Appendix 3B

New issue announcement, application for quotation of additional securities and agreement

Information or documents not available now must be given to ASX as soon as available. Information and documents given to ASX become ASX's property and may be made public.

Introduced 01/07/96 Origin: Appendix 5 Amended 01/07/98, 01/09/99, 01/07/00, 30/09/01, 11/03/02, 01/01/03, 24/10/05, 01/08/12, 04/03/13

Name of entity				
	4DS MEMORY LIMITED			
ABN 43 145	590 110			
We (th	We (the entity) give ASX the following information.			
Part 1 - All issues You must complete the relevant sections (attach sheets if there is not enough space).				
1	⁺ Class of ⁺ securities issued or to be issued	Fully paid ordinary shares		
2	Number of *securities issued or to be issued (if known) or maximum number which may be issued	65,000,000		
3	Principal terms of the +securities (e.g. if options, exercise price and expiry date; if partly paid +securities, the amount outstanding and due dates for payment; if +convertible securities, the conversion price and dates for conversion)	Fully paid ordinary shares		

⁺ See chapter 19 for defined terms.

Yes - the shares issued rank equally with existing Do the +securities rank equally listed fully paid ordinary shares. in all respects from the +issue date with an existing +class of quoted +securities? If the additional +securities do not rank equally, please state: the date from which they do the extent to which they participate for the next dividend, (in the case of a trust, distribution) or interest payment the extent to which they do not rank equally, other than in relation to the next dividend, distribution interest payment Issue price or consideration \$0.05 per share 5 Issue of fully paid ordinary shares as per 6 Purpose of the issue announcement on 17 July 2019. Proceeds raised (If issued as consideration for the will be used to fund the Company's ongoing acquisition of assets, clearly identify those assets) development activities relating to its Interface Switching ReRAM for Storage Class Memory and to achieve key strategic and technical milestones with imec. Yes Is the entity an +eligible entity that has obtained security holder approval under rule 7.1A? If Yes, complete sections 6b - 6h in relation to the +securities the subject of this Appendix 3B, and comply with section 6i 6b The date the security holder 29 November 2018 resolution under rule 7.1A was passed 65,000,000 fully paid ordinary shares 6c Number of +securities issued without security holder approval under rule 7.1 6d Nil Number of +securities issued with security holder approval under rule 7.1A 6e Nil Number of +securities issued with security holder approval under rule 7.3, or another specific security holder approval (specify date of meeting)

6f	Number of +securities issued under an exception in rule 7.2	Nil	
6g	If *securities issued under rule 7.1A, was issue price at least 75% of 15 day VWAP as calculated under rule 7.1A.3? Include the *issue date and both values. Include the source of the VWAP calculation.	N/A	
6h	If +securities were issued under rule 7.1A for non-cash consideration, state date on which valuation of consideration was released to ASX Market Announcements	N/A	
6i	Calculate the entity's remaining issue capacity under rule 7.1 and rule 7.1A – complete Annexure 1 and release to ASX Market Announcements	7.1 92,372,66 7.1A 105,501,7	
7	*Issue dates Note: The issue date may be prescribed by ASX (refer to the definition of issue date in rule 19.12). For example, the issue date for a pro rata entitlement issue must comply with the applicable timetable in Appendix 7A. Cross reference: item 33 of Appendix 3B.	23 July 2019	
		Number	+Class
8	Number and *class of all *securities quoted on ASX (including the *securities in section 2 if applicable)	1,120,017,917	Fully paid ordinary shares
		Number	+Class
9	Number and +class of all +securities not quoted on ASX (including the +securities in	36,458,333	Options @ \$0.02 expiring on 30/6/2020.
	section 2 if applicable)	17,500,000	Options @ \$0.05 expiring on 30/6/2020.
		5,000,000	Options @ \$0.05 expiring on 31/12/2019.
		42,275,000	Options @ \$0.042 expiring on 27/10/2022.
		5,000,000	Options at \$0.07 expiring on 30/6/2020.

o4/o3/2013 Appendix 3B Page 3

880,000

Options at \$0.045 expiring on 23/7/2020

⁺ See chapter 19 for defined terms.

