TELEFONICA S A Form 6-K February 25, 2011

FORM 6-K SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549 Report of Foreign Private Issuer Pursuant to Rule 13a-16 or 15d-16 of the Securities Exchange Act of 1934 For the month of February, 2011 Commission File Number: 001-09531 Telefónica, S.A. (Translation of registrant s name into English) Distrito C, Ronda de la Comunicación s/n, 28050 Madrid, Spain 3491-482 85 48

(Address of principal executive offices)

Indicate by check mark whether the registrant files or will file annual reports under cover of Form 20-F or Form 40-F: Form 20-F b Form 40-F o

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):

Yes b No o

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):

Yes o No þ

Indicate by check mark whether by furnishing the information contained in 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 o No þ

If Yes is marked, indicate below the file number assigned to the registrant in connection with Rule 12g3-2(b): N/A

Telefónica, S.A. TABLE OF CONTENTS

Item

Sequential Page Number December 2010 2

1. Telefónica Group: Presentation on quarterly results January-December 2010

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.

Telefónica, S.A.

Date: February 25th, 2011

By: /s/ Santiago Fernández Valbuena Name: Santiago Fernández Valbuena Title: Chief Strategy Officer