3,786,994	€3,239,357	€2,464,723	€4,745,585	€5,155,553	€4,253,117	**€44,151,419**

Reporting of TII's PPP Financial Expenditure & Commitments

Details of TII existing financial commitments on PPP Contracts are provided in Appendix 1. Future commitments have been forecast on the assumption of an annual inflation rate of two per cent in line with Department of Public Expenditure & Reform requirements.

Information on TII PPP expenditures and future commitments are provided annually to the Department of Expenditure & Reform and also to the Comptroller & Auditor General. TII's Annual Accounts also include details of annual PPP payments along with projections of total future payment obligations on each PPP scheme. TII is currently compiling updated data on PPP expenditures/commitments which is to be published on DPER's website.

Details of TII's PPP payments are provided in March and September of each year to the Central Statistics Office as part of the bi annual Excessive Deficit Procedure Returns.

Post Project Reviews (PPR)

Post Project Reviews are typically carried out a number of years after the opening of a project. This allows the reviewer to make an initial assessment of the performance of the project. The current standards for Post Project Reviews (PPR) of capital infrastructure projects are those set out in the 'Public Spending Code' published by the Department of Public Expenditure and Reform (DPER). This Code specifies that the aim of such a PPR is to determine whether:

- The basis on which a project was undertaken proved correct;
- The expected benefits and outcomes materialised;
- The planned outcomes were the appropriate responses to actual public needs;
- The appraisal and management procedures adopted were satisfactory; and,
- Whether conclusions can be drawn which are applicable to other projects, to the ongoing use of assets, or to associated polices.

Since the early 2000s successive guidance documents published by various Government departments set out the recommended steps that should be taken when implementing PPP projects in Ireland. The aim is to ensure better value for money for the exchequer.

TII's project appraisal guidance has evolved through the years with TII's Project Appraisal Guidelines (first published in 2008 and post the planning and procurement of all TII PPP Toll Concessions) determining the current recommended process to be followed.

Completed Post Project Reviews

PPRs have been completed on ten PPP schemes as set out in the Table below.

Scheme	Scheme Opened	PPR Undertaken
M1 Dundalk Western Bypass	2005	Feb-14
M4 Kilcock to Kinnegad	2005	Feb-14
M8 Rathcormac to Fermoy Bypass	2006	Mar-14
M50 Upgrade	2010	Dec-14
N6 Galway to Ballinasloe East	2009	Dec-14
M7 Portlaoise to Cullahill	2010	Dec-14
Tranche 1 Service Areas	2010	Nov-13
Limerick Tunnel	2010	May-15
N25 Waterford	2010	Dec-12
M3 Clonee to Kells	2010	Oct-16

PPRs to be undertaken

The PPP Contract for the Arklow/Rathnew scheme (including Newlands Cross junction Upgrade) was awarded in April 2013. The works were completed in August 2015 and the PPR is currently being undertaken.

The N17/M18 Gort to Tuam scheme opened in September 2017 while the M11 Gorey-Enniscorthy Bypass and the N25 New Ross Bypass scheme are currently in the construction phase. PPRs will be completed on the above schemes after a 3 to 5 year operational period has elapsed.

Conclusions from Completed PPRs

General findings across the respective PPRs undertaken were:

- Projects were adequately planned in terms of the statutory procedures, route selection and consultation and also the planning undertaken in relation to the decision to procure the scheme as a Public Private Partnership (PPP).

- During the implementation of the projects, the appropriate management procedures adopted were satisfactory and in line with best practice guidance at the time. The implementation of the projects as PPPs resulted in projects being delivered on or ahead of schedule and in line with the quality specified in the PPP contract.

- The projects delivered on objectives with the resultant benefits and outcomes. This included helping to reduce traffic volumes and congestion in towns along the bypassed route, reducing the numbers of fatal accidents and contributing to providing continuous motorway/dual carriageway network routes.

- Although an economic appraisal was carried out, this was done in many cases a number of years prior to the contract being awarded with no interim re-appraisal to account for changes in cost and traffic forecasts. It was acknowledged that this appraisal approach had been in line with the available guidance at the time and that a revised cost-benefit analysis at the tendering stage now forms part of the TII Project Appraisal Guidelines. This addresses this shortcoming for all current/future scenarios.

- Outturn traffic has been below expectations for most schemes. This is in part explained by the impacts of the economic downturn but also raises questions on the accuracy of traffic forecasting techniques particularly in the case of toll roads. In a number of cases the PPR has included a recommendation for updated traffic studies to be undertaken and this work has been commenced. It is also noted that for a number of the schemes opened to traffic in 2010 coinciding with a significant economic slowdown in Ireland which was not likely to be representative of the full 30 plus year concession period of the schemes. In the period since

the PPRs were completed there has been strong growth in the Irish economy which in turn has resulted in high growth rates in traffic volumes.

