IN THE HIGH COURT OF JUSTICE **Claim No: IL-2021-000019**

BUSINESS AND PROPERTY COURTS OF ENGLAND & WALES

INTELLECTUAL PROPERTY LIST (ChD)

B E T W E E N :

CRYPTO OPEN PATENT ALLIANCE **Claimant**

-and-

DR CRAIG STEVEN WRIGHT

Defendant

SECOND EXPERT REPORT OF

PATRICK MADDEN

RC Forensic RightClick Forensic

I, PATRICK MADDEN, of Right Click Forensic Limited, 46 Veals Mead, Mitcham, England, CR4 3SB, will say as follows:

Structure of this Reply Report

1. I was provided with a significant amount of new documents in various stages during the course of preparing this reply report. It has been helpful to address the different parts in different sections as follows:

   a. The main body of this Second Report contains my responses to individual paragraphs of Dr Placks' report.

   b. Where Dr Placks and Dr Wright have provided new information requiring specific analysis, I have followed the same approach as in my First Report, and included that analysis in separate Appendix documents as follows:

{H/208} *Appendix PM41 – Professional Memo Template*
contains an analysis of the Professional Memo Template documents analysed in section 14 of in Dr Placks' report.

{H/209} *Appendix PM42 – New MYOB Documents*

contains an analysis of new MYOB accounting database files which were forensically preserved and analysed by Dr Placks in Section 9 of his Report. These were not originally exhibited to Dr Placks' report but were provided to me around 1 week before the deadline for this Reply report.

{H/219} *Appendix PM43 – Chain of Custody*

contains specific analysis in relation to matters raised in Dr Wright's Chain of Custody document dated 13 October 2023.

{H/238} *Appendix PM44 - BWP Chain of Custody*

contains analysis in response to information about the Bitcoin White Paper Reliance Documents raised in the Chain of Custody document dated 13 October 2023.

{H/241} *Appendix PM45 – Dr Wright's Fourth Witness Statement*

{E/4} contains analysis in response to information raised in Dr Wright's Fourth Witness Statement dated 23 October 2023.

Scope of instructions

a. I have been provided with the following documents in the course of preparing this report:

{I/1} i. The Expert Report of Dr Placks dated 23 October 2023, and exhibits

ii. A forensic image including two MYOB files (including Shoosmiths covering letter serving that document) dated 11 November 2023,

{M/2/239} iii. Shoosmiths letters dated 10 Oct 2023

{K/11} iv. Dr Wright's table of Chain of Custody information dated 13 October 2023

{E/4} v. Dr Wright's fourth witness statement and exhibits

vi. The other documents referred to in the course of my analysis in this report.

2. I have been asked by Bird & Bird to reply to the new information contained in the above documents, and my reply to those documents forms the scope of this Report.

3. I have also been shown the following documents for my information, which I have not been asked to respond to, but which I list out of completeness:

{M./2/205} a. Travers Smith's letter dated 27 September 2023

{A/1} b. COPA's Re-Re-Re Amended Particulars of Claim and Schedule of allegations of forgery (which I have looked at insofar as it relates to my First Expert Report).

4. I have also been provided with and have looked at certain other documents which I exhibit to this Report and which I explain in the course of my analysis.

Note on timestamps

{G/1/33} 5. In my First Report at paragraph 78 I noted that my localisation settings were set locally to the UK throughout my analysis (other than in one instance where localisation settings were relevant), and the prevailing time zone was BST which is UTC+01. Often, when viewing readily-available metadata

through an application, times will have been displayed in BST in my First Report as a result of this. However, the clocks have changed in the UK prior to this Second Report being prepared, and the prevailing time zone is now GMT (which is the same as UTC). Screenshots in this Second Report may therefore display in UTC as a result, but (as with my First Report), if there is a case where the time zone offset is or could be of relevance to the analysis, I will endeavour to make a note of it when it comes up.

General points of response to Dr Placks

Different scope of the two expert analyses

{I/1/}
{G/1}

6. From my reading of Dr Placks' report, I note he has not analysed many of the documents described in my First Report and on which I provided my opinions. I note that Dr Placks' analysis has been more limited, in that he was instructed to focus on the 48 Reliance Documents that were analysed in my report and, in addition, certain extra "MYOB" files that he describes (and which I was not provided with when preparing my First Report). He does not therefore address the remaining documents, including some documents which I analysed separately to Reliance Documents; but also several documents which I analysed in conjunction with various Reliance Documents.

7. In many cases when addressing documents, Dr Placks has referred to (or repeated) parts of my analysis or conclusions without making comments of his own. In those cases, I do not address the documents or analysis further and I understand that we are in agreement, or at least that Dr Placks has not explained that he disagrees.

Conclusions to be understood in context

8. In some cases Dr Placks has pasted part of my analysis or conclusions into his report without full context. I understand Dr Placks is summarising for convenience (and within the scope of his instructions to review only Reliance Documents), but I would point out that my analysis and conclusions have proceeded on multiple strands of analysis for each document or set of documents, and that pasting a single paragraph, or reducing the scope of documents to which my observations apply, might lead to them being misunderstood.

Dr Placks' Executive Summary section

9. I understand that Dr Placks' Executive Summary section is not intended to be a full statement of his conclusions and so I do not address that section on its own. Rather, I will address points that arise in

the main sections of his report (mentioning the Executive Summary paragraphs where relevant).

Response re PM15 and PM16

10. Although the main point may not be in contention, there is one point in his section titled "Limitations of my report" which I consider requires a response as follows. At his paragraph 3.02, Dr Placks has stated that in Appendices PM15 and PM16 I have addressed some documents "simply to state that they are photographs likely to have been transmitted via the WhatsApp messaging application in September 2019." I do not agree with this characterisation of my analysis in this regard:

{I/1/6}
{H/74, H/76}

a. First, I did not address these documents simply to state conclusions. Rather, I assessed the documents for their authenticity, explained the analysis that I undertook, and the various conclusions that I drew. In my opinion, the method or mode of creation of the documents (in this case, via WhatApp) is a relevant finding to understand what the documents are and how they came to exist.

b. Second, I have also drawn other conclusions in the course of that analysis: for example, that ID_003330 and ID_003331 are two copies of the same document, even though this was not clear from the metadata provided. In the case of ID_003330, which is a Reliance Document, no File Name or timestamps were provided. These metadata were only provided in relation to ID_003331, which is not a Reliance Document. Therefore without the ability to relate these together, it would not have been possible to establish these facts about the Reliance Document ID_003330.

{ID_003330}
{ID_003331}

General responses in reply to Dr Placks

Access to forensic images

11. It appears that both Dr Placks and I agree that the best source of evidence for the in-depth forensic analysis of the documents would be the whole disk forensic images captured at the outset of each disclosure collection, and that the export of native documents from their forensic context into a disclosure platform is not an ideal source for forensic examination. I have equally expressed my recommendation that additional analysis regarding these points should be conducted from the collected full disk forensic images, and at the start of my analysis of the disclosure dataset I asked Bird & Bird to request that I be provided with access to the computing equipment or full forensic images from which the disclosed documents were taken. I understand that access was not provided.

12. However, although the context provided has not been ideal (and has made my analysis more difficult and slower), it has not stopped me from conducting my analysis and forming my conclusions on the basis of the information provided. I have taken care to account for this missing information when considering the disclosed documents.

13. In the majority of cases, the lack of access to whole- disk forensic images has not prevented me from being able to draw conclusions on the authenticity of documents, and I have set out my analysis and its limitations carefully.

14. I do not consider that the further information which I might have accessed by reference to whole disk forensic images would have altered the conclusions I have been able to draw. However, if I had had the information, I may have been able to make some additional findings, or I may have been able to corroborate my findings against additional data sources.

15. In some cases, Dr Placks points out that my conclusions are based on the disclosure dataset and that it cannot be ruled out that other documents may exist which would provide further information. In my view, it would have been possible to investigate these matters further if access had been provided to the original forensic images or computing equipment used to store or create the documents. As I have said, such access has not been provided. As I have made clear in my First Report (for example at paragraphs 29.d., 36-39), my review is based on the information provided, and I acknowledge that with further information further investigation could be carried out. An example of this feature is in relation to ID_000013 which I discuss further below.

{G/1/13}
{G/1/15-17}

{ID_000013}

<u>Difference between treatment of internal and external metadata</u>

16. The majority of my conclusions are based upon internal metadata timestamps and information that should, for standard document formats, remain entirely unaffected by the disclosure processes.

17. External (file) metadata is more likely to be contaminated by handling errors. In cases where I have made observations regarding those external (file) timestamps, I have taken care to point out that these observations are reliant on the quality of the information in the load file. I have also been careful to consider the limitations of that dataset. Where anomalies are evident in that external metadata, I have taken care to offer and take into account any potential explanations of why those apparent anomalies might occur. For example:

    a. I tried to explain in the Conclusions section of my First Report how I have approached these problems to ensure that they did not lead to conclusions being drawn inappropriately: see

{G/1/93} paragraph 243 of my First Report.

