IPMA Global Project Excellence Award 2018 Feedback report

Title of the project: Rantatunneli project
Project Organization: Finnish Transport Agency
Date: 26.08.2018

The International Project Management Association (IPMA) is very grateful for your participation in this IPMA Global Project Excellence Award 2018 contest and in promoting international project benchmarking developments. Following on from you entering the Excellence Award 2018 we hereby offer the Feedback Report.

Your application was assigned to a team of IPMA Global Project Excellence Award Assessors, who have assessed your application using their experience, Project Management competence and commitment to the principles of fair and objective assessments. It is they who have compiled this Feedback Report. The contents reflect the information from your written submission, the evidence from the Site Visit and evaluation and suggestions from the Assessor Team.

The Feedback Report consists of five parts:

The content of this Feedback Report is structured so that it may be used as a stand-alone document, contributing to your Organisation's Lessons Learned. For each of the Project Excellence Model criteria it highlights the strengths that the Assessors noted. These good points are mentioned so that you may value them, ensure they are embedded in your organisation and developed further where that may be relevant.

For each criterion, suggested areas for improvement are also included when deemed appropriate by the Assessor Team. Based on the evidence presented in your application and the Site Visit, findings the Assessor Team indicates areas and techniques used elsewhere in Project Management that may benefit similar projects that you may undertake in the future. In the context of continuous improvement, we offer these comments for your consideration within your own organisation and for future projects.

It is neither the intention of the IPMA nor may it be part of the assessors´ performance or intention to undertake any consultancy work by means of this assessment and report, nor to have given any advice during the Site Visit.

In the name of the IPMA, we express once again our utmost appreciation for your participation and efforts in terms of project excellence and we wish you all the best for the future. May all your projects be excellent.

International Project Management Association

Constanta Bodea
Chief Judge
IPMA Global Project Excellence Awards 2018

Pau Lian Staal- Ong

IPMA Awards Coordinator

1. Brief overview of the assessment process

Application

The application and assessment process started with your production of the Application Report for the IPMA Global Project Excellence Awards 2018.

Assessors

Each application was assigned to a team of at least 3 Assessors. The Assessors are experienced project managers, experts from various sectors and management disciplines from companies and organizations in private industry or any other area of activity in various countries. To date approximately 500 assessors of 25 different nationalities have been specially trained for the IPMA Global Project Excellence Award competition. Some Assessors are university professors or lecturers, some are consultants and others are in line management, executives or project management experts. All Assessors were trained on the IPMA Project Excellence Model, part of the IPMA Project Excellence Baseline, for the IPMA Global Project Excellence Award process to make the assessments as uniform as possible and thus suitable for International Benchmarking.

The following factors were taken into account when selecting and compiling the Assessment Team:

- No conflict of interest between the Assessor and the Applicant;
- Experience in the Project Excellence assessment process;
- Appropriate mix of training in understanding and applying the Project Excellence Model, competence profile, seniority and cultural diversity;
- Understanding of and experience in the sector of the applicant and regarding the specificity of the project.

For each team, one Assessor with a special leadership training was appointed Team Lead Assessor and assigned the role of leading and managing the assessment process.

Assessment process

Each assessor received a copy of your application for their independent assessment. Using this information, the Assessors identified strengths, areas for improvement and Site Visit issues for each criteria. The Assessors reviewed your application for proof statements reflecting or exceeding the criteria of the IPMA Project Excellence Model with its Assessment Scoring Tables for each Project Excellence Model Area. Where proof was missing from the Application, these were noted for future investigation.

Thereafter the team conducted a Team Virtual Meeting in which the individual results were presented and discussed, team scores were compiled, and a detailed plan for the Site Visit was developed.

Site Visit

The purpose of the Site Visit is to confirm the information presented in the application, eliminate unclear points through interviews and document reviews, possibly gathering further information of quality evidence for the project application which may have been missed in the application process.
After the Site Visit the assessment team meets, discusses Site Visit findings, and adjusts its assessment and scoring depending on the findings of the Site Visit.

Judges

The Judges Panel for the IPMA Global Project Excellence Awards 2018 consists of internationally highly reputed experts such as past IPMA Award Winners, former IPMA President, Vice President and other leading internationally recognised Project Management Representatives.
The Awards Judges monitored the complete assessment process. Based on the results of the first virtual meeting of the selected Assessor Team the Award Judges formulated additional questions for the Site Visits.
On the basis of the Site Visit reports and recommendation by the Assessor Team, the Judges determined through a consensus process, which Applicants were to become non –Finalists (Committed to Excellence) or Finalists from which Bronze Winner(s), Silver Winner (s) and the Gold Winner are selected.

Feedback Report

The Feedback Report outlines strengths and areas for improvement that were ascertained during the Site Visit and agreed upon after the Site Visit by the Assessor Team during its final consensus meeting. This is supported by the additional findings that were made on the occasion of the on Site Visit.

2. Summary on your application

The team of Assessors have considered your application for the IPMA Global Project Excellence Award 2018 and have completed their assessment.

- The score of the assessment team per Project Excellence Model Area is reported to be:
  - People & Purpose: 78
  - Processes & Resources: 70
  - Project Results: 79

The Judges consider this application to be a Gold Winner of the IPMA Global Project Excellence Award 2018 in the category mega-sized projects.

- The assessment process was undertaken in accordance with the IPMA Project Excellence Model part of the IPMA Project Excellence Baseline. No significant variations to that process were reported by the Team Lead Assessor, nor by the Awards Judges, nor by the IPMA Awards PMO.

3. IPMA Global Project Excellence Judges Statement

Strengths:

1. The implementation planning and construction of Tampere´s Rantatunneli was based on an alliance contract. The service providers were paid a bonus of close to 5 million EUR, evidencing an outstanding result of the project.
2. The judges were impressed with the project management results achieved by the project: completion 6 months ahead of schedule and budget savings (EUR 3.76 million) while meeting all quality and safety requirements.
3. Regular "Value for money" reports were made public by the Finnish Transport Agency, making use of the Australian National Alliance Contracting Guidelines. The reports highlight the status of the project together with the attainment of the owner´s targets, the achievements regarding the right price, the gain/pain-share regime outcomes as well as the lessons learnt.
4. The judges are impressed with the process that was formulated to capture ideas and innovations throughout the project, resulting in a total saving of approximately 20 million EUR in connection with the setting of the target outturn cost during the development phase.
5. The project applied lessons learned from other (alliance) projects and lists their own experiences and lessons learned for utilization in future projects. For example, the use of a "Big Room", the "Target Value Design (TVD)" and trust-building are important lessons that could be used to improve project execution of future projects. The application of lessons learned is an example of excellence. In addition the examples mentioned helped to achieve excellence, compared to other projects.

Areas for improvement

1. There was not enough evidence provided about a well thought-out selection of project management methods, techniques and tools. For example, the key principles of risk management, the division of responsibilities and the sharing of risks were determined at the beginning of the development phase.
2. The judges could not find enough evidences of how the project team took the various stakeholders into account, e.g. analyzing and visualizing the diverse groups of stakeholders, monitoring and controlling their satisfaction along the project lifecycle as well as introducing respective actions. For example, it could not be clarified how the impact of the "Value for money report" on the public opinion was evaluated and considered.
3. Despite the fact that the project team members and related stakeholders were satisfied, the way "how to" make those stakeholders satisfied was not documented or provided during the assessment process. Maybe this is a routine already in this cultural context, nevertheless it is worth noting that such "soft" practices should be high-lighted and utilized, building trust-worthy supplier relationships and high-performance teams.

