Registration No.

SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D.C. 20549

FORM S-4

REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933

UNITEDGLOBALCOM, INC.

(Exact Name of Registrant as Specified in its Charter)

Delaware

(State or Other Jurisdiction of Incorporation or Organization)

4841

(Primary standard Industrial Classification Code Number)

84-1602895

(IRS Employer Identification Number)

UnitedGlobalCom, Inc. 4643 South Ulster Street, Suite 1300 Denver, Colorado 80237 (303) 770-4001

(Address, Including Zip Code, and Telephone Number, Including Area Code, of Registrant's Principal Executive Offices)

Michael T. Fries President UnitedGlobalCom, Inc. 4643 South Ulster Street, Suite 1300 Denver, Colorado 80237 (303) 770-4001

(Name, Address, Including Zip Code, and Telephone Number, Including Area Code, of Agent for Service)

With copies to:

Garth B. Jensen, Esq. Holme Roberts & Owen LLP 1700 Lincoln, Suite 4100 Denver, Colorado 80203 (303) 861-7000

Approximate date of commencement of proposed sale to the public: As promptly as practicable after this registration statement becomes effective.

If the securities being registered on this form are being offered in connection with the formation of a holding company and there is compliance with General Instruction G, check the following box. o

If this form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. \boxtimes 333-109496, 333-111286

If this form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. o

CALCULATION OF REGISTRATION FEE

Title of Each Class of Securities to be Registered	Amount to be Registered(1)	Proposed Maximum Aggregate Offering Price(2)	Proposed Maximum Amount of Registration Fee(3)
Class A Common Stock, \$.01 par value per share	172,234,530	\$1,219,834,662	\$98,685

- This Registration Statement relates to the registrant's Registration Statement on Form S-4 (Registration No. 333-109496), as amended and the registrant's Registration Statement filed pursuant to Rule 462(b) under the Securities Act on Form S-4MEF (Registration No. 333-111286) (collectively, the "Prior Registration Statements"), and covers 618,844 additional shares of Class A common stock, par value \$0.01 per share, of the registrant issuable in connection with the exchange offer for shares of UGC Europe, Inc. ("UGC Europe") common stock and the related short-form merger, based on the maximum number of shares of UGC Europe common stock that may be exchanged in the exchange offer and the merger (16,721,799 shares). The Prior Registration Statements registered 171,615,686 shares of the registrant's Class A common stock.
- In accordance with Rule 462(b) of the Securities and Exchange Commission's Rules and Regulations under the Securities Act of 1933, as amended, the proposed maximum aggregate offering price of securities eligible to be sold under the Prior Registration Statements (\$1,215,102,002) is carried forward to this Registration Statement and an additional amount of securities, having a proposed maximum offering price of \$4,732,660 is registered hereby. This additional amount is estimated solely for the purpose of calculating the registration fee pursuant to Rule 457(f)(1) and Rule 457(c) of the Securities Act and is based on the market value of the additional shares of UGC Europe common stock to be received in the exchange offer and the merger, which is equal to the product of (i) \$78.77 (the average of the high and low sale prices of UGC Europe common stock on December 18, 2003 on the Nasdaq National Market), and (ii) 60,082 (the additional number of shares of UGC Europe common stock to be acquired in the exchange offer or cancelled in the merger).
- (3) \$71,284 of this fee has previously been paid in connection with the initial filing of the registrant's Registration Statement on Form S-4 (Registration No. 333-109496) on October 6, 2003. \$26,805 of this fee was previously paid in connection with the Schedule TO/A filed by Europe Acquisition, Inc., a wholly-owned subsidiary of the registrant on November 13, 2003. \$213 of this fee was previously paid in connection with the filing of the registration Statement on Form S-4MEF (Registration No. 333-111286) on December 17, 2003. Accordingly, a registration fee of \$383 is due in connection with this filing.

EXPLANATORY NOTE

This Registration Statement is being filed by UnitedGlobalCom, Inc., or United, pursuant to General Instruction K of Form S-4 and Rule 462(b) under the Securities Act of 1933, as amended, to register an additional 618,844 shares of Class A common stock, par value \$0.01 per share of United, in connection with

United's offer to exchange 10.3 shares of its Class A common stock for all of the outstanding shares of common stock of UGC Europe, Inc., or UGC Europe, not owned by United or its subsidiaries and a "short-form" merger between United's wholly-owned subsidiary, Europe Acquisition, Inc., and UGC Europe, which occurred on December 19, 2003 upon successful completion of the exchange offer.

United previously registered a total of 171,615,686 shares of its Class A common stock in connection with the exchange offer and merger by means of a currently effective Registration Statement on Form S-4, as amended (Registration No. 333-109496), which was declared effective by the Securities and Exchange Commission on Friday, December 12, 2003 and by means of a currently effective Registration Statement filed pursuant to Rule 462(b) under the Securities Act of 1933 on Form S-4MEF (Registration No. 333-111286) on December 17, 2003. The total number of shares of United Class A common stock to be issued pursuant to the exchange offer and merger is expected to be 172,234,530.

