SECURITIES AND EXCHANGE COMMISSION

Washington, D. C. 20549

FORM 8-K

Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

Date of Report (Date of earliest event reported): January 7, 2004

PRIMUS TELECOMMUNICATIONS GROUP, INCORPORATED

(Exact name of registrant as specified in its charter)

Delaware

(State or other jurisdiction of incorporation)

0-29092

(Commission File No.)

54-1708481 (IRS Employer Identification No.)

1700 Old Meadow Road, Suite 300, McLean, VA 22102

(Address of principal executive offices and zip code)

Registrant's telephone number, including area code: (703) 902-2800

Item 5. Other Events.

Proposed Private Placement of Notes.

On January 7, 2004, Primus Telecommunications Group, Incorporated (the "Company") issued a press release (the "Press Release") announcing the proposed offering pursuant to Rule 144A and Regulation S under the Securities Act of 1933 (the "proposed offering") of an aggregate of \$200.0 million of senior notes due 2014 (the "notes") by Primus Telecommunications Holding, Inc. (the "Issuer"), a direct and wholly owned subsidiary of the Company.

Item 9. Regulation FD Disclosure.

A. Limitation on Incorporation by Reference

In accordance with General Instruction B.2 of Form 8-K, the information set forth in this Item 9 shall not be deemed to be "filed" for purposes of Section 18 of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), or otherwise subject to the liabilities of that section, nor shall such information be deemed incorporated by reference in any filing under the Securities Act or the Exchange Act, except as shall be expressly set forth by specific reference in such a filing. The information set forth in this Item 9 shall not be deemed an admission as to the materiality of any information in this Current Report on Form 8-K that is required to be disclosed solely to satisfy the requirements of Regulation FD.

B. Supplemental Information Included in the Preliminary Offering Memorandum for the Notes

In connection with the proposed offering, we have presented the following information in the preliminary offering memorandum for the notes. As used herein, (i) Primus Telecommunications Holding, Inc., the issuer of the notes and a direct, wholly owned subsidiary of Primus Telecommunications Group, Incorporated, is referred to as the "Issuer," (ii) Primus Telecommunications Group, Incorporated, the parent company of the Issuer, is referred to as "Parent," and (iii) references to "Primus," "we," "us," or "our" are references to Parent and its subsidiaries collectively, including the Issuer, unless it is clear from the context or expressly stated that the reference is only to Parent or the Issuer.

The Concurrent Transactions

Concurrent with the proposed offering of the notes, we are undertaking the following transactions. The proposed offering, together with the following transactions, are referred to herein as the "Concurrent Transactions."

Internal Reorganization

The Issuer was incorporated on October 29, 2003 and is a holding company with no assets, liabilities or operations of its own. On the issue date of the notes, Parent will transfer to the Issuer by way of capital contribution all of the capital stock of all of Parent's direct subsidiaries other than the Issuer, except for those subsidiaries (which we refer to as the "Contingently Transferable Subsidiaries") the transfer of whose capital stock will require the approval or consent of, or a filing with, state telecommunications regulatory authorities in the United States. The Contingently Transferable Subsidiaries and their subsidiaries consist primarily of U.S. subsidiaries and the subsidiaries that will be transferred to the Issuer on the issue date of the notes will consist primarily of non-U.S. subsidiaries. Under the indenture governing the notes, Parent will be obligated to use its best efforts to complete the transfer to the Issuer, without condition, of

the capital stock of the Contingently Transferable Subsidiaries in accordance with applicable law as soon as practicable after the issue date of the notes. Until the transfer is complete, Parent's guarantee of the notes will be secured by a pledge of all of the

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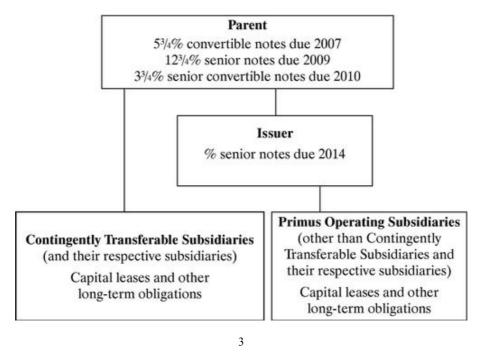
capital stock held by Parent of the Contingently Transferable Subsidiaries. The pledged capital stock will also equally and ratably secure the Parent's $12^3/4\%$ senior notes due 2009 (the "October 1999 senior notes") and possibly any amounts outstanding under future credit facilities of Primus. The Issuer will continue to be directly owned by Parent, and upon the transfer of the capital stock of all Contingently Transferable Subsidiaries to the Issuer, the Issuer will own all of the other Restricted Subsidiaries of Parent and the pledge of the capital stock of the Contingently Transferable Subsidiaries will automatically be released.

