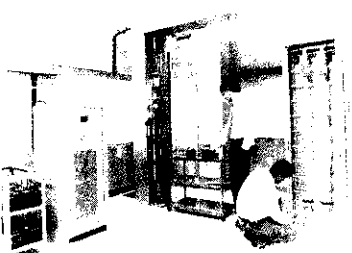
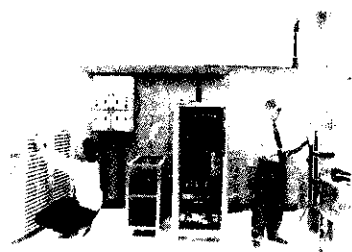
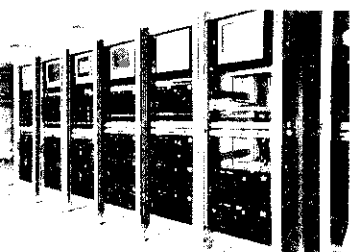
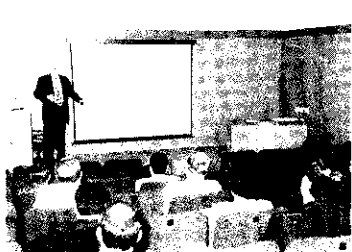
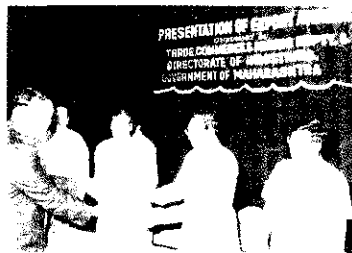
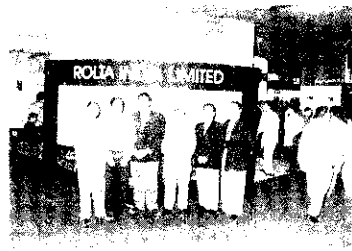


# Annual Report - 1999 ROLTA INDIA LIMITED





**ROLTA INDIA LIMITED****BOARD OF DIRECTORS,****Mr. K.K. Singh**

Chairman &amp; Managing Director

**Mr. R.R. Kumar****Mrs. Aruna K. Singh****Mr. S.L. Baluja****Mr. K.R. Modi****Mr. A.D. Tayal**

Jt. Managing Director

**Mr. A.P. Singh****Mr. H.P. Ranina** (Alternate to Mr. A.P. Singh)**Mr. M. Edwards****Mr. R.K. Kaul** (Alternate to Mr. M. Edwards)**Mr. A.B. Wilson****Mr. A. Chakrabarti**

Dy. Managing Director

**Top Management Team****Mr. K.K. Singh**

Chairman &amp; Managing Director

**Mr. A.D. Tayal**

Jt. Managing Director

**Mr. A. Chakrabarti**

Dy. Managing Director

**Dr. M.K. Munshi**Executive Director - Technical Marketing  
& Customer Support**Mr. K.R. Vaidyanathan**

Executive Director - Sales &amp; Marketing

**Mr. M.L. Mehra**

Executive Director - General Administration

**Mr. T.V. Holay**

Executive Director - Personnel &amp; HRD

**Mr. V.L. Ganesh**

Executive Director - Finance

**Mr. L. Jayanthi**

Executive Director - AM/FM Conversion Services

**Dr. S.R. Bhot**

Executive Director - Internet Services

**Mr. S.S.K. Bannerjee**

Executive Director - Mechanical Design Automation

**Mr. A. Choudhury**

Executive Director - Plant Design Automation Services

**Mr. D. Ganguly**Executive Director - Mechanical Design Automation /  
Plant Design Modeling Services**Mr. P.V. Buddhiwant**Executive Director - Commercial, Distribution  
& Customer Support**Mr. R. Singh**

Regional Director - North

**Mr. S.K. Shirguppi**

Executive Vice President - Plant Design Systems

**Mr. V.K. Sawarkar**

Executive Vice President - Internet Services

**Mr. A. N. Shah**Executive Vice President - ISP Sales & Business  
Development**Mr. S.G. Mukund**

Executive Vice President - Sales

**Mr. L. Remedios**

Sr. Vice President - Production

**Mr. H. Tambralli**

Sr. Vice President - Support Services

**Mr. S. Ramaswami**

Sr. Vice President - Production

**Mr. R.P. Iyer**

Sr. Vice President - Production

**Mr. R. Plaha**

Sr. Vice President - Sales

**Mr. M.K. Govind**

Sr. Vice President - Marketing

**Overseas Operations****Mr. A.P. Singh**

President

Rolta International, Inc., USA

**Mr. A.B. Wilson**

Executive Vice President

Rolta International, Inc., USA &amp;

Managing Director, Rolta Europe, BV

**Mr. M. Edwards**

Managing Director

Rolta Saudi Arabia Ltd.

