

Know Edge Limited

Location Information Innovation

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COMPANY PROFILE

BUSINESS CONTEXT The merging of Geographic Information Management technologies with mainstream IT, the increasing availability of reliable data sources and the emergence of the web, e-commerce and neogeographer capabilities have radically changed the business context of the Geographic Information (GI) sector. New, innovative and very cost effective GI business applications are increasingly opening up new business opportunities, e.g. location based services and GI web based information services, including mashups.

In anticipation of these opportunities, it is essential that organisations re-evaluate their current GI management practices and associated business processes to identify how more effective exploitation of GI and spatial knowledge can improve the delivery of products and services and better support their Corporate Business Plan. Know Edge has the expertise to assist organisations in formulating and implementing the necessary business and technical strategies to take advantage of these expanding market opportunities.

KNOW EDGE LTD The Company, formed in 1986, is an independent, management consulting firm specialising in land policy, land administration and the application of geospatial information (GI). The company has been at the forefront of the GIS revolution and is recognised as specialists in Spatial Data Infrastructures (SDIs) and Land Policy and has worked extensively worldwide to strengthen land tenure to support economic reforms. The company provides objective advice to clients interested in evaluating the strategic business role of GI / land & property information management and in the intelligent planning and implementation of associated Information Systems technology. The company's consultants contribute knowledge from a multi-disciplinary background, which includes management consulting, programme management, business change management, computer science, e-commerce, geomatics, landscape architecture, economics and utility management.

MARKET SECTORS Application areas include:

- Power, Gas & Water Utilities
- Marketing / Retail / Financial Services
- Environmental Assessments & Management and Sustainable Development
- Land & Property Information Services
- National Mapping and Cadastral Agencies
- Land Reform Programmes (EU, UN and World Bank Funded)
- National Spatial Data Infrastructures (NSDI)
- E-government within Local & Central Government
 - Transportation - Planning - Estates Management
 - Social Services - Education - Architectural Services
 - Economic Dev. - Environment - Emergency Services

SERVICES

The following services are provided:

- ◇ Policy, e-strategy formulation and monitoring;
- ◇ Feasibility studies, including ROI;
- ◇ Business design, including IM/IS/IT strategic studies;
- ◇ Technical design, including user requirement analyses;
- ◇ Data / Records audit;
- ◇ Business process re-engineering;
- ◇ Support of systems and services procurement;
- ◇ Programme management;
- ◇ Audits of existing LIS/GIS projects;
- ◇ User awareness and management education & training; and
- ◇ Specialised technical investigations and market research.

THE KNOW EDGE SERVICE DIFFERENTIATORS

- ◇ Early returns on investment;
- ◇ Partnership culture;
- ◇ Risk management;
- ◇ Business led solutions;
- ◇ Quality through World Class consultants; and
- ◇ Timeliness.

COMPANY DIRECTORS

Robin McLaren, D.Sc (Honorary) B.Sc. (Hons), M.Sc.E. FRICS, MBCS CITP, AFRSPSoc,
Director

Robin McLaren has been involved in land and geographic information management since 1978, initially as a designer and developer of GI technology and over the past three decades as a consultant. He brings Know Edge expertise in corporate planning, business requirements, practical knowledge of implementation issues, and through his technical expertise, provides a rare ability to thoroughly evaluate technology in a variety of applications. A broad base of international experience has enhanced these skills. He is a prominent consultant in land administration and works extensively with United Nations agencies, World Bank and EU on land policy / land reform programmes and is on a mission to revolutionise peoples land rights.

Jane McLaren, B.Sc. (Hons), M.Sc., Director

Jane McLaren has specialised in the cartographic and data capture aspects of GIS design through involvement in the software development of a number of major GIS products. This mapping oriented experience, coupled with her talent in support issues and training, adds an invaluable component to the skill base of the company.

Associates

Our company also draws on an extensive network of associates in the professional / academic community to provide an additional resource of specialised expertise tailored to meet the expanding requirements of our clients. A number of our associates are internationally recognised as experts in their field.

