

CURRICULUM VITAE

1. **Family name:** _____ **PATTLE**
2. **First names:** _____ **STEPHEN CHRISTOPHER**
3. **Date of birth:** _____ **13 March 1948**
4. **Nationality:** _____ **British**
5. **Civil status:** _____ **Married**
6. **Education:**

Institution [Date from – Data to]	Degree(s) or Diploma(s) obtained:
Queen Mary College, University of London [1978 - 1979]	MSc Economics
Kingston University, London [1975 - 1978]	BA Economics (2.1)

7. Language skills: Indicate competence on a scale of 1 to 5 (1 – excellent; 5 basic)

Language	Reading	Speaking	Writing
English	Mother tongue		
French	4	4	5

8. **Membership of professional bodies:** _____ **Member of Consulting Economists Association**
9. **Other skills:** _____ **Fully computer literate**
10. **Present position:** _____ **Freelance Consultant**
11. **Years with the firm:** _____ **28 years**
12. **Key qualifications:**

- Twenty eight years experience working with public sector organizations in various countries throughout the world including in: Western, Central and Eastern Europe, The CIS, Asia, Asia Pacific , Africa and the Caribbean
- Proven Project Management and Team Leadership skills
- Well-developed organisational and communication skills;
- Highly experienced in strengthening institutional capacities of national and local authorities in developing infrastructure development plans and strategies covering; solid waste; water and wastewater; housing, roads, railways, ports, transportation
- Solid knowledge of institutional reform, design of new institutional set ups, management systems, de-centralization, the assignment of wider competences to local authorities, the development of regulatory, pricing, competition and privatization policies, change management
- Skilled in the preparation of infrastructure feasibility studies covering; solid waste management, water and wastewater, telecommunications, roads, railways, ports and transportation sub sectors including; economic and financial analysis of projects, affordability analysis, tariff analysis, cost recovery assessments, cost benefit analysis
- Skilled in assessing the operating and financial performance of utilities and parastatals having responsibility for; solid waste management, water and wastewater, roads, ports and harbours, railways and civil aviation
- Substantial experience developing; public expenditure frameworks; capital investment plans; budgets; financing strategies
- Experienced in knowledge transfer and training techniques
- In depth experience of bi-lateral and multi-lateral projects in transition countries

13. Specific experience in the region:

Country	Date from – Date to
Afghanistan	May 2003 to Aug 2003
Albania	Nov/Dec 2005
Armenia	May 1995 to Jan 1996
Bangladesh	Nov 96 to July 97; Sept 99 to Dec 99
Bosnia & Herzegovina	May 2000 to Sept 2002; Sept 2003 to Sept 2005
Botswana	May 1991 to Oct 1991
Croatia	Feb/Mar 2006; May 2006 – March 2007
Dominica	August 2007 to Dec 2007
Egypt	Jan 1980 to Oct 1980
Ethiopia	Feb 2008 to Ongoing
France	March 1981 to March 1983
Georgia	April 1999 to April 2000 (periodic)
Indonesia	Sept 97 to Nov 97; Jan 92 to Dec 94
Latvia	May 96 to July 96
Papua New Guinea	March 83 to Dec 89
Poland	Jan 98 to April 99; May 99 to Aug 99; Jan 2000 to May 2000
Romania	Oct 2007 to ongoing
Seychelles	March 96 to May 96
United Arab Emirates	Sept 96 to Nov 96

14. Professional experience:

Date from – Date to	Location	Company	Position	Description
February 2008 to Ongoing	Ethiopia	Euroconsult - Mott McDonald	Infrastructure Economist	<p>Project Title</p> <p>IBRD funded Tana and Beles Integrated Water Resources Development Project – “Growth Corridor for Tana and Beles Regions. Endowment potential and constraints”.</p> <p>Services delivered:</p> <p>Overall task: To assess the extent to which existing infrastructure assets are a constraint on economic growth and to identify projects for increasing capacity and reducing costs accordingly</p> <p>Assessing economic growth potential in the growth corridor based on water resources and the development of agricultural potential mainly. Assessing current capacity utilization of infrastructure assets including; water supplies, roads at federal, regional and local levels, airports, power supplies, telecommunications, lake navigation structures and equipment. Identifying specific infrastructure improvements needed to meet additional required capacity and to reduce costs. Carrying out economic assessments of improvement options showing; costs and benefits, financial and economic rates of return, social and environmental impacts. Estimating the total costs of the priority infrastructure investment program meeting demand. Assessing program financing options, whether financed by the IDA or the private sector. Making specific recommendations for project implementation</p>