4. In a project of this size and scope that is applying for the Global Project Excellence Award, the judges would expect to find evidence of the implementation of more formalised project management processes for, for example, document management, permits and consents and project governance.

4. The General Assessors Statement

The project is a unique example of effective adaptation and integration of various management concepts (e.g. Big Room, lean methods, Target Value Design, Target Value Delivery, Last Planner timetable). Above all, however, thanks to properly well fitted alliance model it is an example of building a unique project excellence culture, open to change and based on a broad consensus of stakeholders.

Alliances are not new in the construction sector. Several companies have formed alliances based on their mutual expertise to meet the expectations of major projects. Nevertheless, the Rantatunneli project has adopted a more successful form of cooperation with the establishment of an alliance contract to move away from the traditional "adversarial" approach in which parties are first of all competitors. Rantatunneli Alliance has involved in collaborative process which aimed to promote openness, trust, risk- and responsibility-sharing and the alignment of interests between clients and contractors. The focus was mainly on the best arrangement for project delivery rather than on self-interests, typical of traditional contracts.

The operational model of the Rantatunneli project required the deployment of a strategy different from the traditional one. From an early stage of the project parties were seeking to align their (commercial) interests and avoid win-lose scenarios. They have accepted a collective responsibility for risk, performance and outcome (gain-sharing / pain-sharing) and avoided a culture of blaming. Rantatunneli parties have formed integrated teams to work out strategies from which both parties, and the progress of the project, have benefited.

Although it is one of the first projects to adopt this new operating model in Finland, the Rantatunneli project can be considered as a great success for its sponsors in particular and the national construction sector in general. It has been realized with much better results than the national standards.

The project shows very high level of project management competencies. These refers both to project management staff, project employees as well as to suppliers and contractors. Thus, it is very difficult to identify areas with significant potential for improvement. However, in the quest for excellence there is always space for doing things better. In this context the following list should be considered as a list of inspirations for further actions.

- Lessons learned in relation to "soft" elements of adapted project management approach, if had been formulated might have had particularly important meaning for this and similar further projects.
- Considering the relatively large scale of the project and many stakeholders involved, the use of slightly more advanced tools supporting document management could further improve the efficiency of work. In particular, the functions of advanced structuring and indexing of documents seem to be valuable.
- A wide range of activities aimed at stakeholder management were undertaken in the project. Although they have undoubtedly produced very good results, it seems that they were implemented to a large extent independently. As a consequence, the synergy effect of this type of activities was used to a small extent. Therefore, the development of a coherent strategy for managing stakeholders, taking into account their mapping and force field analysis, combined with a periodic satisfaction survey could not only improve the perception of the project, but also become a valuable experience for local government initiatives in the future.

5. Detailed comments on strengths and areas for improvement by Sub-Criteria

A. People & Purpose
The People & Purpose area follows the logic that project excellence starts with leaders, including sponsors, who define and follow the right values and consciously apply an effective leadership style. These leaders engage key stakeholders in the definition of the project objectives and strategy formulation. They build effective teams and engage the right partners and suppliers in order to achieve project success.

A.1. Leadership & Values
Excellent projects are led in a way that anticipates the future and realises it with persistence. The leaders (i.e. all the people involved in a leadership/managerial role within the project or from the client/line organisation) act as role models for the project team with respect to values, morals, focus on objectives, working standards, self-management and cooperation, and create a high-trust, high-inspiration environment. Leaders enable and authorise the project team to anticipate and act in time to achieve project success. They support a flexible project organisation capable of adapting to changing circumstances.

A.1a. Role models for excellence
Strengths

- The alliance model was selected in order to improve the productivity of the infra industry. This is clear sign on promotion of excellence.
- Project has received two awards already. Participation in these award competitions is a sign of striving to excellence.
- The alliance values of co-working and decision by consensus was promoted and client's project manager led on this by example. Parties plan together.
- Monthly reporting by the Alliance Project Manager to the leadership team enabled monitoring of the effectiveness of the approach and solutions in relation to main stakeholders needs.
- The practice of training provided to all regardless of what party they are, after competence gaps identified to benefit outcome.
- The sponsors of Rantatunneli project promoted the organisation's values in project aligned with the principles of the 'Alliance' model chosen as the project's operating mode. The application of these values was essential during the project's progress: moreover, the analysis of the evolution of the project through the three references report clearly demonstrates that the various decisions and changes were taken with a spirit of dialogue, openness, trust and transparency in the interest of the project. The update of the TOC, the fundamental element of the alliance contract, is one of the proofs of the state of mind of the project team.
- The sponsors have sought feedback from the different stakeholders to improve their leadership approach by adopting an unprejudiced approach to collect ideas and suggestions. As well, the opinions and suggestions of the client were put in the same way as the others for objective examination and discussion with the alliance team. This shows that the project sponsors played a model role of excellence throughout the execution of the alliance contract.
- The crucial values to be followed in the project were clearly defined (trust, openness, commitment, no blaming, innovativeness, unanimous decision making, value for clients money). This shows that the leadership really concentrated on setting and living the values.
- For the needs of the process of completing the integrated project team, selection criteria for service providers have been introduced. They were focused on the values promoted in the project, which were, among others: leadership skills, ability to work innovatively and transparently. Undoubtedly, this proves that since the very beginning of the project it was important for the project client not only to achieve the assumed project benefits, but also that they will be achieved in the preferred way.
- The project introduces a transparent incentive system that promotes pro-innovation behaviours. This is undoubtedly an important element supporting the promotion of striving for excellence.
- In the project was implemented the principle that the project manager and experts must promote the desired behaviours by giving personal example. By acting transparently, constructively and avoiding blaming, they shaped the work culture based on trust and openness. This is an example of thoughtful planning and consistent leaders acting.
- To harnessing the collective power of a team, the client's project manager was obliged to take unprejudiced approach to team's suggestions. He was keeping his opinion in the background unless there were objective arguments, which proved that these suggestions are not optimal. This is an example of well thought way of leading increasing trust between all parties and their involvement.

- The developed approach to project management was related not only to changes in the culture of project management, but also to the transformation of the project client's role. In this it has changed from the role of claim and control to the role of an active co-creator of the value provided by the project. Therefore, it should be stated that all relevant stakeholders are fully committed to the innovative approach and proactive forecasting of potential areas for improvement.
- The KPIs system and the bonus system developed with their use were fully oriented towards supporting innovation and, consequently, improving the project's results. Together they were coherent, comprehensive, mature and innovative solution in itself. Undoubtedly, it was a strong incentive to work using the PDCA approach and thus one of the key drivers of project excellence. The process of defining KPI's in the project was well thought out and planned in detail. It began during separate phase of formulating the project implementation strategy, when project objectives were set. KPI's target values were agreed in the development phase.
- Monitoring of current KPIs has been carried out regularly, according to established standards, on a weekly basis for individual technical groups and monthly on the executive team level.
- Project leaders were very open and were accepting feedback from the project team with reference to their leadership. Project team members appreciated it a lot and pointed at it as an important factor of the alliance model success.
- The choice of the project implementation model was made in a conscious manner. It was preceded by reference visits, coaching, gathering information at conferences and seminars. This proves the active search of managers by inspiration in the pursuit of project excellence.
- The project managers are clearly perceived by all interested parties as a conceptual designers and a good spirit of the alliance model success. As they said, with a different attitude on the managerial level, achieving such exceptional results would not be possible.

Areas for improvement

- There is always space to improve and a meticulous examination of pertinent procedures, processes/practices would eventually succeed in suggesting ways to improve. Nevertheless linking the applied practices with project results it could be stated that the project, with reference to this particular criterion, achieved a level close to excellence.

