PENTAIR plc Form SC 13D/A May 10, 2016

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

SCHEDULE 13D Under the Securities Exchange Act of 1934

(Amendment No. 5)*

PENTAIR PLC (Name of Issuer)

Ordinary Shares, nominal value \$0.01 per share (Title of Class of Securities)

G7S00T 104 (CUSIP Number)

Brian L. Schorr, Esq. Trian Fund Management, L.P. 280 Park Avenue, 41 st Floor New York, New York 10017 Tel. No.: (212) 451-3000

(Name, Address and Telephone Number of Person Authorized to Receive Notices and Communications)

May 10, 2016 (Date of Event Which Requires Filing of this Statement)

If the filing person has previously filed a statement on Schedule 13G to report the acquisition which is the subject of this Schedule 13D, and is filing this schedule because of $\S\S 240.13d-1(e)$, 240.13d-1(f) or 240.13d-1(g), check the following box [].

Note: Schedules filed in paper format shall include a signed original and five copies of the schedule, including all exhibits. See Rule 13d-7 for other parties to whom copies are to be sent.

*The remainder of this cover page shall be filled out for a reporting person's initial filing on this form with respect to the subject class of securities, and for any subsequent amendment containing information which would alter disclosures provided in a prior cover page.

The Information required on the remainder of this cover page shall not be deemed to be "filed" for the purpose of Section 18 of the Securities Exchange Act of 1934 ("Act") or otherwise subject to the liabilities of that section of the Act but shall be subject to all other provisions of the Act (however, see the Notes).

1	NAME OF REPORTING PERSON S.S. OR I.R.S. IDENTIFICATION NO. OF ABOVE PERSON Nelson Peltz					
2	CHECK THE APPRO	OPRIATE BOX IF A M	EMBER OF A GROUP	(a) [_] (b) [_]		
3	SEC USE ONLY					
4	SOURCE OF FUNDS					
5	CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) or 2(e)					
6	CITIZENSHIP OR Pl United States	CITIZENSHIP OR PLACE OF ORGANIZATION United States				
BENEFIC	BER OF SHARES CIALLY OWNED BY EPORTING PERSON WITH	7	SOLE VOTING POWER 0			
		8	SHARED VOTING POWER 14,335,888			
		9	SOLE DISPOSITIVE POWER 0			
		10	SHARED DISPOSITIVE POWER 14,335,888			
11	AGGREGATE AMO	UNT BENEFICIALLY	OWNED BY EACH REPORTING PERSON			
	14,335,888					
12	CHECK BOX IF THI SHARES	E AGGREGATE AMO	UNT IN ROW (11) EXCLUDES CERTAIN	[]		
13	PERCENT OF CLAS	S REPRESENTED BY	AMOUNT IN ROW (11)			
	7.93%*					

14 TYPE OF REPORTING PERSON IN

^{*}Calculated based on 180,716,339 ordinary shares outstanding as of March 31, 2016, as reported in the Issuer's Quarterly Report on Form 10-Q for the quarter ended March 31, 2016 (the "Form 10-Q").

1						
2	CHECK THE APPRO	OPRIATE BOX IF A M	EMBER OF A GROUP	(a) [_] (b) [_]		
3	SEC USE ONLY					
4	SOURCE OF FUNDS	S				
5	CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS $2(d)$ or $2(e)$			[_]		
6	CITIZENSHIP OR P. United States	CITIZENSHIP OR PLACE OF ORGANIZATION United States				
BENEFIC	BER OF SHARES CIALLY OWNED BY EPORTING PERSON WITH	7	SOLE VOTING POWER 0			
		8	SHARED VOTING POWER 14,335,888			
		9	SOLE DISPOSITIVE POWER 0			
		10	SHARED DISPOSITIVE POWER 14,335,888			
11	AGGREGATE AMO 14,335,888	OUNT BENEFICIALLY	OWNED BY EACH REPORTING PERSON			
12	CHECK BOX IF THE	E AGGREGATE AMO	UNT IN ROW (11) EXCLUDES CERTAIN	[]		
13	PERCENT OF CLAS 7.93%*	SS REPRESENTED BY	AMOUNT IN ROW (11)			
14	TYPE OF REPORTIN	NG PERSON				

^{*} Calculated based on 180,716,339 ordinary shares outstanding as of March 31, 2016, as reported in the Issuer's Form 10-Q.