{G/1/34-36} b. At paragraphs 81-97 of my First Report, I went to lengths to identify and explain why the Load File Metadata did not appear to be accurate in many respects, and to identify the limitations of that information (for example, the lack of precision, and problems with time zone offsets). I have kept this in mind throughout my analysis.

c. As an example of how file timestamps have been able to lead me to conclusions, in respect of {ID_000739} {H/68/3} ID_000739 (Appendix PM12 at paragraphs 6-8), I have identified external timestamp irregularities and considered and explained various processes which might have led to them arising. I could not find any proper explanation, and concluded that the external metadata timestamps of the document could not be relied upon without further explanation of how they came to arise (even taking into account the limitations that I had identified).

d. On the other hand, where discrepancies could be explained by either manipulation or evidential handling, I have also tried to make that clear. For example, in paragraphs 5-12 of Appendix {H/100/4-6} PM19, I identified various irregularities and considered whether they were the result of handling or manipulation. I came to the conclusion that some alteration of the documents had certainly taken place, but that I could not form an opinion (without more information) as to whether this was the result of poor handling or through manipulation. I was able to form the opinion that the face-value date of ID_002261 (which was in 2016) was not reliable without further explanation, {ID_002261} on the basis that the information provided indicates that some modification took place in 2019, not only to the email file but also to its attachment.

e. I have therefore been careful through my analysis to identify where my observations could be affected by some of the shortcomings of the disclosure process, as distinct from apparently intentional alteration of the document.

18. An example of this is my analysis of those timestamps in Appendix PM8 at paragraphs 19-21 where I {H/60/6-8} {ID_000013} concluded that I did not have reason to doubt the authenticity of a document (ID_000013) and then {H/60/8} explained an irregularity and how this could be accounted for, at paragraph 21stating:

"21. I pause to point out that these difficulties with the disclosure dataset have obstructed my analysis at many junctures during the significant task which I have undertaken of exploring the authenticity of documents within it. This is a good example of a document the authenticity of which would not have been called into question but for the handling problems, and which I have

> *had to go to additional lengths to investigate and explain, following which I have concluded it to be authentic. The authenticity could have been further investigated, or doubts quickly resolved, had access to additional information been provided, such as a chain of custodians and details of the handling process of the documents, or access to the underlying forensic images from which the data was extracted.*"

19. Therefore while lack of access to the computer systems and forensic images definitely increased the time taken and the difficulty of analysis in many respects, it did not prevent me from drawing conclusions from the information available (both that some documents are apparently authentic and that a number are not). Where I have expressed conclusions, they did not depend on the handling of the documents. Where it was my opinion that further information would be required to affirm a conclusion, I have said so.

Possibility of providing cleaner copies if handling errors were in question

20. If any handling difficulties had led to metadata being contaminated, it ought to have been possible for Dr Placks and myself to be given access to the relevant forensic images from which the data was extracted, so as to be able to conduct our analysis on the original version. Other than the new MYOB databases that Dr Placks analysed (and which I have only recently been provided with), I understand from Dr Placks' report that the documents he analysed matched the ones I was provided with, and therefore I do not understand any other copies to have been made available.

Handling of emails

{G/1/51-53} 21. As I explained in my First Report (at paragraphs 148 to 156), one area in which the lack of native formats has impaired some of my analysis is the way that emails have been handled in this case.

{I/1/8} 22. I disagree with the comment of Dr Placks (at para. 5.06 of his report) that there "is no useful native representation of a single email that can be produced from many of the commonest mail platforms". Each mail platform stores its emails in a native format and allows emails to be exported in a format that it natively supports. For example, Gmail allows native extraction of emails in MBOX format (which stores multiple messages in a single file) and EML format (which is very similar to MBOX, except that each message is stored in a separate file). By contrast, Microsoft Outlook uses PST for multiple messages, and allows export to MSG for single messages. In those cases, EML is the native format corresponding to MBOX archives; and MSG is the native format corresponding to PST archives. I explained this in more detail in my First Report at paragraphs 148 to 150. In this case, the

{G/I/51-52}

original native formats of emails were taken from Google Gmail accounts by its native Takeout function, which would have been in MBOX or EML format, but they have not been disclosed in that native format and have instead been converted to MSG/PST. Where data on source devices has been stored in Outlook PST files, for example, a Gmail email account that is accessed using MS Outlook, the content should be processed for forensic analysis in both the PST from MS Outlook, and the MBOX format from the Gmail server.

23. However, my analysis of emails has in the most part not been affected by handling problems of this type, and as with other documents, I have been able to draw conclusions based on my analysis of the email content and data in the Transmission Headers which should not be affected by conversion and allow clear conclusions to be drawn.

24. I agree with Dr Placks that there is no one size fits all solution when dealing with the collection and preservation of email data from live mailboxes or stored repositories. This is why it is important that appropriate measures are taken to preserve and present all relevant information for each different source in a different manner. As above, with emails as with other documents I have set out where further information would have been of assistance during my analysis (and in the main section of my {G/1} First Report). I am not aware of any reason why emails could not have been re-exported more carefully from the native exports and made available to Dr Placks and myself.

25. In some cases, the metadata would not have been affected by conversion. For example, email attachment timestamps (where present) in an MSG-formatted email item are indicative that the email message pertains to an environment that supports the collection of these timestamps at the point the email was authored. These timestamps should remain unaffected by conversion or by the disclosure process.

User Behaviour

26. In some parts of my report I express my observations in terms of expected or conventional "user behaviour". Dr Placks has stated that he does not consider the way I express this to be within the {I/1/16} expertise of a digital forensic analysis, and has stated (for example at his paragraph 6.30) that my analysis 'assumes' a certain pattern of user behaviour or (at his paragraph 7.12) that I have analysed {I/1/20} user behaviour.

27. This is not the case. I have not tried to define or assume any user's behaviour. My analysis starts with the documents that I am instructed to assess. Where these contain (for example) editing artefacts

indicative of some process of creation, it is implicit in my function to determine how the document came to exist in that form. It is inherent in most documents that they are created by a user, and assessing their authenticity requires understanding the steps that user took to create it.

28. If an editing artefact that I observe is typical of what might be expected during editing of a document, I would take them at face value and would not consider them to be anomalous or worthy of comment.

29. In some cases I have observed editing artefacts which at first view do appear to be anomalous. Where an artefact seems to have arisen in a way that is not typical of authentic documents, that artefact demands a technical explanation. In those situations I have carefully considered how those anomalies might have come to arise. If they can be explained by some ordinary editing processes, I have considered that and explained my opinion and analysis, and have not drawn any conclusion in respect of it.

30. In many other cases I have observed editing artefacts which are anomalous and cannot be explained by an authentic editing process, and which do not follow intuitively the creation of a document in a straightforward manner. An example of this is the many occurrences where I have observed indications of the use of clock manipulation techniques. In my view, editing a computer clock (with the effect of creating metadata timestamps that do not relate to the true creation of the document) is not a process of ordinary editing of an authentic document, but a process of editing that creates inauthentic data.

31. I have not said something is indicative of inauthenticity based upon any expectations of user behaviour without there being at least one other reason for my conclusion, or vector for my analysis, and my opinion is based on the entirety of the analysis. I have often also set out detailed explanations of the processes that appear to have been followed, step by step or with explanatory screenshots. I have sought to qualify my explanations or reconstructions where appropriate.

Visual comparison

32. Similarly, Dr Placks and I disagree about the need to compare different documents in a dataset. In my opinion, taking documents in isolation does not always provide a full picture. By taking documents not only individually, but also relating them to others in the disclosure dataset, it is often possible to build up a picture about how the document came to be created which would be impossible if the document was taken entirely out of context.

33. One obvious way to tell whether documents are related is by comparing their content. This often

means inspecting documents visually side by side, because text and image content is (by its nature) visual.

34. Another way of relating documents together can be purely technical and does not require a content analysis. For example, it may be possible simply by inspecting a hash of a file (say, a DOCX file), to observe that an identical copy of it was also included elsewhere in a dataset (for example, as an email attachment or within a zip, or (in the case of several documents in the present dataset) both). Part of my analysis process involves creating a table of hashes so that if a document is identified as being relevant for analysis, I can quickly identify electronic duplicates.

35. In some cases relating documents together is based on a blend of technical and content review. For example,

{ID_003330}
{ID_003331}

a. in the case of ID_003330 and ID_003331, the documents are picture files (and visual by nature). I first observed the similarity between them, and then checked their correspondence by MD5 hash. This allowed me to relate the metadata content together in the way that I have explained above. Reviewing only the Reliance Document (without metadata) absent of context would not have allowed for the same review.

{H/1}
{ID_000550}
{H/15}
{H/15}
{L3/237}
{ID_000550}
{H/1/10-11}

b. In the case of Appendix PM1 (ID_000550), the disclosed Reliance Document appears similar in nature to a reference document Exhibit (PM1.14), based purely on a content review. However, a deeper technical analysis allowed me to confirm that not only were the documents apparently related, but content of PM1.14 (a document from 2017, purportedly later than ID_000550) is in fact embedded within ID_000550, suggesting that the text found in the 2017 document was from an iteration of the document earlier than ID_000550 (see paras. 28 and 29 of Appendix PM1).

36. In some cases it is not only textual or image content, but other editing artefacts which are displayed visually within a document. An example of this is the alignment of paragraphs within a document. The position of content on a page of a digital document is a digital artefact of its editing. It is recorded in different documents in different ways, for example:

a. In a PDF, the position of a content stream on the page is specified within a “media box” element by x/y coordinates (with following text added by indicating an offset).

b. In a DOCX file however, the position on the page is indicated by XML tags indicating the left/right/centre alignment, the margin and line/paragraphs spacing, and by the presence of space and tab characters.