**Mr. A. Hawkes**

Sr. Vice President (US)

Rolta International, Inc., USA

**Mr. E. Jansma**

Vice President

Rolta Europe, BV

**Banks & Financial Institutions**

Union Bank of India

Central Bank of India

Bank of Baroda

Export-Import Bank of India

Industrial Development Bank of India

HDFC Bank Ltd.

**Solicitors**

Kanga &amp; Co.

**Auditors**

Khandelwal Jain &amp; Co.

**Company Secretary**

Mr. T.R. Fernandes



## Mission Statement

Rolta will be the preferred choice for providing knowledge-based IT solutions, through pioneering efforts to meet market demands and exceed customer expectations, achieved by an empowered team of Roltaites, for maximising value to its stakeholders.

## ROLTA INDIA LIMITED

### **Chairman's statement**

*It is with considerable pride and humility I present our results for 1999. Pride due to the excellent year we have had and humility because of the vast potential before us.*

*Change is happening all around us. And it is happening faster than ever before as the Internet becomes more and more ingrained in our lives. Internet has created a fundamental change in the way we communicate, touching many lives – I expect the pace of change to only increase. Organizations that move with agility to capture the momentum, turning change into a competitive advantage will thrive.*

*Rolta has been India's premier CAD & GIS solutions provider and amongst the top AM/FM/GIS Conversion service vendors worldwide, over the past decade. In keeping with the momentous changes happening all around us, we have adopted a strategy that will help us meet the challenges of the new millennium.*

*In the last two years we have consciously embarked on leveraging our existing strengths and have graduated to an IT solutions/services provider across major applications of Engineering, worldwide. Today, we offer comprehensive solutions and services in the segments of Geo-spatial technology for AM/FM & GIS, Plant Design Automation and Mechanical Design Automation (MDA) including Product Data Management.*

*In addition, Rolta is fast emerging as an end-to-end e-business solutions and services provider. Internet access, web-server farm for co-location services and comprehensive solutions focused on e-commerce consisting of web-servers, proxy-servers, firewalls, network security etc. have been some of our initial offerings. These are growing to system design, customization and implementation services across leading software platforms. We are also leveraging our strengths as a premier ISP and a leading software solutions provider, to operate as an Applications Service Provider (ASP). Our e-business strategy is based on profitable and direct revenue streams, which should result in significant growth in the coming years.*

*Another example of how we are marrying our expertise across disciplines is Rolta's foray into the area of Collaborative Product Commerce (CPC). CPC exploits the Internet to allow manufacturing companies to link up with suppliers and customers to build better products and to build them faster. Rolta's expertise in the area of MDA and Internet, has culminated into a special relationship with PTC – the world leader in this field, as one of their very few worldwide Enterprise Consulting Partners for implementing Windchill, providing us immense opportunity to address this market segment, globally.*

*We are already seeing the results of the above approach. Addition of synergetic lines of business, as stated above, has resulted in a significant expansion of our operations, enabling us to offer comprehensive solutions and services to meet the challenges of the new century, with a clear focus to drive, both, our topline and bottomline.*

*Rolta is just not another IT company. We have established domain expertise in our areas of operation, created the required infrastructure and built up strong and efficient business processes to offer strong value proposition to our customers across the world. Acquisition of cutting-edge technology and strong business alliances with global leaders like Intergraph, Z/I Imaging, PTC, IBM, Compaq, Computer Associates, Microsoft, Intel and many others ensures that Rolta not only builds up on its ability to meet demanding customer expectations, but also stays current with emerging trends enabling it to constantly develop and refine skills & expertise.*

*Our performance across various parameters has improved rapidly year after year, as is evident from the independent assessment of EVA carried out by M/s Deloitte Haskins & Sells, while their valuation report for our Brand and Human Resources brings out our intrinsic strengths. The change in perception of Rolta is also reflected in the increased market capitalization as on March 31, 2000 as compared to a year ago.*

