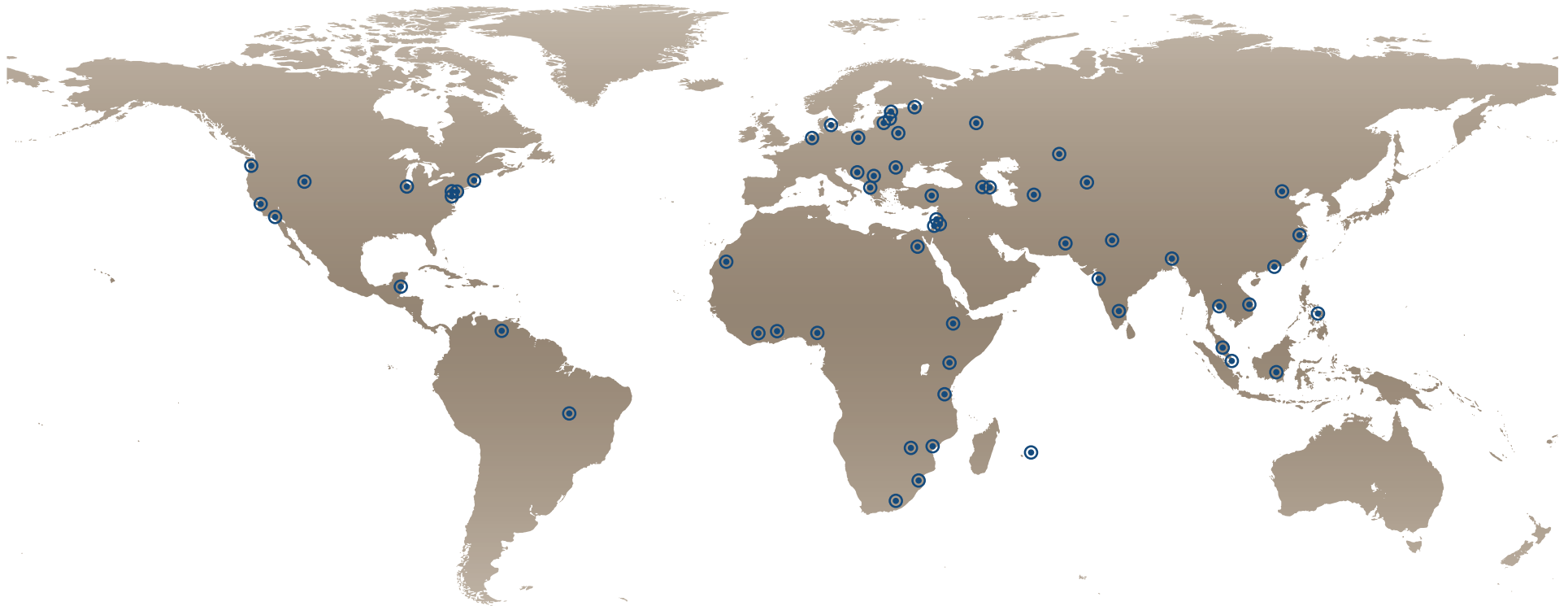


- Analysis
- Planning
- Project Management
- Advisory Services



Founded in 1991 and based in Irvine, California, *Global Resources, Inc.* is an international consulting firm that works exclusively with developing and emerging nations in the Information, Communications and Technology (ICT) and infrastructure fields. We bring a deep and diverse 20-year project history to our clients, along with the wisdom, care and focus that only a highly-specialized, focused and nimble organization can deliver.

Our teams have worked on over 75 Information and Communications Technology (ICT) and infrastructure projects from concept design through implementation in more than 50 countries. Our most senior professionals continue to provide advice and counsel to top decision makers in both government and industry around the world. We have provided services for clients in Africa, the Americas and the Caribbean, the Balkans, the Baltics, Central Asia, Central and Eastern Europe, China, the Indian Subcontinent, the Middle East, South America, South East Asia, and the United States.

