

LEAP WIRELESS INTERNATIONAL INC
Form 424B5
July 18, 2001
Table of Contents

As filed pursuant to Rule 424(b)(5)
under the Securities Act of 1933
Registration No. 333-45388

**PROSPECTUS SUPPLEMENT
(TO PROSPECTUS DATED JUNE 14, 2001)**

LEAP WIRELESS INTERNATIONAL, INC.

521,396 Shares of Common Stock

We are offering 521,396 shares of our common stock directly to Acqua Wellington North American Equities Fund, Ltd., which we refer to as Acqua Wellington, at an average price of \$28.7692 per share, pursuant to this prospectus supplement. The total purchase price for all of these shares is \$15,000,165. Acqua Wellington must purchase all of these shares if it purchases any of them.

We will receive proceeds from the sale of these shares of \$15,000,165 minus our expenses relating to the sale, which are estimated to be approximately \$10,000.

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

The offering price of these shares was established with reference to prices of our common stock on the Nasdaq National Market for the period beginning June 21, 2001 and ending July 17, 2001, net of a discount of 4.5% per share. We will deliver these shares to Acqua Wellington on or about July 19, 2001.

On July 17, 2001, the last reported sale price of our common stock on the Nasdaq National Market was \$29.40 per share.

Investing in our common stock involves certain risks. See Risk Factors beginning on page S-6 of this prospectus supplement.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus supplement or the accompanying prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

The date of this prospectus supplement is July 18, 2001.

TABLE OF CONTENTS

ABOUT THIS PROSPECTUS SUPPLEMENT
SUMMARY
RISK FACTORS
FORWARD-LOOKING STATEMENTS
USE OF PROCEEDS
PLAN OF DISTRIBUTION

DESCRIPTION OF LEAP CAPITAL STOCK

LEGAL MATTERS

EXPERTS

WHERE YOU CAN FIND MORE INFORMATION

Table of Contents

TABLE OF CONTENTS

	Page
Prospectus Supplement	
About This Prospectus Supplement	
S-3	
Summary	
S-3	
Risk Factors	
S-6	
Forward-Looking Statements	
S-18	
Use of Proceeds	
S-18	
Plan of Distribution	
S-19	
Description of Leap Capital Stock	
S-22	
Legal Matters	
S-23	
Experts	
S-23	
Where You Can Find More Information	
S-23	
Prospectus	
About This Prospectus	
3	
Where You Can Find More Information	
4	
Forward-Looking Statements	
5	
Leap Wireless International	
6	
Use of Proceeds	
6	
Ratio of Earnings to Fixed Charges	
6	
Description of Debt Securities	

7
Description of Capital Stock
16
Common Stock
16
Preferred Stock
16
Description of Depository Shares
19
Description of Warrants
22
Description of Rights
25
Description of Units
26
Plan of Distribution
27
Legal Matters
30
Experts
30

This prospectus supplement and the accompanying prospectus incorporate important business and financial information about Leap Wireless International, Inc. and its subsidiaries that is not included in or delivered with these documents. 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 supplement and the accompanying prospectus that is also a part of this document. 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 supplement or the accompanying prospectus is accurate as of any date other than the date on the front cover of this document.

Cricket® 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 supplement and the accompanying prospectus are the property of their respective holders.

S-2

Table of Contents

ABOUT THIS PROSPECTUS SUPPLEMENT

This prospectus supplement is a supplement to the accompanying prospectus that is also a part of this document. This prospectus supplement and the accompanying prospectus are part of a registration statement that we filed with the Securities and Exchange Commission using a shelf registration process. Under the shelf registration process, we may sell any combination of the securities described in the accompanying prospectus up to a total dollar amount of \$1,000,000,000, of which this offering is a part. In this prospectus supplement, we provide you with a general description of the shares of our common stock that we will offer under this prospectus supplement and specific information about the terms of this offering. Both this prospectus supplement and the accompanying prospectus

include important information about us, our common stock and other information you should know before investing in our common stock. This prospectus supplement also adds, updates and changes information contained in the accompanying prospectus. To the extent that any statement that we make in this prospectus supplement is inconsistent with the statements made in the accompanying prospectus, the statements made in the accompanying prospectus are deemed modified or superseded by the statements made in this prospectus supplement. You should read both this prospectus supplement and the accompanying prospectus as well as the additional information described under the heading **Where You Can Find More Information** beginning on page S-23 of this prospectus supplement and on page 4 of the accompanying prospectus before investing in our common stock.

