
CURRICULUM VITAE

Atte Mikkonen
SOFiN Consulting
Managing Director

Date of birth
14-04-1972



SUMMARY

Atte Mikkonen is a specialist civil and structural engineer with 20+ years of experience in bridge design. His key areas of expertise are cable-stayed bridges and post-tensioned bridges. Atte has recently been appointed to a managing director of SOFiN consulting Ltd. Prior to this, Atte has worked for WSP Finland (2006-2018) and for Sito Oy (1996-2005).

Atte has a long and diverse career in bridge design. With SOFiN consulting, Atte has provided special services for complex bridges as well as more conventional design services for standard bridges. These projects include various cable supported structures (cable stayed and suspension bridges) as well as several girder type of bridges made of steel, timber, or concrete, designed for traffic, railway or pedestrians. Prior to SOFiN Consulting, working as a senior designer and project manager in the Bridges department of WSP Finland, He has been responsible, both for design and for project management, of many bridge projects locally as well as internationally. Atte's project portfolio most recently includes significant international and architectural projects such as Kruunuvuori Bridge (Finland), Thu Thiem 2 Bridge (Vietnam), Chenab Bridge (India), Tarvo Bridge (Finland) and Atlantinsilta Bridge (Finland).

Atte has been a key team member in several successful bridge design competitions such as Crown Bridges, Helsinki, Finland (1st place), Aurora Bridge, Helsinki, Finland (1st place), New Mill Bridge, Turku, Finland (1st place), Laukko Bridge, Tampere, Finland (2nd place), Herttoniemi footbridge, Helsinki, Finland (2nd place), and Nguyen Van Troi Tran Thi Ly –Bridge, Danang, Vietnam (1st place). He has also been a project manager and/or main designer for several projects nominated as "Bridge of a year" awarded by the association of Finnish civil engineers in 2016 (Finnevik Bridge), in 2013 (Crusell Bridge), in 2009 (Mikkeli harbor bridge) and in 2006 (Gate of Espoo). Other project awards that Atte has been involved with include the environmental structure of the year 2009 (Viertola square Bridge) and the Bentley Be inspired award 2010 (Ngueyen Van Troi – Tran Thy Ly Bridge).

EMPLOYMENT HISTORY

SOFiN Consulting	2020 -	Managing Director
SOFi Consulting	2018 -2020	Head of International Consulting Services
WSP	2006 – 2018	Project Manager, Bridges
SITO Oy	1996-2005	Structural engineer (Bridges)
Rakennus Ekono	1994-1996	Planning assistant/trainee

EDUCATION

1998 MSc, Bridges and special structures – Helsinki University of Technology

PROFESSIONAL MEMBERSHIPS

2005 IABSE, Secretary of national group

LANGUAGES

Finnish - native

English - fluent

QUALIFICATIONS

FISE

2007 Designer of the concrete structures, grade Exceptionally difficult

2020 Designer of the Steel Structures, grade Exceptionally difficult

LECTURES, PAPERS, PRESENTATIONS

- Article “Finnish with BIM” in Bridge, Design and Engineering magazine. Issue No 90/2018 p. 53...57. Mikkonen, Järvenpää, Russel.
- Lecture in 26th SOFiSTiK Seminar, Munic 2018. “How new design methods lead to a different description of the results is shown by using the example of two cable-stayed bridges in Finland and Vietnam”.
- IABSE conference Vancouver, Canada 2017. Paper and presentation “Optimization of the curved pylon”
- Lecture in 25th SOFiSTiK Seminar, Munic 2016. “Bridges and Information Modelling”.
- AECEF 2015, 8th Symposium, FEUP, Porto, Portugal. “BIM Experiences and future challenges in Bridge design and construction” Paper and presentation. Mikkonen, Jutila.
- NVF Annual Bridge conference 2014, Reykjavik, Iceland. Paper and presentation: “Experiences of product modelling in bridge construction projects”
- IABSE conference Madrid, Spain 2014. Paper and presentation “Study of the Aurora Bridge with a FRP-deck instead of concrete” Mikkonen, Van Ijsele
- Footbridges, London 2014. 5th International Conference. Paper and presentation “three small bridges”.
- IABSE Symposium Kolkata, India 2013. Paper and presentation “Use of 3D Product Modeling in Cable Stayed Bridge Design and Construction”.
- Licentiate seminars in Bridge Engineering (4 pcs.) and graduate studies 1999-2008. total 18 credits points.

