

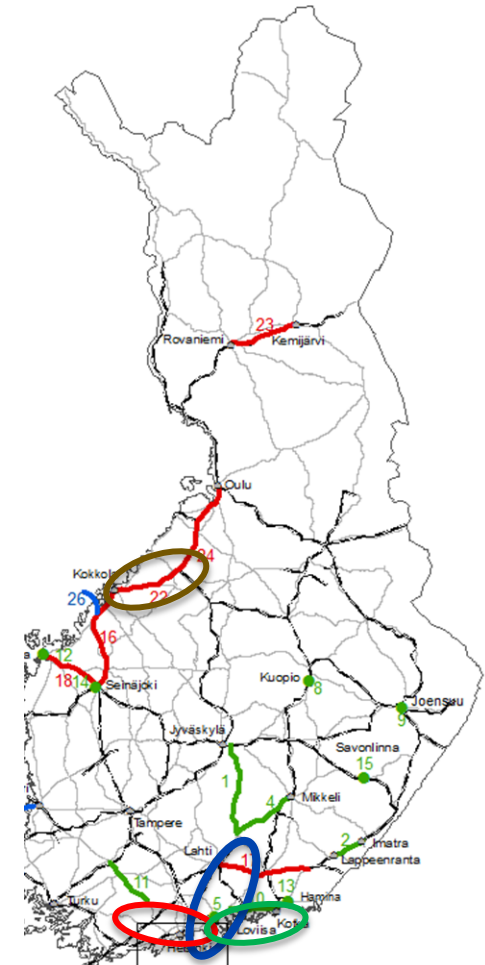
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**PPP Experiences in Finland
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Finnish Transport Agency**

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PPP experiences -report

- The Public Private Partnership (PPP) model has so far been used on four infrastructure projects in Finland. Projects are
 - **Highway 4 Järvenpää-Lahti** (contract expired 2012)
 - **E18 Muurla-Lohja** (operational phase)
 - **Kokkola-Ylivieska rail project** (procurement aborted)
 - **E18 Koskenkylä-Kotka** (construction phase)
- The Finnish national Transport Policy Report published in 2012, proposed the limited use of PPP in large infrastructure developments.
- KPMG-consultant made a report of PPP –projects in 2013 , which focused on procurement documentation, bidding and negotiation phase, construction phase, operational phase and hand-back.
- The conclusions presented in the report are based on 22 interviews with key stakeholders as well as the analysis of procurement and contract documentation
 - E18 Hamina – Vaalimaa (procurement process has started)