SUMMARY

This summary highlights some information from this prospectus supplement and the accompanying 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 supplement and the accompanying prospectus. You should read the full text of, and consider carefully the more specific details contained in or incorporated by reference in this prospectus supplement and the accompanying prospectus. When used in this prospectus supplement and the accompanying prospectus, the terms **Leap**, **we**, **our** and **us** refer to Leap Wireless International, Inc. and its subsidiaries, unless the context requires otherwise.

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**. 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 term 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.

S-3

Table of Contents

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.

As of March 31, 2001, we had launched Cricket service in markets covering a total population of approximately 9.2 million (1998 POPs) and had approximately 339,000 Cricket customers across the U.S. To date we have acquired or have rights to acquire wireless licenses covering approximately 72.7 million potential customers (1998 POPs) in 36 states. Included in this number are 22 licenses covering approximately 22 million potential customers (1998 POPs) on which Leap was the high bidder in a reauction of C-Block and F-Block licenses by the FCC that closed in January 2001. These licenses have not yet been granted to us. Nextwave Telecommunications, Inc., the former holder of these licenses, is a party to litigation challenging the validity of their reauction. See Risk Factors It May Be More Difficult For Us to Acquire C-Block and F-Block Licenses in the Future. Leap plans to continue launching new Cricket markets throughout 2001 and beyond.

We 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. In furtherance of our objective to offer low-cost wireless data services, we completed our first purchase of wireless data technology in December 2000 through the acquisition of a proprietary, personalized, location-based technology, and in March and April 2001 we completed two additional acquisitions to support our future offering of wireless data services. We have several new services in development including a data service designed to provide wireless information to customers' mobile phones. We recently announced the first of these services which was launched in May 2001 in Chattanooga. The service is marketed under the brand name Slice.

In Mexico, we were a founding shareholder 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 (1998 POPs). At the end of March 2001, Pegaso had approximately 624,000 customers. As of July 16, 2001, we owned 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

Table of Contents

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 for which they can budget.

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.

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, and Leap entered into various agreements with Qualcomm. Our executive offices are located at 10307 Pacific Center Court, San Diego, CA 92121. Our telephone number is (858) 882-6000.

S-5

Table of Contents

RISK FACTORS

An investment in the common stock offered in connection with this prospectus supplement and the accompanying prospectus involves a high degree of risk. In addition to the other information in this prospectus supplement and the

accompanying 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 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

Table of Contents

concerns and other competitive factors. Our strategy to address customer turnover may not be successful, 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. Our 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 has announced that it will auction licenses that will authorize the entry of two additional wireless providers in each market. In addition, other wireless providers in the U.S. either have or could attempt to implement plans substantially similar to our domestic strategy of providing unlimited local service at a low, flat monthly rate. The landline services with which we 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, Telefonica, 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 that 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.

Table of Contents

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, 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 July 16, 2001, 35,999,007 shares of our common stock were outstanding, and 20,002,553 additional shares of our common stock were reserved for issuance. The issuance of these additional shares will reduce your percentage ownership in Leap.

The following shares were reserved for issuance as of July 16, 2001:

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;

10,469,882 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;

2,885,208 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;

240,043 shares reserved for issuance under a convertible promissory note issued in connection with our acquisition of wireless licenses in Buffalo and Syracuse, New York, a portion of which may be converted, at the option of the holder, into shares of common stock in June 2002;

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 connection with our recent acquisition of wireless licenses in Buffalo and Syracuse, New York that closed in June 2001, the seller has asserted that based on the results of the FCC auction of wireless licenses completed in January 2001, it is entitled to a purchase price adjustment that would result in the purchase price for such wireless licenses being effectively doubled. The parties are in the early stages of an arbitration concerning this claim. 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 the claim of the seller.

In December 2000, we entered into a common stock purchase agreement with Acqua Wellington 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 million 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

S-8

Table of Contents

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.

An increase in 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.

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 sold outstanding debt under our vendor financing agreements to third parties at a discount and may choose to do so in the future. 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 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.

