

24 August 2023

Ms Laura Gomme
Senior Adviser, Listings Compliance
ASX Compliance Pty Ltd
Level 40, Central Park
152-158 St Georges Terrace
PERTH WA 6000

Dear Laura

ASX AWARE QUERY

We refer to the Aware Query received from the ASX on 23 August 2023 and respond as follows to the specific questions asked:

- 1. Does 4DS consider the Information or any part thereof, and specifically the information contained in the 'dot points' of the Announcement, to be information that a reasonable person would expect to have a material effect on the price or value of its securities?**

Yes

- 2. If the answer to question 1 is "no", please advise the basis for that view.**

Not applicable.

- 3. When did 4DS first become aware of the Information or any part of the Information? In answering this question, please comment specifically on when 4DS became aware of the information contained in the 'dot points' of the Announcement.**

The Company first became aware of the Information on 21 August 2023.

As announced to the market on 3 July 2023, the Company had been testing the Fourth Platform Lot after receipt of the Lot in early July 2023. The Company received some initial preliminary results on 15 August 2023, however, the Board concluded additional verification work was required to be undertaken to ensure that these initial results were repeatable and self-consistent over a number of cells and arrays to form a view as to whether or not the initial preliminary results were information which a reasonable person would expect to have a material effect on the price of value of the Company's shares.

- 4. If 4DS first became aware of the Information or any part thereof before responding to the Price and Volume Query, did 4DS make any announcement prior to the Price and Volume Query which disclosed the information? If so, please provide details. If not, please explain why this information was not released to the market at an earlier time, commenting specifically on when you believe 4DS was obliged to release the information under Listing Rules 3.1 and 3.1A and what steps 4DS took to ensure that the information was released promptly and without delay.**

At the time that the Company responded to the Price and Volume Query, the initial preliminary results it had to hand were insufficiently certain or definite for the Company to be able to predict the ultimate outcome of the testing and for this reason was not information which a reasonable person would expect to have a material effect on the price of value of the Company's shares. Wafer testing is an extremely time-consuming activity with different facets of the testing occurring at different times. Until all aspects of the individual results were analysed in totality and verified through repeated testing the Board considered there to be no material effect on the value of the Company's shares. This testing protocol is consistent with 4DS' internal standards as well as industry standards. Premature disclosure of initial preliminary results which had not been verified would have been misleading.

5. **If 4DS first became aware of the Information or any part thereof between responding to the Price and Volume Query and requesting the Trading Halt, did 4DS make any announcement between responding to the Price and Volume Query and requesting the Trading Halt which disclosed the information? If so, please provide details. If not, please explain why this information was not released to the market at an earlier time, commenting specifically on when you believe 4DS was obliged to release the information under Listing Rules 3.1 and 3.1A and what steps 4DS took to ensure that the information was released promptly and without delay.**

On 20 August 2023 USA Pacific time zone, the Company received requested additional testing data which demonstrated that 4DS has achieved endurance, speed and retention data on repeated and verifiable testing as announced on 23 August 2023 and which was therefore information which a reasonable person would expect to have a material effect on the price of value of the Company's shares, although still ongoing. The Company immediately went into trading halt 21 August 2023 Australian WST. Given the Company's recent share price movements, the Company concluded that Listing Rule 3.1A did not apply and accordingly released its announcement on 23 August 2023.

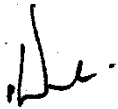
6. **Please confirm that 4DS is complying with the Listing Rules and, in particular, Listing Rule 3.1.**

We confirm that the Company is in compliance with the Listing Rules and, in particular, Listing Rule 3.1..

7. **Please confirm that 4DS's responses to the questions above have been authorised and approved in accordance with its published continuous disclosure policy or otherwise by its board or an officer of 4DS with delegated authority from the board to respond to ASX on disclosure matters.**

Confirmed.

Yours sincerely



Peter Webse
Company Secretary

Authorised for release by the Board.
Contact information

Investors: David McAuliffe
4DS Memory
Interim Executive Chairman
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About 4DS

4DS Memory Limited (ASX: 4DS), with facilities located in Silicon Valley, is a semiconductor development company of non-volatile memory technology, pioneering Interface Switching ReRAM for next generation gigabyte storage in mobile and cloud. Established in 2007, 4DS owns a patented IP portfolio, comprising 34 USA patents granted which have been developed in-house to create high-density Storage Class Memory. 4DS has a joint development agreement with Western Digital subsidiary HGST, a global storage leader, which accelerates the evolution of 4DS' technology. 4DS also collaborates with imec, a world-leading research and innovation hub in nanoelectronics and digital technologies. The combination of imec's widely acclaimed leadership in microchip technology and profound software and information and communication technology expertise makes them unique.

For more information, please visit www.4dsmemory.com.