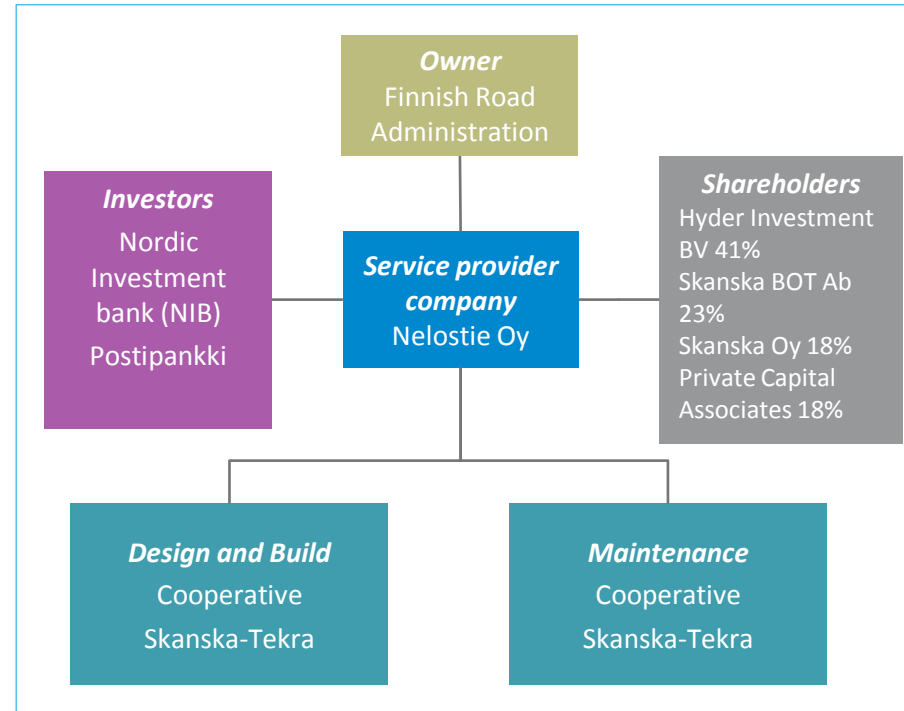


VT4 Järvenpää-Lahti

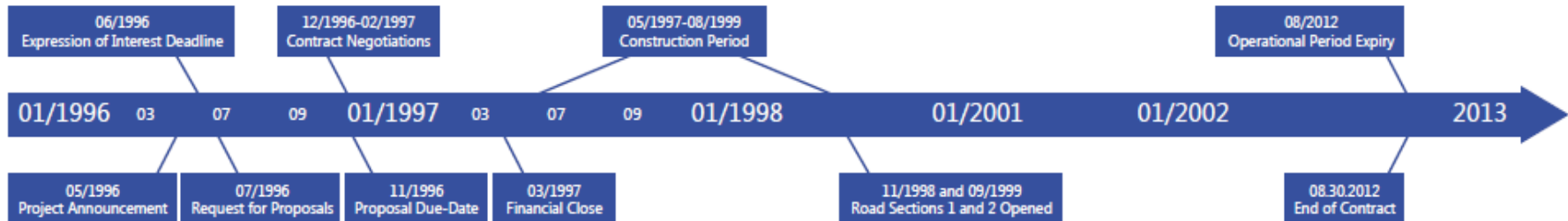
Project introduction

- VT4 Järvenpää-Lahti was the first Finnish PPP -project
- Total 240 M€ - 84 M€ Invest -element
- PPP – Contract 15 Years, signed 3/1997
- Project included 70 km motorway, of which second roadway was already in use (semi-motorway)
- 88 new Bridges
- 2½ Year construction -period
- 13 Years maintenance period
- First part of motorway was opened 11/1998 and second part 9/1999
- PPP -contract completed 8/2012
- Contractor Skanska Infra
- 5 Consortiums participated in competitive bidding