REFERENCE PROJECTS

RECENT

2021-ong	Crown Bridge, Helsinki, Finland. Camber analysis (fabrication shape), erection and geometry control. Cable stayed Bridge with a single pylon and main spans 260+260m. Total length 1228m. Client JC-YIT/Kreate.
2021	VisitVuoksi. Concept design of the pedestrian suspension bridge. Span 103,5m. Client Ramboll.
2020-2021	Kirjalansalmi Bridge, Kaarina, Finland. Cable stayed Bridge, main span 250m. Proof check of the concept design and preparation of the design Basis. Client: Finnish transport agency.
2021	Parnu, Swan Bridge. Bridge. Continuous steel arch. Main spans 2x104,75+70,1m, total length 364,7m. Design development stage, Technical support/advisor. Client Stricto Ou, Tallin.
2021	Gewan Island -entrance Bridge. Independent erection analyses check and partial design verifications. Client VCE, Austria.
2021-ong	Kiiskijärven silta, detailed design for the steel composite girder bridge (spans 41+52+41m). Client: AFRY Ltd.
2021-ong	Espoonjoen ratasilta. Detailed design, PT concrete railway bridge, span 48m. Client: A-Insinöörit Ltd, Finland.
2020	Hakaniemen silta, Concept design of the Steel concrete composite Bridge. Special variable cross section, curved in plane. Main Span 91m. Client: Sitowise Ltd.
2020	VT8, Aurajoki Bridge. Detailed design of the existing bridge extension. Special analyses. Client: Suunnittelukide Ltd.
2020	Pinni AKS, Trough -type continuous reinforced concrete railway bridge. Detailed design for the superstructure. Client: Suunnittelukide Ltd.
2019-2020	Maasilta, continuous PT concrete through type Bridge for tramline. Detailed design. Client Ramboll.
2019	Oulunjoki Bridge, Finland Prestressed continuous concrete Girder Bridge. Tender design, Detailed design, Structural design services. Client: Suunnittelukide Ltd.
2019-ong.	Thu Thiem 2, Ho Chi Minh City. Vietnam Cable stayed Bridge with inclined curved pylon. Steel concrete composite pylon and superstructure. Staged construction analysis. Fabrication shape.
2018-2021.	Beer Sheva Footbridge, Israel Continuous suspension Bridge with inclined pylons. Form-finding and staged construction analysis. Client Shoval Yehudai Engineers Ltd.
2017-2018	Crown Bridges, Helsinki, Finland New tram-pedestrian link (bay crossing) from city centre to Laajasalo. A girder bridge 293m and cable stayed Bridge 1228m, with a single pylon and main spans 260+260m. Full BIM project. Main designer for the girder bridge, designer for the pylon structures and the deputy main designer.
2017- 2018	Atlantinsilta Bridge, Helsinki Finland New tram-vehicular-pedestrian city-bridge (Integral post-tensioned concrete frame bridge) to new residential area. Full BIM project. Main designer, Project manager.
2017	Lähterannantie, Espoo, Finland Three urban footbridges. Main bridge designer. Concept design, Espoo.
2016-2017	Tarvonsilta, Espoo, Finland New high-quality cyclist-footbridge to a nature sensitive historical area. Main bridge designer. Concept design, Espoo.
2015-2016	Thu Thiem 2, Ho Chi Minh City, Vietnam New landmark Bridge to the city centre of Ho Chi Minh City in Vietnam. Cable stayed bridge with a backwards inclined curved pylon. BIM project. Design manager, pylon and erection design, deputy project manager / acting project manager 6 months.

