

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

For the Month of: November 2006

000-29144
(Commission File Number)

ILOG S.A.
(Translation of registrant's name into English)

9 rue de Verdun BP 85
94253 Gentilly, France
(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 Form 40-F

Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(1):

Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(7):

Indicate by check mark whether by furnishing the information contained on this Form, the registrant 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-_____.

On November 20, 2006, ILOG S.A. issued individual declarations of ILOG Directors trading of shares. A copy of the press release is attached hereto as Exhibit 99.1 and is incorporated herein by reference.

On November 24, 2006, ILOG S.A. issued a repurchase program. A description of the repurchase program is attached hereto as Exhibit 99.2 and is incorporated herein by reference.

Special Note Regarding Forward-Looking Statements

All of the statements included in the exhibits incorporated by reference herein and the information referenced therein, as well as oral statements that may be made by us or by officers, directors or employees acting on our behalf, that are not statements of historical fact, constitute or are based upon "forward-looking statements" within the meaning of the United States Securities laws that involve risks and uncertainties that could cause actual results to differ materially from those expressed or implied in the forward-looking statements. Among the factors that could cause our actual results to differ materially are those risks identified in "Item 3. Key Information—Risk Factors," "Item 4. Information on the Company" and "Item 5. Operating and Financial Review and Prospects" of the Company's most recent Annual Report on Form 20-F/A filed with the U.S. Securities and Exchange Commission (the "SEC") and its other filings and submissions with the SEC, including, without limitation, quarterly fluctuations in our operating results and the price of our shares or ADSs, factors affecting any one of our three product lines, the need to have sufficient consultants available to staff an unpredictable demand for our consulting services, lost revenues due to consultants with specialized expertise occupied on competing consulting engagements, our investments in vertical products which carry high implementation costs that we discount in order to promote customer purchases, intense competition and consolidation in our industry, the extended length and variability of our sales cycle and concentration of transactions in the final weeks in the quarter, which could result in substantial fluctuations in operating results and may prevent accurate forecasting of financial results, the increasing number of higher risk fixed price consulting engagements, our dependence on certain major independent software vendors, changing market and technological requirements, our ability to provide professional services activities that satisfy customer expectations, the impact of currency fluctuations on our profitability, changes in tax laws or an adverse tax audit, errors in our software products, the loss of key personnel, logistical difficulties, cultural differences, product localization costs, import and tariff restrictions, adverse foreign tax consequences and fluctuations in currencies resulting from our global operations, the impact of intellectual property infringement disputes, our heavy dependence on our proprietary technology, risks related to acquisitions and minority investments, the impact of dilutive share issuances, or the incurrence of debt and contingent liabilities and write-offs resulting from acquisitions or minority investments, the limitations imposed by French law or our by-laws that may prevent or delay an acquisition by ILOG using its Shares, changes in accounting principles that could affect our operating profits and reported results, and other matters not yet known to us or not currently considered material by us. All written and oral forward-looking statements attributable to us, or persons acting on our behalf, are qualified in their entirety by these cautionary statements. Readers are cautioned not to place undue reliance on these forward-looking statements. Unless required by law, the Company undertakes no obligation to revise these forward-looking statements to reflect new information or events, circumstances, changes in expectations or otherwise that arise after the date hereof.

Exhibit Description

- 99.1 Individual declarations of ILOG Directors trading of shares, issued November 20, 2006, by ILOG S.A.
- 99.2 Description of the repurchase program issued November 24, 2006

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.

ILOG S.A.

**By: /s/ Jerome Arnaud
Name: Jerome Arnaud
Title: Chief Financial Officer**

Date: November 24, 2006

Paris, November 20, 2006

ILOG S.A.: INDIVIDUAL DECLARATIONS OF ILOG DIRECTORS TRADING OF SHARES (pursuant to articles 222-14 and 222-15 of AMF *Règlement Général*)

Name: ILOG S.A.

Share capital: 18,626,709 euros

Register of Commerce and Companies of Créteil B 340 852 458

Registered office: 9 rue de Verdun, 94250 Gentilly

Last Name: Bonnelance

First Name: Nathalie

Position: wife of Marc Fourrier, ILOG Director

Description of the financial instrument: 1,400 ILOG shares

Nature of the transaction: purchase of 1,400 ILOG shares on Eurolist on November 15, 16, 17, 2006 for a total value of €13,624 at an average price of €9,71 per share.

About ILOG

ILOG delivers software and services that empower customers to make better decisions faster and manage change and complexity. Over 2,500 global corporations and more than 465 leading software vendors rely on ILOG's market-leading business rule management system (BRMS), optimization and visualization software components, to achieve improved returns on investment, create market-defining products and services, and sharpen their competitive edge. ILOG was founded in 1987 and employs more than 740 people worldwide.