Net revenue and loss from operations of the Contingently Transferable Subsidiaries and their subsidiaries taken as a group were \$151.1 million and \$(17.4) million, respectively, for the nine months ended September 30, 2003 and \$133.8 million and \$(220.8) million, respectively, for the year ended December 31, 2002. Total assets and total liabilities of the Contingently Transferable Subsidiaries and their subsidiaries taken as a group were \$642.5 million (including \$385.9 million of intercompany receivables) and \$1,071.7 million (including \$1,010.7 million of intercompany payables), respectively, as of September 30, 2003.

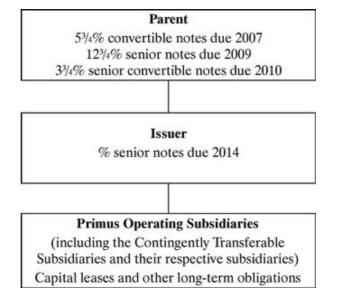
Satisfaction and Discharge of Senior Notes

On the issue date of the notes, the Issuer will distribute the net proceeds it receives from the proposed offering to Parent in the form of an intercompany loan. Parent will irrevocably deposit into trust (i) approximately \$50.0 million of such proceeds for the satisfaction and discharge of all of its outstanding $9^{7}/8\%$ senior notes due 2008 (the "1998 senior notes") and (ii) approximately \$117.0 million of such proceeds for the satisfaction and discharge of all of its outstanding $11^{1}/4\%$ senior notes due 2009 (the "January 1999 senior notes"). Parent will also give notices of redemption to the trustee for the 1998 senior notes and the January 1999 senior notes for the redemption of such notes within 30 days of their satisfaction and discharge. We intend to use the balance of the net proceeds from the proposed offering to repay, redeem or repurchase certain other debt and for working capital and general corporate purposes.

As of the issue date of the notes, after giving effect to the proposed offering and the application of the proceeds therefrom as set forth herein, our corporate structure will be as follows:



After giving effect to the completion of the transactions described under "The Concurrent Transactions—Internal Reorganization," which will not occur until after the issue date of the notes, our corporate structure would be as follows:



As of September 30, 2003, after giving effect to the proposed offering of the notes, the application of the net proceeds therefrom as set forth herein and the completion of the transactions described under "The Concurrent Transactions—Internal Reorganization:"

- the Issuer would have had no indebtedness outstanding other than the indebtedness under the notes;
- the Issuer's subsidiaries would have had \$365.4 million of outstanding debt and other liabilities, including trade payables but excluding intercompany liabilities, all of which are structurally senior to the notes;
- Parent would have had \$71.1 million (excluding debt of its subsidiaries) of outstanding subordinated debt; and
- Parent would have had \$281.3 million (excluding debt of its subsidiaries) of outstanding senior debt (\$247.7 million, after giving effect to the redemption of \$33.6 million of the 11³/4% senior notes due 2004 after September 30, 2003).

Indenture Data Relevant to the Proposed Offering

The following table and related notes provide ratio information and calculations relevant for purposes of determining the extent to which Parent and the Issuer will be able to incur additional Indebtedness in accordance with the proposed indenture governing the notes. Under the proposed indenture governing the notes, Parent and the Issuer (and its Restricted Subsidiaries) will be able to incur Indebtedness only if the ratio of Indebtedness to Consolidated Cash Flow (as such terms are defined in the proposed indenture governing the notes) of Parent or the Issuer, as applicable, are satisfied. Consolidated Cash Flow and Indebtedness of Parent and the Issuer, as defined therein, (1) may not be similar to consolidated cash flow and indebtedness measures presented by other companies, (2) are not measures under generally accepted accounting principles in the United States, (3) should not be considered as alternative indicators of our operating performance or any other measure derived in accordance with generally accepted accounting principles in the United States, and

(4) should be considered in addition to, but not as a substitute for, the information contained in our consolidated statements of cash flows and notes thereto.

The proposed indenture governing the notes requires that Parent's Indebtedness to Consolidated Cash Flow ratio not exceed 5.0 to 1.0 in order for Parent to be able to incur additional Indebtedness, subject to certain exceptions, in accordance with the proposed indenture. The proposed indenture governing the notes requires that the Issuer's Indebtedness to Consolidated Cash Flow ratio not exceed 3.5 to 1.0 in order for the Issuer or any of its Restricted Subsidiaries to be able to incur additional Indebtedness, subject to certain exceptions, in accordance with the proposed indenture. With respect to Parent's ability to incur additional Indebtedness, subject to certain exceptions, in accordance with the proposed indenture. With respect to Parent's ability to incur additional Indebtedness, this ratio is more restrictive than corresponding ratios contained in the indentures governing Parent's senior notes that are outstanding as of the date hereof (the "Existing Indentures"). The Existing Indentures (1) require that Parent's ratio of Indebtedness to Consolidated Cash Flow not exceed 6.0 to 1.0 in order for Parent to be able to incur additional Indebtedness, subject to certain exceptions, in accordance with the Existing Indentures, and (2) do not allow for incurrence of debt by Parent's restricted subsidiaries, including the Issuer, under a ratio test (although they can incur debt under certain other exceptions to the respective "Limitations on Indebtedness" covenants in the Existing Indentures). For the purposes of these ratios in each of the Existing Indentures and the indenture governing the notes, Consolidated Cash Flow is calculated by annualizing data from the last two reported fiscal quarters (i.e., multiplying the data from the last two fiscal quarters by two).

