Form 603

Corporations Act 2001 Section 671B

Notice of initial substantial holder

To Company Name/Scheme	ALS Limited	
ACN/ARSN	009 657 489	
1. Details of substantial holder (1)		
Name	The Vanguard Group, Inc.	
ACN/ARSN (if applicable)	N/A	
The holder became a substantial holder on	13 December 2018	

2. Details of voting power

The total number of votes attached to all the voting shares in the company or voting interests in the scheme that the substantial holder or an associate (2) had a relevant interest (3) in on the date the substantial holder became a substantial holder are as follows:

Class of securities (4)	Number of securities	Person's votes (5)	Voting power (6)
Ordinary	24,502,238	24,502,238	5.034%

3. Details of relevant interests

The nature of the relevant interest the substantial holder or an associate had in the following voting securities on the date the substantial holder became a substantial holder are as follows:

Holder of relevant interest	Nature of relevant interest (7)	Class and number of securities
Vanguard Investments Australia	Beneficial Owner	Ordinary - 12,002,466
Ltd.		
The Vanguard Group, Inc.	Beneficial Owner	Ordinary - 12,499,772

4. Details of present registered holders

The persons registered as holders of the securities referred to in paragraph 3 above are as follows:

Holder of	Registered holder of	Person entitled to be	Class and
relevant	securities	registered as holder (8)	number of
interest			securities
Vanguard	JP Morgan Chase	Vanguard Investments Australia Ltd is the manager of various	Ordinary -
Investments	Bank, N.A. and various	superannuation funds, institutional investor portfolios and unit trusts	12,002,466
Australia Ltd	other Custodians	and in that capacity can exercise the power to vote and/or dispose of	
		the shares	
The Vanguard	Brown Brothers	The Vanguard Group, Inc., is the manager of various Mutual funds and	Ordinary -
Group, Inc.	Harriman	accounts and in that capacity has the power to dispose of the shares	240,190
The Vanguard	BNY Mellon	The Vanguard Group, Inc., is the manager of various Mutual funds and	Ordinary -
Group, Inc.		accounts and in that capacity has the power to dispose of the shares	1,338,020
The Vanguard	Citibank	The Vanguard Group, Inc., is the manager of various Mutual funds and	Ordinary -
Group, Inc.		accounts and in that capacity has the power to dispose of the shares	5,873
The Vanguard	JP Morgan Chase	The Vanguard Group, Inc., is the manager of various Mutual funds and	Ordinary -
Group, Inc.	Bank, N.A.	accounts and in that capacity has the power to dispose of the shares	7,523,370
The Vanguard	State Street Bank and	The Vanguard Group, Inc., is the manager of various Mutual funds and	Ordinary -
Group, Inc.	Trust Company	accounts and in that capacity has the power to dispose of the shares	3,392,319

5. Consideration

The consideration paid for each relevant interest referred to in paragraph 3 above, and acquired in the four months prior to the day that the substantial holder became a substantial holder is as follows:

Holder of relevant interest	Date of acquisition	Consideration (9)	Class and number of securities	
See Annexure A				

6. Associates

The reasons the persons named in paragraph 3 above are associates of the substantial holder are as follows:

Name and ACN/ARSN (if applicable)	Nature of association
N/A	N/A

7. Addresses

The addresses of persons named in this form are as follows:

Name	Address
The Vanguard Group, Inc.	P.O. Box 2600, V26 Valley Forge, PA 19482 USA
Vanguard Investments Australia Ltd	Level 34, 2 Southbank Blvd, Southbank 3006 VIC Australia

