LEAP WIRELESS INTERNATIONAL INC Form 424B3 May 24, 2001

1

This filing made pursuant to Rule 424(b)(3) under the Securities Act of 1933 in connection with Registration No. 333-60390.

PROSPECTUS

[LEAP WIRELESS LOGO]

LEAP WIRELESS INTERNATIONAL, INC.

373,367 SHARES OF COMMON STOCK

This prospectus relates to the offer and sale of up to 373,367 shares of Leap Wireless International, Inc. common stock by the selling security holders identified in this prospectus. The shares offered by this prospectus were originally issued by us to the selling security holders in connection with an agreement and plan of merger among us, one of our wholly-owned subsidiaries and Backwire.com, Inc. The merger was completed on April 24, 2001 and Backwire is now a wholly-owned subsidiary of Leap. Under the terms of the merger agreement, the former stockholders of Backwire became stockholders of Leap and we agreed to register for resale the shares of our common stock issued to them, which are offered by this prospectus, and bear the expenses of registration of the shares. We will not receive any of the proceeds from the sale of shares of common stock by the selling security holders.

Our common stock is quoted on the Nasdaq National Market under the symbol "LWIN."

On May 22, 2001, the reported last sale price of our common stock on the Nasdaq National Market was \$35.05 per share.

BEFORE INVESTING IN THE SHARES OF OUR COMMON STOCK, PLEASE REFER TO THE SECTION IN THIS PROSPECTUS ENTITLED "RISK FACTORS" BEGINNING ON PAGE 4.

NEITHER THE SECURITIES AND EXCHANGE COMMISSION NOR ANY STATE SECURITIES COMMISSION HAS APPROVED OR DISAPPROVED OF THESE SECURITIES OR DETERMINED IF THIS PROSPECTUS IS TRUTHFUL OR COMPLETE. ANY REPRESENTATION TO THE CONTRARY IS A CRIMINAL OFFENSE.

The date of this prospectus is May 23, 2001.

2

TABLE OF CONTENTS

	PAGE
Prospectus Summary	1
Risk Factors	4
Special Note Regarding Forward-Looking Statements	16

Use of Proceeds	16
Selling Security Holders	17
Plan of Distribution	20
Description of Leap Capital Stock	23
Legal Matters	27
Experts	27
Where to Find Additional Information	2.7

THIS PROSPECTUS INCORPORATES IMPORTANT BUSINESS AND FINANCIAL INFORMATION ABOUT LEAP WIRELESS INTERNATIONAL, INC. AND ITS SUBSIDIARIES THAT IS NOT INCLUDED IN OR DELIVERED WITH THIS DOCUMENT. THIS INFORMATION IS AVAILABLE WITHOUT CHARGE TO SECURITY HOLDERS UPON WRITTEN OR ORAL REQUEST.

YOU SHOULD RELY ONLY ON THE INFORMATION CONTAINED IN OR INCORPORATED BY REFERENCE IN THIS PROSPECTUS. WE HAVE NOT AUTHORIZED ANYONE TO PROVIDE YOU WITH DIFFERENT INFORMATION. WE ARE NOT MAKING AN OFFER OF THESE SECURITIES IN ANY STATE WHERE THE OFFER IS NOT PERMITTED. YOU SHOULD NOT ASSUME THAT THE INFORMATION CONTAINED IN OR INCORPORATED BY REFERENCE IN THIS PROSPECTUS IS ACCURATE AS OF ANY DATE OTHER THAN THE DATE ON THE FRONT OF THIS PROSPECTUS.

Cricket(TM) is a registered trademark of Leap. Pegaso(MR) is a registered service mark of Servicios Administrativos Pegaso, S.C. All other brand names, trademarks and service marks appearing in this prospectus are the property of their respective holders.

i

3

PROSPECTUS SUMMARY

This summary highlights some information from this prospectus, and it may not contain all of the information that is important to you. It is qualified in its entirety by the more detailed information and consolidated financial statements, including the notes to the consolidated financial statements, incorporated by reference in this prospectus. You should read the full text of, and consider carefully the more specific details contained in or incorporated by reference in this prospectus. When used in this prospectus, the terms "Leap," "we," "our," "ours" and "us" refer to Leap Wireless International, Inc. and its consolidated subsidiaries, unless the context requires otherwise, and not to the selling security holders. Unless otherwise specified, information relating to population and potential customers is based on 1998 population estimates provided by Easy Analytic Software Incorporated.

OUR BUSINESS

Leap is a wireless communications carrier that is providing innovative, affordable, simple wireless services designed to accelerate the transformation of wireless service into a mass consumer product. We generally seek to address a much broader population segment than traditional wireless providers have addressed to date. In the U.S., we are offering wireless service under the brand name "Cricket (TM)." Our innovative Cricket strategy is designed to extend the benefits of mobility to the mass market by offering wireless service that is as simple to understand and use as, and priced competitively with, traditional landline service. In each of our markets, we are deploying 100% digital, Code Division Multiple Access, or CDMA, networks that we believe provide higher capacity and more efficient deployment of capital than competing technologies. This, when combined with our efforts to streamline operation and distribution systems, allows us to be a low-cost provider of wireless services in each of our markets.

Cricket service allows customers to make and receive virtually unlimited

calls within a local calling area for a low, flat monthly rate compared with traditional wireless services. Cricket customers pay in advance each month's service from a simple, straightforward bill. We offer Cricket service without a contract, and because service is paid in advance, we currently require no credit check. The simplicity of the Cricket service allows us to sustain lower operating costs per customer compared to traditional wireless providers. Our networks are designed and built to provide coverage in the local calling area where our target customers live, work and play. As a result, we believe that our network operating costs are less than those of traditional wireless providers.

We believe that the Cricket service offering will help transform wireless phone service from a luxury product into a mass consumer product. The Cricket strategy is to provide digital wireless service to the mass market with a simple, easy to understand approach. As a part of the Cricket strategy, we intend to:

- attract new customers more quickly than traditional wireless providers that offer complex pricing plans with peak/off-peak rates, roaming charges and expensive "extra" minutes;
- maintain lower customer acquisition costs by offering one simple service plan with a limited choice of handsets, and by distributing our product through company stores and multiple third-party retail stores where the mass market shops;
- sustain lower operating costs per customer compared to traditional wireless providers through reduced network operation costs, streamlined billing procedures, lower customer care expenses, lower credit investigation costs and reduced bad debt; and
- deploy our capital more efficiently by building our networks to cover only the urban and suburban areas of our markets where most of our potential customers live, work and play, while avoiding rural areas and corridors between distant markets.

At the end of March 2001, we had launched Cricket service in markets covering a total population of approximately 9.2 million and had more than 339,000 Cricket customers across the U.S. To date we have acquired or have rights to acquire wireless licenses covering approximately 72.6 million potential customers in 36 states, and we plan to continue launching new Cricket markets throughout 2001

1

4

and beyond.

In Mexico, we were a founding shareholder and have invested \$100 million in Pegaso Telecomunicaciones, S.A. de C.V., a company that is providing a wireless service in Mexico that is more traditional than our Cricket service. Pegaso holds wireless licenses covering all of Mexico, representing approximately 99 million potential customers. At the end of March 2001, Pegaso had approximately 624,000 customers. We currently own 20.1% of Pegaso. In addition to Leap, Alejandro Burillo Azcarraga, a trust controlled by Mr. Burillo, an individual related to Mr. Burillo, Sprint Mexico, Inc., and affiliates of Citicorp, the Latin American Infrastructure Fund and Nissho Iwai have also invested in Pegaso. Mr. Burillo is a member of our board of directors.

BUSINESS STRATEGY

Our business strategy is to bring innovative wireless communications products and services to markets with strong growth potential. Key elements of

this strategy include:

- Enhancing the Mass Market Appeal of Wireless Service. We are working to remove the price and complexity barriers that we believe have prevented many potential customers from using wireless service. We believe that large segments of the population do not use wireless service because they view wireless service as an expensive luxury item, believe they cannot control the cost of service, or find existing service plans too confusing. Our service plans are designed to offer appealing value in simple formats that customers can understand and budget for.
- Offering an Appealing Value Proposition. We strive to provide service offerings that combine high quality and advanced features with simplicity and attractive pricing to create a "high value/ reasonable price" proposition and broaden the market for wireless services. In the U.S., we offer the Cricket service plan at a flat rate, paid in advance each month, that is competitive with traditional landline service.
- Controlling and Minimizing Costs. To become one of the lowest-cost providers in the wireless industry, we are designing high-quality networks to minimize our capital costs and streamlining marketing, distribution and back-office procedures.
- Leveraging CDMA Technology. We are deploying state-of-the-art CDMA networks that are designed to provide higher capacity at a lower capital cost which can be easily upgraded to support enhanced capacity. We believe this enables us to operate superior networks that support rapid customer growth and high usage. In addition, we believe our CDMA networks will provide a better platform to expand into data and other wireless services based on advances in second and third generation digital technology in the future.
- Expanding Our Cricket Service Through Acquisitions of Domestic Licenses and Buildout of Additional Networks. We intend to expand the Cricket service to selected metropolitan areas in the U.S. through the acquisition of additional wireless licenses and the buildout of networks for our newly-acquired wireless licenses.
- Expanding Our Service Offerings to Include Wireless Data Services. We currently plan to expand our service offerings to include wireless data services designed to appeal to a broad segment of the population and further transform the nature of wireless communications for our customers. We believe that wireless data services, like our innovative Cricket service, need to be simple, easy to use and affordable for all consumers.

2

5

- Investing Selectively in Foreign Ventures. While we expect our emphasis for the next few years to be on our U.S.-based operations, if presented with attractive opportunities, we may invest in international markets where we believe the combination of unfulfilled demand and our attractive wireless service offerings can fuel rapid growth.

Leap was formed as a Delaware corporation in June 1998 as a subsidiary of Qualcomm Incorporated. In September 1998, Qualcomm distributed all of the common stock of Leap to Qualcomm's stockholders as a taxable dividend. Our executive offices are located at 10307 Pacific Center Court, San Diego, CA 92121. Our telephone number is (858) 882-6000.

3

6

RISK FACTORS

An investment in the common stock offered in connection with this prospectus involves a high degree of risk. In addition to the other information in this prospectus, you should carefully consider the following risks before making an investment decision.