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Paris, November 24, 2006

ILOG

Société anonyme with a share capital of euros 18,629,709
Registered Office: 9 rue de Verdun, B.P. 85, 94253 Gentilly
Register of Commerce and Companies of Créteil B 340 852 458

**DESCRIPTION OF THE REPURCHASE PROGRAM OF OWN SHARES
SUBMITTED TO THE GENERAL MEETING OF SHAREHOLDERS TO BE HELD ON
NOVEMBER 30, 2006
LAUNCHED BY THE BOARD OF DIRECTORS TO BE HELD ON NOVEMBER 30, 2006**

Summary of the operation major characteristics

Issuer:

ILOG S.A., *société anonyme* with a share capital of euros 18,629,709 at September 30, 2006, divided in 18,629,709 shares of nominal value €1,00 each, negotiated on Eurolist from Euronext Paris S.A. (code ISIN : FR0004042364) and traded in the United States in the form of American Depository Shares (« ADSs »).

Program: repurchase of share capital.

Entitled shares: ordinary shares each of the same category, registered, negotiated on Eurolist from Euronext Paris.

Maximum share percentage to be purchased: 10% of outstanding share capital at the Ordinary General Shareholders' Meeting to be held on November 30, 2006.

Maximum purchase price per unit: 20 euros or the U.S. dollars equivalent, translated at the rate of the date of operation (free of transaction fees).

Minimum sale price: 5 euros or the U.S. dollars equivalent, translated at the rate of the date of operation (free of transaction fees).

Objectives in decreasing priority order:

- provide consideration in the context of an acquisition or of an exchange of the Company's shares, including in the context of external growth or issuance of securities giving access to the Company's share capital;
- implement stock purchase plans for the benefit of the employees or executives of the Company or its affiliates pursuant to applicable laws, in particular through profit-sharing, the award of stock-options, or through a corporate pension fund (*Plan d'Epargne d'Entreprise*) or other allocations of shares for the benefit of the employees or executives of the Company or its affiliates;
- cancel such repurchased shares, subject to Shareholders' approval of a resolution;
- improve and maintain the liquidity of the shares on the market through a liquidity contract entered into with an investment services provider; and
- take into account any market practice recognized by the AMF, after the date of filing of the Annual Report on Form 20-F or *Document de Référence*.

Program duration: this authorization expires at the close of the Ordinary General Shareholders' Meeting called to approve the accounts for fiscal year ending June 30, 2007.

The Company operates in the software industry. ILOG is a worldwide provider of enterprise software and services. We develop, market, sell and support business rule management systems, as well as optimization-based decision tools and applications, and visualization software components. The Company's shares are traded on the *Nouveau Marché*, then Eurolist from Euronext Paris S.A. (code ISIN:

FR0004042364) since December 3, 1998 and on the form of ADS on the NASDAQ National Market since February 20, 1997.

I. DATE OF SHAREHOLDERS MEETING CALLED TO AUTHORISE THE REPURCHASE PROGRAM

Established by applying article L. 451-3 of French *Code Monétaire et Financier* and articles 241-1 and following of the *Règlement Général de l'Autorité des Marchés Financiers* («AMF»), this current repurchase program aims to describe the terms and objectives of the repurchase by ILOG of its own shares, that will be subject to the Shareholders' Meeting approval on November 30 2006.

The previous repurchase program approved by the Shareholders' Meeting on November 29, 2005 is canceled and replaced by this current repurchase program.

II. NUMBER OF SHARES AND SHARE CAPITAL THE COMPANY OWNS DIRECTLY OR INDIRECTLY

As of October 31, 2006, the Company owned 532 170 own shares (of which 450 044 shares repurchased directly by the Company and a net total of 82 126 own shares repurchased through the liquidity contract), representing 2.9% of the capital of the Company.

At this same date, the Company had no open position (purchase, sale) on its own shares, and no shares have been cancelled by the Company during the 24 last months.

III. DISTRIBUTION OF SHARE CAPITAL OWNED AT THE DATE OF THIS REPURCHASE PROGRAM PUBLICATION BY OBJECTIVES

For these 532 170 shares, the objectives are the following:

- provide consideration in the context of an acquisition or of an exchange of the Company's shares, including in the context of external growth or issuance of securities giving access to the Company's share capital;
- implement stock purchase plans for the benefit of the employees or executives of the Company or its affiliates pursuant to applicable laws, in particular through profit-sharing, the award of stock-options, or through a corporate pension fund (*Plan d'Epargne d'Entreprise*) or other allocations of shares for the benefit of the employees or executives of the Company or its affiliates;
- cancel such repurchased shares, subject to Shareholders' approval of a resolution;
- improve and maintain the liquidity of the shares on the market through a liquidity contract entered into with an investment services provider; and
- take into account any market practice recognized by the AMF, after the date of filing of the Annual Report on Form 20-F or *Document de Référence*.

For the purpose of this before last objective, ILOG has signed a liquidity contract on April 10, 2006 with Oddo Corporate Finance, limited to its shares on Eurolist d'Euronext. This contract runs until December 31, 2006, and is tacitly renewable for successive periods of 12 months. It is compliant with with the AFEI Charter, approved by the AMF on a decision dated March 22, 2005.