		25,780,000	Options at \$0.052 expiring on 22/1/2024, subject to vesting conditions
10	Dividend policy (in the case of a trust, distribution policy) on the increased capital (interests)	N/A	
Part 2	- Pro rata issue		
11	Is security holder approval required?		
12	Is the issue renounceable or non-renounceable?		
13	Ratio in which the *securities will be offered		
14	⁺ Class of ⁺ securities to which the offer relates		
15	⁺ Record date to determine entitlements		
16	Will holdings on different registers (or subregisters) be aggregated for calculating entitlements?		
17	Policy for deciding entitlements in relation to fractions		
18	Names of countries in which the entity has security holders who will not be sent new offer documents Note: Security holders must be told how their entitlements are to be dealt with. Cross reference: rule 7.7.		
19	Closing date for receipt of acceptances or renunciations		
20	Names of any underwriters		
21	Amount of any underwriting fee or commission		
22	Names of any brokers to the issue		

23		r commission payable to the er to the issue	
24	payab accep	unt of any handling fee ole to brokers who lodge otances or renunciations on f of security holders	
25	secur	e issue is contingent on ity holders' approval, the of the meeting	
26	form	entitlement and acceptance and offer documents will be to persons entitled	
27	and holde the d	e entity has issued options, the terms entitle option ers to participate on exercise, ate on which notices will be to option holders	
28		rights trading will begin (if cable)	
29		rights trading will end (if cable)	
30		do security holders sell their ements <i>in full</i> through a er?	
31		1	
32	of the	do security holders dispose eir entitlements (except by hrough a broker)?	
33	⁺ Issue	e date	
Part 3 - Quotation of securities You need only complete this section if you are applying for quotation of securities			
34	-	of ⁺ securities	
(a)	X	⁺ Securities described in Part	1

+ See chapter 19 for defined terms.

(b)	All other +securities
	Example: restricted securities at the end of the escrowed period, partly paid securities that become fully paid, employee incentive share securities when restriction ends, securities issued on expiry or conversion of convertible securities

Entities that have ticked box 34(a)

Additional securities forming a new class of securities

		2405 01 0004111205
Tick to docum	indicate you are providing the information ents	on or
35	If the *securities are *equity securities, the names of the 20 largest holders of the additional *securities, and the number and percentage of additional *securities held by those holders	
36	If the *securities are *equity securities, a distribution schedule of the additional *securities setting out the number of holders in the categories 1 - 1,000 1,001 - 5,000 5,001 - 10,000 10,001 - 100,000 100,001 and over	
37	A copy of any trust deed for t	he additional ⁺ securities
Entitie	es that have ticked box 34(b)	
38	Number of *securities for which *quotation is sought	
39	⁺ Class of ⁺ securities for which quotation is sought	
40	Do the *securities rank equally in all respects from the *issue date with an existing *class of quoted *securities?	
	If the additional *securities do not rank equally, please state: • the date from which they do • the extent to which they participate for the next dividend, (in the case of a trust, distribution) or interest payment • the extent to which they do not rank equally, other than in relation to the next dividend, distribution or interest payment	

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Reason for request for quotation 41 now Example: In the case of restricted securities, end of restriction period (if issued upon conversion of another +security, clearly identify that other *security) Number +Class 42 Number and +class of all *securities quoted on ASX (including the *securities in clause

Quotation agreement

- [†]Quotation of our additional [†]securities is in ASX's absolute discretion. ASX may quote the [†]securities on any conditions it decides.
- 2 We warrant the following to ASX.
 - The issue of the *securities to be quoted complies with the law and is not for an illegal purpose.
 - There is no reason why those *securities should not be granted *quotation.
 - An offer of the *securities for sale within 12 months after their issue will not require disclosure under section 707(3) or section 1012C(6) of the Corporations Act.

Note: An entity may need to obtain appropriate warranties from subscribers for the securities in order to be able to give this warranty

- Section 724 or section 1016E of the Corporations Act does not apply to any applications received by us in relation to any *securities to be quoted and that no-one has any right to return any *securities to be quoted under sections 737, 738 or 1016F of the Corporations Act at the time that we request that the *securities be quoted.
- If we are a trust, we warrant that no person has the right to return the ⁺securities to be quoted under section 1019B of the Corporations Act at the time that we request that the ⁺securities be quoted.
- We will indemnify ASX to the fullest extent permitted by law in respect of any claim, action or expense arising from or connected with any breach of the warranties in this agreement.
- We give ASX the information and documents required by this form. If any information or document is not available now, we will give it to ASX before †quotation of the †securities begins. We acknowledge that ASX is relying on the information and documents. We warrant that they are (will be) true and complete.

