### SPIRENT COMMUNICATIONS PLC

Form 6-K August 31, 2006

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 6-K

REPORT OF FOREIGN PRIVATE ISSUER
PURSUANT TO RULE 13a-16 OR 15d-16
UNDER THE SECURITIES EXCHANGE ACT OF 1934

UNDER THE SECURITIES EXCHANGE ACT OF 1934 For the month of August, 2006 SPIRENT COMMUNICATIONS plc (Translation of registrant's name into English) Spirent House, Crawley Business Quarter, Fleming Way, Crawley, West Sussex RH10 9QL, UK. (Address of principal executive offices) Indicate by check mark whether the registrant files or will file annual reports under cover Form 20-F or Form 40-F. Form 20-F X Form 40-F.... Indicate by check mark whether the registrant by furnishing the information contained in this Form is also thereby furnishing the information to the Commission pursuant to Rule 12g3-2(b) under the Securities Exchange Act of 1934. Yes .... No If "Yes" is marked, indicate below the file number assigned to the registrant in connection with Rule 12g3-2(b): 82-NOTIFICATION OF MAJOR INTERESTS IN SHARES 1. Name of listed company

SPIRENT COMMUNICATIONS PLC

2. Name of shareholder with a major interest  $% \left( 1\right) =\left( 1\right) \left( 1\right) +\left( 1\right) \left( 1\right) \left( 1\right) +\left( 1\right) \left( 1\right)$ 

LEXA B.V.

3. Please state whether notification indicates that regarding the holding of the shareholder named in 2 above; in respect of a non-beneficial interest; or in the case of an individual holder if it is a holding of that person's spouse or children under the age of 18

IN RESPECT OF THE BENEFICIAL HOLDING OF LEXA B.V.

 $4.\ \text{Name}$  of the registered holder(s) and, if more than one holder, the number of shares held by each of them

LEXA B.V.

5. Number of shares / amount of stock acquired

N/A

6. Percentage of issued class (any treasury shares held by the listed company should not be taken into account when calculating percentage)

N/A

7. Number of shares / amount of stock disposed

N/A

8. Percentage of issued class (any treasury shares held by the listed company should not be taken into account when calculating percentage)

N/A

9. Class of security

ORDINARY SHARES OF 3 & 1/3 PENCE EACH

- 10. Date of transaction
- 30 AUGUST 2006 (SEE ADDITIONAL INFORMATION)
- 11. Date company informed
- 30 AUGUST 2006
- 12. Total holding following this notification

120,000,000 ORDINARY SHARES

13. Total percentage holding of issued class following this notification (any treasury shares held by the listed company should not be taken into account when calculating percentage)

13.03%

14. Any additional information

SPIRENT COMMUNICATION PLC IS CURRENTLY OPERATING A SHARE BUY BACK PROGRAMME AND AS AT 30 AUGUST 2006 HAD PURCHASED 50,990,000 SPIRENT COMMUNICATIONS PLC ORDINARY SHARES OF 3&1/3 PENCE INTO TREASURY OUT OF A TOTAL ISSUED SHARE CAPITAL OF 971,934,304 SHARES. AS SHARES HELD IN TREASURY ARE NOT INCLUDED IN THE CALCULATION OF HOLDINGS OF MAJOR SHAREHOLDERS A CONSEQUENCE OF THE BUY-BACK PROGRAMME HAS BEEN THAT THE PERCENTAGE HOLDING OF LEXA B.V. HAS INCREASED FROM 12.4% OF THE ISSUED SHARE CAPITAL TO 13.03% OF THE ISSUED SHARE CAPITAL, ALTHOUGH THE ACTUAL NUMBER OF SHARES HELD OF 120,000,000 REMAINS UNCHANGED.

15. Name of contact and telephone number for queries

WARREN NASH - 01293 767676

16. Name and signature of duly authorised company official of the listed company responsible for making this notification

WARREN NASH

Date of notification

31 AUGUST 2006

#### Signatures

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.

	MICHAEL ANSCOMBE
	(Registrant)
Date 31 August 2006	By/s/ Michael Anscombe
	(Signature)*

### **Executive Vice President**

(Last) (First) (Middle)

C/O WSFS FINANCIAL CORP, 838 MARKET STREET 3. Date of Earliest Transaction (Month/Day/Year) 12/02/2005

(Street)

WILMINGTON, DE 19801 4. If Amendment, Date Original Filed(Month/Day/Year)

6. Individual or Joint/Group Filing(Check Applicable Line)

\_X\_ Form filed by One Reporting Person

\_\_\_ Form filed by More than One Reporting Person

(City) (State) (Zip) **Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned** 

1.Title of Security (Instr. 3)	2. Transaction Date (Month/Day/Year)	2A. Deemed Execution Date, if any (Month/Day/Year)	3. Transaction Code (Instr. 8)	4. Securion(A) or D (Instr. 3,	ispose	ed of (D)	5. Amount of Securities Beneficially Owned Following	6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	Beneficial ct (I) Ownership	
			Code V	Amount	(A) or (D)	Price	Reported Transaction(s) (Instr. 3 and 4)			
Common Stock	12/02/2005		M	2,520	A	\$ 10.81	8,340	D		
Common Stock	12/02/2005		S	2,520	D	\$ 63.41	5,820	D		
Common Stock							1,653.22	I	401(K)	

Reminder: Report on a separate line for each class of securities beneficially owned directly or indirectly.

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Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities)

1. Title of Derivative Security (Instr. 3)	2. Conversion or Exercise Price of Derivative Security	3. Transaction Date (Month/Day/Year)	3A. Deemed Execution Date, if any (Month/Day/Year)	4. Transactio Code (Instr. 8)	Secu Acqu (A) o Dispo	rities nired or osed of r. 3, 4,	6. Date Exercisable and Expiration Date (Month/Day/Year)		7. Title and Amount of Underlying Securities (Instr. 3 and 4)	
				Code V	(A)	(D)	Date Exercisable	Expiration Date	Title	Amount or Number of Shares
Stock Options (Right to Buy)	\$ 10.81	12/02/2005		M		2,520	11/16/2001	11/16/2010	Common Stock	2,520
Stock Options (Right to Buy)	\$ 17.2						12/19/2002	12/19/2011	Common Stock	7,700
Stock Options	\$ 33.4						12/19/2003	12/19/2012	Common Stock	4,300

(Right to Buy)					
Stock Options (Right to Buy)	\$ 43.7	12/18/2004	12/18/2013	Common Stock	1,750
Stock Options (Right to Buy)	\$ 58.75	12/16/2005	12/16/2014	Common Stock	2,000

# **Reporting Owners**

Reporting Owner Name / Address	Relationships						
	Director	10% Owner	Officer	Other			
POWELL DEBORAH A C/O WSFS FINANCIAL CORP 838 MARKET STREET WILMINGTON, DE 19801			Executive Vice President				

# **Signatures**

/s/Deborah A. Powell By: Robert F. Mack, Power of Attorney 12/02/2005

\*\*Signature of Reporting Person Date

# **Explanation of Responses:**

- \* If the form is filed by more than one reporting person, see Instruction 4(b)(v).
- \*\* Intentional misstatements or omissions of facts constitute Federal Criminal Violations. See 18 U.S.C. 1001 and 15 U.S.C. 78ff(a).

Note: File three copies of this Form, one of which must be manually signed. If space is insufficient, *see* Instruction 6 for procedure. Potential persons who are to respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB number.

Reporting Owners 5