S-9

Table of Contents

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 quarter 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 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 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

S-10

Table of Contents

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.

We Must Remain Qualified to Hold C-Block and F-Block Licenses

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.

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 opposed 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

S-11

Table of Contents

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 re-auction 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.

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 reaucted, or that we should pay certain financial penalties.

It May Be More Difficult For Us to Acquire C-Block and F-Block Licenses In the Future

Regulatory changes or requirements, or market circumstances, could make it more difficult to acquire C-Block 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 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.

NextWave, the former holder of 22 licenses for which we were the high bidder, is a party to litigation challenging the validity of their auction. On June 22, 2001, the United States Court of Appeals for the

S-12

Table of Contents

D.C. Circuit released a decision supporting NextWave's contention that the FCC violated the U.S. Bankruptcy Code in revoking and reaucting NextWave's licenses. The FCC has not yet indicated whether it will seek further judicial review of the D.C. Circuit's decision or how the D.C. Circuit's decision will affect the validity of the results of its reauction. We cannot predict what effect this or any other challenge to the reauction generally, either in court or at the FCC, or to the grant of licenses to us specifically, will have on us. It is possible that the FCC will seek to settle directly, or to broker a settlement among carriers, of the NextWave litigation, or that Congress could attempt to address the litigation legislatively. We cannot predict what effect such actions would have on us or our ability to retain access to the 22 reaucted licenses for which we were named the high bidder.

While we are in compliance with the terms of our C-Block 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-Block 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-Block and F-Block licenses in the aftermarket, but we may be subject to unjust enrichment penalties if we seek to acquire C-Block 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.

Failure to Comply with Regulations or 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 regulations or 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, or be subject to significant fines, if we fail to construct or operate a wireless network as required by the license, or if we fail to comply with FCC regulations or compliance deadlines, such as the requirement that we deploy the capability to identify the precise location of wireless 911 calls by October 1, 2001. The loss of a license or the imposition of significant fines or penalties 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.

S-13

Table of Contents

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. 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 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.

Table of Contents

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 has been and 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.

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;

S-15

Table of Contents

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 July 16, 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 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.

S-16

Table of Contents

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 the 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.

S-17

Table of Contents

FORWARD-LOOKING STATEMENTS

This prospectus supplement and the accompanying prospectus contain and incorporate 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 the prospectus supplement and the accompanying prospectus.

We have described other risks concerning Leap elsewhere in this prospectus supplement 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 supplement and the accompanying prospectus may not occur and actual results could differ materially from those anticipated or implied in the forward-looking statements.

USE OF PROCEEDS

We anticipate our net proceeds from the sale of our common stock in this offering to be approximately \$14,990,165 million after deducting estimated offering expenses of approximately \$10,000. We expect to use the net proceeds of this offering to supplement current funds available for acquisitions and spectrum purchases and for general corporate purposes including, but not limited to, future working capital needs.

S-18

Table of Contents

PLAN OF DISTRIBUTION

We are offering an aggregate of 521,396 shares of our common stock directly to Acqua Wellington pursuant to this prospectus supplement at an average purchase price of \$28.7692 per share.

On December 20, 2000, we entered into what is sometimes termed an equity line of credit arrangement with Acqua Wellington. Specifically, we entered into a common stock purchase agreement with Acqua Wellington, which, as amended and restated, provides that Acqua Wellington is committed to purchase up to \$125,000,000 of our common stock over the 28-month term of the purchase agreement. We have filed the purchase agreement as an exhibit to the post-effective amendment to the registration statement of which this prospectus supplement and the accompanying prospectus form a part. The total amount of securities available under the purchase agreement, as amended and restated, does not exceed 10% of the aggregate market value of our outstanding common stock that was held by our non-affiliates within 60 days prior to December 20, 2000. From time to time beginning in December 2000 and ending in April 2003 and at our sole discretion, we may present Acqua Wellington with draw down notices constituting offers to purchase our common stock over 18 consecutive trading days or such other number of trading days as agreed upon by us and Acqua Wellington. Under the purchase agreement, we are able to present Acqua Wellington with up to 24 draw down notices during the term of the agreement, with a minimum of five trading days required between each draw down period.