De

Date 23 July 2019

(Company Secretary)

Print name: Peter Webse

Sign here:

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⁺ See chapter 19 for defined terms.

Appendix 3B – Annexure 1

Calculation of placement capacity under rule 7.1 and rule 7.1A for eligible entities

Introduced 01/08/12 Amended 04/03/13

Part 1

Rule 7.1 – Issues exceeding 15% of capital		
Step 1: Calculate "A", the base figure from which the placement capacity is calculated		
Insert number of fully paid +ordinary securities on issue 12 months before the +issue date or date of agreement to issue	964,564,544	
Add the following:		
 Number of fully paid ⁺ordinary securities issued in that 12 month period under an exception in rule 7.2 	15,000,000 (Comprising the issue of Shares on exercise of options)	
 Number of fully paid ⁺ordinary securities issued in that 12 month period with shareholder approval 	1,425,597 Shares issued on 29/11/2018 which was approved by shareholders on 29/11/2018 70,027,777 Shares issued on 20/11/2018 which was approved by shareholders on	
 Number of partly paid +ordinary securities that became fully paid in that 12 month period 	18/01/2019 3,999,999 Shares issued on 21/1/2019 which was approved by shareholders on 18/01/2019	
Note: Include only ordinary securities here – other classes of equity securities cannot be added Include here (if applicable) the securities the subject of the Appendix 3B to which this form is annexed It may be useful to set out issues of securities on different dates as separate line items	10/0 1/2010	
Subtract the number of fully paid +ordinary securities cancelled during that 12 month period	-	
"A"	1,055,017,917	

Step 2: Calculate 15% of "A"		
"B"	0.15 [Note: this value cannot be changed]	
Multiply "A" by 0.15	158,252,687	
Step 3: Calculate "C", the amount 7.1 that has already been used	of placement capacity under rule	
 Insert number of +equity securities issued or agreed to be issued in that 12 month period not counting those issued: Under an exception in rule 7.2 Under rule 7.1A With security holder approval under rule 7.1 or rule 7.4 Note: This applies to equity securities, unless specifically excluded – not just ordinary securities Include here (if applicable) the securities the subject of the Appendix 3B to which this form is annexed It may be useful to set out issues of securities on different dates as separate line items 	880,000 unlisted options issued on 23/7/18 65,000,000 shares issued on 22/7/19	
"C"	65,880,000	
Step 4: Subtract "C" from ["A" x ' placement capacity under rule 7.1	-	
Note: number must be same as shown in Step 2		
Subtract "C" Note: number must be same as shown in Step 3	65,880,000	
<i>Total</i> ["A" x 0.15] – "C"	92,372,687 [Note: this is the remaining placement capacity under rule 7.1]	

⁺ See chapter 19 for defined terms.

Rule 7.1A – Additional placement capacity for eligible entities Step 1: Calculate "A", the base figure from which the placement capacity is calculated		
Note: number must be same as shown in Step 1 of Part 1		
Step 2: Calculate 10% of "A"		
"D"	0.10	
	Note: this value cannot be changed	
Multiply "A" by 0.10	105,501,791	
Step 3: Calculate "E", the amount of placement capacity under rule 7.1A that has already been used		
Insert number of ⁺ equity securities issued or agreed to be issued in that 12 month period under rule 7.1A	-	
 Notes: This applies to equity securities – not just ordinary securities Include here – if applicable – the securities the subject of the Appendix 3B to which this form is annexed Do not include equity securities issued under rule 7.1 (they must be dealt with in Part 1), or for which specific security holder approval has been obtained It may be useful to set out issues of securities on different dates as separate line items 		
"E"	-	
Step 4: Subtract "E" from ["A" x "D"] to calculate remaining placement capacity under rule 7.1A		
"A" x 0.10	105,501,791	
Note: number must be same as shown in Step 2		
Subtract "E"	-	
Note: number must be same as shown in Step 3		
Total ["A" x 0.10] – "E"	105,501,791	