

# **PEGASYSTEMS INC**

# FORM 10-K (Annual Report)

# Filed 03/11/03 for the Period Ending 12/31/02

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Industry Software

Sector Technology

Fiscal Year 12/31

# PEGASYSTEMS INC

# FORM 10-K (Annual Report)

# Filed 3/11/2003 For Period Ending 12/31/2002

Address 101 MAIN ST

CAMBRIDGE, Massachusetts 02142-1590

Telephone 617-374-9600 CIK 0001013857

Industry Software & Programming

Sector Technology

Fiscal Year 12/31



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# SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

# **FORM 10-K**

ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE **SECURITIES EXCHANGE ACT of 1934** For the fiscal year ended December 31, 2002 TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES **EXCHANGE ACT of 1934** 

Commission File No. 1-11859

# PEGASYSTEMS INC.

(Exact name of Registrant as specified in its charter)

#### Massachusetts

(State or other jurisdiction of incorporation or organization) (IRS Employer Identification No. 04-2787865)

101 Main Street Cambridge, MA

02142-1590

(zip code)

(Address of principal executive offices)

(617) 374-9600 (Registrant's telephone number, including area code)

Securities registered pursuant to Section 12(b) of the Act: None

Securities registered pursuant to Section 12(g) of the Act:

Common Stock, \$.01 par value per share

Indicate by check mark whether the Registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities
Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the Registrant was required to file such reports) and (2)
has been subject to such filing requirements for the past 90 days. Yes ⊠ No □

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of the Registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. □

Indicate by check mark whether the Registrant is an accelerated filer (as defined in Exchange Act Rule 12b-2). Yes ⊠ No □

The aggregate market value of the Registrant's common stock held by non-affiliates of the Registrant based on the closing price (as reported by Nasdaq) of such common stock on the last business day of the Registrant's most recently completed second fiscal quarter (June 28, 2002) was approximately \$86 million.

There were 34,364,744 shares of the Registrant's common stock, \$.01 par value per share, outstanding on February 10, 2003.

# **Documents Incorporated by Reference**

**Document Description** 10-K Part

Portions of the Registrant's Proxy Statement for the Annual Meeting of Stockholders to be held June 3, 2003

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### PART I

# ITEM 1: BUSINESS

#### Overview

We provide software that integrates rules and business process management, or BPM. Our customers use our products to automate transaction and information processes that might otherwise involve complex and expensive manual processing.

Rules determine how business decisions are made and the processes that execute them. For example, to process a credit card dispute, you need a rule base of card issuer regulations and merchandiser and cardholder transaction history. Business process management describes the procedures that determine how business decisions are executed. For example, if there is a charge back, these process rules determine how the charge back will be routed, managed and processed. Because our software uses rules to integrate decision making and process execution, our customers can automate decisions and processes. Our customers include some of the world's leading financial services, healthcare and insurance companies. Our software allows organizations to deliver high-quality, consistent customer service in multiple channels of interaction, including traditional call centers and Internet self-service. Our software can be used by thousands of concurrent users in transaction intensive activity involving billions of dollars per day. Work processes initiated by our systems are driven by a highly adaptive "rules base", which is a set of rules defined by the user organization for its specific needs. The rules base leads to a high level of consistency in customer interactions, but also drives different processes depending on the customer profile or the nature of the request. Pegasystems' rules technology enables business users to modify the logic in applications to match their best practices and policies, and gives users a high degree of control over work and flexibility in implementing change. We provide implementation, consulting, training, and technical support services to facilitate the use of our software. We maintain alliances with third parties that offer complementary technology and systems integration support to our customers. Our software runs on a broad range of computers.

We maintain a website with the address www.pega.com. We are not including the information contained on our website as a part of, or incorporating it by reference into, this Annual Report of Form 10-K. We make available free of charge through our website our Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q and Current Reports on Form 8-K, and amendments to these reports, as soon as reasonably practicable after we electronically file such material with, or furnish such material to, the Securities and Exchange Commission. Our code of conduct is available, free of charge, by contacting Investor Relations, Pegasystems Inc., 101 Main Street, Cambridge, MA 02142. In addition, we intend to disclose on our website any amendments to, or waivers from, our code of conduct that are required to be publicly disclosed pursuant to rules of the Securities and Exchange Commission.

# **Business strategy**

Our goal is to establish leadership in the market for integrated business process management and rules – what we call "smart BPM". We believe that more new BPM solutions will deliver intelligent productivity through automated decisions and processes. Customers demand solutions that automatically route work items based on the skills available and required for that item; they demand solutions that provide guidance for processing appropriate to the situation; they demand solutions that allow customers, vendors, and partners to participate in the workflow process as a formal part of the extended enterprise. We believe we are well positioned, through our 19 years of experience in rules technology and rules based BPM applications, to capitalize on this demand.

Our strategy comprises two complementary approaches:

**Direct Sales**: We intend to continue direct sales of industry specific software applications and services to our target markets in financial services, healthcare, and insurance. These applications streamline and enhance work performance by applying process automation to key areas of customer service and exceptions processing. Exceptions are transactions that are identified as requiring additional information or follow up activity to be

completed. Our customers use our rules based products to automate transaction and information processes, which might otherwise involve complex and expensive manual processing.

**Strategic Partnerships**: Equally important, we continue to develop and expand strategic relationships with systems integrators and independent software vendors for the marketing and sale of applications and services based on our enabling rules technology. Through these partnerships, we expect to increase our penetration into other markets for BPM, including insurance, manufacturing, and government, among others. These partners complement our software with their technology. Systems integration partners deliver strategic business planning, consulting, project management and implementation services to our customers. Our partners include Accenture, Misys, eLoyalty, Cognizant, A.J. Rhem, Virtusa, and others.

# Pegasystems' products

We provide rules based BPM software applications for selected industries and enabling rules and BPM products for a number of other markets.

# Application products

Our application products are designed to reduce costs and increase efficiency in completing important customer service and exception processing transactions. The speed, quality and efficiency of completing such transactions are significant factors in the effectiveness and results of our customers' businesses. Our products enable our customers to use rules based process automation to capture and complete transaction requests, which might otherwise involve complex and expensive manual processing. Our applications software does significantly more than collect customer data and track work—it completes the work and guides customers or service representatives as they proceed through interactions. With Pegasystems' products, organizations link customer facing and back-office operations and integrate multiple communications channels, such as the Web, contact center, phone, fax, and local branch offices. Our products extend the reach of existing customer relationship applications to achieve automation efficiencies by completing the often complex and detailed follow up activities associated with customer interactions.

Our applications incorporate an advanced technical architecture that is flexible, powerful and scalable. Our products consist of an industry specific application template that provides a set of best practice rules and automation flows for managing business transactions. These templates may be deployed "as is" or further evolved using rules management and connectivity tools to produce a highly automated and integrated business solution. Our application products use business rules to capture an organization's unique business logic and apply it consistently across multiple channels with personalization for individual customers. All key aspects of Pegasystems' products are defined with business rules, including presentation, processing logic, enforcement of quality standards, reporting, and the management of customer service interactions.

Our applications support industry-standard hardware platforms, operating systems and databases, and provide a set of connectors to work with commonly deployed business applications in target markets.

# Rules and BPM products

We have developed PegaRULES Process Commander, a rules based platform, to help solve the enterprise workflow automation problem. The PegaRULES engine provides an architecture that separates the strategic business logic from the application and the underlying operating system. Just as business data, such as customer information, transaction history and accounting data, has evolved into a database separate from the application, companies are demanding that rules regarding business practices be located in a separate "rules base" so that they can maintain greater control over work and flexibility in implementing change. PegaRULES Process Commander combines an enterprise rules base with application tools used for developing, deploying, managing, and evolving enterprise-wide business processes. PegaRULES Process Commander allows businesses to easily manage,

automate, integrate and rapidly evolve business processes across the enterprise and its vendors, customers and partners. To date, we have derived only a small portion of our revenue from PegaRULES Process Commander.

# Markets and representative customers

We continue to focus on large, industry leading companies in the financial services, healthcare, and insurance markets. In 2002, 2001, and 2000, one financial services customer accounted for approximately 26%, 14%, and 12% of our total revenue, respectively. Following is more detail on these markets and a representative list of customers within those markets as of December 31, 2002.

#### Financial services

We provide software to financial services organizations that automates transaction processing and customer sales and service across varied delivery channels, such as Internet self-service, call centers, and branch networks. Our products improve the quality, accuracy, and efficiency of customer interactions, and enhance the delivery of product and service offerings.

- **Investigations.** Our software provides customer service capabilities that automate the investigation and resolution of exceptions in corporate actions, payments and securities settlement investigations, retail brokerage, and wholesale clearing services.
- Credit card . Our software facilitates the management of collections, customer dispute resolution, chargebacks, credit decisions and customer correspondence.
- Check research and adjustment. Our software automates check research and adjustment processing, streamlining check processing functions, reducing manual work, and enabling efficient access to check data stored on microfilm and digital media.

Representative financial services customers of ours include: First Data Resources, Bank of America, N.A., Barclays Bank PLC, JP Morgan Chase & Co., Credit Lyonnais, Credit Suisse Group, Citibank, N.A., Fleet/Boston Financial Services, N.A., Franklin Templeton Corporate Services Inc., The Hong Kong and Shanghai Banking Corporation Limited, National Australia Bank Limited, Rabobank, Sears, Roebuck and Co., and Société Générale S.A.

#### Healthcare

Our healthcare applications provide health maintenance organizations and health insurers with a set of products that support their customer care initiatives and help them drive efficiency and lower costs.

- Member services. Our software automates the handling of many common member inquiries, supporting contact management, account maintenance and history, and sales inquiries. Our products also integrate with the organization's legacy applications, building on their investments.
- Claims automation. Our software automates back office claims exceptions processing, claims payment and exception research functions that streamline operations by reducing the amount of manual work, error rates and operational costs.

Representative healthcare customers of ours include Blue Cross Blue Shield of Massachusetts, Blue Cross Blue Shield of Georgia, and HealthNOW New York.

#### Insurance

Our products for insurance companies support customer service in multiple delivery channels and help resolve and complete policyholder requests. Our products allow insurance companies to provide personalized customer service and enhance their efforts to sell additional products to their customers.

Representative insurance customers of ours include American National Insurance Company and The Guardian.

# Other markets

We continue to selectively pursue opportunities in markets such as communications and government, where our rules based automation can drive significant efficiencies and cost reductions. During 2002, we were selected by EDS to provide call center software to the Inland Revenue's contact centers. Inland Revenue, the U.K. government department responsible for the administration of personal and corporation tax, supports 30 million taxpayers.

# Sales and marketing

We market our industry specific applications software and services primarily through a direct sales force. To support our sales force, we conduct marketing programs, including industry trade shows, industry seminars, meetings with industry analysts, public relations, partner comarketing programs, direct marketing and telemarketing. Our consulting staff, business partners, and other third parties also generate sales leads. As of December 31, 2002, sales and marketing included 84 people worldwide.

We also market our applications software with partners, including:

- Accenture, where Pegasystems is a preferred provider of rules based applications products within Accenture's North American financial services business; and
- Misys, whose expertise in commercial banking with the Midas transaction processing solution offers a high rate of straight through processing, and combined with Pegasystems' Integrated Investigations provides high levels of straight through processing and automation around exception conditions.

In addition, we distribute our products and technology through third parties. For example, we have a non-exclusive relationship with First Data Resources Inc., or FDR, the largest credit card processor in the world. FDR uses and re-licenses our software to the credit card market. First Data Evolve is an integrated application for credit card customer service and collections designed to run on Pegasystems' rules technology. Also, PFPC, Inc., an affiliate of PNC Bank Corp, incorporates Pegasystems' technology into a comprehensive service solution for mutual fund institutions. In the future, we may also market and sell our products through other value added resellers and systems integrators. There can be no assurance, however, that we will be able to attract and retain value added resellers, systems integrators, or other parties that will be able to market and sell our products effectively.

In 2002, 2001, and 2000, sales to customers based outside of the United States represented 22%, 23%, and 26%, respectively, of our total consolidated revenue. During 2002, 2001, and 2000, we derived our operating revenue from the following geographic areas:

	2002		2001		2000	
			(in \$ thousa	ands)		
United States	\$ 75,617	78%	\$ 73,127	77%	\$ 61,528	74%
United Kingdom	14,806	15%	10,040	11%	7,038	8%
Europe	3,595	4%	8,968	9%	9,222	11%
Other	3,390	3%	2,927	3%	5,690	7%
						_
	\$ 97,408	100%	\$ 95,062	100%	\$ 83,478	100%

See Note 1 to Consolidated Financial Statements.

# Support and professional services

We offer support services through three groups: our Consulting Services group shares market, business and technical knowledge with our customers throughout the deployment of our applications; our Global Technology Services group provides support and maintenance for our customers; and our Education Services group offers training programs for our staff, customers and partners. As of December 31, 2002, these professional services groups consisted of 150 people located in our 12 offices.

### Consulting services

Our Consulting Services group helps companies implement and optimize our software. These projects enable us to guide our customers through a disciplined approach to deployment of our applications, and allow our workflow architects and business process automation consultants to gain industry specific knowledge that can be used in future projects and product development. Providing industry specific business guidance throughout the deployment of our technology generally improves our customers' satisfaction. Many of our customers choose to engage our consulting services group to expand their use of our software to additional business or product lines or add new functionality to their existing solutions. In addition, through our alliances, systems integrators and consulting firms also help our customers deploy our products.

Our implementation procedures, which we call Advanced Implementation Methodology, or AIM, were developed through field experience and facilitate implementation of our software through a disciplined approach to project management that establishes standards for project activities and ensures governance and accountability in adhering to those standards. By adopting a phased approach to deployment, our customers can engage in smaller, more easily managed projects that are more likely to result in a successful solution.

# Global technology services

Our Global Technology Support, or GTS, group is primarily responsible for support and maintenance of our customers. Our support offerings are available at any time of day or night and GTS tailors services appropriately to meet the unique support and project requirements of each customer. Support services provided by GTS include automated problem tracking, prioritization and escalation procedures, periodic preventative maintenance, documentation updates, new software releases, and regularly scheduled meetings with our staff.

Our customers are granted access to ActionPlus, our Web-based self-service extranet. The password-protected site offers a portal for information important to the successful implementation and use of our products. ActionPlus is available at any time of day or night and users may access the site to interact with us at their convenience and to view product information, sales and marketing support materials, Pegasystems news and event information. The site also hosts discussion groups that enable customers to interact with each other to share product knowledge and other special topics of interest.

# Education services

We offer training programs for our staff, customers and partners. Training programs are designed to meet the specific requirements of attendees' roles, and are typically offered for workflow consultants, systems administrators, developers, project managers and technical and business design managers. Training programs are available on-site, through web-based training and computer-based training programs, or in one of our regional training facilities in Cambridge, Massachusetts, San Francisco, California and Reading, England.

# Research and development

Since our inception, we have made substantial investments in product development. We believe that our future performance depends on our ability to maintain and enhance our current products and develop new products. Our product development priorities for application products include capabilities that enhance the

automation of customer relationship transactions to reduce costs and increase business effectiveness for our customers. We intend to continue design and development of industry specific applications that offer rapid deployment and return on investment by pre-packaging key capabilities for initial use and providing optional extensions for further evolution and power. Our product development focus is to extend the power and breadth of industry-specific application templates; maintain and extend support for popular industry standard hardware platforms, operating systems, databases and connectivity options to facilitate easy and rapid deployment in diverse information technology infrastructures; develop industry standard interfaces that allow other Customer Relationship Management, or CRM, and Customer Service applications to interpoperate with our products which will allow our customers to increase their return on their CRM investment; and enhance product quality, platform stability, ease-of-use, and ease of installation. For PegaRULES, product development is focused on building a robust system for the development, deployment and execution of rules based process management applications, primarily by third party developers.

We believe that maintaining future performance and visionary technology leadership depends on our ability to anticipate changes, maintain and enhance our current products, develop new products, and keep pace with the increasingly sophisticated requirements of our current and prospective customers. We must develop products that conform to our customers' information technology standards, scale to meet the needs of large enterprises, operate globally, and cost less than an internal development effort. Our development organization is responsible for product architecture, core technology development, product testing and quality assurance.

As of December 31, 2002, our development group consisted of 93 people. In 2002, 2001, and 2000, research and development expenses were approximately \$21.3 million, \$20.8 million, and \$15.1 million, respectively. We expect that we will need to continue to commit significant resources to our product research and development in the future.

If we are unable, for technical or other reasons, to develop and introduce new products and services, or enhancements of existing products and services, in a timely manner in response to changing market conditions or customer requirements, or if new products and services do not achieve market acceptance, our business, financial condition, and operating results will be materially adversely affected.

# Industry and competitive background

Industry

In addition to the expectations companies typically face, including heightened pressure to lower operational costs, increase revenues, and deliver value to their customers, companies now are frequently reacting to regulatory changes and new competitive pressures. To be successful in this complex environment, organizations must coordinate applications that support customers, adopt a customer-centric approach to information and minimize manual work efforts. Consequently, we believe an increasing number of companies are implementing rules based solutions that help to deliver stronger financial performance, a more productive workforce and superior customer satisfaction and retention.

# Competition

The application software market is intensely competitive and subject to rapid change, as current competitors expand their product offerings and new companies enter the market. Competitors vary in size and in the scope and breadth of the products and services offered. We encounter competition from:

- Potential and current customers' information technology departments, which may seek to develop proprietary systems;
- Software application vendors, such as Oracle, PeopleSoft Inc., and SAP, whose products span multiple industries;
- CRM vendors, such as Siebel Systems, Onyx, and Chordiant with whom we compete in call center and customer service and support applications;

- Companies that target financial services, healthcare, insurance and other specific markets such as Carreker, Kana, Selectica, Sterling, Sungard (acquirer of Microbank) and Smartstream;
- Rules vendors such as Fair Isaac and ILog;
- Business process management vendors such as FileNet and StaffWare; and
- Professional services organizations that develop custom software in conjunction with rendering consulting services.

We believe that the principal competitive factors within our market include:

- Proven success in delivering cost-saving and efficiency improvements;
- Product adaptability, scalability, functionality, and performance;
- Timely development and introduction of new products and product enhancements;
- Establishment of a significant base of reference customers;
- Ability to integrate with other products and technologies;
- Customer service and support;
- Product price;
- Vendor reputation; and
- Relationships with systems integrators.

Although we believe our products compare favorably against the competition, the market is constantly evolving and new competitors are emerging. There can be no assurance that we can maintain our competitive position against current and potential competitors. Many of our competitors can devote greater managerial or financial resources to develop, promote, and distribute customer relationship management software and provide related implementation, consulting, training, and support services. Additionally, there can be no assurance that current or future competitors will not develop products or services which may be superior in one or more respects or which may gain greater market acceptance. Current and future competitors have established or may establish cooperative arrangements or strategic alliances among themselves or with third parties, enhancing their abilities to compete. There can be no assurance that we will be able to compete successfully against current or future competitors or that the competitive pressures will not materially and adversely affect our business, operating results, and financial condition.

We rely on system consulting and system integration firms for recommendation and implementation of our products during the evaluation stage of the purchase process. These third parties often have similar, and, in some cases, more established, relationships with our competitors. There can be no assurance that these third parties, many of which have significantly greater resources, will not market competitive software products in the future or will not otherwise reduce or discontinue their relationships with or support of us and our products.

# **Employees**

As of December 31, 2002, we had 412 employees, of whom approximately 333 were based in the United States, 4 were based in Canada, 60 were based in Europe, and 15 were based in Australia. Of the total, approximately 84 were in sales and marketing, 150 performed consulting and customer support, 93 performed research and development, and 85 were in administration.

Our future performance depends in significant part upon the continued service of our key technical, sales and marketing, and senior management personnel and our continuing ability to attract and retain highly qualified technical, sales and marketing, and managerial personnel. Competition for such personnel is intense and there can be no assurance that we will be successful in attracting or retaining such personnel in the future. None of our employees is represented by a labor union or is subject to a collective bargaining agreement.

# Backlog of license, maintenance and consulting revenues

As of December 31, 2002, we had software license and maintenance agreements and fixed fee professional services agreements with our customers expected to result in approximately \$38.9 million of revenue in 2003. Under such agreements, we must fulfill certain conditions prior to recognizing revenue, and there can be no assurance when, if ever, we will be able to satisfy all such conditions in each instance. As of December 31, 2001, we had software license and maintenance agreements and fixed fee professional services agreements with our customers that were expected to result in approximately \$32.5 million of revenue in 2002. We do not believe that backlog, as defined above, is a meaningful indicator of future financial performance.

# **ITEM 2: PROPERTIES**

Our principal administrative, sales, marketing, support, and research and development operations are located in an 85,378 square foot leased facility in Cambridge, Massachusetts. The lease for this facility expires in 2003, and has been renewed for a 10 year period beginning on May 16, 2003, with the option to extend for two additional five year periods. We also lease space for our other offices in the United States, Canada, Australia, France, and the United Kingdom. These leases expire at various dates through 2013. We believe that additional or alternative space will be available as needed in the future on commercially reasonable terms.

# ITEM 3: LEGAL PROCEEDINGS

None

# ITEM 4: SUBMISSION OF MATTERS TO A VOTE OF SECURITY HOLDERS

During the fourth quarter of fiscal 2002, there were no matters submitted to a vote of security holders.

#### EXECUTIVE OFFICERS OF THE REGISTRANT

The names of our executive officers and certain information about them are set forth below as of December 31, 2002:

Name	Age	Position(s) and Office(s) Held
Alan Trefler	46	Chief Executive Officer and Chairman
Henry Ancona	58	President, Chief Operating Officer and Director
Richard H. Jones	51	Vice Chairman
Joseph J. Friscia	48	Executive Vice President of Sales and Service
Christopher J. Sullivan.	43	Senior Vice President, Chief Financial Officer and
ŕ		Treasurer
Kenneth Olson	53	Senior Vice President of Advanced Technology
Michael Pyle	48	Senior Vice President of Product Development

Our executive officers are elected by the Board of Directors on an annual basis and serve until the next annual meeting of the Board of Directors and until their successors have been duly elected and qualified. There are no family relationships among any of our executive officers or directors.