37. It would be possible to try to infer the position of content in a document by inspecting the metadata within it, and (for example) calculating the PDF offset values or by observing XML formatting tags in a DOCX file. However,

    a. These technical features are better displayed in the native applications themselves, where they can be observed visually. Just because they are observed visually does not, in my opinion, mean that they are any less technical or that the observation is any less part of the role of a digital forensic examiner.

    b. Also, when a DOCX is converted to PDF, the technical way that the positioning on the page is specified will also change, (and vice-versa). Other metadata may be destroyed entirely. The fact that they are specified by different technical means does not mean that the artefacts should be ignored. On the contrary, observing the presence of those artefacts allows documents to be related together, and an editing or creation process to be observed. This provides context for the documents, allowing their process of creation to be better understood.

    c. An assessment in context is not only relevant for a finding of inauthenticity but also for authenticity, as I explained in my First Report at paragraphs 23-28 and in the section "Comparative review and review in context", beginning at paragraph 36. It can often allow a conclusion that a document which otherwise seems anomalous is in fact authentic. In my analysis of the disclosure dataset in this case, I have often come to such a conclusion (however, I have not always reported on that because the scope of my instruction was not to report on all documents in the large dataset, but only the Reliance Documents and those others selected in the way I explained in my First Report).

{H/1/9-10}
{H/1/15}
{G/1}

38. Therefore, in my view a contextual review and visual inspection of a document is an important aspect of forensic document examination, and in my opinion it is crucial to review not only the metadata, but also the face-value content of a document and the editing artefacts it presents. Without opening and inspecting a document (or group of apparently related documents) I would not be able to form reliable opinions about how they relate to each other, or about how they came to exist.

Extent of disagreement about visual analysis not clear

39. I wish to make clear that although I have tried to explain my approach above for total clarity, having read Dr Placks' report it is not entirely clear what specific disagreement there is on this point. It may simply be a difference in how we express ourselves instead of a difference of principle. Dr Placks

{I/1}

makes several observations in his report about the visual and contextual characteristics of various documents, for example: at paragraphs 6.41 (where Dr Placks notes the content of a footnote within the document and relates it to my technical analysis); in Dr Placks' comparison of the content of various MYOB records (section 9 of his report); and in relation to the "Interoffice Memo" templates that Dr Placks has researched and discussed in section 14 of his report. In my view, Dr Placks is right to raise these points. I agree with him that they are relevant to the analysis of these documents as a whole.

{I/1/14} {I/1/26} {I/1/47}

General characterisations of my analysis

40. Finally as a general point, in places Dr Placks has characterised my approach in summary terms which do not always match the analysis that I have done. Without trying to criticise Dr Placks' choice of wording, I would like to respond as follows to some examples:

a. In paragraphs 6.17 to 6.23 Dr Placks summarises my analysis in terms of 'allegations' and drawing comparisons 'to deduce' a conclusion. I point out that I am not making allegations about documents, and I am not drawing any comparisons with the intent of coming to or supporting any specific findings.

{I/1/14-15}

b. At paragraph 6.42, Dr Placks has discussed my report in terms of making 'claims around inauthenticity' and seeking to support them by reference to evidential artefacts. I would like to make clear that I am not 'making claims', and I am not trying to find evidence in support of any claims or assumptions.

{I/1/17}

c. In each case my analysis is based on making observations about the data provided to me, and (taking account of the various observations) drawing conclusions when I am able, or saying if I cannot draw conclusions. As I explained in my First Report at paragraph 14, I have tended to show all relevant steps that I took in my analysis, including those steps which were inconclusive, so as to give a better overall view of the analysis that was done and any limitations to the conclusions drawn.

{G/1/8}

Response to Dr Placks' Section 6 – Lynn Wright documents

General areas and agreement

41. Dr Placks takes the Lynn Wright documents together in Section 6 of his report. I note that (as he explains in his paragraph 5.15), Dr Placks has sometimes signalled his agreement with me by having

{I/1/11} {I/1/10}

little more to add to my comments, which I do not comment on further. Where Dr Placks has added comment, there are many aspects where Dr Placks and I appear to be in agreement. Specifically, taking the 'Lynn Wright' set as a whole:

a. We agree that the accuracy of metadata timestamps is affected by the computer clock used to record them (see para. 6.16 of his report). I have explained and illustrated in my First Report from paragraph 206 onwards under the heading "The use of clock manipulation techniques" how a computer clock can be freely altered and the effect this has on metadata timestamps being recorded. I have also explained some of the metadata characteristics that can present in a document, which can be indicative of the use of such backdating and forward dating of computer clocks.

{I/1/14} {G/1/72}

b. We agree that many of the Lynn Wright documents contain very clear contradictions to their purported metadata timestamps (see para. 6.42 of his report). In my view, a document that exhibits artefacts clearly contradicting the purported creation and editing dates indicates that a document is not authentic to those purported dates.

{I/1/17}

c. At Paragraph E.3 of his Executive Summary, Dr Placks states that he found that some of these documents contained artefacts indicating that they had been accessed and contaminated after their purported Last Modified dates. I agree with this to an extent. I would not have used the word "contaminated" to describe these findings, as the word "contaminated" is normally used to indicate artefacts of the kind that I have described in my First Report for example at paragraphs 39 and 169. These are normally of a kind caused by inadvertent processing and handling problems, and much more likely to affect external metadata than the internal content of a document. Further, changes to the internal content of a document would be expected to lead to the updating of the 'Last Modified' or Root Entry timestamps for that document, and so it would normally be easy to detect if that had taken place. By contrast a document that has been created inauthentically, or altered in the course of manipulation, would not typically be referred to as 'contaminated'. I have set out this distinction at paragraph 236 of my First Report, and as I also explained there that I have been careful not to draw conclusions about inauthenticity where it was not possible to reliably decide whether a document has been manipulated or has been inadvertently contaminated through handling / transmission processes.

{I/1/3} {G/1/17} {G/1/62} {G/1/92}

42. At paragraph 6.04 Dr Placks states that he agrees that the documents alone do not allow us to establish the specific individuals who may have interacted with them over time. As he says, that

{I/1/12}

accords with my view. However, while what Dr Placks says is correct, it does not entirely match my underlying point that I believe he is addressing. I do not criticise Dr Placks for this but should make clear that:

a. I agree with his statement, that we cannot know from the documents alone who may have had access. However, my analysis is not directed to establishing which people may have had access to documents. My analysis relates to the documents themselves (taking into account the context and the relationship between them), including whether they have been manipulated and what specific signs of manipulation and processes of editing they demonstrate.

{H/116/2}

b. The point I was making in my First Report at Appendix PM24, paragraph 4, is that the name of the account used, "Lynn Wright" does not necessarily indicate the identity of the individual doing the editing.[1] The "Author" is a digital artefact of the account settings on the computer used to create each document. The account settings are typically freely editable by a user. Also, the metadata relating to the "Author Name" and "Created" author name are freely editable after creation (for example, by editing the document properties in the same way shown in Appendix PM38, paragraph 31, or by editing the raw content of the document file directly in an appropriate hex editor or text editor like Windows notepad.exe).

{H/145/16}

{K/11} 43. As I explain in much more detail later in this report in response to the CoC information provided, the information I have seen while investigating that CoC Table does appear to indicate that documents listing the account "Lynn Wright" as their author were actually in Dr Wright's possession in 16-18 January 2020, and were sent by email from Dr Wright to Lynn Wright on 18 January 2020 with the subject line indicating that they were relevant to a "CD". The CD-R from which they were sourced was said to be imaged around 5 days later, on 23 January 2020. This leads me to call into question the identity "Lynn Wright" as a purported author.

{I/1/17} 44. At paragraph 6.43, Dr Placks says that it is important to consider each document in turn. I agree that this is important, and I have done so in my analysis as well. However,

a. Taking each document in turn does not mean taking them in isolation and ignoring the context around them. In my opinion it is also important to place documents in their proper context, as I explained at paragraphs 22-30 of my First Report as well as in the section "Comparative review

{G/1/10-14}

[1] For the purpose of this report I have been informed by Bird & Bird that Lynn Wright is Dr Wright's ex-wife and ,that they were married during the period around 2009.

{G/1/15} and review in context" beginning at paragraph 36.

{G/1/8} b. As I explained at paragraph 14b-c of my First Report, it was also helpful for practical reasons to group some documents together by common context or common technical features, or the (already long) report would have been more repetitive and even longer, and it would have been more difficult for the reader to understand connections which I was able to draw or suggest.

c. Specifically, in the case of the 'Lynn Wright' documents, I agree that initial analysis can and should be undertaken document by document. However, once it is established that the documents exhibit common characteristics in their authorship and creation details, and since they all apparently originate from the same source, it is appropriate to also consider them as a set. I {H/116} explained this in my Appendix PM24, which sets out general observations on the dataset and makes clear that my initial analysis of each document was carried out beforehand.

d. It is relevant also to consider the context in which many of the Lynn Wright documents were grouped collectively in a zip file when they were sent from Dr Wright's email address. As I {H/116/5-6} explained in Appendix PM24 at paragraph 17 onwards (and in each of the individual appendices) {ID_003927} those documents were attached to an email in the disclosure dataset (ID_003927) from "craig@rcjbr.org" to "lynnbw14@gmail.com" dated 18 January 2020. That email also brought together those Lynn Wright documents as a set.

<u>Edit Times as an indicator</u>

{I/1/1}4 45. In paragraphs 6.13-6.16, Dr Placks states that my conclusions may be based on an 'inchoate analysis' of edit time calculation. If Dr Placks means that my analysis is incoherent or unclear, I do not agree. I have at each stage explained my views on Edit Times.