- In respect of traffic shortfalls on toll concession schemes it was noted that as it was mainly the private sector that was liable for the majority of the financial implications of the reduced traffic volumes, the public sector is not significantly impacted.

- The PPP Toll Concession contracts were structured to ensure significant traffic risk rested with the private sector. As a result, where there is a traffic shortfall this is primarily a cost to the private sector. However the public sector is also impacted due to the requirement to make traffic guarantee payments on two schemes and also through reduced revenue share payments receivable. While the PPRs concluded that the decision to procure the schemes as PPPs represents value for money for the Exchequer in the case of the Limerick Tunnel and the M3 Clonee-Kells schemes the PPR recommended an ex post cost benefit analysis be undertaken.

  The ex post M3 Clonee-Kells study found that there is a positive economic and financial case (although lower than those from the initial studies) for the M3 Clonee to Kells Scheme and that despite lower than expected traffic volumes the PPP model provided better value than traditional procurement.

  In the case of the Limerick Tunnel scheme an updated economic evaluation (carried out in January 2015) found that despite the significant shortfall in traffic volumes from the original level forecast, the scheme is forecast to return a large positive economic return with a benefit to cost ratio of 3.3. Based on the results of the evaluation and the scheme largely achieving its key objectives, the evaluation found that the decision to develop the scheme is considered validated.

Value for Money Assessments

Value for money assessments of PPP Contracts awarded in the period 2003 – 2009 are included in Appendix 3. The value for money assessment compares the Public Sector Benchmark i.e., the estimate of the cost to the public sector of procuring the works and services set out in the PPP contract employing a traditional public sector procurement process, in which the public sector retains managerial responsibility and exposure to risk to the costs of the PPP tender.

The value for money assessments confirm the PPP procurement option as providing best value to the State and were the basis for the decision to proceed to award the contract on a PPP basis.

Appendix 1

TII PPP Future Commitments Projections – 2018 - 2052

Summary Table	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
PPP Toll Concessions OP Payments	32.8	32.9	35.0	38.2	29.6	25.8	3.6	2.2	10.1	4.2	3.0	3.1	4.2	11.7	10.2	8.6	2.0	4.5
PPP DBOFM AP Payments	72.7	93.1	104.1	104.9	105.6	106.3	107.1	107.9	108.7	109.5	110.3	111.2	112.1	112.9	113.8	114.8	115.7	116.6
Total OP's and AP's	105.5	126.0	139.2	143.1	135.2	132.1	110.7	110.1	118.8	113.7	113.3	114.3	116.2	124.7	124.1	123.3	117.7	121.2
PPP Traffic Guarantee Payments																		
Clonee Kells	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Limerick Tunnel	4.2	4.7	5.4	6.1	6.8	7.8	8.0	8.4	8.7	9.1	9.4	10.0	10.2	10.4	10.9	11.1	11.6	7.0
Total Traffic Guarantee Payments	4.2	4.8	5.4	6.1	6.8	7.8	8.0	8.4	8.7	9.1	9.4	10.0	10.2	10.4	10.9	11.1	11.6	7.0
Total	**109.7**	**130.9**	**144.6**	**149.2**	**142.0**	**139.9**	**118.8**	**118.6**	**127.6**	**122.8**	**122.8**	**124.3**	**126.4**	**135.1**	**135.0**	**134.4**	**129.3**	**128.1**

Summary Table	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052
PPP Toll Concessions OP Payments	14.8	8.7	8.9	7.9	7.0	6.1	1.1	0.3	0.4	0.1	0.2	0.1	0.0	7.2	7.7	19.5	13.8
PPP DBOFM AP Payments	117.6	118.6	119.6	120.7	115.4	103.8	93.1	32.6	11.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total OP's and AP's	132.4	127.3	128.5	128.6	122.4	109.9	94.2	32.9	11.4	0.1	0.2	0.1	0.0	7.2	7.7	19.5	13.8
PPP Traffic Guarantee Payments																	
Clonee Kells	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Limerick Tunnel	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Traffic Guarantee Payments	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	**133.6**	**127.3**	**128.5**	**128.6**	**122.4**	**109.9**	**94.2**	**32.9**	**11.4**	**0.1**	**0.2**	**0.1**	**0.0**	**7.2**	**7.7**	**19.5**	**13.8**

Notes: (i) PPP Commitment Projections are on the assumption of an annual inflation rate of 2 per cent.
(ii) TII receives revenue share on PPP Toll Concessions. Annual Revenue Share receipts over the forecast period are expected to exceed Annual PPP Traffic Guarantee Payments.