WE HAVE A LIMITED OPERATING HISTORY

We have operated as an independent company since September 1998 and we acquired and/or launched all of our existing Cricket markets beginning in January 2000. Because we are at an early stage of development, we face risks generally associated with establishing a new business enterprise. When considering our prospects, investors must consider the risks, expenses and difficulties encountered by companies in their early stages of development. These risks include possible disruptions and inefficiencies associated with rapid growth and workplace expansion, the difficulties associated with raising money to finance new enterprises and the difficulties of establishing a significant presence in highly competitive markets.

OUR BUSINESS STRATEGY IS UNPROVEN

Our business strategy in the U.S., marketed under the brand name Cricket, is to offer consumers a service plan that allows them to make and receive virtually unlimited local calls for an affordable, flat monthly rate. This strategy, which has been introduced in a limited number of markets, is a new approach to marketing wireless services and may not prove to be successful. Our marketing efforts may not draw the volume of customers necessary to sustain our business plan, our capital and operating costs may exceed planned levels, and we may be unable to compete effectively with landline and other wireless service providers in our markets. In addition, potential customers may perceive the Cricket service to be less appealing than other wireless plans, which offer more features and options, including the ability to roam outside of the home service area. If our business strategy proves to be successful, other wireless providers are likely to adopt similar pricing plans and marketing approaches. Should our competitors choose to adopt a strategy similar to the Cricket strategy, some of them may be able to price their services more aggressively or attract more customers because of their stronger market presence and geographic reach and their larger financial resources. Similarly, we currently have several new services in development, including a data service designed to provide wireless information to consumers' mobile phones. These planned services are innovative and unproven. They may not attract or retain customers at a rate necessary to make them profitable and otherwise may not prove to be successful.

WE HAVE A HISTORY OF LOSSES AND ANTICIPATE FUTURE LOSSES

Leap experienced net losses of approximately \$114.4 million in the three month period ended March 31, 2001, \$269.3 million (excluding the gain on the sale of Smartcom, net of related taxes and foreign currency impact) in the year ended December 31, 2000, \$75.8 million in the transition period from September 1, 1999 to December 31, 1999, \$164.6 million in the year ended August 31, 1999, \$46.7 million in the year ended August 31, 1998 and \$5.2 million in the year ended August 31, 1997. Losses are likely to be significant for the next several years as we launch service in new markets and seek to increase our customer bases in new and existing markets. We may not generate profits in the short term or at all. If we fail to achieve profitability, that failure could have a negative effect on the market value of our common stock.

IF WE EXPERIENCE A HIGH RATE OF CUSTOMER TURNOVER, OUR COSTS COULD INCREASE

Many providers in the U.S. personal communications services, or PCS, industry have experienced a high rate of customer turnover as compared to cellular industry averages. The rate of customer turnover may be the result of several factors, including limited network coverage, reliability issues such as blocked or dropped calls, handset problems, inability to roam onto cellular networks, affordability, customer care concerns and other competitive factors. Our strategy to address customer turnover may not be successful,

4

7

or the rate of customer turnover may be unacceptable. In some markets, our competitors have chosen to provide a service plan with pricing similar to the Cricket service, and these competitive factors could also cause increased customer turnover. A high rate of customer turnover could reduce revenues and increase marketing costs in order to attract the minimum number of replacement customers required to sustain our business plan, which, in turn, could have a material adverse effect on our business and financial condition.

WE FACE SIGNIFICANT COMPETITION

The wireless telecommunications industry generally is very competitive and competition is increasing. Unlike many wireless providers, we also intend to compete directly with landline service providers in the telecommunications industry. Many competitors have substantially greater resources than we have, and we may not be able to compete successfully. Some competitors have announced rate plans substantially similar to the Cricket service plan in markets in which we have launched or expect to launch service. These competitive plans could adversely affect our ability to maintain our pricing, market penetration and customer retention.

In the U.S., we will compete directly with other wireless providers and traditional landline carriers in each of our markets, many of which have greater resources than we do and entered the market before us. A few of our competitors operate wireless telecommunications networks covering most of the U.S. Competitors' earlier entry and broader presence in the U.S. telecommunications market may have a negative effect on our ability to successfully implement our strategy. Furthermore, the FCC is actively pursuing policies designed to increase the number of wireless competitors in each of our markets. For example, the FCC will soon auction licenses that will authorize the entry of two additional wireless providers in each market. In addition, other wireless providers in the U.S. could attempt to implement our domestic strategy of providing unlimited local service at a low, flat monthly rate if our strategy proves successful. The landline services with which we will compete are already used by some of our potential customers, and we may not be successful in our efforts to persuade potential customers to adopt our wireless service in addition to, or in replacement of, their current landline service.

Although the deployment of advanced telecommunications services is in its early stages in many developing countries, we believe competition is increasing as businesses and foreign governments realize the market potential of telecommunications services. In Mexico, a number of international telecommunications companies, including Verizon, AT&T, MCI, Motorola, Nextel and SBC, as well as local competitors such as Telmex and other Mexican telecommunications companies, continue to actively engage in developing telecommunications services. Pegaso also competes against landline carriers, including government-owned telephone companies. We also expect the prices that Pegaso may charge for its products and services in some regions will decline over the next few years as competition increases in its markets. Our competitors in Mexico have greater financial resources and more established operations than Pegaso. Pegaso is at an early stage of development and may not be able to

compete successfully.

We compete with companies that use other communications technologies, including paging and digital two-way paging, enhanced specialized mobile radio and domestic and global mobile satellite service. These technologies may have advantages over the technology we use and may ultimately be more attractive to customers. We may compete in the future with companies who offer new technologies and market other services, including cable television access, landline telephone service and Internet access, that we do not currently intend to market. Some of our competitors offer these other services together with their wireless communications service, which may make their services more attractive to customers. In addition, we expect that, over time, providers of wireless communications services will compete more directly with providers of traditional landline telephone services. In addition, energy companies, utility companies and cable operators may expand their services to offer communications services.

LEAP MAY FAIL TO RAISE REQUIRED CAPITAL

We require significant additional capital to build out and operate planned networks and for general working capital needs. We also require additional capital to invest in any new wireless opportunities,

5

8

including capital for license acquisition costs, network buildout of newly-acquired licenses and the planned development and rollout of our wireless data services. Capital markets have recently been volatile and uncertain. These markets may not improve, and we may not be able to access these markets to raise additional capital. If we fail to obtain required new financing, that failure would have a material adverse effect on our business and our financial condition. For example, if we are unable to access capital markets, we may have to restrict our activities or sell our interests in licenses, or in one or more of our subsidiaries or other ventures earlier than planned or at a "distressed sale" price.

YOUR OWNERSHIP INTEREST IN LEAP WILL BE DILUTED UPON ISSUANCE OF SHARES WE HAVE RESERVED FOR FUTURE ISSUANCE

On May 1, 2001, 30,475,740 shares of our common stock were outstanding, and 22,817,050 additional shares of our common stock were reserved for issuance. The number of outstanding shares as of May 1, 2001 does not include Leap's public offering of 3,000,000 shares of common stock announced May 3, 2001, which we completed on May 8, 2001. The number of outstanding shares as of May 1, 2001 also does not include the 373,367 shares offered by this prospectus, which will be delivered to the selling security holders from time to time upon the surrender of their certificates of Backwire stock in exchange for shares of our common stock. The issuance of these additional shares will reduce your percentage ownership in Leap.

As of May 1, 2001, we also had reserved for issuance 22,817,050 shares of our common stock as follows:

- 3,375,000 shares reserved for issuance upon exercise of a warrant issued to Qualcomm in connection with the spin-off of Leap, which is exercisable in whole or in part at any time between now and September 2008;
- 10,500,772 shares reserved for issuance upon the exercise of options or awards granted or available for grant to employees, officers, directors and consultants under Leap's equity incentive plans;

- 2,919,569 shares reserved for issuance upon exercise of options to purchase Leap common stock granted to holders of Qualcomm options in connection with the distribution of Leap's common stock to the stockholders of Qualcomm;
- 2,203,691 shares reserved for issuance upon consummation of our pending acquisitions of wireless licenses in Utica, New York; Visalia, California; Birmingham and Tuscaloosa, Alabama; Jonesboro, Arkansas; and Jackson, Mississippi, and up to 785,598 shares (subject to certain adjustments based upon changes in the market value of wireless licenses) reserved for issuance in connection with our pending acquisition of wireless licenses in Buffalo and Syracuse, New York, all of which acquisitions are subject to FCC approval and other conditions;
- 202,566 shares of common stock reserved for issuance upon exercise of a warrant held by Chase Telecommunications Holdings, Inc.; and
- 2,829,854 shares of common stock reserved for issuance upon exercise of the warrants issued in connection with our February 2000 units offering.

Under certain circumstances, the number of shares to be issued in connection with our acquisitions of wireless licenses is subject to change based on the value of wireless licenses and the market price of our common stock at the time of the closing of the acquisition. In the pending acquisition of wireless licenses in Buffalo and Syracuse, New York that we refer to above, the seller has asserted that based on the results of the recent FCC auction of wireless licenses, it is entitled to a purchase price adjustment that would result in the purchase price being effectively doubled. Under the terms of the agreement, if we are obligated to pay a purchase price adjustment, we are entitled to pay such additional amounts in cash or Leap common stock, at our discretion. We believe the seller's position is without merit, and we will vigorously defend against any claim that the seller may make in the future.

6

9

In December 2000, we entered into a common stock purchase agreement with Acqua Wellington North American Equities Fund, Ltd. under which we may, at our discretion, sell up to a maximum of \$125 million of registered common stock from time to time over the succeeding 28 month period. Under the agreement, we may require Acqua Wellington to purchase between \$10 and \$25 million of common stock, depending on the market price of our common stock, during one or more 18 trading day periods. In addition, we may grant to Acqua Wellington an option to purchase up to an equal amount of common stock during the same 18 trading day period. Acqua Wellington purchases the common stock at a discount to its then current market price, ranging from 4.0% to 5.5%, depending on our market capitalization at the time we require Acqua Wellington to purchase our common stock. A special provision in the agreement (as amended and restated) allowed the first sale of common stock under the agreement to be up to \$55 million. On January 23, 2001, we completed the first sale of our common stock under the agreement, issuing 1,564,336 shares to Acqua Wellington in exchange for \$55.0 million in cash.