sign here HAWN ACKER capacity MANAGER

date 17 December 2018

DIRECTIONS

- (1) If there are a number of substantial holders with similar or related interests (eg. a corporation and its related corporations, or the manager and trustee of an equity trust), the names could be included in an annexure to the form. If the relevant interests of a group of persons are essentially similar, they may be referred to throughout the form as a specifically named group if the membership of each group, with the names and addresses of members is clearly set out in paragraph 7 of the form.
- (2) See the definition of "associate" in section 9 of the Corporations Act 2001.
- (3) See the definition of "relevant interest" in sections 608 and 671B(7) of the Corporations Act 2001.
- (4) The voting shares of a company constitute one class unless divided into separate classes.
- (5) The total number of votes attached to all the voting shares in the company or voting interests in the scheme (if any) that the person or an Associate has a relevant interest in.
- (6) The person's votes divided by the total votes in the body corporate or scheme multiplied by 100.
- (7) Include details of:
 - (a) any relevant agreement or other circumstances by which the relevant interest was acquired. If subsection 671B(4) applies, a copy of any document setting out the terms of any relevant agreement, and a statement by the person giving full and accurate details of any contract, scheme or arrangement, must accompany this form, together with a written statement certifying this contract, scheme or arrangement; and
 - (b) any qualification of the power of a person to exercise, control the exercise of, or influence the exercise of, the voting powers or disposal of the securities to which the relevant interest relates (indicating clearly the particular securities to which the qualification applies).

See the definition of "relevant agreement" in section 9 of the Corporations Act 2001.

- (8) If the substantial holder is unable to determine the identity of the person (eg. if the relevant interest arises because of an option) write "unknown".
- (9) Details of the consideration must include any and all benefits, moneys and other, that any person from whom a relevant interest has acquired has, or may, become entitled to receive in relation to that acquisition. Details must be included even if the benefit is conditional on the happening or not of a contingency. Details must be included of any benefit paid on behalf of the substantial holder of its associate in relation to the acquisitions, even if they are not paid directly to the person from whom the relevant interest was acquired.

To Company ACN/ARSN ALS Limited 009 657 489

Substantial Holder Name

The Vanguard Group, Inc.