				options over medium term planning horizons.
October 2007 to Ongoing	Romania	White, Young Green International (WYG),UK	Finance and Economics Expert	<p>Project Title</p> <p>EC PPF (Public Private Finance) for Infrastructure Projects and Training to Local Authorities and RDA's (Regional Development Authorities) on Infrastructure.</p> <p>Services delivered:</p> <p>Overall task: To build the capacity of institutions to leverage EC financed infrastructure development programmes.</p> <p>Assessed training needs covering strategic investment needs for infrastructure supporting economic and social development in the context of Romania's accession to the EU. Provided guidelines covering the financial and economic analysis of projects and for cost benefit analysis in accordance with EC Structural Fund requirements. Provided project feasibility study training materials for investments in roads and environmental infrastructure. Provided training to civil servants from local, regional and national administrations.</p>
August 2007 – December 2007	Commonwealth of Dominica	NIRAS A/S Denmark	Finance and Economics Expert	<p>Project Title:</p> <p>EC Framework Contract Beneficiaries LOT 6 Environment, West Coast water and Sewerage project: Study and Institutional Review of the Dominica Water and Sewerage Company (DOWASCO).</p> <p>Services delivered:</p> <p>Overall task: To develop a full cost recovery plan so as to place the utility company in a position of sustainable and cost effective service delivery.</p> <p>Conducted a detailed analysis of demands for water and sewerage services. Assessed the condition and performance of existing assets. Evaluated the status of current operating and maintenance regimes, making assessments of costs and the current capacities of the network. Carried out a comprehensive financial analysis of water and sanitation management services provided by DOWASCO. Made detailed recommendations concerning tariffs, cost recovery, subsidy policies, timing of their implementation, modality's for financing, planning and prioritizing of capital investment projects.</p>
May 2006 – March 2007	Croatia	Carl Bro – SOFRECO Consortium	Finance and Economics Expert	<p>Project Title:</p> <p>EU CARDS 2002 Project – Solid Waste Management in Dalmatian Counties, Croatia.</p> <p>Services delivered:</p> <p>Overall task: To develop sustainable regional solid waste management systems in the Counties of Dubrovnik-Neretva and Split-Dalmatia, Croatia</p> <p>Developed methodologies covering the financial and economic analysis of investments in regional solid waste management centres.; Developed long-term financial models for 20 years; Investigated cost recovery and tariff collection practices, examined economic instruments to be employed and assessed the financial viability</p>

				<p>and sustainability of planned investments; Conducted cost-benefit analysis of wider impacts arising from investment options; Assessed the operating and financial performance of responsible collection company utilities and municipalities; Analyzed project financing options; Improved the capacity of collection companies and municipalities to prepare projects and negotiate with financing institutions;</p>
Feb/March 2006	Croatia	ECORYS, Holland.	Economist/ Institutional Expert	<p>Project Title:</p> <p>EU CARDS 2004 Project – Implementation of Lika–Senj Regional Development Program, Croatia.</p> <p>Services delivered:</p> <p>Overall task: To provide economic and financial modeling of business investments related to a regional development project in a war-affected region of Croatia.</p> <p>Included assessments of market demand; alternative options; investment costs, operating and maintenance costs; other costs and benefits; economic and financial costs and benefits; feasibility analysis; institutional capacities; technical assistance and training needs. Provided recommendations covering delegation, the institutional set up, cost recovery and subsidy issues. Provided training to local counterparts including compliance with relevant EU directives and policies.</p>
Nov/Dec 2005	Albania	East West Consulting, Belgium	Economics and Training Expert	<p>Project Title:</p> <p>EC Project – Improving the external assistance management system, Albania</p> <p>Services delivered:</p> <p>Prepared a Manual covering Feasibility Studies, Cost Benefit Analysis, Economic and Financial modelling and analysis of project options, Project Preparation in accordance with IFI requirements. Demonstrated application of the manual on case studies having a focus on EU Integration of solid waste management and environmental remediation measures mainly. Prepared training curricula and materials covering the above and in Compliance with EU Directives and Policies. Provided training courses to civil servants in key ministries.</p>
Sept 2003 to Sept 2005	Bosnia & Herzegovina	Project Management (Ireland)	Team Leader/ Economist	<p>Project Title:</p> <p>EU funded CARDS Project, Support for Capacity Building for Environmental Management</p> <p>Services delivered:</p> <p>Overall task: Team leader; to strengthen institutional capacities of infrastructure and environmental management systems.</p> <p>Activities designed to develop infrastructure investment and environmental management policies through CBA; Draft environmental laws based on a prior definition of policy. Recommended options for legislative and institutional reform including the establishment of a State Agency for the Environment; Prepared project case studies covering environmental remediation measures including for solid waste, energy generation and for transportation projects in</p>

