


PERSONAL INFORMATION

Dan M. Costescu



 Bucharest, Romania

id: 21a31142

Date of birth 1969 | Nationality Romanian

JOB APPLIED FOR

Member of the Board - C.N.C.F. "CFR" SA

WORK EXPERIENCE

2019 Business or sector Transportation Safety
 Director certification program NNTR – UIC (Union International Chemin de Fer)

2017-2018 Business or sector Railway infrastructure
Strategy Adviser
C.N. CFR SA, Bucharest, Romania

- Development of Infrastructure inclusive of rail, road and air strategy, development and promoting to stakeholders of legal framework specific to infrastructure investment, maintenance and renewal.
- Reviewing, updating and promoting the legal framework for investment in national infrastructure to the Transport Commissions of Romanian Parliament.
- Supervising the investment sector and promoting its budgetary needs to the government and Parliament.
- Reviewing the strategic plan to reduce the renewal backlog of the network. Lobby to Finance Ministry and Financing Institutions
- Reviewing and adapting of the Network Performance Contract of CFR. (Final version completed by EBI/Jaspers Romania).
- Campaigning in Romania and EU to prevent the closing of 40% of Romanian Rail Network
- Concept development: Asset management the master tool for railway companies restructuring.
- Responsible for relationship to DG Move and Transport Commissionaire Violeta Bulc
- In charge for negotiating to Bucharest offices of European Investment Bank and European Bank for Reconstruction and Development about Performance Contract.
- Investment Loan "Prince Project", Corporate governance assessment
- Responsible for maintaining the relationships with international organizations and their top management (UIC- Jean Pierre Loubinoux, General Manager and CER – Libor Lochman – Executive Director
- Monitoring the fulfilment of ex-ante conditionalities (Master Plan), including discussion with TRAN Commission of European Parliament (Michael Cramer – Chairman)

2017-2018 Business or sector Railway Infrastructure – Power supply and maintenance
Board Member
Electrificare CFR SA, a subsidiary of CN CFR SA

- 2016 **Business or sector** National Transportation System
Minister
Ministry of Transport and Infrastructure, Bucharest, Romania
- **Duties:**
 - Development and approval of legal framework specific to transport and infrastructure development.
 - Development of strategies, policies and programs aiming to develop transport and infrastructure investments.
 - Coordination of transport modes, Air, Naval, Railway, Road, Intermodal and their integration in the national transport system.
 - Coordination of 51 state-owned companies, commercial companies, institutions and agencies.
 - Coordinated the national transport infrastructure companies: CFR - Romanian Railways, CNADNR – Romanian Company for Motorways and National Roads, CNAB, National Airport Company of Bucharest, CNAPM – National Administration of Maritime.
 - Controlled and simplified the customer interface with: AFER – Romanian Railway Authority, RAR – Romanian Vehicles Register, ARR – Romanian Road Authority, ISCTR - Road State Inspection, ANR – Romanian Naval Authority, AAR – Romanian Aeronautic Agency, CIAS - Agency for Investigation of air accidents, ARSVOM – Life rescue on sea Agency.
 - Ports Constanta, AFDJ-Administration of Low Danube, APDM Administration of Maritime Ports on Danube, ACN - Administration of Navigable Canals.
 - **Achievements/Projects:**
 - Development and promoted of the National Transport Master Plan, the first Romanian strategic document for transport infrastructure (approved by Government Resolution in Sept. 2016) dealing with infrastructure development to 2020, 2030-time horizons and beyond. Campaigning to Parliament for political consent and to local communities
 - Development and approval of the legal package to accelerate the implementation of infrastructure projects
 - Supported restructuring process of Romanian Railways, commenced as the CEO of the company
 - Developed the concept for balancing the national transport system, encouraging the modal shift, eliminate asymmetric state subsidies between transport modes, overall reduction of the amount of total subsidy and use of the savings as an engine for national economy.
 - Development of the National Road Security Strategy (approved in October 2016)
 - Restructured the safety impact (large infrastructure investments) safety audit (design stage) and safety inspection (in-use infrastructure) activities for motorways and national roads.
 - Reformed the Taxi Law
 - Launched the process of restructuring TAROM, the national airline.
 - Launched the process of restructuring CFR Marfa - the state railway freight operator.
- 2015 **Business or sector** Railway
Vice-President
Community of European Railways (CER) – Brussels, Belgium
- CER's role is to represent the interests of its members on the EU policy-making scene, in particular to support an improved business and regulatory environment for European railway operators and railway infrastructure companies. The management team elected in 2015 for two years:
President:
 Christian KERN, CEO of Austrian Railways (ÖBB)
Vice-presidents:
 - Dan M. COSTESCU, CEO of CFR SA,
 - Rüdiger GRUBE, CEO of German Railways (DB),
 - Andreas MEYER, CEO of Swiss Railways (SBB)
 - Guillaume PEPY, President of French Railways (SNCF).