Dilution of the outstanding number of shares of our common stock could adversely affect prevailing market prices for our common stock and our ability to raise capital through an offering of equity securities.

In addition to the shares offered by this prospectus, we have agreed to file registration statements to register for resale up to 2,989,289 shares reserved for issuance upon consummation of our pending acquisitions of wireless licenses. Under certain circumstances, the number of shares for which registration rights have been granted is subject to change based on the value of

wireless licenses and the market price of our common stock at the time of the closing of the transactions pursuant to which the shares to be registered are issued.

HIGH LEVELS OF DEBT COULD ADVERSELY AFFECT OUR BUSINESS AND FINANCIAL CONDITION

We have obtained and expect to continue to obtain much of our required capital through debt financing. A substantial portion of the debt financing, including all of our vendor financing, bears or is likely to bear interest at a variable rate, exposing us to interest rate risk.

Our high leverage could have important consequences, including the following:

- our ability to obtain additional financing may be impaired;
- a substantial portion of our future cash flows from operations must be dedicated to the servicing of our debt, thus reducing the funds available for operations and investments;
- our leverage may reduce our ability to adjust rapidly to changing market conditions and may make us more vulnerable to future downturns in the general economy; and
- high levels of debt may reduce the value of stockholders' investments in Leap because debt holders have priority regarding our assets in the event of a bankruptcy or liquidation.

We may not have sufficient future cash flows to meet our debt payments, and may not be able to refinance any of our debt at maturity.

In addition, our vendors have a right and may choose to sell outstanding debt under our vendor financing agreements to third parties at a discount. Such sales could affect the prices at which our outstanding notes trade and could adversely affect the market's perception of Leap's creditworthiness.

OUR DEBT INSTRUMENTS CONTAIN PROVISIONS AND REQUIREMENTS THAT COULD LIMIT OUR ABILITY TO PURSUE BORROWING OPPORTUNITIES

The restrictions contained in the indenture governing the notes issued in our February 2000 units offering, and the restrictions contained in our vendor facilities, may limit our ability to implement our business plan, finance future operations, respond to changing business and economic conditions, secure additional financing, if needed, and engage in opportunistic transactions, such as the acquisition of wireless

7

10

licenses. Such senior debt, among other things, restricts our ability and the ability of our subsidiaries and our future subsidiaries to do the following:

- incur additional indebtedness;
- create liens;
- make certain payments, including payments of dividends and distributions in respect of capital stock;
- consolidate, merge and sell assets;
- engage in certain transactions with affiliates; and

- fundamentally change our business.

In addition, such senior debt requires us to maintain certain ratios, including:

- leverage ratios;
- interest coverage ratios; and
- fixed charges ratios;

and to satisfy certain tests, including tests relating to:

- maximum annual capital expenditures;
- minimum covered population in order to incur additional indebtedness;
- minimum number of subscribers to our services in order to incur additional indebtedness; and
- minimum quarterly revenues and, commencing in 2004, minimum annual revenues.

We may not satisfy the financial ratios, tests and other covenants under our senior debt due to events that are beyond our control. If we fail to satisfy any of the financial ratios, tests, or other covenants, we could be in default under our senior debt or may be limited in our ability to access additional funds under our senior debt, which could result in our being unable to make payments on our outstanding notes. In addition, if we fail to meet performance requirements, our equipment financing may be restricted or cancelled. Because Leap's new Cricket markets were launched later in the fourth guarter of 2000 than anticipated and because of reduced equipment sales revenues as a result of holiday promotions, Cricket revenue was below the minimum required level contained in the financial covenants in the vendor loan facilities. Leap has received waivers of its failure to meet this revenue target from all of the required lenders. We made up this revenue shortfall and were in compliance with the revenue covenant by the end of the first quarter of 2001. There can be no assurance that additional delays in market launches and/or other adverse results in our business will not result in a failure to meet our financial or operating covenants in the future. Any defaults that result in a suspension of further borrowings under the vendor facilities or acceleration of our obligations to repay the outstanding balances under the vendor facilities would have a material adverse effect on our business and our financial condition.

WE MAY EXPERIENCE DIFFICULTIES IN CONSTRUCTING AND OPERATING OUR TELECOMMUNICATIONS NETWORKS

We will need to construct new telecommunications networks and expand existing networks. We will depend heavily on suppliers and contractors to successfully complete these complex construction projects. We may experience quality deficiencies, cost overruns and delays on these construction projects, including deficiencies, overruns and delays not within our control or the control of our contractors. We also will depend on third parties not under our control or the control of our contractors to provide backhaul and interconnection facilities on a timely basis. In addition, the construction of new telecommunications networks requires the receipt of permits and approvals from numerous governmental bodies including municipalities and zoning boards. There are pressures to limit growth and tower and other construction in many of our markets. Failure to receive these approvals in a timely fashion can delay system rollouts and

8

11

can raise the costs of completing construction projects. Pegaso's launch of commercial service in Mexico City was delayed several months due to delays in obtaining the required permits from local authorities for cell site construction and some planned 2000 launches were delayed. Some of our planned Cricket launches were delayed and launched with fewer cell sites than desirable and therefore reduced coverage, as well.

We may not complete construction projects within budget or on a timely basis. A failure to satisfactorily complete construction projects could jeopardize wireless licenses and customer contracts. As a result, a failure of this type could have a material adverse effect on our business and financial condition.

Even if we complete construction in a timely and cost effective manner, we will also face challenges in managing and operating our telecommunications systems. These challenges include operating and maintaining the telecommunications operating equipment and managing the sales, advertising, customer support, billing and collection functions of the business. Our failure in any of these areas could undermine customer satisfaction, increase customer turnover, reduce revenues and otherwise have a material adverse effect on our business and financial condition.

WE HAVE ENCOUNTERED RELIABILITY PROBLEMS DURING THE INITIAL DEPLOYMENT OF OUR NETWORKS

As is typical with newly-constructed and rapidly expanding wireless networks, we have experienced reliability problems with respect to network infrastructure equipment, reliability of third party suppliers and capacity limitations of our networks. If our networks ultimately fail to perform as expected, that failure could have a material adverse effect on our business and financial condition.

CALL VOLUME UNDER CRICKET FLAT PRICE PLANS COULD EXCEED THE CAPACITY OF OUR WIRELESS NETWORKS

Our Cricket strategy in the U.S. is to offer consumers a service plan that allows them to make virtually unlimited local calls for a low, flat monthly rate. Our business plans for this strategy assume that Cricket customers will use their wireless phones for substantially more minutes per month than customers who purchase service from other providers under more traditional plans. Our current plans assume, and our experience has shown, that our Cricket customers use their phones approximately 1,100 minutes per month. We design our U.S. networks to accommodate this expected high call volume. Although we believe CDMA-based networks will be well suited to support high call volumes, if wireless use by Cricket customers exceeds the capacity of our future networks, service quality may suffer, and we may be forced to raise the price of Cricket service to reduce volume or otherwise limit the number of new customers, or incur substantial capital expenditures to expand network capacity. If our planned networks cannot handle the call volumes they experience, our competitive position and business prospects in the U.S. could be materially adversely affected.

THE FCC'S DECISION THAT WE ARE QUALIFIED TO HOLD C-BLOCK AND F-BLOCK LICENSES IS SUBJECT TO REVIEW AND APPEAL

Our business plan depends on our acquisition and operation of C-Block and F-Block licenses in the U.S. We may acquire and operate C-Block and F-Block licenses only if we qualify as a "designated entity" under FCC rules.

In July 1999, the FCC issued an opinion and order that found that we were entitled to acquire C-Block and F-Block licenses. The order approved our acquisition of the 36 C-Block licenses for which we were the highest bidder in the FCC's 1999 spectrum re-auction, and the transfer of three F-Block licenses which cover portions of North Carolina from AirGate Wireless, L.L.C. to one of our subsidiaries, in each case subject to the fulfillment of certain conditions. In October 1999, the FCC issued to us the 36 re-auctioned licenses. In addition, in March 2000, the FCC approved the transfer to us of 11 C-Block licenses from Chase Telecommunications and one F-Block license from PCS Devco. Subsequently, the FCC has approved the transfer to us of various other C-Block and F-Block licenses.

9

12

The FCC's grants of our C-Block and F-Block licenses are subject to certain conditions. Each of the conditions imposed by the FCC in the opinion and order has been satisfied. We have a continuing obligation, during the designated entity holding period for our C-Block and F-Block licenses, to limit our debt to Qualcomm to 50% or less of our outstanding debt and to ensure that persons who are or were previously officers or directors of Qualcomm do not comprise a majority of our board of directors or a majority of our officers. If we fail to continue to meet any of the conditions imposed by the FCC or otherwise fail to maintain our qualification to own C-Block and F-Block licenses, that failure could have a material adverse effect on our business and financial condition.

Various parties previously challenged our qualification to hold C-Block and F-Block licenses, which challenges were rejected in the FCC's July 1999 order. One of these parties, a wireless operating company, requested that the FCC review its order, as well as the order consenting to the transfer of licenses to us from Chase Telecommunications and PCS Devco. That wireless operating company also has opposed all of our subsequent assignment or transfer applications at the FCC. In July 2000, the FCC affirmed its July 1999 order as well as the order consenting to the transfer of licenses to us from Chase Telecommunications and PCS Devco, and the wireless operating company subsequently appealed the FCC's decision with the Court of Appeal for the D.C. Circuit. In November 2000, the wireless operating company and Leap executed a settlement agreement that resolves all pending agency or court proceedings brought by the wireless operating company against Leap applications. This agreement was approved by the FCC on March 1, 2001. The wireless operating company has withdrawn all pending agency and judicial challenges to Leap's applications. On March 15, 2001, the United States Court of Appeals for the D.C. Circuit issued an order dismissing the wireless operating company's appeal. On April 13, 2001, the FCC issued a public notice officially approving the withdrawal of the wireless operating company's pending petitions to deny and applications for review of our applications. While we believe further review is unlikely, this action may still be subject to additional judicial or administrative review.