1	NAME OF REPOR S.S. OR I.R.S. IDEN Edward P. Garden		IO. OF ABOVE PERSON			
2	CHECK THE APP	ROPRIATE BOX	IF A MEMBER OF A GROUP	(a) [_] (b) [_]		
3	SEC USE ONLY					
4	SOURCE OF FUNI AF	OS				
5		CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT [_] TO ITEMS 2(d) or 2(e)				
6	CITIZENSHIP OR United States	CITIZENSHIP OR PLACE OF ORGANIZATION United States				
BENEF	MBER OF SHARES FICIALLY OWNED B' REPORTING PERSON WITH		SOLE VOTING POWER 0			
		8	SHARED VOTING POWER 14,335,888			
		9	SOLE DISPOSITIVE POWER 0			
		10	SHARED DISPOSITIVE POWER 14,335,888			
11	AGGREGATE AM 14,335,888	OUNT BENEFIC	CIALLY OWNED BY EACH REPORTING PERSON			
12	CHECK BOX IF TI SHARES	HE AGGREGAT	E AMOUNT IN ROW (11) EXCLUDES CERTAIN	[]		
13	PERCENT OF CLA 7.93%*	ASS REPRESENT	ΓED BY AMOUNT IN ROW (11)			
14	TYPE OF REPORT	ING PERSON				

IN

^{*} Calculated based on 180,716,339 ordinary shares outstanding as of March 31, 2016, as reported in the Issuer's Form 10-Q.

1		AME OF REPORTING PERSON rian Fund Management, L.P.				
	S.S. OR I.R.S. IDEN 20-3454182	ΠΓΙΓΙCATION NO. OF A	ABOVE PERSON	() 5 2		
2	CHECK THE APPRO	OPRIATE BOX IF A M	EMBER OF A GROUP	(a) [_] (b) [_]		
3	SEC USE ONLY					
4	SOURCE OF FUNDS AF	S				
5		CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS $2(d)$ or $2(e)$				
6	CITIZENSHIP OR P	CITIZENSHIP OR PLACE OF ORGANIZATION Delaware				
BENEFI	MBER OF SHARES CIALLY OWNED BY REPORTING PERSON WITH	7	SOLE VOTING POWER 0			
		8	SHARED VOTING POWER 14,335,888			
		9	SOLE DISPOSITIVE POWER 0			
		10	SHARED DISPOSITIVE POWER 14,335,888			
11	AGGREGATE AMO 14,335,888	UNT BENEFICIALLY	OWNED BY EACH REPORTING PERSON			
12	CHECK BOX IF THE SHARES	E AGGREGATE AMO	UNT IN ROW (11) EXCLUDES CERTAIN	[]		
13	PERCENT OF CLAS	S REPRESENTED BY	AMOUNT IN ROW (11)			
14	TYPE OF REPORTION	NG PERSON				

* Calculated based on 180,716,339 ordinary shares outstanding as of March 31, 2016, as reported in the Issuer's Form 10-Q.

