

# Curriculum Vitae

## PERSONAL INFORMATION

Name	<b>Melo Parente, Francisco José Monteiro de</b>
Address	Av. 25 de Abril 53 3º Dto., 2800-304 Almada, Portugal
Telephone (cell phone)	(+351) 926607535
Telephone (home)	(+351) 212723275
E-mail	<a href="mailto:f.meloparente@sapo.pt">f.meloparente@sapo.pt</a>
Nationality	Portuguese
Date of birth	15 February 1960

## INTERNATIONAL AND NATIONAL POSITIONS

Dates	<b>August 2016 to present</b>
Name and address of employer	ISO, International Organization for Standardization, Chemin de Blandonnet 8, CP 4011214 Vernier, Geneva, Switzerland
Type of business or sector	Standardization in the field of railway infrastructure, including areas such as railway tracks, platforms, stations and shunting yards, as well as railway specific needs for tunnels, bridges and other civil works, and addressing: design, construction and installation requirements, testing and conformity assessment of ground equipment as well as maintenance criteria for their entire life cycle.
Occupation or position held	Chairman ISO/TC 269/SC 1, Railway Applications, Infrastructure.
Main activities and responsibilities	Chairman of Sub Committee 1 responsible for the standardisation in railway applications - infrastructures

Dates	<b>November 2000 to present</b>
Name and address of employer	CEN, European Committee for Standardization, Avenue Marnix 17 B-1000 Brussels, Belgium
Type of business or sector	Standardization of all applications (except electrical and electronic subjects), in the field of railways, including urban transport, specifically intended for vehicles and fixed installations.
Occupation or position held	Chairman CEN / TC256 / SC1, Railway Applications, Infrastructures.
Main activities and responsibilities	Chairman of Sub Committee 1 responsible for the standardisation in railway applications - infrastructures

Dates	<b>September 2006 to March 2008</b>
Name and address of employer	AVEP, Alta Velocidade entre Espanha e Portugal, Agrupación Europea de Interés Económico “Alta Velocidad España – Portugal”. Calle José Abascal, 56, 6ª planta, E-28003 Madrid. Spain
Type of business or sector	Spanish-Portuguese Company with the responsibility to develop the studies of the border sections in new High Speed Lines between Portugal and Spain
Occupation or position held	Member of Follow Up and Control Committee
Main activities and responsibilities	Follow up and control of AVEP activities

Dates	<b>March 2006 to March 2008</b>
Name and address of employer	Portuguese Government, Minister of Public Works, Transportation and Communications, State Secretary of Transportation. Sub-Comities Portugal-Spain for High Speed Rail and Interoperability. Palácio Penafiel, Rua de S. Mamede ao Caldas 2, 1100-533 Lisboa Portugal

Type of business or sector	Head of the Portuguese delegation on Sub-Comities Portugal-Spain for Rail High Speed and Interoperability
Occupation or position held	Member of Follow Up and Control Committee
Main activities and responsibilities	Follow up and control of AVEP activities

Dates	<b>February 2006 to October 2006</b>
Name and address of employer	APNCF, Portuguese Association for Railway Standardization and Certification. Rua Engenheiro Ferreira Mesquita, 1 Ed CP - Bloco B – 1 Dto. 1099-035, Lisboa, Portugal
Type of business or sector	Certification and Standardization
Occupation or position held	Chairman of the Board
Main activities and responsibilities	First Chairman of the Board, responsible for the start-up, installation and operation of APNCF

Dates	<b>September 2002 to September 2006</b>
Name and address of employer	CT 143, IPQ Instituto Português de Qualidade, Rua António Gião, 2 2829-513 Caparica Portugal
Type of business or sector	Standardization
Occupation or position held	Chairman CT 143, Railway Applications.
Main activities and responsibilities	Chairman of CT 143 responsible for the standardisation in railway applications in Portugal