Organization



Project Timeline

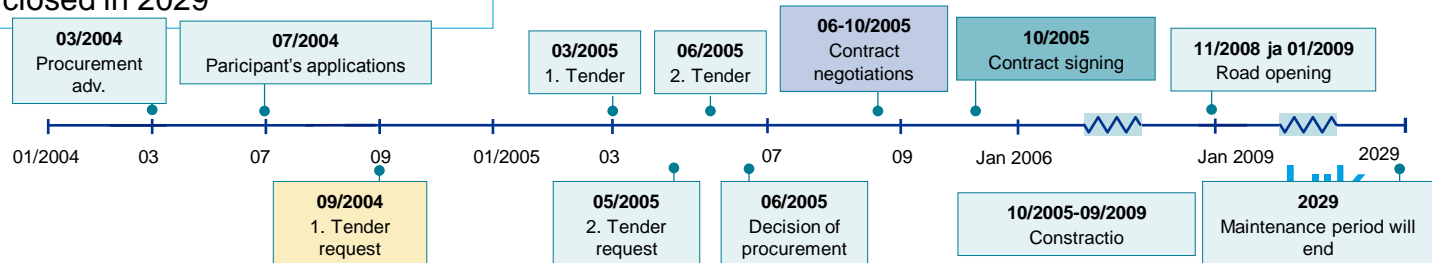
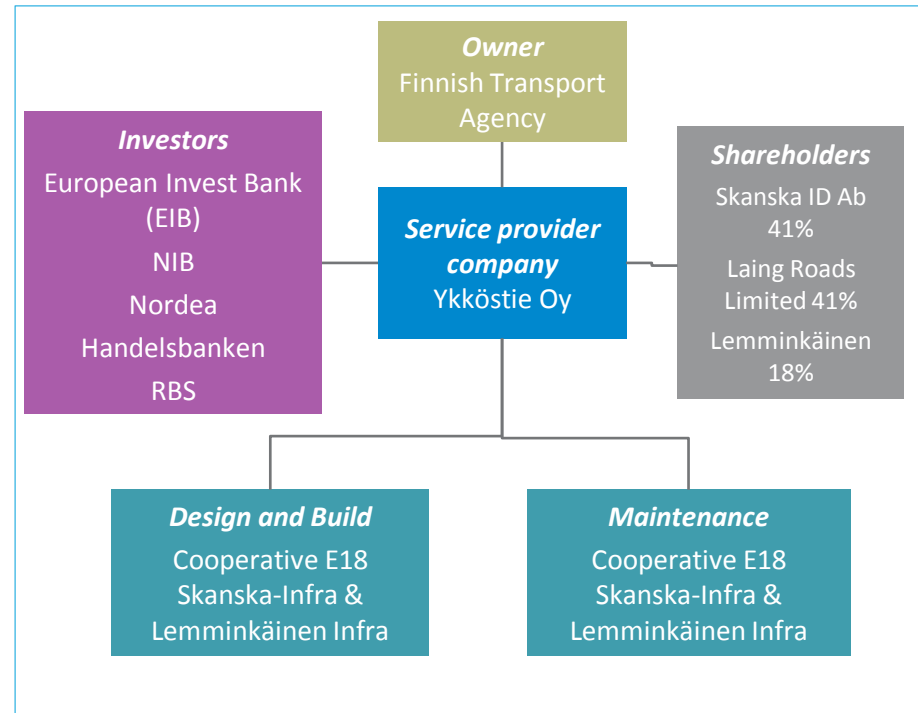