1	NAME OF REPORT Trian Fund Managem						
	S.S. OR I.R.S. IDEN' 20-3454087	TIFICATION NO	O. OF ABOVE PERSON				
2	CHECK THE APPRO	OPRIATE BOX 1	IF A MEMBER OF A GROUP	(a) [_] (b) [_]			
3	SEC USE ONLY						
4	SOURCE OF FUNDAF	URCE OF FUNDS					
5		CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT [_] O ITEMS 2(d) or 2(e)					
6	CITIZENSHIP OR P Delaware	LACE OF ORGA	ANIZATION				
BENEF	MBER OF SHARES FICIALLY OWNED BY REPORTING PERSON WITH		SOLE VOTING POWER 0				
		8	SHARED VOTING POWER 14,335,888				
		9	SOLE DISPOSITIVE POWER 0				
		10	SHARED DISPOSITIVE POWER 14,335,888				
11	AGGREGATE AMC 14,335,888	OUNT BENEFIC	IALLY OWNED BY EACH REPORTING PERSON				
12	CHECK BOX IF TH SHARES	E AGGREGATE	AMOUNT IN ROW (11) EXCLUDES CERTAIN	[]			
13	PERCENT OF CLAS	SS REPRESENT	ED BY AMOUNT IN ROW (11)				
14	TYPE OF REPORTI	NG PERSON					

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^{*} Calculated based on 180,716,339 ordinary shares outstanding as of March 31, 2016, as reported in the Issuer's Form 10-Q.

1		NAME OF REPORTING PERSON Trian Partners Master Fund (ERISA), L.P.					
	S.S. OR I.R.S. IDEN 98-0682467	TIFICATION NO	O. OF ABOVE PERSON				
2	CHECK THE APPR	OPRIATE BOX I	F A MEMBER OF A GROUP	(a) [_] (b) [_]			
3	SEC USE ONLY						
4	SOURCE OF FUND WC						
5		HECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT [_] O ITEMS 2(d) or 2(e)					
6	CITIZENSHIP OR F Cayman Islands	PLACE OF ORGA	NIZATION				
BENE	MBER OF SHARES FICIALLY OWNED BY REPORTING PERSON WITH		SOLE VOTING POWER 0				
		8	SHARED VOTING POWER 182,740				
		9	SOLE DISPOSITIVE POWER 0				
		10	SHARED DISPOSITIVE POWER 182,740				
11	AGGREGATE AMO 182,740	DUNT BENEFICI	ALLY OWNED BY EACH REPORTING PERSON				
12	CHECK BOX IF TH SHARES	IE AGGREGATE	AMOUNT IN ROW (11) EXCLUDES CERTAIN	[X]			
13	PERCENT OF CLAS	SS REPRESENTE	ED BY AMOUNT IN ROW (11)				

14 TYPE OF REPORTING PERSON PN

 $^{^{*}}$ Calculated based on 180,716,339 ordinary shares outstanding as of March 31, 2016, as reported in the Issuer's Form 10-Q.

1	NAME OF REPORT Trian Partners, L.P.	NAME OF REPORTING PERSON Trian Partners, L.P.					
	S.S. OR I.R.S. IDEN' 20-3453988	ΓΙΓΙCATION N	O. OF ABOVE PERSON				
2	CHECK THE APPRO	OPRIATE BOX	IF A MEMBER OF A GROUP	(a) [_] (b) [_]			
3	SEC USE ONLY						
4	SOURCE OF FUNDS WC						
5		HECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT [_] O ITEMS 2(d) or 2(e)					
6	CITIZENSHIP OR P	LACE OF ORG	ANIZATION				
BENE	MBER OF SHARES FICIALLY OWNED BY REPORTING PERSON WITH	7	SOLE VOTING POWER 0				
		8	SHARED VOTING POWER 2,670,342				
		9	SOLE DISPOSITIVE POWER 0				
		10	SHARED DISPOSITIVE POWER 2,670,342				
11	AGGREGATE AMO 2,670,342	UNT BENEFIC	IALLY OWNED BY EACH REPORTING PERSON				
12	CHECK BOX IF THE	E AGGREGATI	E AMOUNT IN ROW (11) EXCLUDES CERTAIN	[X]			
13	PERCENT OF CLAS	SS REPRESENT	ED BY AMOUNT IN ROW (11)				
14	TYPE OF REPORTI	NG PERSON					

PN

^{*} Calculated based on 180,716,339 ordinary shares outstanding as of March 31, 2016, as reported in the Issuer's Form 10-Q.