2015 **Business or sector** Railway Infrastructure
CEO - Chief Executive Officer & Board Member (OUG 109)

C.N. CFR SA, Bucharest, Romania

- Development of company strategy, of multi-annual management plan, restructuring plan, and their implementation in line with Ministry of Transport strategy.
- Coordination of the executive management of the company, the operational sectors, regional branches and subsidiaries.
- Improving the efficiency of the company by re-aligning the assets to the core activity
- Increasing the productivity by restructuring maintenance activity
- Restructuring the debts and accounts receivable portfolio
- Rationalization of human resources and top/middle level management
- Development and supervising the infrastructure and investment plan based on budgetary, European and own financing. (designing and establishing the Investment Directorate)
- Supervising the competitive tenders or direct selection of the financing and funding partners.
- Drafting of a new business model based on specific operations, maintenance, traffic management procedures for main lines and regional lines
- Representing the company vis-a-vis international entities (European Commission, International Railway Association – UIC, European Railways Community – CER, National Railways and embassies.
- Representing the company vis-a-vis international financial institutions (EBRD, BEI, IBRD, IMF).
- Responsibility for the profit-loss account (380 million RON profit in 2015)

1993-2001 & 2005-2014 **Business or sector** Transportation Consulting, Engineering, Business Development
Managing Director

Sistematic Engineering

▪ **Key Sectors:**

- | | |
|-----------------------------------|---------------------------------|
| ◦ Railway, Metro & City Rail | Highways, Bridges & Tunnels |
| ◦ City Planning & Mobility | Power, Chemical & Petrochemical |
| ◦ Logistic & Multimodal Transport | Civil, Industrial, Topo, Geo |

▪ **Duties/Achievements:**

- Developed the corporate strategy and exercising control over departments.
- Directly supervised the department of Transportation Consulting, Project Management and Business Development to create and implement a framework for strategic partner choice and development.
- Defined the pattern of potential new partners of the company, suitable for specific transport services/products.
- Responsible for concept development, initiating, negotiating and executing/supervising business deals.
- Established partnership and alliance processes with selected partners for a number of international projects, including green-field investments, restructuring, sanitation, merging and acquisitions.
- Leading complex and cross-functional teams aiming to perform legal, commercial, technical and operational due diligences for various projects from transport industry
- Request, review and analyses risk related documents in order to mitigate projects risks.
- Initiate and cultivate relationship with private investors and investment bankers.
- Substantial contribution to the professional development of the employees
- Responsibility for the profit-loss account.

▪ **Partners:**

- National Companies: CFR Marfa SA, CFR Calatori SA, CN CFR Infrastructura SA
- Romanian Railway operators: Servtrans SA, Unicom SA, Unifer SA, Dacotrans
- European companies: DB, OBB, MAV, BDZ, CTL
- Vehicle manufacturers: ARIGroup, RomvagSA, Astra SA, Astra Calatori SA, Meva SA, Waggonbau Niesky(DB), ELH GmbH, Waggonbau Brünnighaus, Graaff Waggonbau, Electroputere Craiova.
- Road transportation: DB Schenker, Vectra Logistic, Dunca Expeditii, Lando, Carpathians, Rhenus

2001-2004 **Business or sector** Railway Vehicle Manufacturing
Board President & Coordinator General Manager

Romvag SA, Caracal/Schwerte, Romania, Germany

Duties:

- Directed and co-ordinated the acquisition of the company and its integration into KEG Group. Drove technical, legal and financial due diligence.
- Developed the corporate strategy and exercising control over the Executive Directors in order to plan and develop methods and procedures for implementing the restructuring and development programme.
- Directly supervised the restructuring of Design and Manufacturing Technology Dept.
- Directly supervised the reorganization of the Marketing, Sales and Procurement Depts. to create and implement a framework for strategic partner choice and development.
- Establish the development plan based on a clear investment program in technology.
- Defined the strategic profile of potential new partners of the company, suitable for specific products. Developed a comprehensive understanding of client's strategic goals
- Established partnership and alliance processes with selected partners for a number of large international projects (DB, OBB, MAV, Waggonbau Nietzky).
- Initiated and cultivated relationships with investment bankers. Concluding financing deals.
- Responsibility for the profit-loss account (first year after taking over, the turnover raised from 3 to 20 million Euro and profit from -1 to 3 million Euro EBIDTA)

2002-2004 **Business or sector** International Railway Businesses
International Business Manager

Karsdorfer Eisenbahn, Railway Undertaking, Europe/Africa/Asia

Duties:

- Advised the President of the group on acquisition and reorganization of wagon and locomotive factories and of a number of railway operating contracts (Europe, Asia).
- Chief strategist and negotiator on the acquisition and reorganization of wagons and locomotive factories.
- Market research and analysis.
- Technical, legal and financial due diligence for the envisaged company.
- Conducting risk assessment and mitigation analysis for envisaged transaction.
- Led international teams for complex "on target" programs

2001-2003 **Business or sector** Railway Research and Testing
Director (Founder) of Railway Vehicle Research & Testing Centre

Karsdorfer Eisenbahn, Railway Undertaking, Europe/Africa/Asia

Duties:

- Established the railway research and testing center as a green-field investment.
- Set up the investment plan for special vehicles, measuring equipment and analysis software matching the strategic development plan.
- Directly managed the innovation process during New Products/Services development.
- Result: the first ever, world-wide, "Real-time measurement chain for safety, ride quality and comfort of vehicle"
- Development and Implementing the Hybrid Measurement Technique (preliminary FEA calculation, before employing the compulsory Strain-gage measurement technology)
- Project management, portfolio development according to the strategic needs of the customers. Setting up a customer critical mass.
- Staff training and inspiring. Personal involvement in the professional development of the employees.
- Building/maintaining relationships with EBA (German Railway Authority).
- Ensure that all activities and duties are performed according to safety procedures. Risk assessment and mitigation

- 1998-2001 **Business or sector** National Transportation System, NSA- National Safety Agency
Executive Director of Research & Laboratory Directorate
Romanian Railway Authority (AFER), Ministry of Transportation, Bucharest, Romania
Duties:
- Testing activity, assessment of products and services conformity in order to issue acceptance and type homologation regarding all vehicle, spare part, equipment, civil works, components and installations to be used across CFR's network (a total of over 1000 reports) but not limited to railway
 - Restructuring the testing, research and acceptance directorate
 - Change management: increasing the flexibility and versatility of departments by breaking the classic line of reporting and switching to a matrix organization in order to facilitate the horizontal flow of skills and resources
 - Performed studies and research for railway sector.
 - Completed investment projects (PHARE) for modernization of a research & testing center including railway infrastructure of the railway test ring (200 km/h), the biggest in Europe, central laboratories equipment and computer network.
- 1995-2001 **Business or sector** European Railway Research
CFR Representative
European Railway Research Institute-ERRI, Research Body of UIC (Union International Chemins de Fer), Utrecht, Netherland
- Represented CFR interests at technical meetings with the representative of all European administrations.
 - Evaluated, discussed, negotiated, issued UIC documents in international teams and committees, including managers and directors of the national railway administrations.
 - Established technical and commercial contacts with the representatives of railway suppliers and administration.
 - Completing testing and research contracts with industry, operators and industry across Europe.
- 1998-2001 **Business or sector** National Safety Agency (NSA)
Executive Director of Research & Laboratory Directorate
Romanian Railway Authority (AFER), Ministry of Transportation, Bucharest, Romania
- Assigned and directed work regarding tests for vehicle acceptance extended the related market and implemented QA systems.
 - Represented the company vis-a-vis rolling stock suppliers, railway operators and authorities.
 - Directly coordinated the development of measurement technique including special vehicles for dynamic, brake, coupling systems, measurement chains and software.
 - Selected the appropriate personnel to secure the department needs of a growing railway testing market.
- 1996-1997 **Business or sector** Railway Testing
Head of Vehicles Dynamic Laboratory
Romanian Railway Register (REFER), Ministry of Transportation, Bucharest, Romania
- Assigned and directed work regarding tests for vehicle acceptance extended the related market and implemented QA systems.
 - Represented the company vis-a-vis rolling stock suppliers, railway operators and authorities.
 - Directly coordinated the development of measurement technique including special vehicles for dynamic, brake, coupling systems, measurement chains and software.
 - Selected the appropriate personnel to secure the department needs of a growing railway testing market.