A.1b. Care for project stakeholders
Strengths

- The Alliance's commercial model ties the benefits of the client with the benefits of the service providers. This means that they succeed or fail together. This "goal-alignment" is sign of successful supplier management.
- All parties, including subcontractors, are aware of the goals and earning opportunities. The service provider consortium can influence the measuring and scales of the goals. This is a sign of dialogue that creates good working atmosphere.
- The Big Room had "open door" for all and all the time. The project managers and all key experts worked there continuously and were available for the stakeholders, media, citizens. This is sign of communication with the stakeholders.
- Creating safety conscious environment was a key project objective relating to the outcome for customers/end-users and the final outcome surpasses EU safety directives. Safety was also one of the key result areas to be achieved by project team in delivery.
- The alliance model adopted, naturally allowed the creation of a favourable working environment to maintain close relations with the stakeholders. All of the key stakeholders are represented in the project organizational structure, thus promoting the dialogue that leads to mutual care and objectives. The organizational structure of the project was updated and improved when needed: the head of transport from the Pirkanmaa Centre for Economic Development, Transport and the Environment, for example, was invited to also attend the ALT's meetings in addition to the actual members of the ALT.
- The alliance team leaders behaved in a socially responsible way by putting forward the public image as one of the key result areas. A detailed communication plan was put in place during the DP phase and updated regularly under the responsibility of the alliance communication group represented by all key stakeholders. The objectives of this plan have been clearly defined, the key messages formulated for everybody and the different situations anticipated. The project team collected feedback and responded to all requests.
- The concern for stakeholders has been reflected in the project objectives. The vast majority of them were focused on the local community, and one referred directly to "increase of trust and transparency between the parties and therefore to improve the cooperation". This distribution of accents clearly reflects the great importance of the satisfaction of the main stakeholders in the overall assessment of the project.
- The project management structure was constructed in such a way that representatives of the main stakeholders were present at all its levels. This helped to build a broad platform for discussion and

decision-making process with clear escalation path (alliance design guidance team, alliance project team, alliance executive team). This is a proof that the concern for the project's shareholders was not an incidental phenomenon, but from the beginning was embraced in the implemented priorities.

- Striving to focus the stakeholders around the project's objectives and to ensure good coordination and smooth implementation of the work, a communication team was set up. This is a very valuable initiative, given that the project's implementation has strongly and for a long time influenced the local community.
- Thanks to the alliance model, various project stakeholders have gained a real chance for further professional development.
- The development of stakeholders during the project was carried out, among others by means of regular trainings.
- The innovation management system has been developed and implemented with the participation of all major stakeholders. In this way, everyone had an assured influence on changes in the project, which undoubtedly significantly increased both the level of engagement of each party and the level of satisfaction with the improvements implemented.
- In order to objectify the improvements made and to document the efforts and contributions of various stakeholders, the value for money report was introduced. Eventually it became a good practice recommended for further similar projects in the country.
- With the participation of all project stakeholders, a model for achieving consensus within the alliance team was developed. It was constructed as the hierarchy of the following elements: trust -> healthy conflict -> commitment -> results. This proves that good interpersonal relationships from the very beginning of the project were accepted as the foundation for the success of the project.
- Representatives of various stakeholder groups have independently indicated that thanks to the exceptionally partner and open attitude of managers, and a well-designed innovation management system, they felt safe. They were not afraid to suggest new ideas. This is a proof that the project has managed to create a unique spirit of project excellence. This conviction was shared by all stakeholders.

Areas for improvement

- The implemented approach of proceeding with project issues seems still have some space for improvement to make it even more systemic and coherent. The lack of one integrated issue-log for issues addressed by external stakeholders was noticed. The open door policy and making publicly available e-mails and phones' numbers of the project managers are very positive practices but still have some potential for further improvement by better management of the gathered information (e.g. by implementation of a basic CRM system).

A.1c. Orientation towards project objectives and adaptability to change

Strengths

- The environment where all take responsibility for project objectives and results was created. All felt equally responsible for mistakes - a no blame culture was successfully implemented.
- Trainings meeting development needs and organization of site visits on other referential projects helped to remove obstacles that could have blocked or limited team members.
- Project managers managed to enable broad range of stakeholders to generate ideas and innovation. It resulted in implementation of many improvements in this project. At certain period time and resources for innovation was a challenge and but the solutions worked out were fruitfully utilised in further steps as precious lesson learned.
- The client's project manager have created a working environment around the Big Room favourable to the development of the alliance project team cohesion, and exchange of ideas and new solutions to achieve the objectives. The setting up of such an environment has made it possible to take decisions and arbitrations between the alliance's stakeholders in good time and to offer good conditions for innovative operations.
- The project clearly defined the expected short- and long-term results. The latter included both expected ecological outcomes (in a possible broad sense) as well as the creation of new infrastructure opportunities. E.g. the project includes a provision for the construction of the underground interchange to be ready to use it in a future without suspending traffic through the tunnel during the construction works. This is good example of sound planning and optimizing efficiency of further related projects.
- A bonus system was developed and implemented, which rewarded the broadly understood integrated project team (in the alliance model) depending on the level of the project's objectives achieved. Introduced a rule: "The best financial results and fee can be achieved only when the whole project succeeds. By optimizing someone's own delivery successfully is not enough". This is an example of creating a project environment in which the main stakeholders in a transparent manner (as a group) are motivated to achieve the objectives of the project.
- All stakeholders were familiarized with the project's objectives, their bases and the idea of the adopted alliance model. This is an expression of the project leaders' efforts to be transparent.

- As one of the tools used to ensure a uniform understanding of the requirements by project stakeholders, stimulating creativity and regular training were used. Based on the identified needs, a training program was initiated at the beginning of the project. This is evidence that the approach adopted was well linked to the identified needs and introduced a mechanism to shape the stakeholders' ability to respond to the needs that may arise during the implementation of the project.
- Commitment and creativity were regularly measured and strengthened. This is proof of reliable planning and management of stakeholders' development. The importance of it is difficult to overestimate taking into account long duration of the project. In this case, the probability of possible changes in the environment is relatively high and having an engaged team capable of adapting to these changes is of great importance.
- In addition to the standard requirements resulting from the applicable legal acts in the field of construction, environmental, road, safety, etc., almost all internal regulations were worked out jointly by the alliance team and representatives of the local community. As a rule, however, there were not many of them. In this way, a high level of flexibility was ensured, which was required by the ambitiously set KPIs target values. Moreover, thanks to this, a space for continuous improvement was created in accordance with the project excellence approach.
- Individual issues requiring a decision were made to win a win-win agreement.
- It is therefore necessary to conclude that the impact of internal regulations on the main stakeholders of the project was enormous, as they themselves introduced them (they were perceived like their rules rather than externally enforced regulations). Striving to ensure the highest possible efficiency of teamwork, all members of the alliance underwent special training and coaching. They also were supported by external psychologists as alliance team meetings' moderators.
- Designing and implementation works have been divided into modules. After each module, as a rule, lessons learned were defined and entered in the next module. This is an evidence of active use of the PDCA model in the pursuit of the best results.
- In the project, by purpose was designed the transition from knowing culture into learning culture what helped a lot to enhance the project team adaptability to change.
- All the project managers, executive team members and the project team members were coached to be able to use as much of co-working culture as possible for improvement of the project results.

Areas for improvement

- There is always space to improve and a meticulous examination of pertinent procedures, processes/practices would eventually succeed in suggesting ways to improve. Nevertheless linking the applied practices with project results it could be stated that the project, with reference to this particular criterion, achieved a level close to excellence.