1	NAME OF REPORT Trian Partners Master					
	S.S. OR I.R.S. IDEN 98-0468601	ΓΙΕΓΙΕΑΤΙΟΝ ΝΟ. ΟΕ Α	ABOVE PERSON			
2	CHECK THE APPRO	OPRIATE BOX IF A M	EMBER OF A GROUP	(a) [_] (b) [_]		
3	SEC USE ONLY					
4	SOURCE OF FUNDS					
5		CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT [_] O ITEMS 2(d) or 2(e)				
6	CITIZENSHIP OR Pl Cayman Islands	LACE OF ORGANIZA	TION			
BENEFI	IBER OF SHARES CIALLY OWNED BY EPORTING PERSON WITH	7	SOLE VOTING POWER 0			
		8	SHARED VOTING POWER 5,959,332			
		9	SOLE DISPOSITIVE POWER 0			
		10	SHARED DISPOSITIVE POWER 5,959,332			
11	AGGREGATE AMO 5,959,332	UNT BENEFICIALLY	OWNED BY EACH REPORTING PERSON			
12	CHECK BOX IF THI SHARES	E AGGREGATE AMO	UNT IN ROW (11) EXCLUDES CERTAIN	[X]		
13	PERCENT OF CLAS 3.30%*	S REPRESENTED BY	AMOUNT IN ROW (11)			
14	TYPE OF REPORTIN	NG PERSON				

PN

^{*} Calculated based on 180,716,339 ordinary shares outstanding as of March 31, 2016, as reported in the Issuer's Form 10-Q.

1		NAME OF REPORTING PERSON Trian Partners Parallel Fund I, L.P.					
	S.S. OR I.R.S. IDEN 20-3694154	TIFICATION NO	O. OF ABOVE PERSON				
2	CHECK THE APPR	OPRIATE BOX II	F A MEMBER OF A GROUP	(a) [_] (b) [_]			
3	SEC USE ONLY						
4	SOURCE OF FUND WC						
5		HECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT [_] O ITEMS 2(d) or 2(e)					
6	CITIZENSHIP OR F Delaware	PLACE OF ORGA	NIZATION				
BENE	MBER OF SHARES FICIALLY OWNED BY REPORTING PERSON WITH		SOLE VOTING POWER 0				
		8	SHARED VOTING POWER 261,894				
		9	SOLE DISPOSITIVE POWER 0				
		10	SHARED DISPOSITIVE POWER 261,894				
11	AGGREGATE AMO 261,894	DUNT BENEFICI	ALLY OWNED BY EACH REPORTING PERSON				
12	CHECK BOX IF TH SHARES	IE AGGREGATE	AMOUNT IN ROW (11) EXCLUDES CERTAIN	[X]			
13	PERCENT OF CLAS	SS REPRESENTE	ED BY AMOUNT IN ROW (11)				

14 TYPE OF REPORTING PERSON PN

 $^{^{*}}$ Calculated based on 180,716,339 ordinary shares outstanding as of March 31, 2016, as reported in the Issuer's Form 10-Q.

1		NAME OF REPORTING PERSON Trian Partners Strategic Investment Fund-A, L.P.					
	S.S. OR I.R.S. IDEN 27-4180625	TIFICATION N	O. OF ABOVE PERSON				
2	CHECK THE APPRO	OPRIATE BOX	IF A MEMBER OF A GROUP	(a) [_] (b) [_]			
3	SEC USE ONLY						
4	SOURCE OF FUND WC						
5		CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT [_] TO ITEMS 2(d) or 2(e)					
6	CITIZENSHIP OR P Delaware	LACE OF ORG	ANIZATION				
BENE	JMBER OF SHARES FICIALLY OWNED BY I REPORTING PERSON WITH		SOLE VOTING POWER 0				
		8	SHARED VOTING POWER 2,008,726				
		9	SOLE DISPOSITIVE POWER 0				
		10	SHARED DISPOSITIVE POWER 2,008,726				
11	AGGREGATE AMC 2,008,726	OUNT BENEFIC	IALLY OWNED BY EACH REPORTING PERSON				
12	CHECK BOX IF TH SHARES	E AGGREGATI	E AMOUNT IN ROW (11) EXCLUDES CERTAIN	[X]			
13	PERCENT OF CLAS	SS REPRESENT	ED BY AMOUNT IN ROW (11)				
14	TYPE OF REPORTI	NG PERSON					