*Alan Trefler*, a founder of Pegasystems, serves as Chief Executive Officer and Chairman and has been a Director since we organized in 1983. Prior thereto, he managed an electronic funds transfer product for TMI Systems Corporation, a software and services company. Mr. Trefler holds a B.A. degree in economics and computer science from Dartmouth College.

Henry Ancona joined Pegasystems in 2002 as President and Chief Operating Officer and was elected a Director of Pegasystems in December 2002. Prior to joining us, he served as Chairman, President and Chief Executive Officer of Evidian, a supplier of security and telecommunications management software. Prior to Evidian, he served as Executive Vice President at Polaroid Corporation, where he led the Commercial Imaging and Electronic Imaging businesses. He also held a variety of management positions at Digital Equipment Corporation, including Vice President of the office software business. Mr. Ancona holds B.S. and M.S. degrees in electrical engineering from the Massachusetts Institute of Technology and an M.B.A. from Harvard University's Graduate School of Business Administration.

Richard H. Jones joined Pegasystems in 1999 as President and Chief Operating Officer and was elected a Director of Pegasystems in 2000. In August 2002, he assumed his current role as Vice Chairman. From 1995 to 1997, he served as Chief Asset Management Executive and a member of the Operating Committee at Barnett Banks, Inc., which at the time was among the nation's 25 largest banks. He served as CEO of Fleet Investment Services, a brokerage and wealth management organization, from 1991 to 1995. His prior experience also includes serving as Executive Vice President with Fidelity Investments, an international provider of financial services and investment resources and as a principal with the consulting firm of Booz, Allen & Hamilton. Mr. Jones holds an undergraduate degree from Duke University, with majors in both economics and management science. He also holds an M.B.A. degree from the Wharton School of the University of Pennsylvania.

Joseph J. Friscia joined Pegasystems in 1984 to establish our New York office. Mr. Friscia has served as Executive Vice President of Sales and Service since 1987. Prior to joining us, he worked as a money transfer operations manager with Bankers Trust Company and J. Henry Schroder Bank and Trust Company. Mr. Friscia holds a B.A. degree from Long Island University and an M.B.A. degree from Adelphi University.

Christopher J. Sullivan joined Pegasystems in July 2001. In August 2001, he was elected Senior Vice President, Chief Financial Officer and Treasurer. From August 2000 to July 2001, he served as CFO at Event Zero, an IT consulting company. From December 1998 to August 2000, he was the CFO and Executive Vice President of AMS Holding Group, a software and information services provider to the insurance industry. From 1997 to 1998, he served as Vice President of Finance at Compaq Computer Corporation, a computer company. His prior experience also includes service as Senior Vice President of Finance at Fisher Scientific International, Inc., a distributor of clinical and scientific laboratory equipment, and as Vice President of Finance at Digital Equipment Corporation. He holds a B.S.B.A. degree and an M.B.A. degree from Babson College.

Kenneth Olson, a founder of Pegasystems, joined Pegasystems in 1983 and served as Vice President of Technical Development until 2000. Since 2000, he has served as Senior Vice President of Advanced Technology, and holds primary responsibility for new product development. Prior to Pegasystems, Mr. Olson held positions at TMI Systems Corporation, where he was involved with the development and installation of software solutions in European and Middle Eastern markets. He holds a B.S. degree in the fields of Humanities and Science from the Massachusetts Institute of Technology.

Michael Pyle joined Pegasystems in 1985 and has served as Senior Vice president of Product Development since August 2000. Including his positions with Pegasystems, Mr. Pyle's professional background encompasses almost thirty years of software development and managerial experience throughout Europe and the United States. Mr. Pyle completed his B.C.S. specializing in Computer Science and Systems Programming at the C.S. College in London.

# **PART II**

# ITEM 5: MARKET FOR REGISTRANT'S COMMON STOCK AND RELATED STOCKHOLDER MATTERS

The following table sets forth the range of high and low sales prices of our common stock on the National Association of Security Dealers Automatic Quotation ("Nasdaq") National Market System for 2002 and 2001. Our common stock is traded under the Nasdaq Symbol "PEGA." As of February 3, 2003, we had approximately 105 stockholders of record and approximately 4,700 beneficial owners of our common stock. On February 3, 2003, the closing sale price of the common stock was \$5.50. We have never declared or paid any cash dividends on our common stock. We intend to retain our earnings to finance future growth, and therefore, do not anticipate paying any dividends in the foreseeable future.

	High			Low
			_	
2002				
First Quarter	\$	8.59	\$	4.28
Second Quarter	\$	11.95	\$	7.50
Third Quarter	\$	9.40	\$	5.20
Fourth Quarter	\$	7.20	\$	5.00
		High		Low
		High		Low
2001		High		Low
2001 First Quarter	\$	6.38	\$	2.75
			\$ \$	
First Quarter	\$	6.38		2.75
			\$	

On February 6, 2002, as partial consideration for our purchase of the assets of 1mind Corporation, a Delaware corporation ("1mind"), we issued to 1mind 569,949 shares (the "Shares") of our common stock (155,760 shares of which were deposited into escrow to secure the indemnity obligations of 1mind's equity holders relating to the transaction) and a ten-year warrant (the "Warrant") to purchase for a fixed aggregate exercise price of \$71 thousand, 83,092 shares of our common stock, plus, depending on the performance of the 1mind business from the acquisition date through December 31, 2002, up to an additional number of shares of our common stock (the "earnout shares") having a value of approximately \$1.1 million based on the average closing price of the Company's common stock over the ten consecutive trading days ending on the third trading day prior to the date the earnout amount is agreed upon by the parties to the transaction. We have determined that the Warrant is not exercisable for any earnout shares and, accordingly, the exercise price of the Warrant is approximately \$0.85 per share. We issued the Shares and the Warrant in reliance upon an exemption from registration under Section 4(2) of the Securities Act of 1933 and Rule 506 of Regulation D promulgated thereunder.

# ITEM 6: SELECTED CONSOLIDATED FINANCIAL DATA

The selected consolidated financial data presented below have been derived from our consolidated financial statements. This data may not be indicative of our future condition or results of operations and should be read in conjunction with "Management's Discussion and Analysis of Financial Condition and Results of Operations" and the consolidated financial statements and accompanying notes.

Certain amounts in the 2001-1998 selected consolidated financial data were reclassified to be consistent with current presentation, including reimbursements received for out-of-pocket expenses. These reimbursements have been reflected as revenue, in compliance with Emerging Issues Task Force Abstract No. 01-14; in prior year presentations the reimbursements had been reflected as a reduction of cost of services.

Years Ended December 31.

	Tears Ended December 51,									
	20	002		2001		2000		1999		1998
				(in tho	usands	s, except per	share	data)		
Consolidated Statements of Operations Data:										
Total revenue	\$ 97	7,408	9	95,062		83,478		80,961	\$	66,977
Income (loss) from operations	11	1,476		6,534		(25,952)		(5,920)		(22,797)
Net income (loss)	15	5,297		12,534		(20,856)		(2,410)		(11,618)
Earnings (loss) per share:										
Basic	\$	0.45	\$	0.38	\$	(0.71)	\$	(0.08)	\$	(0.41)
Diluted	\$	0.43	\$	0.37	\$	(0.71)	\$	(0.08)	\$	(0.41)
Weighted average number of common shares outstanding:										
Basic	33	3,835		32,677		29,206		28,947		28,604
Diluted	35	5,980		33,434		29,206		28,947		28,604
				Years Ended December 31,						
	2002		200	1	:	2000		1999		1998
					(in th	nousands)				
Consolidated Balance Sheet Data:										
Cash and cash equivalents	\$ 57,39	3 \$	33	,017	\$	17,339	\$	30,004	\$	24,806
Working capital working capita	75,50	1	57	,157		43,758		49,790		33,883
Long-term license installments, net	48,66	7	43	,155		37,401		36,744		49,000
Total assets	156,22	.6	125	,072	1	10,493	1	124,991		139,260
Long-term debt	_	_		_		_		_		_
Stockholders' equity	130,92	7	104	,958		92,063	1	101,045		101,919

# ITEM 7: MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

# **Results of Operations**

2002 Overview

Total revenue in 2002 increased 2.5% due to increased software license revenue offset by decreased services revenue. The \$19.9 million growth in license revenue was driven by an increase in perpetual licenses, primarily a \$17.6 million increase in license revenue resulting from an overall restructuring of our relationship with First Data Resources, or FDR. This restructured relationship also allowed us to re-enter the growing credit card market. While we have stepped up efforts to sign new customer license business in all of our target markets, the vast majority of our license revenue in 2002 was from existing customers who chose to renew, add-on to, or extend their investment with us. Services revenue declined sharply to \$33.5 million in 2002 from \$51.0 million in 2001 due largely to the fall off in new customer license signings. Net income of \$15.3 million in 2002 grew 22% over 2001, mainly because license revenue comprised a higher percentage of total revenue and because of cost containment efforts. We generated \$27.1 million in positive cash flow from operations and ended the year with a strong balance sheet, including \$63.4 million in cash and marketable debt securities and \$80.8 million in combined short and long-term license installments receivable. Total cash and cash equivalents increased to \$57.4 million at December 31, 2002, up 10% from September 30, 2002 and up 74% from December 31, 2001.

Revenue of \$21.0 million in the fourth quarter of 2002 was less than our revenue for the immediately preceding quarter and for the fourth quarter of 2001 due primarily to a decline in license revenues. The decrease in fourth quarter license revenue reflected a decrease in revenue from FDR as well as the timing of license

acceptances and renewals which can cause fluctuations in our quarterly revenue because of the relatively small number of license transactions that typically comprise our revenue in any quarter. Included in term software license revenue in the fourth quarter of 2002 was \$2.4 million related to the settlement of a customer dispute. We posted net income of \$2.4 million and \$6.4 million in positive cash flow from operations for the fourth quarter of 2002. Services revenue and services margins increased in the fourth quarter over the third quarter of 2002. In the fourth quarter, we signed four new customers, two of which are in the healthcare sector, a growth market we are targeting. New license signings in the second half of 2002 grew 13% over the first half, indicating improved sales traction. Nearly all of the dollar value of new license signings in the second half of 2002 is expected to be recorded as revenue in 2003, when the license implementations are complete.

#### International Revenues

International revenues were 22%, 23%, and 26% of total consolidated revenues in 2002, 2001, and 2000, respectively. Our international revenues may fluctuate in the future because such revenues are generally dependent upon a small number of product acceptances by our customers during a given period. Historically, most of our contracts have been denominated in U.S dollars. We expect, however, that in the future due to competition from vendors who will do business in foreign currencies, more of our contracts may be denominated in foreign currencies which may expose us to increased currency exchange risk.

# Statement of Operations Information

The following shows certain items reflected in our Statements of Operations as a percentage of total revenue:

	Year	Year ended December 31,				
	2002	2001	2000			
Software license revenue	65.6%	46.3%	40.5%			
Services revenue	34.4	53.7	59.5			
Total revenue	100.0	100.0	100.0			
Cost of software license	2.7	3.2	2.9			
Cost of services	30.0	39.3	49.9			
Total cost of revenue	32.7	42.5	52.8			
Gross profit	67.3	57.5	47.2			
Research and development	21.9	21.9	18.1			
Selling and marketing	23.9	18.4	28.9			
General and administrative	9.7	10.3	12.4			
Litigation settlement and restructuring costs	_	_	18.9			
m · 1		50.6	70.0			
Total operating expenses	55.5	50.6	78.3			
Income (loss) from operations	11.8	6.9	(31.1)			
Installment receivable interest income	5.9	6.5	4.8			
Other interest income, net	0.8	0.9	2.0			
Other (expense) income, net	(0.8)		(0.3)			
Income (loss) before provision for income taxes	17.7	14.2	(24.6)			
Provision for income taxes	2.0	1.1	0.4			
Net income (loss)	15.7%	13.2%	(25.0)%			

# Year ended December 31, 2002 compared to year ended December 31, 2001

#### Revenue

Total revenue for 2002 increased 2% to \$97.4 million from \$95.1 million for 2001. The increase was due primarily to increases in software license revenue, which were partially offset by decreases in services revenue. Since the latter part of 2001 and through most of 2002, signing of license contracts with new customers slowed significantly due in large part, we believe, to continued weakness in spending by our target customers. License and services revenue from new customers was 10% of total revenue for 2002, compared with 15% for 2001. The decrease in license contracts with new customers adversely impacted our services business because we derive a substantial portion of our services revenue from implementation of software licensed by these customers. The following table summarizes our revenue composition:

	En	nded nber 31,
	2002	2001
	(in m	illions)
License revenue		
Perpetual licenses and licenses accounted for on a subscription basis	\$ 35.6	\$ 13.7
Term license renewals, extensions and additions	28.3	30.4
Total license revenue	63.9	44.1
Services revenue		
Implementation, consulting and training services	24.2	43.0
Maintenance	9.3	8.0
Total services revenue	33.5	51.0
Total revenue	\$97.4	\$ 95.1

Software license revenue for 2002 increased 45% to \$63.9 million from \$44.1 million for 2001 due primarily to software license renewals by existing customers. The increase in perpetual and subscription license revenue for 2002 was primarily due to a perpetual license agreement entered into with First Data Resources, or FDR, in the first quarter of 2002. That perpetual license agreement replaced a prior term license agreement with FDR under which revenue was being recognized on a subscription basis and which was due to expire in December 2002. Of the \$21.9 million increase in perpetual and subscription license revenue for 2002, \$17.6 million was due to the FDR perpetual license agreement. The following table summarizes the revenue we have recognized under the FDR perpetual license and the prior agreements with FDR:

Twelve Months Ended

		Decemb		
	20	2002		001
		(in mill	lions)	
Perpetual and subscription licenses	\$	23.9	\$	6.3
Implementation, consulting and training services		0.8		5.2
Maintenance		0.9		1.0
	<del></del>			
Total revenue	\$	25.6	\$	12.5

Under the terms of the FDR perpetual license agreement, FDR is required to make monthly payments through December 2003. These payments will total \$3.54 million in each of the four quarters of 2003. We recognize revenue as earned, which is three months in advance of receipt of payments, because while FDR has the contractual right to terminate the agreement, FDR is required to provide us with at least three months advance notice. We expect to recognize as revenue from the FDR perpetual license \$3.54 million in each of the first three quarters of 2003.

Our current sales strategy is to sell perpetual licenses to new customers, and therefore we expect to enter into more perpetual license transactions than term licenses with new customers, the effect of which may be to increase our license revenue and cash flow in the short term and to decrease the amount of revenue and cash flow from the renewal of term software license agreements. In the past few years, a significant portion of our license revenue has been from renewals of term software license agreements.

Revenues from term software licenses, renewals, extensions, and additions decreased by \$2.1 million to \$28.3 million from \$30.4 million for 2001. Included in term software license revenues in the fourth quarter of 2002 is \$2.4 million received from Qwest in settlement of a dispute. Discount rates used to recognize term license revenue vary directly with market interest rates. The discount rates used to recognize term license revenue reflect the estimated borrowing rates of our customers, and averaged 3.27% in the fourth quarter of 2002. Decreases in the average discount rate resulted in an increase in license revenue of approximately \$1.2 million for 2002 versus 2001. If interest rates increase and in turn the discount rates we use to recognize term license revenue increase, we would defer as installment receivable interest a greater portion of the revenue from such arrangements and recognized license revenue would decrease by the same amount.

Services revenue for 2002 decreased 34% to \$33.5 million from \$51.0 million for 2001. The decrease was due primarily to delayed customer spending and a decrease in new customer license transactions, which we believe were caused by current generally weak economic conditions. Typically, we derive substantial revenue from services provided in connection with the implementation of software licensed to new customers. New customer implementations in 2002 were significantly below 2001. While we saw a modest improvement in new license signings in the fourth quarter of 2002, the rate of signing new customers in 2002 indicates that growth in services revenue will continue to be a challenge.

Deferred revenue at December 31, 2002 consisted primarily of billed fees from arrangements for which acceptance of the software license or service milestone had not occurred, the unearned portion of services revenue and advance payment of maintenance fees. Deferred revenue balances increased to \$12.1 million as of December 31, 2002 from \$6.2 million as of December 31, 2001, due to payments for software licenses in advance of customer acceptance and advance payment of maintenance fees.

# Cost of revenue

Costs of software license includes the amortization associated with purchased software under an agreement with FDR and the amortization of technology we purchased in connection with a business acquisition in 2002. The amortization related to the FDR asset was completed in the fourth quarter of 2002. Cost of software license for 2002 decreased 13% to \$2.7 million from \$3.0 million for 2001. As a percentage of software license revenue, cost of software license revenue decreased to 4% for 2002 from 7% for 2001. The decreases were due to a \$0.6 million charge taken in the second quarter of 2001, and the increased volume in software license revenue. The charge was for software we acquired in the fourth quarter of 2000, which, after initially being amortized, was expensed in full in the second quarter of 2001 because the productive use of this software was no longer anticipated.

Cost of services consists primarily of the cost of providing implementation, consulting, maintenance, and training services. Cost of services for 2002 decreased 22% to \$29.2 million from \$37.3 million for 2001, primarily due to reduced staff costs and reduced spending on consultants. Cost of services as a percentage of services revenue increased to 87% for 2002 from 73% for 2001. The percentage increase was primarily due to

the reduction in services revenue, which was only partially offset by lower salary costs resulting from staff reductions in the latter part of the year.

# Operating expenses

Research and development expenses for 2002 increased 2% to \$21.3 million from \$20.8 million for 2001. As a percentage of total revenue, research and development expenses remained flat at 22%. The increase in spending was primarily due to increased compensation and staff-related expenses, and continued investment in our emerging PegaRULES business.

Selling and marketing expenses for 2002 increased 33% to \$23.3 million from \$17.5 million for 2001. As a percentage of total revenue, selling and marketing expenses increased to 24% for 2002 from 18% for 2001. These increases were due to increased staff and marketing program spending in our applications business and investment in our emerging PegaRULES business.

General and administrative expenses for 2002 decreased 3% to \$9.5 million from \$9.8 million for 2001 due to reduced employee compensation expense and a reduction in the allowance for doubtful accounts of \$0.4 million to reflect better collections experience. As a percentage of total revenue, general and administrative expenses remained essentially flat at approximately 10% for 2002.

# Installment receivable interest income

Installment receivable interest income for 2002, which consists of the portion of all license fees under long-term software license agreements that is attributable to the time value of money, decreased 6% to \$5.8 million from \$6.2 million for 2001. The decrease was due to a lower average discount rate for our portfolio of term software licenses. Installment receivable interest income of \$2.0 million in the fourth quarter of 2002 was higher than in previous quarters due to growth in our portfolio of term software licenses and adjustment from review of estimates for the current year. A portion of the fee from each license lease arrangement is initially deferred and recognized as installment receivable interest income over the term of the license. For purposes of the present value calculations, the discount rates used are estimates of customers' borrowing rates, typically below prime rate, and have varied between 3.25% and 8.0% for the three years ended December 31, 2002.

### Other interest income, net

Other interest income, net, remained flat at \$0.8 million for 2002 as larger invested cash balances and investments in securities were offset by lower interest rates.

# Other income (expense), net

Other income (expense), net, which consists primarily of currency exchange losses and reseller development funds received from third-party vendors of computer hardware products, decreased to a \$0.8 million expense for 2002 compared to \$15 thousand income for 2001. The decrease was due to greater currency exchange losses and lower reseller development funds.

# Income before provision for income taxes

Income before provision for income taxes increased to \$17.2 million in 2002 from \$13.5 million in 2001. The \$3.7 million improvement was due primarily to a \$20.3 million improvement in software license gross margin from increased revenues, partially offset by a \$9.4 million reduction in services gross margin due to lower services revenues, increased operating expenses of \$5.9 million, greater currency exchange losses and reduced interest income.

# Provision for income taxes

The provision for income tax was \$1.9 million in 2002, an increase from \$1.0 million in 2001. The 2001 tax provision consisted primarily of foreign subsidiary income tax. The increase was primarily due to increased deductions for compensation triggered by stock option exercises, which are reflected as increases in equity instead of reductions in the provision for income taxes. The provision for income tax in the fourth quarter of 2002 was higher than previous quarters due to adjustment from review of estimates for 2002. Minimal provisions for U.S. income taxes have been made due to the availability of loss carry forwards to offset current period income. Our net deferred tax assets are currently reserved. These valuation allowances have been maintained due to concerns about the future realization of these benefits. In 2002 and 2001, the benefits of these assets were recognized only to the extent that they reduced taxes due on current year operations. Should circumstances in the future indicate an increased likelihood of realization of our assets, remaining valuation allowances would be reversed generally through tax provision. See Note 8 of Notes to Consolidated Financial Statements.

# Year ended December 31, 2001 compared to year ended December 31, 2000

#### Revenue

Total revenue for 2001 increased 14% to \$95.1 million from \$83.5 million for 2000. The increase was primarily due to increased software license revenue.

Software license revenue for 2001 increased 30% to \$44.1 million from \$33.8 million for 2000. The increase was due primarily to software license acceptances by existing customers and \$2.3 million due to improved accounting estimates relating to the revenue attributable to the inflation adjustment provisions contained in our long-term software license agreements. Contract signings with new customers slowed towards the latter part of 2001.

Services revenue for 2001 increased 3% to \$51.0 million from \$49.7 million for 2000. The increase was due primarily to higher maintenance revenue from a larger installed base. Services revenue for the fourth quarter of 2001 decreased to \$10.2 million from \$13.3 million in the third quarter, reflecting the impact of weakened economic conditions and customers' delayed spending and fewer new license contracts.

