



Curriculum vitae

NAME: Loo van

FIRST NAMES: Frederik Johannes (Hans)

DATE OF BIRTH: March 2nd 1967

CIVIL STATUS: Married

NATIONALITY: Dutch, Swiss

TELEPHONE: +41 799 360 706

CURRENT JOB: Owner / Consultant Weigh-In-Motion
Corner Stone International Sagl.
Claro, Switzerland

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EDUCATION:
1987 - 1993 MSc.
Electrical Engineering, University Twente,
Enschede, The Netherlands

SPECIALITIES:

- Weigh-in-Motion, technology and applications
- Overloading enforcement policy and implementation
- Specification, design and testing of WIM systems
- WIM data quality management

LANGUAGES:

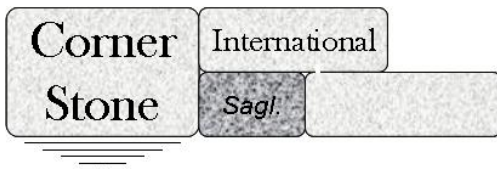
Dutch: mother language
English: good verbal and written usage
German: good verbal and moderate written usage
Italian: good verbal and moderate written usage.

WORKING CAREER:

2013 - PRESENT Owner / Consultant Weigh-In-Motion
Corner Stone International Sagl.
Claro, Switzerland

2006 - 2013 Project manager Weigh-in-Motion
Kalibra-Cofely.
Delft, The Netherlands.

1999 - 2006 Senior Project manager
ARCADIS Infra BV in Amersfoort
Department Consultancy and Development.



- 1997 - 1999 Consultant
Dutch Railways (NS)
NS Technical Research
- 1993 – 1997 Technology Consultant
Dutch National Police Agency (KLPD)
Division Mobility

REFERENCE PROJECTS

- KENLEZ
1995 - 1997 Project manager of the KENLEZ project for the Division Mobility of the National Police Agency. The project concerned the development and introduction of an automatic licence plate recognition system. The goal of the project was to improve the throughput capacity and velocity of the processing of the pictures of speed violations using of automatic character recognition
- WIM-VID
1996 - 1997 Project manager, representing the Division Mobility of the National Police Agency in the WIM-VID project. The project concerned the first testing in The Netherlands of the combination of a Weigh-In-Motion system with a video registration camera. The purpose of the project to develop a practical tool for more efficient enforcement of overloading.
- VIDEO INSPECTION
1997 - 1999 Project manager for the Technical Research Department of the Dutch Railways. The project concerned the development and introduction of an automatic rail track inspection system using video detection. Aim of the project was to improve the efficiency of the inspection process using automatic incident detection.
- WIM-HAND 1 & 2
2000 - 2005 Project manager for the Road and Hydraulic Engineering Institute of the Dutch Ministry of Transport, to manage both the technical and organisational content of the project. The goals of the project were the specification, development and testing of a multiple sensor Weigh-In-Motion system that in the future could be used for direct enforcement of overloading. The project also included the preparation of the implementation of the WIM-systems in the legal and operational enforcement procedures.
- PARTNERS FOR ROADS
2003 - 2008 Leader of Window 4 ‘Axle Loads’ of the programme Partners for Roads. The program focussed on the development of cooperation between Rijkswaterstaat and Transport Ministries of Central and East European countries. Including project management of individual projects in Poland, Slovenia, Hungary and Romania all in the area of overloading and the use of WIM technology for weight enforcement.
- REMOVE
2004 - 2006 Work package leader and technical expert, representing of the Dutch Ministry of Transport and ARCADIS in this European Union grant application project. The objective of the REMOVE project was to prepare requirements for the harmonised and interoperable deployment of Weigh-in-Motion systems in the enforcement of overloading throughout the EU. The work packages covered operational, legal and technical aspects.

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| <p>FIWI 2008 - 2010</p> | <p>Work package leader and technical expert, representing of the Dutch Ministry of Transport in this European FEHRL project. The goal of the FiWi project was the update of the COST-323 specifications into a truly European standard for WIM systems. This included the revision of structure of the document, the system requirements and the acceptance tests.</p> |
| <p>BRIDGE-WIM 2004 - 2012</p> | <p>Product manager for the introduction of the applications of Si-Bridge-WIM technology in the Netherlands. Project manager for several implementation, test and demonstration projects for different customers. Including projects for the Centre for Transport and Navigation, department for Infrastructure and the Regional Directorate South-Holland of Rijkswaterstaat and the province of Zeeland.</p> |
| <p>REDESIGN WIM-NL 2011 - 2012</p> | <p>Consultant in the project for the upgrade and redesign of the existing national network of WIM systems of Rijkswaterstaat on the highway network in the Netherlands. The activities involved; preparation of the functional specifications and input for the tender documents, assessment of the technical design offered in the tender, advice on the site selection and system installation, preparation of the procedures for calibration, acceptance tests and data quality checks for the new network.</p> |
| <p>PIAF & PNCT 2014 - 2016</p> | <p>Consultant together with Labtrans, University of Santa Catharina in the project for development of a Data Quality Management system for the networks of WIM systems (PIAF and PNCT)of the Brazilian National Department for Infrastructure and Transport (DNIT). The activities involved; the introduction, design, development, implementation and testing of a data quality control system dedicated to the Brazilian road and traffic conditions.</p> |
| <p>BRIDGEMON 2012 - 2015</p> | <p>Consultant and technical expert in the European Union project Bridgemon for the further development of the measurement accuracy of Bridge WIM technology and the application for strength assessment of long span steel bridges. The activities involved; the preparation of operational tests, the evaluation of test results and dissemination of the benefits to potential users in bridge design and maintenance.</p> |
| <p>NMI STANDARD 2015 - 2016</p> | <p>Project manager and technical expert in the development of a new international standard for WIM systems. The development of the standard was initiated by the Dutch Metrology Institute (NMI) and a group of international WIM experts. The new standard covers both specifications and test requirements, both low speed and high speed system and both statistical and legal applications.</p> |
| <p>KISTLER 2005 - PRESENT</p> | <p>Consultant for Kistler Instrumente assisting on several technical and marketing projects like the development, testing, evaluation and introduction of new hard- and software, customer training and supervision of Kistler sensor and system installations, preparation of several instruction manuals on the installation of Kistler WIM sensors and systems and the preparation of marketing brochures.</p> |
| <p>ISWIM 2007 - PRESENT</p> | <p>Founding member, first General Secretary later Information Officer and currently Coordinator of Promotional Activities of the International Society for Weigh-In-Motion (ISWIM). Activities include the organization of several international seminars and workshops on the developments and applications of WIM. The aim is to make ISWIM more active and prominent in the support of the more widespread use of WIM technologies and applications.</p> |



