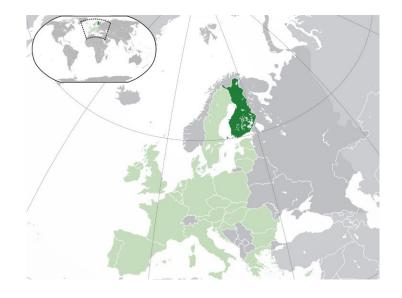
Finland Project Management Roundup



By Jouko Vaskimo Senior Contributing Editor& International Correspondent Espoo, Finland

INTRODUCTION

This roundup continues the coverage of Project Management Association Finland, PMI Finland Chapter, and the key projects currently going on in Finland.

PROJECT MANAGEMENT ASSOCIATION FINLAND

Project Management Association Finland (PMAF), **Projektiyhdistys ry** in Finnish, is a not-for-profit organization, and the International Project Management Association (IPMA) Member Association (MA) in Finland.



Founded in 1978, PMAF promotes the interaction, project-oriented thinking, and exchange and development of practical and theoretical knowledge among project management professionals with over 4000 individual and 200 organizational members.

Project Management Association Finland turned 40 years at end of January, and organized a gala dinner to celebrate the occasion. The gala dinner program comprised musical performances, presentations, celebratory speeches, and a four-course culinary dinner by Chef **Hans Välimäki**, one of the best-known Finnish contemporary chefs. During the event the Honorary Fellows of Project Management Association Finland got together for a group photograph.



In the photograph: The Honorary Fellows of Project Management Association Finland (from left to right): Mr Matti Ahvenharju, Mr Jyry Louhisto, Professor Dr Kalle Kähkönen, Mr Pekka Mäkelä, Mr Juhani Silvasti, Mr Veikko Välilä, Mr Esa Koskelainen, and Mr Risto Pelin. Mr Tom Taylor, the first International Honorary Member of PMAF, is missing from the photograph (photo courtesy PMAF)

PMAF promotes the development and dissemination of project and project management knowledge. PMAF members are able to enjoy information sharing, workgroups, development projects, project management forums, conferences and certification services PMAF provides. PMAF organizes two annual conferences: *Project Days (Projektipäivät* in Finnish) in early November, and *3PMO* in early June. Last year the Project Days conference took place on 31.10. - 1.11.2017 in the Helsinki Expo and Convention Centre. Please navigate to <u>www.3pmo.fi</u>, <u>www.projektipaivat.fi</u> and <u>www.pry.fi/en</u> for further information on PMAF and its main events.

PMI FINLAND CHAPTER

PMI Finland Chapter is a not-for-profit organization providing project practitioners in Finland continuous learning, networking and community support. The Chapter was founded in 2005. Today, with more than 400 members, the chapter is increasingly recognized as place



where its members can enhance their project management and leadership skills, as well as network with other project management professionals.

PMI Finland Chapter hosts a number of events such as Breakfast Round Tables, regular meetings taking place once a month in Helsinki and occasionally also in other locations. The chapter members have the opportunity to attend events for free or with a discount and the chapter sends its members a regular newsletter with localized content on project management. Additionally, the Chapter supports its members in their professional development and training.

PMI Chapter Finland has a tradition of organizing an annual conference in the spring. This year the conference will take place on May 17th, in Otaniemi, Espoo, with an overarching theme "Grow!". Please navigate to <u>www.pmifinland.org</u> and <u>www.conference.pmifinland.org</u> for further information on the PMI Finland Chapter and its main events.

OLKILUOTO 3

The 1 600 MW Olkiluoto 3 nuclear power plant, originally contracted to be built by consortium comprising of **Areva** and **Siemens** for **Teollisuuden Voima** (TVO) at Olkiluoto, announced a further delay from the previously agreed time schedule in last October. The previously agreed time schedule estimated for the plant to be on line at the end of 2018 – nine years behind original time schedule. Due to the latest delay, the plant will not be on line before May 2019 – full ten years behind the original time schedule and over 5 500 M€ over budget – Olkiluoto 3 will be the largest nuclear power plant in the world. TVO is understandably very disappointed about the latest delay – and the fact that the plant is well over 100 % over original budget and 10 years behind the original time schedule.