A.2. Objectives & Strategy

The objectives and strategies of excellent projects are defined and developed by the project leaders in alignment with stakeholders' needs and requirements. They also take into account the project environment.
Once agreed, objectives and strategies are regularly reviewed and, if necessary, adapted in response to a changing environment or to stakeholder demands.
Excellent projects use project objectives and overall project strategies to develop and continuously adapt their plans and procedures.

A.2a. Managing stakeholders' needs, expectations and requirements

Stakeholders, their needs, expectations and requirements are clearly identified and actively managed.

Strengths

- Urban and environmental planning and their impact assessments included a very extensive and thorough dialogue with the various parties and citizens. This is a sign of identifying the stakeholders and their expectations.
- There were a lot of communication activities towards the stakeholders (information, progress, memos). All parties were aware of main goals and earning opportunities and some of the project documents were publicly available. This shows that stakeholders and their needs were valued.
- Stakeholders were invited to project meetings whenever needed or if they wanted. This is a proof of listening to the stakeholders.
- The incentive mechanism was published during and after the project.

- The needs and expectations of the key stakeholders were identified before the start of the project, discussed and aligned with the project objectives as part of the preparation of the alliance contract. Interactions with key stakeholders started upstream of the project (procurement phase) and led the customer to choose those with a better ability to evolve in the alliance business model. The needs and expectations of this category of key stakeholders have been taken into account and reviewed during the main phases of the project through the TOC and the incentive system. This review also consisted of comparing the provisional achievements of the project with the expectations and needs of key stakeholders at the end of key phases in order to monitor the effectiveness of the alliance approach.
- Regarding the external stakeholders (e.g. citizens, media, associations, inhabitants), a communication plan led by the representatives of the alliance team was deployed through a plan combining a transparent institutional communication and another spontaneous through the concepts of "open door" and "direct feedback". The roles of the different parties of the alliance in charge of the communication were well distributed and executed according to instructions related to major events or disturbances due to the project.
- In the project, in order to facilitate the management of the needs and requirements of stakeholders, the Big Room concept was introduced. It consisted in creating a common workplace for all project parties (one office). Such an approach (also known as a war room or integrated project management team) certainly improved the transparency of management actions, the effectiveness of lean methods used and also stimulated openness in the team.
- Building the engagement of the members of the service providers consortium has already begun at the very beginning of the project. These activities included, inter alia, involving these stakeholders in the process of determining goals measures and their target values. This is an example of balancing different perspectives in the project and at the same time a preventive action, minimizing the risk of subsequent misunderstandings and conflicts in the context of various priorities.
- The rule (resulting from the adopted "open door" policy) has been introduced that project managers and key experts are constantly available to stakeholders (including the media and representatives of the local community). In addition, there were activities taken to facilitate the interaction of the project team with stakeholders. They consisted of monthly open briefings and communication using a wide range of media. The openness and access promoted in this way undoubtedly had a positive impact on the social reception of the project and a sense of security.
- Undoubtedly, the effective integration of the lean approach and the strong involvement of the most important stakeholders supported by the bonus system constituted the strength of the project and the foundation of the project excellence approach promoted.

Areas for improvement

- Although working with stakeholders was a very strong side of the project, it could be helpful to categorize them and develop a stakeholder map. It would undoubtedly be a good starting point for further agreeing dedicated management strategies for each category.
- No proof was found that the project stakeholders' satisfaction surveys were conducted on regular basis. It could have helped to gather feedback data in more standardized and systemic way to make the further benchmarking process easier.

A.2b. Development and realisation of project objectives

Strengths

- Identified urban development and road transport development needs defined the purpose and effectiveness targets of the project. To implement these a plan was drawn up. This is a sign of deriving the project targets from stakeholders' expectations.
- "We discuss as long as it is needed so that everyone can agree. No voting and client does not decide alone." This is strong proof for using consensus approach to deal with conflicting interests.
- Understanding and willingness to respond to project requirements and bring up ideas were maintained, measured and strengthened through regular training. This is a mean to secure the commitment of the project team members to the project objectives.
- The project objectives were clearly defined by the client project team and discussed during the procurement phase, to align the expectations and obligations of each stakeholder according to the technical information available. The objectives of the project were reviewed twice: once during the negotiation of the alliance contract and once between the two phases DP and IP. Key stakeholders were therefore informed and could effectively contribute to their achievements.
- The project objectives have been adapted to continually measure the performance of the achievements that impact the incentive system. Thus, the results project was guided to keep alliance project team focus on the same interests.

- The objectives of the project were closely related to the client's long-term aspirations and well embedded in the reliably identified realities of the project environment (key factors and conditions for success). This demonstrates the rational focusing of project objectives around a broader regional development strategy.
- At the stage of formulating project objectives, various types of benchmarks were taken into account, adopting ambitious target values for the project, sometimes significantly exceeding the benchmark values. This is undoubtedly the expression of striving for excellence in the project.
- A plan for implementing project objectives has been developed. According to it, the degree of their implementation was subject to periodic evaluation and, depending on the results obtained, the necessary measures were taken. This is an example of reliable planning and use of control mechanisms that support the implementation of project objectives.
- Thanks to the introduced alliance model and the Big Room concept, conditions were provided for active involvement of various stakeholder groups in the process of formulating the project goals and their further mutual balance (alignment) were facilitated. Such behaviour proves that the project was making efforts so that its goals would not be subordinated to only one group.
- The most important indicator illustrating that the activities related to the development and the realisation of project objectives were well thought out is the project's success. All objectives were achieved with exceptionally high level of stakeholders' satisfaction.

Areas for improvement

- There is always space to improve and a meticulous examination of pertinent procedures, processes/practices would eventually succeed in suggesting ways to improve. Nevertheless linking the applied practices with project results it could be stated that the project, with reference to this particular criterion, achieved a level close to excellence.

A.2c. Development and realisation of project strategy
Strengths

- After analysing the features and implementation context of the project, which was carried out before its commencement, it was agreed that the best implementation strategy would be alliance contract. In such a formula, "all parties are involved in the project and are committed to transparency and close cooperation". It is an expression of concern for the best possible adjustment of the project realization formula to the project environment.
- The alliance strategy facilitated the team's work as all alliance parties shared the risks and benefits of the project, and had to do their best arrangement for project delivery. The number of changes and innovations identified during the project demonstrates that the strategy of adopting a project mode based on the alliance contract was relevant.
- The alliance model, as a leading strategy, was supplemented with further methodical elements, such as lean methods, Target Value Design and Big Room concept.
- For the sake of maintaining high operational efficiency, the elements of the project implementation strategy were supported by a clear division of responsibilities between the various decision-making entities.
- On the basis of the established values, an efficient model of dealing with stakeholders not directly involved in the project implementation (e.g. local community) was also developed. It is a valuable preventive initiative that reflects the constant pursuit of building a broad consensus based on the win-win principle.

Areas for improvement

- There is always space to improve and a meticulous examination of pertinent procedures, processes/practices would eventually succeed in suggesting ways to improve. Nevertheless linking the applied practices with project results it could be stated that the project, with reference to this particular criterion, achieved a level close to excellence.

A.3. Project Team, Partners & Suppliers

In excellent projects, project team members, partners and suppliers are valued through the creation of a culture that allows the mutually beneficial achievement of organisational, project and personal goals. Fairness and equality are promoted within the project, with respect to integration and development of all involved parties.

In excellent projects achievements are communicated, rewarded and recognised in a way that motivates project team members, partners and suppliers. This builds commitment and enables skills and knowledge to be used and developed in order to achieve project success.