^{*} Calculated based on 180,716,339 ordinary shares outstanding as of March 31, 2016, as reported in the Issuer's Form 10-Q

1	NAME OF REPORT Trian Partners Strate		ınd-N, L.P.	
	S.S. OR I.R.S. IDEN 80-0958490	TIFICATION NO	O. OF ABOVE PERSON	() []
2	CHECK THE APPR	OPRIATE BOX	IF A MEMBER OF A GROUP	(a) [_] (b) [_]
3	SEC USE ONLY			
4	SOURCE OF FUND WC	os		
5	CHECK BOX IF DIT TO ITEMS 2(d) or 2		LEGAL PROCEEDINGS IS REQUIRED PURSUANT	[_]
6	CITIZENSHIP OR F Delaware	PLACE OF ORGA	ANIZATION	
BENE	MBER OF SHARES FICIALLY OWNED BY REPORTING PERSON WITH		SOLE VOTING POWER 0	
		8	SHARED VOTING POWER 569,800	
		9	SOLE DISPOSITIVE POWER 0	
		10	SHARED DISPOSITIVE POWER 569,800	
11	AGGREGATE AMO 569,800	OUNT BENEFIC	IALLY OWNED BY EACH REPORTING PERSON	
12	CHECK BOX IF TH SHARES	IE AGGREGATE	E AMOUNT IN ROW (11) EXCLUDES CERTAIN	[X]
13	PERCENT OF CLA	SS REPRESENT	ED BY AMOUNT IN ROW (11)	
14	TYPE OF REPORT	ING PERSON		

PN

^{*} Calculated based on 180,716,339 ordinary shares outstanding as of March 31, 2016, as reported in the Issuer's Form 10-Q.

1		NAME OF REPORTING PERSON Trian Partners Strategic Investment Fund II, L.P.				
	S.S. OR I.R.S. IDEN' 45-4929803	TIFICATION NO. OF A	ABOVE PERSON			
2	CHECK THE APPRO	OPRIATE BOX IF A M	EMBER OF A GROUP	(a) [_] (b) [_]		
3	SEC USE ONLY					
4	SOURCE OF FUND WC	S				
5		CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT [_] TO ITEMS 2(d) or 2(e)				
6	CITIZENSHIP OR P Delaware	CITIZENSHIP OR PLACE OF ORGANIZATION Delaware				
BENEFI	IBER OF SHARES CIALLY OWNED BY EPORTING PERSON WITH		SOLE VOTING POWER 0			
		8	SHARED VOTING POWER 902,609			
		9	SOLE DISPOSITIVE POWER 0			
		10	SHARED DISPOSITIVE POWER 902,609			
11	AGGREGATE AMC 902,609	OUNT BENEFICIALLY	OWNED BY EACH REPORTING PERSON			
12	CHECK BOX IF TH	E AGGREGATE AMO	UNT IN ROW (11) EXCLUDES CERTAIN	[X]		
13	PERCENT OF CLAS 0.50%*	SS REPRESENTED BY	AMOUNT IN ROW (11)			
14	TYPE OF REPORTI	NG PERSON				

^{*} Calculated based on 180,716,339 ordinary shares outstanding as of March 31, 2016, as reported in the Issuer's Form 10-Q.