		As of and for Six Months Annualized Ended September 30, 2003		
	Actual	Pro Forma As Adjusted(2)		
	(in th	(in thousands, except ratios) (unaudited)		
ing:				
	\$ 161.24	15(1) \$161 245(1)		

Indebtedness	\$ 598,991	\$581,442
Indebtedness to Consolidated Cash Flow Ratio(4)	3.71	3.61
Issuer		
Consolidated Cash Flow (as defined)(3)	\$ —	\$174,669(1)
Indebtedness	\$ —	\$262,643
Indebtedness to Consolidated Cash Flow Ratio(4)	_	1.50

(1) Consolidated Cash Flow is calculated by annualizing data from the last two reported fiscal quarters (i.e., multiplying the data from the last two fiscal quarters by two).

(2) Pro forma as adjusted gives effect to: (i) the redemption, in October 2003, of the remaining \$33.6 million principal amount of the 11³/4% senior notes due 2004; (ii) the proposed offering and the use of proceeds thereof as described above; and (iii) the completion of the transactions as described in "The Concurrent Transactions—Internal Reorganization" (which will not occur until after the issue date of the notes).

(3) On a pro forma as adjusted basis, a reconciliation of Parent's net income to Parent Consolidated Cash Flow and to Issuer Consolidated Cash Flow is as follows:

	Annu	For Six Months Annualized Ended September 30, 2003	
	(in thousands)		
	(1	inaudited)	
Reconciliation of Parent Consolidated Cash Flow:			
Net income	\$	51,740	
Add:			
Interest expense		62,627	
Income tax expense		2,698	
Depreciation and amortization expenses		86,364	
Other non-cash items*		1,408	
Less: Foreign currency transaction gain		30,392	
Gain on early extinguishment of debt		13,200	
Gain on early extinguisiment of debt		15,200	
Parent Consolidated Cash Flow:	\$	161,245	
	_		
econciliation of Issuer Consolidated Cash Flow:			
Parent Consolidated Cash Flow (see calculation above)	\$	161,245	
Plus: Selling, general and administrative expenses of Parent		13,424	
Issuer Consolidated Cash Flow	\$	174,669	
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* Comprised of asset impairment charges, stock compensation, loss on sale of fixed assets, minority interest and losses on equity method investees.

(4) Indebtedness to Consolidated Cash Flow Ratio is calculated by dividing Indebtedness by Consolidated Cash Flow.

Additional Information Regarding Foreign Currency Gains and Future Capital Expenditures

Foreign currency gain for the year ended December 31, 2002 of \$8.5 million includes (i) \$0.7 million in unrealized gain on intercompany accounts receivable held by U.S. subsidiaries of Parent, but denominated and payable in Canadian dollars, and (ii) \$5.5 million in unrealized gain on intercompany accounts receivable held by U.S. subsidiaries of Parent, but denominated and payable in Australian dollars. The remainder was earned on the valuation for settlement of customer accounts receivable or vendor accounts payable throughout Parent's subsidiaries.

Foreign currency gain for the nine months ended September 30, 2003 of \$25.2 million includes (i) \$10.6 million in unrealized gain on intercompany accounts receivable held by U.S. subsidiaries of Primus, but denominated and payable in Canadian dollars, and (ii) \$13.3 million in unrealized gain on intercompany accounts receivable held by U.S. subsidiaries of Primus, but denominated and payable in Australian dollars. The remainder was earned on the valuation for settlement of customer accounts receivable or vendor accounts payable throughout Parent's subsidiaries.

As of the date hereof, we believe our current network meets the near term needs for our current and prospective customers and we expect future capital expenditures to be made only for network maintenance purposes and for success-based growth or acquisition initiatives.