## Expertise Areas:

*Global Resources* provides strategic analysis, practical planning and implementation tools, management services, and confidential advice and counsel for clients investing in or managing ICT and infrastructure projects, especially in high-risk, resource-constrained environments.

We are fluent and experienced in the three core languages that comprise the ICT and infrastructure field (technical, commercial and policy) and bring extensive expertise and experience evaluating and managing the related business, regulatory, operational, institutional, and range of project challenges that can require:

**Advisory Services:** (Ministerial; Director General; Board of Directors; CEO/COO/Senior Management)

**Contract Evaluations, Mediation, Negotiation, and Arbitration Services**

**Defining, Staffing and/or Managing Cross-Cultural and Multi-Functional Work Teams**

**Due Diligence**

**Electric Utilities and Telecommunications**

**Emergency Management, Response & Recovery Systems**

**Financing, Insurance and Foreign Direct Investment**

**Government/State/Private Networks**

**Governance/Risk Management**

**Institutional, and Organizational Planning and Management**

**Infrastructure Planning and Management**

**ICT Professional Development**

**Intellectual Property Protection**

**On-Site Project and Operations Management**

**Ports, Customs, Immigration, and Security Planning and Management**

**Procurement and Request for Proposal (RFP/RFQ) Design and Management**

**Project Analysis, Definition and Management**

**Project Troubleshooting**

**Regulatory and Policy Planning/Management**

**Sector Planning and Assessments**

**Strategic Business Case Design and Analysis**

**Strategic Marketing and Operations Management**

**Supply Chain Management and Security**

**Technology Parks, Zones and Cities**

**Transportation and Telecommunications**

### TECHNOLOGY EXPERTISE

ATM ♦ Broadband Networks ♦ Cable TV and Networks ♦ Cellular/Wireless Networks ♦ Cloud Computing ♦ Customer Relationship Management (CRM) ♦ Customs Reform Database Integration/Legacy Systems ♦ Data Networks & Warehousing ♦ Disaster Planning & Response ♦ E-Commerce ♦ E-Education ♦ E-Government ♦ E-Procurement Electronic Records Management ♦ Fiber Optic Systems/Undersea Cables Financial Management Systems ♦ Geographic Information Systems (GIS) ♦ Internet/ISP: Access/Delivery

## Clients:

This partial list of our clients does not include those organizations and/or individuals who have requested confidentiality.

We thank each of the individuals in all of our client organizations who have given us the opportunity to work together.

### Africa/Middle East

Autorite de Regulation des Postes et Telecommunications (ARPT)/SoftDomain	Algeria
Agence des Télécommunications de Côte d'Ivoire (ATCI)	Côte d'Ivoire
EgyptAir Maintenance & Engineering	Egypt
Emerging Markets Group / USAID	Egypt
Ethiopian Telecommunications Corporation (ETC)	Ethiopia
Ghana Telecom/Voltacom	Ghana
PhaseNet	Ghana
GTE/GlobeNet	Jordan
Ministry of Planning/Telecommunication Regulatory Commission (TRC)	Jordan
Ministry of Post and Communications	Jordan
Ministry of Transportation	Jordan
Jordan Rift Valley Telecommunications Group/Bezek	Jordan/Israel
Industrial Development Authority of Lebanon/Graeber, Simmons & Cowen	Lebanon
Mauritius Ports Authority (MPA)	Mauritius

Office National des Chemins de Fer (ONCF)	Morocco
Telecomunicações de Moçambique (TDM)	Mozambique
Nigerian Transportation & Ports Authority/Sandler Travis Advisory Services	Nigeria
Banque Nationale du Rwanda (BNR)	Rwanda
South African Telecommunications Regulatory Authority (SATRA)	South Africa
Vula Communications	South Africa
Confidential	Swaziland
Posts and Telecommunications Corporation (PTC)	Zimbabwe