1	NAME OF REPORTING PERSON Trian Partners Strategic Investment Fund-D, L.P.			
	S.S. OR I.R.S. IDENTIFICATION NO. OF ABOVE PERSON 98-1108184			
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP			(a) [_] (b) [_]
3	SEC USE ONLY			
4	SOURCE OF FUNDS WC			
5	CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) or 2(e)			[_]
6	CITIZENSHIP OR PLACE OF ORGANIZATION Cayman Islands			
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH		7	SOLE VOTING POWER 0	
		8	SHARED VOTING POWER 446,245	
		9	SOLE DISPOSITIVE POWER 0	
		10	SHARED DISPOSITIVE POWER 446,245	
11	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 446,245			
12	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES			[X]
13	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11) 0.25%*			
14	TYPE OF REPORTIN	NG PERSON		

^{*} Calculated based on 180,716,339 ordinary shares outstanding as of March 31, 2016, as reported in the Issuer's Form 10-Q.

1	NAME OF REPORTING PERSON Trian Partners Fund (Sub)-G, L.P.			
	S.S. OR I.R.S. IDENTIFICATION NO. OF ABOVE PERSON 90-1035117			
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP			(a) [_] (b) [_]
3	SEC USE ONLY			
4	SOURCE OF FUNDS WC			
5	CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) or 2(e)			[_]
6	CITIZENSHIP OR PLACE OF ORGANIZATION Delaware			
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH			SOLE VOTING POWER 0	
		8	SHARED VOTING POWER 106,099	
		9	SOLE DISPOSITIVE POWER 0	
		10	SHARED DISPOSITIVE POWER 106,099	
11	AGGREGATE AMC 106,099	OUNT BENEFICIALLY	OWNED BY EACH REPORTING PERSON	
12	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN [X SHARES			[X]
13	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11) 0.06% *			
14	TYPE OF REPORTI	NG PERSON		

^{*} Calculated based on 180,716,339 ordinary shares outstanding as of March 31, 2016, as reported in the Issuer's Form 10-Q.

1	NAME OF REPORTING PERSON Trian Partners Strategic Fund-G II, L.P.				
	S.S. OR I.R.S. IDEN 46-5509975	TIFICATION NO. OF	F ABOVE PERSON	(a) [_]	
2	CHECK THE APPR	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP			
3	SEC USE ONLY	SEC USE ONLY			
4	SOURCE OF FUND WC	os			
5	CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) or 2(e)			[_]	
6	CITIZENSHIP OR F Delaware	CITIZENSHIP OR PLACE OF ORGANIZATION Delaware			
BENEF	MBER OF SHARES FICIALLY OWNED BY REPORTING PERSON WITH		SOLE VOTING POWER 0		
		8	SHARED VOTING POWER 361,725		
		9	SOLE DISPOSITIVE POWER 0		
		10	SHARED DISPOSITIVE POWER 361,725		
11	AGGREGATE AMO 361,725	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 361,725			
12	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN [X SHARES			[X]	
13	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11) 0.20%*				

14 TYPE OF REPORTING PERSON PN

 $^{^{*}}$ Calculated based on 180,716,339 ordinary shares outstanding as of March 31, 2016, as reported in the Issuer's Form 10-Q.

1	NAME OF REPORTING PERSON Trian Partners Strategic Fund-G III, L.P.			
	S.S. OR I.R.S. IDENTIFICATION NO. OF ABOVE PERSON 47-2121971			
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP			(a) [_] (b) [_]
3	SEC USE ONLY			
4	SOURCE OF FUNDS WC			
5	CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) or 2(e)			[_]
6	CITIZENSHIP OR PLACE OF ORGANIZATION Delaware			
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH		7	SOLE VOTING POWER 0	
		8	SHARED VOTING POWER 212,365	
		9	SOLE DISPOSITIVE POWER 0	
		10	SHARED DISPOSITIVE POWER 212,365	
11	AGGREGATE AMO 212,365	UNT BENEFICIALLY	OWNED BY EACH REPORTING PERSON	
12	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN [X] SHARES			[X]
13	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11) 0.12% *			
14	TYPE OF REPORTION	NG PERSON		

^{*} Calculated based on 180,716,339 ordinary shares outstanding as of March 31, 2016, as reported in the Issuer's Form 10-Q.