## EMPLOYMENT

Dates	<b>March 2008 to present</b>
Name and address of employer	SAFEVIA, Lda., Praça Gil Vicente, n.º 1 – 1º- B, 2800-098 Almada, Portugal
Type of business or sector	Consulting and engineering
Occupation or position held	Managing Partner and Technical Director
Main activities and responsibilities	<p>Consulting and engineering in railway projects:</p> <ul style="list-style-type: none"> <li>- CE Conformity Check of the catenary contact line, system designated LP300, suitable for electrification at 25 kV and for a service speed of 300 km/h, within the TSI - Energy Subsystem, on the Technical Specification for Interoperability for the Energy subsystem. as required by the Contracting Authority, INFRAESTRUTURAS DE PORTUGAL, SA (IP, SA)</li> <li>- CE Conformity Check with the TSI - Processes for authorization of the circulation in the Portuguese railway network in general, and in work places, of various rolling stock, including locomotives, wagons and railbond machines.</li> <li>- CE verification of the electrification Conformity of the Rail Access to the Aveiro Port', within the TSI - Energy Subsystem, on the Technical Specification For the Energy subsystem, hereinafter referred to as "ETI ENE", as required by the Contracting Authority, INFRAESTRUTURAS DE PORTUGAL, SA (IP, SA). hereinafter referred to as "IP".</li> <li>- Studies to increase the capacity of the Sena railroad, Republic of Mozambique, between Moatize and the port of Beira. The studies include: <ul style="list-style-type: none"> <li>• Capacity analysis of existing operations;</li> <li>• Study of the operations to transport 12, 20 and 30 million tons of coal per year;</li> <li>• Adequacy of infrastructure, including the layout of the stations;</li> <li>• Hourly charts.</li> </ul> </li> </ul>

- Analysis and Validation of the “Pre-Feasibility Study for logistics transportation of coal. (EARLY START PROJECT).  
As part of the coal mining activities in Boyacá, Minas Paz del Rio, the VOTORANTIN company, is currently developing a number of studies to expand its mining production. The studies include the Study Coal Transport Logistics, pre-feasibility phase from the Paz del Rio river region to an export port in the Colombian Caribbean.  
My work was to do the critical analysis and validation study of the rehabilitation and operation of the railway line owned by Minas Paz del Rio.
- Development of a plan for the Institutional Management of the Railways. Consolidation of technical and institutional capacity of ANTT, as the responsible body for the public policies for the operation of passenger services for high-speed trains, with the end customer the ANTT, National Agency of Railway Transport -BRAZIL. Contract with Inter-American Development Bank – IADB.
- Review of Project PPP1, " High Speed Rail Line, Axis Lisbon / Madrid, section Poceirão / Caia," and " Évora / Caia, conventional line”, coordinating the review of the alignment, track, catenaries and interoperability.
- Preliminary Study and Executive Project for refurbishment and upgrade of the railway between Biskra and Touggourt, 74 km, in the Republic of Algeria.
- Participation in Supervision Team of Demand and Feasibility Study, Project TAV, High Speed Train, High Speed Connection Rio de Janeiro / Sao Paulo, Brazil.  
This consultancy work was developed for Nathan and Associates for the IADB – Interamerican Development Bank.
- In developing of the High Speed network in Portugal, led the technical SAFEVIA team who provided technical advice to the competitors in the bidding PPP1: " High Speed Rail Line, Axis Lisbon / Madrid, section Poceirão / Caia," and " Évora / Caia, conventional line”, "and the of bidding of PPP2" High Speed Rail Line, Axis Lisbon / Madrid, section Lisbon / Poceirão ":
  - Monitoring plans, inspection and diagnosis, PPP1;
  - Maintenance plans for the infrastructure, PPP1;
  - Maintenance of Bridges, RAMS analysis, Activities Management and Inspection, PPP1;
  - Procedures, tests and trials necessary to demonstrations of compliance and certification of the infrastructure, PPP1;
  - Strategy of the maintenance of the infrastructure, PPP1;
  - Integration of Engineering subsystems, PPP2;
  - Procedures to verify the compliance of the infrastructure, interoperability certification and the availability and security clearance, PPP2;
  - Procedure for interfaces managing, PPP2.
- Process for the Design Certification of High Speed Catenarie CAV2 2 to 350 km/h.

Dates

Name and address of employer

Type of business or sector

Occupation or position held

Main activities and responsibilities

**August 2006 to March 2008**

Rede Ferroviária Nacional – REFER EP, Estação Sta. Apolónia 1100-105 Lisboa Portugal

Portuguese Railway Network Manager

Manager of Engineering Direction

- Management of REFER Engineering Direction, which includes the Departments of: Innovation, Research and Development; Track; Catenaries;

Signalling; Bridges and Tunnels; Architecture and Buildings; Geotechnical; Materials; Track Measurements and Diagnostic.