The contract for building the Olkiluoto 3 power plant was signed in 2003 for 3 000 M€, and construction began in 2005, targeting completion in June 2009. Due to numerous challenges during the planning and construction phases, the target date has been pushed forward several times, finally to 2018 - nine years in total. According to Areva, the delays have pushed the total cost up to 8 500 M€. Areva and TVO have conducted negotiations regarding the delay and related penalties, with TVO demanding 2 300 M€ from Areva, and Areva 3 500 M€ from TVO: Areva claims TVO has not carried out its contractual duties, and is therefore accountable for the costs of the string of delays. TVO claims Areva has failed to construct the plant according to contractual schedule.

The matter is made more challenging by the French government plan to sell its majority share of Areva stock to *Électricité de France* (EDF) S.A. – the French electric utility company, largely owned by the French state, headquartered in Paris, France, with 65 200 M€ in revenues in 2010. EDF operates a diverse portfolio of over 120 GW of electrical power generation capacity in Europe, South America, North America, Asia, the Middle East and Africa. The French government would like to merge the loss-making Areva with EDF, however, EDF has been unwilling to proceed with proposed arrangement understanding the international arbitration may agree with TVO's claims.



In the photograph: Olkiluoto 3 construction site (photo courtesy TVO)

HANHIKIVI 1

The preliminary construction works of the 1 200 MW Hanhikivi 1 nuclear power plant, contracted to be built by **Rosatom** for **Fennovoima** at Pyhäjoki, are proceeding despite the lack of the main nuclear power station building permit. **Säteilyturvakeskus** (STUK), the Radiation and Nuclear Safety Authority in Finland, announced late last year it will demand enhancements to the Hanhikivi nuclear power plant project. Most importantly, STUK says the safety culture of the Russian plant supplier **Raos Project** and main contractor **Titan 2** are not at the appropriate level. STUK had earlier instructed for Fennovoima to take a more powerful stance towards Rosatom when demanding the safety documents required for the main building permit. In mid-February STUK estimated that 90 % or the material required for processing the main nuclear power station building permit are missing. STUK had estimated earlier that the main building permit cannot be granted before 2019 due to the inaccuracies in the Rosatom technical documentation. Now even this time schedule is starting to appear unrealistic.

Due to the EU sanctions towards Russia, the Hanhikivi 1 plant has become involved in international politics. Many see the Rosatom three-way involvement in the Hanhikivi 1 project – being one of the main shareholders as well as the main contractor and the main equipment supplier – as a way for Russia to get involved in EU matters. Some go as far as seeing the Rosatom involvement in the Hanhikivi 1 project as a way for Russia to strike a blow against a uniform EU sanction policy towards Russia. Setting aside the

international politics, experts say the Hanhikivi 1 plant is unlikely to be able to produce electrical power at a price lower than the Teollisuuden Voima Olkiluoto 3 plant.

A preliminary approval to construct the plant was granted by the Finnish Government in April 2010, and by the Finnish Parliament in July 2010. The decision to invest in the power plant was made by Voimayhtiö SF, the largest owner of Fennovoima, in February 2014. The final permit to construct the plant – applied for by Fennovoima in June 2015 – is now expected to be granted by the Finnish Government no earlier than 2019.

The plant will be constructed by Rosatom, and will use a pressurized water reactor. Rosatom – formally known as *Rosatom State Atomic Energy Corporation* – is a Russian state corporation, established in 2007, and the regulatory body of the Russian nuclear operations. 66% of Fennovoima is owned by the Finnish *Voimaosakeyhtiö SF*, and 34% by *RAOS Voima*, the Finnish subsidiary of Rosatom.

The plant is expected to generate approximately 10% of Finnish electricity demand. Rosatom has 34% ownership of the plant, which translates to Rosatom supplying 3% of Finland's electricity production according to Veli-Pekka Tynkkynen, professor of Russian energy politics at University of Helsinki. Professor Tynkkynen argues Russia may use its ownership of the plant to attempt manipulating Nordic power prices, or use it to leverage political disputes the same way Russia is already using its gas supply in disputes with neighboring countries such as Ukraine. Researcher Martin Kragh of Uppsala University in Sweden notes that Russia has already applied pressure to keep the Hanhikivi 1 project going by pressuring Fortum – a major player in the Finnish power business – to invest in the Hanhikivi 1 project through Voimaosakeyhtiö SF.