- 1993-1995 **Business or sector** Railway Research
Head of System Optimisation, Finite Element Department
Romanian Railway Register (REFER), Ministry of Transportation, Bucharest, Romania
- Founded and established the Department (first year after graduating university).
 - Selected, trained and roles assignment of employees. Managed the investment/acquisition program for dept.
 - Proposing and getting approved the research project portfolio with the senior management
 - Setup the department's internal program for specific tools and software development
 - Negotiated and secured the necessary budget and funding for department activity
 - Developed and implemented the original concept of Virtual Testing (computer simulated) and Calibration of Numerical Models for testing facilities translated in saving between 20-95% for industry and notified bodies
- 1987 **Military Service - Officer**
Officers school for Railway, Construction and Demolition, Valcea, Romania

EDUCATION AND TRAINING

1988-1993 **Polytechnic University of Bucharest, BSc, eq. MSc., Faculty of Transportation**

PERSONAL SKILLS

- organizational skills, guidance and leadership of complex organizations;
- efficiency and speed in situation analysis and decision making;
- strategic planning and implementation of derived tactics and policies;
- establishment and coordination of multi-disciplinary project teams;
- concern for improving processes and implementing best practices;
- commercial repositioning techniques and market / client orientation;
- implementation of stimulating working environments, based on fairness and professional excellence;
- openness to negotiation, positive and flexible attitude;
- networking and experience in international and inter-cultural environments;
- creativity and ability to adapt to new situations;
- management of change.

Mother tongue(s) Romanian

Other language(s)	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	C1/C2	C1/C2	C1/C2	C1/C2	C1/C2
German	C1/C2	C1/C2	B1/B2	B1/B2	B1/B2

Levels: A1/A2: Basic user - B1/B2: Independent user - C1/C2 Proficient user
[Common European Framework of Reference for Languages](#)

Job-related skills **Lean Six Sigma Black Belt Certification (Process Improvement) - certified by Lean Sigma Six International Association of Professionals**

Digital skills

SELF-ASSESSMENT				
Information processing	Communication	Content creation	Safety	Problem solving
Proficient User	Proficient User	Independent User	Independent User	Independent User