46. I should stress that I have not drawn any conclusions about the authenticity of individual documents {H/68/8} based on Edit Time irregularities alone. As I explained in my First Report at paragraph 15, there were several cases where I observed similar technical features across multiple documents, but they nevertheless required individual analysis. Despite the widespread findings of edit time and metadata anomalies in the Lynn Wright documents, each document required individual analysis and my opinions about their authenticity and my principal reasons for findings of inauthenticity varied from document to document.

47. Dr Placks lists various features that he considers to be relevant, and I agree they are relevant and have addressed them in my First Report. Specifically,

{I/1/14} {G/1/48}

a. At 6.14 Dr Placks refers to "sleep mode", or user sessions being suspended, or left running and resumed later. I did not overlook this. I explained it in detail at paragraph 137.b. of my first report and took it into account in my analysis.

{I/1//14} {H/116/12} {G/1}

b. Dr Placks states at paragraph 6.14 that "Dr Wright has used Citrix Xen Servers in the past as a virtualisation platform." I addressed this possibility in PM24 at paragraph 35 where I stated "I emphasise that it may be possible if multiple machines were used to edit documents across long time spans at the same time.". For the purpose of document authorship running concurrent virtual machines would be akin to running multiple different physical computers, which I addressed in my First Report, but as I discuss below this does not explain the range of anomalies that I have observed across the dataset.

{I/1/14} {H/122} {ID_000396}

c. At paragraph 6.15, Dr Placks refers to the potential relevance of the "Save As" operation when considering Edit Times. I did not overlook this. I considered the possible use of "Save As" operations throughout my analysis and have made reference to it throughout my appendices, for example in Appendix PM27 at paragraphs 5-6 under the heading "ID_000396 Edit Time and Save As". I agree with Dr Placks' opinion that the use of "Save As" can result in the Edit Time being reset (rather than that it always will), since the effect of resetting Edit Time is not consistent across all software and can vary. In any event, where anomalies might have been explained by use of the "Save As" operation, I have sought to consider that possible explanation and to accept or discount it.

{I/1/14} {H/116/12} {H/116}

d. At paragraph 6.16 Dr Placks states that if documents were created across multiple computers, such behaviour may lead to overlapping Edit Times. I accept this point. For example, in my Main Report at Appendix PM24, paragraph 35, I emphasised that there may be such overalaps of edit times if multiple machines are used to edit documents across periods in parallel. That is one reason why I did not draw any conclusions about individual documents on the basis of the Edit Time observations alone. When considering individual documents, I focused upon signs which were clearly indicative of backdating or other manipulation of those particular documents. However, that does not mean that the overlapping edit times are irrelevant. Given the full set of findings across the Lynn Wright documents (as set out in Appendix PM24), it is my view that this property is more readily explained as an indication of the use of clock manipulation than by Dr

Wright keeping a series of physical and/or virtualised computers simultaneously occupied with separate individual documents (some for very long periods) in the way which would be required. The overlapping Edit Times would not be explained merely by the use of a remote storage device however: the storage device is not relevant to this aspect of the analysis. As above, the use of multiple virtualised computers can be considered akin to running multiple physical computers.

Post-dating source material

{I/1/14-15} 48. In paragraphs 6.17 to 6.23, Dr Placks responds to parts of my analysis of various documents which refer to source material from other documents.

49. As I have explained above, I do consider that the context of a document (including the content, which Dr Placks refers to as visual content) is an important part of forensic analysis. However, as I made clear I have not relied upon content analysis alone in any part of my review: it is just one factor that I have taken into account where it appears to be relevant.

{I/1/15} 50. Dr Placks has pointed out fairly in his paragraph 6.23 that his commentary is on the specific observations about content (and he does not comment on the other findings in the document). Those other observations are nevertheless important. For example, for ID_000371 (Dr Placks's paragraph 6.19; my Appendix PM27), my review of ID_000371 was multi-layered:

{ID_000371}
{I/1/14}
{ID_000371}

a. It included considering the document alongside ID_000396, which overlapped in content. Both documents appeared to contain text from another source, which dated from 2005 (and which is not therefore post-dating source material). ID_000396 contained many other indications of inauthenticity including embedded, contradictory metadata and I was able to conclude it to be inauthentic.

{ID_000396}

{ID_000396}

b. The characteristics were less pronounced for ID_000371, and my conclusion was more nuanced. For example, I was not initially able to reach a concluded view, and expressed my opinions in general terms.

{ID_000371}

c. Later, I conducted a further analysis of various embedded equations across the set of documents, which I reported on in Appendix PM40. That led to a very clear finding that ID_000371 was not authentic, based on the use of software from 2013 to create it, in addition to the other points.

{I/1/15} 51. At Paragraph 6.21, Dr Placks refers to my analysis of ID_000551 (my Appendix PM35). That

{ID_000551}
{H/141}

{ID_000371} example is similar to the analysis of ID_000371, in that it was not possible to draw a conclusion on the basis of text in common with a book by Hofstad alone, but I could draw a conclusion having

{ID-000551} regard to additional observations made during my analysis. In respect of ID_000551 the additional factors include:

a. **The metadata information and chain of editing among the Hofstad source documents.** The Hofstad source content for ID_000551 has gone through a clear series of editing revisions from year to year, creating a series of documents which were archived and are exhibited to my First Report. The metadata of those documents indicates them to be true to their purported dates. As I explained, the source material was added to and revised over time, and it was possible to establish the presence of overlaps in some text and not in others, and extensions from one to the next. From this material, it was possible to say that the earlier versions of the Hofstad book did not contain all the content which features in ID_000551.

b. **The relative dates of the documents.** Taken in totality, the apparent source content, Hofstad, is dated from much later than the purported date of ID_000551. The chain of editing of the apparent Hofstad source material began in 2007, prior to the purported creation of ID_000551. However, ID_000551 does not only overlap with Hofstad 2007, but also Hofstad 2012, Hofstad 2013, Hofstad 2014, Hofstad 2016, Hofstad 2017, and Hofstad 2018.

{ID_000551} c. **Apparent errors due to technical conversion.** In ID_000551, the apparent source content contains fully formed equations throughout, but in ID_000551 an equation is referred to but is missing from the document. This is consistent with complex content (formulae) being imported imperfectly, an artefact that has also been observed in many other documents within the disclosure dataset (documents which also include other independent indicia of tampering). This provides a counterpoint to other equations within the document that had been imported from .DOCX format into .DOC format. ID_000551 contains other apparent errors of conversion which are not present in the Hofstad source material.

d. **Other Shared technical characteristics.** ID_000551 contains anomalies of Edit Time, and other metadata characteristics, including the encoding of formulae which indicate conversion from DOCX format.

e. **Shared anomalies with other documents.** The technical characteristics of ID_000551 match the characteristics and context of other ‘Lynn Wright’ documents.

f. **The lack of explanatory context in the disclosure dataset.** I was also not able to identify any other common third source on the internet or in the disclosure dataset.

{I/1/15-18} 52. I therefore disagree with Dr Placks' characterisation of this analysis at his paragraphs 6.21 and 6.44. My analysis has included a review of the text, metadata, and relative dates of ID_000550 as well as the source material in question. My full analysis of ID_000551 is set out in Appendix PM35.

{ID_000550}
{ID_000551}
{H/141}

53. Similarly for the other documents mentioned in this section of Dr Placks' report:

{ID_000367}
{H/129}, {I/1/14}

a. In respect of ID_000367 (Appendix PM30), Dr Placks has summarised my analysis at his paragraph 6.19. He has correctly acknowledged that the overlap between the document and the ResearchGate article also includes unusual fonts in which the content is displayed (and as a technical matter, encoded), indicating that it was copied from the source document that was first published in 2012.

{ID_000258},
{H/126}, {I/1/15}

b. In respect of ID_000258 (Appendix PM29), Dr Placks has summarised my analysis at his paragraph 6.22 without mentioning that it also features an implausible Edit Time, and apparently contradictory metadata, or the fact that the hidden embedded text of the document (which he has mentioned) refers to later events in the present tense or past tense while the face-value content of the document has been altered so that they are phrased in the future tense as if they had not happened yet.

{ID_000570},
{ID_000568},
{H/143}

c. In respect of ID_000570 and ID_000568 (Appendix PM36), Dr Placks correctly observes that there is no citing of third party source material. This is because my analysis was not based on content overlap with any third party source material. The two documents were addressed together because of their contextual similarities, but my conclusions were based on the presence of impossible metadata Edit Times, embedded metadata from 31 January 2020, the presence of fonts which did not exist at the purported date of creation, the reference to Microsoft Schema which did not exist at the date of purported creation, and the several other indications listed in Appendix PM36.

{H/143}

Downgraded donor content

{G/1} 54. In various places in my First Report I have observed that a documents was created by downgrading its content from .DOCX to .DOC version. Dr Placks comments on this in paragraphs 6.26 to 6.30 of his report. This is a technical characteristic that can be observed across the set of documents which display other independent indicia of tampering.

{I/1/15-16}

55. However, similarly to the Post-Dating Source Material section above, I have not relied upon content-downgrades of this kind alone for any conclusions that I have drawn. It is a technical observation that gave rise to a number of other additional observations that I drew at various points and have explained as they came up.

Redundant edits

{I/1/16} {G/1}

56. The quotation from my First Report at Dr Placks' paragraph 6.29 is not a complete quotation. The principal point of that part of my First Report is to explain the effect of downgrading from .DOCX to .DOC format when editing live objects. I have not drawn conclusions about the authenticity of documents on the assumption that a user downgrading from one format to another would necessarily retain the DOCX file. However, it is relevant to point out that converting a document with equations in this way and not retaining the original could pose difficulties for the user in later editing.