A.3a. Identification and development of competences

Strengths

- Leadership skills and ability to work innovatively and transparently with the customer (as well as self-reflection and problem-solving) was evaluated and tested during the contractors selection process. The purpose of these activities was to have a team that complemented each other. This is a proof of identifying competences on leadership and co-operation area and an innovation in this kind of projects in Finland.
- Understanding and willingness to respond to project requirements and bring up ideas were maintained, measured and strengthened through regular training.
- The Alliance created its own training program. In addition to orientation, development needs were identified and people in the organization were trained when needed, regardless of which party they represented. Regular development workshops, face to face discussions and coaching were used to improve possibilities to increase people skills in the project. This shows that adequate competence development activities were in place.
- Staffing strategies were implemented based on clearly defined responsibilities of individuals and groups. Four teams were formed with delegated authorities to make decisions related to their areas of expertise and to effectively manage risks.
- The referential abroad site visits were elements of the preparation of the project team for the work and for the collection of external lessons learned. It proves that external sources of knowledge were utilized in the project.

Areas for improvement

- No convincing proof was found that implemented training program included certification paths on project management. Undoubtedly, it would be a valuable completion of traditional training.

A.3b. Recognition of achievements and empowerment

Strengths

- Criticism was requested and all responses were answered. These are signs of involving project people in improvement and optimization of their processes.
- Open access to project data was assured according to the individually assigned access level. The broad range of data were made public .This all was contributed to transparency and mitigation of possible communication barriers.
- Open Door approach and Big Room concept enhanced team members ability to raise issues or ideas that if neglected may have compromised values or project outcome.
- The performance bonus of the alliance partners depended not only on the work of the alliance teams but also on the individual performance of each. The Alliance partners have therefore introduced individual incentives that are correlated with the alliance's own incentive scheme, in order to appropriately recognize everyone's participation in this win-win relationship.
- Open failure organization culture (no blame for mistakes) and supportive attitude of the project managers created an environment in which members of the project team had an active influence on how the project is implemented. It encouraged them to be active. If they had good ideas their suggestions were implemented. This is a good example of using the potential of the entire team.
- In order to build and maintain a good atmosphere, recreational events and excursions were organized for the project team. This proves that not only structural solutions (alliance model, Big Room) were used for good integration of the team, but they were also actively supported by other dedicated activities.
- A wide range of non-financial incentives has been introduced. In principle, there have been taken actions that improve the atmosphere in the team, the effectiveness of cooperation and the sense of influence on the tasks being performed.

Areas for improvement

- Undoubtedly, the project has enabled professional development for many people involved in its implementation. However, no convincing evidence has been found that intentional development paths have been defined in relation to individuals. It could be a valuable innovation, in particular taking into account the fact that alliance projects require specific competences and predispositions, and the time of its implementation is relatively long.

A.3c. Collaboration and communication

Strengths

- The Clients project manager was chosen for the lead to communication team. The stakeholders experts who were responsible for communication were invited to participate to the communication team so they could influence and guide to the communication plan and acts. This is a sign of development and implementation of effective communication plans.
- The aim of the Big Room was to visualize and deliver the information as efficiently as possible through the whole organization. For example, all sector's head designers and construction managers worked together to make commenting on the designs as soon as it is needed. This shows encouragement to proactive communication.
- The project organization and processes were designed in ways that enable the alliance project team to communicate and cooperate efficiently. Indeed, the Big Room has been a catalyst for developing teamwork and improving the flow of information. The success of this concept was supported by the initiation of a culture open to trust, transparency, risk and responsibility-sharing and the alignment of all alliance partners.
- The concern for equal access to information for all stakeholders proves that from the beginning of the project the activities and communication tools were well chosen and the whole process was well planned.

Areas for improvement

- There is always space to improve and a meticulous examination of pertinent procedures, processes/practices would eventually succeed in suggesting ways to improve. Nevertheless linking the applied practices with project results it could be stated that the project, with reference to this particular criterion, achieved a level close to excellence.

B. Processes & Resources

The Processes & Resources area focuses on the management of key processes contributing to project success and the resources required to realise them successfully. Given the importance of the project management processes and related resources, they receive special attention in the model. The project team should carefully select, adapt and develop them in order for the project to reach its goals in an effective and efficient way. Their adequacy for the needs of the project and its complexity should also be actively managed throughout the entire project lifecycle. However, effective and efficient project management processes alone are not sufficient conditions for project success. This is the main reason that the PEM also considers how the project team identifies other processes and resources required for project success and the way the project fits into its environment (e.g. corporate, legal, natural).

B.1. Project Management Processes & Resources

Teams on excellent projects identify the key project management processes and related resources necessary for project success in cooperation with stakeholders. Key methods, tools and project management processes are selected, developed and optimised to achieve the project objectives in the most effective and efficient way. This is done based on a good understanding of the project needs and organisational capabilities.

Strengths

- For the needs of the project, an organizational structure was developed, adequate methods, techniques and tools were selected, procedures and templates of documents were developed. This is proof that the activities in the area of project management have been thought out and prepared.
- One of the objectives of the project was to improve the productivity of the infra-industry and this was done by redesigning the contractual structure (to Alliance model) and redefining responsibilities, modes of co-operation and risk management and sharing. This is major innovation in Finnish public sector and is a proof of striving to improve industry sector standards.
- The risk management activities were well planned and carefully aligned with the commercial model. The way this was done (especially how risks were shared) is innovative in this industry in Finland.
- Documentation and information management were designed to support open and effective communication and problem solving. Big Room concept is one of the ingredients here. This is sign of ensuring adequacy of the communication processes.
- The Last Planner method together with the Big Room concept was selected to be the main vehicle for status follow up and planning and it was practiced in an effective and efficient way. This is sign of selecting and adapting project management processes based on good understanding of the project needs and organizational capabilities.
- The use of alliance model ("Integrated Project Deliveries") was selected for the project after benchmarking with Australian projects. The approach was first piloted in a Finnish project (railroad renovation). Then the model and related processes (like risk management) were adapted to this project.

This is sign of defining project management processes based on good practices and lessons learned from other projects.

- Care has been taken, among others, in the planning of following project management processes: procurement, risk management and new ideas and innovations management. These have clearly been adapted for this project and are quite innovative. Also, Target Value Design -process was new for FTA but suited extremely well for the project. These are signs of identifying and implementing appropriate processes and methodologies.
- The project had well formulated and monitored measurable process performance indicators clearly aligned with project objectives. It is also important to note that KPI target values for monitoring the KRAs consider the average performance of the sector as a neutral (or even negative) value in order to generate outperformance from the alliance project team.
- Project management processes of the project were described in a project plan. The construction work was managed based on Lemminkäinen's certified quality system. For the project management of the design work, system of A-Insinöörit was used. The Rantatunneli project plan summed up the processes that had to be adapted because of the alliance model and is a sign of selecting and optimizing project management processes.
- The lessons learned in the project have been applied in subsequent alliance projects (Tramway, Lahti ring road). This is sign of contributing to the development of the organizational competencies of the performing organization, its partners and customers.
- Project manager and deputy project manager had a clear and adequate share of responsibilities: One was working mainly on external issues and the other on internal. This is sign of sound and practical project management roles setting.
- Project did book keeping on security incidents and near misses. The number of near misses was such that it looks reliable. That is, it seems that security threats were taken seriously, and preventive action were identified and implemented as expected.

Areas for improvement

- The excellence of the processes and the project are to some extent due to excellence of certain individuals. It could be beneficial in the future to explore ways for "standardizing" the recipe of success. This could have to do with capturing and documenting the project management processes and techniques in more detail. This could also improve the ability to make process development more explicit (and easier to communicate about it).
- Learning between the projects happens currently mainly through individuals that work in both projects. Could this perhaps be boosted in projects not having any same resources with more systematic (and documented) lessons learned processes?
- The system for storing project documentation could possibly be improved to make more sophisticated data searches possible.