				accordance with IFI supported project preparation and financial structuring requirements. Provided training modules covering; Economic and Financial Modelling; Economic and financial analysis, Evaluation of economic instruments as a management tool versus command & control, costs and benefits of implementing Best Available Technologies, Cost Benefit Analysis, Project Preparation, Compliance with EU Directives and Policies.
May 2003 to Aug 2003	Afghanistan	RRI Beller. Gmbh, Germany	Economist/ Institutional Specialist	<p>Project Title:</p> <p>KfW funded Kabul Water Supply Utility Feasibility Study.</p> <p>Services delivered:</p> <p>Overall task: To prepare a commercialisation and privatisation plan for the water utility system.</p> <p>Included a detailed assessment of the institutional framework; inventory of capacities for O&M, investment planning and structuring; assessments of administrative and accounting procedures; affordability and tariff analysis; cost recovery performance; deficiencies; identification of bottlenecks obstructing the efficient operation of the system and sustainability; outlines of proposals for improvements and development of the institutional setup including; systems development, organizational structures, functions and staffing profile, managerial capacities. Made recommendations for institutional development covering corporatization, delegation to the private sector where feasible, the regulatory role of the national government and capacity building.</p>
May 2000 to Sept 2002	Bosnia & Herzegovina	Arcadis BMB, Holland	Team Leader / Economist	<p>Project Title:</p> <p>IBRD Local Development Project (LDP)</p> <p>Services delivered:</p> <p>Overall task: To build institutional and financial management capacity amongst municipal governments.</p> <p>Included technical assistance and training covering; financial management and operating budgets, capital investment planning, cost recovery, preparation of municipal infrastructure projects for financing covering solid waste management, water, waste water, public transport and roads, street-lighting. Incorporated; policy framework issues, strategic priorities, feasibility analysis, cost benefit analysis, financial and economic analysis, utility management options, contracting out, private ownership. Developed economic and financial models analyzing revenues and expenditures in accordance with the credit policies and financial structuring requirements of IFI's and private commercial banks. Provided recommendations assigning wider competences to local authorities promoting the decentralization process and strengthening the regulatory role of the national government.</p>
Jan 2000 to May 2000	Poland	Agrisystems Ltd, UK	Economics and Finance Specialist	<p>Project Title:</p> <p>DFID – National Fund for Environmental Protection and Water Management</p>