### Americas and the Caribbean

AT&T	USA
Cisco Systems	USA
Coopers & Lybrand (now PricewaterhouseCoopers)	USA
EarthData	USA
IEEE	USA
Intelsat	USA
JM Huber	USA
Loral Skynet	USA

Lucent Technologies	USA
Marconi Communications	USA
Motorola	USA
Qualcomm	USA
Sea-Launch	USA
Snowbird Ski and Summer Resort	USA
US Trade and Development Agency	USA
Watchmark	USA

Cámara de Empresas de Servicios de Telecomunicaciones (CASETEL)	Venezuela
Consorcio de Teleinformación, C.A. (CONTEL)	Venezuela
Telecomunicaciones y la Informática Comisión Nacional de Telecomunicaciones (CONATEL)	Venezuela

### Asia/Indian Sub-Continent

Access Telecom	Bangladesh
Intel/Save the Children	Bangladesh
General Administration of Customs of the PRC	China
Sinopec International	China
State Council Informatization Office/Motorola	China

### TECHNOLOGY EXPERTISE

**Maintenance, Repair and Overhaul (MRO) ♦ Network Planning & Management ♦ Outside/External Plant ♦ Pilot Projects ♦ Port and Supply Chain Security ♦ Postal Modernization Public Switched Telephone Network ♦ RFID/Supply Chain Management ♦ Satellites: Planning/Management/Services Delivery ♦ Spectrum Monitoring, Management & Planning Standards Switching Planning/Multi-Technology Network Integration ♦ Tariff Analysis/Planning ♦ Teleport/Gateway Planning ♦ Traffic Engineering/Planning**

- Analysis
- Planning
- Project Management
- Advisory Services

Bechtel/Essar Commvion/OSP Consultants/ Mahanagar Telephone Nigam Ltd. (MTNL)	India
Hinduja Group	India
Hughes Network Systems/Mahanagar Telephone Nigam Ltd. (MTNL)	India
Nynex	India
Oracle/Mahanagar Telephone Nigam Ltd. (MTNL)	India
Malaysia Multimedia University	Malaysia
Ministry of Communications and Transportation/ Land Transportation Office (LTO)	Philippines
National Electronics and Computer Technology Center	Thailand
Ministry of Information and Communications Technology (MICT)	Thailand
Department of Vietnam Customs	Vietnam
Pacifica Solutions	Vietnam
Vietnam Ministry of Finance/Oracle	Vietnam
Vietnam State Treasury	Vietnam
Vietnam State Treasury/KPMG	Vietnam

#### Central and Eastern Europe

Port of Durres	Albania
Elektroprivreda	Bosnia
Central State Office for E-Croatia	Croatia

Union of Baltic Cities	Estonia/Poland/Lithuania
Latvian Cabinet of Ministers	Latvia
Melita Cable TV	Malta
Bank 24 (of Hungary)	Poland
Government of Poland	Poland
Industrial Research Institute for Automation and Measurement (PIAP)	Poland
Ministry of Posts and Telecommunications Telekomunikacja Polska S.A. (TPSA)	Poland
Polish Government Computer Center (PESEL)	Poland
I-world.com	Republic of Georgia
Ministry of Information and Communications Technology (MICT)	Romania
Ministry of Justice (MoJ)	Romania
Romanian National Electric Company (CONEL)	Romania
Transelectrica	Romania
Serbian State Agency for the Protection of Intellectual Property Rights (IPO)	Serbia

#### Central Asia/Former Soviet Union

Ministry of Communications and Information Technology (MCIT)	Azerbaijan
Ministry of Foreign Affairs (MFA)	Azerbaijan
University of Kansas	Azerbaijan