ACN/ARSN

N/A

Date of change	Person whose relevant interest changed	Nature of Change(6)	Consideration given in relation to change(7)	Class	Number of securities	Person's votes affected
	18 The Vanguard Group, Inc.	BUY	8.95	Ordinary	7,138	7,138
	18 The Vanguard Group, Inc.	SELL	8.94	Ordinary	(7,248)	(7,248)
	18 The Vanguard Group, Inc.	BUY	8.89	Ordinary	14,953	14,953
	18 The Vanguard Group, Inc.	BUY	8.73	Ordinary	1,342	1,342
	18 The Vanguard Group, Inc.	BUY	8.75	Ordinary	84,302	84,302
	18 The Vanguard Group, Inc.	SELL	8.73	Ordinary	(653)	(653)
	18 The Vanguard Group, Inc.	BUY	8.54	Ordinary	63,424	63,424
	18 The Vanguard Group, Inc.	BUY	8,43	Ordinary	3,996	3,996
	18 The Vanguard Group, Inc.	BUY	8.54	Ordinary	5,994	5,994
	18 The Vanguard Group, Inc.	BUY	8.86	Ordinary	2,275	2,275
.	18 The Vanguard Group, Inc.	SELL	8.86	Ordinary	(1,478)	(1,478)
	18 The Vanguard Group, Inc.	BUY	8.86	Ordinary	3,042	3,042
	18 The Vanguard Group, Inc.	BUY	8.74	Ordinary	3,036	3,036
	18 The Vanguard Group, Inc.	BUY	8.74	Ordinary	6,072	6,072
-		BUY	8.74	Ordinary	7,590	7,590
	18 The Vanguard Group, Inc.	BUY	8.94	Ordinary	955	955
<u>.</u>	18 The Vanguard Group, Inc.	BUY	8.92	Ordinary	4,554	4,554
	18 The Vanguard Group, Inc.		8.97	Ordinary	12,144	12,144
	18 The Vanguard Group, Inc.	BUY		Ordinary	4,554	4,554
	18 The Vanguard Group, Inc.	BUY	9.03	Ordinary	3,408	3,408
	18 The Vanguard Group, Inc.	BUY				5,680
	18 The Vanguard Group, Inc.	BUY	8.16	Ordinary	5,680	
	18 The Vanguard Group, Inc.	BUY	8.26	Ordinary	3,408	3,408
	18 The Vanguard Group, Inc.	BUY	8.26	Ordinary	4,554	4,554
	18 The Vanguard Group, Inc.	BUY	8.04	Ordinary	96,487	96,487
	18 The Vanguard Group, Inc.	BUY	8.10	Ordinary	3,795	3,795
	18 The Vanguard Group, Inc.	BUY	8.19	Ordinary	5,313	5,313
	18 The Vanguard Group, Inc.	BUY	8.22	Ordinary	86,775	86,775
	18 The Vanguard Group, Inc.	BUY	8.20	Ordinary	7,590	7,590
	18 The Vanguard Group, Inc.	BUY	8.06	Ordinary	9,949	9,949
7-Nov-	18 The Vanguard Group, Inc.	BUY	8.03	Ordinary	6,072	6,072
9-Nov-	18 The Vanguard Group, Inc.	SELL	8.12	Ordinary	(967)	(967)
	18 The Vanguard Group, Inc.	BUY	7.97	Ordinary	4,554	4,554
13-Nov-	18 The Vanguard Group, Inc.	BUY	7.97	Ordinary	1,544	1,544
	18 The Vanguard Group, Inc.	BUY	7.70	Ordinary	6,072	6,072
14-Nov	18 The Vanguard Group, Inc.	BUY	7.70	Ordinary	4,554	4,554
16-Nov	18 The Vanguard Group, Inc.	BUY	7.94	Ordinary	109,023	109,023
21-Nov	18 The Vanguard Group, Inc.	BUY	7.24	Ordinary	6,072	6,072
28-Nov	18 The Vanguard Group, Inc.	BUY	7.35		568	568
	18 The Vanguard Group, Inc.	BUY	7.35	Ordinary	3,408	3,408
28-Nov	18 The Vanguard Group, Inc.	BUY	7.35	·	3,795	3,795
4-Dec	18 The Vanguard Group, Inc.	BUY	7.44	Ordinary	6,072	6,072
5-Dec	18 The Vanguard Group, Inc.	BUY	7.55	Ordinary	33,794	33,794
6-Dec	18 The Vanguard Group, Inc.	BUY	7.48	Ordinary	113,971	113,971
7-Dec	18 The Vanguard Group, Inc.	BUY	7.10	Ordinary	6,072	6,072
	18 The Vanguard Group, Inc.	BUY	7.10	Ordinary	5,313	5,313
7-Dec	18 The Vanguard Group, Inc.	BUY	7.39	Ordinary	12,273	12,273
	18 The Vanguard Group, Inc.	BUY	6.96		6,072	6,072
11-Dec	18 The Vanguard Group, Inc.	BUY	6.96	Ordinary	4,554	4,554
12-Dec	18 The Vanguard Group, Inc.	BUY	7.11	Ordinary	4,554	4,554
	18 The Vanguard Group, Inc.	BUY	7.11	Ordinary	4,554	4,554
	18 The Vanguard Group, Inc.	BUY	7.11	Ordinary	12,903	12,903
	18 The Vanguard Group, Inc.	BUY	7.23	Ordinary	196	196
	18 Vanguard Investments Australia Ltd	BUY	8.81	Ordinary	9,328	9,328
	18 Vanguard Investments Australia Ltd	BUY	8.97	Ordinary	2,772	2,772
	18 Vanguard Investments Australia Ltd	BUY	8.97	Ordinary	17,155	17,155
	18 Vanguard Investments Australia Ltd	BUY	8.73	Ordinary	4,620	4,620
	18 Vanguard Investments Australia Ltd	BUY	8.90	Ordinary	7,002	7,002
	18 Vanguard Investments Australia Ltd	BUY	8.87	Ordinary	7,002	7,002
	18 Vanguard Investments Australia Ltd	SELL	8.87	Ordinary	(1,249)	(1,249
	18 Vanguard Investments Australia Ltd	BUY	8.80	Ordinary	4,884	4,884