*We intend to aggressively pursue the immense opportunities before us and I firmly believe that our current accomplishments provide a solid base for future growth and reflect our ability to create superior value for all our stakeholders i.e. shareholders, customers, employees and business partners.*



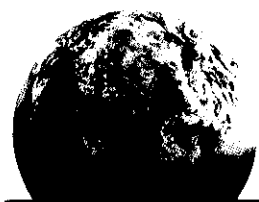
**K. K. Singh**

Chairman & Managing Director

April 24, 2000







**R**olta is a multinational well equipped to solutions & IT se across the world

## The Rolta Advantage

By judiciously combining resources on world-wide facilities Rolta is able to meet customer expectations cost effectively. Since 1982 Rolta has been a pioneer in computer graphics, mapping and engineering software and has consistently being ranked as India's No. 1 CAD/CAM & GIS solutions provider. Rolta is one of the top Engineering Software Conversion & Modeling Service vendors worldwide and is fast emerging as an end-to-end e-business solutions and services provider. Business Standard in its recent survey in February, 2000 has super ranked Rolta 24th amongst the top 1000 corporates in India on the basis of profitability, growth and other key ratios. In 1999, Rolta received the national export award for outstanding performance from the Honourable Prime Minister of India.

### A focus on quality

Rolta's application engineers and project managers work in close coordination with the customer's staff to establish the standards and quality assurance criteria that will build quality into the workflow. The project management methodology best suited to the customer expectations is jointly determined by working closely with the customer. Rolta's focus is to be able to deliver quality results, the first time, every time. Rolta's commitment to quality is evidenced by the ISO 9001(since 1995) certification that Rolta's quality procedures have received.

**ISO-9001  
CERTIFIED**



### Project management that spans the globe

Rolta is proud of its significant investments to make its products and services both cost-effective and reliable for its customers. Rolta's unique offshore capabilities utilize high-speed satellite links between its production facilities in Mumbai, India and project offices in various parts of the world to provide rapid and direct communications, enabling project tasks to be continuously monitored. This unique approach reduces project turnaround time, increases quality assurance, and ensures data security. Managers in each facility work together to coordinate all production and project management efforts, supporting customers around the globe. This innovative methodology enables Rolta to provide customers with high quality, well managed AM/FM & GIS, Plant Design Automation, Mechanical Design Automation, Collaborative Product Commerce and e-Business /Internet Consulting Solutions & Services.

### Impressive Infrastructure

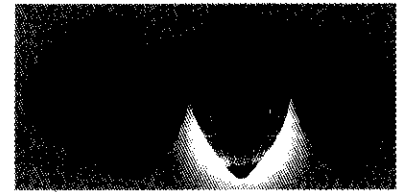
Rolta is a leading public limited company with over 125,000 shareholders and has been consistently paying dividends since its initial public offer in 1990. With Corporate Global Headquarters in Mumbai, Rolta has established a nationwide network of offices across India, besides its overseas subsidiaries in USA, Europe and the Middle East. With over 2,000 workstations, high-end software, numerous servers and peripheral devices, communications network with dedicated satellite data links, and over 500,000 square feet of facilities worldwide (200,000 square feet under construction), Rolta has an infrastructure that can be relied upon to meet the demands of some of the most challenging assignments. With more than 2000 Roltaites, Rolta has over 3750 man years of management experience & more than 12,500 man years of Software/Technical experience.

### Strategic Alliances with global leaders:

Rolta's technology / business partners include global leaders like Intergraph for CAD & GIS, PTC for Mechanical Design Automation & Collaborative Product Commerce, Z/I Imaging for photogrammetry & imaging, IBM for eBusiness & eCommerce, Compaq for Data Centers, Microsoft for MCIS, Ascend & Intel for networking, Lucent for communication, Bentley for 2D/3D CAD, Tekla for steel structural modeling, and Computer Associates for providing worldwide services on the Unicenter TNG platform.