E18 Muurla-Lohja

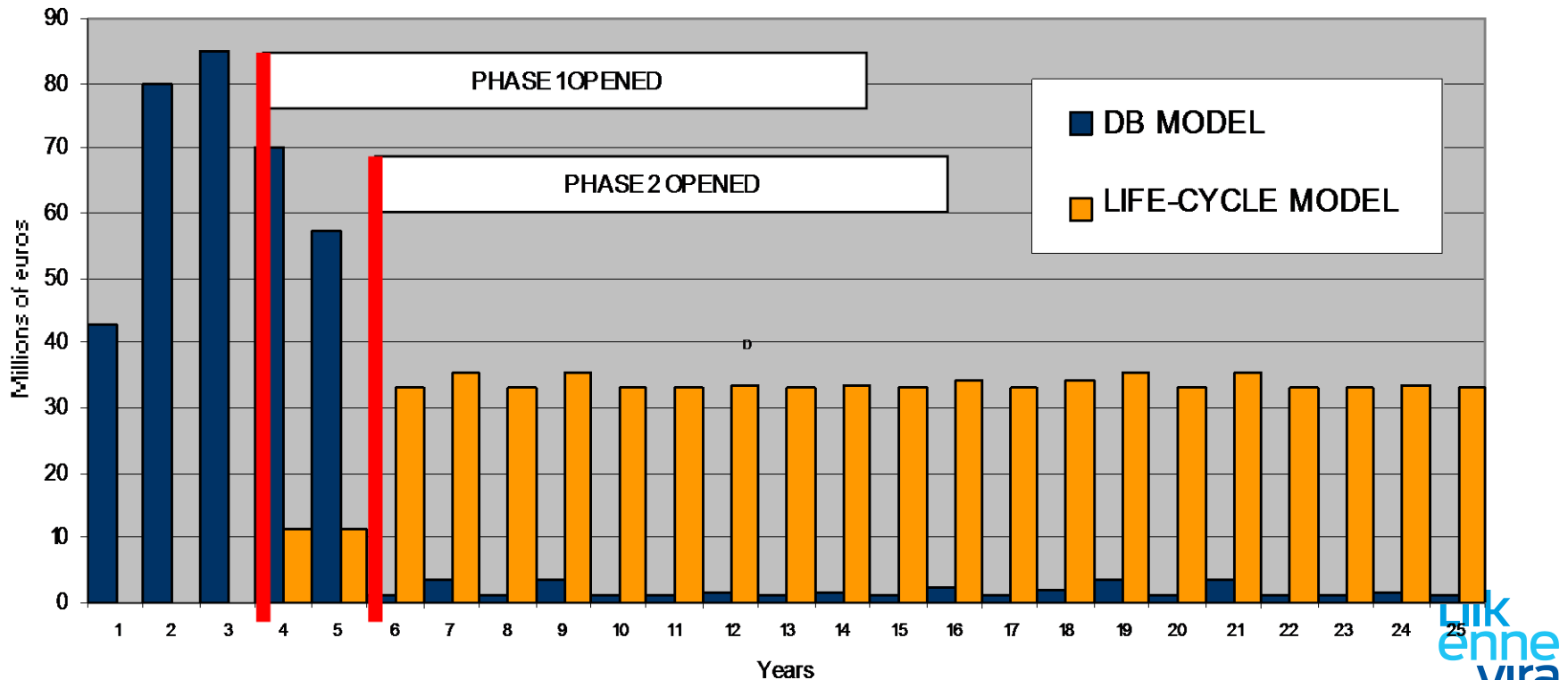
Project introduction

- E18 Muurla-Lohja motorway is part of international East-West connection from Turku to Helsinki
- Project includes 51 km motorway, 12.5 km other roads, 27 km private roads, 7 Tunnel (total length 5,2 km) and 8 interchanges
- Contractor Lemminkäinen & Skanska-Infra consortium.
- For the bidding process participated also
 - Bouygues & Kesälahden Maansiirto Oy
 - Cintra & SRV Oyj
 - Tielikelaitos & YIT Rakennus Oy
 - Vinci Concessions
- E18 Muurla-Lohja service contract sign 10/2005
- Construction -period 3 years, opened for traffic 11/2008 & 1/2009
- Total cost ~700 M€ of which invest element ~300 M€
- PPP –Contract will be closed in 2029

Organization



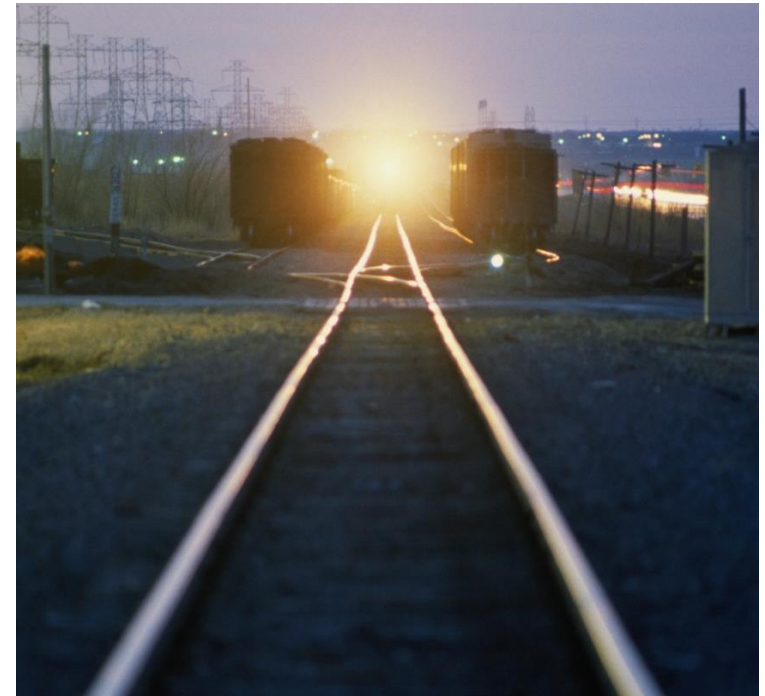
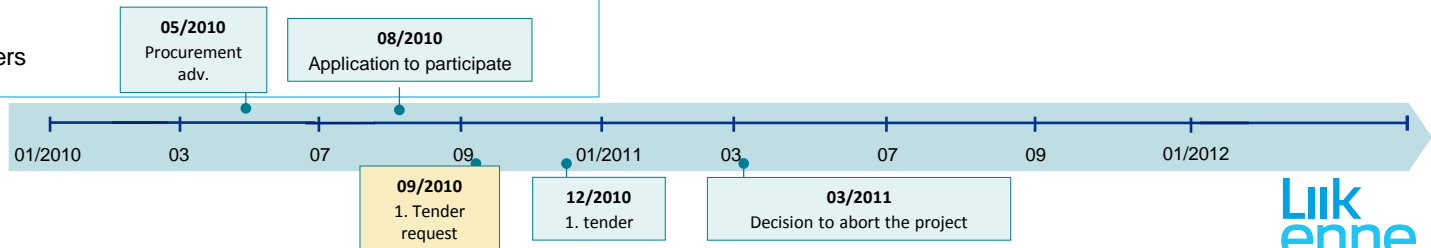
The client's cashflow in traditional (DB) and life-cycle model