				<p>Services delivered:</p> <p>Overall task: To provide technical assistance to strengthen the capacity of the environmental and water management systems in preparing environmental investment projects to be submitted for co-financing under pre-accession instrument ISPA for 2000.</p> <p>Tasks: identified inadequacies and bottlenecks in the project preparation process; developed manuals including, feasibility analysis, cost-benefit analysis, economic and financial modeling; affordability, tariff analysis, cost recovery, subsidy policy, assessments of sustainability, economic and financial analysis in accordance with the requirements of IFI supported project preparation and structuring, assessments of the regulatory role of the national government. Conducted workshops, reviewed projects submitted by municipalities for financing under ISPA; Made recommendations for institutional development covering corporatization, delegation to the private sector where feasible, the regulatory role of the national government and capacity building.</p>
Apr 1999 to Apr 2000 (periodic inputs)	Georgia	Arcadis Euroconsult, Holland	Economist / Financial Analyst	<p>Project Title:</p> <p>IBRD - Municipal Environmental Management Project</p> <p>Services delivered:</p> <p>Overall task: To make economic and financial modelling and analyses of water, sewerage and solid waste utilities.</p> <p>Determined; current operating, maintenance and renewal expenditures; fixed and variable elements of current tariffs, pricing policies, affordability analysis, cost recovery performance. Recommended; a rational pricing policy, reducing numbers of non payers, institutional development and strengthening; privatization options. Carried out feasibility analyses of projects consistent with IFI supported project preparation.</p>
Sept 1999 to Dec 1999	Bangladesh	Arcadis Euroconsult, Holland	Economist / Institutional Development Expert	<p>Project Title:</p> <p>EU – Integrated Food Assisted Development Programme</p> <p>Services delivered:</p> <p>Overall task: To recommend improved planning systems to bring food assisted road investment programs into the mainstream of development planning.</p> <p>Carried out economic and financial modeling and analysis of projects; Established performance indicators covering; targeting, economic benefit/cost ratios, social and political preference comparators. Incorporated best practice project appraisal tools consistent with IFI requirements including feasibility analysis, cost-benefit analysis, financial and economic analysis. Provided recommendations concerning key aspects of program management covering; delegation, procurement, institutional development and capacity building.</p>
May 1999 to Aug 1999 (periodic inputs)	Poland	Agrisystems Ltd, UK	Economics and Finance Specialist	<p>Project Title:</p> <p>DFID / IBRD - Public Investment in Rural Infrastructure</p>

				<p>Services delivered:</p> <p>Overall task: To prepare investment case studies for rural infrastructure systems covering water, sewerage and solid waste management.</p> <p>Included financial and economic modelling; analyses of; socio-economic and sector trends, competitive advantage, economic growth, employment & incomes, demand, project identification; investment, operating and maintenance costs; affordability and tariff analysis; financial and economic analysis. Provided advice on financial structuring, delegation, institution building and capacity development, project financing options and modalities. A manual was developed for training municipal personnel and local consultants.</p>
June/July 1999	Albania	P-E International, UK	Economist / Financial Analyst	<p>Project Title: EU – Albanian Rural Development Fund Project</p> <p>Services delivered:</p> <p>Overall task: To prepare methodologies for reducing unemployment in rural areas, and supporting decentralization and institution building of local governments.</p> <p>Determined: viable and sustainable infrastructure proposals; economic efficiencies resulting from; regional development strategies, privatization options; employment impacts of projects, labour intensive options, efficiency and costs; identified training programs for strengthening capacities of municipal institutions, including key financial management modalities such as optimal pricing and cost recovery strategies; project preparation in accordance with IFI procedures.</p>
Jan 1998 to Apr 1999	Poland	Chemonics Consortium, USA	Infrastructure Economist and Financial Expert	<p>Project Title: USAID – Local Government Partnership Programme</p> <p>Services delivered:</p> <p>Overall task: To strengthen capacities of local authorities in preparing municipal infrastructure (solid waste, water & wastewater, roads) projects for financing in accordance with IFI supported project preparation and financial structuring.</p> <p>Provided training in: sector analysis, project identification and evaluation techniques, financial and economic modeling; affordability, tariff analysis and cost recovery; financial and economic analysis of options; preparation of project documentation providing an adequate basis for negotiating with national and international financial institutions and private investors; Coordinated with private commercial banks to determine credit policies, incorporating these into project preparation procedures. Provided relevant feasibility study case studies. Provided recommendations concerning decentralization, delegation, privatization, institutional development and the regulatory role of the national government.</p>
September 1997 to November 1997	Indonesia	Louis Berger International, USA.	Economist	<p>Project Title:</p> <p>IBRD Second Highway Sector Investment Project. Indonesia.</p>