{I/1/16} {H/118} {ID_000199}

57. Dr Placks is mistaken at paragraph 6.36 in his commentary on Appendix PM25 (ID_000199), however he is correct that I did not use the term "redundant edits" in that Appendix. The redundant deleted content was accessed on that occasion via the "Versions" dialog in MS Word 2003 which stores the content of past edits (in this case, deleted comments containing timestamps indicating an anomalous editing history and confirming the relevance of an earlier observation that I had drawn at paragraph 22 of that Appendix relating to the observed difference in edit time between related versions of the documents). The relevant passage begins at paragraph 36 of Appendix PM25.

{H/118/17}

58. I agree with Dr Placks that little is known about when and how the redundant edits were made, at least taking them on their own. However, in many cases there are direct indications of a time frame in which the editing occurred, or it is possible to state with confidence that the editing began after a certain date. Examples include references to URLs or source material from a later date, and the presence of hidden timestamps: see for example Appendix PM1, paragraph 18.

{H/1/6}

Grammarly timestamps and use of Grammarly tool inconsistent with timestamps

{I/1/16-17}

59. At his paragraphs 6.38-6.39, Dr Placks states that the conclusions regarding embedded Grammarly timestamps suggest that the tool Grammarly has been applied to the documents in some fashion. If Dr Placks means that the documents came to exist first in a form authentic to their timestamps, and then Grammarly may have been applied to them later, I disagree for the following reasons:

    a. I set out my overall analysis of these Grammarly timestamps in my First Report under the heading "Grammarly timestamps" from paragraph 61 onwards.

{G/1/26}

{G/1/29-31}

b. At paragraphs 69-73, I explained that I investigated how the Grammarly software functions in order to ensure that I fully understood it as far as was possible. As I explained, the Grammarly software did not appear to interact with documents unless it was specifically requested to during editing, and did not actively scan documents.

{G/1/32}

c. As I explained at paragraph 73.e., the Grammarly timestamp is generated by the local computer clock and the time corresponds to the time of the software function being launched within MS Word.

{G/1/31-32}

d. Also, as I explained at paragraph 73.c-f, the Grammarly timestamp does not get added to a document unless the document is saved later, after Grammarly has been used to edit it.

60. In each case, the Grammarly timestamps that call the authenticity of documents into question appear to be contradicted by the metadata of the file to which they are applied, including their Last Modified and Root Entry dates.

61. This therefore indicates not just that the tool was applied to the documents after editing, but that the Grammarly tool was applied at an earlier time when the computer clock was set to a more modern date, and then the document was saved afterwards, but with inauthentic timestamps that make it appear to be dated earlier.

62. In the reverse case (if Grammarly had been used in an authentic document that was already in existence, and then the file was saved so that the Grammarly timestamp became embedded into the document), the Last Saved/Modified and Root Entry timestamps of the files in question would have been updated to record that change, and those timestamps should post-date the Grammarly timestamp.

63. Further for many of the documents in which Grammarly timestamps have been identified, the metadata for these have been captured within the XML formatting that has been embedded within the .DOC document as part of the downgrade process, indicating that the Grammarly timestamp was applied when the source/donor document was still a .DOCX formatted document, prior to the downgrade process taking place.

Mathtype

{I/1/17}

{L3/237/12}

64. Dr Placks has observed at paragraph 6.41 that it is notable that a footnote (7) on page 12 of ID_000550 reads “Need to buy new MathType version!”:

a. I agree with Dr Placks that this is a notable observation. It is also an observation about the visual content of the document, and therefore the context in which the metadata came to arise.

b. The content of the footnote is however contradicted by the technical content of the document. The footnote appears to refer to the need to buy a "new" MathType version not being used. However, the MathType version that was actually used in the document was more modern by several years than the purported date of the document.

c. As explained above, had a 'new' version of MathType been bought and used to interact with the document, the document would have had to be saved before the new content was committed to the file. At that point, the document's Last Saved and Last Modified timestamps and its Root Entry would have been updated. This is one of several indicia of tampering in ID_000550 and other documents.

{ID_000550}

Response to Section 7 of Dr Placks' Report – Bitcoin White Paper

ID_000254 - ODT file – basis of analysis

{ID_000254}

65. Where Dr Placks and I appear to disagree in relation to ID_000254 is predominantly with respect to how my analysis is characterised and the need to inspect the visual presentation of a document, which I address below.

{ID_000254}
{H/17}
{I/1/21}

66. I note however that Dr Placks' analysis and mine do not approach the question on an identical footing. A significant part of my analysis of ID_000254 (in Appendix PM2) involved putting it within its context of other documents relating to the Bitcoin White Paper. Dr Placks has cautioned (at paragraph 7.16) that the constraints on his time prevented him from reviewing the non-reliance documents relating to the Bitcoin White Paper. It is therefore possible that our conclusions are formed on the basis of different information.

ID_000254 – Load File Metadata

{I/1/19-21}
{ID_000254}

67. At paragraphs 7.01 to 7.18, Dr Placks refers to difficulties with the Load File Metadata. I would point out that my analysis of ID_000254 addressed several different issues, and that the issue with the Load File Metadata was only one among them. I do agree that the provided Load File Metadata has problems, and I agree with Dr Placks that it appears to have been reconstructed from various sources without accounting for the differences in those sources. As explained elsewhere in this Second Report and throughout my First Report, this has not affected my analysis other than to present a barrier to

{G/1/}

analysis of that metadata in some cases.

68. I do not agree that my analysis of those metadata across the dataset presupposes that the documents were captured from any particular device. It is possible that some of the rounding of times to the nearest minute could be explained by capture from different filesystems (such as CDs) as Dr Placks indicates. However, that would relate only to the documents captured from such sources and not explain how issues come to be present across the whole of the disclosure dataset irrespective of the devices from which they were taken. I have explained the problems with the load file metadata in my {G/1/34} First Report under the heading "The Load file Metadata" beginning at paragraph 81. While I agree it would have been preferable if the timestamps did not need to be reconstructed, I have not been provided with any replacement Load File that fixed those problems.

{I/1/19-20} 69. I note that in paragraph 7.06-7.07 Dr Placks refers to handling differences by different operating systems with different system settings. I understand that Dr Wright was asked to provide information {G/1/} about the various operating systems used to interact with his documents prior to my First Report, but did not provide that information. I have not seen any source of information that would allow me to understand whether the settings or operating systems Dr Placks refers to were actually used, or whether Dr Placks is indicating a range of possible settings that could have been used (but without specific reference to the present case).

{I/1/20}{G/1} 70. I agree with Dr Placks (at his paragraph 7.08, and as I have stated throughout my First Report) that more confident conclusions could be drawn about the apparent anomalies could be gathered if access to the relevant computing equipment had been provided. I have not been provided with such access.

ID_000254 – Visual artefacts and technical artefacts

{I/1/20} 71. I would not agree (by reference to Dr Placks' paragraph 7.09) that my following analysis of {ID_000254} ID_000254 is based purely on a visual comparison with the Bitcoin White Paper alone. It is the case that my review has involved looking at the documents, which are presented visually. I understand that Dr Placks has done the same, as (for example) he notes that the content of ID_000254 and the Bitcoin White Paper differ (which I understand to have been ascertained by inspecting the documents themselves, as is proper when examining documents). However, my analysis is not only based on a visual review. It is based on observations of artefacts of digital conversion leading to consistent anomalous errors throughout the document, which correspond for example to artefacts of hyphenation and spacing consistent with the document having been converted from the Bitcoin White Paper PDF backwards into editable form.

{ID_000254} 72. I agree with Dr Placks that the process by which ID_000254 came to be created has not been explained (and it is not otherwise available as this document, in common with most document formats, does not include a detailed audit log of the editing history of the document). This has not prevented me from conducting an analysis of the document itself. Forensic analysis is not limited to reading only logs and audit trails, and it is very often required that a thorough analysis requires in depth technical analysis regarding subtle artefacts that are displayed visually, often in conjunction with other artefacts.

{I/1/21} 73. I also agree with Dr Placks (paragraph 7.15) that the artefacts of conversion are visual in nature. Such observation is relevant to reaching views about the creation of this document, for example how it came to present its digital information in the form of user-visible fonts (which are visual designs representing text characters).

ID_000254 – Conclusions drawn based on analysis and observation

{ID_000254} 74. Dr Placks has referred to my analysis of ID_000254 on several occasions in terms that might appear to suggest I have presupposed it to be inauthentic. That would not be correct and, while it is possible that Dr Placks is merely summarising or did not mean to give such an impression, I think it is important to correct the position.

75. My analysis does not begin by presupposing a path of editing. I also do not come to a presupposed view and then seek to support that with observations afterwards. That is not my practice. My analysis of the document began by reviewing it at face value, during which I identified a range of anomalies. It was not until after I had identified those that I related them to other documents and drew conclusions. {ID_000254} Where (as with ID_000254) multiple anomalies appear to support a particular path of editing, I have noted a consistency in that approach as my analysis developed (making qualifications to my view where appropriate). I have explained my general approach to the review of documents in more detail {G/1/13} {G/1/15} in my First Report at paragraph 29 of the Main Report under the heading "*General approach to review*" and at paragraphs 36 onwards under the heading "*Comparative review and review in context"*. I have also explained in summary how I have related information together under paragraph {G/1/10} 22 of my (First) Main Report. I have also explained at paragraph 4 of my (First) Main Report that I {G/1/5} have tried as far as possible to keep to a chronological account of my investigation to show how my {ID_000254} analysis developed, and this is the case with ID_000254.