IV. REPURCHASE PROGRAM OBJECTIVES

The objectives of this repurchase program are in decreasing priority order:

- provide consideration in the context of an acquisition or of an exchange of the Company's shares, including in the context of external growth or issuance of securities giving access to the Company's share capital;
- implement stock purchase plans for the benefit of the employees or executives of the Company or its affiliates pursuant to applicable laws, in particular through profit-sharing, the award of stock-options, or through a corporate pension fund (*Plan d'Epargne d'Entreprise*) or other allocations of shares for the benefit of the employees or executives of the Company or its affiliates;
- cancel such repurchased shares, subject to Shareholders' approval of a resolution;
- improve and maintain the liquidity of the shares on the market through a liquidity contract entered into with an investment services provider; and
- take into account any market practice recognized by the AMF, after the date of filing of the Annual Report on Form 20-F or *Document de Référence*.

V. MAXIMUM PART OF SHARE CAPITAL MAXIMUM NUMBER AND CHARACTERISTICS OF SHARES THAT THE ISSUER PROPOSES TO ACQUIRE AS WELL AS MAXIMUM PURCHASE PRICE

1 - Maximum part of share capital to be purchased and maximum cash dedicated to the transaction

- ILOG would be authorized to repurchase up to 10% of its share capital as of the date of the general Shareholders' Meeting on November 30, 2006, therefore 1,862,970 shares. The Company commits not to exceed, directly or indirectly, at any time, the legal and authorized threshold of 10%.
- The maximum amount authorized for this transaction is 20 million euros. The Company intends to use the entirety of the authorized program.
- The General Shareholders' Meeting would authorize the share repurchase at a maximum price of 20 euros per share (free of transaction fees).
- Moreover the minimum sale price of the shares amounts to 5 euros per share (free of transaction fees).
- The Company commits to maintain a minimum floating number of shares, respecting the threshold defined by Euronext Paris S.A.
- According to article L.225-210 of French *Code de commerce*, the Company has enough retained earnings to realize this present program. This program cannot exceed consolidated retained earnings in equity in the last published financial statements at June 30, 2006, which amount to 38,431,441 euros.

2 - Terms of repurchases

The shares could be repurchased, in whole or in part, on the mutual agreement market, or by purchase of shares in block. Despite the authorization to use derivative financial instruments that could be given by the General Shareholders' Meeting, the Company does not intend to have recourse to this possibility.

Purchases or sales of shares in block could happen on the entirety of the program. Nonetheless in the case of the use of the repurchase program to regulate prices, purchases or sales in block would be limited.

The repurchase program could also be used in a public offering/exchange period, in the limits that could allow securities exchange regulations.

3 – Characteristics of shares of this program

- Nature of shares repurchased: ordinary shares, registered of the same category, negotiated on Eurolist from Euronext Paris
- Issuer : ILOG
- ISIN registration number : FR0004042364

4 – Terms of financing the repurchase program

ILOG intends to finance the repurchase program on its available cash, or through debt for additional needs that would exceed its auto financing capabilities.

Cash and cash equivalents, and net equity extracted from the consolidated financial statements as of June 30, 2006 amount to 54,468,797 euros and 53,735,439 euros respectively. The Company does not have any financial debts at this date.

VI. DURATION AND CALENDAR OF THE PROGRAM

The repurchase program would begin at the date of the Shareholders' Meeting and expire at the Ordinary Shareholders' Meeting to be called to approve the financial statements for the fiscal year ended June 30, 2007, and in all cases for a duration that cannot exceed 18 months, therefore at the latest on May 30, 2008 if the General Meeting called on November 30, 2006 meets on first call.

In application of article L.225-209 of French *Code de commerce*, the shares can only be cancelled in the limit of 10% of share capital on a 24 month-period.

VII. SUMMARY OF TRANSACTIONS REALIZED BY THE COMPANY IN THE PREVIOUS REPURCHASE PROGRAM

Following the previous repurchase program published on November 25, 2005 and approved by the Shareholders' Meeting on November 29, 2005 and expiring on May 25, 2007, as of October 31, 2006 the following shares had been purchased by the Company:

DECLARATION SUMMARY

Declaration by the issuer of transactions realized on own shares from July 1, 2005 to November 21, 2006

Percentage of share capital owned directly or indirectly: 2.9%
 Number of shares cancelled during the last 24 months: none
 Number of shares held in portfolio: 450 044
 Accounting value of portfolio as of September 30, 2006: 4 060 K€
 Market value of portfolio as of November 21, 2006: 4 388 K€

	Cumulative		Open positions at the date of this repurchase program			
	Purchases	Sales	Buying open positions		Selling open positions	
Number of shares	737,668	282,021	<i>Buying options purchased</i>	<i>Forward purchase</i>	<i>Buying options sold</i>	<i>Forward selling</i>
Average maximum deadline			-	-	-	-
Average rate of Transaction	11.8	11.4				
Amounts (K€)	8,713	3,217				

The Company had never used derivative instruments in its repurchase programs transactions.

VIII. RECENT EVENTS

The Company has published a press release of its first quarter closed September 30, 2006 results on October 26 on its website: www.ilog.com, and a form 6K on the SEC website. ILOG has published its Annual Form 20F on October 6, 2006 and 20F/A on October 13, 2006, available on the SEC and the Company's websites.

Pierre Haren
Chairman and CEO