- Technical support, analyses and advice to RAVE (Portuguese High Speed Project), in the Technical Specifications, Feasibility Study and Basic System Design (Pre-study Project) for the High Speed Tracks: Lisbon-Madrid, Lisbon - Portuguese Border section, and Lisbon – Oporto.
- Development and management of Feasibility Study, Pre-study and Projects for maintenance, renovation, up-grade and new REFER conventional tracks.
- Management and development of REFER infrastructures standards.
- Homologation and certification of new track equipment, materials, work methods, machinery and trains.
- Train tests and analysis of compatibility between trains and infrastructure.
- Participation in the development of TSI, European Technical Specifications for Interoperability in High Speed and Conventional.
- Participation in the development of U.I.C (International Union of Railways) leaflet and European, C.E.N., Standards.

Dates

Name and address of employer

Type of business or sector

Occupation or position held

Main activities and responsibilities

**February 2004 to August 2006**

Rede Ferroviária Nacional – REFER EP, Estação Sta. Apolónia 1100-105 Lisboa Portugal

Portuguese Railway Network Manager

International Direction

- Technical consultant for REFER international relationships.
- Organization of the REFER representatives in international organizations.
- Chairman of CT 143, responsible for the standardisation in railway applications in Portugal.

Dates

Name and address of employer

Type of business or sector

Occupation or position held

Main activities and responsibilities

**April 2003 to February 2004**

Rede Ferroviária Nacional – REFER EP, Estação Sta. Apolónia 1100-105 Lisboa Portugal

Portuguese Railway Network Manager.

Manager of Standardisation and Infrastructures Innovation, Engineering Direction.

- Management and development of REFER infrastructures standards, organisation of the system and the procedures.
- Development, research and analysis of new materials and technologies for the railway infrastructures.
- Homologation and certification of new track equipment, materials, work methods, machinery and trains.
- Train tests and analysis of track speed and load.
- Analysis and advices concerning TSI, Technical Specifications for Interoperability, ERRI, European Rail Research Institute, Reports, U.I.C. leaflets, and prEN of CEN. Standards.

Dates

Name and address of employer

Type of business or sector

Occupation or position held

Main activities and responsibilities

**July 2002 to March 2003**

Rede Ferroviária Nacional – REFER EP, Estação Sta. Apolónia 1100-105 Lisboa Portugal

Portuguese Railway Network Manager.

Manager of Innovation and Knowledge Management, Infrastructures Direction.

- Development, research and analysis of new materials and technologies for the

	<p>railway infrastructures.</p> <ul style="list-style-type: none"> <li>- Homologation and certification of new track equipment, materials, work methods, machinery and trains.</li> <li>- Train tests and analysis of track speed and load.</li> <li>- Expert in the UIC, Union International des Chemins de Fer, Working Group: "Track Parameters for Tilting Trains".</li> <li>- Analysis and advices concerning TSI, Technical Specifications for Interoperability, ERRI, European Rail Research Institute, Reports, U.I.C. leaflets, and prEN of C.E.N. Standards.</li> </ul>
<p>Dates</p> <p>Name and address of employer</p> <p>Type of business or sector</p> <p>Occupation or position held</p> <p>Main activities and responsibilities</p>	<p><b>January 2000 to June 2002</b></p> <p>Rede Ferroviária Nacional – REFER EP, Estação Sta. Apolónia 1100-105 Lisboa Portugal</p> <p>Portuguese Railway Network Manager.</p> <p>Manager of Track Technical Quality and Standards, Engineering Direction.</p> <ul style="list-style-type: none"> <li>- Track quality analysis.</li> <li>- Development, research and analysis of new track and materials technologies.</li> <li>- Track standards.</li> <li>- Homologation and certification of new track equipment, materials, work methods, machinery and trains.</li> <li>- Train tests and analysis of track speed with tilting trains.</li> <li>- Analysis and advices concerning ERRI, European Rail Research Institute, Reports, U.I.C. leaflets, and prEN of C.E.N. Standards.</li> </ul>
<p>Dates</p> <p>Name and address of employer</p> <p>Type of business or sector</p> <p>Occupation or position held</p> <p>Main activities and responsibilities</p>	<p><b>January 1998 to December 1999</b></p> <p>Rede Ferroviária Nacional – REFER EP, Estação Sta. Apolónia 1100-105 Lisboa Portugal.</p> <p>Portuguese Railway Network Manager.</p> <p>Chief Engineer of the Track Technical Division, Maintenance.</p> <ul style="list-style-type: none"> <li>- Maintenance track design and topography.</li> <li>- Track standards.</li> <li>- Track quality analysis.</li> <li>- Analysis and advices concerning ERRI, European Rail Research Institute, Reports, U.I.C. leaflets, and prEN of C.E.N. Standards.</li> <li>- Train tests and analysis of track speed with tilting trains.</li> <li>- Head of the Portuguese delegation to CEN / TC256 / SC1, Railway Applications Track.</li> <li>- Representative of REFER to the National Technical Committee for Standardization, CT 143, "Railway Applications", mirror to CEN/TC 256.</li> <li>- Homologation and certification of new track equipment, materials, work methods, machinery and trains.</li> </ul>
<p>Dates</p> <p>Name and address of employer</p> <p>Type of business or sector</p> <p>Occupation or position held</p> <p>Main activities and responsibilities</p>	<p><b>November 1991 to December 1997</b></p> <p>CP, Caminhos de Ferro Portugueses, EP, Calçada do Duque, nº 20 1249-109 Lisboa Portugal</p> <p>Portuguese Railways.</p> <p>Chief Engineer of the Track Technical Division, Maintenance Direction.</p> <ul style="list-style-type: none"> <li>- Maintenance track design and topography;</li> <li>- Track standards development.</li> <li>- Track quality analysis.</li> <li>- Analysis and advices concerning ERRI, European Rail Research Institute, Reports, U.I.C. leaflets, and prEN of C.E.N. Standards.</li> <li>- Train tests and analysis of track speed with tilting trains.</li> <li>- Homologation and certification of new track equipment, materials, work methods, machinery and trains.</li> <li>- Representative to U.I.C. 7G Group, Track, 1992.</li> </ul>