### A solid foundation for robust growth

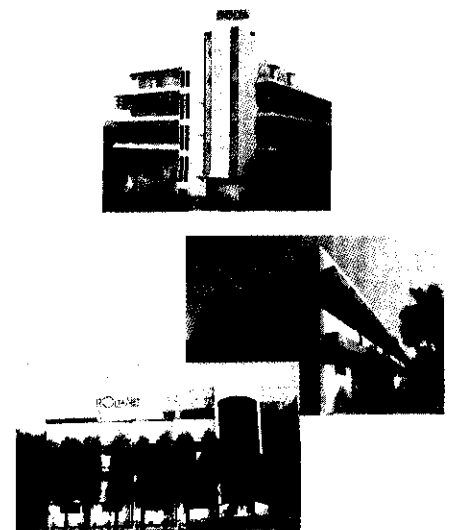
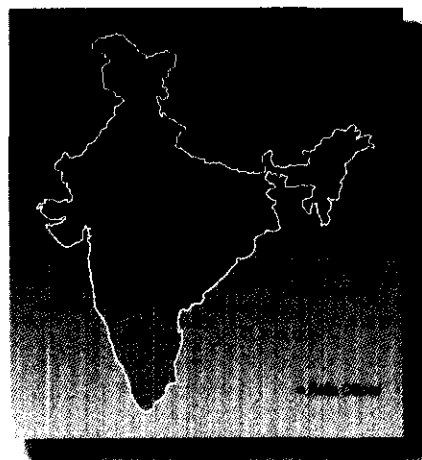
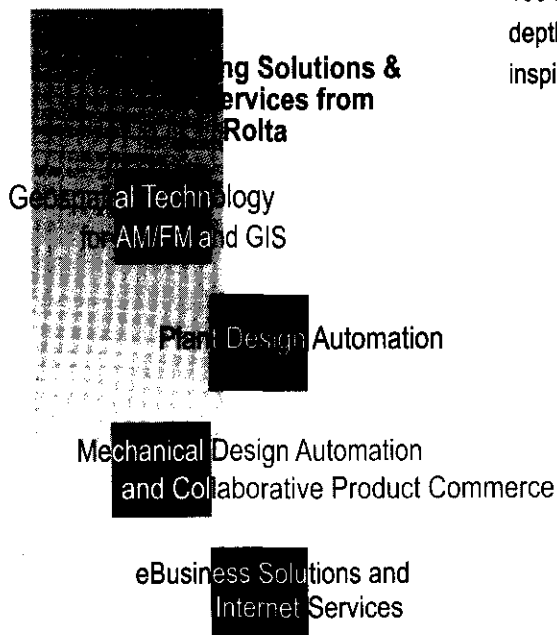
Rolta has an enviable track record of successfully completed projects around the globe, some as large as \$50M. Rolta's International customer base boasts of names like Saudi Telecom, Hong Kong Telecom, Alltel, AT&T, Dayton Power & Light, US West, Fiji Telecom, Technip, Enerco Gas, New York Transit, Dynacast etc. In India, the who's who of the corporate world & leading government agencies like The Ministry of Defence, Forestry Dept., Pollution Control Board, BHEL, Bechtel, Fluor Daniel, L&T, NTPC, Lurgi, EIL, Tata Chemicals, Toyo Engineering, Technimont ICB, and many others use solutions from Rolta. Rolta is financially sound, and continues to experience healthy growth in all parameters of financial performance: sales, profitability, net-worth, market capitalization, and return to stock holders. Rolta is ranked amongst the 100 most valuable companies in India and has the depth of managerial and technical talent that inspires confidence.

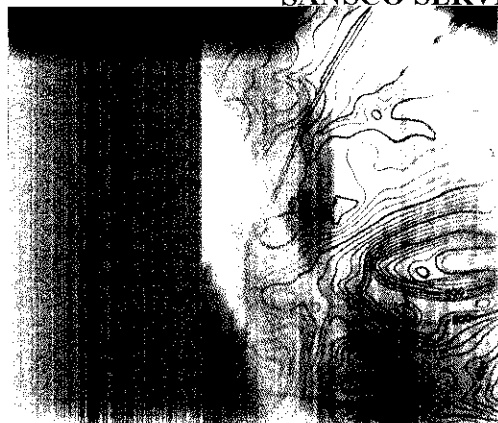


| International Subsidiaries/Offices | Atlanta      |
|------------------------------------|--------------|
|                                    | Calgary      |
|                                    | Los Angeles  |
|                                    | Philadelphia |
|                                    | Amsterdam    |
|                                    | Dusseldorf   |
|                                    | London       |
|                                    | Riyadh       |
|                                    | Dubai        |

### Nationwide Network of Regional/Branch offices

|             |               |
|-------------|---------------|
| Mumbai      | Lucknow       |
| Pune        | Dehradun      |
| Vadodara    | Chandigarh    |
| Gandhinagar | Bangalore     |
| Nagpur      | Chennai       |
| Calcutta    | Hyderabad     |
| Jamshedpur  | Visakhapatnam |
| New Delhi   | Trivandrum    |