1	NAME OF REPORTING PERSON Trian Partners Strategic Fund-K, L.P.			
	S.S. OR I.R.S. IDENTIFICATION NO. OF ABOVE PERSON 47-5116069			() F 1
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP			(a) [_] (b) [_]
3	SEC USE ONLY			
4	SOURCE OF FUNDS WC			
5	CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) or 2(e)			[_]
6	CITIZENSHIP OR PLACE OF ORGANIZATION Delaware			
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH		7	SOLE VOTING POWER 0	
		8	SHARED VOTING POWER 654,011	
		9	SOLE DISPOSITIVE POWER 0	
		10	SHARED DISPOSITIVE POWER 654,011	
11	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 654,011			
12	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN [X] SHARES			[X]
13	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11) 0.36%*			
14	TYPE OF REPORTING PERSON PN			

^{*} Calculated based on 180,716,339 ordinary shares outstanding as of March 31, 2016, as reported in the Issuer's Form 10-Q.

This Amendment No. 5 amends and supplements the Schedule 13D filed with the Securities and Exchange Commission on June 30, 2015 (the "Original Statement"), as amended by Amendment No. 1 filed on July 13, 2015, as amended by Amendment No. 2 filed on July 29, 2015, as amended by Amendment No. 3 filed on September 8, 2015, and as amended by Amendment No. 4 ("Amendment No. 4") filed on February 22, 2016 (as amended, the "Schedule 13D"), relating to the Ordinary Shares, nominal value \$0.01 per share (the "Shares"), of Pentair plc, an Irish public limited company (the "Issuer"). The address of the principal executive office of the Issuer is P.O. Box 471, Sharp Street, Walkden, Manchester, M28 8BU United Kingdom.

Capitalized terms not defined herein shall have the meanings ascribed to them in the Schedule 13D. Except as set forth herein, the Schedule 13D is unmodified.

Items 4 and 5 of the Schedule 13D are hereby amended and supplemented as follows:

Item 4. Purpose of Transaction

Item 4 of the Schedule 13D is hereby amended and supplemented by adding the following information:

As a result of the shareholders of the Issuer approving at its 2016 annual general meeting of shareholders on May 10, 2016 the Amendment Resolution to increase the maximum number of directors of the Issuer from eleven to twelve, Ed Garden, Chief Investment Officer and a Founding Partner of Trian Management, was appointed as a director of the Issuer and as a member of the Compensation Committee and the Governance Committee of the Board of Directors of the Issuer immediately following the meeting. Mr. Garden was appointed as director of the Issuer pursuant to the terms of the Letter Agreement. Pursuant to the Letter Agreement, Mr. Garden has been attending and participating in all Board of Directors and Compensation Committee meetings in a non-voting participant capacity since September 2015.

Item 5. Interest in Securities of the Issuer

Item 5 of the Schedule 13D is hereby amended and supplemented by adding the following information:

- (a) As of 4:00 p.m., New York City time, on May 9, 2016, the Reporting Persons beneficially owned, in the aggregate, 14,335,888 Shares, representing approximately 7.93% of the Issuer's outstanding Shares (calculated based on 180,716,339 ordinary shares outstanding as of March 31, 2016, as reported in the Issuer's Quarterly Report on Form 10-Q for the quarter ended March 31, 2016).
- (c) There have been no new transactions by the Reporting Persons since the filing of Amendment No. 4.

[INTENTIONALLY LEFT BLANK]

SIGNATURE

After reasonable inquiry and to the best of each of the undersigned knowledge and belief, each of the undersigned certifies that the information set forth in this statement is true, complete and correct.

Dated: May 10, 2016

TRIAN FUND MANAGEMENT, L.P.

By: Trian Fund Management GP, LLC, its general partner

By: /s/ EDWARD P. GARDEN

Name: Edward P. Garden

Title: Member

TRIAN FUND MANAGEMENT GP, LLC

By: /s/ EDWARD P. GARDEN

Name: Edward P. Garden

Title: Member

TRIAN PARTNERS, L.P.