Further judicial review of the FCC's orders granting us licenses is possible. In addition, licenses awarded to us at auction may be subject to the outcome of pending judicial proceedings by parties challenging the auction process or the FCC's decision or authority to auction or reauction certain C-Block and F-Block licenses. We may also be affected by other pending or future FCC, legislative or judicial proceedings that generally affect the rules governing C-Block and F-Block licensees or other designated entities. For example, recent FCC rules changes have made it easier for large companies to acquire C-Block and F-Block licenses at auction and in the aftermarket.

In a reauction of C-Block and F-Block PCS spectrum that closed in January 2001, we were named the high bidder on 22 licenses covering 22.4 million potential customers. These licenses have not yet been granted to us, and we cannot predict what effect any challenges before the FCC or in court to the

reauction generally, or the grant of these licenses to us specifically, will have on us. NextWave Telecommunications, Inc. is a party to litigation challenging the validity of the auction. Other parties have indicated publicly that they intend to challenge the validity of the auction and grants thereunder, as well.

We may not prevail in connection with any such challenges, appeals or proceedings. If the FCC or a court determines that we are not qualified to hold C-Block or F-Block licenses, it could take the position that some or all of our licenses should be divested, cancelled or reauctioned, or that we should pay certain financial penalties.

IT MAY BE MORE DIFFICULT FOR US TO ACQUIRE C- AND F-BLOCK LICENSES IN THE FUTURE

Regulatory changes or requirements, or market circumstances, could make it more difficult to acquire C- or $F-Block\ PCS$ licenses, either at auction or in the aftermarket.

The FCC held a reauction of 422 C-Block and F-Block licenses that closed in January 2001. In connection with that reauction, the FCC made a number of changes to its wireless and PCS licensing rules, and to the size of the licenses being sold. Specifically, the FCC subdivided the C-Block licenses slated for reauction into three 10 MHz licenses. For this reauction, the FCC also subdivided the basic trading area, or BTA, service areas to which C-Block and F-Block eligibility restrictions would continue to

10

13

apply into two tiers according to population. In so-called "Tier 1" BTAs, service areas with a population equal to or greater than 2.5 million, the FCC removed all eligibility restrictions on two of the newly-created 10 MHz C-Block licenses, and sold them in open bidding to any entity that could afford to purchase them, no matter how large. In these Tier 1 BTAs, one 10 MHz C-Block license remained subject to a closed bidding process, such that only entities meeting C-Block and F-Block eligibility requirements were permitted to bid. In Tier 2 BTAs, service areas with a population less than 2.5 million, two of the 10 MHz C-Block licenses remained subject to C-Block and F-Block eligibility rules and thus were reserved for closed bidding by designated entities, while one 10 MHz C-Block license per BTA was sold at open bidding. Several 15 MHz C-Block licenses and a number of F-Block licenses slated for reauction also were sold at open bidding, such that previous C-Block and F-Block eligibility requirements no longer applied.

The FCC's reauction that closed in January 2001 represented a compromise that made some additional spectrum available to large carriers, but also continued to preserve C-Block and F-Block spectrum for designated entities. The FCC's C-Block and F-Block rules, the recent reauction, and FCC actions taken in connection with previous C-Block auctions and reauctions, remain subject to pending FCC and judicial proceedings. These proceedings, and continuing changes to the C-Block and F-Block rules, could have a material adverse effect on our business and financial condition, including our ability to continue acquiring C-Block and F-Block licenses. In addition, in the reauction, we were named the high bidder on 22 licenses covering 22.4 million potential customers.

These licenses have not yet been granted to us, and we cannot predict what effects any challenges before the FCC or in court to the reauction generally, or the grant of these licenses to us specifically, will have on us. NextWave Telecommunications, Inc. is a party to litigation challenging the validity of the auction. Other parties have indicated publicly that they intend to challenge the validity of the auction and grants thereunder, as well.

While we are in compliance with the terms of our C- and F-Block licenses,

as a result of the expansion of our business, we have now grown beyond certain designated entity size thresholds specified in FCC rules. This growth will likely preclude our ability to obtain additional C- or F-Block licenses that may be auctioned by the FCC in the future. This growth does not preclude us from continuing to acquire C- and F-Block licenses in the aftermarket, but we may be subject to unjust enrichment penalties if we seek to acquire C- or F-Block licenses from entities that qualify as "very small businesses" under FCC rules.

WE MAY NOT SATISFY THE BUILDOUT DEADLINES AND GEOGRAPHIC COVERAGE REQUIREMENTS APPLICABLE TO OUR LICENSES, WHICH MAY RESULT IN THE REVOCATION OF SOME OF OUR LICENSES OR THE IMPOSITION OF FINES AND/OR OTHER SANCTIONS

Each of our licenses is subject to an FCC mandate that we construct PCS networks that provide adequate service to specified percentages of the population in the areas covered by that license, or make a showing of substantial service in that area, within five and ten years after the license grant date. For 30 MHz C-Block licenses, this initial requirement is met when adequate service is offered to at least one-third of the population of the licensed service area. For 15 MHz and 10 MHz C-Block licenses and 10 MHz F-Block licenses, the initial requirement is met when adequate service is provided to at least one-quarter of the population in the licensed service area. Because we obtained many of our wireless licenses from third parties subject to existing buildout requirements, some of our licenses have buildout deadlines in 2001 and several other licenses have buildout deadlines in the first half of 2002. We are unable to predict whether the required coverage will be achieved and we have applied to the FCC for a limited waiver of its construction requirements for a number of licenses. We cannot predict whether or the extent to which our request will be granted. Failure to comply with FCC buildout requirements could cause the revocation of some of our licenses or the imposition of fines and/or other sanctions.

11

14

ADVERSE REGULATORY CHANGES COULD IMPAIR OUR ABILITY TO MAINTAIN EXISTING LICENSES AND OBTAIN NEW LICENSES

We must maintain our existing telecommunications licenses and those we acquire in the future to continue offering wireless telecommunications services. Changes in regulations or failure to comply with the terms of a license or failure to have the license renewed could result in a loss of the license, penalties and fines. For example, we could lose a license if we fail to construct or operate a wireless network as required by the license. If we lose a license, that loss could have a material adverse effect on our business and financial condition.

State regulatory agencies, the FCC, the U.S. Congress, the courts and other governmental bodies regulate the operation of wireless telecommunications systems and the use of licenses in the U.S. The FCC, Congress, the courts or other federal, state or local bodies having jurisdiction over our operating companies may take actions that could have a material adverse effect on our business and financial condition.

Foreign governmental authorities regulate the operation of wireless telecommunications systems and the use of licenses in the foreign countries in which we operate. In some cases, the regulatory authorities also operate our competitors. Changes in the current regulatory environment of these markets could have a negative effect on us. In addition, the regulatory frameworks in some of these countries are relatively new, and the interpretation of regulations is uncertain.

We believe that the process of acquiring new telecommunications licenses

will be highly competitive. If we are not able to obtain new licenses, or cannot otherwise participate in companies that obtain new licenses, our ability to expand our operations would be limited.

RISKS ASSOCIATED WITH PEGASO COULD ADVERSELY AFFECT OUR BUSINESS

We face many risks from our international activities. Pegaso in Mexico largely depends on the Mexican economy. The Mexican market is subject to rapid fluctuations in currency exchange rates, consumer prices, inflation, employment levels and gross domestic product.

Mexico's currency and financial markets continue to experience volatility. The impact on the Mexican economy of the economic crisis that began in Asia and then spread to Eastern Europe and Brazil has affected the ability of Mexican companies to access the capital markets. The ability of Mexican companies to access the capital markets may not improve and may deteriorate further in the future. The economy of Mexico historically is affected by fluctuations in the price of oil and petroleum products. Fluctuations in the prices of these products and continuing political tensions in Mexico could negatively impact our prospects in Mexico.

In addition, foreign laws and courts govern many of the agreements of Pegaso. Other parties may breach or may make it difficult to enforce these agreements.

Pegaso requires substantial additional capital to continue its planned growth and operations. Leap may contribute capital to Pegaso in the future. If Leap does not contribute additional capital to Pegaso, Leap's ownership interest in Pegaso may be diluted due to additional capital contributions of other investors.

If presented with attractive opportunities, Leap may invest in additional international markets in the future. Any such international investment would create risks associated with the applicable foreign country's economic condition, including but not limited to currency exchange rates, inflation, employment levels and gross domestic product.

OUR RESULTS OF OPERATIONS MAY BE HARMED BY FOREIGN CURRENCY FLUCTUATIONS

We are exposed to risk from fluctuations in foreign currency rates, which could impact our results of operations and financial condition. Although we report our financial statements in U.S. dollars, Pegaso reports its results in Mexican pesos. Consequently, fluctuations in currency exchange rates between the

12

15

U.S. dollar and the Mexican peso will affect our results of operations as well as the value of our ownership interest in Pegaso. We do not currently hedge against foreign currency exchange rate risks.

Pegaso generates revenues that are paid in Mexican pesos. However, many of Pegaso's major contracts, including financing agreements and contracts with equipment suppliers, are denominated in U.S. dollars. As a result, a significant change in the value of the U.S. dollar against the Mexican peso could significantly increase Pegaso's expenses and could have a material adverse effect on our business and financial condition. For example, Pegaso may be unable to satisfy its obligations under equipment supply agreements denominated in U.S. dollars in the event of currency devaluations. In some developing countries, including Mexico, significant currency devaluations relative to the U.S. dollar have occurred and may occur again in the future. In such circumstances, Leap and Pegaso may experience economic loss with respect to the

collectability of payments from their business partners and customers and the recoverability of their investments.

If we invest in other foreign ventures in the future, we will face similar risks relating to the applicable foreign currency of the foreign venture as well as other country-specific risks.

THE TECHNOLOGIES THAT WE USE MAY BECOME OBSOLETE, WHICH WOULD LIMIT OUR ABILITY TO COMPETE EFFECTIVELY

We have employed digital wireless communications technology based on CDMA technology. We are required under an agreement entered into with Qualcomm in connection with our spin-off to use only cdmaOne systems in international operations through January 2004. Other digital technologies may ultimately prove to have greater capacity or features and be of higher quality than CDMA. If another technology becomes the preferred industry standard in any of the countries in which we operate, we may be at a competitive disadvantage, and competitive pressures may require us to change our digital technology at substantial cost. We may not be able to respond to those pressures or implement new technology on a timely basis, or at an acceptable cost. If CDMA technology becomes obsolete at some time in the future, and we are unable to effect a cost-effective migration path, it could materially and adversely affect our business and financial condition.