# AM/FM & GIS

## State-of-the-art solutions for the Indian market

To keep things running smoothly, decision makers need a flexible system to integrate design and geographic data. Project co-ordination demands the ability to acquire, manage, analyse and present geographic information in a single environment. Rolta in partnership with Intergraph & Z/I Imaging, the world leaders in this field offers solutions that tie a customer's decision making environment with complete Geographic Information Systems, for the Indian market. These solutions provide advanced capabilities in applications such as mapping, surveying, image processing, terrain modeling, parcel management, digital photogrammetry, cartography, engineering design and utility / environment resource management. Solutions include high-end workstations, specialised software and comprehensive services towards mapping, cartography, imaging and photogrammetry. Also available are integrated and comprehensive architectural and civil engineering solutions for large infrastructure projects like roads, bridges, dams, water systems, city planning and development, etc.

Rolta has more than 70% share of the GIS / Photogrammetry market in India. Most Nodal agencies such as Ministry of Defence, Forest Survey of India, Gujarat Pollution Control Board, National Hydrographic Office, Indian Institute of Remote Sensing, Survey of India, Geological Survey of India, National Remote Sensing Agency, MTNL, ONGC, CESC, and many more use solutions provided by Rolta.

During Operation "Vijay", an urgent requirement had come up for producing 3-D imageries, with fly-through models, of Kargil Sector, to facilitate operational planning. The task was executed by us with total support and commitment from M/s. Rolta India Limited both in terms of resources and expertise.

I wish to convey to you and place on record our deep appreciation for the manner in which your organisation rose to the occasion and displayed total positive attitude which enabled us to complete the given task in record time. \*\*

- Army Headquarters

## Comprehensive services for the global market

Leveraging its experience of supporting hundreds of GIS users in terms of integration, customization and development of specific applications, Rolta also offers a full complement of services for AM/FM & GIS to the global market.

Rolta prides itself in providing a full complement of conversion services for implementing Geospatial Technology applications for Automated Mapping/Facilities Management (AM/FM) and Geographical Information Systems (GIS) including: building of rule-based feature connectivity models, re-mapping of facilities on a landbase into different coordinate systems, integration of map feature and attribute data from multiple and sometimes conflicting sources and documents, and the development of digital landbase maps; inclusive of planimetric, topographic, and cadastral features. Whether data collection involves raster-to-vector conversion, photogrammetric techniques for stereo-compilation, or orthophoto processing, Rolta can be called upon to meet customer needs.

Rolta has years of experience in building sophisticated AM/FM & GIS databases for telephone, electric and gas, and water utilities, as well as government, municipal and transportation agencies. Rolta has the knowledge base and the experience to implement AM/FM & GIS systems on a variety of software platforms: Intergraph FRAMME, MGE and GeoMedia, Smallworld, Autodesk VISION, EngHouse GeoNet, Bentley Systems MicroStation, and others. This knowledge is based on sound technology and long term technology tie-ups which ensures that Rolta's skills and know-how stay abreast of new developments.



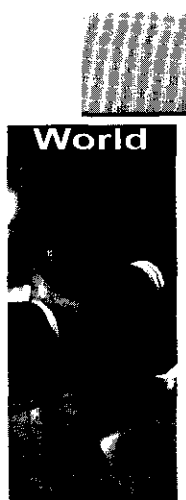


# Engineering Solutions for

## State-of-the-art solutions for the Indian market

Project cycles, global sharing of engineering information and management of data and documents are three of the most important factors for a successful process or power plant. To accomplish this, Rolta offers in India, Intergraph's Plant Design System (PDS) - the world's No. 1 3D design and modeling tool for plant design. PDS is a comprehensive computer-aided design/engineering (CAD/CAE) application for plant design and construction, offering a complete design workflow for any type of process and power plant. Engineers can generate an accurate representation of the plant, including schematics and use that information to produce deliverables for construction and for operations and maintenance tasks. To complement these software solutions, Rolta offers engineering workstations and comprehensive services that include installation, training, product support, customization, integration & development of specific applications.

Rolta has over 80% share in this market in India. The large customer base includes BHEL, EIL, Lurgi, Bechtel, Fluor Daniel, L&T Chiyoda, Tata Chemicals, Toyo Engineering, Technimont ICB, NTPC, Technip, Bayer, Mitsui, and many more ...