Appendix 2

Variable Operation Payments (Traffic Guarantee Payments)

The purpose of the variable operation payment mechanism was to enhance the funding solution for PPP projects in the context of scheme specific challenges. For example: the Limerick Tunnel scheme faced significant construction risks and also significant uncertainty in relation to the implementation of a city centre traffic management strategy which in turn increased uncertainty in relation to traffic forecasting for the scheme; while the challenge for the M3 was in relation to the quantum of debt involved in the project.

TII did not want the uncertainties fixed into a higher bid price for the full concession length and consequently implemented the traffic guarantee payment mechanism.

The traffic guarantee mechanism ensures that a level of project revenue is guaranteed for the private partner. The mechanism will therefore bridge some of the shortfall in project revenue for a particular year, under certain circumstances, where actual toll revenues are significantly below expectations. Where the actual traffic usage/profile is above traffic guarantee levels in any one contract year, then no traffic guarantee payments will be made for that year.

The traffic guarantee mechanism paid to PPP Co contributes to the senior debt service requirements. It is also relevant to note that had the scheme been procured under traditional procurement or indeed as availability based payment scheme then TII would have had to pay the full construction, O&M and lifecycle costs rather than the partial contribution it makes under the existing contract risk sharing arrangements.

The M3 Clonee-Kells traffic guarantee payments are expected to continue until 2019 based on low growth. Under a low growth scenario, approx. €170k is the estimate of traffic guarantee payments payable to 2019. However a continuation of traffic growth levels of previous years would result in no further traffic guarantee payments on this scheme.

The Limerick Tunnel traffic guarantee payments are expected to continue until 2036. €151m (nominal) is the estimate of traffic guarantee payments payable 2018 to 2036 based on low growth.

The traffic guarantee mechanism means that the M3 Clonee-Kells and the Limerick Tunnel scheme can be considered hybrid PPP schemes in that, while tolled, full traffic risk is not transferred and they can be considered to have similarities with DBOMF type PPPs on which PPP Cos do not bear traffic demand risk.

Tables 1 to 4 overleaf provide:

- minimum traffic guarantee threshold levels included PPP Contracts
- outturn annual average daily traffic 2010 to 2017
- Variable Operation Payments (Traffic Guarantee) Payable 2010 – 2017, and
- Estimate of Future Variable Operation (Traffic Guarantee) Payments

Table 1

Variable Operation Payments (Traffic Guarantee) Average Annual Daily Traffic Thresholds

Clonee - Kells (Contract Expires 2052)		
Year	**ADT Level**	***Growth***
2009	24,250	
2010	25,250	*4.12%*
2011	26,250	*3.96%*
2012	27,250	*3.81%*
2013	28,250	*3.67%*
2014	29,250	*3.54%*
2015	30,250	*3.42%*
2016	31,250	*3.31%*
2017	32,250	*3.20%*
2018	33,250	*3.10%*
2019	34,250	*3.01%*
2020 - Expiry Date	34,250	*0.00%*

Limerick Tunnel (Contract Expires 2041)		
Year	**ADT Level**	***Growth***
2009	15,000	
2010	17,200	*14.67%*
2011	19,400	*12.79%*
2012	20,600	*6.19%*
2013	21,800	*5.83%*
2014	23,000	*5.50%*
2015	24,200	*5.22%*
2016	25,400	*4.96%*
2017	26,600	*4.72%*
2018	27,800	*4.51%*
2019	29,000	*4.32%*
2020	30,200	*4.14%*
2021	31,300	*3.64%*
2022	32,400	*3.51%*
2023	33,700	*4.01%*
2024	34,100	*1.19%*
2025	34,600	*1.47%*
2026	35,000	*1.16%*
2027	35,400	*1.14%*
2028	35,800	*1.13%*
2029	36,300	*1.40%*
2030	36,600	*0.83%*
2031	36,900	*0.82%*
2032	37,300	*1.08%*
2033	37,600	*0.80%*
2034	38,000	*1.06%*
2035	38,300	*0.79%*
2036 - Expiry Date	38,300	*0.00%*