In the photograph: The Hanhikivi construction site main gate (photo courtesy Pekka Fali)

LÄNSIMETRO

The second implementation phase of Länsimetro extension to the existing Helsinki metro system is progressing. The main underground tunneling work has been completed, however, some of the auxiliary spaces remain to be finalized. Unfortunately the latest estimates say the budget is in danger of increasing by 400 M€ and the project might be completed as late as 2024. The anticipated cost increase and the delay in starting operations is starting to resemble what happened in the first implementation phase of the Länsimetro extension to Helsinki metro system.



In the photograph: Länsimetro tunneling nearing completion (photo courtesy Länsimetro)

The westward metro extension is being implemented in two phases: The first phase of the extension lengthened the existing line from *Ruoholahti* to a new terminus at *Matinkylä*. The second phase of the extension will lengthen the line further from *Matinkylä* to *Kivenlahti*. Länsimetro project is undertaken by Länsimetro Ltd, a jointly founded a company, of which the city of Espoo owns 72%, and the City of Helsinki the remaining 28%.

The second phase of the extension, a 7.4 kilometer (4.7 mi) route was approved for construction in February 2014, and the construction began flexibly as the work on the first phase was being completed. The second phase of the westward metro extension runs entirely within Espoo city limits. The second phase of the extension has been planned to be completed in 2020. The estimated cost of the second phase has been 801 M€ as of 2013.

RAIDE-JOKERI

A consortium comprising **Yleinen Insinööritoimisto** (YIT) and **VR Track** was chosen as the main building contractor for Raide-Jokeri in October, and an alliance contract between parties was signed in November 2018. Building of track and related structures is expected to begin in 2019, and operations are expected to start early 2020s. The main contract is for 205 ... 225 M€, and the overall building budget is 275 M€.

The Raide-Jokeri light rail transit system – similar to the *Metro Blue Line* light rail in Minneapolis, Minnesota, US, and the *Metrolink* in Manchester, England – is planned for the metropolitan Helsinki area to complement the existing public transit service. Raide-Jokeri will connect two Helsinki metro stations – *Itäkeskus* in eastern Helsinki, and *Keilaniemi* in the eastern Espoo – to one another with 25 km of street-level double track and 33 stops. Raide-Jokeri will replace bus line 550, which is currently the most heavily congested line in metropolitan Helsinki area, in 2021. The new light rail transit system is intended to enhance the reliability and travel comfort of the transverse public transportation i.e. traffic in the areas surrounding the immediate downtown Helsinki.



In the illustration: An artist's view of the Raide-jokeri train (illustration courtesy HSL)

The first idea of a transverse light rail transit system was introduced in 1990, and it was agreed to be one of the next-generation public transit systems to be constructed in 1994. Instead of a light rail system, the transverse connection was established with bus service in 2006. The number of passengers has grown enormously, and bus connection 550 along the proposed path of the Raide-Jokeri route is currently the most popular bus service offered by Helsinki Regional Transport Authority. Due to the increasing traffic, and need for quick and reliable connection, the plan to establish the originally proposed light rail transit system has been approved by the city of Helsinki as well as the city of Espoo. The budget for construction of the Raide-Jokeri infrastructure was originally 275 M€, however, the figure has been pushed up to 459 M€ before construction has started.

About the Author



Jouko Vaskimo is an International Correspondent and Senior Contributing Editor for *PM World* in Finland. Jouko graduated M.Sc. (Tech.) from Helsinki University of Technology in 1992, and D.Sc. (Tech.) from Aalto University in 2016. He has held several project management related positions with increasing levels for responsibility. Jouko holds a number of professional certificates in the field of project management, such as the IPMA Level C (Project Manager), IPMA Level B (Senior Project Manager), PMP, PRINCE2 Foundation, and PRINCE2 Practitioner. Jouko is also a Certified Scrum Master and SAFe Agilist. Jouko is a member of the Project Management Association Finland, a founding member of PMI Finland Chapter, and the immediate past chairman of the Finnish IPMA Certification Body operating IPMA certification in Finland. Since October 2007, he has been heading the Finnish delegation to ISO/TC 258. Jouko resides in Espoo, Finland and can be best contacted at jouko.vaskimo@aalto.fi . For more information please navigate to www.linkedin.com/in/jouko-vaskimo-6285b51 .