**World**

**Alliances**

For more than 15 years, Rolta has been supporting hundreds of PDS users as their exclusive business partner in India. Rolta has also formed an alliance with Intergraph to provide on-site engineering services for PDS users worldwide.

## Comprehensive services for the global market

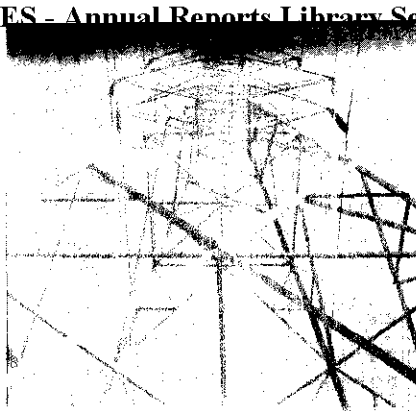
Leveraging its experience of over 15 years in supporting hundreds of PDS users, Rolta offers a wide range of services for implementing Plant Design Automation solutions for the global market. These services are focussed towards EPCs & Owner/Operators in the Process and Power industries and include creation of "intelligent" P&IDs using existing paper drawings or "dumb" CAD files, to 3D modeling of equipment, piping, structures, instrumentation and other facilities using sophisticated CAD software, and extraction of detailed construction drawings and documents. Rolta also has extensive experience in implementing data management systems for process plants.

## Impressive Skills Profile

First hand industry experience, built on top of a solid educational background -- degrees, including post-graduate qualifications, in various disciplines of engineering, such as mechanical, chemical, electronics and instrumentation, civil, and electrical -- is what Rolta's professional services personnel offer. When coupled with expertise in using and implementing tools such as Intergraph's Plant Design System (PDS) and INtools the industry's most widely used CAD packages, Rolta's engineers have an unbeatable skills profile. Rolta has established a state-of-the-art Center of Excellence for PDA Services. Customers draw upon these resources for tasks to be performed at their project site, or off-site at Rolta's facilities.

## Extensive Experience

Rolta has successfully performed a wide range of services assignments both off-site and on-site. For example, for a large sulfuric acid plant, Rolta did the 3D modeling of the entire plant, including piping systems analysis. Rolta generated the isometrics, as well as the material take-off lists, and did the structural modeling. On a petrochemical plant project, Rolta customized the P&ID system to meet the customer's unique requirements. For a multinational EPC in Europe, Rolta carried out customization of PDS reference databases, and migrated plant models from older CLIX (UNIX) platforms to current Windows NT based PDS. Rolta has helped customers make more productive use of their PDS resources by placing consultants at customer sites.



### Infrastructure for large project

Rolta has an impressive array of resources to effectively handle large projects. A team of more than 1000 technicians, software and management professionals dedicated to AM/FM & GIS projects, equipped with software, workstations, servers, and a variety of peripherals; Rolta is well equipped to meet customer expectations. Customers can count on Rolta to be with them from the beginning through the successful conclusion of their most challenging projects.

### Impressive track record

Rolta has an impressive track record of services for customers around the world, with over 20 million features converted for customers in all segments of the industry. Rolta has also provided consulting services to define and design data-conversion specifications and procedures for major utility companies. ALLTEL, US WEST, New England Power, Dayton Power & Light, Cowlitz County in the US; Saudi Telecom and GT Oman in the Middle East; British Telecom and Geodat in Europe; Hong Kong Telecom, Fiji Telecom, Enerco Gas and MTNL in Asia-Pacific, are examples of the range of Rolta's experience.



“The quality of work done by your engineers & technicians is outstanding.”

- Telecom Fiji

“Of all the vendors doing .... posting, Rolta was the first vendor to complete the posting and have all of their finals accepted and put on-line in USW Cimage. Put that fourth feather in your caps and hold your heads high!!”

- US West

“Rolta's technical competence, professionalism, and the ability to manage the project, both offshore and onshore has been of an exceptionally high order. This is all the more significant because of the magnitude of the project, perhaps the largest of its kind in recent times - over 34,000 maps & drawings containing 5.7m items of plant & 1.7m access lines, covering the telephone network of the entire Kingdom of Saudi Arabia.”

- Intergraph Saudi Arabia



**Rolta has established strategic business / technology partnerships with Intergraph, Z/I Imaging, Bentley, Autodesk, Enghouse, and Smallworld, to effectively provide total solutions and services to its customers. Customers can, therefore, be assured that they will stay abreast of new developments in technology with Rolta's skills and know-how.**