{I/1/20} 76. In paragraph 7.11, Dr Placks appears to agree with my analysis at Appendix PM2, paragraph 23. I {H/17/8} would not however accept that my conclusions are fairly described as "claims". It is simply my

opinion, based on the anomalies I observed and set out in detail, that a conversion occurred of the kind described.

{I/1} 77. There are several other occasions in Dr Placks' report where he has made similar observations. Instead of attempting to reply to them all individually, I have responded to some of them above in my response to Section 6 of his report; as well as others in this section in response to section 7 of Dr Placks' report. It should be taken that these responses apply generally to any other similar observations in Dr Placks' report.

ID_000260 and ID_004010

{ID_004010} {I/1/21} {G/1} 78. Dr Placks addresses ID_000260 in his paragraphs 7.17 to 7.20. I would not accept that I overlooked the possibility of a computer session being suspended, as I have explained in detail above and in my First Report. Although Dr Placks has commented on the aspects of my analysis that did not allow me to draw a conclusion, he has not commented on the significant technical anomaly by which the document presents as having been created using OpenOffice 2.4, software which did not yet exist at the purported date of creation, based on information provided from identified external sources (information subsequently confirmed in witness statements). Similarly, Dr Placks does not comment on the technical anomalies observed in ID_004010, other than to recite my conclusions.

{ID_004010}

ID_003847

{I/1/22} 79. I did not draw the conclusion that Dr Placks attributes to me in his paragraph 7.22. It is not therefore possible to respond to Dr Placks' comments.

{ID_003847} {H/20/78-79} 80. ID_003847 contains metadata indicating it was created in 2020, which is consistent with my analysis as explained in Appendix PM3 at paragraphs 241 to 243. It holds no electronic information to indicate it existed before it was scanned at 10/02/2020 at 12:36. I note that the CoC also provides no information about the date of this Reliance Document.

ID_004011

{I/1/22} {ID_004011} 81. At his paragraph 7.23, Dr Placks correctly points out that I did not challenge the authenticity of ID_004011 to its timestamp of September 2019.

{G/1} {K/11} {ID_004011} **82.** However, after the date of my First Report (September 2023) I was provided with Dr Wright's Chain of Custody document (October 2023) which states that ID_004011 originally dates from a

significantly earlier time. It has therefore been necessary to revisit that analysis, which I set out at **Appendix PM44** to this Report. As I explain there, I have found that ID_004011 and its associated document, ID_003330 are not contemporaneous to 2008 or 2009, but are contemporaneous to 2019 (the date in their metadata), and appear to have been created as downstream edits from the 2019 version of the Bitcoin White Paper uploaded to the website SSRN.

{H/238}
{ID_004011}
{ID_003330}

Response to Section 8 of Dr Placks' Report – BDO Minutes

83. Dr Placks has indicated that he is largely in agreement with my analysis of the BDO Minutes, in Section E.

{I/1/4}

84. I agree with Dr Placks' additional observation (at paragraph 8.10) that Exhibit MS1 contains an embedded logo image file which appears to date from 4 August 2009. The graphic appears to have been created from a pre-existing file, dating from 4 August 2009, which was used as a component of the design of Exhibit MS1 at the time Exhibit MS1 was being created. This is consistent with my findings in relation to Exhibit MS1, however my analysis did not proceed on that graphical component (the logo image used), but rather on the file as a whole.

{I/1/23}{D/1}

Response to Section 9 of Dr Plack's Report – MYOB

85. My response to Dr Placks' Section 9, and the new MYOB documents that were provided on 10 November 2023, is set out in Appendix PM42 to this Report.

{I/1/26}
{H/209}

Response to Section 10 of Dr Placks' Report – Blacknet

86. In Section 10 of his report, Dr Placks addresses my analysis of ID_001379 (which is at Appendix PM8) and some related documents.

{I/1/40}
{ID_001379}
{H/60}

87. We appear to agree that the Reliance Document ID_001379.PDF does not date from 2002 (the date on its face) and is more likely to derive from 2014, based on its metadata timestamps.

88. Dr Placks has criticised my approach to ID_000013 and my conclusion that its content represents the source material from which ID_001379 was produced (see paragraphs 10.05-10.07 of his report). I agree with Dr Placks that there are limitations on the analysis we can perform due to the material made available to us. However, I do not agree with the way the analysis is summarised in those paragraphs and I do not agree that the analysis is unsupported, as Dr Placks suggests. Although it was not necessary to reconstruct the creation of ID_001379 in order to draw the conclusions about the

{ID_000013}
{ID_001379}
{I/1/41}

{ID_001379} {H/61} authenticity of ID_001379 itself (on which I understand we agree), I have attempted to analyse how ID_001379 came to be created, based on the analysis set out in Appendix PM8, including the following points:

{ID_001379} {ID_000013} a. The external metadata of ID_001379 records that it was named "ITOL Application 2.pdf" and its internal metadata records that it was created using Microsoft Word on 17 February 2014. Within the disclosure dataset is a Word document with the same name and an MS Word file extension, "ITOL Application 2.doc" (ID_000013). The external metadata file timestamps for that document give a creation date of 10 February 2014, suggesting that it was created as a copy at that time, which is close in time to the creation date of ID_001379.

b. This document, ID_000013, appeared to be authentic to 2002 (the date on its face and the date indicated by its internal metadata properties) and did not bear any indications of inauthenticity, and I take it to be authentic.

c. Other documents bearing the same or similar dates and content, however, did bear indications of inauthenticity. Therefore, ID_000013 appears to be a better comparator for ID_001379.

{H/60/10} c. I concluded that ID_001379 shared features of the same heritage as ID_000013 (e.g. the same errors of spelling and punctuation): see Appendix PM8 at paragraph 28.

{H/60/22-23} d. I did not conclude that ID_001379 was created *directly* from ID_000013 as Dr Placks suggests, although (at paragraph 60-62) based on the information available I considered that to be very likely for the reasons explained there. I also explained the possibility of a precursor document that has not been disclosed.

{H/60/22} {ID_001379} e. While I agree with Dr Placks that it is not possible on the basis of these documents alone to identify whether there was any other precursor document, it would have been possible to investigate it further. As I made clear at paragraph 61, I consider it would require significantly greater supporting evidence that affirmatively explains the anomalies before ID_001379 could be considered to be contemporaneous to 2002. On the available material, it is very likely that that document is not authentic to that date.

{H/60/23} f. As I also explained at paragraph 62 of Appendix PM8, there could have been further investigation if I had had access to the computing equipment used to author these documents and storage devices on which they are or were stored, or at least the forensic images from which the documents were extracted. I have not been provided with that access and I do not understand Dr

Placks to have been provided with it. However, I have been able to reach confident conclusions without such access, for the reasons given in my report.

{ID_001379} {ID_000013} {H/60/22}

g. From the information provided, there is no evidence that the document ID_001379 or its content ever existed before 17 February 2014, whereas by contrast ID_000013 provides reliable evidence that the document existed in that form in 2002 (without the additional material that features in ID_001379). I adhere to the conclusions set out in paragraph 60 of Appendix PM8.

{I/1/41} {H/60/12} {H/60/8-13}

89. At Dr Placks' paragraph 10.08 he has quoted my paragraphs 32a. and b. of Appendix PM8 but has not referred to the fuller reasoning from paragraphs 23 to 33. My observations should be taken in the context of the full passage. In that context, I disagree with Dr Placks that the observations are solely from comparison of passages of text. They are based on my full review of the documents, including the whole context of the documents and the information available in the disclosure dataset.

{I/1/42} {ID_001379} {ID_001408} {H/60/21} {ID_001409}

90. At paragraph 10.13 of Dr Placks' report, he states that ID_001379 appears to predate the email at ID_001408 and says that irregularities with the email cannot bear on the authenticity of ID_001379. This was not fundamental to my analysis of ID_001379, but I do not agree with the observation which Dr Placks has made. As I explained at paragraph 57 ofAppendix PM8, the email is timed just 3 minutes after the recorded creation of ID_001379 as a PDF document and the email attaches ID_001409, which is an electronic duplicate (identical by MD5 hash) of ID_001379. While I have not relied upon the irregularities in the email in my conclusion that ID_001379 is inauthentic (and this feature does not appear in my conclusions regarding ID_001379), the irregularities in the email should be identified and noted in connection with the related document.

{I/1/43}

Response to Section 11 of Dr Placks' Report – code2flow

{I/1/4}

91. Dr Placks has indicated that he is largely in agreement with my analysis of the Code2Flow documents, in Section E of his report. While Dr Placks speculates about the possibility of a missing document, I have not seen any indications that suggest that the black and white TIFF image ID_000554 was created other than by conversion from the PDF ID_000375, a file which is visually identical (accounting for conversion) and which contains significant indications of tampering that would have been masked by conversion to TIFF.

{ID_000554} {ID_000375}

{I/1/44}

Response to Section 12 of Dr Placks' Report – ATO Letter

{H/72} {ID_001916}

92. In Appendix PM13, I explained that I had found reason to doubt the authenticity of Reliance Document ID_001916. However, I was not able to be certain and suggested that it should not be

assumed to be authentic without further explanation or supporting evidence.

93. I also pointed out that there were other similar documents in the disclosure dataset which were not Reliance Documents but exhibited similar characteristics.

{I/1/44-45} 94. Dr Placks has stated in paragraph 12.08 that the document may have been created from a scanned image of a hard copy document.