				<p>Services delivered:</p> <p>Carried out an economic feasibility study of improvement options to the Jereweh-Lunyak Road in Sumbawa in, Eastern Indonesia. Tasks included: (i) macro-economic analysis, (ii) assessment of socio-economic and sector trends, (iii) analysis of relevant road network and traffic data, (iv) traffic forecasts, (v) appraisal of project impacts, and (vi) economic analysis. Assessed institutional capacities of local implementing agencies. Offered recommendations to the Ministry of Public Works covering feasible investment options and optimal implementation strategies.</p>
March 1997 to July 1997	Bangladesh	Brockman Tym Ltd, UK.	Development Economist	<p>Project Title:</p> <p>ADB – North West Regional Development Study Project</p> <p>Services delivered:</p> <p>Carried out economic and financial modeling and analyses of investment projects for the transportation, water, wastewater, solid waste management, industrial and agriculture sectors. Assessed natural resource endowments, competitive advantage, economic growth and development, employment & income potential, project impacts, development of a Medium Term Capital Investment program and financing modalities</p>
Nov 1996 to Feb 1997	Bangladesh	Halcrow, UK	Economist	<p>Project Title:</p> <p>IBRD – Dhaka Urban Transport Project</p> <p>Services delivered:</p> <p>Carried out economic and financial feasibility analyses of investment alternatives for the transport system covering the Dhaka Metropolitan area.</p>
Sept 1996 to Nov 1996	United Arab Emirates	Halcrow, UK	Team Leader /Economist	<p>Project Title:</p> <p>Ras Al Khaimeh Emirate - Bulk Port Project</p> <p>Services delivered:</p> <p>Carried out an appraisal of bulk port investment options. Tasks included: (i) analyses of macroeconomic trends, (ii) bulk commodity flows, (iii) capacities of ports, (iv) shipping trends, (v) potential for trans-shipment, (vi) overland options, (vii) port developments, and (viii) traffic growth by commodity. Appraised market potential of the port taking account of competition and size of potential cargo volumes.</p>
July 1996 to Sept 1996	United Kingdom	Halcrow, UK	Economist	<p>Project Title:</p> <p>Dept. of Transport, UK Government, East Thames River Crossing Project</p> <p>Services delivered:</p> <p>Estimated environmental impacts of investment options. Appraised the costs and benefits of alternative remediation measures.</p>
May 1996 to July 1996	Latvia	Halcrow, UK	Economist/ Financial Analyst	<p>Project Title:</p> <p>EU – Project 800 – Ministry of Environment</p> <p>Services delivered:</p> <p>Carried out economic and financial modelling and feasibility assessments of water and wastewater projects. Assessed level of</p>

				<p>service objectives, estimated costs, conducted tariff analyses, recommended cost recovery strategies, institutional strengthening measures and a capital investment programme. Provided assessments of the operating and financial performances of the municipal utility companies. Provided an assessment of the regulatory role of the national government.</p>
Mar 1996 to May 1996	Seychelles	Halcrow, UK	Project Manager/ Economist	<p>Project Title:</p> <p>Private Luxury Waterfront Development Project</p> <p>Services delivered:</p> <p>Project Managed a feasibility study and financial analysis of a proposed luxury waterfront development project. Made recommendations to the client – a private investor in the region.</p>
May 1995 to Jan 1996	Armenia	Binnie, Black and Veatch, UK	Team Leader/ Economist	<p>Project Title:</p> <p>IBRD – Regional Infrastructure Study – Earthquake Zone</p> <p>Services delivered:</p> <p>Overall task: To provide technical assistance to various components of infrastructure including; transport, energy, water, sewerage, solid waste systems and telecommunications.</p> <p>Analyzed the potential for economic growth in the context of region specific competitive advantage. Estimated current capacity given earthquake damage and subsequent repairs. Identified projects meeting demand. Assessed affordability, pricing, cost recovery and subsidy issues. Carried out economic and financial modeling of projects; provided economic and financial analysis and cost-benefit assessments of project options. Provided assessments of the operating and financial performances of municipal utility companies and parastatals. Provided recommendations to the Client.</p>
Nov 1992 to Dec 1994	Indonesia	Hoff & Overgaard, Denmark	Regional Coordinator	<p>Project Title:</p> <p>IBRD – Local Roads Development Project</p> <p>Services delivered:</p> <p>Strengthened capacities of local governments in Kalimantan and Lampung Provinces through training in project preparation procedures covering; traffic forecasting, options analysis, economic and financial modeling; economic and financial analysis, cost benefit analysis, capital investment and maintenance planning, appropriate institutional delegations and preparation of documentation for financing.</p>
Jan 1992 to Oct 1992	Indonesia	DHV, Holland	Economist	<p>Project Title:</p> <p>ADB - Local Roads Development Project</p> <p>Services delivered:</p> <p>Strengthened capacities of local governments in East Java and Bali Provinces through training in project preparation procedures covering; traffic forecasting, options analysis, economic and financial modeling; economic and financial analysis, cost benefit analysis, capital investment and maintenance planning, appropriate institutional delegations, preparation of documentation for financing.</p>