B.2. Management of Other Key Processes & Resources

Teams on excellent projects identify other key project delivery and support processes and related resources necessary for project success (e.g. product design, engineering, maintenance, handover and acceptance, logistics, safety and security) in cooperation with stakeholders. These methods, tools and processes are selected, developed and optimised to achieve the project objectives in the most effective and efficient way. This is achieved based on a good understanding of organisational capabilities.

Strengths

- The project used, coached and trained several LEAN methods and other useful practices such as Target Value Design, Target Value Delivery, Ideas and Innovation processes, Big Room concept, Last Planner timetable. This shows to some extent that the delivery and support processes were defined on the basis of good practices or even innovative approaches.
- All the necessary functions were systematized if possible. That helps to detect, compare, analyse and improve their functionality all the time. This shows that the key processes were identified, adapted and regularly checked and improved.
- Needs of various authorizations, administrative approval procedures and environmental monitoring were identified and listed. This is sign of identifying acceptance processes and adherence to rules and regulations.
- Striving to improve Sector standards - targets to be achieved were set higher than industry standards, and lessons learnt were shared benefitting other projects (not just in the transport sector). Successfully raised the benchmark.
- Contribution to development of competence of organisation and its partners - this was one of the great successes of this project, that introduced new concepts as LEAN and Big Room to stakeholders and trained them as necessary to efficiently utilise then and improve efficacy.

- Similarly, particular care was given by the project team in the technical areas by detailing all the work implementation plans for better coordination and value. These plans were challenged throughout the project to target the project TOC and updated regularly by the project team as part of the idea management and innovation process. These technical plans have also taken into consideration the constraints related for example to traffic during the execution of works. the team planned, managed and controlled traffic disruptions and safety.
- Necessary resources (with clear assigned responsibilities as refers to persons) were scheduled and reserved.
- Particular attention was paid to the assurance of the high quality of information generated in the project. As a result, some of the important processes (including the authorization and monitoring process) have been simplified. This is a good example of effective risk and quality management.
- Personal leadership style of project management enables "out of the box" approach for the team. This is the basis for optimized innovation and improvement strategies which have an important effect on realisation of objectives.
- Management of key processes is based on the personal leadership style of Mauri Makiaho. His role model for the "Alliance" way of working is the big driving force for team members to develop and succeed in the task they have to accomplish.
- In addition on all regular human safety precautions the safety manager arranged repeatedly meetings with the safety authority on site. This aimed to assure safety to high level and optimize incident prevention.
- Separate safety supervisors have been foreseen on tunnelling, bridging and roads, the tree mayor technical aspects of the project.
- Technical development has been divided in tree specialised groups to assure focus.
- Drilling and blasting induces vibrations. The amount of explosives has been prescribed precisely to minimalize annoyance and damage to the above positioned buildings. All levels of ground surface have been measured and monitored constantly. All houses have been inspected on cracks and photographic documentation gathered. In an event of damage appropriate care was taken.

Areas for improvement

- There is always space to improve and a meticulous examination of pertinent procedures, processes/practices would eventually succeed in suggesting ways to improve. Nevertheless linking the applied practices with project results it could be stated that the project, with reference to this particular criterion, achieved a level close to excellence.

C. Project Results

The Project Results area consists of criteria that provide insight into the perceptions about the management of the project held by the customer, project team members and other stakeholders, expressed in terms of their satisfaction levels, as well as indicators that prove this satisfaction level. In addition, it covers other results that can provide insight into the level of excellence achieved by the project.

Balancing the expectations and demands of all parties involved, together with great management processes, should lead to sustainable, outstanding results for all key stakeholders. The concept of sustainability as an important element of project excellence is specifically explained in Chapter 4.4 (The role of sustainability). As a fundamental principle, results can by definition only be excellent if they are also sustainable, so fully evaluating the excellence of a project entails extrapolating from the results achieved at the end of a project, in order to estimate future levels of satisfaction and success.

C.1. Customer Satisfaction

Excellent projects achieve high customer satisfaction. The perceived satisfaction is consistent with the fulfilment of the project objectives, key performance indicators (quantitative and qualitative), engagement of customer representatives and their identification with the project. In well-managed organisations and projects, the customer alone decides on the perception of quality. The Customer Satisfaction criterion is a reflection of how well the project team understood and fulfilled their needs and requirements.

C.1a. Customer perception

Strengths

- The construction director of the Tampere city expressed his satisfaction to the project. On a scale of 0-10 he scored it 9.625. The only thing that kept it away from full 10 was the contaminated soil that was not identified earlier in the process.
- The construction director of the Tampere City said that it was one of the best moments in his career when he was able together with the project team to avoid huge risk concerning houses near tunnel works. He also said that he is proud of the project and so is the City of Tampere.
- Director of the ELY-keskus expressed his satisfaction both to the outcome of the project and to the way it was done. ELY-keskus is the governmental organization that is responsible for operating the tunnel and can be considered as a customer of the project. He mentioned that the environment for the project was challenging but excellent results were delivered thanks to great solutions that were created in strong co-operation.
- According to the ELY-keskus director the speed of decision making in the project was spectacular. Cost targets were achieved (normally they are overrun) and project was delivered before schedule. This was crucial in a strategically important project. Rantatunneli was needed for development of Ranta-Tampella area.
- Director of the ELY-keskus told that also the motorists have been satisfied to the tunnel.
- Director of Finance of City of Tampere was very satisfied to the project and told that Rantatunneli project started a remarkable chain of projects that will have big impact to the City. The new projects are implemented with alliance model because it proved to be so good in Rantatunneli. The mentioned projects were: Development of Ranta-Tampella area (houses), Tramway and ice hockey hall above the railroad.
- Project has been quite well updated on the Customer satisfaction throughout the project lifecycle since customer representatives have been working intensively in the project and participated in several meetings.
- Considered as the main clients of the project, the city of Tampere and the FTA were part of the alliance project team. They were informed daily of the progress of the project and were involved in the strategic orientations and decisions of the project. The customer representatives regularly expressed their needs and expectations and participated in their good achievements in a spirit of cooperation between the different members of the project team.

Areas for improvement

- There is always space to improve and a meticulous examination of pertinent procedures, processes/practices would eventually succeed in suggesting ways to improve. Nevertheless linking the applied practices with project results it could be stated that the project, with reference to this particular criterion, achieved a level close to excellence.

C.1b. Indicators of customer satisfaction

Strengths

- Clients set the objectives and expected measurable results. Their satisfaction can therefore be deduced from the results achieved during the project in these different areas : Schedule, Safety, Usability and Public image. Thus, the good scores recorded by all the KPIs confirm the satisfaction of the customers, insofar as the desired effects have been achieved with high levels of performance that in some areas exceed the project targets.
- The ratio describing the return on investment was also good. This is some sign of customer satisfaction.
- The perception of the customer through the regular measurement of the public image is good. Although the technical work was complicated to perform in this project without major disruptions during the IP phase, it is in the average performance of the sector. The 88% satisfaction score is certainly due to the efforts of communication and anticipation of traffic problems and sound damage during the works. indeed, it is important to note that Traffic volumes (ADT) along Highway 12 remained almost unchanged during the construction phase despite the (1% decrease since before the project), and the effects and potential risks associated with the works have been well anticipated.
- Customer satisfaction of the Rantatunneli project is also reflected in the positive lessons learned through the adoption of the alliance model. Since the successful experience of the Rantatunneli project, customers have initiated other projects by adopting the alliance model.
- The tunnel was opened for traffic six months before schedule and the finishing work after that also several months ahead of time and under budget. The project was very complicated with lots of risks. It was a great success and it was carried out with high quality and safety. This is meaningful indication that the Customer is satisfied.