- Head of research program with LNEC, National Civil Engineering Laboratory, to develop the software “RECTIF”, for track curve optimisation.
- Study and introduction of rail grinding in CP.
- Head of the Portuguese delegation to CEN / TC256 / SC1, Railway Applications Track.
- Supervision of several training programs, some in cooperation with Instituto Superior Técnico (I.S.T.), Technical University of Lisbon.

Dates

Name and address of employer

Type of business or sector

Occupation or position held

Main activities and responsibilities

**January 1990 to October 1991**

CP, Portuguese Railways

CP, Caminhos de Ferro Portugueses, EP, Calçada do Duque, nº 20, 1249-109 Lisboa Portugal

Engineer in the Track Maintenance Service, Maintenance Direction.

- Member of the working group for tilting trains.
- Track quality analysis, head of the new track measurements geometric car, EM 120.
- Responsible for ultra sonic inspection of rails, (rail flaw detection).
- New methods analysis and works with computers.

Dates

Name and address of employer

Type of business or sector

Occupation or position held

Main activities and responsibilities

**July 1989 to December 1989**

Luso-Área. Consultores Rodoviários Rua José Afonso, nº 11, 2810-237 Almada, Portugal

Road and highway projects.

Project Manager.

Coordination and execution of traffic surveys, road and highway projects.

## UNIVERSITY LECTURING

Dates

Name and address of employer

Type of business or sector

Occupation or position held

Main activities and responsibilities

**October 2009**

FUNDEC - Association for Training and Development in Civil Engineering and Architecture, FUNDEC – IST - Instituto Superior Técnico, University of Lisbon - DECivil - Gab. 1.42, Av. Rovisco Pais, 1049-001 Lisboa, Portugal

University

Lecturer

Responsible for the graduate course “Track Materials” of the Program in Railway Engineering

Dates

Name and address of employer

Type of business or sector

Occupation or position held

Main activities and responsibilities

**January 2003 to September 2007**

Faculdade de Engenharia, Universidade Católica Portuguesa Estrada Octávio Pato – 2635-631 Rio de Mouro Portugal

University

Lecturer

Responsible for the graduate course “Track Project” of the Master Program in Railway Engineering

## EDUCATION AND TRAINING

Dates	<b>September 1984 to July 1989</b>
Name and type of organisation providing education and training	Instituto Superior Técnico, Technical University of Lisbon. Portugal
Principal subjects/occupational	Civil Engineering.
Title of qualification awarded	<b>Diploma in Civil Engineering (five years)</b>
Dates	<b>September 1989 to July 2000</b>
Name and type of organisation providing education and training	Instituto Superior Técnico, Technical University of Lisbon. Portugal
Principal subjects/occupational	Transportation systems, land, sea and air.
Title of qualification awarded	<b>MSc in Transportation (courses only)</b>
Dates	<b>June 2006</b>
Name and type of organisation providing education and training	UIC, International Union of Railways, 16 rue Jean Rey , 75015 Paris, France
Principal subjects/occupational	“6th Training for High Speed Systems”.
Dates	<b>September and October 1995</b>
Name and type of organisation providing education and training	Fernave, Lisbon
Principal subjects/occupational	“Management in Business for High Level Staff”.
Dates	<b>February 1992</b>
Name and type of organisation providing education and training	Fernave, Lisbon
Principal subjects/occupational	“Principles of Track Quality, Recording and Assessment, New Methods and Technologies for Track Maintenance”, by Prof. Dr. Conrad Esveld from Delft University.
Dates	<b>January to September 1992</b>
Name and type of organisation providing education and training	CP, Portuguese Railways.
Principal subjects/occupational	“Contact Rail-Roue, Dynamique Ferroviaire”, by Mr. Eng. Roland Joly, SNCF.