23 August 2023

Reference: 78487

Mr Peter Webse
4DS Memory Limited
PO Box 271
West Perth
WA 6782

By email: peter.webse@pcscorporate.com.au

Dear Mr Webse

4DS Memory Limited ('4DS'): Aware Query

ASX refers to the following:

- A. The increase in the price of 4DS's securities on 16 August 2023 from a low of \$0.045 to a high of \$0.055.
- B. ASX's price and volume query letter dated 16 August 2023 (the 'Price and Volume Query') and 4DS's response to the Price and Volume Query dated 16 August 2023, released together on the ASX Market Announcement Platform ('MAP') at 5.17pm AEST and in which 4DS responded to each of the questions as follows (responses in italics):

1. Is 4DS aware of any information concerning it that has not been announced to the market which, if known by some in the market, could explain the recent trading in its securities?

No. The Company is not aware of any information concerning it that has not been announced, which, if known by some in the market, could explain the recent trading in its securities

2. If the answer to question 1 is "yes".

- (a) Is 4DS relying on Listing Rule 3.1A not to announce that information under Listing Rule 3.1? Please note that the recent trading in 4DS's securities would suggest to ASX that such information may have ceased to be confidential and therefore 4DS may no longer be able to rely on Listing Rule 3.1A. Accordingly, if the answer to this question is "yes", you need to contact us immediately to discuss the situation.
- (b) Can an announcement be made immediately? Please note, if the answer to this question is "no", you need to contact us immediately to discuss requesting a trading halt (see below).
- (c) If an announcement cannot be made immediately, why not and when is it expected that an announcement will be made?

The answer to question 1 is no – therefore not applicable.

3. If the answer to question 1 is "no", is there any other explanation that 4DS may have for the recent trading in its securities?

In its Quarterly Activities Report and Appendix 4C released on 31 July 2023, the Company advised that the Fourth Platform Lot had been successfully manufactured and shipped from imec to Fremont, California and that the Lot was undergoing extensive analysis utilising the enhanced test capabilities, with results to be announced upon completion. It is noted that previous guidance for results remains Q3 2023

4. Please confirm that 4DS is complying with the Listing Rules and, in particular, Listing Rule 3.1.

We confirm that the Company is in compliance with the Listing Rules and, in particular, Listing Rule 3.1.

5. Please confirm that 4DS's responses to the questions above have been authorised and approved under its published continuous disclosure policy or otherwise by its board or an officer of 4DS with delegated authority from the board to respond to ASX on disclosure matters.

Confirmed

- C. The increase in the price of 4DS's securities on 18 August 2023 from a low of \$0.050 to an intraday high of \$0.069.
- D. The increase in the volume of securities traded between 16 August 2023 and 18 August 2023,
- E. 4DS's request for a trading halt provided to ASX and released on MAP at 9.24am AEST in which 4DS disclosed that *'After additional testing cycles to guarantee a comprehensive analysis of the Fourth Platform Lot, the Company requests a trading halt whilst it undertakes a review of the newly compiled data'* (the 'Trading Halt').
- F. 4DS's announcement of 23 August 2023 titled 'Megabit Success' lodged on MAP as market sensitive and released at 9.22am AEST to lift the Trading Halt (the 'Announcement') disclosing (amongst other things), the following information:

'4DS Memory Limited (ASX:4DS)(4DS)(the Company), is pleased to inform shareholders that it has successfully completed the analysis of the Fourth Platform Lot and the results obtained are significantly better than the Board and management team at 4DS were expecting.

Analysis of the Fourth Platform Lot has verified that 4DS has:

- *Successfully incorporated its ReRAM memory cells into the imec megabit array*
- *Validated that 4DS Interface Switching ReRAM technology is transferable from fab to fab*
- *Demonstrated a fully functional megabit array with 4DS Interface Switching ReRAM memory cells*
- *Demonstrated consistent read and write speeds equivalent to DRAM*
- *Proven endurance in excess of 2 billion cycles at DRAM read and write speed on a megabit array*
- *Demonstrated persistent memory with variable and tuneable retention'*

(the 'Information')

- G. Listing Rule 3.1, which requires a listed entity to immediately give ASX any information concerning it that a reasonable person would expect to have a material effect on the price or value of the entity's securities.
- H. The definition of "aware" in Chapter 19 of the Listing Rules, which states that:
- "an entity becomes aware of information if, and as soon as, an officer of the entity (or, in the case of a trust, an officer of the responsible entity) has, or ought reasonably to have, come into possession of the information in the course of the performance of their duties as an officer of that entity" and section 4.4 in Guidance Note 8 Continuous Disclosure: Listing Rules 3.1 – 3.1B "When does an entity become aware of information."*
- I. Listing Rule 3.1A, which sets out exceptions from the requirement to make immediate disclosure, provided that each of the following are satisfied.