REPRESENTATIVE EXPERIENCE OF COMPANY

Robin McLaren has conducted the following projects:

CORPORATE STRATEGIES

- **Government of Canada**

A contract with Hickling Arthurs Low Corporation of Ottawa, Canada to develop Canadian Geomatics Community Strategy "White Paper" and Scenarios for **Natural Resources Canada**.

Status: White Paper published April 2013.

- **Government of Western Australia**

A contract to review the draft Location Information Strategy for Western Australia.

Status: The strategy was published in October 2010.

- **UK Location Council**

A contract from Defra to sit on the UK Location Council to oversee the implementation of the UK Location Strategy and the EU INSPIRE Directive and to provide independent quality assurance.

Status: The UK Location Programme was initiated in November 2008.

- **UK GI Panel (now the UK Location Council)**

A contract from the UK GI Panel to formulate a UK Location Strategy.

Status: The project was initiated in June 2006 and reported to the UK GI Panel in December 2006. The UK Location Strategy was subsequently adopted and published by the Minister in November 2008.

- **States of Guernsey**

A contract to conduct a GIS Strategic Review in the public sector in the States of Guernsey.

Status: The project completed and the strategy adopted in May 2008.

- **Dumfries & Galloway Council**

A contract from Dumfries & Galloway Council to create a corporate GIS strategy.

Status: The project was initiated in May 2006, reported to the Corporate Management Team in September 2006 and subsequently adopted.

- **sportscotland**

A contract from sportscotland to conduct an options analysis for the development of a web based information service for the public to locate sports facilities across Scotland.

Status: The project was completed in July 2006 and procurement commenced in February 2007.

- **UK GI Panel**

A commission from the UK GI Panel to conduct a scoping study for a UK GI Strategy.

Status: The project reported to the UK GI Panel in September 2005.

- **Customer First, The National Gazetteer - Scotland**

A contract to test the quality of the 32 local authority-based Corporate Address Gazetteers in Scotland using data quality criteria and associated indicators formulated in a previous contract.

Status: The project was initiated in April 2005 and completed in September 2005.

- **Glasgow City Council**

A joint contract with Compass Geographics Ltd to review Glasgow City Councils' current approach to spatial data management and to formulate a new approach to corporate spatial data management.

Status: The project was initiated in March 2005 and ran until March 2006.

- **Defence Estates**

A contract to review the MoD's Sustainable Development programme.

Status: The project was initiated in March 2005 and was completed in June 2005.

- **Customer First, The National Gazetteer - Scotland**

A contract to produce a set of data quality criteria and associated indicators that will be used to measure the quality of the 32 local authority-based Corporate Address Gazetteers in Scotland.

Status: The project was initiated in January 2005 and was completed in March 2005.

- **Defence Estates**

A contract to review the approach to managing infrastructure assets in the Departmental Asset Register.

Status: The project was initiated in January 2005 and was completed in July 2005.

- **Customer First, The National Gazetteer - Scotland**

A contract to with Spatial Direction Ltd to produce a set of business requirements associated with the Definitive National Address - Scotland programme.

Status: The project was successfully completed in November 2004.

- **Perth & Kinross Council**

A Cost / Benefit Analysis of organisational framework options to support the management and maintenance of the Land & Property Gazetteer.

Status: The project was initiated in January 2004 and was completed in March 2004.

- **Department of Environment, Food and Rural Affairs (DEFRA)**

An invitation by the Ordnance Survey to conduct a Ministerial review of the GI Strategy of DEFRA.

Status: The project was completed in March 2003.

- **National Address Initiative (ACACIA)**

An invitation by the CEOs of HMLR, Registers of Scotland, Ordnance Survey, Valuation Office Agency, IdeA and Royal Mail to assume responsibility of the Acacia programme as Programme Leader.

Status: A 15 month appointment from January 2003.

- **Glasgow City Council**

A joint contract with Compass Geographics Ltd to audit Glasgow City Councils Land & Property Information Systems, provide advice on how the more effectively manage corporate land & property information and explore opportunities to support Access

Glasgow. A major component of the programme is to establish common referencing of assets. Further contracts have been awarded to provide programme management support services for a 36-month period.