95. I have also been provided with a copy of a letter from Shoosmiths dated 10 October 2023 which
{M/2/239-240} states as follows:

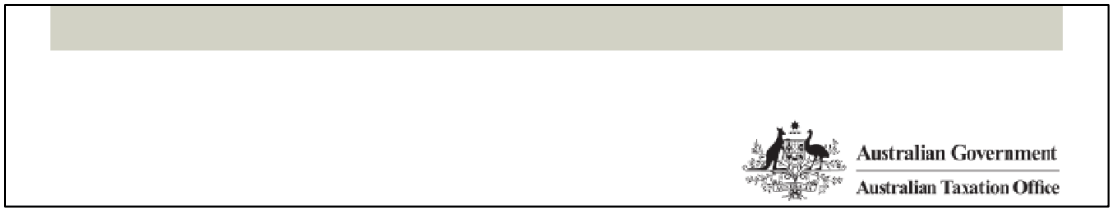
> *1.1 From the Defendant's review of the Madden Report, the following errors are clear:*
>
> {H/72} *<u>Appendix PM13 – Australian Tax Office letter to Hotwire Preemptive Intelligence Pty Ltd1.2</u>*
>
> *There are several observations made regarding this document in the Madden Report. The first is to the quality of the logo. The Madden Report states:*
>
> *[Quote of paragraphs 4-7 of PM13]*
>
> {H/72/2-3}
>
> *Our client has advised that this is incorrect. The GPL Ghostscript PDF producer tag relates to the application associated with the scanner. GPL Ghostscript 9.05 refers to a particular version of Ghostscript, an interpreter for the PostScript language and PDF (Portable Document Format).*
>
> *1.3 "GPL" in its name signifies that it is released under the General Public License, making it free software that users can redistribute and/or modify under the terms of the GPL. Version 9.05 of Ghostscript referred to in the Madden Report was released in 2012 and that Ghostscript, in the context of scanning, plays a significant role in the conversion and processing of scanned paper documents to PDF format. The document itself exists in hardcopy which has simply been scanned in . The hardcopy document is evidence that the analysis within the Madden Report is flawed.*

<u>Investigation of suggested creation by scanning</u>

96. I have investigated the point that Dr Placks and Dr Wright's solicitors have now raised, suggesting
{ID_001916} that document ID_001916 was created by scanning from hard copy, and in my view of ID_001916 the explanation suggested cannot be correct.

{ID_001823} 97. I observe that ID_001916, ID_001823, ID_001824, and ID_002080[2] all contain a letterhead image at
{ID_001824} the top of the page. When extracted, that image presents as follows:
{ID_002080}

[2] I note that ID_001823, ID_001824, and ID_002080 may not have been available to Dr Placks as those documents are not Reliance Documents.



Hash-matching images

{ID_001916} {ID_001823} {ID_001824} {ID_002080}

98. I was able to digitally extract the image from each of the four documents ID_001916, ID_001823, ID_001824, and ID_002080. I observed that,

    a. They are visually identical,

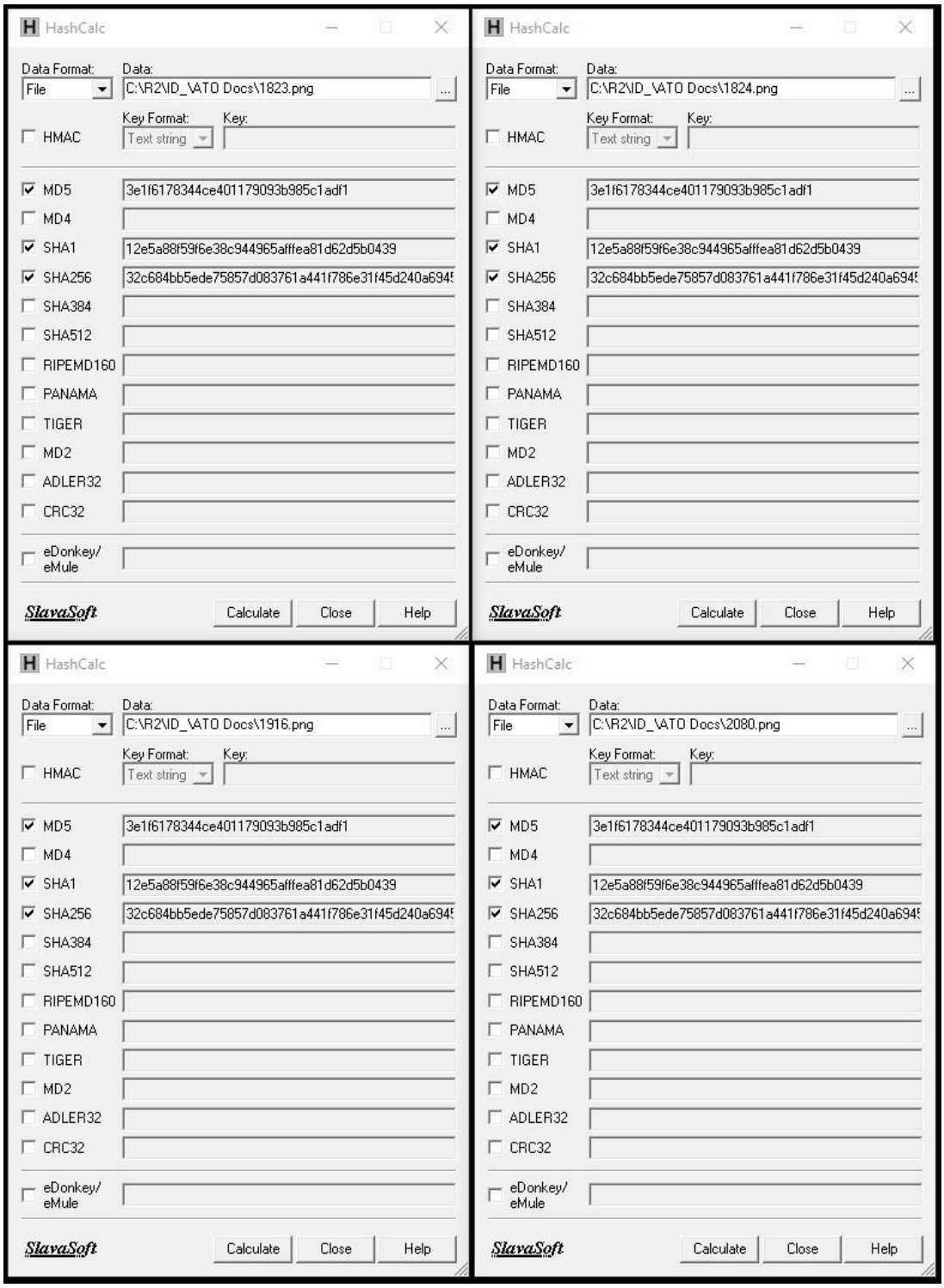
    b. They have an identical pixel size, which is 808 pixels x 141 pixels,

    c. Conducting an MD5 hash procedure on each of the files, they are hash-identical (`3e1f6178344ce401179093b985c1adf1`),

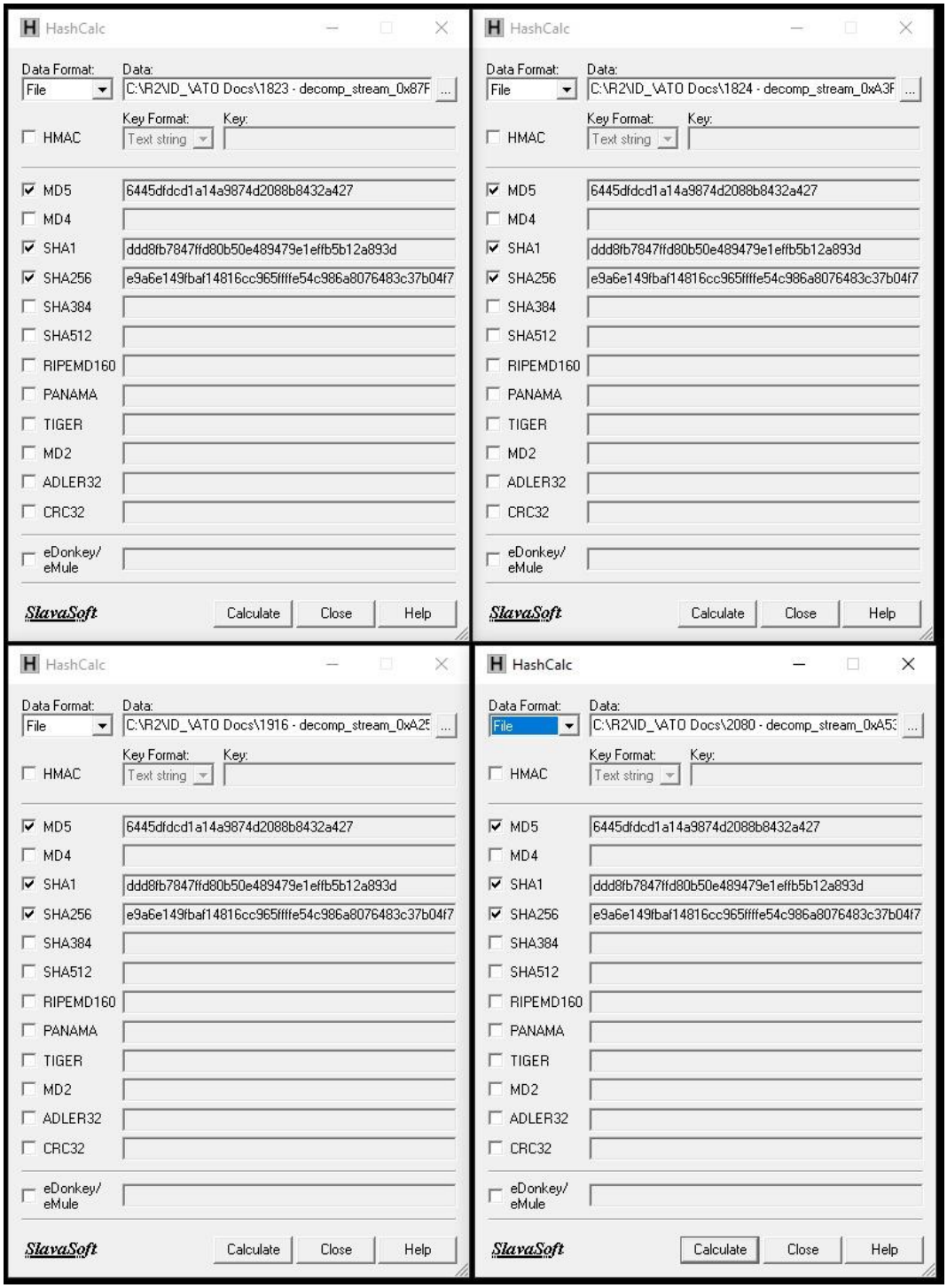
    d. I also conducted a check of the raw data embedded within the decompressed stream for the four documents (which also produces an MD5 hash which is the same across all four documents).