Once presented with a draw down notice, Acqua Wellington is required to purchase a pro rata portion of the shares on each trading day during the trading period on which the daily volume weighted average price for our common stock exceeds a threshold price determined by us and set forth in the draw down notice. The per share purchase price for these shares equals the daily volume weighted average price of our common stock on each date during the draw down period on which shares are purchased, less a discount ranging from 4.0% to 5.5%, based on our market capitalization on the date we issue a draw down notice. If the daily volume weighted average price of our common stock falls below the threshold price on any trading day during a draw down period, the purchase agreement provides that Acqua Wellington will not be required to purchase the pro-rata portion of shares of common stock allocated to that day. However, at its election, Acqua Wellington could buy the pro-rata portion of shares allocated to that day at the threshold price less the discount described above.

The purchase agreement also provides that from time to time and at our sole discretion we may grant Acqua Wellington a call option to purchase additional shares of our common stock in an aggregate amount up to the applicable draw down amount requested by us in such draw down period. Upon Acqua Wellington's exercise of the call option, we will issue and sell the shares of our common stock subject to the call option at a price equal to the greater of the daily volume weighted average price of our common stock on the day Acqua Wellington notifies us of its election to exercise its call option or the threshold price of our common stock, less a discount ranging from 4.0% to 5.5%, based on our market capitalization on the date we issue a draw down notice.

In addition to our issuance of shares of common stock to Acqua Wellington pursuant to the purchase agreement, this prospectus also covers the sale of those shares from time to time by Acqua Wellington to the public. Acqua Wellington is an underwriter within the meaning of Section 2(a)(11) of the Securities Act of 1933, as amended.

Acqua Wellington has informed us that it intends to use Carlin Equities Corp. as the broker-dealer to sell shares of common stock on the Nasdaq National Market. Such sales will be made on the Nasdaq National Market at prices and at terms then prevailing or at prices related to the then current market price. Carlin Equities Corp. is the same broker-dealer that Acqua Wellington used to sell shares of common stock it purchased from us in January 2001 pursuant to a draw down notice we delivered in December 2000 and related call options. Carlin Equities Corp. is an underwriter within the meaning of Section 2(a)(11) of the Securities Act. We filed a prospectus supplement in January 2001, and according to a telephone interpretation issued by the SEC Staff, we should have filed a post-effective amendment naming Carlin Equities Corp. as an underwriter. Acqua Wellington has informed us that Carlin Equities Corp., which is not an affiliate of Acqua Wellington, will receive commissions from Acqua Wellington

Table of Contents

which will not exceed customary brokerage commissions. Acqua Wellington also will pay other expenses associated with the sale of the common stock it acquires pursuant to the purchase agreement.

The shares of common stock may be sold in one or more of the following manners:

ordinary brokerage transactions and transactions in which the broker solicits purchasers; or

a block trade in which the broker or dealer so engaged will attempt to sell the shares as agent, but may position and resell a portion of the block as principal to facilitate the transaction.

In addition, Acqua Wellington and Carlin Equities Corp. will be subject to liability under the federal securities laws and must comply with the requirements of the Securities Act and the Securities Exchange Act of 1934, as amended, including without limitation, Rule 415(a)(4) under the Securities Act and Rule 10b-5 and Regulation M under the Exchange act. These rules and regulations may limit the timing of purchases and sales of shares of common stock by Acqua Wellington or Carlin Equities Corp. Under these rules and regulations, Acqua Wellington and Carlin Equities Corp.:

may not engage in any stabilization activity in connection with our securities;

must furnish each broker which offers shares of our common stock covered by this prospectus supplement and the accompanying prospectus with the number of copies of this prospectus supplement and the accompanying prospectus which are required by each broker; and

may not bid for or purchase any of our securities or attempt to induce any person to purchase any of our securities other than as permitted under the Exchange Act.

These restrictions may affect the marketability of the shares of common stock by Acqua Wellington and Carlin Equities Corp.