IF WIRELESS HANDSETS POSE HEALTH AND SAFETY RISKS, WE MAY BE SUBJECT TO NEW REGULATIONS, AND DEMAND FOR OUR SERVICES MAY DECREASE

Media reports have suggested that certain radio frequency emissions from wireless handsets may be linked to various health concerns, including cancer, and may interfere with various electronic medical devices, including hearing aids and pacemakers. Concerns over radio frequency emissions may have the effect of discouraging the use of wireless handsets, which would decrease demand for our services. In recent years, the FCC and foreign regulatory agencies have updated the guidelines and methods they use for evaluating radio frequency emissions from radio equipment, including wireless handsets. In addition, interest groups have requested that the FCC investigate claims that wireless technologies pose health concerns and cause interference with airbags, hearing aids and other medical devices. There also are some safety risks associated with the use of wireless handsets while driving. Concerns over these safety risks and the effect of any legislation that may be adopted in response to these risks could limit our ability to market and sell our wireless service.

THE LOSS OF KEY PERSONNEL COULD HARM OUR BUSINESS

We believe our success depends on the contributions of a number of our key personnel. These key personnel include but are not limited to Harvey P. White, Chairman of the Board and Chief Executive Officer, and Susan G. Swenson, President and Chief Operating Officer. If we lose the services of key personnel, that loss could materially harm our business. We do not maintain "key person" life insurance on any employee.

13

16

OUR STOCK PRICE IS VOLATILE

The stock market in general, and the stock prices of telecommunications companies and other technology-based companies in particular, have experienced significant volatility that often has been unrelated to the operating performance of any specific public companies. The market price of Leap common stock has fluctuated widely in the past quarter and calendar year and is likely to continue to fluctuate in the future. Factors that may have a significant

impact on the market price of Leap common stock include:

- future announcements concerning Leap or its competitors, including the announcement of joint development efforts;
- changes in the prospects of our business partners or equipment suppliers;
- delays in the construction of planned Cricket networks and in general implementation of our business plan;
- failure to achieve planned levels of subscriber growth and other operating targets;
- deficiencies in our networks;
- results of technological innovations;
- government regulation, including the FCC's review of our acquisition of wireless licenses;
- changes in recommendations of securities analysts and rumors that may be circulated about Leap or its competitors;
- the impact of an economic slowdown on existing and future customers; and
- public perception of risks associated with our international operations.

Our future earnings and stock price may be subject to significant volatility, particularly on a quarterly basis. Shortfalls in our revenues, earnings or subscriber growth or delays in network buildout in any given period relative to the levels and schedule expected by securities analysts could immediately, significantly and adversely affect the trading price of Leap common stock. In the past, following periods of volatility in the market price of a company's securities, class action litigation has often been instituted against the subject company. Litigation of this type could result in substantial costs and a diversion of our management's attention and resources which could, in turn, have a material adverse effect on our business and financial condition.

WE DO NOT INTEND TO PAY DIVIDENDS IN THE FORESEEABLE FUTURE

We do not anticipate paying any cash dividends on our common stock in the foreseeable future. The terms of the indenture governing the notes issued in our February 2000 units offering restrict our ability to declare or pay dividends. We intend to retain future earnings to fund our growth. Accordingly, you will not receive a return on your investment in our common stock through the payment of dividends in the foreseeable future and may not realize a return on your investment even if you sell your shares. Any future payment of dividends to our stockholders will depend on decisions that will be made by our board of directors and will depend on then existing conditions, including our financial condition, contractual restrictions, capital requirements and business prospects.

A DETERMINATION THAT LEAP IS AN INVESTMENT COMPANY COULD ADVERSELY AFFECT OUR BUSINESS

Our ownership interest in Pegaso was 20.1% as of May 1, 2001, and we expect that future investments in ventures will include ownership interests of less than 50% and that our interests will vary over time as the ventures raise additional capital. As a result, we could be subject to the registration requirements of the Investment Company Act of 1940. The Investment Company Act of 1940 requires registration of companies that engage primarily in the business of investing in stock. Because we intend to actively participate in the business

operations of our subsidiaries and other ventures, we do not believe that we are 14

17

primarily engaged in the business of investing in stock. We intend to monitor and adjust our interests in our ventures to the extent practical to avoid being subject to the Investment Company Act of 1940. If we must register as an investment company under the Investment Company Act of 1940, compliance with these regulations will negatively impact our business.

WE HAVE IMPLEMENTED OR ARE SUBJECT TO ANTI-TAKEOVER PROVISIONS THAT COULD PREVENT OR DELAY AN ACQUISITION OF LEAP THAT IS BENEFICIAL TO OUR STOCKHOLDERS

Our charter and bylaws could make it more difficult for a third party to acquire us, even if doing so would benefit our stockholders. Our charter and bylaw provisions could diminish the opportunities for a stockholder to participate in tender offers. The charter and bylaws may also restrain volatility in the market price of our common stock resulting from takeover attempts. In addition, our board of directors may issue preferred stock that could have the effect of delaying or preventing a change in control of Leap. The issuance of preferred stock could also negatively affect the voting power of holders of our common stock. The provisions of the charter and bylaws may have the effect of discouraging or preventing an acquisition of Leap or a sale of our businesses. In addition, Section 203 of the Delaware General Corporation Law imposes restrictions on mergers and other business combinations between us and any holder of 15% or more of our common stock.

We have adopted a rights plan that could discourage, delay or prevent an acquisition of Leap at a premium price. The rights plan provides for preferred stock purchase rights attached to each share of our common stock which will cause substantial dilution to a person or group acquiring 15% or more of our stock if the acquisition is not approved by our board of directors.

The transfer restrictions imposed on the U.S. wireless licenses we own also adversely affect the ability of third parties to acquire us. Our licenses may only be transferred with prior approval by the FCC. In addition, we are prohibited from voluntarily assigning or transferring control of our C-Block and F-Block licenses for five years after grant date except to assignees or transferees that satisfy the financial criteria established by the FCC for designated entities, unless we have met the first network buildout deadline applicable to such license. Accordingly, the number of potential transferees of our licenses is limited, and any acquisition, merger or other business combination involving us would be subject to regulatory approval.

In addition, the documents governing our indebtedness contain limitations on our ability to enter into a change of control transaction. Under these documents, the occurrence of a change of control transaction, in some cases after notice and grace periods, would constitute an event of default permitting acceleration of the indebtedness.

15

18

FORWARD-LOOKING STATEMENTS

This prospectus contains and incorporates by reference 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 subject to a number of risks, uncertainties and assumptions about Leap, including, among other things:

- changes in the economic conditions of the various markets our

subsidiaries serve which could adversely affect the market for wireless services;

- our ability to access capital markets;
- a failure to meet the operational, financial or other covenants of our credit facilities;
- our ability to rollout networks in accordance with our plans, including receiving equipment and backhaul and interconnection facilities on schedule from third parties;
- failure of network systems to perform according to expectations;
- the effect of competition;
- the acceptance of our product offering by our target customers;
- our ability to retain customers;
- our ability to maintain our cost, market penetration and pricing structure in the face of competition;
- uncertainties relating to negotiating and executing definitive agreements and the ability to close pending transactions;
- technological challenges in developing wireless data services and customer acceptance of such services if developed;
- our ability to integrate the businesses and technologies we acquire; and
- rulings by courts or the FCC adversely affecting our rights to own and/or operate certain wireless licenses.

You can identify these forward-looking statements by forward-looking words such as "believe," "may," "could," "will," "estimate," "continue," "anticipate," "intend," "seek," "plan," "expect," "should," "would" and similar expressions in this prospectus.

We have described other risks concerning Leap elsewhere in this prospectus under the heading "Risk Factors." We undertake no obligation to publicly update or revise any forward-looking statements, whether as a result of new information, future events or otherwise. In light of these risks and uncertainties, the forward-looking events and circumstances discussed in this prospectus may not occur and actual results could differ materially from those anticipated or implied in the forward-looking statements.

USE OF PROCEEDS

We will not receive any proceeds from the sale by the selling security holders of the common stock offered by this prospectus.

16

19

SELLING SECURITY HOLDERS

The shares offered by this prospectus were originally issued by us to the selling security holders in connection with an agreement and plan of merger among us, one of our wholly-owned subsidiaries and Backwire.com, Inc. The merger was completed on April 24, 2001 and Backwire is now a wholly-owned subsidiary of Leap. Under the terms of the merger agreement, the former stockholders of

Backwire became stockholders of Leap and we agreed to register for resale the shares of our common stock issued to them, which are offered by this prospectus, and bear the expenses of registration of the shares. We agreed to keep the registration statement effective for a period ending upon the earlier of April 24, 2002 or such time as the selling security holders advise us that they have completed their resale of the shares of common stock being offered by this prospectus.

The following table sets forth information with respect to the shares owned by the selling security holders. The information regarding shares owned after the offering assumes the sale of all shares offered by the selling security holders.

Other than as described in the footnotes to the table below, none of the selling security holders has held a position or office or had a material relationship with us or any of our affiliates within the past three years other than as a result of the ownership of Leap common stock.