Status: The project was initiated in June 2002 and will run until April 2006.

- **Ministry of Defence**

A contract with Defence Estates to support the programme management of the implementation of the MoD Wide Estate Information Systems strategy. A major component of the programme is to establish common referencing of assets and generate a MIS to support the Estate Strategy.

Status: The project was initiated in June 2000 and will run until October 2006.

- **Scottish Enterprise**

A 15-month contract with Scottish Enterprise to audit existing Geographic Information System based projects and to formulate a corporate Geographic Information Systems strategy for HQ and the Local Enterprise Companies.

Status: The project was completed in March 1999 and the Spatial Knowledge Strategy agreed by the Board under their Knowledge Web initiative. The KMap initiative is currently being implemented.

- **East of Scotland Water**

A 3-month contract with East of Scotland Water to formulate a Field Systems strategy and to create a Business Case to justify the investment.

Status: The project was completed in April 2000. The IT Board have endorsed the Business Case and financed the initial field systems investment.

- **Ordnance Survey**

A contract with the Ordnance Survey to provide strategic advice in the context of their new business model under their Trading Fund status and support their DNF communication strategy.

Status: The project was completed in March 2001.

- **Scottish Land Information Service (ScotLIS)**

A contract with the Registers of Scotland to market research, define and plan a Pilot Land & Property Information Service for Glasgow, Scotland.

Status: The project completed in March 1999.

- **UK National Land Information Service (NLIS) Steering Group**

A contract as part of a KPMG Consortium to develop a UK NLIS strategy, including issues such as market research, NLIS organisation and management, fee charging strategies, and development and implementation strategies, including the feasibility of private sector investment.

Status: Results from study endorsed by Steering Group December 1996.

- **Ministry of Defence (MOD), Defence Estates**

Lead consultancy to formulate a strategy for a computerised terrier to support the management of the Defence estate, which the fourth largest in the UK.

Status: Strategy agreed and financed by Management Board March 2000. Implementation has been initiated.

- **Land Registry of the Isle of Man Government**

A contract to develop business and technical designs for a Computerised Land Register, including a value for money study, to support the introduction of a Land Register.

Status: Council of Ministers approved project and associated funding for ten years. The new registration service will be launched in Nov 2000.

- **Haringey Council, London**

A contract to formulate a Corporate GIS strategy within the council, including a cost / benefit analysis,

Status: Revised Corporate GIS strategy endorsed in May 1997.

- **East of Scotland Water Authority**

A contract to review current piecemeal GIS activities and formulate a revised Corporate GIS strategy fully integrated within the new business context. The contract includes support in market testing existing GIS solutions and downstream procurement activities.

Status: Board approved the strategy in May 1998.

- **Ministry of Defence (MOD), Defence Estates**

Lead Consultancy to initially conduct a requirements analysis of the CAD/GIS requirements of three GIS pilot projects to support the Estate Management of MOD land & property holdings, including the environmental aspects of Military Training Areas. Following the success of the pilot project, the contract has been extended to support the expansion of the CAD/GIS solution into a national solution.

Status: Pilot projects success approved by MOD Management December 1996 and Corporate roll out initiated January 1998.

- **Electricidade de Portugal**

A commission from the National power company in Portugal to review their current GIS projects and to formulate a Corporate GIS implementation strategy.

Status: Recommended strategy adopted by management and Corporate Smallworld solution now implemented.

- **Scottish Hydro-Electric**

A contract to perform a User Requirements Analysis, create an Invitation To Tender document, benchmark potential GIS solutions, project manage the pre-production trial associated with their Digital Records Project, and to review a proposed Corporate Strategy for a Digital Mapping / GIS Corporate roll-out.

Status: Corporate GIS solution has been implemented.

- **Highland Regional Council**

A GIS Strategic Study to evaluate the feasibility of implementing a Corporate GIS within the Region and to formulate a Corporate Strategy to provide a vision for the Council.