Deferred revenue at December 31, 2001 consisted primarily of billed fees from arrangements for which acceptance of the software license or service milestone had not occurred, the unearned portion of services revenue and advance payment of maintenance fees. Deferred revenue balances increased to \$6.2 million as of December 31, 2001 from \$5.1 million as of December 31, 2000, due to billings for software licenses in advance of customer acceptance and advance payment of maintenance fees.

# Cost of revenue

Cost of software license revenue for 2001 increased 28% to \$3.0 million from \$2.4 million for 2000. Cost of software license included the amortization associated with a stock purchase warrant issued by us in September 1997, and our acquisition of software for resale. The increase was due to software acquired by us during 2000, which, after initially being amortized over three years, was expensed in full in the second quarter of 2001 because the productive use of this software was no longer anticipated. Cost of software license as a percentage of license revenue for 2001 and 2000 was 7%.

Cost of services for 2001 decreased 10% to \$37.3 million from \$41.7 million for 2000. Cost of services as a percentage of services revenue decreased to 73% for 2001 from 84% for 2000. These decreases were primarily due to reduced staff including compensation, travel and facilities expense, partially offset by higher third party contracted consultant spending. The decrease as a percent of service revenue was also partially due to higher services revenue.

# Operating expenses

Research and development expenses for 2001 increased 38% to \$20.8 million from \$15.1 million for 2000. As a percentage of total revenue, research and development expenses increased to 22% for 2001 from 18% for 2000. These increases were a result of growth in staffing costs including compensation and benefits, the redeployment of internal resources and increased use of third party consultants.

Selling and marketing expenses for 2001 decreased 27% to \$17.5 million from \$24.1 million for 2000. As a percentage of total revenue, selling and marketing expenses decreased to 18% for 2001 from 29% for 2000. The decreases were due to reduced spending on infrastructure, marketing programs, and travel. The decrease as a percent of revenue was also due to higher revenue.

General and administrative expenses for 2001 decreased 5% to \$9.8 million from \$10.3 million for 2000. As a percentage of total revenue, general and administrative expenses decreased to 10% for 2001 from 12% for 2000. These decreases were due primarily to lower discretionary spending on infrastructure, benefits and third party consulting, partially offset by higher compensation costs, including incentive compensation.

# Installment receivable interest income

Installment receivable interest income for 2001 increased 53% to \$6.2 million from \$4.0 million for 2000. The increase was due to improved accounting estimates regarding the amount of interest income earned on license transactions recorded in 2001, higher average discount rates, and the increased value of our portfolio of customer licenses.

# Other interest income, net

Interest income, net decreased 50% to \$0.8 million for 2001 from \$1.7 million for 2000. The decrease was attributable to lower yields on investments due to declining interest rates.

#### Other income (expense), net

Other income (expense), net, which consists primarily of currency exchange gains or losses and reseller development funds received from third-party vendors of computer hardware products, was \$15 thousand income for 2001 and a \$286 thousand expense for 2000. The increase was due to a lower currency exchange loss and increased reseller development funds.

# Income (loss) before provision for income taxes

Income (loss) before provision for income taxes improved to \$13.5 million in 2001 from a loss of \$4.7 million in 2000, excluding litigation settlement and restructuring costs of \$15.8 million in 2000. Of this \$18.2 million improvement, \$2.3 million was due to improved accounting estimates relating to the revenue attributable to the inflation adjustment provisions contained in our long-term software license agreements. Of the remaining \$15.9 million improvement, \$7.3 million was from increased software license gross margin from increased revenues, \$5.7 million in improved services gross margin mostly due to cost reductions, \$1.4 million from reduced operating expenses and \$1.5 million of other improvements in interest income and other income and expense.

# Provision for income taxes

The provision for income tax was \$1.0 million in 2001, an increase from \$0.3 million in 2000. The 2000 tax provision consisted primarily of foreign subsidiary income tax. The increase was related to minimum tax due on current year U.S. profits and foreign subsidiary income. Minimal provisions for U.S. income taxes were made

due to the availability of loss carry forwards to offset current period income. See Note 8 of Notes to Consolidated Financial Statements.

# Liquidity and capital resources

We have funded our operations primarily from cash flow from operations and the proceeds of our public stock offerings. At December 31, 2002, we had cash and cash equivalents of \$57.4 million and working capital of \$75.5 million.

Net cash provided by operations for 2002 was \$27.1 million compared with \$15.9 million for 2001. The increase was primarily due to \$2.8 million in improved profitability, \$4.8 million from increased deferred revenue and \$3.5 million from improved collection of accounts receivable, primarily from perpetual licenses. Although we have been successful in reducing receivables through collections activity, should services revenue increase or customer payments slow, it is reasonable to expect that our collections experience may return to a more normal level during 2003.

Net cash used in investing activities for 2002 was \$7.5 million compared with \$0.1 million for 2001. The increased use of cash was primarily due to a \$6.1 million purchase of debt securities, which we intend to hold to maturity, and transaction costs associated with the 1mind acquisition.

On February 6, 2002, we acquired substantially all of the assets of 1mind Corporation for initial consideration valued at \$3.7 million, consisting of 569,949 shares of our common stock (155,760 shares of which were deposited into escrow to secure the indemnity obligations of 1mind's equity holders relating to the transaction) and warrants to purchase for nominal consideration 83,092 shares of our common stock. The purchase agreement included provisions for additional consideration, which we are not obligated to pay because of the performance of the acquired business since the acquisition date. (See Note 2 of Notes to Consolidated Financial Statements.)

Net cash provided by financing activities for 2002 was \$4.4 million compared with \$46 thousand in 2001. The increase was primarily due to proceeds from employee stock option exercises. (See Note 5 to Notes to Consolidated Financial Statements.)

We believe that current cash, cash equivalents, and cash flow from operations will be sufficient to fund our business until at least the end of 2003. We expect to receive cash during 2003 of \$32.2 million for license installments and \$9.7 million for maintenance under existing contracts. We do not have plans or commitments for significant capital equipment expenditures. Material risks to cash flow from operations include, a further decline in services revenue and delayed or reduced cash payments accompanying sales of new licenses. There can be no assurance that changes in our plans or other events affecting our operations will not result in materially accelerated or unexpected expenditures. In addition, there can be no assurance that additional capital if needed will be available on reasonable terms, if at all, at such time as we require.

We lease certain equipment and office space under non-cancelable capital and operating leases. Future minimum rental payments required under the capital and operating leases with non-cancelable terms in excess of one year at December 31, 2002 are as follows:

	 Operating Leases
Years ending December 31,	(in thousands)
2003	\$ 3,850
2004	3,558
2005	3,395
2006	3,022
2007	3,070
2008 and thereafter	18,702
	\$ 35,597

Our liquidity is affected by the manner in which we collect cash for certain types of license transactions. Historically, our term licenses have provided for monthly license payments, generally over five years. The following amounts of cash are due for receipt over the next six years in connection with our existing term license agreements:

	 License Installments
Years ended December 31,	 (in thousands)
2003	\$ 32,178
2004	21,371
2005	17,538
2006	12,697
2007	4,244
2008	1,148
	 ·
	\$ 89,176

# **Critical Accounting Policies and Estimates**

Management's discussion and analysis of the financial condition and results of operations is based upon the consolidated financial statements, which have been prepared in accordance with accounting principles generally accepted in the United States. The preparation of these financial statements requires us to make estimates and judgments that affect the reported amounts of assets, liabilities, revenues and expenses, and related disclosure of contingent assets and liabilities. We base our estimates and judgments on historical experience, knowledge of current conditions and beliefs of what could occur in the future given available information. We consider the following accounting policies to be both those most important to the portrayal of our financial condition and those that require the most subjective judgment. If actual results differ significantly from management's estimates and projections, there could be a material effect on our financial statements.

# Revenue Recognition

Our revenue is derived from two primary sources: software license fees and service fees. We offer both perpetual and term software licenses. Perpetual license fees are generally payable at the time the software is delivered, and are generally recognized as revenue upon customer acceptance to the extent that payments are not subject to refund. Payments subject to refund are recognized as revenue as refund provisions lapse.

Term software license fees are generally payable on a monthly basis under term license agreements that generally have a five-year term and may be renewed for additional years at the customer's option. The present value of future license payments is generally recognized as revenue upon customer acceptance. A portion of the

license fees payable under each term license agreement (equal to the difference between the total license payments and the discounted present value of those payments) is initially deferred and recognized as installment receivable interest income (and is not part of total revenue) over the license term. Many of our license agreements provide for license fee increases based on inflation. When such an increase occurs, as determined by the terms of the license agreement, we recognize the present value of such increases as revenue; the remainder of the increase is recognized as installment receivable interest income over the license term. For purposes of the present value calculations, the discount rates used are estimates of customers' borrowing rates at the time of recognition, typically below prime rate, and have varied between 3.25% and 8.0% for the past few years. As a result, revenue that we recognize relative to these types of license arrangements would be impacted by changes in market interest rates. For term license agreement renewals, license revenue is recognized with the same present value approach, when the customer becomes committed to the new license terms, provided no additional obligations to the customer exist.

In certain circumstances, such as when license fees are not fixed and determinable, some term licenses are accounted for on a subscription basis, where revenue is recognized as payments become due over the term of the license.

Our services revenue is comprised of fees for software implementation, consulting, maintenance, and training services. Our software implementation and consulting agreements typically require us to provide services for a fixed fee or at an hourly rate. Revenues for time and material projects are recognized as fees are billed. Until the fair value of the elements of a contract can be determined, the recognition of services revenue for fixed-price projects is limited to amounts equal to costs incurred, resulting in no gross profit. We do not have a reliable track record for accurately estimating the time and resources needed to complete fixed price service projects. As a result, determination of the fair value of the elements of the contract has generally occurred late in the implementation process, typically when implementation is complete and remaining services are no longer significant to the project. If the fair values of the elements of a contract are then apparent, the remaining revenue and profit associated with the fixed price services elements will be recognized when the project is completed. To the extent that a software license is included in the contract, any residual amounts remaining after revenue is allocated to the services elements are recorded as license revenues. All costs of services are expensed as incurred.

Software license customers are offered the option to enter into a maintenance contract, which requires the customer to pay a monthly maintenance fee over the term of the maintenance agreement, typically renewable annually. Prepaid maintenance fees are deferred and are recognized evenly over the term of the maintenance agreement. We generally recognize training fees revenue as the services are provided.

We reduce revenue for estimates of the fair value of potential concessions, such as disputed services, when revenue is initially recorded. These estimated amounts are deferred or reserved until the related elements of the agreement are completed and provided to the customer.

# Allowance for Doubtful Accounts

We maintain an allowance for doubtful accounts using estimates that we make based on factors such as the composition of the accounts receivable aging, historical bad debts, changes in payment patterns, customer creditworthiness and current economic trends. If we used different estimates, or if the financial condition of customers were to deteriorate, resulting in an impairment of their ability to make payments, additional provisions for doubtful accounts would be required and would increase bad debt expense. During 2002, our allowances were reduced by approximately \$0.4 million reflecting lower levels of problem accounts.

# Accounting for Income Taxes

We account for income taxes in accordance with Statement of Financial Accounting Standards No. 109, or FAS 109, "Accounting for Income Taxes," which requires that deferred tax assets and liabilities be recognized using enacted tax rates for the effect of temporary differences between the book and tax bases of recorded assets and liabilities. FAS 109 also requires that deferred tax assets be reduced by a valuation allowance if it is more likely than not that some portion or all of the deferred tax asset will not be realized. We evaluate the realizability of our deferred tax assets quarterly by assessing our valuation allowance and by adjusting the amount of such allowance, if necessary. At December 31, 2002, we had net deferred tax assets of \$8.5 million primarily resulting from temporary differences between the book and tax bases of assets and liabilities. We have provided a valuation allowance equal to net deferred tax assets based on an assessment of the likelihood of realization. In reaching our conclusion, we evaluated certain relevant criteria including deferred tax liabilities that can be used to offset deferred tax assets, estimates of future taxable income of appropriate character within the carry forward period available under the tax law, and tax planning strategies. Our judgments regarding future taxable income may change due to market conditions, changes in U.S. or international tax laws, and other factors. These changes, if any, may require material adjustments to these deferred tax assets, resulting in either a tax benefit, if it is estimated that future taxable income is likely, or a reduction in the value of the deferred tax assets, if it is determined that their value is impaired, resulting in a reduction in net income or an increase in net loss in the period when such determinations are made.

In addition, we have provided for potential liabilities due in the various foreign jurisdictions. Judgment is required in determining our worldwide income tax expense provision. In the ordinary course of conducting a global business enterprise, there are many transactions and calculations undertaken whose ultimate tax outcome cannot be certain. Some of these uncertainties arise as a consequence of transactions and arrangements made among related parties. Although we believe our estimates are reasonable, no assurance can be given that the final tax outcome of these matters will not be different from what is reflected in our historical income tax provisions and accruals. Such differences could have a material impact on our income tax provision and operating results in the period in which such a determination is made.

# Contingencies

From time to time, we are threatened with or become party to litigation. We periodically assess each matter in order to determine if a contingent liability in accordance with Statement of Financial Accounting Standards No. 5, or FAS 5, "Accounting for Contingencies," should be recorded. In making this determination, we may, depending on the nature of the matter, consult with internal and external legal counsel and technical experts. Based on the information we obtain, combined with our judgment regarding all the facts and circumstances of each matter, we determine whether it is probable that a contingent loss may be incurred and whether the amount of such loss can be estimated. Should a loss be probable and estimable, we record a contingent loss in accordance with FAS 5. In determining the amount of a contingent loss, we consider advice received from experts in the specific matter, current status of legal proceedings, settlement negotiations that may be ongoing, prior case history and other factors. Should the judgments and estimates made by us be incorrect, we may need to record additional contingent losses that could materially adversely impact our results of operations.

### **Inflation**

Inflation has not had a significant impact on our operating results to date, and we do not expect it to have a significant impact in the future. Our unbilled license and maintenance fees are typically subject to annual increases based on recognized inflation indexes.

# Significant customers

First Data Resources accounted for 26%, 14%, and 12% of our total consolidated revenue in 2002, 2001 and 2000, respectively.

# **Forward-Looking Statements**

This Annual Report on Form 10-K contains or incorporates forward-looking statements within the meaning of section 27A of the Securities Act of 1933 and section 21E of the Securities Exchange Act of 1934. These forward-looking statements are based on current expectations, estimates, forecasts and projections about the industry and markets in which we operate and management's beliefs and assumptions. In addition, other written or oral statements that constitute forward-looking statements may be made by or on our behalf. Words such as "expect," "anticipate," "intend," "plan," "believe," "seek," "estimate," "may," variations of such words and similar expressions are intended to identify such forward-looking statements. These statements are not guarantees of future performance and involve certain risks, uncertainties and assumptions that are difficult to predict. We have included important factors in the cautionary statements below under the heading "Factors That May Affect Future Results" that we believe could cause our actual results to differ materially from the forward-looking statements we make. We do not intend to update publicly any forward-looking statements, whether as a result of new information, future events or otherwise.

# **Factors That May Affect Future Results**

We are having difficulty closing license transactions with new customers. Due in large part, we believe, to continued weakness in spending by our target customers, license transactions with new customers have decreased significantly since the latter part of 2001. License revenue from new customers was 4% of total license revenue in 2002. We believe that obtaining new license customers will continue to be a challenge at least in the near term. The decrease in license contracts with new customers has adversely impacted and may continue to adversely impact our services business because we derive a substantial portion of our services revenue from implementation of software licensed by new customers. We have been dependent on FDR for a significant portion of our revenue during the past few years. With the perpetual license entered into with FDR in 2002, FDR is not likely to represent as large a portion of our revenues after 2003, therefore we are more dependent on license transactions with new customers.

Our stock price has been volatile. Quarterly results have fluctuated and are likely to continue to fluctuate significantly. The market price of our common stock has been and may continue to be highly volatile. Factors that are difficult to predict, such as quarterly revenues and operating results, statements and ratings by financial analysts, and overall market performance, will have a significant effect on the price for shares of our common stock. Revenues and operating results have varied considerably in the past from period to period and are likely to vary considerably in the future. We plan product development and other expenses based on anticipated future revenue. If revenue falls below expectations, financial performance is likely to be adversely affected because only small portions of expenses vary with revenue. As a result, period-to-period comparisons of operating results are not necessarily meaningful and should not be relied upon to predict future performance.

The timing of license revenues is related to the completion of implementation services and product acceptance by the customer, the timing of which has been difficult to predict accurately. There can be no assurance that we will be profitable on an annual or quarterly basis or that earnings or revenues will meet analysts' expectations. Fluctuations may be particularly pronounced because a significant portion of revenues in any quarter is attributable to product acceptance or license renewal by a relatively small number of customers. Fluctuations also reflect our policy of recognizing revenue upon product acceptance or license renewal in an amount equal to the present value of the total committed payments due during the term. Customers generally do not accept products until the end of a lengthy sales cycle and an implementation period, typically ranging from six to twelve months but in some cases significantly longer. We are currently in the process of introducing new

product technology and making material changes to our existing products. This may result in even lengthier sales and implementation cycles which may adversely affect our financial performance. In addition, we are more focused on closing larger but fewer license transactions than in the past. This may increase the volatility in our quarterly operating results. Risks over which we have little or no control, including customers' budgets, staffing allocation, and internal authorization reviews, can significantly affect the sales and acceptance cycles. Changes dictated by customers may delay product implementation and revenue recognition.

If existing customers do not renew their term licenses, our financial results may suffer. Term license renewal negotiations have required more effort due to economic pressures and consolidation among our customers. A significant portion of total revenue has been attributable to term license renewals. While historically a majority of customers have renewed their term licenses, there can be no assurance that a majority of customers will continue to renew expiring term licenses. A decrease in term license renewals absent offsetting revenue from other sources would have a material adverse effect on future financial performance. In addition, we are currently entering into perpetual licenses with most of our new customers, the effect of which may be to increase our license revenue and cash flow in the short term but to decrease the amount of revenue and cash flow from the renewal of term license in the long term.

We will need to develop new products, evolve existing ones, and adapt to technology change. Technical developments, customer requirements, programming languages and industry standards change frequently in our markets. As a result, success in current markets and new markets will depend upon our ability to enhance current products, to develop and introduce new products that meet customer needs, keep pace with technology changes, respond to competitive products, and achieve market acceptance. Product development requires substantial investments for research, refinement and testing. There can be no assurance that we will have sufficient resources to make necessary product development investments. We may experience difficulties that will delay or prevent the successful development, introduction or implementation of new or enhanced products. Inability to introduce or implement new or enhanced products in a timely manner would adversely affect future financial performance. Our products are complex and may contain errors. Errors in products will require us to ship corrected products to customers. Errors in products could cause the loss of or delay in market acceptance or sales and revenue, the diversion of development resources, injury to our reputation, or increased service and warranty costs which would have an adverse effect on financial performance.

We have historically sold to the financial services market. This market is continuing to consolidate, and faces uncertainty due to many other factors. We have historically derived a significant portion of our revenue from customers in the financial services market, and our future growth depends, in part, upon increased sales to this market. Competitive pressures, industry consolidation, decreasing operating margins within this industry, currency fluctuations, geographic expansion and deregulation affect the financial condition of our customers and their willingness to pay. In addition, customers' purchasing patterns are somewhat discretionary. As a result, some or all of the factors listed above may adversely affect the demand by customers. The financial services market is undergoing intense domestic and international consolidation. In recent years, several customers have been merged or consolidated. Future mergers or consolidations may cause a decline in revenues and adversely affect our future financial performance.

We depend on certain key personnel, and must be able to attract and retain qualified personnel in the future. The business is dependent on a number of key, highly skilled technical, managerial, consulting, sales, and marketing personnel, including Mr. Trefler, our Chief Executive Officer. The loss of key personnel could adversely affect financial performance. We do not have any significant key-man life insurance on any officers or employees and do not plan to obtain any. Our success will depend in large part on the ability to hire and retain qualified personnel. The number of potential employees who have the extensive knowledge of computer hardware and operating systems needed to develop, sell and maintain our products is limited, and competition for their services is intense, and there can be no assurance that we will be able to attract and retain such personnel. If we are unable to do so, our business, operating results, and financial condition could be materially adversely affected.

The market for our offerings is increasingly and intensely competitive, rapidly changing, and highly fragmented. The market for customer relationship management software and related implementation, consulting and training services is intensely competitive and highly fragmented. We currently encounter significant competition from internal information systems departments of potential or existing customers that develop custom software. We also compete with companies that target the customer interaction and workflow markets and professional service organizations that develop custom software in conjunction with rendering consulting services. Competition for market share and pressure to reduce prices and make sales concessions are likely to increase. Many competitors have far greater resources and may be able to respond more quickly and efficiently to new or emerging technologies, programming languages or standards or to changes in customer requirements or preferences. Competitors may also be able to devote greater managerial and financial resources to develop, promote and distribute products and provide related consulting and training services. There can be no assurance that we will be able to compete successfully against current or future competitors or that the competitive pressures faced by us will not materially adversely affect our business, operating results, and financial condition.

We rely on certain third-party relationships. We have a number of relationships with third parties that are significant to sales, marketing and support activities, and product development efforts. We rely on relational database management system applications and development tool vendors, software and hardware vendors, and consultants to provide marketing and sales opportunities for the direct sales force and to strengthen our products through the use of industry-standard tools and utilities. We also have relationships with third parties that distribute our products. In particular, we benefit from our non-exclusive relationship with First Data Resources for the distribution of products to the credit card market and with PFPC Inc. for distribution of products to the mutual fund market. FDR can sell applications based on our software to their credit card customers who have less than an agreed number of active credit card accounts as identified in the perpetual license agreement, without paying additional fees to us. There can be no assurance that these companies, most of which have significantly greater financial and marketing resources, will not develop or market products that compete with ours in the future or will not otherwise end their relationships with or support of us.