By: Trian Partners GP, L.P., its general partner

By: Trian Partners General Partner, LLC, its general partner

By: /s/ EDWARD P. GARDEN

Name: Edward P. Garden

Title: Member

TRIAN PARTNERS MASTER FUND (ERISA) L.P.

By: Trian Partners (ERISA) GP, L.P., its general partner

By: Trian Partners (ERISA) General Partner, LLC, its general partner

By: /s/ EDWARD P. GARDEN

Name: Edward P. Garden

Title: Member

TRIAN PARTNERS MASTER FUND, L.P.

By: Trian Partners GP, L.P., its general partner

By: Trian Partners General Partner, LLC, its general partner

By: /s/ EDWARD P. GARDEN

Name: Edward P. Garden

Title: Member

TRIAN PARTNERS PARALLEL FUND I, L.P.

By: Trian Partners Parallel Fund I General Partner, LLC, its

general partner

By: /s/ EDWARD P. GARDEN

Name: Edward P. Garden

Title: Member

TRIAN PARTNERS STRATEGIC INVESTMENT FUND-A, L.P.

By: Trian Partners Strategic Investment Fund-A GP, L.P., its

general partner

By: Trian Partners Strategic Investment Fund-A General

Partner, LLC, its general partner

By: /s/ EDWARD P. GARDEN

Name: Edward P. Garden

Title: Member

TRIAN PARTNERS STRATEGIC INVESTMENT FUND-N, L.P.

By: Trian Partners Strategic Investment Fund-N GP, L.P., its

general partner

By: Trian Partners Strategic Investment Fund-N General

Partner, LLC., its general partner

By: /s/ EDWARD P. GARDEN

Name: Edward P. Garden

Title: Member

TRIAN PARTNERS STRATEGIC INVESTMENT FUND II, L.P.

By: Trian Partners Strategic Investment Fund II GP, L.P., its general

partner

By: Trian Partners Strategic Investment Fund-II General Partner,

LLC., its general partner

By: /s/ EDWARD P. GARDEN

Name: Edward P. Garden

Title: Member

TRIAN PARTNERS STRATEGIC INVESTMENT FUND-D, L.P.

By: Trian Partners Strategic Investment Fund-D GP, L.P., its general

partner

By: Trian Partners Strategic Investment Fund-D General Partner,

LLC, its general partner

By: /s/ EDWARD P. GARDEN

Name: Edward P. Garden

Title: Member

TRIAN PARTNERS FUND (SUB)-G, L.P.

By: Trian Partners Investment Fund-G GP, L.P., its general partner

By: Trian Partners Investment Fund-G General Partner, LLC, its

general partner

By: /s/ EDWARD P. GARDEN

Name: Edward P. Garden

Title: Member

TRIAN PARTNERS STRATEGIC FUND-G II, L.P.

By: Trian Partners Strategic Fund-G II GP, L.P., its general partner

By: Trian Partners Strategic Fund-G II General Partner, LLC, its

general partner

By: /s/ EDWARD P. GARDEN

Name: Edward P. Garden

Title: Member

TRIAN PARTNERS STRATEGIC FUND-G III, L.P.

By: Trian Partners Strategic Fund-G III GP, L.P., its general partner

By: Trian Partners Strategic Fund-G III General Partner, LLC, its

general partner

By: /s/ EDWARD P. GARDEN

Name Edward P. Garden

Title Member

TRIAN PARTNERS STRATEGIC FUND-K, L.P.

By: Trian Partners Strategic Fund-K GP, L.P., its general partner

By: Trian Partners Strategic Fund-K General Partner, LLC, its general

partner

By: /s/ EDWARD P. GARDEN

Name Edward P. Garden

Title Member

/s/NELSON PELTZ

Nelson Peltz

/s/PETER W. MAY

Peter W. May

/s/EDWARD P. GARDEN

Edward P. Garden