

## Disclosure of beginning to have substantial holding

*Section 276, Financial Markets Conduct Act 2013*

**Note:** This form must be completed in accordance with the instructions at the end of the form.

**To NZX Limited**  
and  
**To Chorus Limited**

Date this disclosure made: 18 December 2018

Date on which substantial holding began: 12 December 2018

### **Substantial product holder(s) giving disclosure**

Full name(s): The Vanguard Group, Inc.

### **Summary of substantial holding**

Class of quoted voting products: Ordinary shares

Summary for **The Vanguard Group, Inc.**

For this disclosure,—

- (a) total number held in class: **23,418,083**
- (b) total in class: **436,075,010**
- (c) total percentage held in class: **5.370%**

**Details of transactions and events giving rise to substantial holding**

Details of the transactions or other events requiring disclosure:

Date	Change	Price	Share Quantity
15-Aug-18	Sell	4.34	(8,112)
15-Aug-18	Buy	3.94	942
16-Aug-18	Buy	4.37	10,005
21-Aug-18	Buy	3.99	1,570
24-Aug-18	Sell	4.41	(9,570)
24-Aug-18	Buy	4.41	9,570
24-Aug-18	Buy	4.41	6,670
4-Sep-18	Buy	4.33	1,298
7-Sep-18	Sell	4.86	(3,335)
10-Sep-18	Buy	4.47	1,550
11-Sep-18	Buy	4.88	66,875
13-Sep-18	Buy	4.87	31,614
14-Sep-18	Buy	4.84	12,171
14-Sep-18	Buy	4.84	22,843
17-Sep-18	Buy	4.86	36,907
17-Sep-18	Buy	4.86	19,663
17-Sep-18	Buy	4.49	1,716
18-Sep-18	Buy	4.93	8,166
18-Sep-18	Buy	4.93	15,327
18-Sep-18	Buy	4.95	995
21-Sep-18	Sell	5.00	(314)
21-Sep-18	Buy	4.99	8,400
21-Sep-18	Buy	4.99	28,133
21-Sep-18	Buy	4.99	245,456
21-Sep-18	Sell	5.00	(56,127)
24-Sep-18	Buy	4.83	149
24-Sep-18	Buy	4.83	499
24-Sep-18	Buy	4.83	4,353
25-Sep-18	Buy	4.76	445
25-Sep-18	Buy	4.76	1,489
25-Sep-18	Buy	4.76	12,987
25-Sep-18	Buy	4.76	84,468
26-Sep-18	Buy	4.76	2,074
26-Sep-18	Buy	4.80	1,801
26-Sep-18	Buy	4.80	15,713
26-Sep-18	Buy	4.84	12,230
26-Sep-18	Buy	4.84	4,892
26-Sep-18	Buy	4.84	9,784
26-Sep-18	Buy	4.43	1,020
27-Sep-18	Buy	4.83	1,427

27-Sep-18	Buy	4.83	12,450
27-Sep-18	Buy	4.44	27,884
27-Sep-18	Buy	4.44	24,230
27-Sep-18	Buy	4.45	13,090
28-Sep-18	Buy	4.87	2,263
28-Sep-18	Buy	4.87	19,747
1-Oct-18	Buy	4.84	7,338
1-Oct-18	Buy	4.44	1,674
2-Oct-18	Buy	4.82	1,457
2-Oct-18	Buy	4.82	12,714
2-Oct-18	Buy	4.86	19,568
3-Oct-18	Buy	4.85	7,338
8-Oct-18	Buy	4.44	1,674
11-Oct-18	Buy	4.70	3,990
11-Oct-18	Buy	4.33	2,652
15-Oct-18	Buy	4.73	6,650
17-Oct-18	Buy	4.47	3,757
17-Oct-18	Buy	4.47	23,855
19-Oct-18	Buy	4.82	3,990
19-Oct-18	Buy	4.82	7,338
24-Oct-18	Buy	4.33	2,244
25-Oct-18	Buy	4.75	6,115
25-Oct-18	Buy	4.30	2,618
29-Oct-18	Buy	4.34	24,401
31-Oct-18	Buy	4.76	8,561
31-Oct-18	Buy	4.39	588
31-Oct-18	Buy	4.39	3,136
1-Nov-18	Buy	4.73	12,230
1-Nov-18	Buy	4.39	392
2-Nov-18	Buy	4.48	2,548
6-Nov-18	Buy	4.54	28,176
7-Nov-18	Buy	4.95	9,784
12-Nov-18	Buy	5.00	7,338
12-Nov-18	Buy	5.00	5,180
12-Nov-18	Buy	4.71	2,964
14-Nov-18	Buy	4.91	9,784
14-Nov-18	Buy	4.91	7,338
15-Nov-18	Buy	4.97	7,770
21-Nov-18	Buy	5.02	9,784
22-Nov-18	Buy	4.65	3,192
23-Nov-18	Buy	4.65	18,560
28-Nov-18	Buy	4.87	3,990
28-Nov-18	Buy	4.87	665
28-Nov-18	Buy	4.87	6,115

29-Nov-18	Buy	4.47	2,145
30-Nov-18	Buy	4.80	7,770
3-Dec-18	Buy	4.49	2,535
4-Dec-18	Buy	4.72	9,784
4-Dec-18	Buy	4.72	7,770
6-Dec-18	Buy	4.76	10,360
7-Dec-18	Buy	4.75	8,561
7-Dec-18	Buy	4.75	9,784
7-Dec-18	Buy	4.75	10,360
11-Dec-18	Buy	4.70	9,784
11-Dec-18	Buy	4.70	10,360
11-Dec-18	Buy	4.52	4,460
11-Dec-18	Buy	4.52	2,676
12-Dec-18	Buy	4.72	7,338
12-Dec-18	Buy	4.72	20,791
12-Dec-18	Buy	4.72	7,338
12-Dec-18	Buy	4.52	142,580
12-Dec-18	Buy	4.72	8,146,408

**Additional information**

Address(es) of substantial product holder(s):

**The Vanguard Group Inc.** – P.O. Box 2600, V26 Valley Forge, PA 19482 USA

Contact details: **Shawn Acker, 001-610-669-8989,**  
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**Certification**

I, **Shawn Acker**, certify that, to the best of my knowledge and belief, the information contained in this disclosure is correct and that I am duly authorised to make this disclosure by all persons for whom it is made.