We may face product liability and warranty claims. Our license agreements typically contain provisions intended to limit the nature and extent of our risk of product liability and warranty claims. There is a risk that a court might interpret these terms in a limited way or could hold part or all of these terms to be unenforceable. Also, there is a risk that these contract terms might not bind a party other than the direct customer. Furthermore, some of our licenses with our customers are governed by non-U.S. law, and there is a risk that foreign law might give us less or different protection. Although we have not experienced any material product liability claims to date, a product liability suit or action claiming a breach of warranty, whether or not meritorious, could result in substantial costs and a diversion of management's attention and our resources.

We face risks from operations and customers based outside of the U.S. Sales to customers headquartered outside of the United States represented approximately 22%, 23% and 26% of our total revenue in 2002, 2001 and 2000, respectively. We, in part through our whollyowned subsidiaries based in the United Kingdom, Singapore, Canada, and Australia, market products and render consulting and training services to customers based in Canada, the United Kingdom, France, Germany, the Netherlands, Belgium, Switzerland, Austria, Ireland, Sweden, South Africa, Mexico, Australia, Hong Kong, and Singapore. We have established offices in continental Europe and Australia. We believe that growth will necessitate expanded international operations requiring a diversion of managerial attention and financial resources. We anticipate hiring additional personnel to accommodate international growth, and we may also enter into agreements with local distributors, representatives, or resellers. If we are unable to do one or more of these things in a timely manner, our growth, if any, in our foreign operations will be restricted, and our business, operating results, and financial condition could be materially and adversely affected.

In addition, there can be no assurance that we will be able to maintain or increase international market demand for our products. Most of our international sales are denominated in U.S. dollars. Accordingly, any appreciation of the value of the U.S. dollar relative to the currencies of those countries in which we distribute our products may place us at a competitive disadvantage by effectively making our products more expensive as

compared to those of our competitors. Additional risks inherent in our international business activities generally include unexpected changes in regulatory requirements, increased tariffs and other trade barriers, the costs of localizing products for local markets and complying with local business customs, longer accounts receivable patterns and difficulties in collecting foreign accounts receivable, difficulties in enforcing contractual and intellectual property rights, heightened risks of political and economic instability, the possibility of nationalization or expropriation of industries or properties, difficulties in managing international operations, potentially adverse tax consequences (including restrictions on repatriating earnings and the threat of "double taxation"), enhanced accounting and internal control expenses, and the burden of complying with a wide variety of foreign laws. There can be no assurance that one or more of these factors will not have a material adverse effect on our foreign operations, and, consequentially, our business, operating results, and financial condition.

We face risks related to intellectual property claims or appropriation of our intellectual property rights. We rely primarily on a combination of copyright, trademark and trade secrets laws, as well as confidentiality agreements to protect our proprietary rights. In October 1998, we were granted a patent by the United States Patent and Trademark Office relating to the architecture of our systems. We cannot assure that such patent will not be invalidated or circumvented or that rights granted there under or the description contained therein will provide competitive advantages to our competitors or others. Moreover, despite our efforts to protect our proprietary rights, unauthorized parties may attempt to copy aspects of our products or to obtain the use of information that we regard as proprietary. In addition, the laws of some foreign countries do not protect our proprietary rights to as great an extent as do the laws of the United States. There can be no assurance that our means of protecting our proprietary rights will be adequate or that our competitors will not independently develop similar technology.

We are not aware that any of our products infringe the proprietary rights of third parties. There can be no assurance, however, that third parties will not claim infringement by us with respect to current or future products. We expect that software product developers will increasingly be subject to infringement claims as the number of products and competitors in our industry segment grows and the functionality of products in different industry segments overlaps. Any such claims, with or without merit, could be time-consuming, result in costly litigation, cause product shipment delays, or require us to enter into royalty or licensing agreements. Such royalty or licensing agreements, if required, may not be available on terms acceptable to us or at all, which could have a material adverse effect upon our business, operating results, and financial condition.

# ITEM 7A: QUANTITATIVE AND QUALITATIVE DISCLOSURE ABOUT MARKET RISK

Market risk represents the risk of loss that may affect us due to adverse changes in financial market prices and rates. Our market risk exposure is primarily fluctuations in foreign exchange rates and interest rates. We have not entered into derivative or hedging transactions to manage risk in connection with such fluctuations.

We derived approximately 22% of our total revenue in 2002 from sales to customers based outside of the United States. Certain of our international sales are denominated in foreign currencies. The price in dollars of products sold outside the United States in foreign currencies will vary as the value of the dollar fluctuates against such foreign currencies. Although our sales denominated in foreign currencies in 2002 were not material, there can be no assurance that such sales will not be material in the future and that there will not be increases in the value of the dollar against such currencies that will reduce the dollar return to us on the sale of our products in such foreign currencies.

We believe that at current market interest rates, the fair value of license installments receivable approximates carrying value as reported on our balance sheets. However, there can be no assurance that the fair value will approximate the carrying value in the future. Factors such as increasing interest rates can reduce the fair value of the license installments receivable. The carrying value reflects a weighted average of historic discount rates. The average rate changes with market rates as new license installment receivables are added to the portfolio, which mitigates exposure to market interest rate risk. A 10% change in the market rates would not have a significant impact on the fair value of our license installments receivable.

# ITEM 8: FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

# INDEX TO CONSOLIDATED FINANCIAL STATEMENTS

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### INDEPENDENT AUDITORS' REPORT

To the Board of Directors and Stockholders of Pegasystems Inc.:

We have audited the accompanying consolidated balance sheets of Pegasystems Inc., as of December 31, 2002 and 2001 and the related consolidated statements of operations, stockholders' equity and other comprehensive income, and cash flows for each of the three years in the period ended December 31, 2002. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these consolidated financial statements based on our audits.

We conducted our audits in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of Pegasystems Inc., as of December 31, 2002 and 2001 and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2002 in conformity with accounting principles generally accepted in the United States of America.

/s/ D ELOITTE & T OUCHE LLP Boston, Massachusetts February 17, 2003

# PEGASYSTEMS INC.

# **CONSOLIDATED BALANCE SHEETS** (in thousands, except share-related data)

	December 31,		
	2002	2001	
<u>ASSETS</u>			
Current assets:			
Cash and cash equivalents	\$ 57,393	\$ 33,017	
Trade accounts receivable, net of allowance for doubtful accounts of \$507 in 2002 and \$1,034 in 2001	4,897	9,592	
Short-term license installments	32,178	31,359	
Investments held to maturity	5,303	_	
Prepaid expenses and other current assets	790	2,286	
Total current assets	100,561	76,254	
Long-term license installments, net of unearned interest income	48,667	43,155	
Investments held to maturity	750	_	
Equipment and improvements, net of accumulated depreciation and amortization	1,727	3,053	
Acquired technology, net of accumulated amortization	1,079	_	
Purchased software and other assets, net of accumulated amortization	196	2,610	
Goodwill	3,246	_	
	¢ 156 226	¢ 105 070	
Total assets	\$ 156,226	\$ 125,072	
LIABILITIES AND STOCKHOLDERS' EQUITY			
Current liabilities:			
Accrued payroll related expenses	\$ 7,695	\$ 7,940	
Accounts payable and accrued expenses	5,220	4,900	
Deferred revenue	12,145	6,176	
Capital lease obligations		81	
Total current liabilities	25,060	19,097	
Deferred income taxes	25,000	1,000	
Other long-term liabilities	239	17	
Total liabilities	25,299	20,114	
Total Incomines		20,111	
Commitments and contingencies			
Stockholders' equity:			
Preferred stock, \$.01 par value, 1,000,000 shares authorized; no shares issued and outstanding	_	_	
Common stock, \$.01 par value, 45,000,000 shares authorized; 34,291,389 shares and 32,754,648 shares	2.42	220	
issued and outstanding in 2002 and 2001, respectively	343	328	
Additional paid-in capital	113,488	101,318	
Stock warrant	374	2,897	
Retained earnings	16,054	757	
Accumulated other comprehensive income (loss)	668	(342)	
Total stockholders' equity	130,927	104,958	
Total liabilities and stockholders' equity	\$ 156,226	\$ 125,072	
1 /	,		

See notes to consolidated financial statements.

#### PEGASYSTEMS INC.

# **CONSOLIDATED STATEMENTS OF OPERATIONS** (in thousands, except per share amounts)

Years Ended December 31, 2002 2001 2000 Revenue: Software license \$ 63,922 \$ 44,053 \$ 33,806 Services 33,486 51,009 49,672 Total revenue 97,408 95,062 83,478 Cost of revenue: Cost of software license 2,661 3,049 2,383 Cost of services 29,207 37,347 41,677 Total cost of revenue 31,868 40,396 44,060 65,540 Gross profit 54,666 39,418 Operating expenses: Research and development 21,284 20,812 15,073 Selling and marketing 23,308 17,522 24,142 General and administrative 9,472 9,798 10,334 Litigation settlement and restructuring 15,821 54,064 48,132 65,370 Total operating expenses 11,476 6,534 (25,952)Income (loss) from operations Installment receivable interest income 5,774 6,159 4,015 Other interest income, net 760 826 1.667 Other (expense) income, net (813)15 (286)Income (loss) before provision for income taxes 17,197 13.534 (20,556)Provision for income taxes 1,900 1.000 300 \$15,297 \$12,534 \$ (20,856) Net income (loss) Earnings (loss) per share, basic 0.45 \$ 0.38 (0.71)Earnings (loss) per share, diluted \$ 0.43 0.37 \$ (0.71)Weighted average number of common shares outstanding, basic 33,835 32,677 29,206

See notes to consolidated financial statements.

35,980

33,434

29,206

Weighted average number of common shares outstanding, diluted

# PEGASYSTEMS INC. CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY AND OTHER COMPREHENSIVE INCOME (in thousands)

	Common Stock								Retained		Accumulated		Total		
	Number of Shares	Amo	unt	Additional Paid-In Capital	Deferred Compensation		Stock Warrant		Earnings (Accumulated Deficit)		Other Comprehensive (Loss) Income		Stock- holders' Equity	Comprehensive (Loss) Income	
Balance at December 31, 1999	28,996	\$ 2	290	\$ 88,941	\$	(18)	\$ 2	2,897	\$	9,079	\$	(144)	\$101,045	\$	(2,079)
Exercise of stock options Issuance of stock under Employee	299		3	803				_		_		_	806		
Stock Purchase Plan	150		2	812		_		_		_		_	814		
Stock issued in settlement of	2 125		21	10.220									10.261		
litigation Foreign currency translation	3,125		31	10,330		_		_					10,361		
adjustments	_		_	_		_		_		_		(125)	(125)	\$	(125)
Amortization of deferred															
compensation			_			18		_				_	18		
Net loss			_					_		(20,856)			(20,856)		(20,856)
Balance at December 31, 2000	32,570		326	100,886		_	2	2,897		(11,777)		(269)	92,063	\$	(20,981)
Exercise of stock options	68		1	59		_		_		_		_	60		
Issuance of stock under Employee															
Stock Purchase Plan	117		1	300		_		_				_	301		
Issuance of compensatory stock option	_		_	73		_		_		_		_	73		
Foreign currency translation															
adjustments	_		_	_		_		_		_		(73)	(73)	\$	(73)
Net income	_		_	_		_		_		12,534		_	12,534		12,534
Balance at December 31, 2001	32,755	3	328	101,318		_	2	2,897		757		(342)	104,958	\$	12,461
D	071		0	1.026									4.044		
Exercise of stock options	871		8	4,036		_		_		_		_	4,044		
Issuance of stock under Employee Stock Purchase Plan	95		1	389		_						_	390		
Expiration of stock warrant				2,897			(2	2,897)							
Tax benefit from exercise of stock				2,077			(2	2,027)							
options	_		_	1,559		_		_		_		_	1,559		
Issuance of common stock and															
warrant for acquisition	570		6	3,289		_		374					3,669		
Foreign currency translation															
adjustments			_			_		_				1,010	1,010	\$	1,010
Net income	_		_	_		_		_		15,297		_	15,297		15,297
Balance at December 31, 2002	34,291	\$ 3	343	\$ 113,488		\$—	\$	374	\$	16,054	\$	668	\$130,927	\$	16,307

See notes to consolidated financial statements.

# PEGASYSTEMS INC. CONSOLIDATED STATEMENTS OF CASH FLOWS (in thousands)

	Year	er 31,	
	2002	2001	2000
Cash flows from operating activities:			
Net income (loss)	\$15,297	\$12,534	\$(20,856)
Adjustment to reconcile net income (loss) to net cash provided by (used in) operating activities:			
Stock option income tax benefits	1,559	_	_
Deferred income taxes	(1,000)	_	_
Depreciation and amortization	4,992	6,228	6,631
Reduction in provision for doubtful accounts	(353)	· —	_
Issuance of compensatory stock option		73	_
Stock issued in settlement of litigation	_	_	10,361
Loss on disposal of fixed assets	83	153	
Change in operating assets and liabilities:	0.0	100	
Trade accounts receivable and license installments	(1,118)	(4,581)	(1,358)
Prepaid expenses and other current assets	1,525	(714)	(678)
Accounts payable and accrued expenses	204	1,089	(1,601)
Deferred revenue	5,911	1,111	(3,700)
Defended revenue	3,911	1,111	(3,700)
Net cash provided by (used in) operating activities	27,100	15,893	(11,201)
Cash flows from investing activities:			
Purchase of investments held to maturity	(6,053)		_
Purchase of equipment and improvements	(1,006)	(561)	(2,626)
Acquisition of 1mind	(573)	(301)	(2,020)
		475	(254)
Other long term assets and liabilities	157	475	(354)
Net cash used in investing activities	(7,475)	(86)	(2,980)
Cash flows from financing activities:			
Payments under capital lease obligations	(81)	(315)	(54)
Exercise of stock options	4,044	60	806
Proceeds from sale of stock under Employee Stock Purchase Plan	390	301	814
1 rocceds from sale of stock under Employee stock I drendse I fair		301	014
Net cash provided by financing activities	4,353	46	1,566
Effect of exchange rate on cash and cash equivalents	398	(175)	(50)
Not in any and described and such and s	24.276	15 (70	(10.665)
Net increase (decrease) in cash and cash equivalents	24,376	15,678	(12,665)
Cash and cash equivalents, beginning of year	33,017	17,339	30,004
Cash and cash equivalents, end of year	\$57,393	\$33,017	\$ 17,339
Supplemental disclosures of cash flow information:			
Cash paid during the year for:			
Interest	\$ 2	\$ 36	\$ 88
Income taxes	\$ 724	\$ 1,191	\$ 834
Non-cash financing activity:	φ / <del>/ 4</del>	Ф 1,191	φ 034
Equipment acquired under conital losses	¢	<b>c</b>	¢ 202
Equipment acquired under capital lease	\$ —	\$ —	\$ 292
Stock issued in settlement of litigation	\$ —	\$ —	\$ 10,361
Stock issued in business combination	\$ 3,669	\$ —	\$ —

See notes to consolidated financial statements.

### PEGASYSTEMS INC.

# NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

# 1. SIGNIFICANT ACCOUNTING POLICIES

# (a) Business

Pegasystems Inc. and subsidiaries ("we" or the "Company") develops, markets, licenses and supports software that enables transaction intensive-organizations to manage a broad array of customer interactions. We also offer consulting, training, and maintenance and support services to facilitate the installation and use of our products.

# (b) Management Estimates and Reporting

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the periods presented. Actual results could differ from those estimates. Significant assets and liabilities with reported amounts based on estimates include trade and installment accounts receivable, long term license installments, deferred income taxes, and deferred revenue.

# (c) Principles of Consolidation

The consolidated financial statements include the accounts of Pegasystems Inc. and its wholly owned subsidiaries, Pegasystems Limited (a United Kingdom company), Pegasystems Company (a Canadian company), Pegasystems Worldwide Inc. (a United States corporation), GDOO AB (a Swedish company), and Pegasystems Pty Ltd. (an Australian company), Pegasystems Investment Inc. (a United States corporation) and Pegasystems Private Limited (a Singapore company). All intercompany accounts and transactions have been eliminated in consolidation.

Certain amounts in the 2001 and 2000 consolidated financial statements were reclassified to be consistent with the current presentation. Reimbursements received for out-of-pocket expenses have been reflected as services revenue, in compliance with Emerging Issues Task Force Abstract No. 01-14; in prior periods the reimbursements had been reflected as a reduction of cost of services.

		Year ended December 31, 2001		Year ended December 31, 2000	
		(in tho	ousands)		
Services revenue as reported previously	\$	48,234	\$	47,000	
Add: reimbursements for out-of-pocket expenses		2,775	_	2,672	
Services revenue, reclassified	\$	51,009	\$	49,672	
Cost of services as reported previously	\$	34,572	\$	39,005	
Add: reimbursements for out-of-pocket expenses	·	2,775		2,672	
Cost of services, reclassified	\$	37,347	\$	41,677	

# (d) Foreign Currency Translation

The translation of assets and liabilities of our foreign subsidiaries is made at year-end exchange rates, while revenue and expense accounts are translated at the average exchange rates during the period transactions occurred. The resulting translation adjustments are in accumulated other comprehensive income (loss). Realized and unrealized exchange gains or losses from transactions and adjustments are reflected in other (expense) income, net, in the accompanying consolidated statements of operations.

## PEGASYSTEMS INC. NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

### (e) Revenue Recognition

Our revenue is derived from two primary sources: software license fees and service fees. We offer both perpetual and term software licenses. Perpetual license fees are generally payable at the time the software is delivered, and are generally recognized as revenue upon customer acceptance to the extent that payments are not subject to refund. Payments subject to refund are recognized as revenue as refund provisions lapse.

Term software license fees are generally payable on a monthly basis under license agreements that generally have a five-year term and may be renewed for additional years at the customer's option. The present value of future license payments is generally recognized as revenue upon customer acceptance. A portion of the license fees payable under each term license agreement (equal to the difference between the total license payments and the discounted present value of those payments) is initially deferred and recognized as installment receivable interest income (and is not part of total revenue) over the license term. Many of our license agreements provide for license fee increases based on inflation. When such an increase occurs, as determined by the terms of the license agreement, we recognize the present value of such increases as revenue; the remainder of the increase is recognized as installment receivable interest income over the license term. For purposes of the present value calculations, the discount rates used are estimates of customers' borrowing rates at the time of recognition, typically below prime rate, and have varied between 3.25% and 8.0% for the past few years. As a result, revenue that we recognize relative to these types of license arrangements would be impacted by changes in market interest rates. For term license agreement renewals, license revenue is recognized with the same present value approach, when the customer becomes committed to the new license terms, provided no additional obligations to the customer exist.

In certain circumstances, such as when license fees are not fixed and determinable, some term licenses are accounted for on a subscription basis, where revenue is recognized as payments become due over the term of the license.

Our services revenue is comprised of fees for software implementation, consulting, maintenance, and training services. Our software implementation and consulting agreements typically require us to provide services for a fixed fee or at an hourly rate. Revenues for time and material projects are recognized as fees are billed. Until the fair value of the elements of a contract can be determined, the recognition of services revenue for fixed-price projects is limited to amounts equal to costs incurred, resulting in no gross profit. We do not have a reliable track record for accurately estimating the time and resources needed to complete fixed-price service projects. As a result, determination of the fair value of the elements of the contract has generally occurred late in the implementation process, typically when implementation is complete and remaining services are no longer significant to the project. If the fair values of the elements of a contract are then apparent, the remaining revenue and profit associated with the fixed-price services elements will be recognized when the project is completed. To the extent that a software license is included in the contract, any residual amounts remaining after revenue is allocated to the services elements are recorded as license revenues. All costs of services are expensed as incurred.

Software license customers are offered the option to enter into a maintenance contract, which requires the customer to pay a monthly maintenance fee over the term of the maintenance agreement, typically renewable annually. Prepaid maintenance fees are deferred and are recognized evenly over the term of the maintenance agreement. We generally recognize training fees revenue as the services are provided.

We reduce revenue for estimates of the fair value of potential concessions, such as disputed services, when revenue is initially recorded. These estimated amounts are deferred or reserved until the related elements of the agreement are completed and provided to the customer.

## PEGASYSTEMS INC. NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

### (f) Cash and Cash Equivalents

We consider all highly liquid investments with remaining maturities of three months or less at the date of purchase to be cash equivalents. Cash equivalents principally consist of US Treasury bills and short-term debt securities. We account for investments under Statement for Financial Accounting Standards ("SFAS") No. 115, "Accounting for Certain Investment in Debt and Equity Securities". Under SFAS No. 115, debt securities with remaining maturities of longer than three months when purchased and which we both have the intent and ability to hold until maturity are reported at amortized cost, which approximates fair market value.

### (g) Concentration of Credit Risk

Financial instruments that potentially subject us to a concentration of credit risk consist of short term cash investments, trade accounts receivable and license installments receivable. We record long-term license installments in accordance with our revenue recognition policy, which results in long-term installment receivables from customers (due in periods exceeding one year from the reporting date, primarily from large organizations with strong credit ratings). We grant credit to customers who are located throughout the world. We perform credit evaluations of customers and generally do not request collateral from customers. Amounts due under long-term license installments are as follows:

	License Installments (in thousands)			
Years ended December 31,				
2003	\$	32,178		
2004		21,371		
2005		17,538		
2006		12,697		
2007		4,244		
2008		1,148		
		89,176		
Deferred license interest income		(8,331)		
Total license installments receivable	\$	80,845		

### (h) Equipment and Improvements, Net of Accumulated Depreciation and Amortization

Equipment and improvements are recorded at cost. Depreciation is computed using the straight-line method over the estimated useful lives of the assets, which are three years for equipment and five years for furniture and fixtures. Leasehold improvements and equipment under capital lease are amortized over the lesser of the life of the lease or the useful life of the asset. Repairs and maintenance costs are expensed as incurred.

### (i) Impairment of Long-Lived Assets

We evaluate our long-lived assets for impairment whenever events or changes in circumstances indicate that the carrying amount of such assets may not be recoverable. Impairment is generally assessed by comparison of cash flows expected to be generated by an asset to its carrying value, with the exception that after January 1, 2002, goodwill impairment is assessed by use of a fair value model. If such assets are considered to be impaired, the impairment to be recognized is measured by the amount by which the carrying amount of the asset exceeds its fair value.