Levels: Basic user - Independent user - Proficient user

Driving licence :B

ADDITIONAL INFORMATION

<p>International Strategy and European Transport Affairs (as Minister)</p>	<ul style="list-style-type: none"> Active involvement in transport and infrastructure projects and European concepts development during the Council of Ministers, Transport Ministers' Summit, International Transport Forum, Investment Summits, Brussels, Amsterdam, Leipzig, Rotterdam Campaigning for fair working condition for drivers and road transport companies throughout Europe. Building an alliance of 14 EU transport ministers and exerting pressure on EU institutions and officials for updating the Posting Directive and the Mobility Package. Campaigning for a level playfield for all transport modes, an accelerated implementation of "polluter pays" and "user pays" mainly through the external cost internalization. Building alliances with EU MPs, administration, international railway organizations and unions. Maintaining the relationship and developing new contacts with transport ministers and ambassadors from Europe, America and Asia Negotiating and drafting common legal packages and projects for development or lobbying the top representatives of European Institutions: Council of Europe, European Commission, Transport Commissioner, European Parliament, TRAN Commission, Brussels, Belgium Negotiating and drafting joint projects for development or lobby with the top representatives of international associations for air, naval, rail and road transport: ICAO, IMO, UIC, ERA, CER, IRU, IRF Cooperation and program development with the IFIs: EBRD, EIB, WB, IBRD, IMF Development of the project portfolio (16) for transport infrastructure to be addressed by the Junker Plan. (PPPs) (launched at TEN-T Days 2016), Bucharest, Rotterdam Development of the concept of Constanta Port as the gate to Europe. Negotiation with ambassadors and/or transport ministers of countries on the Belt and Road: Georgia, Azerbaijan, Kazakhstan, Iran and China to collect and consolidate their traffic volumes. Transfer to rail, internal navigable ways Development of business/operational concept of Danube Corridor and presenting it to the Transport Ministers of Serbia, Croatia, Slovenia and to EU Transport Commissioner Violeta Bulc. The corridor (rail, road, Danube) is a connection of the Belt and Road from Constanta to the ports of the Adriatic Sea: Kopper, Rjeka, Trieste
<p>Privatisation, Acquisition, Merging:</p>	<ul style="list-style-type: none"> In charge of taking over of Waggonbau Brünninghaus- Krupp's member, a wagon manufacturer (300 employees) and its integration in the Industrial group of the new owner, Germany In charge for privatization of the wagon manufacturer SC Romvag SA Caracal (900 employees) - technical, financial and legal due diligence. Negotiation with AVAS, the state authority for privatization, Romania In charge for feasibility assessment of SC Electroputere Craiova privatization (5000 employees) - technical, financial and legal due diligence. Negotiation with AVAS, the state authority for privatization, Romania
<p>Business Development:</p>	<ul style="list-style-type: none"> Strategist for establishing and developing a Railway Industrial Group of Karsdorfer Investment, Germany Business plan development, establishing and managing "Forschung, Mess- und Daten-technik" a railway vehicle research and testing center in Schwerte, Germany In charge of building an aggregate partnership with the major suppliers of spare parts and setting up a suitable railway maintenance program, Rheine, Germany Business plan development for a transport engineering company aimed to provide consulting, design, technology development and testing to companies specialized in manufacturing, maintenance and traffic, Bucharest, Romania, Establishing a profit center specializing in maintenance and light repair, an in-house unit of a railway vehicles manufacturing company, Caracal, Romania Concept development of a profit center specializing in maintenance and light repair within a private railway operator, Fetesti, Romania Concept development for a rolling stock joint-venture company based in Kazakhstan