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| <p>ISWIM USER GUIDE 2018 - 2019</p> | <p>Main author of the ISWIM Guide for Users of Weigh-In-Motion providing a basic, yet comprehensive introduction to beginners users of WIM. The guide covers different aspects related to the specification, technical working, purchase, installation, calibration, testing, operation and maintenance of WIM systems, the various applications of WIM data, and a 5 step procedure to select the right WIM system all described in an easy-to-understand language.</p> |
| <p>CORNER STONE INT. 2013 - PRESENT</p> | <p>The first consulting company in the international WIM market. Corner Stone International SAGL provides consultancy services on WIM technology and its applications for various different vendors and user of WIM systems. Corner Stone's consulting activities range from product development and marketing, sensor and system installations, user training, project management, assistance in the preparation of tender documents and evaluation of offers, calibration and testing of WIM systems and data quality management of its data.</p> |
| <p>BENCHMARK WIM 2018- 2019</p> | <p>Technical expert in the preparation of a worldwide overview for Rijkswaterstaat in The Netherlands of the latest developments in WIM technologies, applications and implementation. This benchmark served as input for the ongoing development of a strategy on the use of WIM data in road asset management and weight enforcement.</p> |
| <p>ROADS OF SERBIA 2019- 2020</p> | <p>Implementation of a network of WIM-systems on the state road network of the Republic of Serbia for the Public Enterprise Roads of Serbia (PERS). The work included the selection of locations for measurements of traffic loading, description of the effects of overloading and of different applications of WIM systems to support weight enforcement operations. Providing the functional specifications, interface requirements and test procedure as part of the tender documentation. Development of an action plan for a future weight enforcement strategy; including various enforcement approaches and supporting (WIM) technology.</p> |
| <p>CROSS ISRAEL HIGHWAY 2019- 2020</p> | <p>Implementation of high speed WIM-systems on the Route 6 highway for the Cross Israel Highway Ltd. The work included the general design of the systems, the selection of sites for implementation and providing the functional specifications, interface requirements and test procedure as part of the tender documentation.</p> |
| <p>ROADS DEPARTMENT OF GEORGIA 2020</p> | <p>Technical expert for the Asian Development Bank to develop an overload control strategy for the Georgian Roads Department and an action plan for the implementation of WIM systems for direct weight enforcement on the East-West Highway. In addition the work included the general design of the WIM systems, the selection of sites for implementation and providing the functional specifications for the tender documentation.</p> |
| <p>NMI TYPE APPROVAL OF WIM SYSTEMS 2020-2022</p> | <p>Consultancy for several manufacturers of WIM system on the preparation and execution of the type approval procedure according to the international OIML R134 and NMI-WIM standards. The type approval tests and certification were done by the Netherlands Metrology Institute (NMI). The work included the preparation, supervision and evaluation of practical on-site tests.</p> |



ROADS & HIGHWAYS
DEPT. OF BANGLADESH
2021-2022

Preparation of the general design, standard operational procedure and functional specifications for a network of 28 WIM-stations for the Roads and Highways Department of the government of Bangladesh. The WIM systems will be used as pre-selection tool for more efficient overload control stations.

RIJKSWATERSTAAT
WIM 2.0
2022- 2023

Assessment of the technology and functionality of the current network of WIM systems of Rijkswaterstaat in the Netherlands. The work included interviews with all end users of the WIM data and organizations involved in the operation and maintenance of the network. This resulted in a first set of technical and functional specifications for the next generation of the network (WIM 2.0). It also included the preparation of an international overview of existing and new WIM technologies and a description of the applications of WIM systems and data around the world.

PUBLICATIONS:

- Co-author of several ISWIM Practitioners' Guides
- Numerous reports, papers and articles on the projects mentioned above
- Trainings on the installation, configuration and operation of WIM systems
- Presentations at several international conferences, seminars and workshops.

CERTIFICATION

Location+ Date: Claro, 13 March 2023

Name: F.J. (Hans) van Loo

Signature:

A handwritten signature in blue ink, appearing to be 'Hans van Loo', written over a horizontal line.