## PEGASYSTEMS INC. NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

### (j) Research and Development and Software Costs

Research and development costs, other than certain software related costs, are expensed as incurred. Capitalization of software costs begins upon the establishment of technical feasibility, generally demonstrated by a working model or an operative version of the computer software product that is completed in the same language and is capable of running on all of the platforms as the product to be ultimately marketed. Such costs have not been material to date and, as a result, no internal costs were capitalized during the years ended December 31, 2002, 2001, and 2000.

Amortization of capitalized software is included in cost of software license revenue. No amortization expense for internally developed capitalized software costs was charged to cost of software license revenue during the years ended December 31, 2002, 2001, and 2000.

### (k) Earnings (Loss) Per Share

Basic earnings (loss) per share is computed based on the weighted average number of common shares outstanding during the period. Diluted earnings (loss) per share includes, to the extent inclusion of such shares would be dilutive to earnings per share, the effect of outstanding options and warrants, computed using the treasury stock method.

	Years Ended December 31,					
		2002 2001		2001		2000
		(in thou	sands,	except per s	share d	lata)
Basic						
Net income (loss)	\$	15,297	\$	12,534	\$	(20,856)
	_				_	
Weighted average common shares outstanding		33,835		32,677		29,206
Basic earnings (loss) per share	\$	0.45	\$	0.38	\$	(0.71)
Diluted						
Net income (loss)	\$	15,297	\$	12,534	\$	(20,856)
	_				_	
Weighted average common shares outstanding		33,835		32,677		29,206
Effect of assumed exercise of stock options		2,145		757		
•	_		_		_	
Weighted average common shares outstanding, assuming dilution		35,980		33,434		29,206
Diluted earnings (loss) per share	\$	0.43	\$	0.37	\$	(0.71)
Outstanding options and warrant excluded as impact would be anti-dilutive		4,023		7,618		4,326

### (l) Segment Reporting

We currently operate in one operating segment – rules based business process management, or BPM, software. We derive substantially all of our operating revenue from the sale and support of one group of similar products and services. Substantially all of our assets are located within the United States. During 2002, 2001, and 2000, we derived our operating revenue from the following geographic areas (sales outside the United States are principally through export from the United States):

	2002	2002			2000	
			(in thousa	nds)		
United States	\$ 75,617	78%	\$ 73,127	77%	\$ 61,528	74%
United Kingdom	14,806	15%	10,040	11%	7,038	8%
Europe	3,595	4%	8,968	9%	9,222	11%
Other	3,390	3%	2,927	3%	5,690	7%
	\$ 97,408	100%	\$ 95,062	100%	\$ 83,478	100%
				_		

### PEGASYSTEMS INC.

### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

In 2002, 2001, and 2000, one customer accounted for approximately 26%, 14%, and 12% of our total revenue, respectively. At December 31, 2002, one customer represented 22% of outstanding accounts receivable and one customer represented 12% of long and short-term license installments.

### (m) Stock Options

We periodically grant stock options for a fixed number of shares to employees and directors with an exercise price equal to the fair market value of the shares at the date of the grant. We account for such stock option grants using the intrinsic value method and intend to continue to do so. Stock options granted to non-employee contractors are accounted for using the fair value method. We have provided appropriate disclosure of the impact of the fair value method.

### (n) Fair Value of Financial Instruments

The principal financial instruments held consist of cash and cash equivalents, investments held to maturity, accounts receivable and payable, capital lease obligations, and license installment receivables arising from license transactions. The carrying values of cash and cash equivalents, investments held to maturity, accounts receivable, and accounts payable approximate their fair value due to the relatively short-term nature of the accounts. Using current market rates, the fair value of license installment receivables approximates carrying value at December 31, 2002 and 2001.

### (o) Intangible Assets and Goodwill

Intangible assets are recorded at cost and principally represent technology acquired in business combinations or from third parties. Amortization is provided on a straight-line basis over the assets' estimated useful lives. As of December 31, 2002, intangible assets consisted of technology acquired in a business combination with a carrying value of \$1.1 million and accumulated amortization of \$0.3 million. Amortization expense was \$0.3 million for 2002. We expect to recognize approximately \$0.4 million of amortization expense yearly until the end of the asset's useful life in January, 2006.

Goodwill represents the residual purchase price given in the business combination after all identified assets have been recorded. Goodwill is not amortized, but is tested annually for impairment by comparing the fair value of units containing goodwill to their carrying value.

### (p) Deferred Taxes

Deferred taxes are provided for differences in the basis of our assets and liabilities for book and tax purposes and loss carry forwards based on enacted rates expected to be in effect when these items reverse. Valuation allowances are provided to the extent it is more likely than not that some portion or all of the deferred tax asset will not be realized.

### (q) New Accounting Standards

We have adopted SFAS No. 141, "Business Combinations," and SFAS No. 142, "Goodwill and Other Intangible Assets." These pronouncements provide guidance on how to account for the acquisition of businesses and intangible assets, including goodwill, which arise from such activities. SFAS No. 141 affirms that only one method of accounting may be applied to a business combination, the purchase method. SFAS No. 141 also provides guidance on the allocation of purchase price to the assets acquired. SFAS No. 142 provides that goodwill resulting from business combinations no longer be amortized to expense, but rather requires an annual assessment of impairment and, if necessary, adjustments to the carrying value of goodwill.

We have adopted SFAS No. 143, "Accounting for Obligations Associated with the Retirement of Long-Lived Assets" and SFAS No. 144 "Accounting for the Impairment of Disposal of Long-Lived Assets." SFAS No. 143 establishes accounting standards for the recognition and measurement of an asset retirement obligation and its associated asset retirement cost. It also provides guidance for legal obligations associated with the retirement of tangible long-lived assets. SFAS No. 144 establishes a single accounting model for the impairment or disposal of long-lived assets (other than goodwill), including the treatment of discontinued operations. Adoption of these pronouncements has not had a significant effect on our consolidated financial statements.

## PEGASYSTEMS INC. NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

### 2. ACQUISITION

On February 6, 2002, we acquired substantially all of the assets of 1mind Corporation ("1mind") for initial consideration of \$3.7 million consisting of 569,949 shares of our common stock (155,760 shares of which were deposited into escrow to secure the indemnity obligations of 1mind's equity holders relating to the transaction) and warrants to purchase 83,092 shares of common stock for nominal consideration. We believe that the acquisition will help increase our penetration of the healthcare and insurance markets, strengthen our management and delivery teams and deepen our product offerings. The acquisition of 1mind has been accounted for as a purchase and the operations of 1mind have been included in our consolidated financial statements from the date of acquisition. Results of operations would not have changed materially for 2002, 2001, or 2000 if 1mind had been acquired on January 1, 2002, 2001, or 2000, respectively. The cash flow impact of \$573 thousand from this acquisition was transaction costs of \$614 thousand less cash acquired of \$41 thousand. The purchase price allocation is based on the report of an independent appraiser. The purchase agreement included provisions for additional consideration, which we are not obligated to pay because of the performance of the acquired business since the acquisition date.

(in thousands, except for share-related data)	
Shares issued (a)	\$ 3,295
Warrants issued (b)	374
Total purchase price	\$ 3,669
Current assets, including cash of \$41	\$ 207
Equipment and improvements	143
Acquired technology (c)	1,400
Goodwill (d)	3,246
Current liabilities	(563)
Long-term liabilities	(150)
Transaction costs	(614)
	\$ 3,669

<sup>(</sup>a) 569,949 common shares of Pegasystems Inc. valued at approximately \$5.78 per share, the average of closing prices as reported by Nasdaq for the three days before and after January 29, 2002, the date of agreement.

<sup>(</sup>b) Warrants to purchase, for nominal consideration, 83,092 common shares of Pegasystems Inc., valued at approximately \$4.50 per warrant using a Black-Scholes model.

<sup>(</sup>c) Acquired technology results from an appraisal report of 1mind intangible assets. This asset is being amortized over its expected useful life of four years.

<sup>(</sup>d) This asset is considered to have an indeterminate life and amortization is not provided. This asset is subject to an annual impairment test, which is conducted annually in November. No impairment adjustments have been required.

### PEGASYSTEMS INC.

### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

### 3. VALUATION AND QUALIFYING ACCOUNTS

We maintain allowances for bad debts based on factors such as the composition of accounts receivable, historical bad debt experience, and current economic trends. These estimates are adjusted periodically to reflect changes in facts and circumstances. Our allowance for doubtful accounts was \$0.5 million and \$1.0 million, respectively, at December 31, 2002 and 2001. The following is a roll forward of the allowance for doubtful accounts:

Description	Balance at beginning of year	Additions (deductions) charged to costs and expenses	Foreign Exchange Gain/ (Loss)	Write- offs	Balance at end of year
Allowance for doubtful accounts:			(in thousands)		
Year ended December 31, 2002	\$ 1,034	(353)	6	(180)	\$ 507
Year ended December 31, 2001	\$ 1,037	`—	(3)		\$1,034
Year ended December 31, 2000	\$ 1,026	_	11	_	\$1,037

### 4. EQUIPMENT AND IMPROVEMENTS

The cost and accumulated depreciation of equipment and improvements consist of the following:

	December 31,				
		2002		2001	
		(in thou	isands)		
Computer equipment and purchased software	\$	8,895	\$	8,535	
Furniture and fixtures		3,005		2,990	
Leasehold improvements		2,765		3,133	
Equipment under capital leases		914		914	
		15,579		15,572	
Less: accumulated depreciation and amortization		(13,852)		(12,519)	
•					
Equipment and improvements, net of accumulated depreciation					
and amortization	\$	1,727	\$	3,053	

Depreciation expense was approximately \$2.3 million, \$3.9 million, and \$4.3 million for the years ended December 31, 2002, 2001, and 2000, respectively. During the year ended December 31, 2002, we recorded disposals of approximately \$1.0 million of furniture and fixtures and leasehold improvements, resulting in a loss on disposal of \$83 thousand.

### 5. STOCKHOLDERS' EQUITY

(a) Common Stock

We have 45,000,000 authorized shares of common stock at \$.01 par value, of which 34,291,389 shares were issued and outstanding at December 31, 2002.

### PEGASYSTEMS INC.

### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

### (b) Preferred Stock

We have authorized 1,000,000 shares of preferred stock, which may be issued from time to time in one or more series. Our Board of Directors has authority to issue the shares of preferred stock in one or more series, to establish the number of shares to be included in each series and to fix the designation, powers, preferences and rights of the shares of each series and the qualifications, limitations or restrictions thereof, without any further vote or action by the stockholders. The issuance of preferred stock could decrease the amount of earnings and assets available for distribution to holders of common stock, and may have the effect of delaying, deferring or preventing a change in control of the Company. We had not issued any shares of preferred stock as of December 31, 2002.

### (c) Long-Term Incentive Plan

In 1994, we adopted a Long Term Incentive Plan since amended, (the "1994 Plan") to provide employees, directors and consultants with opportunities to purchase stock through incentive stock options and non-qualified stock options.

In addition to options, eligible participants under the 1994 Plan may be granted stock appreciation rights, restricted stock and long-term performance awards. As of December 31, 2002, a total of 11.5 million shares of common stock were reserved for issuance under the 1994 Plan. At December 31, 2002, approximately 1.7 million shares were available for issuance.

Generally the option price per share is determined at the date of grant. Options granted under the 1994 Plan generally vest over five years and expire no later than ten years from the date of grant.

### (d) 1996 Non-Employee Director Stock Option Plan

The 1996 Non-Employee Director Stock Option Plan (the "Director Plan") was originally adopted by the Board of Directors on May 13, 1996 and approved by the stockholders on June 26, 1996. An amendment and restatement of the Director Plan was adopted by the Board of Directors on November 23, 1999. As amended and restated, the Director Plan provides for the grant to each new non-employee Director of Pegasystems on the date he or she first becomes a Director of an option to purchase 30,000 shares of Common Stock at a price per share equal to the fair market value thereof on the date of grant, such option to vest in equal annual installments over three years. It also provides for the grant to each non-employee Director at the time of the regular meeting of Directors following the annual stockholders meeting (commencing in 2000) of a fully vested option to purchase 10,000 shares of Common Stock at a price per share equal to the fair market value thereof on the date of grant. Prior to amendment and restatement, the Director Plan provided for the grant to each new non-employee Director of Pegasystems on the date he or she first became a Director of Pegasystems an option to purchase 30,000 shares of Common Stock at a price per share equal to the fair market value thereof on the date of grant, such options to vest in equal annual installments over five years. At December 31, 2002, under the Director Plan there were outstanding options to purchase a total of 250,000 shares of common stock and no additional shares were available for issuance. We do not plan to issue any additional options under the Director Plan. The Compensation Committee administers the Director Plan.

### (e) 1996 Employee Stock Purchase Plan

The 1996 Employee Stock Purchase Plan (the "Stock Purchase Plan") was adopted by the Board of Directors on May 13, 1996 and approved by the stockholders on June 26, 1996. There are 500,000 shares of common stock reserved for issuance pursuant to this plan. To date, there have been six stock issuances under the Stock Purchase Plan of approximately 454,000 shares. Under the terms of the Stock Purchase Plan, employees

are entitled to purchase shares at 85% of the fair market value of our common stock on either the commencement date or completion date for offerings under the plan, whichever is less. The Stock Purchase Plan is tax qualified and no compensation expense has been recognized in the financial statements for the completed offerings.

For pro forma compensation expense relating to the Employee Stock Purchase Plan, the weighted average fair value of options contained within the Plan offerings in 2002, 2001, and 2000 was \$2.36, \$1.74, and \$7.27, respectively.

### **Stock Options Summary**

The following table presents the combined activity for the 1994 Plan and the Director Plan for the years ended December 31:

	2002		200	1	2000	
	Number of Options	Weighted Average Exercise Price	Number of Options	Weighted Average Exercise Price	Number of Options	Weighted Average Exercise Price
		(in th	ousands, except	per share amou	nts)	
Outstanding options at beginning of year:	8,617	\$ 7.56	7,537	\$ 8.83	6,262	\$ 6.02
Granted	901	7.42	2,300	4.10	2,962	17.41
Exercised	(872)	4.64	(68)	0.50	(299)	2.69
Canceled	(663)	8.57	(1,152)	8.91	(1,388)	9.66
Outstanding options at end of year	7,983	7.79	8,617	7.56	7,537	8.83
Exercisable options at end of year	5,404	7.86	4,415	7.46	3,165	6.79
Weighted average fair value of options granted during the year		\$ 4.74		\$ 2.87		\$ 11.69

The following table presents weighted average price and life information about significant option groups outstanding and exercisable at December 31, 2002:

	Options Outstanding				Options Ex	ercisable	
Range of Exercise Prices	Number Outstanding (in thousands)	Weighted Average Remaining Contractual Life (years)	Weighted fe Average Exercise Price		Number Exercisable (in thousands)		Veighted Average ercise Price
\$ 0.33 — 4.22	2,092	5.65	\$	2.68	1,634	\$	2.47
4.27 — 7.53	2,270	8.41		5.47	987		4.99
7.63 - 10.00	2,130	6.06		8.00	1,659		8.03
10.38 - 25.75	1,491	6.98		18.16	1,124		17.98
	7,983				5,404		

The following are the pro forma net loss and loss per share, as if compensation expense for the option plans had been determined based on the fair value at the grant consistent with the provisions of SFAS No. 123:

	2002		200	1	2000		
	As Reported	Pro Forma	As Reported	Pro Forma	As Reported	Pro Forma	
Net income (loss) (in thousands)	\$ 15,297	\$7,673	\$ 12,534	\$ (390)	\$ (20,856)	\$ (34,570)	
Basic earnings (loss) per share	\$ 0.45	\$ 0.23	\$ 0.38	\$ (0.01)	\$ (0.71)	\$ (1.18)	
Diluted earnings (loss) per share	\$ 0.43	\$ 0.21	\$ 0.37	\$ (0.01)	\$ (0.71)	\$ (1.18)	

## PEGASYSTEMS INC. NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

The fair value of options at the date of grant were estimated using the Black-Scholes option pricing model with the following weighted-average assumptions:

	2002	2001	2000
Volatility	77%	100%	200%
Expected option life:	,,,,	10070	20070
Years from grant	N/A	5.0	5.0
Years from vesting	1.0	N/A	N/A
Interest rate (risk free)	2.78%	4.40%	6.00%
Dividends	None	None	None

For awards granted prior to 2002, a Black-Scholes single-option model using an expected option life from the grant date was used to value grants. For awards in 2002, a Black-Scholes multiple-option model using an expected option life from the vesting date was used to reflect changes in grant and exercise patterns.

The effects on 2002, 2001, and 2000 pro forma net income (loss) and net income (loss) per share of the estimated fair value of stock options and shares are not necessarily representative of the effects on the results of operations in the future. In addition, the estimates made utilize a pricing model developed for traded options with relatively short lives; our option grants typically have a life of up to ten years and are not transferable. Therefore, the actual fair value of a stock option grant may be different from our estimates. We believe that our estimates incorporate all relevant information and represent a reasonable approximation in light of the difficulties involved in valuing non-traded stock options.

### 6. INTANGIBLE ASSET AND WARRANT AGREEMENTS WITH FDR

In 1997, we entered into Software License and Support and Warrant Agreements with First Data Resources, Inc. ("FDR"). In accordance with the Software License and Support Agreement, we were granted a license for access to and the use of the designs, specifications and code of FDR's ESP product. As consideration for this right, we paid FDR \$10.0 million. This amount was recorded as purchased software on the accompanying balance sheets. In connection with the Software License and Support Agreement, we gave a warrant to FDR to purchase 284,876 shares of our common stock at a purchase price of \$28.25 per share which represented the fair market value of the common stock on the date of the agreement. The warrant became exercisable on June 27, 1998 and expired during the fourth quarter of 2002. The warrant was valued at \$2.9 million. We amortized the value of the purchased software and the warrant on a pro rata basis over the initial 5 <sup>1</sup>/<sub>2</sub> year term of the agreement. During the years ended December 31, 2002, 2001 and 2000, we recorded amortization expense of approximately \$2.3 million per year, related to the ESP software and warrant.

### 7. COMMITMENTS AND CONTINGENCIES

We lease certain equipment and office space under non-cancelable operating leases with various extension dates through 2013. Rent expense under operating leases is recognized on a straight-line basis. Future minimum rental payments required under operating leases with non-cancelable terms in excess of one year at December 31, 2002 are as follows:

Years ending December 31,	(in t	(in thousands)		
2003	\$	3,850		
2004		3,558		
2005		3,395		
2006		3,022		
2007		3,070		
2008 and thereafter		18,702		
	\$	35,597		

## PEGASYSTEMS INC. NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

Total rent expense under operating leases was approximately \$5.1 million, \$4.5 million, and \$4.9 million, for the years ended December 31, 2002, 2001, and 2000, respectively.

We are a party in various contractual disputes, litigation and potential claims arising in the ordinary course of business. We do not believe that the resolution of these matters will have a material adverse effect on our financial position or results of operation.

### 8. INCOME TAXES

The components of income (loss) before provision for income taxes are as follows:

	2002		2001		2000
			(in	thousands)	
Domestic	\$	16,183	\$	12,214	\$ (21,538)
Foreign		1,014		1,320	982
Total	\$	17,197	\$	13,534	\$ (20,556)

The provision for income taxes for the years ended December 31, consists of the following:

2002	2001		2000	
(	in thou	sands)		
\$ 2,166	\$	146	\$	_
87		_		
 647		854		300
2,900		1,000		300
(1,000)		_		_
_		_		
_				
(1,000)				_
\$ 1,900	\$	1,000	\$	300
\$	\$ 2,166 87 647 2,900 (1,000) — (1,000)	(in thou \$ 2,166  \$ 87 647 2,900 (1,000) — — — — — — — — — — — — — — — — — — —	(in thousands)  \$ 2,166  \$ 146 87	(in thousands)  \$ 2,166  \$ 146  \$ 87

The effective income tax rate differed from the statutory federal income tax rate due to the following:

	2002	2001	2000
Statutory federal income tax rate	35.0%	35.0%	(35.0)%
State income taxes, net of federal benefit and tax credits	0.3		_
Permanent differences	4.0	1.5	1.4
Tax effective on foreign activities	1.0	2.1	(0.2)
Valuation allowance on U.S. tax losses	(29.2)	(31.2)	35.3
Effective income tax rate	11.1%	7.4%	1.5%

## PEGASYSTEMS INC. NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

Deferred income taxes at December 31, 2002 and 2001, reflect the net tax effects of net operating loss and tax credit carry forwards and temporary differences between the carrying amounts of assets and liabilities for financial statement purposes and the amounts used for tax purposes. The components of our net deferred tax assets (liabilities) as of December 31, are as follows:

	 2002		2001
	 (in thou	isands)	
Software revenue installment receivables	\$ (28,331)	\$	(25,982)
Depreciation	748		(84)
Vacation accrual	267		236
Receivable and other reserves	1,254		900
Net operating loss carry forwards	28,737		32,592
Tax credits	5,819		5,078
Net deferred tax assets	8,494		12,740
Less: valuation allowances	8,494		13,740
	\$ _	\$	(1,000)

A valuation allowance has been provided for deferred tax assets since it is uncertain if we will realize the entire benefit of the assets. The decrease in the valuation allowance during the year resulted from the generation of additional future taxable temporary differences and the utilization of U.S. net operating tax losses. Of the valuation allowance at December 31, 2002, approximately \$403 thousand is related to acquired tax loss and credit carry forwards, which, if utilized, will reduce goodwill. In addition, these acquired tax benefits are subject to limitation as defined by Section 382 of the Internal Revenue Code. Of the valuation allowance at December 31, 2002, approximately \$697 thousand is related to tax benefits generated on exercise of stock options, which will be recorded directly to equity when realized.