<p>Project Management, Process Improvement:</p>	<ul style="list-style-type: none"> • Appointed as Delegate Insolvency Manager to promote internal legal, technical and financial due diligence, promote and sell a number of railway companies (Blessinger, Wischermann, Spiecker, Schönepauk& Partner, Wuppertal, Germany) • Managed the manufacturing, acceptance, import-export operation for DB, OBB and CFR, of large contracts in aluminium walls railway vehicles Habills (budget over 80 million Euro), Elze, Niesky, Brüninghaus, Germany • Optimizing the national distribution of facilities and working centers for KEG (commercial and maintenance), Germany, • Restructuring of Mainische Feldbahnen a locomotive maintenance unit in North Rhein Westphalia, Germany • Led process improvement at Rügensche Kleinbahn, a passenger transportation company on Rügen Island, Germany • Managed the acceptance process for the Diesel-Electric Locomotive 2100 HP and of Electric Locomotive 5100 kW, with EBA (Eisenbahn Bundesamt), the first ever 6-axle locomotive accepted in Germany (the American locomotives GM failed the same process), Stuttgart, Ulm, Mettlach, Trier, Germany • Managed the development of modern PZP90 INDUSI safety equipment (hardware and software) according to EBA technical specification and its acceptance in different types of locomotives, Germany • Managed the technical assessment and remaining lifetime of the tank vehicles belonging to Petrom, Pitesti/Brazi, Romania
<p>Consulting:</p>	<ul style="list-style-type: none"> • Supporting the sales activity of the German Railway Operator, KEG, Germany • Consulting for passenger traffic tenders in Saxony Anhalt, • Consultancy for a number of companies in order to obtain the acceptance for diesel-electric Locomotive 2100 HP with their State railway authorities, Italy, Spain, • Assistance in building the relationship with the major suppliers of spare parts and setting up a suitable maintenance programs in Italy, Spain • Assistance to a number of vehicles owners to improve maintenance programs, Germany, Romania, Hungary • Consultancy for a number of private transport operators in order to enter the international transportation market, Romania • Consultancy for a number of railway operators to establish partnerships with the rolling-stock manufacturers and the appropriate financing institutions, Romania • Consultancy for a group of companies to consolidate their industrial activity in a group with a unified technical, marketing and sales forces and their transportation, logistic and maintenance units in a more synergetic company, Romania, • Consultancy for a "start-up" company acting as railway operator to fulfil the technical and legal requirements for traffic approval and to establish international partnerships with the rolling-stock manufacturers or leasers and financing institutions, Russia, • Consulting for cities and metropolitan authorities regarding urban traffic for passengers and freight, electric vehicles, mass transit, Europe • Consulting for municipalities to implement the European mobility requirements, Romania
<p>Relationship development, Lobby:</p>	<ul style="list-style-type: none"> • Relationship development with the national railway company and Ministry of Transportation to establish a long-term partnership with the aim to deliver carriages manufactured in Europe to the former Soviet area, Russia • Promoting a variable gauge bogie project for the rail state authorities, Russia • Relationship development between various international rail suppliers (wagons, passenger coaches, locomotives, DMU, EMU, spare parts) and the national railway or Ministry of Transportation, Syria • Relationship development with the national railway, ministry and transportation and private companies in order to establish a long-term partnership to deliver vehicles manufactured in Europe, Kazakhstan. • Promoting coaches and urban vehicles in the former Soviet area. • Feasibility studies, promoting campaign targeted on authorities or Civil Society in order to implement major urban, regional, national or trans-border projects, Romania, Europe
<p>Publications (Journals)</p>	<ul style="list-style-type: none"> • Safety Targets, Liability Transfer and Engineering Concretization for Autonomous Vehicles. Safe Distance at Destination for Overtaking, Journal of Engineering Science and Innovation, Volume 5/Issue 3, 2019 • Autonomous Vehicles' Ethics, Faculty of Transportation, University Politehnica of Bucharest, 2018, • Re-balancing the national transportation system: Modal Shift, Transportation and Infrastructure, Operational concepts, Club Romania, 2018 • General Master Plan for Transport: Gaps and improvement opportunities, Transportation and Infrastructure, Operational concepts, Club Romania, 2018 • Acceptance of railways vehicles, between safety and economic effectiveness, Güterbahnen, Alba Verlag, Germany No. 1/2003 • Piping and pressure vessels analysis, CAD report, No. 4/1997 • Vibration study of 2ndclass passenger vehicle, Railway Magazine No. 2/1995 • Study of temperature distribution of 610mm braking disk, using Finite Element Method, Railway Magazine No. 1/1993