	18 Vanguard Investments Australia Ltd	BUY	8.80	Ordinary	29,245	29,245
	18 Vanguard Investments Australia Ltd	BUY	8.45	Ordinary	4,440	4,440
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Date of change		Person whose relevant interest changed	Nature of Change(6)	Consideration given in relation to change(7)	Class	Number of securities affected	Person's votes affected
	p-18	Vanguard Investments Australia Ltd	BUY	8.61	Ordinary	4,050	4,050
		Vanguard Investments Australia Ltd	BUY	8.77	Ordinary	4,884	4,884
	_	Vanguard Investments Australia Ltd	BUY	8.82	Ordinary	7,059	7,059
		Vanguard Investments Australia Ltd	SELL	8.86	Ordinary	(40,067)	(40,067)
		Vanguard Investments Australia Ltd	SELL	8.86	Ordinary	(23,211)	(23,211)
		Vanguard Investments Australia Ltd	SELL	8.86	Ordinary	(9,660)	(9,660)
		Vanguard Investments Australia Ltd	SELL	8.86	Ordinary	(20,165)	(20,165)
		Vanguard Investments Australia Ltd	BUY	8.86	Ordinary	21,589	21,589
		Vanguard Investments Australia Ltd	виу	8.75	Ordinary	2,622	2,622
	• —	Vanguard Investments Australia Ltd	BUY	8.75	Ordinary	12,553	12,553
		Vanguard Investments Australia Ltd	BUY	8.75	Ordinary	6,665	6,665
	<u> </u>	Vanguard Investments Australia Ltd	BUY	8.75	Ordinary	33,649	33,649
	<u> </u>	Vanguard Investments Australia Ltd	SELL	8.94	Ordinary	(7,059)	(7,059)
	•	Vanguard Investments Australia Ltd	BUY	8.91	Ordinary	3,843	3,843
		Vanguard Investments Australia Ltd	BUY	9.03	Ordinary	1,648	1,648
		Vanguard Investments Australia Ltd	BUY	8.71	Ordinary	7,059	7,059
		Vanguard Investments Australia Ltd	BUY	8.71	Ordinary	3,843	3,843
		Vanguard Investments Australia Ltd	BUY	8.28	Ordinary	5,124	5,124
		Vanguard Investments Australia Ltd	SELL	8.29	Ordinary	(10,770)	(10,770)
		Vanguard Investments Australia Ltd	BUY	8.33	Ordinary	7,259	7,259
		Vanguard investments Australia Ltd	BUY	8.33	Ordinary	20,682	20,682
		Vanguard Investments Australia Ltd	BUY	8.29	Ordinary	2,656	2,656
		Vanguard Investments Australia Ltd	SELL	8.21	Ordinary	(6,703)	(6,703)
		Vanguard Investments Australia Ltd	BUY	8.19	Ordinary	7,050	7,050
		Vanguard Investments Australia Ltd	SELL	8.19	Ordinary	(3,857)	(3,857)
		Vanguard Investments Australia Ltd	BUY	8.25	Ordinary	5,124	5,124
		Vanguard Investments Australia Ltd	SELL	8.02	Ordinary	(5,613)	(5,613)
		Vanguard Investments Australia Ltd	BUY	8.02	Ordinary	4,700	4,700
		Vanguard Investments Australia Ltd	BUY	8.02	Ordinary	5,978	5,978
		Vanguard Investments Australia Ltd	BUY	7.91	Ordinary	19,937	19,937
		Vanguard Investments Australia Ltd	BUY	8.16	Ordinary	6,960	6,960
		Vanguard Investments Australia Ltd	BUY	8.16	Ordinary	1,305	1,305
		Vanguard Investments Australia Ltd	BUY	8.17	Ordinary	870	870
			BUY	8.06	Ordinary	5,655	5,655
		Vanguard Investments Australia Ltd	BUY	8.01	Ordinary	15,534	15,534
		Vanguard Investments Australia Ltd	BUY	7.97	Ordinary	22,534	22,534
		Vanguard Investments Australia Ltd	BUY	8.07	Ordinary	5,655	5,655
		Vanguard Investments Australia Ltd	BUY	7.84	Ordinary	7,053	7,053
		Vanguard Investments Australia Ltd	SELL	7.84	Ordinary	(5,666)	(5,666)
		Vanguard Investments Australia Ltd	SELL	7.81	Ordinary	(16,549)	(16,549)
		Vanguard Investments Australia Ltd			Ordinary	6,090	6,090
		Vanguard Investments Australia Ltd	BUY	7.27	Ordinary	16,919	16,919
		Vanguard Investments Australia Ltd				7,056	7,056
		Vanguard Investments Australia Ltd	BUY	7.08	Ordinary Ordinary	5,005	5,005
		Vanguard Investments Australia Ltd	BUY			(8,730)	(8,730)
		Vanguard Investments Australia Ltd	SELL	7.24	Ordinary	5,915	5,915
		Vanguard Investments Australia Ltd	BUY	7.52	Ordinary	 	79,178
		Vanguard Investments Australia Ltd	BUY	7.58	Ordinary	79,178	
		Vanguard Investments Australia Ltd	BUY	7.47	Ordinary	4,061	4,061
		Vanguard Investments Australia Ltd	BUY	7.19	Ordinary	16,806	16,806
		Vanguard Investments Australia Ltd	BUY	6.96	Ordinary	5,304	5,304
		Vanguard Investments Australia Ltd	BUY	6.96	Ordinary	8,840	8,840
12-De	c-18	Vanguard Investments Australia Ltd	BUY	7.12	Ordinary	348,971	348,971