Areas for improvement

- For the future it could be beneficial to consider more systematic and documented methods for customer satisfaction measurement in addition to the close co-operation that was used in the project. It might be beneficial to do this through the project lifecycle rather than just in the end of the project. However, the assessors do see that in this very project the way of working made it sure that Customer satisfaction was known in the project all the time.

C.2. Project Team Satisfaction

Excellent projects achieve high team member satisfaction. The perceived satisfaction is consistent with the fulfilment of the project objectives, engagement of the team members in the project and their identification with the team.

C.2a. Perception of the project team

Project team members consistently express their satisfaction throughout the entire project lifecycle.

Strengths

- Interviewed project team members were very satisfied to the project. On a scale of 0-10 their satisfaction varied from 9 to 9.75. This is sign of strong team satisfaction. Interviewed team members named reasons for their satisfaction and the list contains many of the values and targets that the project leaders have set so there is clear link between the result and the leadership & process. Things mentioned did include the following:

    - big room and co-operation

    - solving problems right away together

    - do not have to think about the contract but can concentrate on solution

    - no blaming

    - deep and authentic interest in the management for security (HSE)

    - 250 days without accidents and no severe accidents during the whole project

    - enthusiastic alliance atmosphere

    - small ideas implemented right away

    - no dumb ideas - thinking

    - ability to change the plans as needed

    - best project ever

Areas for improvement

- It would be worth considering the introduction of a standardized periodic evaluation of the satisfaction of the members of the project team. It would allow the analysis of trends in the perception of the project and thus the assessment of the effectiveness of actions taken on the project team.
- In the spirit of constant striving for excellence, it might also be beneficial to consider ways of systemically analysing possible improvements in the work of the alliance team.

C.2b. Indicators of project team satisfaction

Strengths

- People appreciated to work in a project that used Alliance model. This can be inducted from their desire to work in Alliance-projects also in the future. This is some indication of team satisfaction.
- The development proposals as the results of development workshops were implemented and actions were reported in next workshop. This is some indication of team member satisfaction.
- Only couple of changes (to team) were made. This is some indication to team satisfaction.
- Bonuses have been paid also for subcontractors. This is some indication of satisfaction of subcontractor team members.
- Executive manager of the A-Insinöörit told that they carried out a lessons learned session after the project and there were more positive findings than normally in projects. This is some sign of team member satisfaction.
- The drone videos that were used to communicate the status of the project were also distributed in the internet. People of the project have shared these with their friends and relatives. This is some sign of team member satisfaction.

Areas for improvement

- In addition to direct indicators (as for example satisfaction surveys' results) more systematically secondary indicators of the well-being of the team members is something to consider. These could include metrics like ill-rate, retention etc.

C.3. Other Stakeholder Satisfaction

Excellent projects achieve high stakeholder satisfaction. The perceived satisfaction is consistent with the fulfilment of the project objectives, key performance indicators (quantitative and qualitative), engagement of the stakeholders' representatives and their identification with the project. Stakeholders representing environmental aspects of the project are highly satisfied.

C.3a. Perception of the other stakeholders

Strengths

- This project is quite unique as normally other stakeholders (third parties) category refers to subcontractors, suppliers or the local city authorities in addition to the local community etc. In this instance subcontractors and representative of the local authorities are fully integrated into the main project Alliance team with ability to influence elements such as objectives and performance indicators.
- Within this project, this category refers to incidental people who are often more difficult to verify in a systematic way. Key suppliers and sub-contractors stakeholder satisfaction is covered in section C2. However, evidence from Authority and Alliance team members during the site visit and documents as the value for money reports etc. issued demonstrate positive perceptions of various stakeholders towards the project management approach, the project and its impact on the environment.
- This was a high profile project with immense local interest in its environmental and safety performance. The quantitative and qualitative targets thus set for these categories both reflected the local concerns and were embedded in the Environmental Impact Study and the agreed project targets. Public image (perception) was a key target set for assessing the project's success and this was measured via positive media coverage.
- Media coverage is a key indicator of public perception. The public image indicators improved constantly throughout the project and at completion 88% of media hits were either neutral or positive.
- Though unable to make direct comparison on perception to other projects, a similar project in Helsinki (based on site visit evidence) is late in delivery, has costs overrun and has received widespread negative press coverage.
- The expectation of stakeholders representing the environmental aspects were highly satisfied by value for money - approach, particularly through the good execution of the environmental impact monitoring program exemplifying the plan-do-check-act approach towards project excellence. Report No 2/2017 of the City of Tampere Environmental Protection Unit, states that the Rantatunneli tunnel has reduced

considerably the zones where residents are exposed to noise. Similarly, based on the latest Tampere Tunnel air quality monitoring report on 5 April 2017 by the Finnish Meteorological Institute, air quality near the tunnel entrances appears to have remained unchanged. Since the commissioning of the tunnel on November 15, 2016, the number of accidents has decreased by approximately 50%.
- The value for money approach and associated targets prioritised factors that create value for the owner, users and other stakeholders; also taking into account their views and social and environmental considerations. All the project results were widely shared and the feedback evaluated through the "Public Image" indicator which recorded 88% satisfaction.
- Targets and indicators relevant to noise, emissions and safety were explicit, visible and exceeded with some indication of satisfaction of the local community, tunnel users and regulators. However, indicators of other stakeholders other than those which were measurable indicators for the project (as safety, awards, earlier commencement of the adjacent housing development) were not so easy to establish.
- There has been no deterioration to air quality at the tunnel ends since completion; the traffic jams that occurred on the highways especially in the mornings have disappeared. Satisfaction levels of this road from the National Road transport authority's survey are favourable and the upper quartile.
- Safety was enhanced through rare proactive engagement with the National Safety Agency. Environmental and ground water impact were controlled to prevent harm. An indication of the success of this is the minimal damage to third party property at just 36K euros overall, though not benchmarked with other Finnish projects it is low for the extent of works undertaken. At the site visit, evidence was received that during the site works that daily monitoring readings were taken of local historic structures to assess settlement during the works.

Areas for improvement

- While overall project results are good, an increased level of primary or direct data relating to other stakeholders as environmental or community organisations and their satisfaction levels, also statistics on number of complaints or similar, would have contributed to reinforcing the perception of excellence.

C.3b. Indicators of other stakeholders' satisfaction
Strengths

- Indicators of other Stakeholders satisfaction, benefits and targets achieved are useful secondary indicators of satisfactorily meeting requirements. The two awards received by the project are strong indicators from other stakeholders (professional community) of their satisfaction. Likewise, the positive book published of the project by a local university lecturer specialising in road traffic who also received clarity on the "Alliance" model.
- The attentiveness to local stakeholders is evidenced by the prior notification of blasts given to a nervous local resident who expressed her gratitude with a gift at completion.
- Engaging with and involving other stakeholders is also demonstrated by 50,000 people visiting and walking through the tunnel on the open day that was organised.
- The project enabled further development projects for the city centre including nearly 4000 housing units to commence more quickly then was initially programmed.
- Politicians have also benefitted from the success of this project through the confidence it has given them to embark on projects with the "Alliance" model to deliver on objectives while providing value for money both in Tampere and other cities. This became apparent from evidence received during the site visit.

Areas for improvement

- There is always space to improve and a meticulous examination of pertinent procedures, processes/practices would eventually succeed in suggesting ways to improve. Nevertheless linking the applied practices with project results it could be stated that the project, with reference to this particular criterion, achieved a level close to excellence.