2016	Kauklahdenväylä footbridge, Espoo, Finland. Unique, weathering steel, Vierendeel truss footbridge. Concept and detailed design. BIM project. Main designer / Project manager.
2015	Taxiway AM-AH Bridge, Helsinki Airport, Finland. Taxiway-bridge for airplanes. Preparation of the design basis, concept and detailed design. Specialist and main designer.
2015	Matinpuro Pedestrian Bridge, Espoo, Finland Unique timber-bridge for pedestrians and cyclists. Concept and detailed design. Main designer / Project manager.
2014-2016	City Rail Loop. Helsinki, Finland Underground railway under the Helsinki city center. Conceptual and structural design of ALUE2 (eastern site above ground). Two Bridges, Culverts and retaining wall structures. Full BIM project. ALUE2 Project manager, main designer of Bridges and structures
2014	Crown Bridges, Helsinki, Finland Concept design. Full BIM project. Bridge structural specialist.
2014	Karpinsilta Footbridge, Espoo, Finland. Concept and detailed design. Main designer and project manager.
2012	Crown Bridges, Helsinki, Finland International Design competition. Team member, Bridge structural specialist.2013-
2016	Chenab Bridge. India.
2006-2008	Steel arch Bridge for railway with massive concrete substructures/foundations. Main span 467m, total length 1315m. BIM project. Construction ongoing, one of the highest railway bridges in the world. Responsible designer for the concrete structures.
2013	Nahkuri SILTA, Finland Post tensioned concrete frame bridge. Detailed design. Full BIM project. Main designer.
2012-2014	Finnevik SILTA, Espoo. Finland Post tensioned, segmentally constructed 365 m long girder bridge. Main designer.
2010-2012	Rao II Bridge. Haiphong. VietNam Cable stayed Bridge. Erection supervision (18 months at site in Vietnam)
2009-2010	Crusell Silta, Helsinki. Finland Cable stayed Bridge, BIM project. Erection supervision and design services.

INTERNATIONAL

2012	Central Mekong Delta Connectivity project, Vietnam/Ho Chi Minh City. 27 small and middle size bridges. Detailed design. Main designer for six concrete-concrete –composite bridges (app. 75 000 deck-m2)
2008	Nguyen Van Troi – Tran Thi Ly Bridge, DaNang, Viet Nam. Cable stayed Bridge Concept and detailed design. Designer for the pylon concrete structures.
2008	Leamouth bridge, London UK. Three footbridges, structures for stairs and elevators. General design, project Engineer.
2008	Tripoli Bridges, Tripoli, Libya. Flyover bridges, parking structures. Concept design. Main designer.
2007	Rao II Bridge. Haiphong. VietNam. Cable Stayed Bridge. Concept change for foundation design. Project engineer.

RAILWAY BRIDGES

2009	Riipiläntie underpass
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- 2009 Continuous girder-bridge. Detailed design. Main designer
Vantaanjoki Railway Bridge
- 2004 Continuous post tensioned girder-bridge. Detailed design BIM project. Main designer.
Masala underpass
- 2003 Detailed design of post tensioned concrete bridges Project engineer.
Etelänväylä underpass
- 2003 Detailed design of continuous concrete bridges Project engineer.
Espoonportti underpass
- 2002 Post tensioned concrete bridges. Detailed design, Project engineer.
Lahdenperä underpass
- 2002 Detailed design of continuous concrete bridges Project engineer.
Tynniharju underpass
- 2000 Post tensioned concrete bridge. Detailed design, Project engineer.
Hennala underpass
- 1999 Post tensioned concrete bridge. Detailed design, Project engineer.
Aatola underpass
- 1999 Post tensioned concrete bridge. Detailed design, Project engineer.
Leikola underpass
- 1999 Post tensioned concrete bridge. Detailed design, Project engineer.
Mynttilä underpass
- 1999 Post tensioned concrete bridge. Detailed design, Project engineer.
Lappohja underpass
- 1999 Post tensioned concrete bridge. Detailed design, Project engineer.
Uro underpass
- 1998 Post tensioned concrete bridge. Detailed design, Project engineer.
Mielakka underpass
- 1998 Post tensioned concrete bridge. Detailed design, Project engineer.
Rauhala underpass
- 1997 Post tensioned concrete bridge. Detailed design, Project engineer.
Rikkilä underpass
- 1997 Post tensioned concrete bridge. Detailed design, Project engineer.
Peltokumpu underpass
- 1997 Post tensioned concrete bridge. Detailed design, Project engineer.