Table 2

Outturn Annual Daily Traffic and Annual Growth Rates

M3 Clonee Kells		
Year	***Tolled***	***Change***
2010	20,983	*n/a*
2011	22,759	*8%*
2012	22,489	*(1%)*
2013	23,018	*2%*
2014	24,708	*7%*
2015	27,101	*10%*
2016	29,357	*8%*
2017	31,742	*8%*

Limerick Tunnel		
Year	***Tolled***	***Change***
2010	12,849	*n/a*
2011	14,836	*15%*
2012	15,197	*2%*
2013	16,102	*6%*
2014	17,589	*9%*
2015	19,301	*10%*
2016	21,105	*9%*
2017	22,620	*7%*

Table 3

Variable Operation Payments (Traffic Guarantee) Payable 2010 - 2017

Traffic Guarantees (€)			
	Clonee Kells	**Limerick Tunnel**	**Totals**
Payable 2010	524,311	1,242,793	1,767,104
Payable 2011	1,859,405	4,453,979	6,313,384
Payable 2012	2,492,733	4,971,436	7,464,168
Payable 2013	2,659,265	5,176,376	7,835,641
Payable 2014	2,300,764	5,025,151	7,325,915
Payable 2015	1,563,810	4,795,201	6,359,000
Payable 2016	838,728	4,382,081	5,220,809
Payable 2017	66,559	4,095,534	4,162,093
Total Payable	**12,305,575**	**34,142,550**	**46,448,114**

Table 4

Estimate of Future Variable Operation (Traffic Guarantee) Payments

	Clonee Kells	Limerick
Year		
2018	50,000	4,194,000
2019	120,000	4,726,000
2020		5,396,000
2021		6,085,000
2022		6,806,000
2023		7,769,000
2024		8,021,000
2025		8,447,000
2026		8,739,000
2027		9,113,000
2028		9,428,000
2029		9,951,000
2030		10,204,000
2031		10,437,000
2032		10,929,000
2033		11,050,000
2034		11,577,000
2035		6,977,000
2036		1,247,000
Total	**170,000**	**151,096,000**

M3 Clonee Kells forecast is based on the following traffic growth assumptions: 4% 1 yr , 2% 2-3 yrs, 1% per annum thereafter.

Limerick Tunnel forecast is based on the following traffic growth assumptions: 5% 1yr, 2% 2-3 yrs, 1% per annum thereafter.

Appendix 3 – Value for Money Assessments

Kilcock – Kinnegad. - Value for Money Assessment

Comparison of Monetary Costs and Benefits

A comparison of the monetary costs and benefits associated with the traditional procurement and PPP options indicates the following:

Traditional Procurement (With Tolling)			**Preferred Tenderer**	
	PV €'000			**PV €'000**
Base Costs (capital, operating & lifecycle)	366,797		Construction Payment	145,404
Toll Costs	91,539		Operational Payment	5,946
Toll Revenue	(416,231)		Weighted Avg. Revenue Share	(84,393)
			Contractual mark-ups	472
Project risks retained (Costs)	111,440		Plus risks retained in either PPP or FC	1,636
Less Revenue from Lane Occupation Charges	(375)		Less Revenue from Lane Occupation Charges	(1,006)
Total Risk Adjusted Cost to the NRA before Revenue Risks	**153,170**			
Project risks retained (Revenue)	148,442			
Total Risk Adjusted Cost to the NRA	**301,612**		**Total Risk Adjusted Cost to the NRA**	**68,059**
Less incremental cash flows to Public Sector e.g. unrecoverable VAT on costs and risks	(73,832)		Less incremental cash flows to Public Sector: - Corporation Tax and VAT on non recoverable receipts - Rates	 (29,966) (27,787)
Total Risk Adjusted Cost to the Public Sector	**227,780**		**Total Risk Adjusted Cost – Public Sector**	**10,306**

Traditional procurement costs and related risks are inclusive of VAT which is irrecoverable by the NRA, whereas toll revenue and related toll risks are exclusive of VAT, as the NRA would not retain the VAT from tolls

Dundalk Western Bypass - Value for Money Assessment

Comparison of Monetary Costs and Benefits

A comparison of the monetary costs and benefits associated with the traditional procurement and PPP options indicates the following:

Traditional Procurement (With Tolling)[4]		Preferred Tenderer	
	PV €'000		**PV €'000**
Base Costs (capital, operating & lifecycle)	256,252	Construction Payment	0
Toll Costs	82,010	Operational Payment	0
Total Cost	338,262	Weighted Avg. Revenue Share	(7,099)
Toll Revenue	(348,614)	Weighted Avg. Royalty Payment	(18,282)
Project risks retained (Costs)	61,219	Offer Price	(25,381)
		Plus risks retained in either PPP or FC	3,258
Less Revenue from Lane Occupation Charges	(452)	Less Revenue from Lane Occupation Charges	(675)
		Less Revenue from Non Availability Charges	(412)
Total Risk Adjusted Cost to the NRA before Revenue Risks	**50,415**		
Project risks retained (Revenue)	86,635		
Total Risk Adjusted Cost to the NRA	**137,050**	**Total Risk Adjusted Benefit to the NRA**	**(23,220)**
Less incremental cash flows to Public Sector e.g. unrecoverable VAT on costs and risks	(60,383)	Less incremental cash flows to Public Sector, e.g Corporation Tax (€7m), VAT on non-recoverable receipts (€34m) and Rates (€36m)	(76,736)
Total Risk Adjusted Cost to the Public Sector	**76,667**	**Total Risk Adjusted Benefit – Public Sector**	**(99,956)**

Traditional procurement costs and related risks are inclusive of VAT which is irrecoverable by the NRA, whereas toll revenue and related toll risks are exclusive of VAT, as the NRA would not retain the VAT from tolls

[4] Inclusive of VAT of €37.6m on base costs, €14.2m on toll costs, €8.5m on risks amounting to €60m on the total risk adjusted cost to the NRA.

N8 Fermoy/Rathcormac Bypass - Value for Money Assessment

Comparison of Monetary Costs and Benefits

A comparison of the monetary costs and benefits associated with the traditional procurement and PPP options indicates the following (table overleaf):

Traditional Procurement (With Tolling)[4]	
	PV €'000
Base Costs (capital, operating & lifecycle including rates and PI cover)	197,684
Toll Costs	69,833
Total Cost	267.517
Toll Revenue	(196.562)
Project risks retained (Costs)	52,776
Total Risk Adjusted Cost to the NRA before Revenue Risks	**123.731**
Project risks retained (Revenue) i.e. Range of *(€11m) to € 91m*	48,305
Total Risk Adjusted Cost to the NRA	**172.036**
Less incremental cash flows to Public Sector e.g. non-recoverable VAT on costs and risks, rates (€3.6m)	(46,909)
Total Risk Adjusted Cost to the Public Sector	**125,127**

Preferred Tenderer	
	PV €'000
Construction Payment	80.367
Operational Payment	39.627
Weighted Average Revenue Share	(1.415)
Offer Price	**118.579**
Plus risks retained in either PPP or FC	5,937
Professional Indemnity Insurance	1,500
Total Risk Adjusted Cost to the NRA	**126.016**
Less incremental cash flows to Public Sector, e.g. Corporation Tax (€0), VAT on non-recoverable receipts (€16m) and Rates (€11m)	(26,904)
Total Risk Adjusted Cost – Public Sector	**99,112**
Range of Risk Adjusted Cost to the Public Sector based on range under Preferred Tenderer traffic	*Low* €49m Medium €26m High €(38)m

Traditional procurement costs and related risks are inclusive of VAT, which is irrecoverable by the NRA, whereas toll revenue and related toll risks are exclusive of VAT, as the NRA would not be required to charge VAT on tolls

[4] Inclusive of VAT of ε25.3m on base costs, ε11.4m on toll costs, ε6.7m on risks amounting to ε43.4m on the total risk adjusted cost to the NRA.

N25 Waterford Bypass PPP - Value for Money Assessment

Comparison of Monetary Costs and Benefits

A comparison of the monetary costs and benefits associated with the traditional procurement and PPP options indicates the following

Traditional Procurement (With Tolling)			**Preferred Tenderer**	
	NPV €'m			**NPV €'m**
Base Costs (capital, operating & lifecycle and rates)	440.4		Construction Payment	99.9
Toll Costs	75.1		Operational Payment	48.0
Total Cost	515.5			
Toll Revenue	(267.5)		Weighted Average Revenue Share	(2.7)
Total Non-Risk adjusted cost to the NRA	**248.0**		**Offer Price**	145.2
Project risks retained (Costs)	126.4		Plus risks retained in either PPP or FC	11.2
Total Risk Adjusted Cost to the NRA before Revenue Risks	**374.4**			
Project risks retained (Revenue) i.e. Range of *€11 to € 91m*	79.0			
Total Risk Adjusted Cost to the NRA	**453.4**		**Total Risk Adjusted Cost to the NRA**	**156.4**
Less incremental cash flows to Public Sector - Non-recoverable VAT on costs and risks (€77.2m), rates (€14.5m)	(91.7)		Less incremental cash flows to Publ1c Sector, e.g. Corporation Tax (€5.1m) VAT (€218k) and Rates (€15.8m)	(21.1)
Total Risk Adjusted Cost to the Public Sector	**361.7**		**Total Risk Adjusted Cost – Public Sector**	**135.3**
Risk Adjusted Cost to the Public Sector excluding Revenue Risk	*282.7*		***Range of Risk Adjusted Cost to the Public Sector based on range under Preferred Tenderer traffic***	**Low €131m** **Medium €104m** **High €24m**
Non-Risk Adjusted Cost to the Public Sector	*156.3*			