INCORPORATION BY REFERENCE

United hereby incorporates by reference the contents of its Registration Statement on Form S-4, as amended (Registration No. 333-109496) and its Registration Statement on Form S-4MEF (Registration No. 333-111286), including each of the documents filed with and incorporated by reference or deemed to be incorporated by reference therein and all exhibits and schedules thereto.

I-1

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the registrant has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Denver, State of Colorado, on December 23, 2003.					
UNITEDGLOBALCOM, INC.					
December 23, 2003	Ву:	/s/ MICHAEL T. FRIES			
		Michael T. Fries, President, Chief Operating Officer and Director			
Pursuant to the requirements of the Securit dates indicated.	ies Act of 1933, this registration stateme	ent has been signed by the following persons in the capacities and on the			
December 23, 2003	*				
	Gene W. Schneider, Chairma Officer and Director	nn, Chief Executive			
December 23, 2003	*				
	Robert R. Bennett, <i>Director</i>				
December 23, 2003	*				
	Albert M. Carollo, Director				
December 23, 2003	*				
	John P. Cole, Jr., Director				
December 23, 2003	/s/ VALERIE L. COVER				
	Valerie L. Cover, Vice Presid	lent and Controller			
December 23, 2003	*				
	John W. Dick, Director				
December 23, 2003	/s/ MICHAEL T. FRIES				
	Michael T. Fries, President, and Director	Chief Operating Officer			
December 23, 2003	*				
	Gary S. Howard, Director				
	David B. Koff, Director				
December 23, 2003	*				

	December 23, 2003	*
		Curtis W. Rochelle, <i>Director</i>
	December 23, 2003	*
		Mark L. Schneider, <i>Director</i>
	December 23, 2003	*
		Frederick G. Westerman III, Chief Financial Officer
	December 23, 2003	*
		Tina M. Wildes, Senior Vice President Business Administration and Director
*By:	/s/ MICHAEL T. FRIES	
	Michael T. Fries, Attorney-in-Fact	

EXHIBIT INDEX

Description

Restated Certificate of Incorporation of the Registrant and as amended, as currently in effect.(1)

Incorporated by reference from United's Form 10-K for the year ended December 31, 2001 (File No. 000-496-58).

	7.1	restated definition of the registrant and as amended, as currently in effect.
	4.2	Bylaws of the Registrant as currently in effect.(1)
	4.3	Specimen of Class A Common Stock certificate of the Registrant.(2)
	5.1	Opinion of Holme Roberts & Owen LLP regarding the legality of the securities being sold.
	8.1	Opinion of Holme Roberts & Owen LLP as to tax matters.*
	23.1	Independent Auditors' Consent — KPMG LLP (UnitedGlobalCom, Inc.)
	23.2	Independent Auditors' Consent — KPMG Accountants N.V. (United Pan-Europe Communications N.V.)
	23.3	The consent of Holme Roberts & Owen LLP is included as part of Exhibit 5.1 and Exhibit 8.1.
	24.1	Power of Attorney.*
* (1)		usly filed in connection with Amendment No. 1 to United's Registration Statement on Form S-4 dated November 26, 2003 (File No. 333-109496). Formatted by reference from United's Registration Statement on Form S-1 dated February 14, 2002 (File No. 333-82776).

QuickLinks

(2)

Exhibit Number

4.1

EXPLANATORY NOTE INCORPORATION BY REFERENCE **SIGNATURES EXHIBIT INDEX**

Exhibit 5.1

[Holme Roberts & Owen LLP Letterhead]

December 23, 2003

Board of Directors UnitedGlobalCom, Inc. 4643 South Ulster Street, Suite 1300 Denver, Colorado 80237

Re: Registration Statement on Form S-4 of UnitedGlobalCom, Inc.

Ladies and Gentlemen:

As counsel for UnitedGlobalCom, Inc., a Delaware corporation (the "Company"), we have examined the above-referenced Registration Statement on Form S-4 under the Securities Act of 1933, as amended and supplemented (the "Registration Statement"), that the Company is filing with the Securities and Exchange Commission with respect to the registration of 172,234,530 shares of its Class A common stock, par value \$0.01 per share (the "Shares") in connection with the offer by the Company's wholly-owned subsidiary, Europe Acquisition, Inc., to exchange the Shares for each outstanding share of UGC Europe, Inc. not owned by the Company or its subsidiaries and a related short-form merger.

We have also examined the Company's Restated Certificate of Incorporation, as amended, Bylaws and the record of its corporate proceedings and have made such other investigation as we have deemed necessary in order to express the opinion set forth below.

Based on such investigation, it is our opinion that the Shares, when issued and sold in the manner and for the consideration contemplated by the Registration Statement, will be validly issued, fully paid and nonassessable.

We hereby consent to the reference to us under the caption "Certain Legal Information—Legal Matters" in the Registration Statement. We further consent to the filing of this opinion as an exhibit to the Registration Statement. We express no opinion as to any matters not expressly set forth herein.