At December 31, 2002, we had alternative minimum tax ("AMT"), and research and experimentation ("R&E") credit carry forwards for federal and state purposes of approximately \$6.7 million, available to offset future taxes payable. The carry forward period for the AMT credit is unlimited. The R&E credit carry forwards generally expire from 2003 to 2022.

As of December 31, 2002, we have available U.S. net operating loss carry forwards of approximately \$72.7 million. The operating loss carry forwards expire from 2003 to 2020. These carry forwards may be used to offset future income taxes payable at the federal and state levels, if any, and are subject to review by the U.S. Internal Revenue Service and various state taxing authorities.

A provision has not been made for the U.S. or additional foreign taxes on \$2.1 million of undistributed earnings of foreign subsidiaries that could be subject to taxation if remitted to the U.S., because we plan to keep these amounts permanently reinvested overseas.

### 9. LITIGATION SETTLEMENT AND RESTRUCTURING

We had been involved in two lawsuits related to restatements of our financial statements (the Chalverus case and the Gelfer Case). We have settled both cases and recorded a charge of \$14.8 million, net of insurance reimbursement of \$4.3 million, during 2000, reflecting the cost of settlements and legal costs.

## PEGASYSTEMS INC. NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

During the year ended December 31, 2000, we recorded a restructuring charge of \$1.0 million for severance of 75 employees in various locations and certain costs associated with leased facilities. Approximately \$0.2 million of additional depreciation expense was recorded due to reduced economic life of the leased facilities to be closed or idled under the restructuring plan. Terminations were completed in January 2001. There are no accruals remaining relating to these charges as of December 31, 2002 or 2001.

### 10. EMPLOYEE BENEFIT PLAN

The Company sponsors a retirement plan for qualifying employees. This Plan is a 401(k) defined contribution plan. Beginning in 2001, the Company provides a discretionary profit sharing contribution. The contributions paid aggregated approximately \$0.4 million and \$0.2 million in 2002 and 2001, respectively.

### 11. SELECTED QUARTERLY INFORMATION (UNAUDITED)

	2002							
	1st Quarter		2ne	2nd Quarter 3r		d Quarter	4th Quarter	
			(in th	ousands, exce	pt per :	share data)		
Revenue	\$	24,211	\$	26,667	\$	25,565	\$	20,965
Gross profit		16,276		18,393		17,541		13,330
Income from operations		2,388		3,707		4,025		1,356
Net income		3,438		4,603		4,826		2,430
Earnings per share—Basic	\$	0.10	\$	0.14	\$	0.14	\$	0.07
Earnings per share—Diluted	\$	0.10	\$	0.13	\$	0.13	\$	0.07

2002

2001

2nd Quarter 1st Quarter 3rd Quarter 4th Quarter (in thousands, except per share data) \$ Revenue 23,605 23,515 \$ 23,887 \$ 24,055 Gross profit 12,713 12,384 14,009 15,560 (Loss) income from operations (177)1,052 2,244 3,415 3,884 4,904 Net income 1,094 2,652 0.03 0.08 0.12 0.15 Earnings per share—Basic \$ \$ \$ \$ \$ \$ \$ \$ Earnings per share—Diluted 0.03 0.08 0.12 0.15

### ITEM 9: CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

Not applicable.

#### **PART III**

Certain information required by Part III is omitted from this annual report as we will file a proxy statement for our Annual Meeting of Stockholders, pursuant to Regulation 14A of the Securities Exchange Act of 1934, as amended, not later than 120 days after the end of the fiscal year covered by this Report, and certain information included in that proxy statement is incorporated herein by reference.

### ITEM 10: DIRECTORS AND EXECUTIVE OFFICERS OF THE REGISTRANT

Information relating to our executive officers is set forth in Part I, immediately following Item 4, of this Report under the caption "Executive Officers of the Registrant." The information concerning our directors required by this Item is incorporated by reference to our proxy statement for our 2003 Annual Meeting of Stockholders under the heading "Election of Directors". Information concerning the compliance of our officers, directors and 10% shareholders with Section 16(a) of the Securities Exchange Act of 1934 is incorporated by reference to the information contained in that proxy statement under the heading "Section 16(a) Beneficial Ownership Reporting Compliance".

### ITEM 11: EXECUTIVE COMPENSATION

The information required by this item is incorporated by reference to our proxy statement for our 2003 Annual Meeting of Stockholders under the headings "Directors Compensation" and "Executive Compensation".

### ITEM 12: SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

The information required by this item is incorporated by reference to our proxy statement for our 2003 Annual Stockholders Meeting under the headings "Principal and Management Stockholders" and "Securities Authorized for Issuance under Equity Compensation Plans."

### ITEM 13: CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS

The information required by this item is incorporated by reference to our proxy statement for our 2003 Annual Meeting of Stockholders under the heading "Certain Relationships and Related Transactions".

### ITEM 14: CONTROLS AND PROCEDURES

- (a) *Disclosure controls and procedures*. Within 90 days before filing this report, we evaluated the effectiveness of the design and operation of our disclosure controls and procedures. Our disclosure controls and procedures are the controls and other procedures that we designed to ensure that we record, process, summarize and report in a timely manner the information we must disclose in reports that we file with or submit to the SEC. Alan Trefler, our Chairman and Chief Executive Officer, and Christopher Sullivan, our Chief Financial Officer and Treasurer, reviewed and participated in this evaluation. Based on this evaluation, Messrs. Trefler and Sullivan concluded that, as of the date of their evaluation, our disclosure controls were effective.
- (b) *Internal controls*. Since the date of the evaluation described above, there have not been any significant changes in our internal accounting controls or in other factors that could significantly affect those controls.

### **PART IV**

### ITEM 15: EXHIBITS, FINANCIAL STATEMENT SCHEDULES AND REPORTS ON FORM 8-K

### (a)(1) Financial Statements

The following consolidated financial statements are included in Item 8:

Consolidated Balance Sheets at December 31, 2002 and 2001

Consolidated Statements of Operations for the years ended December 31, 2002, 2001, and 2000

Consolidated Statements of Stockholders' Equity and Other Comprehensive Income for the years ended December 31, 2002, 2001, and 2000

Consolidated Statements of Cash Flows for the years ended December 31, 2002, 2001, and 2000

### (2) Financial Statement Schedules

All financial statement schedules are omitted because the required information is not present or not present in sufficient amounts to require submission of the schedule or because the information is reflected in the consolidated financial statements or notes thereto.

### (3) Exhibits

The exhibits listed in the Exhibit Index immediately preceding such exhibits are filed as part of this Annual Report on Form 10-K.

### (b) Reports on Form 8-K

On December 11, 2002, we filed a current report on Form 8-K reporting that we had adopted amendments to our insider trading policy to permit our officers, directors and certain other insiders to enter into trading plans or arrangements to systematically sell shares of our common stock in compliance with Rule 10b5-1 promulgated under the Securities Exchange Act of 1934, as amended.

On December 3, 2002, we filed an amendment to a current report on Form 8-K that we had filed on February 21, 2002. The amendment was filed to include an executed version of an exhibit to the original report.

### **SIGNATURES**

Pursuant to the requirements to Section 13 or 15(d) of the Securities Exchange Act of 1934, the Registrant has duly caused this Annual Report on Form 10-K to be signed on its behalf by the undersigned, thereunto duly authorized.

 $\boldsymbol{P}$  egasystems  $\boldsymbol{I}$  nc .

Sy: / s / C hristopher S ullivan
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**Christopher Sullivan** 

Senior Vice President, Chief Financial Officer and Treasurer (principle financial and accounting officer)

Date: March 10, 2003

Pursuant to the requirements of the Securities Exchange Act of 1934, this Annual Report on Form 10-K has been signed below on March 10, 2003 by the following persons on behalf of the Registrant and in the capacities indicated.

Signature	Title			
/ S / A LAN T REFLER	Chief Executive Officer and Chairman			
Alan Trefler / S / C HRISTOPHER S ULLIVAN	(principle executive officer)  Senior Vice President, Chief Financial Officer and Treasurer			
Christopher Sullivan / S / H ENRY A NCONA	(principal financial and accounting officer)  President, Chief Operating Officer, and Director			
$\label{eq:Henry Ancona} \textit{Henry Ancona} \\ \textit{/ S / R ICHARD H. J ONES}$	Vice Chairman			
Richard H. Jones / S / S TEVEN F. K APLAN	Director			
Steven F. Kaplan / S / W ILLIAM H. K EOUGH	Director			
William H. Keough / S / E DWARD A. M AYBURY	Director			
Edward A. Maybury / S / J AMES P. O'H ALLORAN	Director			
James P. O'Halloran / S / E DWARD B. R OBERTS	Director			
Edward B. Roberts / S / W ILLIAM W YMAN	Director			
William Wyman				

- I, Alan Trefler, certify that:
- 1. I have reviewed this annual report on Form 10-K of Pegasystems Inc.;
- 2. Based on my knowledge, this annual report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this annual report;
- 3. Based on my knowledge, the financial statements, and other financial information included in this annual report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this annual report;
- 4. The registrant's other certifying officers and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-14 and 15d-14) for the registrant and have:
  - a) designed such disclosure controls and procedures to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this annual report is being prepared;
  - b) evaluated the effectiveness of the registrant's disclosure controls and procedures as of a date within 90 days prior to the filing date of this annual report (the "Evaluation Date"); and
  - c) presented in this annual report our conclusions about the effectiveness of the disclosure controls and procedures based on our evaluation as of the Evaluation Date;
- 5. The registrant's other certifying officers and I have disclosed, based on our most recent evaluation, to the registrant's auditors and the audit committee of registrant's board of directors (or persons performing the equivalent functions):
  - a) all significant deficiencies in the design or operation of internal controls which could adversely affect the registrant's ability to record, process, summarize and report financial data and have identified for the registrant's auditors any material weaknesses in internal controls; and
  - b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal controls; and
- 6. The registrant's other certifying officers and I have indicated in this annual report whether there were significant changes in internal controls or in other factors that could significantly affect internal controls subsequent to the date of our most recent evaluation, including any corrective actions with regard to significant deficiencies and material weaknesses.

Date: February 25, 2003

/s/ A LAN T REFLER

Chairman and Chief Executive Officer (principal executive officer)

- I, Christopher Sullivan, certify that:
- 1. I have reviewed this annual report on Form 10-K of Pegasystems Inc.;
- 2. Based on my knowledge, this annual report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this annual report;
- 3. Based on my knowledge, the financial statements, and other financial information included in this annual report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this annual report;
- 4. The registrant's other certifying officers and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-14 and 15d-14) for the registrant and have:
  - a) designed such disclosure controls and procedures to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this annual report is being prepared;
  - b) evaluated the effectiveness of the registrant's disclosure controls and procedures as of a date within 90 days prior to the filing date of this annual report (the "Evaluation Date"); and
  - c) presented in this annual report our conclusions about the effectiveness of the disclosure controls and procedures based on our evaluation as of the Evaluation Date;
- 5. The registrant's other certifying officers and I have disclosed, based on our most recent evaluation, to the registrant's auditors and the audit committee of registrant's board of directors (or persons performing the equivalent functions):
  - a) all significant deficiencies in the design or operation of internal controls which could adversely affect the registrant's ability to record, process, summarize and report financial data and have identified for the registrant's auditors any material weaknesses in internal controls; and
  - b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal controls; and
- 6. The registrant's other certifying officers and I have indicated in this annual report whether there were significant changes in internal controls or in other factors that could significantly affect internal controls subsequent to the date of our most recent evaluation, including any corrective actions with regard to significant deficiencies and material weaknesses.

Date: February 25, 2003

/s/ C HRISTOPHER S ULLIVAN

Vice President, Chief Financial Officer and Treasurer (principal financial and accounting officer)

### PEGASYSTEMS INC.

### **Exhibit Index**

Exhibit No.	Description
3.3*	Restated Articles of Organization of the Registrant.
3.4*	Restated By-Laws of the Registrant.
4.1*	Specimen Certificate Representing the Common Stock.
10.1	Amended and Restated 1994 Long-Term Incentive Plan. (Filed in the Registrant's Proxy Statement for its 1999 annual stockholders meeting and incorporated herein by reference.)
10.2	1996 Non-Employee Director Stock Option Plan. (Filed in the Registrant's Proxy Statement for its 1999 annual stockholders meeting and incorporated herein by reference.)
10.3	1996 Employee Stock Purchase Plan. (Filed in Registrant's Proxy Statement for its 1998 annual stockholders meeting and incorporated herein by reference.)
10.13.*	Lease Agreement dated February 26, 1993 between the Registrant and Riverside Office Park Joint Venture.
10.14.*	Amendment Number 1 to Lease Agreement dated August 7, 1994 between the Registrant and Riverside Office Park Joint Venture.
10.15	Warrant Agreement dated June 27, 1997 by and between the Registrant and First Data Resources Inc. (Filed as exhibit 10.15 to the Registrant's 1997 Form 10-K.)
10.16.**	Employment Agreement dated May 10, 2001 between the Registrant and Joseph Friscia. (Filed as exhibit 10.1 to the Registrant's June 30, 2000 Form 10-Q.)
10.17	Agreement and Release dated November 2, 2001 by and between the Registrant and Carreker Corporation. (Filed as exhibit 10.17 to the Registrant's 2001 Form 10-K. Confidential treatment requested as to certain portions.)
10.18	Asset Purchase Agreement dated January 29, 2002 by and among the Registrant and 1mind Corporation, 1mind.com, LLC, and all of the equity holders of 1mind Corporation. (Filed as exhibit 2.0 to the Registrant's February 6, 2002 Form 8-K.)
10.19	Refreshed Software License and Support Agreement dated March 1, 2002 by and between the Registrant and First Data Resources Inc. (Filed as exhibit 10.1 to the Registrant's March 31, 2002 Form 10-Q. Confidential treatment requested as to certain portions.)
10.20**	Executive Employment Agreement dated July 25, 2002 between Registrant and Henry Ancona. (Filed as exhibit 10.1 to the Registrant's September 30, 2002 Form 10-Q and incorporated herein by reference.)
10.21	Asset Purchase Agreement dated January 29, 2002 between Registrant and 1Mind Corporation. (Filed as exhibit 2.0 to the Registrant's February 21, 2002 Form 8-K.)
10.22	Form of Warrant issued pursuant to 1mind Asset Purchase Agreement. (Filed as exhibit 2.1 to the Registrant's December 3, 2002 Form 8-K/A.)
10.23	Amendment Number 8 to Lease Agreement dated July 31, 2002 between the Registrant and NOP Riverfront LLC
10.24	Letter Amendment to Lease Agreement dated July 31, 2002 between the Registrant and NOP Riverfront LLC

Exhibit No.	Description
21.1	Subsidiaries of the Registrant.
23.1	Independent Auditors' Consent—Deloitte & Touche LLP.
99.1	Certification pursuant to 18 U.S.C. Section 1350 of the Chief Executive Officer and the Chief Financial Officer.

<sup>\*</sup> Filed as an exhibit to the Registrant's Registration Statement on Form S-1 (Registration No. 333-03807) or an amendment thereto and incorporated herein by reference to the same exhibit number.

\*\* Management contracts and compensatory plan or arrangements required to be filed pursuant to Item 15(c) of Form 10-K.

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**EXHIBIT 10.23** 

### 101 MAIN STREET CAMBRIDGE, MASSACHUSETTS AMENDMENT NO. 8 TO AGREEMENT OF LEASE

### Pegasystems Inc.

This Amendment No. 8 to Agreement of Lease (this "Amendment") is made as of July 31, 2002 by and between NOP Riverfront LLC, a Delaware limited liability company, having an office at One Main Street, Cambridge, MA (hereinafter, "Landlord") and Pegasystems Inc., a Massachusetts corporation, having an office at 101 Main Street, Cambridge, Massachusetts 02142 (hereinafter, "Tenant").

### **Background**

Pursuant to the provisions of that certain Lease dated as of February 26, 1993 between Riverfront Office Park Joint Venture, Landlord's predecessor, and Tenant, as amended by Amendment No. 1 to Agreement of Lease dated as of August 17, 1994, Amendment No. 2 to Agreement of Lease dated as of February 28, 1997, Amendment No. 3 to Agreement of Lease dated as of March 31, 1998 ("Amendment No. 3"), Amendment No. 4 to Agreement of Lease dated as of September 9, 1998 ("Amendment No. 4"), Amendment No. 5 to Agreement of Lease dated as of November 30, 1998, Amendment No. 6 to Agreement of Lease dated as of June 30, 2000, and Amendment No. 7 to Agreement of Lease dated as of November 15, 2001 (as so amended, the "Lease"), Tenant leases from Landlord and Landlord leases to Tenant certain premises containing 85,228 rentable square feet of office space (the "Demised Premises") and 285 rentable square feet of storage space on the second floor garage level and 100 rentable square feet of storage space on the penthouse floor (collectively, the "Storage Space") in the building located at 101 Main Street, Cambridge, Massachusetts (the "Building"). Capitalized terms used and not defined herein shall have the respective meanings ascribed to them in the Lease.

Landlord and Tenant desire to enter into this Amendment No. 8 to extend the Term of the Lease for a period of approximately ten (10) years, on the terms and conditions set forth herein.

### Agreement

NOW, THEREFORE, in consideration of the foregoing and the mutual covenants contained herein, Landlord and Tenant hereby agree to modify and amend the Lease as follows:

- 1. Extension of Term.
- (a) *Extension*. The Term of the Lease is hereby extended to and including a new Termination Date, which shall be May 31, 2013, subject to the terms set forth below. The period beginning on May 16, 2003 (the "*Extension Term Commencement Date*") and ending on May 31, 2013 is hereinafter referred to as the "*First Extension Term*."
- (b) Yearly Fixed Rent. Effective as of the Extension Term Commencement Date, Section 1(19) of the Lease shall be amended to read in its entirety as follows:

### "(19) Yearly Fixed Rent:

During the period commencing May 16, 2003 and ending on May 31, 2013:

*For Floors 5, 6, 7 and 12 (79,463 rentable square feet) :* 

Lease Year 1: \$2,304,427 per annum (\$29 per rentable square foot)

Lease Year 2: \$2,383,890 per annum (\$30 per rentable square foot)

Lease Year 3: \$2,463,353 per annum (\$31 per rentable square foot)

Lease Year 4: \$2,542,816 per annum (\$32 per rentable square foot)

Lease Year 5: \$2,622,279 per annum (\$33 per rentable square foot)

Lease Year 6: \$2,781,205 per annum (\$35 per rentable square foot)

Lease Year 7: \$2,860,668 per annum (\$36 per rentable square foot) Lease Year 8: \$3,019,594 per annum (\$38 per rentable square foot) Lease Year 9: \$3,178,520 per annum (\$40 per rentable square foot) Lease Year 10: \$3,337,446 per annum (\$42 per rentable square foot)

For Floor 1 (5,765 rentable square feet):

Lease Year 1: \$86,475 per annum (\$15 per rentable square foot)
Lease Year 2: \$92,240 per annum (\$16 per rentable square foot)
Lease Year 3: \$98,005 per annum (\$17 per rentable square foot)
Lease Year 4: \$103,770 per annum (\$18 per rentable square foot)
Lease Year 5: \$109,535 per annum (\$19 per rentable square foot)
Lease Year 6: \$121,065 per annum (\$21 per rentable square foot)
Lease Year 7: \$126,830 per annum (\$22 per rentable square foot)
Lease Year 8: \$138,360 per annum (\$24 per rentable square foot)
Lease Year 9: \$149,890 per annum (\$26 per rentable square foot)
Lease Year 10: \$161,420 per annum (\$28 per rentable square foot)

For the Storage Space (385 rentable square feet):

Lease Years 1 through 10: \$4,620 per annum (\$12 per rentable square foot)

As used above, "Lease Year" shall mean each successive twelve (12) month period beginning on May 16, 2003 and each anniversary thereof, provided that the last Lease Year shall end on May 31, 2013."

### (c) Additional Rent.

- (i) *Taxes*. Effective as of the Extension Term Commencement Date, Section 6.2 of the Lease (as previously amended) shall be amended by deleting the reference to the prior fiscal year and substituting therefor a reference to the fiscal year ending "June 30, 2004."
- (ii) *Operating Expenses*. Effective as of the Extension Term Commencement Date, Section 6.3 of the Lease (as previously amended) shall be amended by deleting the reference to the prior calendar year and by substituting therefor a reference to the calendar year ending "December 31, 2003."
- (iii) *Operating Expense Provisions* . Effective as of the Extension Term Commencement Date, Section 6.4 on the attached Exhibit D shall replace Section 6.4 of the Lease (as previously amended).
- (d) Condition of Demised Premises and Storage Space. With respect to the First Extension Term, the Demised Premises and the Storage Space shall be leased in their "as-is" condition without representation or warranty by Landlord. Landlord shall not be required to perform any tenant improvement work in connection with Tenant's occupancy of the Demised Premises or the Storage Space for the First Extension Term. Any tenant improvements that Tenant may desire to make in the Demised Premises or the Storage Space shall be done at Tenant's sole cost and expense, subject to Landlord's Finish Work Allowance for the Demised Premises set forth below, and shall be made in accordance with and subject to the terms of the Lease including, without limitation, Sections 10 and 11 of the Lease.

Without limiting the generality of Sections 10 and 11 of the Lease, Tenant will provide detailed plans and specifications ("Tenant's Plans") necessary to price, permit, and construct any improvements or perform any alterations to the Demised Premises. Tenant's Plans will be subject to Landlord's review and approval, which shall not be unreasonably withheld for improvements that are consistent with the first-class standard of the Building, do not affect structural elements of the Building or adversely affect Building systems, and otherwise comply with the Lease. Landlord shall promptly review Tenant's Plans within ten (10) business days and either approve them or specify the revisions required to enable approval. Tenant shall select (subject to Landlord's approval within five (5) business days after Tenant's request, which approval shall not be unreasonably withheld) a qualified general contractor to perform the work. Except for Tenant's business equipment, furniture, and

personal property (which Tenant may or, if requested by Landlord, shall remove at the end of the Term), Landlord shall advise Tenant, at the time of its consent to any alterations to the Demised Premises, whether Landlord may require Tenant at the expiration of this Lease to restore the Demised Premises to substantially the same condition as existed prior to such alterations; provided that, except as set forth in Section 14.2 of the Lease (as amended hereby), Landlord shall not require Tenant to remove any alterations that are for general office uses. The preceding sentence shall supersede the last sentence of Article 9 of the Lease.