Ministry of Posts, Telecommunications and Informatics/Essential Orbital Services, Inc.	Belarus
Intertelecom/EDS	Kazakhstan
KazakhTelecom	Kazakhstan
KazakhTelecom/Kazakhstan Capital Development Corporation/LGN Networks	Kazakhstan
Ministry of Communications and Informatics of the Russian Federation	Russia
Municipal Treasury of St. Petersburg/Oracle	Russia
Rostelcom/Hughes Network Systems	Russia
Russian Center for Electronic Commerce/ Avaya/Blacklin & Associates/CTI	Russia
Russian Ministry of Communications	Russia
TECHNOPOST/DEC	Russia
CH2MHILL/FIBERKOM	Turkey
Government of the Municipality of Izmir	Turkey
Meteksan Sistem	Turkey
Miltel	Turkey
Türk Telekom	Turkey
Intel	Turkmenistan
Ministry of Communication	Turkmenistan
Ultrapro/Connell Communications	Turkmenistan

#### TECHNOLOGY EXPERTISE

Transmission Planning ♦ Transportation/IT Planning ♦ Utility/Power/Telecom Applications ♦ Voice over Internet Protocol (VoIP) ♦ VSAT Networks ♦ Wi-MAX  
Wireless Local Loop (including broadband wireless access (BWA), radio in the loop (RITL), fixed radio access (FRA) and fixed wireless access (FWA)) ♦ Wireline Networks

## Project Experience:

Below are three samples of projects we have completed for clients in China, the Philippines and Thailand.

To learn more about our more than 75 projects that have been conducted for public and private sector clients in Africa, the Americas and the Caribbean, the Balkans, the Baltics, Central Asia, Central and Eastern Europe, China, the Indian Subcontinent, the Middle East, South America, South East Asia, and the United States, please visit our website at: [www.global-resources.com](http://www.global-resources.com)

### Country: *China*

### Client: *China Petrochemical International (Sinopec)*

### Project Title: *E-Procurement Feasibility Study for Sinopec International*

**Project Description:** China Petrochemical International Co., Ltd., China's largest petroleum and petrochemical company, is responsible for China Petroleum & Chemical Corporation's import and export activities. With \$12.2 billion in trade volume, reflecting a ratio of \$11 billion of imports to \$1.2 billion in exports, the firm ranked first among 500 importers and exporters in China in 2000 when *Global Resources* was selected to assist this prestigious global organization.

Generally known as the Sinopec Group, China Petrochemical International requested assistance for a proposed e-trade/business-to-business platform project. The trading component of the giant petrochemical

organization wanted to improve their overall quality, and accelerate the speed and efficiency of their extensive global procurements through electronic means. Sinopec had begun e-commerce operations in 2000, and *Global Resources* was asked to assist them as they considered how their larger global e-vision could be implemented.

*Global Resources* first conducted an extensive industry analysis, evaluating databases and e-commerce platforms used in the petrochemical industry throughout the world, and strategic sourcing and supply chain/operations issues facing global petrochemical firms. In China, we worked with senior management to analyze Sinopec International's current technical and organizational capabilities to build, implement, support, and sustain an e-commerce platform for the import and export of petroleum and chemical products. To transition Sinopec from a paper-based to an e-commerce organization, we suggested a three-phase approach:

- Develop an internal intranet for procurement from established suppliers

- Develop an international Internet procurement system, which would include new vendors, partners, and trading relationships
- In the longer-term, build on these e-systems to establish Sinopec International's Global trading network, which would become a new business asset for Sinopec International and China. The resulting organization could become a web-based trading agent with sourcing and sales capabilities extending beyond the petrochemical industry.