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Legal Proceedings Update

On December 17, 2003, Primus Telecommunications, Inc. (PTI), our principal U.S. operating subsidiary, was served with notice that the Enforcement Bureau of the Federal Communications Commission (FCC) is conducting an inquiry concerning 96 alleged telephone calls made on behalf of PTI to residential telephone lines that were either (1) included on the Do-Not-Call Registry or (2) to consumers who directly requested not to receive telemarketing calls from PTI. PTI does not conduct outbound telemarketing activities to residential customers, but does use third party telemarketers. PTI is in the process of investigating whether it has responsibility relative to these allegations, or, notwithstanding the actions or inactions of third party telemarketers that may have given rise to the inquiry, PTI has satisfied the standards set out by the FCC as part of its routine business practices. PTI is in the preliminary stages of reviewing circumstances surrounding the subject matter of the inquiry and has not yet responded to the inquiry. Because the Do-Not-Call regulations are relatively new and little formal interpretive guidance exists regarding whether the matters identified in the inquiry represent a violation by PTI of these regulations, it is not clear what consequences the inquiry will have on PTI. Penalties for violations of the rules associated with the Do-Not-Call Registry and the consumer requests not to receive telemarketing calls can reach up to \$11,000 per call.

C. Forward-Looking Information

Certain statements throughout this Current Report on Form 8-K and elsewhere concerning the Company and the Offering constitute "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. Such statements are based on current expectations, and are not strictly historical statements. Forward-looking statements include, without limitation, statements set forth in this document and elsewhere regarding, among other things:

- expectations of future growth, revenue, foreign revenue contributions and net income, as well as income from operations, earnings per share, cost reduction efforts, cash flow, network development, Internet services development, traffic development, capital expenditures, selling, general and administrative expenses, goodwill impairment charges, service introductions and cash requirements;
- financing, refinancing and/or debt repurchase, restructuring or exchange plans or initiatives;
- liquidity and debt service forecasts;
- assumptions regarding stable currency exchange rates;
- management's plans, goals, expectations, guidance, objectives, strategies, and timing for future operations, acquisitions, product plans and performance;
- the revenue or other impact of our acquisition of the small- and medium-sized enterprise voice customer base of Cable & Wireless (C&W) in the United States; and
- management's assessment of market factors.

Factors and risks, including certain of those described in greater detail herein, that could cause actual results or circumstances to differ materially from those set forth or contemplated in forward-looking statements include, without limitation:

- changes in business conditions;
- fluctuations in the exchange rates of currencies, particularly any strengthening of the United States dollar relative to foreign currencies of the countries where we conduct our foreign operations;
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- adverse interest rate developments;
- fluctuations in prevailing trade credit terms or revenues due to the adverse impact of, among other things, further telecommunications carrier bankruptcies or adverse bankruptcy related developments affecting our large carrier customers;
- the possible inability to raise additional capital when needed, or at all;
- the inability to reduce, repurchase, exchange or restructure debt significantly, or in amounts sufficient to conduct regular ongoing operations;
- changes in the telecommunications or Internet industry, including rapid technological changes, regulatory changes in our principal markets and the degree of competitive pressure that we may face;
- adverse tax rulings from applicable taxing authorities;
- digital subscriber line (DSL), Internet and telecommunications competition;
- changes in financial, capital market and economic conditions;
- changes in service offerings or business strategies;
- difficulty in migrating or retaining customers, including former C&W customers associated with the recent acquisition of this customer base, or integrating other assets;

- difficulty in providing voice-over-Internet protocol services;
- changes in the regulatory schemes or requirements and regulatory enforcement in the markets in which we operate;
- restrictions on our ability to follow certain strategies or complete certain transactions as a result of our capital structure or debt covenants;
- risks associated with our limited DSL, Internet and Web hosting experience and expertise;
- entry into developing markets;
- the possible inability to hire and/or retain qualified sales, technical and other personnel, and to manage growth;
- risks associated with international operations;
- dependence on effective information systems;
- dependence on third parties to enable us to expand and manage our global network and operations;
- dependence on the implementation and performance of our global asynchronous transfer mode + Internet protocol communications network;
- adverse outcomes of outstanding litigation matters; and
- the outbreak or escalation of hostilities or terrorist acts and adverse geopolitical developments.

As such, actual results or circumstances may vary materially from such forward-looking statements or expectations. Readers are also cautioned not to place undue reliance on these forward-looking statements which speak only as of the date these statements were made. We are not necessarily obligated to update or revise any forward-looking statements, whether as a result of new information, future events or otherwise.

You are advised, however, to consult the discussion of risks and uncertainties under "Management's Discussion and Analysis of Financial Condition and Results of Operations—Liquidity and Capital Resources—Short- and Long-Term Liquidity Considerations and Risks"; and "—Special Note Regarding Forward-Looking Statements" contained in our quarterly report on Form 10-Q for the period ended September 30, 2003, as filed with the Securities and Exchange Commission on November 14, 2003.

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SIGNATURE

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

PRIMUS TELECOMMUNICATIONS GROUP, INCORPORATED

Dated: January 7, 2004

By: /s/ NEIL L. HAZARD

Name:Neil L. HazardTitle:Chief Operating Officer and Chief Financial Officer

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QuickLinks

SIGNATURE