Traditional procurement costs and related risks are inclusive of VAT, which is irrecoverable by the NRA, whereas toll revenue and related toll risks are exclusive of VAT, as the NRA would not be required to charge VAT on tolls

Limerick Tunnel PPP Scheme - Value for Money Assessment

Comparison of Monetary Costs and Benefits

A comparison of the monetary costs and benefits associated with the traditional procurement and PPP options indicates the following:

Traditional Procurement (With Tolling)(			**Preferred Tenderer (35 Years)**	
	NPV €'m			**NPV €'m**
Base Costs (capital, operating & lifecycle and rates)	384.1		Construction Payment	166.7
Toll Costs	145.1		Operational Payment	35.3
Total Cost	529.2		Weighted Average Revenue Share	(137.6)
Toll Revenue	(535.6)		Adjustment for 35 Year Concession	27.2
Total Non-Risk adjusted cost to the NRA	**(6.4)**		**Offer Price**	**91.6**
Project risks retained (Costs)	108.9			
Total Risk Adjusted Cost to the NRA before Revenue Risks	**102.5**		Plus risks retained in either PPP or FC	11.8
Project risks retained (Revenue)	157.2			
Total Risk Adjusted Cost to the NRA	**259.7**		**Total Risk Adjusted Cost to the NRA**	**103.4**
Less incremental cash flows to Public Sector - Non-recoverable VAT on costs and risks	(70.9)		Less incremental cash flows to Public Sector, e.g. Corporation Tax (€4.2) and Rates (€48.5m)	(52.7)
Total Risk Adjusted Cost to the Public Sector	**188.8**		**Total Risk Adjusted Cost - Public Sector**	**50.7**

Traditional procurement costs and related risks are inclusive of VAT, which is irrecoverable by the NRA, whereas toll revenue and related toll risks are exclusive of VAT, as the NRA would not be required to charge VAT on tolls

M3 Clonee to North of Kells - Value for Money Assessment

Comparison of Monetary Costs and Benefits

A comparison of the monetary costs and benefits associated with the traditional procurement and PPP options indicates the following:

Traditional Procurement (With Tolling)		**Preferred Tenderer (45 Years)**	
	NPV €'m		**NPV €'m**
Base Costs (capital, operating & lifecycle and rates)	758.0	Construction Payment	237.2
Toll Costs excl. VAT	135.8	Operational Payment	241.6
VAT on Costs	137.8	Weighted Revenue Share	(266.8)
Total Cost	**1031.6**	Adjustment for 45 Year Concession	50.9
Toll Revenue	(544.4)		
Total Non-Risk adjusted cost to the NRA	**487.2**		
Total Non-Risk adjusted cost to the NRA excl VAT	**349.4**	**Offer Price**	**262.9**
Project risks retained (Costs) excl. VAT	120.6		
VAT on risks retained (Costs)	18.3		
Total Risk Adjusted Cost to the NRA before Revenue Risks	**626.0**	Plus risks retained in either PPP or FC	14.1
Project risks retained (Revenue)	206.7		
Total Risk Adjusted Cost to the NRA	**832.7**	**Total Risk Adjusted Cost to the NRA**	**277.0**
Less incremental cash flows to Public Sector – Non-recoverable VAT on costs and risks	(156.1)	Less incremental cash flows to Public Sector, e.g. Corporation Tax (€18.3), Rates (€38.3m) and VAT on non-recoverable receipts (€57.7).	(114.0)
Total Risk Adjusted Cost to the Public Sector	**676.6**	**Total Risk Adjusted Cost - Public Sector**	**163.0**
Total Non-Risk adjusted cost to the Public Sector	**349.4**		

Traditional procurement costs and related risks are inclusive of VAT, which is irrecoverable by the NRA, whereas toll revenue and related toll risks are exclusive of VAT, as the NRA would not be required to charge VAT on tolls

N6 Galway to Ballinasloe PPP Scheme- Value for Money Assessment

Comparison of Monetary Costs and Benefits

A comparison of the monetary costs and benefits associated with the traditional procurement and PPP options indicates the following:

Traditional Procurement (With Tolling)		ICON's PT Offer	
	NPV €'m		**NPV €'m**
Base Costs (capital, operating & lifecycle and rates) excl. VAT	433.9	Construction Payment	135.6
Toll Costs excl. VAT [1]	82.7	Operational Payment	137.0
VAT on Costs [3]	79.2	Weighted Average Revenue Share [2]	(0.9)
Total Cost	**595.8**		
Toll Revenue	(150.0)		
Total Non-Risk adjusted cost to the NRA	**445.8**		
Total Non-Risk adjusted cost to the NRA excl VAT	**366.6**	**Offer Price**	**271.7**
Project risks retained (Costs) excl. VAT	113.6		
VAT on Risks [3]	16.4		
Total Risk Adjusted Cost to the NRA before Revenue Risks	**575.9**	Plus risks retained in either PPP or FC	5.9
Project risks retained (Revenue) [4]	33.0		
Total Risk Adjusted Cost to the NRA	**608.9**	**Total Risk Adjusted Cost to the NRA**	**277.6**
Less incremental cash flows to Public Sector [5]	(95.6)	Less incremental cash flows to Public Sector [6]	(41.9)
Total Risk Adjusted Cost to the Public Sector	**513.3**	**Total Risk Adjusted Cost - Public Sector**	**235.7**
Total Non-Risk adjusted cost to the Public Sector	**366.6**		

Traditional procurement costs and related risks are inclusive of VAT, which is irrecoverable by the NRA, whereas toll revenue and related toll risks are exclusive of VAT, as the NRA would not be required to charge VAT on tolls

[1] Toll Costs include Toll Operating Costs of €73.8m and Toll Lifecycle Costs of €8.9m

[2] 80% revenue risk weighting applied

[3] VAT is calculated at 13.5% on capital and lifecycle costs and 21% on operating costs

[4] Revenue weighting to 80% (€30m) and violations/operational losses risk (€3m)

[5] Non-recoverable VAT on costs (€95.6m)

[6] Tax (€3.4m), Rates (€3m) and VAT on Non-recoverable receipts (€35.5m)

M7/M8 Portlaoise PPP Scheme- Value for Money Assessment at Tender

(See Note 1 below)

Comparison of Monetary Costs and Benefits

A comparison of the monetary costs and benefits associated with the traditional procurement and PPP options indicates the following:

Traditional Procurement (With Tolling) 30 Years	
	NPV €'m
Base Costs (capital, operating & lifecycle and rates) excl. VAT	400.0
Toll Costs excl. VAT [1]	112.1
VAT on Costs [3]	78.6
Total Cost	**590.7**
Toll Revenue	(274.8)
Total Non-Risk adjusted cost to the NRA	**315.9**
Total Non-Risk adjusted cost to the NRA excl VAT	**237.3**
Project risks retained (Costs) excl. VAT	103.7
VAT on risks retained (Costs)	15.0
Total Risk Adjusted Cost to the NRA before Revenue Risks	**434.6**
Project risks retained (Revenue) [4]	60.5
Total Risk Adjusted Cost to the NRA	**495.1**
Less incremental cash flows to Public Sector [5]	(93.6)
Total Risk Adjusted Cost to the Public Sector	**401.5**
Total Non-Risk adjusted cost to the Public Sector	**237.3**

Preferred Tenderer (30 Years) [7]	
	NPV €'m
Construction Payment	24.7
Operational Payment	29.1
Weighted Revenue Share [2]	(5.3)
Offer Price	**48.5**
Plus risks retained in either PPP or FC	5.5
Total Risk Adjusted Cost to the NRA	**54**
Less incremental cash flows to Public Sector [6]	(17.1)
Total Risk Adjusted Cost - Public Sector	**36.9**

Traditional procurement costs and related risks are inclusive of VAT, which is irrecoverable by the NRA, whereas toll revenue and related toll risks are exclusive of VAT, as the NRA would not be required to charge VAT on tolls

[1] Toll Costs including Toll Operating Costs of €88.3m and Toll Lifecycle Costs of €10.6m

[2] 80% revenue risk weighting applied

[3] VAT is calculated at 13.5% on capital and lifecycle costs and 21% of operating costs

[4] Revenue weighting to 80% (€55m) and violations / operational losses risk (€5.5m)

[5] Non Recoverable VAT on costs €93.6m

[6] VAT on non-recoverable receipts €17.1m

[7] CRG assume base case Toll revenues of €505m NPV underpinning their offer

Note: The extract from the VfM report (which was prepared prior to financial close based on the tender received) contains an Offer Price c.€48.5m in NPV terms. The NPV at Financial Close was c.€63m (Construction Payments increased by c.€14m in NPV terms to reflect interest rate changes between Offer and Financial Close). Value for Money of the tender offer adjusted for interest rate changes was confirmed to the NRA prior to close.