- (e) Landlord's Finish Work Allowance. Landlord shall provide Tenant with an allowance for the costs ("Finish Work Allowance Costs") of hereafter constructing any tenant improvements in the Demised Premises (including, without limitation, architectural and engineering fees with respect thereto, provided, however, that said architectural and engineering fees shall not exceed 15% of the Finish Work Allowance) in an amount not to exceed \$1,278,420 (i.e., the product of (x) \$15 per rentable square foot and (y) 85,228 rentable square feet of the Demised Premises) (the "Finish Work Allowance"). All construction and design costs for the Demised Premises in excess of the Finish Work Allowance shall be paid for entirely by Tenant, and Landlord shall not provide any reimbursement therefor. The Finish Work Allowance shall be disbursed as requisitioned by Tenant, but not more frequently than monthly, within thirty (30) days after Tenant's submission of the requisition package. For each disbursement, Tenant shall submit a requisition package to Landlord with an itemization of the costs being requisitioned, a certificate by an officer of Tenant that all such costs are Finish Work Allowance Costs and have been incurred by Tenant, and appropriate back-up documentation including, without limitation, partial or full lien waivers (in a form reasonably approved by Landlord), invoices and bills (together with evidence of Tenant's payment of such amounts, if Tenant does not request such invoices to be paid by joint check pursuant to the next sentence), and, upon completion of the work, such certificates of completion, final lien waivers, certificates of occupancy, and as-built plans as Landlord may reasonably require in light of the nature and scope of the work. Notwithstanding the foregoing, at Tenant's request, Landlord shall make disbursements of the Finish Work Allowance by check jointly payable to Tenant and Tenant's general contractor with respect to the portion of the work then completed; provided, however, that Landlord shall have no responsibility or liability to Tenant or such contractor with respect to such work, including without limitation, the quality or completeness of such work or any warranties associated therewith. If the reasonably estimated cost of the work exceeds the Finish Work Allowance, Landlord reserves the right to make pro-rata disbursements of the Finish Work Allowance in the proportion that the Finish Work Allowance bears to the estimated cost of the work, subject to a final reconciliation upon completion of the work. Landlord shall have no obligation to pay the Finish Work Allowance at any time when Tenant is in default under the Lease (as amended hereby) beyond the expiration of any applicable notice or cure period or in respect of any requisition submitted after May 16, 2004. Tenant shall have no right to any unused portion of the Finish Work Allowance.
- (f) Landlord's Additional Allowance. Landlord shall provide Tenant with an allowance for the costs ("Allowance Costs") of hereafter installing a security system, voice and data cabling, telephone switch equipment, and other business equipment listed on Exhibit C attached hereto (collectively, the "Security / Telecommunications Work") in the Demised Premises in an amount not to exceed \$1,022,736 (i.e., the product of (x) \$12 per rentable square foot and (y) 85,228 rentable square feet of the Demised Premises) (the "Additional Allowance"). The Additional Allowance is intended to be used for the costs of upgrading the infrastructure of the Demised Premises itemized on Exhibit C. All installation costs for the Security/Telecommunications Work in the Demised Premises in excess of the Additional Allowance shall be paid for entirely by Tenant, and Landlord shall not provide any reimbursement therefor. The Additional Allowance shall be disbursed as requisitioned by Tenant, but not more frequently than monthly, within thirty (30) days after Tenant's submission of the requisition package. For each disbursement, Tenant shall submit a requisition package to Landlord with an itemization of the costs being requisitioned, a certificate by an officer of Tenant that all such costs are Allowance Costs and have been incurred by Tenant, and appropriate back-up documentation including, without limitation, partial or full lien waivers (in a form reasonably approved by Landlord), invoices and bills (together with evidence of Tenant's payment of such amounts, if Tenant does not request such invoices to be paid by joint check pursuant to the next sentence), and, upon completion of the work, such certificates of completion, and final lien waivers. Notwithstanding the

foregoing, at Tenant's request, Landlord shall make disbursements of the Additional Allowance by check jointly payable to Tenant and Tenant's contractor with respect to the portion of the work then completed; provided, however, that Landlord shall have no responsibility or liability to Tenant or such contractor with respect to such work, including without limitation, the quality or completeness of such work or any warranties associated therewith. Landlord shall have no obligation to pay the Additional Allowance at any time when Tenant is in default under the Lease (as amended hereby) beyond the expiration of any applicable notice or cure period or in respect of any requisition submitted after May 16, 2004. Tenant shall have no right to any unused portion of the Additional Allowance.

- (g) *Parking*. Effective as of the Extension Term Commencement Date, (i) Section 1(10) (Parking Spaces) of the Lease (as previously amended) shall read as follows:
  - "(10) (Parking Spaces): One hundred twenty-eight (128)"
- and (ii) Section 27.6 of the Lease shall be deleted in its entirety and replaced with the following Section 27.6:
  - "27.6 Parking . Landlord shall allocate to the parking spaces set forth in Article 1 ("Tenant's Parking Spaces") in the Parking Garage located in the Project. Landlord may, pursuant to Section 15.1, establish Rules and Regulations relative to the Parking Garage serving the Project tenants and may further engage the services of an independent contractor to administer and control access to said Parking Garage. Landlord or said independent contractor shall impose separate charges for use of said Parking Garage, and such charges shall be payable by Tenant as Additional Rent with respect to Tenant's Parking Spaces. The monthly charge shall be as from time to time established by Landlord or said independent contractor as the then prevailing market rate for monthly parking charges for the Project at the then lowest rates given to new or renewing tenants in the Building so long as Pegasystems Inc. occupies as much or more space than any other tenant in the Building. As of the date hereof, the current monthly charge for parking spaces is \$200 per space per month. Tenant acknowledges that Landlord has informed Tenant that Landlord intends to allocate in its tenant leases more than the actual parking spaces servicing the Project. It is further acknowledged and agreed that as a consequence of such over-allocation of parking spaces to which Tenant is entitled under this Lease. Landlord shall incur no liability to Tenant as a consequence of such over-allocation of parking spaces.

In addition to the Parking Spaces allocated to Tenant as set forth above, Landlord shall allocate to Tenant 43 additional parking spaces (the "*Tenant's Additional Parking Spaces*") on a month-to-month basis at the same monthly charge. Either party may terminate the rights and obligations as to some or all of Tenant's Additional Parking Spaces from time to time, effective as of the first day of any calendar month with notice given at least ninety (90) days prior to such effective date(s) of termination."

- (h) Signage. So long as (i) Tenant is not in default under the Lease (as amended hereby) beyond the expiration of any applicable notice or cure period, and (ii) Tenant occupies at least 50,000 rentable square feet of the Demised Premises, effective as of the Extension Term Commencement Date signage shall be made available for Tenant on the existing monument in front of the Building in a manner consistent with the signage currently in place. Any such signage shall be at Tenant's sole cost and subject to applicable governmental approvals and permits. Notwithstanding the foregoing, Landlord shall have the right, at Landlord's sole cost and expense, from time to time during the First Extension Term, as the same may be extended, to relocate and/or replace said signage with similar signage of equal or greater size and of equivalent or better location and visibility.
- (i) Assignment and Subletting . Effective as of the Extension Term Commencement Date, Article 14 of the Lease is hereby amended as follows:
  - (1) Section 14.2 is hereby amended by deleting the phrase "three (3) occupants, including Tenant, within the Demised Premises" and inserting in its place the phrase "three (3) occupants (including

Tenant) on any full floor of the Demised Premises or two (2) occupants (including Tenant) on any partial floor of the Demised Premises; provided, however, that Landlord reserves the right to require Tenant, at the end of the Term, to remove any interior demising partitions installed for any subtenants and any other alterations made by Tenant to demise the Demised Premises into multi-tenant floors, and to restore the affected areas to the condition existing prior to such work."

- (2) Section 14.2 is further amended by adding at the end of such section: "Such reasonable objections may include, without limitation, the fact that the proposed assignee or subtenant is already a tenant (or an affiliate of a tenant) in the Project (unless Landlord reasonably determines that Landlord has no other space in the Project that Landlord intends to offer to such tenant), is a party with whom Landlord is then in active negotiations for other space in the Project, or has a financial condition that is reasonably unsatisfactory to Landlord relative to the scope of the obligations proposed to be undertaken by such assignee or subtenant. Landlord shall promptly respond with its approval or denial of the proposed assignment or sublease, but in all events within fifteen (15) days after Tenant's submission of all required information and documents hereunder."
- (3) The reference in the eleventh line of Section 14.2 to a Tenant "default" shall mean a default beyond the expiration of any applicable notice or cure period.
- (4) Section 14.4 is amended by adding the following sentence at the end of such Section: "Such excess rent shall be determined after deducting brokerage fees, attorneys' fees (not to exceed \$1 per square foot of the subleased area), and commercially reasonable costs of demising the subleased area, that are incurred by Tenant in connection with such Sublease, and the unamortized costs of tenant improvements in the subleased area made by Tenant at its expense after completion of the work described in Paragraphs 1(d) through (f) above."
- (5) Section 14.7(d) is amended by adding after the word "time" in the fourth line thereof the words "(but, with respect to any subtenant or occupant other than an assignee, only after Tenant is in default, beyond the expiration of any applicable notice or cure period, with respect to any of its obligations under the Lease)".
- (j) *General*. Except as otherwise set forth in this Amendment, Tenant's lease of the Demised Premises and Storage Space during the First Extension Term shall be on all of the terms and conditions of the Lease in effect immediately before the commencement of the Extension Term. Sections 3.3 and 3.4 of the Lease are hereby deleted in their entirety.
- 2. Temporary Space . Landlord agrees to lease to Tenant, and Tenant agrees to lease from Landlord, on the terms set forth herein, 23,350 rentable square feet (the "Temporary Space") located on the 11 th floor of the Building as shown on Exhibit A attached hereto and incorporated herein. Tenant shall lease and occupy the Temporary Space for a term commencing on or about August 15, 2002 and expiring on May 31, 2003 (the "Temporary Space Term") while Tenant constructs certain improvements to the Demised Premises for the Extension Term. Such lease shall be on all of the terms and conditions applicable to the Demised Premises in effect on the date hereof, provided that Tenant shall not be obligated to make any payments of Yearly Fixed Rent or Additional Rent for Landlord's taxes or operating expenses for the Temporary Space during the portion of the Temporary Space Term ending on April 14, 2003 (but shall be obligated to make such payments for the period April 15, 2003 through May 31, 2003 at the rate of \$29 per rentable square foot). However, Tenant shall be responsible for paying the cost of all electricity consumed (and any separately reimbursable services, such as after-hours HVAC) in the Temporary Space during the Temporary Space Term. Tenant agrees to accept the Temporary Space in its broom clean, "as-is" condition on the commencement of the Temporary Space Term (free of the prior occupant and exclusive of any furniture or personal property of the prior occupant thereof), and Landlord shall not be required to perform any work in the Temporary Space or to provide any allowance for such space. Landlord shall not be liable to Tenant for any delay in delivery of the Temporary Space to Tenant on the date set forth above, but the expiration date for the Temporary Space Term shall be extended by one day for each day of such delay. Tenant shall vacate and surrender the Temporary Space to Landlord on or before the end of

the Temporary Space Term in the same condition as existed at the commencement of the Temporary Space Term, reasonable wear and tear and damage by fire or casualty excepted, and otherwise in the condition required under the Lease for vacating the Demised Premises at the end of the Term.

- 3. Security Deposit. On or before the Extension Term Commencement Date (or, if earlier, the date of Tenant's initial requisition of any allowance under Paragraph 1 above), Tenant shall deposit with Landlord a Letter of Credit naming Landlord as beneficiary (such Letter of Credit, including renewals, substitutions and replacements thereof, the "Letter of Credit") in the amount of One Million One Hundred Ninety Five Thousand Four Hundred Fifty One Dollars (\$1,195,451) as security for the full and punctual performance by Tenant of all of the terms of the Lease. Notwithstanding the foregoing, provided (i) Tenant is not in default under the Lease after any applicable notice and cure periods have expired and (ii) the Tenant originally named herein (or its Successor as defined in Section 14.3 of the Lease) shall occupy more than 80% of the rentable square feet of the Demised Premises, at the commencement of the second Lease Year of the First Extension Term Landlord shall permit the reduction of the Letter of Credit to an amount equal to one quarter of the Yearly Fixed Rent set forth in Paragraph 1(b) above for the Second Lease Year or return the original Letter of Credit upon Tenant's substitution therefor by a replacement Letter of Credit in such amount. At the commencement of each subsequent Lease Year, Tenant shall increase or replace the Letter of Credit required hereunder (including any replacement thereof or supplement thereto) shall conform to the requirements set forth on the attached Exhibit B.
- 4. *Right of First Offer*. Reference is made to any space that hereafter may become available on the eighth (8 th) and twelfth (12 th) floors of the Building (the "*First Offer Space*"). In the event the First Offer Space becomes available during the Term of this Lease, then before hereafter entering into a lease for the First Offer Space with a third party (other than the then current tenant or occupant of such space, or a tenant having superior rights granted prior to the date hereof) for a period within such Term, Landlord shall notify Tenant of the terms on which Landlord intends to lease the space ("*Landlord's Notice*").

Within ten (10) business days after receipt of Landlord's Notice, Tenant may, by written notice delivered to Landlord, (a) unconditionally and irrevocably agree to lease the First Offer Space for its own use on the terms set forth in Landlord's Notice, (b) reject Landlord's offer, or (c) decline Landlord's offer but unconditionally and irrevocably offer to lease such space from Landlord for its own use on specific economic terms proposed in Tenant's response. The failure by Tenant to timely respond as aforesaid shall be deemed Tenant's rejection of Landlord's Notice under clause (b). If Tenant rejects (or is deemed to have rejected) Landlord's offer under clause (b), Tenant shall have no further rights with respect to such space.

If Tenant makes a counteroffer to Landlord under clause (c), then Landlord may, by written notice delivered within thirty days of receipt thereof, accept or decline such offer (the failure to so respond being deemed Landlord's election to decline Tenant's offer). If such offer under clause (c) is declined (or deemed declined), then, for a period of one year after Landlord's receipt of Tenant's offer, Landlord may enter into any lease for such space at an effective rent (after taking into account any tenant improvement allowance) greater than that set forth in Tenant's offer. If, during such one-year period, Landlord desires to enter into a third-party lease at an effective rent less than or equal to the effective rent set forth in Tenant's offer, Landlord shall deliver to Tenant a new Landlord's Notice. If Landlord does not enter into any lease within such one-year period, Landlord shall re-commence the process under this Paragraph before entering into a lease for the space.

If Tenant timely accepts Landlord's Notice under this Paragraph (or if Landlord timely accepts Tenant's offer under clause (c)), the space shall, subject to the following paragraph below and without further action by the parties, be leased by Tenant on the accepted terms and otherwise on all of the terms of the Lease in effect immediately prior to such expansion; provided that, at the request of either party, Landlord and Tenant shall promptly execute and deliver an agreement confirming such expansion of the Demised Premises and the estimated date the Demised Premises are to be expanded pursuant to this paragraph with a provision for

establishing the effective date of such expansion based on actual delivery. Landlord shall use good faith efforts (including legal process, if appropriate) to deliver the First Offer Space on or about the estimated delivery date. Landlord's failure to deliver, or delay in delivering, all or any part of the First Offer Space, for any reason, shall not give rise to any liability of Landlord, shall not alter Tenant's obligation to accept such space when delivered, shall not constitute a default of Landlord, and shall not affect the validity of the Lease. Notwithstanding the foregoing, if Landlord has not delivered the First Offer Space to Tenant within four (4) months after the estimated delivery date, Tenant may, by notice to Landlord within sixty (60) days thereafter, terminate its obligation to lease the First Offer Space, which notice shall not be effective if the First Offer Space is delivered to Tenant within sixty days after delivery of such termination notice. If Tenant so terminates as to the First Offer Space, Tenant shall thereafter have no right to lease the First Offer Space in question, but such termination right shall not affect Tenant's rights under this Paragraph 4 with respect to any other First Offer Space.

Notwithstanding any provision of this Section to the contrary, Tenant's rights under this Section shall be void, at Landlord's election, if (i) Tenant is in default hereunder, after any applicable notice and cure periods have expired, at any time prior to the time Tenant makes any election with respect to the First Offer Space hereunder or at the time the First Offer Space would be added to the Demised Premises or (ii) the original Tenant named herein (or a Successor of Tenant under Section 14.3 of the Lease) occupies less than eighty percent (80%) of the Demised Premises or (iii) fewer than fourteen months remain in the Term. Nothing in this Section shall be construed to grant to Tenant any rights or interest in any space in the Building, and any claims by Tenant alleging a failure of Landlord to comply herewith shall be limited to claims for monetary damages. Tenant may not assert any rights in any space nor file any lis pendens or similar notice with respect thereto.

- 5. Rooftop Satellite Dish Space. Subject to the terms set forth below, Landlord hereby grants Tenant a license to use a portion of the roof of the Building for the installation of up to two (2) communications antennae or satellite dishes for Tenant's uses ancillary to the Permitted Uses in the Demised Premises (the "Satellite Dish"), subject to the prevailing availability of roof space on the Building reasonably designated by Landlord for such uses. The size, location, manner of placement, screening, installation specifications, and other particulars of the Satellite Dish shall be subject to the prior review and reasonable approval of Landlord. Tenant shall be responsible for obtaining all necessary permits, approvals, and operating licenses for such installation and shall pay all costs arising from the installation, maintenance, repair, and subsequent removal of the Satellite Dish.
- 6. Extension Option(s). Tenant shall have the option to extend the Term of the Lease for two (2) additional periods of five (5) years each (the "Second Extension Term" and the "Third Extension Term" respectively; each, an "Extension Term" on the terms set forth below (the "Extension Option(s)"). Yearly Fixed Rent during any Extension Term shall be ninety-five (95%) percent of the Fair Market Rent (as defined below) for the Demised Premises and Storage Space (as determined below) for such Extension Term. Tenant's lease of the Demised Premises and Storage Space during any Extension Term shall otherwise be on all of the terms and conditions of this Lease in effect on the last day of the expiring Term, except that Tenant shall have no further option to extend the Term beyond the end of the Third Extension Term set forth herein, and Landlord shall have no obligation to provide any improvements to the Demised Premises or Storage Space or any allowances therefor with respect to the Second or Third Extension Terms.
  - (a) If Tenant wishes to consider exercising the Extension Option, Tenant shall so notify Landlord of such preliminary (i.e., non-binding) interest no more than sixteen (16) months, and no less than fifteen (15) months, prior to the date the Term is then scheduled to expire. Failure by Tenant timely to send a notice under this paragraph (a) shall constitute an irrevocable waiver of Tenant's right to extend the Term.
  - (b) If Tenant timely delivers a notice under paragraph (a) above, within ten (10) days Landlord shall furnish Tenant with Landlord's estimate of the Fair Market Rent for the applicable Extension Term. If Tenant disputes Landlord's estimate, Tenant shall provide to Landlord Tenant's estimate of Fair Market Rent within ten (10) days after receipt of Landlord's estimate.
  - (c) If Tenant timely notifies Landlord under paragraph (a) above, on or before the date fourteen (14) months prior to the date the Term is then scheduled to expire, Tenant shall either (i) waive the Extension

Option, or (ii) exercise the Extension Option by giving Landlord notice to such effect accepting Landlord's estimate of Fair Market Rent or such other amount as the parties may have mutually agreed upon prior to such date. Failure timely to give a notice exercising the Extension Option as set forth in this paragraph (c) shall constitute an irrevocable waiver of Tenant's right to extend the Term.

- (d) "Fair Market Rent" shall be the fair market rent that a willing tenant would pay to lease the Demised Premises and Storage Space for each year of the Extension Term in question under the terms and conditions of this Lease, assuming the Demised Premises and Storage Space are in their then existing condition (or in such better condition as the same are required to be maintained under the terms of the Lease), taking into account all relevant factors (including, without limitation, the condition of the space and the presence or absence of free rent, tenant improvement allowances, or other comparable concessions), but disregarding the rent historically paid under this Lease.
- (e) If Tenant shall exercise the Extension Option in accordance with this Section 3, the provisions of this Section shall be self-operative, but upon request by either party after determination of the Yearly Fixed Rent for the Extension Term, the parties shall execute an agreement specifying the Yearly Fixed Rent for the Extension Term and acknowledging the extension of the Term.
- (f) Notwithstanding any provision of this Section to the contrary, Tenant's option to extend the Term shall be void, at Landlord's election, if (i) Tenant is in default hereunder, after any applicable notice and cure periods have expired, at the time Tenant elects to extend the Term or at the time the Term would expire but for such extension, or (ii) the Tenant originally named herein (or its Successor as defined in Section 14.3 of the Lease) shall occupy less than 80% of the rentable square feet of the Demised Premises.
- 7. Miscellaneous Provisions. The Lease is hereby amended as follows:
- (a) Section 7.1 of the Lease is hereby amended by deleting the fourth sentence thereof and inserting in its place: "Tenant's use of electrical energy in the Demised Premises shall not at any time exceed the capacity of any of the electrical conductors and equipment in or otherwise serving the Demised Premises, provided that Landlord shall not materially alter the capacity of the electrical conductors and equipment currently serving the Demised Premises." The parties acknowledge that *Exhibit E* attached hereto sets forth the current methodology for determining Tenant's electrical charges under the Lease.
- (b) Section 7.5 of the Lease is hereby amended by deleting the words "on an around-the-clock basis" from clause (f) and inserting in their place "during the hours of 8:00 a.m. to 8:00 p.m. on Mondays through Fridays and 8:00 a.m. to 12:00 p.m. on Saturdays (excluding holidays in all cases) and thereafter as reasonably appropriate from time to time".
- (c) Section 16(b) of the Lease is hereby amended by deleting the words "three (3)" in both places where it appears and inserting in their place the words "nine (9)". Section 16(c) is hereby amended by inserting after the word "Lease" in the third line thereof the words "(which damage is estimated to require more than half of the remaining Term to repair)."
  - (d) Section 27.10 on Exhibit F attached hereto is hereby added to the Lease after Section 27.9.
- (e) With respect to overtime HVAC under Section 3.4 of the Lease, the current procedures for requesting such services from Landlord are set forth on *Exhibit G* attached hereto.
- 8. Notice Addresses. Tenant's notice address is hereby amended to be:

Pegasystems Inc. 101 Main Street Cambridge, MA 02142 Attention: General Counsel With a copy of any default notice to:

Kurzman Eisenberg Corbin Lever & Goodman, LLP One North Broadway, 10 th floor White Plains, New York 10601 Attention: Robin Levitt Topol, Esq.