East Botnian Railway Section Kokkola-Ylivieska

Project introduction

- Kokkola-Ylivieska was first planned railway PPP- project in Finland,
- Kokkola-Ylivieska section is part of Seinäjoki-Oulu railway (the most important North-South rail connection)
- 80 km from Single Track to Double Track
 - Axle load 25 t – speed 200 km/h
- Estimated Total Cost according to the preplanning from 2009 are 650 M€, of which investment 263 M€
- Estimated construction 3 and maintenance period 27 years
- 2 Bidders Consortium
 - Destia Oy & ja YIT Rakennus Oy
 - Lemminkäinen Infra Oy & VR Track Oy
- Project aborted in spring 2011 because of high tender cost
- It goes further as first large Design-Build Contracts by Railways in Finland
 - 3 Sections - only 1-3 bidders

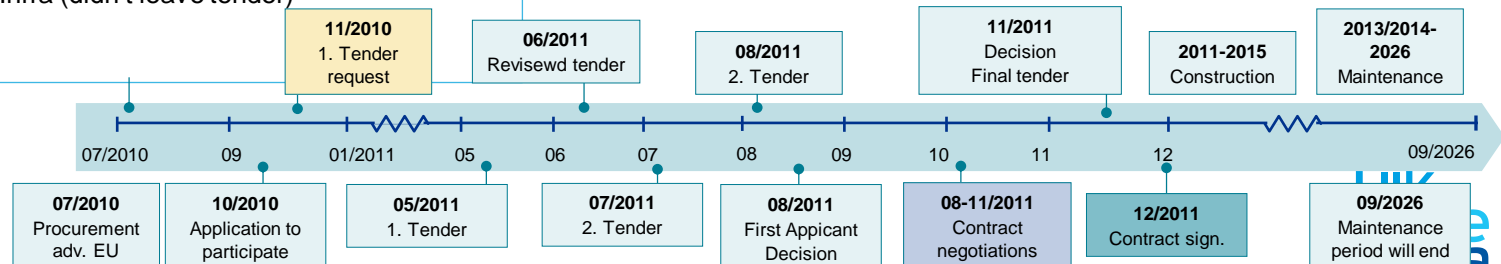
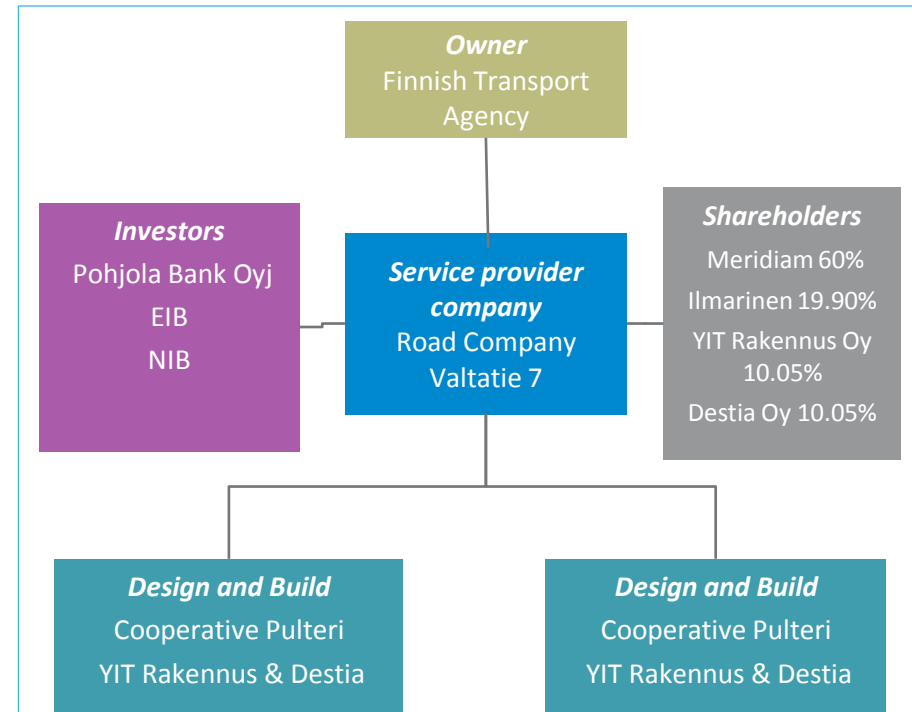