*Our work with Sinopec resulted in more diversified and cost-effective sourcing, increased productivities and organizational efficiencies at Sinopec, and expedited purchasing from and payments to suppliers around the globe. In addition to improved transparency and accountability for all parties using the e-system, as a byproduct, the Sinopec E-Procurement project created sales opportunities for software and ICT suppliers in the expanding Chinese marketplace.*

## Project Experience:

**Country:** Thailand

**Client:** Ministry of Information and Communications Technology

**Project Title:** Ministry of Information and Communications Technology (MICT) 26: The Inter-Ministerial and Agency Operations Centers E-Government Project

**Project Description:** In 2005, the Prime Minister of Thailand announced that he wanted domestic government institutions to have "Operations Centers" which would serve as e-links, providing timely and relevant electronic data and information for decision making to the Prime Minister's office. Suppliers, service providers, and the financing community greeted the idea enthusiastically and quickly began planning and implementing a range of e-government projects. The Thai Ministry of Information and Communications Technology (MICT) wanted to realize the Prime Minister's vision as rapidly as possible. However, with limited resources, they needed assistance in determining how best to achieve the goal.

Through analysis and discussion with the many interested participants in the project, *Global Resources* assessed MCIT's institutional capabilities as well as organizational and technical relationships between the Prime Minister's office and the top 26 Thai Ministries (including MICT) and Government Agencies that reported to him. It became clear that MCIT could play a coordinating and catalytic role for the Operations Center project, and that needed human resources were available from other Ministries, if specialized expertise could be added to "glue" the decentralized e-team together.

As a result, *Global Resources* developed the *MICT 26 E-Government Project* that provided timely and relevant electronic data and information exchange between the 27 vital Operations Centers (the top 20 Ministries, 6 Agencies and the Prime Minister's office). Our team worked closely with MICT to develop the detailed project scope (terms of reference) that would assess each potential Operations Centers' responsibilities, goals, institutional support capabilities (human resources, management strengths/weaknesses, supplier interfaces, etc), technology assets (hardware, software, databases,

network infrastructures (external/internal), security levels, etc.), operational resources and gaps, budget, scheduling concerns, and related parameters. We also developed the project budget, RFP hiring parameters, and project deliverables. In addition to defining the project, we assisted the MICT in securing \$400,000 of US Government funding for the e-government pilot project.

*The MICT 26 E-Government Project enabled the network of 26 Inter-Ministerial Operations Centers to communicate in new, secure and multi-dimensional pathways, while also integrating and adding value to cross-governmental information which could then be shared directly and electronically with the Prime Minister's office – on a moment's notice. The project also opened funded opportunities for ICT sector suppliers and service providers, in addition to bringing important professional development and technology transfer benefits to Thailand.*

## Project Experience:

**Country:** *Philippines*

**Client:** *Ministry of Communications and Transportation - Land Transportation Office*

**Project Title:** *Management Information Systems Consultancy Project for the Philippines*

**Project Description:** The Land Transportation Office (LTO) of the Philippines' Department of Transportation and Communications is responsible for promoting and maintaining nationwide safe, efficient, comfortable and economic land transportation services by providing a rationalized system of motor vehicle registration, license issuance, law enforcement and adjudication of traffic violation cases. However, at the time *Global Resources* arrived, the LTO's efficiency and overall functionality as a government agency was limited by several factors, including long turnaround times for motor vehicle registration and drivers' and conductors' licensing, an absence of a central repository of land transportation data for fast real-time inquiry and verification from LTO and other public service agencies, a voluminous renewal of license applications and even greater amount of traffic, motor vehicles, franchising and licensing law violations cases (needing linkages to police force and other public service agency databases), poor service levels, petty graft and corruption, and the proliferation of fake documents. The LTO and top members of the Philippine government

knew that these problems represented financial, economic and social losses, and in a strategic effort to respond and to implement President Ramos' National Information Technology Program, the LTO outlined a series of activities which would help to revitalize their operations and assist the office in attaining a greater functional efficiency. While many of these restructuring plans involved physical plant and operational changes, it was evident that the installation of a modern information technology network could solve many challenges associated with data management, integration, movement, and verification. A modern IT system would also ensure far greater transparency and accountability.