“3.1A Listing rule 3.1 does not apply to particular information while each of the following is satisfied in relation to the information:

3.1A.1 One or more of the following applies:

- It would be a breach of a law to disclose the information;*
- The information concerns an incomplete proposal or negotiation;*
- The information comprises matters of supposition or is insufficiently definite to warrant disclosure;*
- The information is generated for the internal management purposes of the entity; or*
- The information is a trade secret; and*

3.1A.2 The information is confidential and ASX has not formed the view that the information has ceased to be confidential; and

3.1A.3 A reasonable person would not expect the information to be disclosed.”

J. ASX’s policy position on the concept of “confidentiality”, which is detailed in section 5.8 of Guidance Note 8 *Continuous Disclosure*: Listing Rules 3.1 – 3.1B. In particular, the Guidance Note states that:

“Whether information has the quality of being confidential is a question of fact, not one of the intention or desire of the listed entity. Accordingly, even though an entity may consider information to be confidential and its disclosure to be a breach of confidence, if it is in fact disclosed by those who know it, then it ceases to be confidential information for the purposes of this rule.”

Request for information

Having regard to the above, ASX asks 4DS to respond separately to each of the following questions and requests for information:

1. Does 4DS consider the Information or any part thereof, and specifically the information contained in the ‘dot points’ of the Announcement, to be information that a reasonable person would expect to have a material effect on the price or value of its securities?
2. If the answer to question 1 is “no”, please advise the basis for that view.
3. When did 4DS first become aware of the Information or any part of the Information? In answering this question, please comment specifically on when 4DS became aware of the information contained in the ‘dot points’ of the Announcement.
4. If 4DS first became aware of the Information or any part thereof before responding to the Price and Volume Query, did 4DS make any announcement prior to the Price and Volume Query which disclosed the information? If so, please provide details. If not, please explain why this information was not released to the market at an earlier time, commenting specifically on when you believe 4DS was obliged to release the information under Listing Rules 3.1 and 3.1A and what steps 4DS took to ensure that the information was released promptly and without delay.
5. If 4DS first became aware of the Information or any part thereof between responding to the Price and Volume Query and requesting the Trading Halt, did 4DS make any announcement between responding to the Price and Volume Query and requesting the Trading Halt which disclosed the information? If so, please provide details. If not, please explain why this information was not released to the market at an earlier time, commenting specifically on when you believe 4DS was obliged to release the information under Listing Rules

3.1 and 3.1A and what steps 4DS took to ensure that the information was released promptly and without delay.

6. Please confirm that 4DS is complying with the Listing Rules and, in particular, Listing Rule 3.1.
7. Please confirm that 4DS's responses to the questions above have been authorised and approved in accordance with its published continuous disclosure policy or otherwise by its board or an officer of 4DS with delegated authority from the board to respond to ASX on disclosure matters.

When and where to send your response

This request is made under Listing Rule 18.7. Your response is required as soon as reasonably possible and, in any event, by no later than **3.30 PM AWST Friday, 25 August 2023**. You should note that if the information requested by this letter is information required to be given to ASX under Listing Rule 3.1 and it does not fall within the exceptions mentioned in Listing Rule 3.1A, 4DS's obligation is to disclose the information 'immediately'. This may require the information to be disclosed before the deadline set out in the previous paragraph and may require 4DS to request a trading halt immediately.

Your response should be sent to me by e-mail at **ListingsCompliancePerth@asx.com.au**. It should not be sent directly to the ASX Market Announcements Office. This is to allow me to review your response to confirm that it is in a form appropriate for release to the market, before it is published on the ASX Market Announcements Platform.

Trading halt

If you are unable to respond to this letter by the time specified above, you should discuss with us whether it is appropriate to request a trading halt in 4DS's securities under Listing Rule 17.1. If you wish a trading halt, you must tell us:

- the reasons for the trading halt;
- how long you want the trading halt to last;
- the event you expect to happen that will end the trading halt;
- that you are not aware of any reason why the trading halt should not be granted; and
- any other information necessary to inform the market about the trading halt, or that we ask for.

We require the request for a trading halt to be in writing. The trading halt cannot extend past the commencement of normal trading on the second day after the day on which it is granted. You can find further information about trading halts in Guidance Note 16 *Trading Halts & Voluntary Suspensions*.

Suspension

If you are unable to respond to this letter by the time specified above, ASX will likely suspend trading in 4DS's securities under Listing Rule 17.3.

Listing Rules 3.1 and 3.1A

In responding to this letter, you should have regard to 4DS's obligations under Listing Rules 3.1 and 3.1A and also to Guidance Note 8 *Continuous Disclosure: Listing Rules 3.1 – 3.1B*. It should be noted that 4DS's obligation to disclose information under Listing Rule 3.1 is not confined to, nor is it necessarily satisfied by, answering the questions set out in this letter.

Release of correspondence between ASX and entity

ASX reserves the right to release all or any part of this letter, your reply and any other related correspondence between us to the market under Listing Rule 18.7A.

Questions

If you have any questions in relation to the above, please do not hesitate to contact me.

Yours sincerely

Laura Gomme
Senior Adviser, Listings Compliance