E18 Koskenkylä-Kotka

Project introduction

- E18 Koskenkylä-Kotka is part of international East-West connection from Helsinki to Russian border. It connect also Southern Finland cities, airports and harbors.
- Total 53 km motorway (36 km new motorway & 17 km removing from semi-motorway to motorway. Bridges 63.
- PPP Contract is total 15 Years, of which 3 years construction and 12 years maintenance period. Contract will be closed at 2026.
- Service Contract Total cost 623 M€, of which invest 285 M€. Contractor Destia & YIT consortium.
- For the competitive bidding participated also
 - Strabag
 - Vinci Concessions (didn't leave tender)
 - Lemminkäinen Infra (didn't leave tender)

Organization



Appraisals

Procurement documentation

- **One important target: improve productivity of the industry.**
- **The output specification has a key role in realising the benefits of PPP.**
- Documentation is seen to have been of **high quality** by the interviewees.
- **Changes to the documentation, especially with respect to risk allocation**, have been necessary in order to secure bankability. These changes have been negotiated in the procurement process after the preferred bidder has been chosen.
- **The client should be better able to anticipate the requirements of the project financing banks in the procurement and contractual documentation before selecting the preferred bidder**
- **In order to streamline the procurement process, the client could consider fixing the affordability envelope and output specification up front and using contract (construction and operation) duration as a bid evaluation criteria.** The use of output specification is seen to call for a at least a 15-year operational period

Bidding and negotiation phase

- The bidding and negotiation phase **has been very short** in comparison to international benchmarks.
- **The client has been extremely successful in its systematic approach to organising the bidding competition and concluding the negotiations. The same approach should be applied in future projects.**
- **In order to take advantage of competitive tension, the client should take the bidders' critical requirements into account whilst more than one bidder is involved in the procurement process.** The client has found it **challenging** to identify the genuinely critical requirements
- The negotiations between the client and the bidders have been perceived by the bidders **to be confrontational** as opposed to being sessions **for joint problem-solving**.
- **The client has an opportunity to make use of the best practices of alliancing bringing the Finnish PPP negotiation practices closer to those used internationally.** Some tension in the negotiations is unavoidable due to their commercial nature.