Status: Council has approved limited investment in GIS technology within Planning Department.

- **Central Regional Council**

A contract to create a corporate strategy for the introduction of GIS technology into the Council. This included conducting a User Requirements analysis within the Architectural Services, Assessors, Chief Executive's, Development & Planning, Education, Roads & Transportation and Water & Drainage Departments, and formulating an implementation strategy.

Status: Council adopted proposed strategy and approved funding for Corporate GIS Unit. ESRI ArcInfo solution implemented in 5 Departments, supported by Corporate GIS Unit.

- **Water Department, Strathclyde Regional Council**

A GIS Implementation Study to investigate the scope of a possible GIS solution and to identify potential implementation solutions, including integration with other Regional Council Departments.

Status: Council adopted proposed strategy and Department conducted extensive pilot GIS project that is currently in a corporate rollout.

- **City of London**

A sub-contract from Business Information Management to jointly conduct a GIS Corporate Evaluation study for the Corporation, including a detailed User Requirements Analysis and associated business case.

Status: Council did not approve the proposed GIS project.

- **Grampian Regional Council**

A contract with the Water Research Centre to conduct a GIS User Requirements Analysis to integrate the Council's Water Services, Roads, Planning and Estates departments and to aid in the Corporate system procurement.

Status: Council adopted strategy and an extensive Corporate GIS solution is now implemented although derailed through Local Government re-organisation...

- **City of Sunderland**

A joint contract with Business Information Management to perform a GIS Feasibility Study, including both technical and financial analyses.

Status: Council adopted strategy and an extensive Corporate GIS solution is now implemented.

- **Royal Borough of Windsor and Maidenhead**

A contract to evaluate and present the potential of applying GIS technology within the operational environment of the Borough.

Status: After a 5-year delay, the Council has initiated GIS implementation.

- **Statistics Office of the European Union**

A contract to analyse the CORINE project and conduct a feasibility study into the use of GIS technology within six Directorates General of the organisation.

Status: The lessons learned within the CORINE project have been used and expanded the use of GIS within the EU.

PROCUREMENT SUPPORT: TENDER DOCUMENTATION, PRODUCT EVALUATION AND BENCHMARKING

- Support of **Defence Estates** in researching the Next Generation of Estate Contracts to support their core services and core works contracts worldwide across the MOD estate.
- Support of **sportscotland** on the procurement of a Sports Facilities GIS web service for Scotland.
- Support of **Forestry Commission** on the procurement of GI services to support their enterprise GIS solution.

- Advisor to **Defence Estates** on the procurement of an enterprise IS solution to support estate management activities within the relaunched Defence Estates.
- The support of **Phoenix Natural Gas Ltd** in the procurement of a GIS solution for the gas distribution business in Belfast.
- The support of **United Utilities** plc in the procurement of a GIS / Trouble Call solution for the distribution business.
- The support of **Northern Ireland Electricity** plc in the procurement of an INTRANET solution to complement their existing VISION GNIS solution.
- The support of **East of Scotland Water** in the procurement of their Corporate GIS solution.
- The support of **East of Scotland Water** in the procurement of GIS technical support services to support their Corporate GIS solution.
- The support of **Northern Ireland Electricity** plc in tender evaluation and post tender negotiation for the procurement of an Automated Mapping solution.
- The production of Invitation to Tender documentation, benchmark definition and procurement support of the Budapest District Land Offices and the Hungarian National Computerised Land Registration Systems under the **EU PHARE procurement regulations**. These have been successfully audited.
- A contract from **The Scottish Sports Council** to assist in the specification and procurement of a Document Image Management solution for the management of all documentation associated with the National Lottery Capital and Revenue Schemes.
- A contract from **Scottish Hydro Electric** plc to assist in the procurement of pen-based PC technology to support the field capture of defects / condition of the Overhead Line Network and the field maintenance of their digital mapping system.
- A contract from the **Land Registry of the Isle of Man Government** to support the procurement of a Computerised Land Registration System, including benchmark design and evaluation.
- A contract from **The Scottish Sports Council** and the Loch Lomond Park Authority to assist in the definition and procurement of GPS/GIS pen-based PC technology solution to support the field capture of information related to boating violations occurring on Loch Lomond.
- Lead Consultancy with the **Ministry of Defence (MOD), Defence Estates Organisation** to specify, procure and manage the implementation of three GIS pilot projects to support the Estate Management of MOD land & property holdings, including the environmental aspects of Military Training Areas.
- Technical advisor to **Central Regional Council** in the evaluation and procurement of a Corporate GIS.
- A contract with the **UK Ordnance Survey** to advise in the definition and procurement of a GIS to manage their small scales databases.
- A commission from **Electricidade de Portugal**, the National power company in Portugal to design a benchmark associated with the procurement a Corporate GIS.
- Advisor to **Lothian Regional Council** in the product evaluation phase of their GIS project involving the Highways and Planning Departments.