<p>Papers and speeches at Conferences, Congresses, Summits:</p>	<ul style="list-style-type: none"> • Modal competition and complementarity: cost optimization at end-user level, in Romanian Journal of Transport Infrastructure, Volume 8, 2018, Bucharest, Romania • Autonomous vehicles' safety in mixed traffic: Accounting for incoming vehicles when overtaking, IEEE Publications, Electric Vehicles International Conference & Show, 2019, • Building on a Traffic Code Violating Monitor for Autonomous Vehicles: Trio Overtaking Model, International Conference "Transbaltica" – Transportation Science and Technology 2019, Lithuania • Keeping the autonomous vehicles accountable: Legal and Logic Analysis on Traffic Code, Vision Zero for sustainable Road Safety Conference 2018, Vilnius • Asset Management, a complex tool for infrastructure companies restructuring, UIC Asset Management Global Conference, 2017, Paris, France • PPP approaches for Central and East-European countries, Regional Transport Investment Conference, 2017, Sofia, Bulgaria • Launching within Juncker Plan of 16 PPP large infrastructure projects for road, rail, aviation and naval - TEN-T Days, 2016 Rotterdam, Netherland • Building the new railway economy, Challenges and Opportunities, Railway Days, 2016, Bucharest, Romania • Modal shift (from Road2Rail) as a facilitator of decarbonization and social inclusion, ITF- International Transport Forum, an OECD event, 2016, Leipzig, Germany • Correlation between road and rail infrastructure and development of supply chains & logistics, Arilog Conference, 2016, Bucharest, Romania • Boosting the infrastructure investment, 2016, Ljubljana, Slovenia • Using the Global Navigation Satellite Systems for road transport policy implementation end electronic toll collection, 2016, Crowne Plaza, Bucharest. • Electro-mobility and automated cars/ Boosting the railway development/ Effects of ICAO decarbonization regulation development on the airlines - Summit of Transport Ministers, 2016, Amsterdam, Netherland • Financial and legal mechanisms to assure a level playfield on complex transportation markets, Investment Summit, 2015, Bucharest, Romania • Finite Element Method in trains brake, Politehnica University of Bucharest, Romania • Numerical methods as a basis for vibrations study by Finite Elements Methods, Politehnica University of Bucharest, Romania • Simulation of Vibration level of 2ndclass vehicle, Politehnica University of Bucharest, Romania • Benchmark Algor, Nastran, Ansys and tailored software for bogie frame calculation, National Railway Symposium, Bucharest, Romania • Study of temperature distribution of D=610 mm braking disk for different operating situations, Bucharest, Romania • Contributions on strain and stress calculation due to wheel-rail contact, Bucharest, Romania • Strain and stress calculation of welded/cast frame bogies, National High Speed Conference, Bucharest, Romania • Stress Concentrator on Diesel Hydraulic Locomotive of 2100 HP axle, High Speed Trains Conference, Bucharest, Romania
<p>Teaching</p>	<ul style="list-style-type: none"> • Performance Management/ Human Resources in Transportation, Course, Transport, Traffic and Logistic Department, Politehnica University of Bucharest • Management and Marketing in Engineering, Sistematic Engineering, Bucharest, • Best practices in the management of maintenance units, Schwerte, Germany • Market approach in the railway industry, Schwerte, Germany • Structures of rolling stock vehicles, Course, Rolling Stock Dept. Politehnica University of Bucharest • Strength of materials for vehicles, Laboratory, Rolling Stock Dept. Politehnica University of Bucharest • Railway vehicle structures, Design Project, Rolling Stock Dept. Politehnica University of Bucharest • Computational techniques in engineering, Sistematic Engineering, Bucharest • Numerical methods in engineering, CPDE, Bucharest • Finite Elements Method, AFER, Bucharest • Introduction to industrial plant, Oltchim, Ramnicu-Valcea, Romania,
<p>Research Development:</p>	<ul style="list-style-type: none"> • Modal shift, contribution for developing a plain level field on transportation market, • Developing a Traffic Code Violating Monitor for Autonomous Vehicles (Traffic Rules formalization by employing Legal, Logic and Engineering Analyses, • Concept development of an Ethical Violating Monitor for Autonomous Vehicles. • Finite Element Method in trains brakes, Mathematical Model, Software, • Numerical methods as a basis for vibrations study by FEM, • Simulation of vibration level of 2nd class vehicle • Study of temperature distribution of D=610 mm braking disk for different regimes • Contributions on strain and stress calculation due to wheel-rail contact • Strain and stress calculation of cast, welded, forged frame bogies

	<ul style="list-style-type: none"> • Stress concentrator on diesel hydraulic Locomotive 1250 HP axle • Geometrical and inertial properties determination for structural elements and parts in vehicles and airplanes. • Mathematical modelling of dynamical behavior of vehicle's structure
Testing Research:	<ul style="list-style-type: none"> • Optimization of elastic/damping characteristic of the bogie coupling of Electric Locomotive LE 5100kW • Dynamic and stress and strain analysis/measuring of the following railway vehicle's bogies: 5100 kW Electric Locomotive, 2100 HP Diesel Electric Locomotive, 1250 HP Diesel Locomotive, 4000 kW Electric Locomotive, Bo-Bo Electric Locomotive, Minden-Deutz, Diamond, Y32, Y25, • Tramway BBT16, Metro Bogie with steering wheel. • Natural frequencies and mode shape determination for the following railway vehicle bogies: 1250 HP Diesel, Locomotive, Y32 & Y25. • Static and modal analysis (FEM & Strain Gauge) for the following railway car body: 74000 cars, DeDietrich Z Type. • Stress analysis induced in rim, plate and axle by shrink operation, stress analysis of 1250 HP Diesel Locomotive and 5100 kW Electric Locomotive axles and stress analysis and 1250 HP Diesel Locomotive and 700 HP Diesel Locomotive crankshafts. • Non-conventional wheels, stress analysis and optimization. • Analysis on feasibility of replacing compound wheel with shoe braked on threaded surface with solid wheel. • Design, thermo-elastic analysis and optimization of railway wheel