Working with *Global Resources*, the LTO designed an information technology backbone network to serve as the electronic infrastructure around which the LTO would build up sub-component projects that would modernize its management and operations. All 214 district, 15 regional offices and the Central Office of the LTO would be linked in this wide area network which interconnected other government agency computer systems, while accessing the internet and providing accessibility for citizens.

During the first three years, the LTO could develop its databases to provide the public fast, accurate and efficient services. With on-line transaction processing in its field offices, data warehouses were upgraded to a 200 gigabyte size; this electronic growth would allow the Department of Transportation and Communications and other government

agencies to interconnect. The robust decision support systems provided by the data warehouse provided correct, on-time information for field decision makers, who needed to provide real-time service delivery to the public.

In order to ensure long-term project sustainability, a Build-Own-Operate scheme was chosen for the privatization of the business-like activities of the Information Technology Project. The LTO exercised the regulatory functions and direct supervision/control over the entire system through the implementation of an effective systems administration and a reliable and strong Information Systems Security.

*With the full use of its IT resources, the LTO stabilized its staffing requirements as it relied more on office automation to facilitate transactions. This freed up personnel to serve the public directly, rather than utilizing their productive capabilities to perform back room operations. Requirements for storage of records and other paper based documentation and forms were largely replaced by electronic messaging, digitization of records, and a maximum implementation of electronic data interchange and paperless transactions.*

*Global Resources was honored to serve the Department of Transportation and Communications and especially the Land Transportation Office of the Philippines. As a result of our work, the US government supported the Land Transportation's request for the financing of the Consultancy Study to implement the LTO \$54M Backbone Network project.*

## Project Specialists:

*Global Resources* utilizes in-house staff and senior and distinguished professionals to create our unique project teams.

### All of our project professionals have:

- A Master's or PhD degree in their field of expertise
- A minimum of fifteen years of industry experience
- Experience working in the private and public sector, and with State Owned Enterprises
- Experience and worldwide contacts in their specific technology expertise area
- Experience working in developing or emerging countries
- Experience staffing and/or managing cross-cultural teams
- Courtesy, professionalism, and a focused and intensive work ethic

At times, our clients may ask us to locate individuals or to build specialized teams for a specific project purpose. If the professionals in your firm meet the above credentials, please contact us to discuss our *Strategic Affiliates Program*.

**We welcome your inquiry:**

***Global Resources, Inc.***

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[inquiry@global-resources.com](mailto:inquiry@global-resources.com)

As our work is global, our project professionals are often at our client's locations; e-mail is the fastest and most effective way to reach them directly. For general inquiries and for assistance reaching any of our staff, our headquarters team is always ready to take your call or handle your e-mail during our business hours, Monday through Friday, 8 am to 5 pm (Pacific time zone).

For speaking engagements and press inquiries, please contact our public relations firm, Hilary Kaye Associates, Inc. (HKA) at (01) 714-426-0444 or visit: <http://hkamarcom.com/html/contact.htm>. Please be sure to identify that your inquiry is in regards to *Global Resources, Inc.*

**WE ARE HONORED TO HAVE WORKED WITH:**

***Albania, Algeria, Australia, Azerbaijan, Baltic Cities, Bangladesh, Belarus, Belize, Bosnia, Brazil, China, Costa Rica, Côte d'Ivoire, Croatia, Egypt, Estonia, Ethiopia, Georgia, Ghana, Hong Kong, India, Indonesia, Israel, Jordan, Kazakhstan, Kenya, Kyrgyzstan, Latvia, Lebanon, Lithuania, Malaysia, Malta, Mauritius, Morocco, Mozambique, Netherlands, Nigeria, Pakistan, Philippines, Poland, Romania, Russia, Rwanda, Serbia, Singapore, South Africa, Sub-Sahara Africa, Swaziland, Tanzania, Thailand, Turkey, Turkmenistan, United States, Venezuela, Vietnam, Zimbabwe...***