- Technical Advisor to **East Surrey Water plc** in the evaluation of proposals associated with the procurement of a GIS.
- Benchmarking of GIS products for **Scottish Hydro-Electric's** Digital Records Project.
- Advisor to **Grampian Regional Council** in the benchmarking of potential solutions during the procurement of a Corporate GIS
- Advisor to the **Milton Keynes Development Corporation** in the product evaluation phase of their LIS (Land Terrier) procurement project.
- Benchmarking of GIS products for the **Statistics Office of the European Community**.
- Evaluation of Property Management Packages for a major Commercial Property Management company in Edinburgh.

PUBLIC / PRIVATE PARTNERSHIP FACILITATION

- A contract from **The Scottish Sport Council** to identify and facilitate private sector partners to commercialise a Demonstration Programme to support education in Mountain Navigation.
- A contract from **Forth Valley GIS** to develop a Business Plan to support their expansion as a GI service provider.

BUSINESS CHANGE MANAGEMENT

- A contract from **United Utilities** to define and implement new business processes across the corporate organisation to support the implementation of their new GIS / TroubleCall solution.
- A contract with **Defence Estates** to review their Health & Safety business processes for interfaces to their contractors.
- Provision of Management level GIS training for the **London Borough of Enfield** to support their business change programme.

INTERNATIONAL EXPERIENCE

- A contract with the **UN-HABITAT GLTN and Dutch Kadaster** to produce a "Guide for Fit-For-Purpose Land Administration".
- A contract with the **World Bank** to provide the Minister of Justice with guidance on institutional reform in **Croatia**.
- A contract with the **World Bank** to advise the government of **Albania** on a strategy for an Integrated Land Management Program.
- A contract with the **World Bank** to review the Land Administration and Management Project (LAMP) in **Albania**.
- A contract with the **World Bank** to advise on the National Land Registration and Cadastral Strategy in **Croatia**.
- Senior advisor to Cloudburst and **USAID** in designing and implementing pilot projects in the use of mobile technology and crowdsourcing to strengthen land tenure security.