- 9. Brokerage. Landlord and Tenant each represents and warrants that it has had no dealings with any broker or agent in connection with this Amendment other than Spaulding & Slye ("Broker"). Each party covenants to pay, hold harmless and indemnify the other party from and against any and all costs, expenses or liability for any compensation, commissions, and charges claimed by any other broker or agent arising from its breach of the foregoing warranty. Landlord shall be responsible for the payment of brokerage fees to Broker pursuant to a separate agreement between Landlord and Broker. Any additional brokerage commission or other compensation payable in connection with this Amendment shall be the sole responsibility of Tenant.
  - 10. Ratification. Except as set forth herein, the Lease, as previously amended, is hereby ratified and confirmed in all respects.

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LANDLORD:	
NOP	R IVERFRONT LLC, laware limited liability company
Ву:	National Office Partners Limited Partnership a Delaware limited partnership, its Managing Member
Ву:	Hines National Office Partners Limited Partnership, a Delaware limited partnership, its General Partner
Ву:	Hines Fund Management, L.L.C., a Delaware limited liability company, its General Partner
Ву:	Hines Interests Limited Partnership, a Delaware limited partnership, its sole member
Ву:	Hines Holdings, Inc., a Texas corporation its General Partner
By:	/s/ J effrey C. H ines
	Jeffrey C. Hines President

P EGASYSTEMS I NC .,
a Massachusetts corporation

By: /s/  $\;\;J$  ohn H. P arker , J r .

John H. Parker Jr Vice President

By: /s/  $\,$  C hristopher S ullivan

Christopher J. Sullivan Chief Financial Officer

By:  $/s/\quad A \ \mathsf{LAN} \ T \ \mathsf{REFLER}$ 

Alan Trefler Chief Executive Officer

Temporary Space—Floor Plan

### **EXHIBIT B**

### Letter of Credit Requirements

The Letter of Credit required under the Amendment to which this Exhibit is attached (i) shall be irrevocable and shall be issued by a commercial bank reasonably acceptable to Landlord that has an office in Boston, Massachusetts, New York City, New York, or any other major U.S. city, (ii) shall require only the presentation to the issuer of a certificate of the holder of the Letter of Credit stating that a default has occurred under this Lease after the expiration of any applicable notice and cure period (or that Tenant has failed to timely perform any obligation under the Lease and transmittal of a default notice is barred by applicable law), (iii) shall be payable to Landlord or its successors in interest as the Landlord and shall be freely transferable without cost to any such successor or any lender holding a collateral assignment of Landlord's interest in the Lease, (iv) shall be for an initial term of not less than one year and contain a provision that such term shall be automatically renewed for successive one-year periods unless the issuer shall, at least 45 days prior to the scheduled expiration date, give Landlord notice of such nonrenewal, and (v) shall otherwise be in form and substance reasonably acceptable to Landlord. Notwithstanding the foregoing, the term of the Letter of Credit for the final period shall be for a term ending not earlier than the date thirty (30) days after the last day of the Extension Term, as the same may be extended.

Landlord shall be entitled to draw upon the Letter of Credit for its full amount or any portion thereof (i) if Tenant shall be in default under the Lease, after the expiration of any applicable notice or cure period (or that Tenant has failed to timely perform any obligation under the Lease and transmittal of a default notice is barred by applicable law), or (ii) if, not less than 30 days before the scheduled expiration of the Letter of Credit, Tenant has not delivered to Landlord a new Letter of Credit in accordance with this Section (which failure shall be deemed a default without notice or cure period). Landlord may, but shall not be obligated to, apply the amount so drawn to the extent necessary to cure Tenant's default under the Lease. Any amount drawn in excess of the amount applied by Landlord to cure any such default shall be held by Landlord as a security deposit for the performance by Tenant of its obligations hereunder. Said security deposit may be mingled with other funds of Landlord, and no fiduciary relationship shall be created with respect to such deposit, nor shall Landlord be liable to pay Tenant interest thereon. If Tenant shall fail to perform any of its obligations under this Lease, Landlord may, but shall not be obliged to, apply the security deposit to the extent necessary to cure the default. After any such application by Landlord of the Letter of Credit or security deposit, Tenant shall reinstate the Letter of Credit to the amount originally required to be maintained hereunder, upon demand. Within thirty (30) days after the expiration or sooner termination of the Extension Term, as the same may be extended, the Letter of Credit and any security deposit, to the extent not applied, shall be returned to the Tenant, without interest.

In the event of a sale of the Building or lease, conveyance or transfer of the Building, Landlord shall transfer the Letter of Credit or security deposit to the transferee and Landlord shall thereupon be released by Tenant from all liability for the return of such security; and Tenant agrees to look to the transferee solely for the return of said security. The provisions hereof shall apply to every transfer or assignment made of the security to such a transferee. Tenant further covenants that it will not assign or encumber or attempt to assign or encumber the Letter of Credit or the monies deposited herein as security, and that neither Landlord nor its successors or assigns shall be bound by any assignment, encumbrance, attempted assignment or attempted encumbrance.

### **EXHIBIT C**

### Security/Telecommunications Work

- 1. Moving costs
- 2. IT backbone design
- 3. IT switching
- 4. New fiber optic system between floors
- 5. Upgrade to IT servers
- 6. New phone system
- 7. New voice mail system
- 8. New security system
- 9. Additional cooling in the 7 <sup>th</sup> floor wire closet 10. Additional cooling in the 5 <sup>th</sup> floor performance lab
- 11. New fire suppression system in the 6 <sup>th</sup> floor data center and the 5 <sup>th</sup> floor performance lab
- 12. Removal of unused high and low voltage wiring, cabling, and dead circuits

### **EXHIBIT D**

### 6.4 Tenant's Proportionate Share; Audit Rights.

Tenant's proportionate share of taxes pursuant to Section 6.2 shall mean the fraction, expressed as a percentage, equal to the Rentable Area of the Demised Premises (which is deemed to be 85,228 square feet as of the date hereof) divided by the total rentable area of the Building (which is deemed to be 340,908 square feet as of the date hereof), and Tenant's proportionate share of operating expenses pursuant to Section 6.3 shall mean the fraction, expressed as a percentage, equal to the Rentable Area of the Demised Premises divided by the total rentable area of the Building, exclusive of the rentable area of the portion of the Building from time to time designated by Landlord for retail use (which is deemed to be 7,841 square feet as of the date hereof). Computations of rentable area arising from any future changes in the Demised Premises, the Building, or its retail area shall be made by Landlord's architect whose good faith determination shall be conclusive and binding on Tenant.

Notwithstanding anything to the contrary in the Lease as set forth above, the following items shall be excluded from operating expenses under Section 6.3: (1) salaries and compensation for officers and executives of Landlord (above the level of senior building manager), unless for work actually performed in or about the Building ordinarily done by an unrelated third person, and then only at compensation no higher than that which would have been paid to such third person; (2) legal or other fees, leasing or brokerage commissions, advertising expenses, promotional expenses and other costs incurred in lease negotiations or enforcement of leases against tenants or in renewing, amending or terminating leases; (3) any insurance premium to the extent that Landlord is, or is entitled to be, separately reimbursed therefor by Tenant pursuant to this Lease (other than pursuant to this Article) or by any other tenant or other occupant of the Building pursuant to its lease (other than pursuant to an operating expenses escalation clause contained therein); (4) the cost of any items for which Landlord is, or is entitled to be, reimbursed by insurance or otherwise compensated, including reimbursement by any tenant (other than pursuant to an operating expenses escalation clause contained therein); (5) costs of alterations, additions, changes, replacements, and improvements made in order to prepare space for occupancy by a new tenant; (6) the cost of electricity furnished to the Demised Premises or any other space in the Building leased to tenants; (7) Landlord's taxes under Section 6.2; (8) debt service, payments of principal, or any other costs (including, without limitation, legal fees) of the financing or refinancing of any mortgage or costs incurred in connection with any other financing, sale, or syndication of the Building or any interest therein; (9) the costs of any items furnished to other tenants in the Building but not furnished to Tenant hereunder (provided that the costs incurred by Landlord in providing any services to Tenant that are not provided on the same basis to all tenants in the Building shall be allocated among Tenant and any other tenants receiving such services); (10) the cost of capital items or amortization of the Building, except to the extent amortized costs of capital items may be charged as Amortized Capital Costs (as defined below); (11) damages, penalties, or fines that Landlord is obligated to pay by reason of Landlord's violation of applicable law or failure by Landlord to comply with its lease obligations, to the extent not arising from any failure by Tenant to timely comply with its obligations under the Lease; (12) the costs of environmental testing and of complying with applicable federal, state and local laws dealing with the handling, storage and disposal of hazardous materials or substances not arising in the ordinary course of operating a first-class office building, to the extent not caused by the act or omission of Tenant or its agents, employees, or contractors; (13) depreciation; (14) any rent paid on any ground or underlying lease of the Land: (15) payments to affiliates of Landlord, to the extent the same exceed the market rate for such services in comparable owner-managed buildings in the vicinity; (16) travel, entertainment or dining expenses, other than those reasonable and customary in the operation of the Building, (17) costs that would otherwise constitute operating expenses to the extent related exclusively to retail or storage space in the Building, (18) costs of operating, maintaining, repairing and restoring the parking garage, and (19) management fees in excess of 2.5% of gross revenues provided the same do not exceed market rates. "Amortized Capital Costs" shall mean amortized capital expenditures for the purpose of reducing operating expenses as set forth in Section 6.3 or for alterations and improvements to the Building by reason of any laws, building codes, regulations first applicable to the property after the date hereof or other requirements of any governmental or quasi-governmental authorities or the requirements of insurance

bodies imposed on Landlord or Landlord's insurer or to maintain the Property as a first-class building, in each case amortized as set forth in Section 6.3. Landlord represents that to its best knowledge the ADA requirements and all life and health safety systems, including sprinklers, fire and smoke alarms, are in compliance with local and federal laws, codes, regulations and ordinances.

If less than ninety-five percent (95%) of the Building is occupied at any time, then those items included in operating expenses that are subject to change based upon actual occupancy in the Building shall be appropriately adjusted by Landlord to the amounts that said items would have been, as reasonably determined by Landlord, had the Building been fully occupied at all times during such year. Similar adjustments may be made by Landlord in cases in which the tenants do not require or desire such work or service, or the tenants are themselves obtaining and providing such item of work or service.

Upon request by Tenant made within one hundred twenty days after delivery to Tenant of Landlord's year-end statement concerning operating expenses, and no more than once annually, Landlord shall make available for Tenant's review pertinent records and documents used in preparing such statement. Any such review shall be conducted by a certified public accountant from a nationally recognized accounting firm. Prior to such review Tenant (and its accountant) shall enter into a confidentiality agreement in a form reasonably supplied by Landlord restricting the use of such information solely to the determination of Tenant's share of operating expenses hereunder and certifying that Tenant has not engaged such reviewer or accountant or any other person or firm on a contingency fee basis in connection with such review. Such review shall take place during business hours on no more than five (5) business days in the offices of Landlord or its building manager (or in another location in Boston specified by Landlord) and shall be completed within fifteen (15) business days after the date that such materials are first made available. Review shall be limited to the records evidencing the operating expenses allocable to the Demised Premises that were used by Landlord in preparing such year-end statement. Copies of any documents requested by Tenant shall be made by Landlord at Tenant's reasonable expense. If Tenant has not furnished Landlord with a completed audit report within three (3) months after the date such access is first made available to Tenant specifically identifying the particular items from Landlord's year-end statement that are in dispute, then Tenant shall be deemed to have accepted the year-end statement with respect to all items that have not been so disputed. If operating expenses for the calendar year (as finally determined hereunder) are less than reported, Landlord shall, at Tenant's election, pay such amount to Tenant within thirty (30) days or provide Tenant with a credit against the next installment of Rent in the amount of the overpayment by Tenant. If operating expenses for the calendar year (as finally determined hereunder) are greater than reported, Tenant shall pay Landlord the amount of any underpayment within thirty (30) days. During the pendency of any such review or any dispute, Tenant shall make payments of additional rent for operating expenses based on Landlord's calculations, and Tenant shall have no right to abate rent or offset any amounts against any payments otherwise due under this Lease. The rights granted under this paragraph are personal to the Tenant originally named herein (and any Successor under Section 14.3 of the Lease to which the Lease may be assigned) and may not be exercised by or on behalf of any subtenant or other party. In no event shall Tenant be permitted to examine Landlord's records or to dispute any statement of operating expenses if Tenant is then in default under this Lease continuing beyond any applicable notice and cure period. If Landlord does not invoice Tenant for any item of operating expenses, real estate taxes, or other charges for additional rent under Articles 6 and 7 of the Lease within twenty-four (24) months after Landlord's payment of the costs of such item (or, if later, within twenty-four (24) months after the end of the pertinent accrual period for the costs of such item), Landlord shall be deemed to have waived its right to seek reimbursement for such item; provided, however, that this sentence shall not apply to any such items for which an invoice is barred by applicable law or is not given for any other reason beyond Landlord's control or to any such items if Tenant claims a refund, rebate, or other disputed amounts for any charges under the Lease with respect to the calendar year in which such item was incurred or accrued or any other prior period.

### **EXHIBIT E**

### PROCEDURE FOR ALLOCATION OF COSTS OF ELECTRIC POWER USAGE BY TENANTS (101 Main Street, Cambridge, Massachusetts)

- 1. Main electric service to the Building will be provided by the local utility company to the base building meters. These meters track electricity usage from stairwell and emergency lights; elevators; heat pumps and HVAC in the Building; exterior lighting; and all main Building mechanical systems (common areas on each floor, including the elevator lobby, corridors, and bathrooms) (the "Base Building Electricity") and shall be allocated to tenants. All charges by the utility will be read from this meter and billed to and paid by Landlord at rates established by the utility company.
- 2. All costs of Base Building Electricity to Landlord shall be treated as part of the operating expenses of the Building for purposes of determining the allocation of those costs.
- 3. Separate electric service from the utility company directly to tenants will be required by Landlord for each tenant to measure all electricity provided for lights, power specific tenant equipment including computer room and telephone room HVAC, cafeterias, or other special purpose facilities.

### **EXHIBIT F**

### Other Lease Sections

27.10 Holding Ove r. If Tenant (or any person holding under or through Tenant) fails to vacate and surrender the Demised Premises to Landlord as required hereunder upon the termination or expiration of the Term, such holding over shall be, except as Landlord may elect pursuant to the next sentence, as a tenant at sufferance (requiring 30 days' notice of termination by either party to the other) at a monthly fixed rent ("Holdover Rent") equal to (i) 125% (for the first thirty (30) days of any such holdover), (ii) 150% (for the next thirty (30) days of any such holdover), and (iii) thereafter, 200% of the greater of the Yearly Fixed Rent due hereunder for the last month of the Term or the rent being quoted by Landlord for comparable space in the Building at the time of the termination or expiration of the Term, and otherwise subject to all the covenants and conditions (including obligations to pay Additional Rent under Sections 6.2 and 6.3) of this Lease as though it had originally been a monthly tenancy. Notwithstanding the foregoing, if Landlord desires to regain possession of the Demised Premises promptly after the termination or expiration hereof and prior to acceptance of rent for any period thereafter, Landlord may, at its option, forthwith re-enter and take possession of the Demised Premises or any part thereof without process or by any legal process in force in The Commonwealth of Massachusetts.

Notwithstanding the establishment of any holdover tenancy following the expiration or earlier termination of the Term, if Tenant fails promptly to vacate the Demised Premises at the expiration or earlier termination of the Term, Tenant shall save Landlord harmless and indemnified against any claim, loss, cost or expense (including reasonable attorneys' fees) arising out of Tenant's failure promptly to vacate the Demised Premises (or any portion thereof) and upon demand pay to Landlord any damages or loss incurred by Landlord as a result of any delayed or terminated lease of all or part of the Premises by another party.

### REQUESTING OVERTIME HVAC

### **General Information:**

Overtime HVAC is defined as heating or cooling *after* Business Hours. Business Hours for Riverfront Office Park are Monday through Friday 8AM to 6PM and Saturday 8AM to 12PM, Commonwealth of Massachusetts holidays excluded. A list of Tenant-authorized requestors shall be on file at the Management Office, and Security Lobby Desk. It is the responsibility of the Tenant to maintain a current list and submit that list to Hines Management. Hines has provided a Heat Pump Location guide that should be distributed to each Tenant-approved requestor. Requestors should be prepared to reference this location guide when making a request for overtime HVAC. Additional copies of this map may be obtained through the Management Office.

### Procedures for making a request: DURING BUSINESS HOURS

1. Tenant-authorized requestor may e-mail ( *Christine\_granade@hines.com* ) or FAX attached "Overtime HVAC Request" form (see attached) to the Management Office at (617) 494-1760. Requestors should be familiar with the provided heat pump location map, and be prepared to reference a heat pump location and number(s).

2.	Overtime Service for:	Please make request by:
	Weekdays, holidays excluded	3PM of the day needed
	Weekends (Saturday after 12PM; Sunday)	3PM the preceding Friday
	Holidays	5PM the preceding workday

#### AFTER BUSINESS HOURS

- 1. After business hours, requestor shall contact Security at (617) 497-7711, Option 1, and request will be relayed to the on-call Hines engineering staff who will execute the service as requested.
- 2. Requestor will be asked by Security to provide information needed on Overtime HVAC Request form, mainly concerning the specific heat pump(s) that are to be programmed and their floor/area location(s). Requestors should be familiar with the provided heat pump location map, and be prepared to reference a heat pump location and number(s).

### NOTES:

- The targeted service level for overtime HVAC requests made after business hours is 30 minutes from the time the call is initiated.
- These procedures are subject to change with 30 days prior written notice to tenant. Changes, if any, will be consistent with services rendered in comparable Class A buildings in Cambridge.

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**Exhibit 10.24** 

November 5, 2002

Pegasystems Inc. 101 Main Street

Cambridge, Massachusetts 02142 Attention: Mr. Christopher Sullivan

Re: Lease dated February 26, 1993 with NOP Riverfront LLC, as successor in interest to Riverfront Office Park Joint Venture, and Pegasystems Inc. (as amended, the "Lease") regarding space at 101 Main Street, Cambridge, Massachusetts

### Dear Chris:

You have advised us about a change in the anticipated schedule for Pegasystems to make tenant improvements in its space at 101 Main Street. Paragraphs 1(e) and 1(f) of Amendment No. 8 to Agreement of Lease dated July 31, 2002 contemplate that Pegasystems would perform certain improvements and requisition the Finish Work Allowance and the Additional Allowance no later than May 16, 2004. This letter will confirm the Landlord's agreement that (a) the May 16, 2004 outside date will apply to 20% of each such allowance, and (b) Pegasystems will requisition at least an additional 20% of each such allowance each anniversary thereafter through May 16, 2008, provided that the Landlord reserves the right not to fund any such requisition for work in connection with any sublease or assignment (other than to a Successor as defined in Section 14.3 of the Lease). Capitalized terms used and not defined herein have the meanings set forth in the Lease.

Sincerely,

/s/ S HAY S IMS

Acknowledged and Agreed:

P EGASYSTEMS I NC .

By: /s/ C HRIS S ULLIVAN

Chris Sullivan

C: Michael Francis

Exhibit 21.1

### SUBSIDIARIES OF PEGASYSTEMS, INC.

Name of Subsidiary	Jurisdiction of Organization
Pegasystems Limited	England
Pegasystems Proprietary Limited	Australia
Pegasystems Worldwide Inc.	United States
Pegasystems Investment Inc.	United States
Pegasystems Company	Canada
GDOO AB (Liquidated 9/30/01 Final Distribution Q1 2002)	Sweden
Pegasystems Private Limited	Singapore

**EXHIBIT 23.1** 

### INDEPENDENT AUDITORS' CONSENT

We consent to the incorporation by reference in Registration Statement Nos. 333-09305, 333-53746, and 333-89707 of Pegasystems Inc. on Form S-8 of our report dated February 17, 2003, appearing in this Annual Report on Form 10-K of Pegasystems Inc. for the year ended December 31, 2002.

Deloitte & Touche LLP Boston, Massachusetts March 10, 2003

Exhibit 99.1

# CERTIFICATION PERSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002 (SUBSECTIONS (a) AND (b) OF SECTION 1350, CHAPTER 63 OF TITLE 18, UNITED STATES CODE)

In connection with the Annual Report of Pegasystems Inc., (the Company) on Form 10-K for the year ended December 31, 2002 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), each of the undersigned officers of Pegasystems Inc., certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

- (1) The Report fully complies with the requirements of Section 13(a) or 15(d), asapplicable, of the Securities Exchange Act of 1934, as amended; and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ A LAN T REFLER

Chairman and Chief Executive Officer (principal executive officer)

February 25, 2003

/s/ C HRISTOPHER S ULLIVAN

Senior Vice President, Chief Financial Officer and Treasurer (principal financial and accounting officer)

February 25, 2003