	NUMBER OF SHARES		SHARES OWN AFTER OFFER	
NAME OF SELLING SECURITY HOLDER	OWNED PRIOR TO THE OFFERING	NUMBER OF SHARES BEING OFFERED	NUMBER	PERC
Ack Radio Profit Sharing Fund(1)	41	41		
12th Street Investors LLC	1,858	1,858		
Anderson, Ernest(2)	206	206		
Atkerson, Lucie B	41	41		
Barton, Charles C	82	82		
Board, Norman(2)	3,625	3,625		
Bond, Thomas P., Jr	4	4		
Brading, Stanley G	20	20		
Brewer, Leigh Luter	41	41		
Brown, Tammie P	82	82		
Burlholmen I/S	20	20		
Chandler, Dr. John E.(3)	3,678	3,678		
Comerica Incorporated	13	13		
Connell, Dr. Elizabeth M	20	20		
Connell, Robert B	20	20		
Cooper, Terrell K.(2)	206	206		
Cotton, James O	24	24		
Duggan, Francis P	1,452	1,452		
Dunn, James A., Jr	1,870	1,870		
Eyres, Stephen G	24	24		
Fair, Davis L. III	4	4		
Feldman, Jeffrey	1,810	1,810		
Fenley, Troy G. and Adrienne G	20	20		
Five Paces Ventures, L.P.(4)	130,385	130,385		
Fockele, Mark	20	20		
Frank, Michael E	1,808	1,808		
Fry, George W., Jr	20	20		
Furman, Judith L	20	20		
Green, Paul A. (Legg Mason FBO Paul				
Green)	16	16		
Green, Paul A	82	82		
GreenSpring Ventures LLC(5)	51,627	51,627		
Greer, Richard L	41	41		
Hawkins, William A	41	41		

	NUMBER OF SHARES	NUMBER OF CHARGO		ES OWN
NAME OF SELLING SECURITY HOLDER	OWNED PRIOR TO THE OFFERING	NUMBER OF SHARES BEING OFFERED	NUMBER	PERC
Horten, Nicolai R	8	8		
Internet.com Venture Partners III				
LLC(6)	47,060	47,060		
JHP Family Investment LLP(7)	24	24		
Johnson, George H	8	8		
Kelly, Michael T	41	41		
Kerr, John A.	8 927	8 927		
King, Charles H., Jr	20	20		
Luter, Frances P	20	20		
Luter, Joseph W., IV	20	20		
MacIsaac, Joseph E	8	8		
MacIsaac, Thomas W.(8)(21)	15 , 920	920	15,000	
Maletta, Thomas P., III	15, 520	8		
Maletta, Thomas P., Jr	20	20		
Maletta, Thomas, Sr	53	53		
Markets One, Inc.(9)	37	37		
Martin Schoffstall Revocable Trust	7,476	7,476		
Marvin Schoffstall Revocable Trust	1,810	1,810		
McCarty, Perry and Virginia	924	924		
McDermott, Stephen P	41	41		
Miljanic, Kathy M. and Mijodrag R	8	8		
MLS-1, L.P. (10)	1,810	1,810		
MLS-Two, L.P.(10)	50,527	50 , 527		
MNMG, LLC(11)	70	70		
Mykityshyn, Mark	557	557		
Mykityshyn, Thomas R	82	82		
NeoPets.com, Inc	26	26		
Network Commerce, Inc	96	96		
NP Ventures IV, LLC(12)	1,810	1,810		
PAG Partners, LP	41	41		
Patterson, Patrick	41	41		
Powell, Dr. Jack H., III	24	24		
PSINet Strategic Investments, Inc.(13)	4,393	4,393		
Quarterman, D. Alan	41	41		
Robinson-Humphrey Netlanta Fund I, LP	3,617	3,617		
Rohan, Jordan	916	916		
RRR Financial, Inc	41	41		
SAC Capital Associates, LLC(14)	9,042	9,042		
Schmidt-Fellner, F. Blair	20	20		
Sechrest, Jeffrey	82	82		
Sellars, Rainey, Jr	2,248	2,248		
Simmons, Calvert	66	66		
Spencer, Jeb(8)(22)	12,371	371	12,000	
Steele, AlanStephan A. Schoffstall Revocable	20	20		
Trust(15) Technology Ventures Investment Fund I,	1,810	1,810		
LLC (16)	18,100	18,100		
Thomas L. Bindley Revocable Trust(17)	5,440	5,440		
Toepfer, Helen G	12	12		

Travelbank, Inc.(18)	41	41	
Univest Investments, Inc.(19)	20	20	

18

21

	NUMBER OF SHARES	NUMBER OF SHARES	SHARES OWN AFTER OFFER	
NAME OF SELLING SECURITY HOLDER	THE OFFERING	BEING OFFERED	NUMBER	PERC
Val-E Investments(20)	9,523	9,523		
Wickham, Malon	20	20		
Willis, C. Cooper	3,761	3,761		
Wilson, Littell E. Jr	37	37		
Total		373,367		

(1) Stephen E. Atkerson is the president of the selling security holder and has voting and investment power with respect to these shares.

(2) The selling security holder is an employee of Leap.

- (3) Martha S. Chandler, Mr. Chandler's spouse, has shared voting and investment power with respect to these shares.
- (4) D. Alan Quarterman, Michael C. McChesney and Mark G. Mykityshyn are the managing partners of the selling security holder and have voting and investment power with respect to these shares.
- (5) Bruce A. Springer has voting and investment power with respect to these shares.
- (6) I-Venture Management LLC is the managing member of the selling security holder. internet.com Corporation is the sole member and manager of I-Venture Management LLC and has voting and investment power with respect to these shares.
- (7) Dr. Jack Powell, Jr. has voting and investment power with respect to these shares.
- (8) The selling security holder is an officer of Leap.
- (9) Amit Bhargave and Rahul Simha, the president and chief technology officer, respectively, of the selling security holder, have voting and investment power with respect to these shares.
- (10) Martin L. Schoffstall is the general partner of the selling security holder and has voting and investment power with respect to these shares.
- (11) Chris Collins, James Connell, Michael Cope, Jeffrey Koepsell, Mark Koepsell, Tommy McPeak, Robert Rohm and Michael Schupert are partners and share voting and investment power with respect to these shares.
- (12) Scott F. Cristman, Nestor Nicholas and Richard F. Langan, Jr. share voting and investment power with respect to these shares.

- (13) PSINET, Inc. is the parent company of the selling security holder and has voting and investment power with respect to these shares.
- (14) Robert R. Rhinehart is the president of the selling security holder and has voting and investment power with respect to these shares.
- (15) Stephen A. Schoffstall, trustee of the selling security holder, has voting and investment power with respect to these shares.
- (16) Joseph McCall has sole voting and investment power with respect to these shares.
- (17) Thomas L. Bindley, trustee of the selling security holder, has sole voting and investment power with respect to these shares.
- (18) Terrill A. Turner, chief financial officer of the selling security holder, has voting and investment power with respect to these shares.
- (19) Ric Tomlinson has voting and investment power with respect to these shares.
- (20) Jan Rumberger, manager, has voting and investment power with respect to these shares.
- (21) Includes 15,000 shares subject to a right of repurchase in favor of Leap, which right of repurchase lapses in three equal installments on the first through third anniversaries of the Backwire closing.
- (22) Includes 12,000 shares subject to a right of repurchase in favor of Leap, which right of repurchase lapses in three equal installments on the first through third anniversaries of the Backwire closing.

19

22

PLAN OF DISTRIBUTION

RESALES BY THE SELLING SECURITY HOLDERS

Leap is registering the shares on behalf of the selling security holders. The selling security holders may offer the shares from time to time, either in increments or in a single transaction. The selling security holders may also decide not to sell any or all of the shares allowed to be sold under this prospectus. The selling security holders will act independently of Leap in making decisions with respect to the timing, manner and size of each sale.

DONEES, PLEDGEES AND DISTRIBUTEES

The term "selling security holders" includes donees, persons who receive shares from the selling security holders after the date of this prospectus by gift. The term also includes pledgees, persons who, upon contractual default by the selling security holders, may seize shares which the selling security holders pledged to such persons. The term also includes distributees who receive shares from the selling security holders after the date of this prospectus as a distribution to members or partners of the selling security holders.

COST AND COMMISSIONS

Leap will pay all costs, expenses and fees in connection with the registration of the shares being offered by this prospectus. The selling security holders will pay all brokerage commissions and similar selling expenses, if any, attributable to the sale of shares.

TYPES OF SALE TRANSACTIONS

The selling security holders will act independently of Leap in making decisions with respect to the timing, manner and size of each sale. The selling security holders may sell their shares in one or more types of transactions (which may include block transactions):

- on any national securities exchange or quotation service on which the common stock may be listed or quoted at the time of sale, including the Nasdag National Market;
- in negotiated transactions;
- in the over-the-counter market;
- through the writing of options on shares;
- by pledge to secure debts and other obligations;
- in hedge transactions and in settlement of other transactions;
- in short sales; or
- through any combination of the above methods of sale.

The shares may be sold at a fixed offering price, which may be changed, or at market prices prevailing at the time of sale, or at negotiated prices.

SALES TO OR THROUGH BROKER-DEALERS

The selling security holders may either sell shares directly to purchasers, or sell shares to, or through, broker-dealers. These broker-dealers may act either as an agent of the selling security holders, or as a principal for the broker-dealer's own account. These transactions may include transactions in which the same broker acts as an agent on both sides of the trade. Such broker-dealers may receive compensation in the form of discounts, concessions or commissions from the selling security holders and/or the purchasers of shares. This compensation may be received both if the broker-dealer acts as an agent or as a principal. This compensation might also exceed customary commissions.

23

The selling security holders may enter into hedging transactions with broker-dealers in connection with distributions of the shares or otherwise. In such transactions, broker-dealers may engage in short sales of the shares in the course of hedging the positions they assume with the selling security holders. The selling security holders also may sell shares short and re-deliver the shares to close out such short positions. The selling security holders may enter into options or other transactions with broker-dealers which require the delivery to the broker-dealer of the shares. The broker-dealer may then resell or otherwise transfer such shares pursuant to this prospectus. The selling security holders also may loan or pledge the shares to a broker-dealer. The broker-dealer may sell the shares so loaned, or upon a default the broker-dealer may sell the pledged shares pursuant to this prospectus.

DISTRIBUTION ARRANGEMENTS WITH BROKER-DEALERS

If the selling security holders notify Leap that any material arrangement has been entered into with a broker-dealer for the sale of shares through:

- a block trade,

- a special offering,
- an exchange distribution or secondary distribution, or
- a purchase by a broker or dealer,

then Leap will file, if required, a supplement to this prospectus under Rule 424(b) of the Securities Act.

The supplement will disclose, to the extent required:

- the names of the selling security holders and of the participating broker-dealer(s);
- the number of shares involved;
- the price at which such shares were sold;
- the commissions paid or discounts or concessions allowed to such broker-dealer(s), where applicable;
- that such broker-dealer(s) did not conduct any investigation to verify the information set out or incorporated by reference in this prospectus; and
- any other facts material to the transaction.

DEEMED UNDERWRITING COMPENSATION

The selling security holders and any broker-dealers that act in connection with the sale of his shares might be deemed to be "underwriters" within the meaning of Section 2(a)(11) of the Securities Act. Any commissions received by such broker-dealers, and any profit on the resale of shares sold by them while acting as principals, could be deemed to be underwriting discounts or commissions under the Securities Act.