- A contract with the **World Bank** to review the National Land Registration & Cadastral Agency (ANCPI) in **Romania** – ICT expert.
- A contract with Hickling Arthurs Low Corporation of Ottawa, Canada to develop Canadian Geomatics Community Strategy “White Paper” and Scenarios for **Natural Resources Canada**.
- A contract with the **World Bank** to advise on State Land Management in **Kuwait**.
- A contract with the **World Bank** to author the ‘ICT in Land Administration’ module of their e-source book on ‘ICT in Agriculture’.
- A contract with **UN-HABITAT** to support the formulation of a National Land Policy for **Iraq**.
- A contract with the **Swedish International Development Agency** to support the planning of the implementation of **Kenya’s** Land Information Management System.
- A contract with the **UK Department of International Development** to support the planning of the implementation of **Kenya’s** new Land Policy over the initial two year transition period.
- A contract with the **European Commission – Joint Research Centre** to monitor the implementation of the **Polish Cadastre** under the Phare 2003 Programme.
- A contract with the **UK Department of International Development** to review the feasibility of the Land Information Management component of **Kenya’s** proposed Land Policy.
- A contract with the **Centre of Legal Competence (CELC) in Austria** to review the Corporate Strategy of the **Department of Lands and Mapping within the Ministry of Agriculture and Regional Development in Hungary** to optimise the delivery of Land Registration and Cadastral services.
- A contract with the **Swiss State Secretariat for Economic Affairs (seco)** to conduct a sectoral cross-country and post-project evaluation of three projects in the cadastre / land reform sector in **Columbia, Hungary and Russia** to support a review of Swiss foreign aid policy.
- A sub-contract from Ordnance Survey International to support land registration and cadastral information management analysis in **Slovakia** under the **EU PHARE programme**.
- A contract from the **Office of Monitoring and Assessment (OMAS) of the EU PHARE programme** to assess the impact of Phare support to land reform in **Estonia** and to review the need for future Phare supported interventions.
- A 36 month contract from the **EU PHARE programme** and the **Ministry of Agriculture of Hungary** to provide technical assistance for the Land Registration Project to computerise the 120 District and County Land Offices. Know Edge headed a consortium of 17 internationally recognised experts to support the computerisation of Land Registration and Cadastre, including the procurement of computer equipment and services to a value of ECU 5 million.
- An invitation from the **Food and Agriculture Organisation (FAO) of the United Nations** to assist the **Government of Estonia** in creating an Information Management Strategy to support a plan for national land registration, cadastre and conveyancing.

- A commission from the **EU PHARE programme** and the **Ministry of Agriculture** of Hungary to participate in the design of a Computerised Land Registration Information System for the **City of Budapest**.
- An invitation from the **FAO of the United Nations** to introduce GIS and Remote Sensing technology into the Ministry of Agriculture in **Zimbabwe**.
- A Mission with the **FAO of the United Nations** to **Mongolia** to specify a National Information System for Agriculture Monitoring and Management within the Ministry of Agriculture.
- A contract with the **FAO of the United Nations** to analyse the requirements for a computerised land transaction monitoring and inventory system for the Department of Agrarian Reform, **Government of the Philippines**.
- An invitation from the **FAO of the United Nations** to prepare a strategy for the implementation of a computerised land registration system for the **Yemen Arab Republic**.
- A contract with the **FAO of the United Nations** to analyse the requirements for a computerised land records system (National LIS) to support the cadastral activities of the Land Management Bureau of the Department of Environment and Natural Resources, **Government of the Philippines**.
- Robin McLaren is active in **FIG Commission 3 (Spatial Information Management)** International Working Groups analysing the role of spatial information management and spatial knowledge in the decision making process.

INFORMATION MANAGEMENT

- A contract with **Dumfries & Galloway Council** to create Data Management Plans to support the management of their Corporate Address Gazetteer and Local Street Gazetteer.
- A contract with **Defence Estates** to create Data Management Plans to support DE in their collection of information on performance against DEFRA's Sustainable Operations on the Government Estate (SOGES) Sustainable Development targets.
- A contract with **Defence Estates** to create an Information Strategy for the operations side of their business.

PROJECT AUDITS

- A contract with the **Municipality of Istanbul** to conduct a technical audit of their Intergraph based LIS project.
- A sub-contract from Business Information Management to participate in a UK **Local Government Management Board (LGMB)** contract to conduct case studies into the implementation of GIS technology within the UK Local Government and to produce a set of implementation guidelines published by LGMB.
- A sub-contract from the **Ordnance Survey GB** to assist in the review and scoping study of The Scottish Office, Agriculture & Fisheries Department's Integrated Administration & Control System (IACS) to support the EU reform of the Common Agricultural Policy.

RECORDS CONVERSION

- A contract with **Northern Ireland Electricity** to support the tendering of the conversion of the Record Drawings within their Automated Mapping project.