M50 PPP Project- Value for Money Assessment

Comparison of Monetary Costs and Benefits

A comparison of the monetary costs and benefits associated with the traditional procurement and PPP options indicates the following:

Traditional Procurement			**ICON's PT Tender**	
	NPV €'m			**NPV €'m**
Base Costs (capital, operating & lifecycle) excl. VAT	533.5		Availability Payments	405.1
VAT on Costs [1]	75.9		Lane Occupation Charges	1.3
			VAT on Availability Payments [2]	85.5
Total Non-Risk adjusted cost to the NRA	**609.4**		**Tender Price incl VAT**	**491.9**
Total Non-Risk adjusted cost to the NRA excl VAT	**533.5**		**Tender Price excl VAT**	**406.4**
Project risks retained (Costs)	148.5		Plus risks retained in either PPP or FC	7.5
Vat on Risks	20.5			
Total Risk Adjusted Cost to the NRA	**778.4**		**Total Risk Adjusted Cost to the NRA**	**499.4**
Less incremental cash flows to Public Sector [3]	(96.4)		Less incremental cash flows to Public Sector [4]	(91.2)
Total Risk Adjusted Cost to the Public Sector	**682.0**		**Total Risk Adjusted Cost - Public Sector**	**408.2**
Total Non-Risk adjusted cost to the Public Sector	**533.5**			

Traditional procurement costs and related risks are inclusive of VAT, which is irrecoverable by the NRA.

[1] VAT is calculated at 13.5% on capital and lifecycle costs and 21% on operating costs

[2] The PT has assumed a 21% rate on availability payments. The ultimate VAT treatment is subject to Revenue ruling

[3] Non-recoverable VAT on costs (€96.4m)

[4] Tax (€5.7m) and VAT on non-recoverable receipts (€85.5m)

Tranche 1 Motorway Service Areas- Value for Money Assessment

Comparison of Monetary Costs and Benefits

Traditional Procurement	NPV €'m	Preferred Tenderer's Tender	NPV €'m
Base costs (capital, operating, rates, life cycle & tax) excl VAT	210.1	Construction Payments excl VAT	43.0
Service Area Gross Revenues excl VAT [1]	(139.1)	Weighted Underwritten Revenue Share excl VAT [5]	(14.9)
VAT on Costs [2]	26.0	Weighted Non-Underwritten Revenue Share excl VAT [6]	(3.2)
VAT on Gross Revenues [3]	(23.0)	VAT Cost to the Authority [7]	0.0
Total Non-Risk adjusted cost to the NRA	74.0		
Total Non-Risk adjusted cost to the NRA excl VAT	71.0	**Tender Price**	24.9
Risks Retained (Costs) excl VAT	20.6		
Risks Retained (Revenue) excl VAT	25.2		
Vat on Risks	6.3		
Total Risk adjusted cost to the NRA	126.1	**Total Risk adjusted cost to the NRA**	24.9
Less incremental cash flows to Public Sector [4]	(17.3)	Less incremental cash flows to Public Sector [8]	(5.7)
Total Risk adjusted cost to the Public Sector	108.8	**Total Risk adjusted cost to the Public Sector**	19.2

(1) Service Area Gross Revenues are the gross margins generated for each Revenue Line (i.e. sales less cost of sales)
(2) VAT on Construction and Lifecycle costs of 13.5% and Design and Maintenance costs of 21%. Varying VAT rates on Operating costs resulting in a weighted VAT rate of c. 10.6%
(3) VAT on final gross margin of 21.5% restaurant gross margin of 13.5% and mixed VAT rates on retail gross margin resulting in a weighted rate of 16.5%
(4) Total incremental cash flows to Public Sector includes (i) excess of VAT on Costs over VAT on Revenues (€9.3m). (ii) Corporation Tax (€4.6m) and (iii) Rates (€3.4m)
(5) Risk Weighting 95%
(6) Risk Weighing 60%

(7) **Construction payments;** Superstop has assumed construction payments are outside the scope of VAT.

Revenue Share: The Authority is not considered to be acting in business in respect of its activities and as such would not charge Superstop VAT on the Revenue Share payments.

(8) Corporation Tax (1.4m) and Rates (4.3m)