Construction phase

- The construction phase for Highway 4 Järvenpää-Lahti and E18 Muurla-Lohja has expired. **The construction phase on both projects was approximately one year shorter than what it would have been if they had been procured traditionally.** This is one of the main achievements of PPP in Finland
- E18 Koskenkylä-Kotka project (under construction) has resulted in an improved working atmosphere in comparison to the previous project. **The private sector partner has obtained positive feedback from the client on its increased openness towards the client**
- **A number of challenges were encountered during the construction phase of E18 Muurla-Lohja. These led to a slight delay in the completion of the project and partially damaging the relationship between the parties.** Possible causes to the challenges
 - The private sector bid was commercially very aggressive in an environment where civil engineering costs were rising above expectations. As a result, it became essential to seek cost-effectiveness in all aspects of the project
 - The client used a very demanding output specification for traffic control. The private sector did not understand the challenges involved with the traffic control system at the time of bidding and signing the contract

Operational phase and hand back

- Two PPP projects have proceeded to the operational phase
 - Highway 4 Järvenpää-Lahti is considered to be a success story. **The active role the PPP company has played in collaborating with the local authorities to revitalise the local economy was highlighted by the interviewees**
- **Hand back:**
 - The preparations for the hand-back of Highway 4 Järvenpää–Lahti started three years before the contract was due to expire. The hand-back was a success.
 - **The PPP company had rectified all the issues identified and fulfilled all the requirements set for the hand-back of the road at the time of the transfer.**
 - The guidance drawn up during the hand-back process should be used on upcoming projects. A detailed ex-post evaluation on the hand-back should be undertaken for the benefit of future projects
- The requirements for E18 Muurla-Lohja were defined primarily as outputs linked to the payment mechanism. This has caused some interpretation challenges. **The client and the private sector have prepared documentation on the interpretation of the payment mechanism.** These documents should be used on future PPP projects in seeking to simplify the payment mechanism

Financial Solution

- **The higher cost of project financing compared to public sector financing was a reoccurring theme in the interviews.** The potential avenues for reducing the cost of financing whilst retaining most of the benefits arising from efficient management of risk under PPP include
 - **The Irish model:** the client funds approximately half of the project's capital costs directly during the construction phase as private finance is used of the other half. As a result, more affordable public sector financing and the PPP risk allocation are both being used
 - **The French model:** The client guarantees a proportion of the availability payment thus leaving approximately 70 percent of it protected. This allows the protected part of the payment to be financed at a cost close to public sector borrowing
 - **The Danish model:** the client refinances the project using public sector funds post construction. This brings more affordable financing to the project at the time most of the project risks have been passed in time
- The above PPP models have been evaluated in connection with previous PPP projects and proven not to be adaptable to the Finnish context. However, the evaluation of the models should be continued

Risk Allocation

- **Two MAJOR challenges by risk allocation** came up
 - On E18 Muurla-Lohja, the private sector was allocated **the responsibility for meeting specific outputs standards for traffic control and tunnel safety**. This turned out to be very challenging leading to a slight delay in the completion of the project.
 - On Kokkola-Ylivieska (railway project), **the bidders were asked to take the long-term responsibility for the existing infrastructure condition of which was unknown**. The project was **cancelled as a PPP due to the increased costs resulting from the risk transfer**
- The European project financing market has an acknowledged **bankable risk allocation for PPP projects which changes slightly over time depending on market conditions**. The client has found it challenging to identify the appropriate level of risk transfer due to the absence of common European financing terms
- The **value for money of using the established risk allocation** has surfaced during the bidding and negotiation phase.

Payment mechanism

- The payment mechanism on Highway 4 Järvenpää-Lahti was a **simple shadow toll** mechanism.
- The payment mechanism on E18 Muurla-Lohja is **availability based with multiple dimensions**.
- The availability payment mechanism **was simplified** for E18 Koskenkylä-Kotka.

- **However, future scope for simplification can still be identified.**
- **Among the FTA report a possible option is to make the trigger for availability binary by road segment and utilise the widely used payment mechanisms for regional road maintenance contracts as a parallel mechanism**

PPP- Conclusions in Finland

Finnish Transport
Agency

Thank You!