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1-Nov-18	Vanguard Investments Australia Ltd	BUY	8.17	Ordinary	870	870	
2-Nov-18	Vanguard Investments Australia Ltd	BUY	8.06	Ordinary	5,655	5,655	
5-Nov-18	Vanguard Investments Australia Ltd	BUY	8.01	Ordinary	15,534	15,534	
6-Nov-18	Vanguard Investments Australia Ltd	BUY	7.97	Ordinary	22,534	22,534	
12-Nov-18	Vanguard Investments Australia Ltd	BUY	8.07	Ordinary	5,655	5,655	
13-Nov-18	Vanguard Investments Australia Ltd	BUY	7.84	Ordinary	7,053	7,053	
15-Nov-18	Vanguard Investments Australia Ltd	SELL	7.81	Ordinary	(5,666)	(5,666)	
19-Nov-18	Vanguard Investments Australia Ltd	SELL	7.95	Ordinary	(16,549)	(16,549)	
22-Nov-18	Vanguard Investments Australia Ltd	BUY	7.27	Ordinary	6,090	6,090	
	Vanguard Investments Australia Ltd	BUY	7.31	Ordinary	16,919	16,919	
27-Nov-18	Vanguard Investments Australia Ltd	BUY	7.08	Ordinary	7,056	7,056	
29-Nov-18	Vanguard Investments Australia Ltd	BUY	7.35	Ordinary	5,005	5,005	
30-Nov-18	Vanguard Investments Australia Ltd	SELL	7.24	Ordinary	(8,730)	(8,730)	
3-Dec-18	Vanguard Investments Australia Ltd	BUY	7.52	Ordinary	5,915	5,915	
4-Dec-18	Vanguard Investments Australia Ltd	BUY	7.58	Ordinary	79,178	79,178	
6-Dec-18	Vanguard Investments Australia Ltd	BUY	7.47	Ordinary	4,061	4,061	
7-Dec-18	Vanguard Investments Australia Ltd	BUY	7.19	Ordinary	16,806	16,806	
11-Dec-18	Vanguard Investments Australia Ltd	BUY	6.96	Ordinary	5,304	5,304	
11-Dec-18	Vanguard Investments Australia Ltd	BUY	6.96	Ordinary	8,840	8,840	
12-Dec-18	Vanguard Investments Australia Ltd	BUY	7.12	Ordinary	348,971	348,971	
This is Annexure A of 2 pages referred to in Form 603, Notice of initial substantial holder.							
Signature HAWN	Here			Date	17-Dec-18		
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