- A contract from the **Water & Drainage Dept, Lothian Regional Council** to support the specification, tendering and project management of the conversion of the Record Drawings within their GIS project.
- A contract with **Scottish Hydro Electric** to create procedures and specification for the audit of their extensive record drawings, prior to conversion. This included an investigation into data capture technology to support the conversion of their 1:500 records.
- A contract with the **Ministry of Defence (MOD), Defence Estates Organisation** to support the specification, tendering and quality assurance of the conversion of records associated with the Estate Management of MOD land & property holdings, including the environmental aspects of Military Training Areas.

POSITIONAL ACCURACY IMPROVEMENT (PAI) PROJECTS

- A contract with **Scottish Water** to create PAI strategic options and to support the tendering of their PAI project to upgrade the GIS asset records.

PROJECT MANAGEMENT AND IMPLEMENTATION

- Know Edge has considerable experience in directly supporting the project management and operational implementation of complex, distributed major projects, including:
 - ◇ **Programme Management** of the IS projects supporting Defence Estates' Prime Contracting Initiative where the majority of estate maintenance work is being outsourced.
 - ◇ The provision of a project manager to support **Northern Ireland Electricity plc** in the implementation of an Automated Mapping solution based on the VISION product.
 - ◇ The initial pilot project and corporate national roll out of a CAD/GIS solution to all regional offices of the **Ministry of Defence (MOD), Defence Estates**.
 - ◇ The initial pilot project and corporate roll out of the GIS solution for **Scottish Hydro Electric**.
 - ◇ The national implementation of a Computerised Land Registration System for the **Ministry of Agriculture of Hungary** under the **EU PHARE programme**.
 - ◇ The operational management of a computerised land transaction monitoring and inventory system for the Department of Agrarian Reform, **Government of the Philippines**, provided by the **FAO of the United Nations**.
 - ◇ The implementation of a Computerised Land Registration System for the **Land Registry of the Isle of Man Government**.

OUTSOURCING TECHNICAL SUPPORT SERVICES

- A contract with the **East of Scotland Water** to define and procure technical support services to outsource the support of their Corporate GIS solution.

MARKET ASSESSMENTS

- A contract from **EuroGeographics**, in conjunction with ConsultingWhere Ltd, to conduct an in-depth study into the market for geospatial information and the position of EuroGeographics products within it.
- A contract with **Ordnance Survey GB** to quality assure their strategy for marketing object based data products.

- A contract with **Wild Heerbrugg AG, Switzerland** (now Leica) to perform market analyses of the UK Utility market segments, create future product specifications and generate technical documentation for their (now UNISYS) SYSTEM 9 GIS products throughout Europe.

RECRUITMENT

- Know Edge has supported the recruitment of GIS project managers and technical staff for Scottish Hydro Electric, Central Regional Council, and The Crown Estate.

TECHNICAL INVESTIGATIONS

- A contract with the **UK Department of International Development** to investigate and review how technology is being used in developing countries to promote transparency around land acquisitions.
- The creation of a Corporate Data Dictionary for **Northern Ireland Electricity** plc integrating business and technical object definitions across 7 corporate information systems. The data dictionary solution was delivered in a form to encourage end users to access and interrogate the Data Dictionary and to support a data warehousing initiative.
- A contract with the **Turnbull Jeffrey Partnership** of Edinburgh to develop a Computer Aided Visual Impact Analysis package for the visual, environmental impact assessment of major projects on the landscape, e.g. transmission line and wind farm construction.
- A study with the **Central Statistics Unit of the Scottish Development Department**, Scottish Office to investigate the feasibility of integrating environmental datasets into the existing Computerised Highway Information & Planning System (CHIPS) to aid in the planning of new road schemes.
- A contract with a **major UK bank** to advise on GIS technology to support the reconfiguration of their Branch network.

EDUCATION

- Invitation by the Institute of Geography, School of Geosciences, **University of Edinburgh** to design & teach the "GIS & Public Policy" unit within the M.Sc. in GIS course.
- Robin McLaren is currently an Honorary Fellow at the **School of GeoSciences, University of Edinburgh** in recognition of his business expertise in GIS.
- At a ceremony at the **University of Glasgow** in December 2014 the Honorary Degree of Doctor of Science was conferred on Robin McLaren in acknowledgment of his contribution to Geomatics.