## LANGUAGES

<b>MOTHER TONGUE</b>	<b>Portuguese</b>
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## OTHER LANGUAGES

Language	<b>English</b>
Reading skills	Excellent
Writing skills	Good
Verbal skills	Good

Language	<b>French</b>
Reading skills	Excellent
Writing skills	Good
Verbal skills	Good

Language	<b>Spanish</b>
Reading skills	Excellent
Writing skills	Basic
Verbal skills	Good

Language	<b>Italian</b>
Reading skills	Basic
Writing skills	Basic
Verbal skills	Basic

## **ADDITIONAL INFORMATION**

### **COMPUTER SKILLS**

- Various training in computer applications. Proficient in “MsWord”, “Exel”, “PowerPoint”, “Acess”, “MsProject”, “Rectif”, specific software for track quality analysis, “Works”, specific software for road and rail design and traffic surveys, “Vax/Vms”, “Basic” and “Fortran”.

### **ADDITIONAL TRAINING**

- Holland Company, 1000 Holland Drive, Crete, IL USA: Welding of rails, October 2012.
- ITSS, The Spanish company Ibérica Tecnología en Sistemas de Seguridad Ferroviarios SL, Madrid, Spain: Warning Systems in the railway sector, April 2009
- UNION PACIFIC, Omaha NE, and NEW YORK TRANSIT AUTHORITY in NY: New technologies in track geometry measurements and evaluation, April 2007.
- HTT and Reeves, Columbia SC, U.S.A: New dynamic track stabilizer, January 2002.
- UNION PACIFIC, Omaha NE, and PLASSER, Chesapeake VI, U.S.A.: New methods in track geometry measurements and evaluation, October 1998.
- Matisa, Cresier, Switzerland: Track optimisation with tamping machines, November 1995.
- AMTRACK in Philadelphia PE, PLASSER in Chesapeake VI, KLD Lbs. in Long Island NY, New York Transit Authority in NY and Pandrol Jackson in Danbury CO, USA: Technologies, systems and methods for track quality analysis, October 1993;
- NS, Netherlands Railways: Rail Maintenance and grinding, March 1993,
- DB, German Railways, Trier, Germany: Tests with the tilting train X2000 from A.B.B., August 1991,
- Plasser & Theurer and O.B.B., Austrian Railways, Linz and Wien, Austria: Track geometry measurements and evaluation, with the measurement car EM 120, June 1991.
- S.N.C.F., French Railways: High Speed Infrastructures, April 1991.

### **TALKS IN CONFERENCES**

- Conference in “Infrastructure Standardization in Europe”, Zagreb, Croatia, October 2012.
- EFRTC, European Federation of Railway Track Works Contractor, “European Standardization Activities for Railway Applications”, Porto, Portugal, June 2009.



- Conference in “Infrastructure Standardization in Europe – Different Track Gauges Approach”, Riga, Latvia, October 2006.
- “EurailSpeed 2002”, organized by UIC. Title: “Modernization of Conventional Tracks for High Speed With Tilting Trains in Portugal”, Madrid, Spain, October 2002.
- “III Conference in Standards and Certification in Railway Applications”, organized by IPQ, Portuguese NSB. Title: “Activities of CEN / TC 256/ SC1, Railway Applications Track”. I.P.Q., Monte da Caparica, Portugal, November 2001.
- “I Conference in Standards and Certification in Railway Applications”, organized by IPQ, Portuguese NSB. Title: “Activities of CEN / TC 256/ SC1, WG15, 21 and 28, Track alignment design parameters, Acceptance of track works, Track geometry quality”, Monte da Caparica, Portugal, November 1999.
- “Sixth International Conference on Computer Aided Design, Manufacture and Operation in Railway and Other Advanced Mass Transit Systems”, organized by Wessex Institute of Technology, United Kingdom. Title: “In-vehicle application of the RECTIF system for curve alignment optimisation”, jointly with A. Macedo and E. Arsénio. Lisbon, September 1998.