May 1991 to Oct 1991	Botswana	Arcadis Euroconsult, Holland	Economist	<p>Project Title:</p> <p>IBRD – Accelerated Land Servicing Project</p> <p>Services delivered:</p> <p>Provided assessments of demand for serviced land in urban areas. Analyzed cost recovery and subsidy policies, undertook affordability studies. Assessed the financial and economic costs of infrastructure provision, determined service levies and plot prices. Provided training to local authorities. Investigated options for the private sector in servicing of urban land. Investigated the operational and financial performance of utilities responsible for land development and infrastructure investments. Made appropriate recommendations concerning decentralization, delegations to local authorities, institutional development strategies, investment planning, cost recovery and financing strategies.</p>
Jan 1990 to Jan 1991	United Kingdom	Department of Transport, UK	Economic Adviser	<p>Project Title:</p> <p>Government Transport Programs</p> <p>Services delivered:</p> <p>Appraised the reorganization of British Rail covering privatization, competition, regulatory and subsidy regimes. Carried out an investment appraisal of the Channel Tunnel High Speed Rail Link. Assessed impacts on the distribution of industry and commercial activity. Carried out economic and financial modeling; Conducted economic and financial appraisals; Assessed rates of return, private sector financing options and modalities.</p>
Mar 1986 to Dec 1989	Papua New Guinea	Department of Transport, PNG	Chief Planning Officer	<p>Project Title:</p> <p>Departmental Transport Programmes</p> <p>Services delivered:</p> <p>Directed sector analyses and project feasibility studies; Recommended investment strategies and programs, changes in regulatory and pricing policies, competition policy, privatization strategy, civil service reform, institutional development, and capacity building interventions. Assessed the operating and financial performance of the PNG Harbours Board and Air New Guinea and provided recommendation's covering tariff policy, investment strategy, cost recovery, and the potential for privatization. Recommended substantial deregulation of the road transport industries, public transport, and was also instrumental in privatizing the Government Ships Authority (Government Fleet).</p>
Mar 1983 to Mar 1986	Papua New Guinea	Department of Finance & Planning, PNG	Assistant Secretary Infrastructure	<p>Project Title:</p> <p>Departmental Budgeting and Financing Programmes</p> <p>Services delivered:</p> <p>Directed sector analyses and project feasibility studies covering the urban, housing, transport, water and environmental infrastructure sub sectors. Recommended investment strategies and programs, changes in regulatory and pricing policies, competition policy, privatization strategy, civil service reform, and institutional strengthening</p>

				measures. Contributed to the development of medium term development plans and strategies covering urban and environmental infrastructure, low to medium cost housing, transport infrastructure investment programmes, cost recovery and tariff strategies. Monitored the operating and financial performance of key parastatals in the transport sector including the PNG Harbours Board, and Air New Guinea.
Mar 1981 to Mar 1983	France	International Economics (Intecs), France.	Economist	<p>Project Title:</p> <p>Macro Economic Analyses and reporting of OECD Countries</p> <p>Services delivered:</p> <p>Carried out macro-economic analyses of OECD member countries. Specific market and industry studies were also undertaken including those of steel, motor vehicles and telecommunications.</p>
Jan 1980 to Oct 1980	Egypt	Ministry of Housing, Egypt	Economist	<p>Project Title:</p> <p>IBRD – Housing and Construction Sector Study</p> <p>Services delivered:</p> <p>Carried out a study of housing and the construction industry. Included assessments of housing demand and need in the context of affordable standards. Also included assessments of construction industry capacity and the capability of the housing finance institutions to meet the scale of the required program.</p>