ROAD BRIDGES

2015	Highway No 3, Arolampi Overpass and culvert. Post tensioned concrete girder-bridge. BIM project. Main designer and project manager.
2015	Matasaari Bridge, Espoo Integral concrete bridge, Concept and detailed design. Main designer and project manager.
2011	Arielinkatu Bridge, Helsinki. Post tensioned concrete girder bridge. Detailed design. Main designer.
2010	Highway No 51. Overpasses No S5 & S7 Post tensioned concrete girder bridges. Detailed design. Main designer.
2007	Mikkilä overpass Post tensioned concrete girder bridge. Detailed design. Main designer.
2007	Torhola overpass Post tensioned concrete girder bridge. Detailed design. Main designer.
2007	Kuikku overpass Post tensioned concrete girder bridge. Detailed design. Main designer.
2007	Kupsenkylän Bridge Integral concrete bridge over the Kupsenkylä joki, Detailed design. Main designer and project manager.
2007	Moisiolampi Bridghe Steel culvert. General- and detailed design. Main designer and project manager.
2006	Saviontaipale Bridge, Post tensioned concrete frame bridge. Detailed design. Main designer.
2005	Haarapaju overpass Post tensioned concrete girder bridge. Detailed design. Main designer.
2005	Tavola overpass, Jännitetty betoninen risteysilta Post tensioned concrete girder bridge. Detailed design. Main designer.
2005	Lahnajärvi overpass Post tensioned concrete girder bridge. Detailed design. Main designer.
2004	Muijala overpass Post tensioned concrete girder bridge. Detailed design. Main designer.
2000	Leppävaara overpass Continuous concrete slab-bridge. Post general and detailed design. Project engineer.

FOOTBRIDGES AND OTHER STRUCTURES

2015	Seiliniitty Footbridge, Glue-lam timber-bridge. Concept and detailed design. Main designer.
2013	Kutomo Footbridge Steel-truss. Concept design. Project manager and Main designer.
2008	Aurora Footbridge, Helsinki Steel frame-arch -bridge. Competition 1st prize. Competition proposal, general- and detailed design. BIM project. Bridge specialist.
2009	Jokiranta Footbridge, Espoo Steel truss, Concept and detailed design. Project manager and Main designer.
2008	Gräsanoja Footbridge, Concrete Bridge, Concept and detailed design. Main designer and project manager.
2008	Iirislahti Footbridge. Post - tensioned continuous girder bridge. Concept and detailed design. BIM project. Main designer and project manager.
2007	Ratina Bridge Competition proposal, Cable stayed bridge. 2 nd prize. Project engineer.
2007	Sepetlahti Footbridge Glue-lam timber-bridge. Concept and detailed design. Main designer.
2008	Outokumpu Stainless MVP II. Underwater pumping station. Watertight concrete structures. Detailed design Project engineer.
2006	Mikkeli Harbor-bridge Steel truss, railway overpass. Detailed design. Project engineer.
2005	Olkiluoto Footbridge Steel truss. Detailed design. Main designer.

GENERAL AND TENDER DESIGN

2005	Hakamäentie Mt 100 Tender design, 100 M€ project / 21 bridges. Project engineer.
2004	Highway No 15 Improvement at border crossing -station in Nuijamaa. Masterplan, Project engineer
2003	Highway No 4 Improvement between Vantaanjoki – Maaherrantie. Masterplan, Project engineer
2002	Luhdanmäki railway-bridge Continuous concrete box girder. Concept design for Masterplan. Project engineer
1996	Ringroad No III Improvement between Vantaankoski-Tikkurila. Masterplan, Project engineer