INDEMNIFICATION

A selling security holder may agree to indemnify any agent, dealer or broker-dealer that participates in transactions involving sales of his, her or its shares against certain liabilities, including liabilities arising under the Securities Act. Under our agreements with the selling security holders, we and the selling security holders will be indemnified by the other against certain liabilities, including certain liabilities under the Securities Act, or will be entitled to contribution in connection with these liabilities.

21

24

PROSPECTUS DELIVERY REQUIREMENTS

Because a selling security holder may be deemed an underwriter, a selling security holder must deliver this prospectus and any supplements to this prospectus in the manner required by the Securities Act.

SALES UNDER RULE 144

The selling security holders may also resell all or a portion of the shares offered by this prospectus in open market transactions in reliance upon Rule 144 under the Securities Act. To do so, the selling security holders must meet the criteria and comply with the requirements of Rule 144.

REGULATION M

The selling security holders and any other persons participating in the sale or distribution of the shares will be subject to applicable provisions of the Exchange Act and the rules and regulations under such act, including, without limitation, Regulation M. These provisions may restrict certain activities of, and limit the timing of purchases and sales of any of the shares by, the selling security holders or any other such person. Furthermore, under Regulation M, persons engaged in a distribution of securities are prohibited from simultaneously engaging in market making and certain other activities with respect to such securities for a specified period of time prior to the commencement of such distributions, subject to specified exceptions or exemptions. All of these limitations may affect the marketability of the shares offered by this prospectus.

COMPLIANCE WITH STATE LAW

In jurisdictions where the state securities laws require it, the selling security holders' shares offered by this prospectus may be sold only through registered or licensed brokers or dealers. In addition, in some states the shares may not be sold unless they have been registered or qualified for sale in the applicable state or an exemption from the registration or qualification requirement is available and has been complied with.

22

25

DESCRIPTION OF LEAP CAPITAL STOCK

The following description of our capital stock is intended as a summary only and is qualified in its entirety by reference to our certificate of incorporation and our by-laws. For information on obtaining a copy of our certificate of incorporation and by-laws, see the section of this prospectus captioned "Where To Find Additional Information."

Under our charter, the total number of shares of all classes of stock that we have authority to issue is 310,000,000, consisting of 10,000,000 shares of preferred stock and 300,000,000 shares of common stock.

COMMON STOCK

As of May 1, 2001, we had 30,475,740 shares of common stock outstanding, not including the 373,367 shares offered by this prospectus. The holders of our common stock are entitled to one vote for each share on all matters voted on by stockholders. The holders of our common stock possess all voting power, except as otherwise required by law or provided in any resolution adopted by our board of directors regarding any series of preferred stock. After adequate provision has been made for repayment of our creditors and subject to any preferential or other rights of any outstanding series of our preferred stock that may be designated by our board, the holders of our common stock will be entitled to such dividends as may be declared from time to time by our board from available funds and upon liquidation will be entitled to receive pro rata all of our assets available for distribution to the holders of our capital stock. The terms of the indenture governing the notes restrict our ability to declare or pay dividends.

PREFERRED STOCK

Our board of directors is authorized to issue shares of preferred stock, in one or more series, and to determine, regarding any series, the terms and rights of the series, including the following:

- the designation of the series;
- the rate and time of, and conditions and preferences regarding, dividends, and whether the dividends are cumulative;
- the voting rights, if any, of shares of the series;
- the price, timing and conditions regarding the redemption of shares of the series and whether a sinking fund should be established for the series;
- the rights and preferences of shares of the series in the event of our voluntary or involuntary dissolution, liquidation or winding up of our affairs; and
- the right, if any, to convert or exchange shares of the series into or for stock or securities of any other series or class.

We believe that the availability of the preferred stock will provide us with increased flexibility in structuring possible future financings and acquisitions, and in meeting other corporate needs which might arise. Having authorized shares available for issuance will allow us to issue shares of preferred stock without the expense and delay of a special stockholders' meeting. The authorized shares of preferred stock, as well as shares of our common stock, will be available for issuance without further action by our stockholders, unless action is required by applicable law or the rules of any stock exchange on which our securities may be listed or unless we are restricted by the preferred stock.

WARRANTS

In connection with the spin-off of Leap from Qualcomm, we issued a warrant to purchase 5,500,000 shares of our common stock to Qualcomm at an exercise price of approximately \$6.11 per share. In March 1999, in exchange for consideration valued at \$5.4 million, Qualcomm agreed to amend the warrant to reduce the number of shares which may be acquired upon exercise to 4,500,000. The warrant is exercisable during the 10 years following the spin-off of Leap. The warrant provides that Qualcomm may not exercise the warrant if, as a result, Qualcomm, together with its officers and directors, would own equity securities

23

26

of Leap in an amount that would disqualify Leap from being a "designated entity" under FCC rules. As of May 1, 2001, Qualcomm had received 1,015,700 shares of our common stock upon exercising portions of the warrant and had surrendered rights to purchase 109,300 shares in partial payment of the exercise price. The remaining number of shares which may be acquired upon exercise of the warrant is 3,375,000.

The warrant issued to Qualcomm includes three types of registration rights which require Leap to register the shares of Leap common stock issuable upon exercise of the warrant. First, the warrant provides for a one-time "demand" registration right which permits Qualcomm to require Leap to register a minimum of \$5 million of Leap common stock issuable upon exercise of the warrant. Second, the warrant provides for "piggyback" registration rights which require Leap to notify Qualcomm of its intention to register shares of Leap common stock with the SEC and, upon request, to include Qualcomm's shares issuable upon exercise of the warrant in the registration. If Qualcomm exercises its piggyback or demand registration rights and the offering is underwritten, the shares to be registered may be reduced by the underwriters based on market conditions.

However, the shares to be registered may be reduced to no less than 30% of the shares requested to be registered. The registration rights in the warrant may be assigned by Qualcomm with any transfer of the warrant. Third, the warrant provides for "Form S-3" registration rights which generally permit Qualcomm to require Leap to register a minimum of \$5 million of shares issuable upon exercise of the warrant if Form S-3, a short-form registration statement, is available for the proposed registration. Qualcomm has agreed to waive its piggyback registration rights with respect to this offering. We will be able to suspend the effectiveness of such registration statement under certain circumstances. The registration rights in the warrant may be assigned by Qualcomm with any transfer of the warrant.

In connection with our February 2000 units offering, we issued warrants to purchase an aggregate of 2,829,854 shares of our common stock. The terms and conditions of the warrants issued in the senior unit and senior discount unit offerings are more fully described in the warrant agreement for those warrants, which is filed as an exhibit to the registration statement of which this prospectus forms a part. Qualcomm, which purchased units in the offering, holds 308,000 of such warrants, which are exercisable on or after February 23, 2001 for 770,924 shares of our common stock, at an exercise price of \$96.80 per share.

In connection with our acquisition of Chase Telecommunications in March 2000, we issued a warrant to Chase Telecommunications Holdings to purchase 643,068 shares of common stock of our subsidiary, Cricket Communications, for an aggregate warrant exercise price of \$1,000,000. In connection with the June 2000 merger of Cricket Communications into a wholly owned subsidiary of ours, the warrant was converted into the right to purchase an aggregate of 202,566 shares of Leap common stock at an exercise price of \$4.9367 per share. The aggregate warrant exercise price of \$1,000,000 remains unchanged.

LEAP COMMON STOCK RESERVED FOR ISSUANCE

Future sales of substantial amounts of our common stock in the public market could adversely affect the trading price of our common stock. As of May 1, 2001, we had 30,475,740 shares of common stock outstanding, the large majority of which were freely tradable without restriction or further registration under the Securities Act of 1933. The number of outstanding shares as of May 1, 2001 does not include Leap's public offering of 3,000,000 shares of common stock announced May 3, 2001, which we completed on May 8, 2001. The number of outstanding shares as of May 1, 2001 also does not include the 373,367 shares offered by this prospectus, which will be delivered to the selling security holders from time to time upon the surrender of their certificates of Backwire stock in exchange for shares of our common stock. Also, as of May 1, 2001, we had reserved for issuance 22,817,050 shares of our common stock as follows: 3,375,000 shares reserved for issuance upon exercise of a warrant held by Qualcomm; 10,500,772 shares of common stock reserved for issuance upon the exercise of options or awards granted or available for grant to employees, officers, directors and consultants under Leap equity incentive plans; 2,919,569 shares of common stock reserved for issuance upon exercise of options granted in connection with the spin-off of Leap to holders of options for Qualcomm common stock (including our employees who were former employees of Qualcomm); 2,203,691 shares reserved for issuance upon consummation of our pending acquisitions of a

27

wireless licenses in Utica, New York; Visalia, California; Birmingham and Tuscaloosa, Alabama; Jonesboro, Arkansas; and Jackson, Mississippi, and up to 785,598 shares (subject to certain adjustments based upon changes in the market value of wireless licenses) reserved for issuance in connection with our pending acquisition of wireless licenses in Buffalo and Syracuse, New York, all of which acquisitions are subject to FCC approval and other conditions; 202,566 shares of

common stock reserved for issuance upon exercise of a warrant held by Chase Telecommunications Holdings, Inc.; and 2,829,854 shares of common stock reserved for issuance upon exercise of the warrants issued in connection with our February 2000 units offering. In addition to the shares offered by this prospectus, we have agreed to file registration statements to register for resale 2,989,289 shares reserved for issuance upon consummation of our pending acquisitions of wireless licenses. Under certain circumstances, the number of shares to be issued in connection with our acquisitions of wireless licenses and for which registration rights have been granted is subject to change based on the value of wireless licenses and the market price of our common stock at the time of the closing of the transactions pursuant to which the shares to be registered are issued.

NO PREEMPTIVE RIGHTS

No holder of any stock of Leap has any preemptive right to subscribe for any securities of Leap of any kind or class.

TRANSFER AGENT AND REGISTRAR

The Transfer Agent and Registrar for our common stock is Computershare Investor Services LLC.

DELAWARE LAW AND CHARTER PROVISIONS

We must comply with the provisions of Section 203 of the Delaware General Corporation Law, an anti-takeover law. In general, the statute prohibits a publicly held Delaware corporation from engaging in a "business combination" with an "interested stockholder" for a period of three years after the date of the transaction in which the person became an interested stockholder, unless the business combination is approved in a prescribed manner. A "business combination" includes a merger, asset sale or other transaction resulting in a financial benefit to the stockholder. An "interested stockholder" is a person who, together with affiliates and associates, owns at the time of the business combination (or within three years prior, did own) 15% or more of the corporation's voting stock.