C.4. Project Results and Impact on the Environment
Excellent projects achieve outstanding results while keeping high performance levels. Such results are achieved as an outcome of excellent management and leadership. Their positive impact on the environment is also clearly visible.

C.4a. Realisation of results as defined in project objectives
Strengths

- All the objectives of the project were met or even positively exceeded. This means that in all these cases the results of the project were better than in the industry in general. As an example: the tunnel was opened for traffic six months before schedule and the finishing works after that were also completed several months ahead of time and under budget.
- The project is perceived as successful taking into account any indicator set at the project initiation and planning phase.
- This project has also proved to be an extremely valuable source of know-how. Based on the achieved results one can stated than cost- and time-effectiveness can be improved without lowering the level of quality and safety. The practices worked out in this project were deployed in further projects as valuable lessons learned.

Areas for improvement

- There is always space to improve and a meticulous examination of pertinent procedures, processes/practices would eventually succeed in suggesting ways to improve. Nevertheless linking the applied practices with project results it could be stated that the project, with reference to this particular criterion, achieved a level close to excellence.

C.4b. Realisation of results beyond project objectives, including impact on environment
Strengths

- The project improved the local transport system by removing the barrier effect caused by highway. Now city center and waterfront are much more easily accessible.
- As a result of the project, work related to the development of many districts of the city, including its entire western part, has accelerated.
- The traffic jams on highway has decreased and so has did the number of traffic accidents (in the latter case even up to 50%)
- During the project execution phase no disturbance to the train traffic was noted. In addition, all construction work has been carried out without the need to introduce traffic restrictions on the highway.
- The project was environmentally friendly. According to the data from the inspections carried out, no negative impact of the project on the environment and ground water has been recorded.
- In recognition of the obtained results, the project was awarded two prizes:
  - An Award from the Finnish Association of Civil Engineers in 2016
  - Project of the Year Award from the Project Management Association Finland in 2017
- Several Finnish contracting authorities after the successful completion of the project work were encouraged to test and use alliancing in their own projects.
- The enormous impact of the implemented alliance model on project efficiency and effectiveness has attracted an unusual amount of interest among researchers.

Areas for improvement

- There is always space to improve and a meticulous examination of pertinent procedures, processes/practices would eventually succeed in suggesting ways to improve. Nevertheless linking the applied practices with project results it could be stated that the project, with reference to this particular criterion, achieved a level close to excellence.

C.4c. Project performance
Strengths

- Project was delivered before time, under cost and the outcome exceeded expectations although the target level was set high. This shows that the delivery was efficient and effective. This is extraordinary in Finnish infrastructure projects.
- When the tunnel is opened, its usability has been at good level.
- All KRAs are met, all people and companies involved are very satisfied, clients and users are positive on the outcome, therefore one can conclude the project performance is outstanding.

Areas for improvement

- There is always space to improve and a meticulous examination of pertinent procedures, processes/practices would eventually succeed in suggesting ways to improve. Nevertheless linking the applied practices with project results it could be stated that the project, with reference to this particular criterion, achieved a level close to excellence.

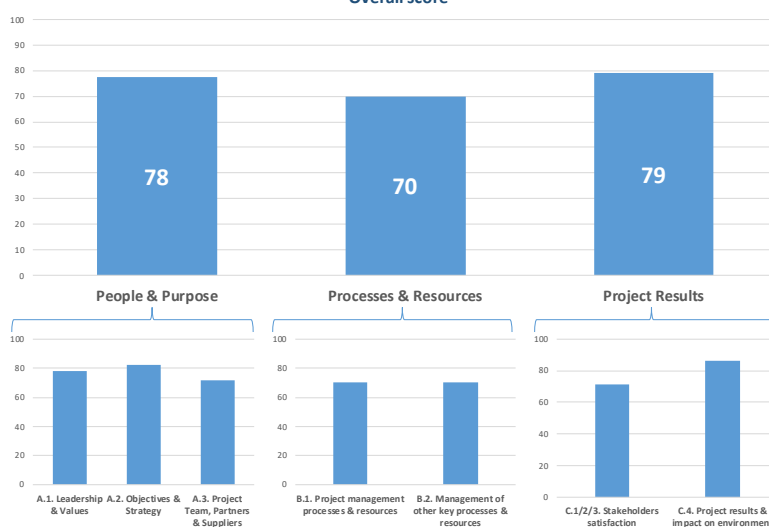| Team Lead Assessor:	Grzegorz Dzwonnik
Assessors:	Timo Lehtimäki, Teri Vivienne Okoro, Maurice Adriaans, Younous Hizebry

6. Final Scoring

Project code and title: (9PFIGD) Rantatunneli project
Applicant organization: Finnish Transport Agency
Project type: Investment / Infrastructure
Project category: Mega

Criterion	Score

A. People & Purpose

A.1. Leadership & Values

A.1a. Role models for excellence	83
A.1b. Care for project stakeholders	71
A.1c. Orientation towards project objectives and adaptability to change	81

→ 78

A.2. Objectives & Strategy

A.2a. Managing stakeholders' needs, expectations and requirements	84
A.2b. Development and realisation of project objectives	80
A.2c. Development and realisation of project strategy	83

→ 82

A.3. Project Team, Partners Suppliers

A.3a. Identification and development of competences	65
A.3b. Recognition of achievements and empowerment	72
A.3c. Collaboration and communication	79

→ 72

→ 78

B. Processes & Resources

B.1. Project Management Processes & Resources	70
B.2. Management of Other Key Processes & Resources	70

→ 70
→ 70

→ 70

C. Project Results

C.1. Customer Satisfaction	87
C.2. Project Team Satisfaction	67
C.3. Other Stakeholder Satisfaction	61

→ 72

C.4. Project Results and Impact on Environment

C.4.a/b. Realisation of results as defined in project objectives and beyond, including impact on environment	87
C.4.c. Project performance	86

→ 87

→ 79

IPMA
Global
Project
Excellence
Award

Project code and title: **(9PFIGD) Rantatunneli project**
Applicant organization: **Finnish Transport Agency**
Project type: **Investment / Infrastructure**
Project category: **Mega**

Overall score

People & Purpose	Processes & Resources	Project Results
78	70	79

A.1. Leadership & Values | A.2. Objectives & Strategy | A.3. Project Team, Partners & Suppliers

B.1. Project management processes & resources | B.2. Management of other key processes & resources

C.1/2/3. Stakeholders satisfaction | C.4. Project results & impact on environment

People & Purpose

A.1.a. Role models for excellence | A.1.b. Care for project stakeholders | A.1.c. Orientation towards project objectives and adaptability to change

A.2.a. Managing stakeholders' needs, expectations and requirements | A.2.b. Development and realisation of project objectives | A.2.c. Development and realisation of project strategy

A.3.a. Identification and development of competences | A.3.b. Recognition of achievements and empowerment | A.3.c. Collaboration and communication

Project results

C.1. Customer Satisfaction | C.2. Project Team Satisfaction | C.3. Other Stakeholder Satisfaction

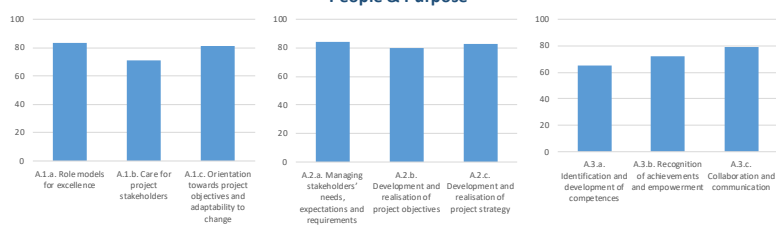C.4.a/b. Realisation of results as defined in project objectives and beyond, including impact on environment | C.4.c. Project performance