Sincerely,

HOLME ROBERTS & OWEN LLP

By: /s/ GARTH B. JENSEN

Garth B. Jensen, Partner

QuickLinks

Exhibit 5.1

INDEPENDENT AUDITORS' CONSENT

The Board of Directors UnitedGlobalCom, Inc.:

We consent to the use of our report, dated March 31, 2003, except as to Notes 21 and 22 to the consolidated financial statements, which are as of April 9, 2003 and November 12, 2003, respectively, with respect to the consolidated balance sheet of UnitedGlobalCom, Inc. and subsidiaries as of December 31, 2002, and the related consolidated statements of operations and comprehensive income (loss), stockholders' equity (deficit), and cash flows for the year then ended, incorporated herein by reference and to the reference to our firm under the heading "Experts" in the prospectus.

Our report dated March 31, 2003, except as to Notes 21 and 22 to the consolidated financial statements, which are as of April 9, 2003 and November 12, 2003, respectively, contains an explanatory paragraph that states that the Company's primary operating subsidiary (United Pan-Europe Communications, N.V.) is currently under bankruptcy court supervision in both the United States and in The Netherlands, has suffered recurring losses from operations and is currently in default under certain of its significant bank credit facilities and senior notes and senior discount note agreements, which has resulted in a significant net working capital deficiency and raises substantial doubt about its ability to continue as a going concern. The consolidated financial statements do not include any adjustments that might result from the outcome of that uncertainty.

Our report refers to a change in the Company's method of accounting for goodwill and other intangible assets in 2002.

Our report refers to the revisions to the 2001 and 2000 consolidated financial statements to include the transitional disclosures required by Statement of Financial Accounting Standards No. 142, *Goodwill and Other Intangible Assets*, which was adopted by the Company as of January 1, 2002. However, we were not engaged to audit, review, or apply any procedures to the 2001 and 2000 consolidated financial statements of UnitedGlobalCom, Inc. and subsidiaries other than with respect to such disclosures.

Our report refers to a restatement of the consolidated financial statements as of and for the year ended December 31, 2002.

KPMG LLP

Denver, Colorado December 16, 2003

QuickLinks

Exhibit 23.1

Exhibit 23.2

[KPMG LOGO]

Independent Auditors' Consent

The Board of Directors UnitedGlobalCom, Inc.:

We consent to the use of our report dated March 31, 2003, except as to Note 19 to the consolidated financial statements, which is November 12, 2003, with respect to the consolidated balance sheet of United Pan-Europe Communications N.V. and subsidiaries as of December 31, 2002, and the related consolidated statements of operations and comprehensive income (loss), stockholders' equity (deficit), and cash flows for the year then ended for incorporation by reference into the registration statement on Form S-4 of UnitedGlobalCom, Inc. and to the reference to our firm under the heading "Experts" in the registration statement.

Our report dated March 31, 2003, except as to Note 19 to the consolidated financial statements, which is November 12, 2003, contains an explanatory paragraph that states that the accompanying consolidated financial statements have been prepared assuming that the Company will continue as a going concern. As discussed in Note 2 to the consolidated financial statements, the Company is currently under bankruptcy court supervision in both the United States and in the Netherlands, has suffered substantial recurring losses from operations, is currently in default under certain of its senior notes and senior discount notes, obtained waivers through March 31, 2003 from the lenders under the UPC Distribution Bank Facility and the Exchangeable Loan for potential events of cross defaults, and has a net capital deficiency. Management expects the Company to incur operating losses at least through 2004. Accordingly, there is substantial doubt regarding the Company's ability to continue as a going concern. Management's plans in regard to these matters and the status of the Financial Restructuring are also described in Note 2. The consolidated financial statements do not include any adjustments relating to the recoverability and classification of asset carrying amounts or the amount and classification of liabilities that might result should the Company be unable to successfully complete the Financial Restructuring or to continue as a going concern.

Our report refers to a change in the Company's method of accounting for goodwill and other intangible assets as a result of the adoption of Statement of Financial Accounting Standards No. 142 Goodwill and Other Intangible Assets.

Furthermore, our report refers to the revisions to the 2001 and 2000 consolidated financial statements to include the transitional disclosures required by Statement of Financial Accounting Standards No. 142, *Goodwill and Other Intangible Assets*, which was adopted by the Company as of January 1, 2002. However, we were not engaged to audit, review, or apply any procedures to the 2001 and 2000 consolidated financial statements of United Pan-Europe Communications N.V. and subsidiaries other than with respect to such disclosures.

The 2001 and 2000 consolidated financial statements of United Pan-Europe Communications N.V. and subsidiaries were audited by other auditors who have ceased operations.

Our report refers to a restatement of the consolidated financial statements as of and for the year ended December 31, 2002.

/s/ KPMG Accountants N.V.

KPMG Accountants N.V.

Amstelveen, The Netherlands December 16, 2003

QuickLinks

Exhibit 23.2