Acqua Wellington has agreed that prior to, during the term of and for a period of three months after the termination of the purchase agreement, neither Acqua Wellington nor any of its affiliates will be in a short position with respect to shares of our common stock. During the term of the purchase agreement, Acqua Wellington may sell the shares that it has the right to purchase pursuant to the purchase agreement, but Acqua Wellington has agreed that it will not sell any other shares of our common stock. In addition, Acqua Wellington has agreed that it will not grant any option to purchase or acquire any right to dispose or otherwise dispose for value, any shares of common stock or any securities convertible into, or exchangeable for, or warrants to purchase any shares of common stock or any swap, hedge or other agreement that transfers, in whole or in part, the economic risk of ownership of common stock. In the purchase agreement, Acqua Wellington also has agreed that its sales of our common stock on any trading day will not represent more than 30% of the total trading volume of our common stock, as reported on Bloomberg Financial LP, for that trading day.

We have agreed to indemnify and hold harmless Acqua Wellington against certain liabilities, including liabilities under the Securities Act, which may be based upon, among other things, any untrue statement or alleged untrue statement of a material fact contained in or incorporated by reference in the registration statement of which this prospectus supplement and the accompanying prospectus form a part, or any omission or alleged omission to state in the registration statement or any document incorporated by reference in the registration statement, a material fact required to be stated therein or necessary to make the statements therein not misleading, unless made or omitted in reliance upon written information provided to us by Acqua Wellington. We have agreed to pay all of Acqua Wellington's reasonable fees and expenses related to the transactions contemplated by the purchase agreement, except that we are obligated to pay only up to \$50,000 of the reasonable attorneys' fees and expenses (exclusive of disbursements and out-of-pocket expenses) incurred by Acqua Wellington in connection with the preparation,

negotiation, execution and delivery of the purchase agreement. We have also agreed to pay all reasonable fees and expenses incurred by Acqua Wellington in connection with any amendments, modifications or waivers of the purchase agreement, or incurred in connection with the enforcement of the purchase agreement, including without limitation, all reasonable attorneys' fees and expenses.

S-20

Table of Contents

The purchase agreement as executed and as amended and restated as of December 20, 2000 has been incorporated by reference into and has been filed as an exhibit to the registration statement of which this prospectus supplement and the accompanying prospectus form a part.

We have agreed to bear the expenses incident to the registration of the shares, other than selling discounts and commissions. These expenses are estimated to be \$10,000.

S-21

Table of Contents

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 bylaws. For information on obtaining a copy of our certificate of incorporation and bylaws, see the section of this prospectus supplement or the accompanying prospectus captioned **Where You Can Find More 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 July 16, 2001, we had 35,999,007 shares of common stock outstanding. 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. 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. The terms of the indenture governing the notes restrict our ability to declare or pay dividends.

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 of Leap in an amount that would disqualify Leap from being a designated entity under FCC rules. As of July 16, 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 piggy-back 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 piggy-back 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 piggy-back 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,

S-22

Table of Contents

which is filed as an exhibit to the registration statement of which this prospectus supplement and the accompanying prospectus form 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.

LEGAL MATTERS

Latham & Watkins in San Diego, California has passed upon the validity of the securities offered under this prospectus supplement 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, 2000 and 1999 and for the year ended December 31, 2000 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. 1 of Leap Wireless International, Inc. for the year ended December 31, 2000 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 YOU CAN FIND MORE 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. Please call the SEC at 1-800-SEC-0300 for further information on the public reference room. You may also access filed documents at the SEC's Web site at www.sec.gov.

The SEC allows us to incorporate by reference information that we file with them, which means that we can disclose important information to you by referring you to those documents. We incorporate by reference in this prospectus supplement and the accompanying prospectus the following documents listed below in addition to the documents and information contained under the heading "Where You Can Find More Information" on page 4 of the accompanying prospectus:

Our Annual Report on Form 10-K for the fiscal year ended December 31, 2000 filed with the SEC on March 2, 2001 and Amendment No. 1 thereto filed on Form 10-K/A with the SEC on June 28, 2001;

Our Quarterly Report on Form 10-Q for the 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;

S-23

Table of Contents

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;

Edgar Filing: LEAP WIRELESS INTERNATIONAL INC - Form 424B5

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 in this prospectus supplement or the accompanying prospectus shall be deemed to be modified or superseded for purposes of this prospectus supplement and the accompanying 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 superseded shall not be deemed, except as so modified or superseded, to constitute a part of this document.

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

Leap Wireless International, Inc.

10307 Pacific Center Court
San Diego, CA 92121
(858) 882-6000

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

S-24