Our charter also requires that any required or permitted action by our stockholders must be effected at a duly called annual or special meeting of stockholders and may not be effected by any consent in writing. In addition, special meetings of our stockholders may be called only by a majority of the authorized number of directors, the Chairman of the Board or the President of Leap. The charter also provides for a classified board of directors consisting of three classes as nearly equal in number as possible with the directors in each class serving staggered three-year terms. In addition, the charter provides that the authorized number of directors may be changed only by resolution of our board of directors. Our bylaws require advance notice by a stockholder of a proposal or director nomination which such stockholder desires to present at the annual meeting of stockholders. Our charter and bylaws also require that the holders of at least 66 2/3% of our voting stock must approve any amendment to either the charter or bylaws affecting certain provisions. These provisions may have the effect of deterring hostile takeovers or delaying changes in control or management of Leap.

RIGHTS PLAN

On September 9, 1998, our board of directors adopted a shareholder rights plan. Under the rights plan, a dividend of one preferred share purchase right was declared for each outstanding share of our common stock. The common stock currently trades with a right to purchase Series A Junior Participating preferred stock. A preferred share purchase right will be attached to each share of common stock issued during the term of the rights plan. Each right entitles

shareholders to buy one one-thousandth of a share of our Series A preferred stock at an exercise price of \$350.00, subject to anti-dilution adjustments, upon

25

28

the triggering event of a person acquiring, or making a tender or exchange offer for, 15% or more of our outstanding common stock. Each right entitles its holder, other than the person acquiring 15% or more of the outstanding common stock, to purchase shares of our common stock with a market value of twice the right's exercise price. Ownership of our common stock in excess of the 15% threshold by Qualcomm as a result of its warrant to purchase 4,500,000 shares of our common stock or the warrants purchased by Qualcomm in our February 2000 units offering entitling it to purchase 770,924 shares of our common stock, however, will not trigger the rights plan, unless and until Qualcomm acquires one or more additional shares of our common stock. In addition, if a company acquires us in a merger or other business combination, or if we sell more than 50% of our consolidated assets or earning power, these rights will entitle our shareholders, other than the acquirer, to purchase, for the exercise price, shares of the common stock of the acquiring company having a market value of two times the exercise price. At any time prior to these events, the board of directors may redeem the rights at one cent per right.

The rights plan is intended to protect shareholders in the event of an unsolicited attempt to acquire us. The right is transferred automatically with the transfer of the common stock until separate rights certificates are distributed upon the occurrence of certain events. The rights plan could have the effect of delaying, deferring or preventing a person from acquiring us or accomplishing a change in control of the board of directors. This description of the rights plan is intended as a summary only and is qualified in its entirety by reference to a rights agreement dated as of September 14, 1998, as amended, between Leap and Harris Trust Company of California. To obtain a copy of the rights agreement, as amended, see the section of this prospectus captioned "Where To Find Additional Information."

LIABILITY AND INDEMNIFICATION OF DIRECTORS AND OFFICERS

Our officers and directors are covered by the provisions of the Delaware General Corporation Law (DGCL), the charter, the bylaws, individual indemnification agreements with us and insurance policies which serve to limit, and, in some instances, to indemnify them against, liabilities which they may incur in such capacities. These various provisions are described below.

Elimination of Liability in Certain Circumstances. The DGCL authorizes corporations to limit or eliminate the personal liability of directors to corporations and their stockholders for monetary damages for breach of directors' fiduciary duty of care. This duty of care requires that, when acting on behalf of the corporation, directors must exercise an informed business judgment based on all significant information reasonably available to them. Absent the limitations authorized by the DGCL, directors are accountable to corporations and their stockholders for monetary damages for conduct constituting negligence or gross negligence in the exercise of their duty of care. Although the statute does not change directors' duty of care, it enables corporations to limit available relief to equitable remedies such as injunction or rescission. Our charter limits the liability of directors to Leap or our stockholders (in their capacity as directors but not in their capacity as officers) to the fullest extent permitted by the Delaware statute. Specifically, our directors will not be personally liable for monetary damages for breach of a director's fiduciary duty as director, except for liability:

- for any breach of the director's duty of loyalty to Leap or its

stockholders;

- for acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law;
- for unlawful payments of dividends or unlawful share repurchases or redemptions as provided in Section 174 of the DGCL; or
- for any transaction from which the director derived an improper personal benefit.

Indemnification and Insurance. Under the DGCL, we have the power, under specified circumstances generally requiring the directors or officers to have acted in good faith and in a manner they reasonably believe to be in or not opposed to our best interests, to indemnify our directors and officers in connection with actions, suits or proceedings brought against them by a third party or in our name, by reason of the fact that they were or are such directors or officers; and against expenses, judgments, fines and amounts

26

29

paid in settlement in connection with any such action, suit or proceeding. The bylaws generally provide for mandatory indemnification of our directors and officers to the full extent provided by Delaware corporate law. In addition, we have entered into indemnification agreements with our directors and officers which generally provide for indemnification of the officers and directors to the fullest extent permitted under the DGCL, including under circumstances for which indemnification would otherwise be discretionary under Delaware law.

We have purchased and intend to maintain insurance on behalf of any person who is or was a director or officer of Leap, or is or was a director or officer of Leap serving at our request as a director, officer, employee or agent of another corporation, partnership, joint venture, trust, employee benefit plan or other enterprise against any liability asserted against him or her and incurred by him or her in any such capacity, or arising out of his or her status as such, whether or not we would have the power or obligation to indemnify him or her against such liability under the provisions of our charter or bylaws.

Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers or controlling persons pursuant to the foregoing provisions, those provisions are, in the opinion of the SEC, against public policy as expressed in the Securities Act of 1933 and are therefore unenforceable.

LEGAL MATTERS

Latham & Watkins, San Diego, California, will pass upon the validity of the securities being offered by this prospectus and certain other legal matters.

EXPERTS

The consolidated financial statements incorporated in this prospectus by reference to the Annual Report on Form 10-K of Leap Wireless International, Inc. for the year ended December 31, 2000 have been so incorporated in reliance on the report of PricewaterhouseCoopers LLP, independent accountants, given on the authority of said firm as experts in auditing and accounting.

The financial statements as of December 31, 1999 and 1998 and for the year ended December 31, 1999 and for the period from June 24, 1998 (inception) to December 31, 1998 of Pegaso Telecomunicaciones, S.A. de C.V. incorporated in this prospectus by reference to the Annual Report on Form 10-K/A Amendment No. 2 of Leap Wireless International, Inc. for the year ended August 31, 1999 have

been so incorporated in reliance on the report of PricewaterhouseCoopers, independent accountants, given on the authority of said firm as experts in auditing and accounting.

WHERE TO FIND ADDITIONAL INFORMATION

Leap is subject to the informational requirements of the Securities Exchange Act of 1934, and files annual, quarterly and special reports, proxy statements and other information with the SEC. You may read and copy any reports, proxy statements and other information we file at the SEC's public reference room at 450 Fifth Street, N.W., Washington, D.C. 20549 and at the SEC's regional offices at Seven World Trade Center, 13th Floor, New York, New York 10048 and Citicorp Center, 500 West Madison Street, Suite 1400, Chicago, Illinois 60661-2511. Please call the SEC at 1-800-SEC-0300 for further information on the public reference rooms. You may also access filed documents at the SEC's Web site at www.sec.gov.

We have filed a registration statement on Form S-3 and related exhibits with the SEC under the Securities Act of 1933. The registration statement contains additional information about Leap and the securities. You may inspect the registration statement and exhibits without charge and obtain copies from the SEC at prescribed rates at the locations above.

27

30

We are incorporating by reference some information about us that we file with the SEC. We are disclosing important information to you by referencing those filed documents. Any information that we reference this way is considered part of this prospectus.

We incorporate by reference the following documents we have filed, or may file, with the SEC:

- Our Annual Report on Form 10-K for the fiscal year ended December 31, 2000 filed with the SEC on March 2, 2001;
- Amendment No. 2 to our Annual Report on Form 10-K for the fiscal year ended August 31, 1999 filed on Form 10-K/A with the SEC on June 28, 2000;
- Our Quarterly Report on Form 10-Q for the fiscal quarter ended March 31, 2001 filed with the SEC on May 15, 2001;
- Our Current Report on Form 8-K dated January 11, 2001 filed with the SEC on January 19, 2001 and Amendment No. 1 thereto filed on Form 8-K/A with the SEC on January 25, 2001;
- Our Current Report on Form 8-K dated January 23, 2001 filed with the SEC on January 31, 2001;
- Our Current Report on Form 8-K dated February 14, 2001 filed with the SEC on February 14, 2001;
- Our Current Report on Form 8-K dated March 16, 2001 filed with the SEC on March 16, 2001;
- Our Current Report on Form 8-K dated April 9, 2001 filed with the SEC on April 9, 2001;
- Our Current Report on Form 8-K dated April 19, 2001 filed with the SEC on April 20, 2001;

- Our Current Report on Form 8-K dated May 2, 2001 filed with the SEC on May 3, 2001;
- The description of our common stock and associated preferred stock purchase rights contained in our Registration Statement on Form 10 filed with the SEC on July 1, 1998, as amended; and
- All documents filed by us with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1934 after the date of this prospectus and before termination of this offering.

A statement contained in a document incorporated by reference herein shall be deemed to be modified or superceded for purposes of this prospectus to the extent that a statement contained herein or in any other subsequently filed document which is also incorporated herein modifies or replaces such statement. Any statements so modified or superceded shall not be deemed, except as so modified or superceded, to constitute a part of this prospectus.

You may request a free copy of any of the documents incorporated by reference in this prospectus by writing or telephoning us at the following address:

Leap Wireless International, Inc. 10307 Pacific Center Court San Diego, California 92121 (858) 882-6000

You should rely only on the information incorporated by reference or provided in this prospectus. We have not authorized anyone else to provide you with different information. You should not assume that the information in this prospectus is accurate as of any date other than the date on the front cover of this document.

28

31

[LEAP WIRELESS LOGO]