    e. They are therefore identical files embedded within the digital PDFs.

99. The following image is a set of screenshots comparing the hashes of the four extracted PNG images, showing that they are identical by MD5, SHA1 and SHA256 hashes:



100. I also extracted the raw decompressed streams from each of the four PDFs that pertain to the pictures as they were stored within the respective four PDF files. These also exhibit matching hashes in the same way, demonstrating that there is no material effect from any conversion to PNG format, as shown in the following images which compares the hashes of the raw extracted data:



101. I also observe that the way that the text of the letter is in my opinion too precise and clean to be explained by scanning and OCR processes, and is more consistent with native application of text digitally. However, that is not my reason for considering that the images were not produced by scanning from hard copy. My reason is based on the forensic findings set out above and explained

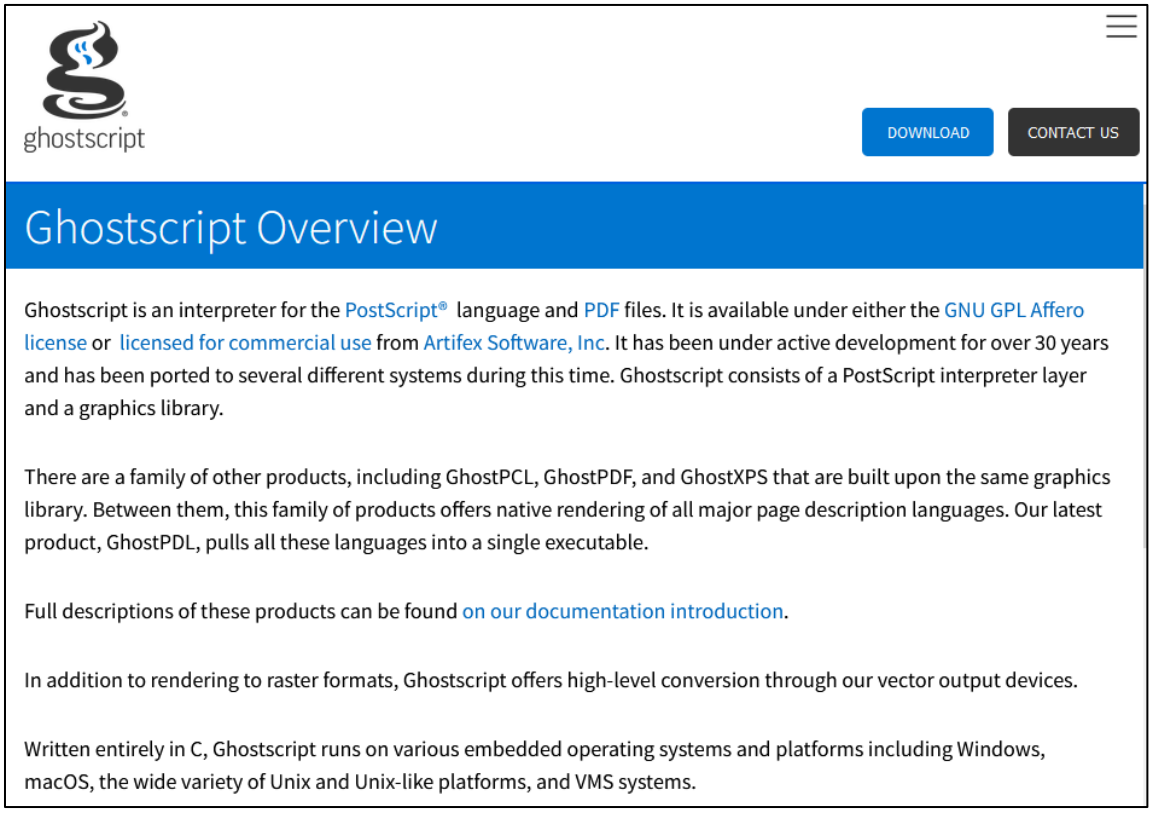
below.

102. The forensic findings summarised above clearly indicate that all four documents were created by a process of digital editing from native files, and not by scanning from hard copy. Had four different documents been scanned from hard copy, there would have been differences in the way the images were captured. As I have explained, these could relate to differences in alignment, brightness and colour intensity, printing, speckling, or other typical artefacts of scanning (examples of which were given in my First Report at paragraph 192, paragraph 232 of Appendix PM3, and paragraph 22.d. of Appendix PM5). Any one of those artefacts would be expected to create changes to how the image in question was captured. Even a small change would have resulted in the MD5 hash being different. Since the hashes are all the same, it indicates that there are no differences at all in the files (however minor).

{G/1/68}
{H/20/77}
{H/31/8}

Relevance of Ghostscript

103. I also disagree that Ghostscript software is particularly associated with scanning or conversion. Ghostscript is a native PDF rendering interpreter used in a wide variety of systems and which can be used on any front end. On its homepage at www.ghostscript.com it states as follows:



104. The use of Ghostscript software is therefore consistent with digital creation and is not particularly indicative of scanning.

ATO letters - conclusion

105. In my view, the explanation provided by Dr Wright and Dr Placks cannot be an accurate explanation for the irregularities in ID_001916.

{ID_001916}

106. However, I reiterate and emphasise that it is not my view that ID_001916 itself is necessarily inauthentic, only that it should be treated with caution. The analysis above is directed to the response provided, which I do not consider to be accurate.

{I/1/46}

Response to Section 13 of Dr Placks' Report – Economist Papers and NewBlogPost

107. I agree with Dr Placks that emails are not transmitted as MSG files. However, the timestamps in the MSG files ought accurately to record data about when the email messages were created, sent, and about the other aspects of creation of those email messages. If the metadata of the disclosed files does not accurately record information about the emails, I would not regard such metadata to be authentic to the original dates of the documents. The method of transmission of an email is however not the only relevant point. The method by which email messages are sent or received does also have an impact on what information is available. If either sent or received using MS Outlook for example, the copy of the message within MS Outlook will have additional metadata applied to it.

108. I agree that in some cases, handling rather than manipulation can account for irregular metadata, as I have explained at length in my First Report, and in this Report above under the heading "Handling of Emails".

{G/1}
{G/3/10}

{I/1/46}

109. In his paragraph 13.07, Dr Placks states that the presence of irregular metadata is not enough to render the underlying emails as inauthentic. However:

a. That was not my conclusion. In PM18 at paragraph 21 I concluded that the provenance and authenticity of those documents cannot be assumed without further exploration of (and explanation for) the cause of the discrepancies that I have identified. I also explained at paragraphs 4-14 that the documents have certainly been altered to some extent and that the face-value date is not reliable without an explanation of how these discrepancies came to arise. I stated in terms that I could not "form any opinion on whether this [alteration] was done as a result of poor handling or through manipulation of the documents."

{H/83/7}

{H/100/5-6}

{H/100/6}

b. My conclusion was not based only on the presence of metadata in the MSG file which would not have been present in the original Gmail account, but on the audit trail as a whole.

c. I understand from the disclosure documents filed in this case that the natives were exported from Gmail, but these were not provided. Instead, converted MSG files were provided. Had the original native Takeout emails been provided it might have been possible to resolve these concerns. Where an email is stored in multiple locations or resources each copy should be provided for forensic analysis in an appropriate manner for each source.

Response to Section 14 of Dr Placks' Report – Interoffice Memo

{I/1/47}
{ID_000856}
{H/208}

110. In Section 14 of his report, Dr Placks has conducted a similar inspection of ID_000856 to mine, and (as I did) has identified templates based on the visual presentation of the document. I have responded to this in **Appendix PM41** to this Report.

Response to technical information in Shoosmiths' Letter of 10 October

Operating systems

{M/2/239} 111. In the letter of 10 October, it has been stated that I did not properly take account of the operating systems used by Dr Wright. I have explained above that this was a result of not being provided with that information when requested. While this did not prevent me from being able to conduct my analysis, it did draw out my analysis and it would have assisted my review to have been informed of the answers beforehand.

Hypothetical points

112. Some parts of the letter present as hypothetical. I am instructed by Bird & Bird that they have
{M/2/257} requested Shoosmiths to indicate whether the hypothetical observations in the 10 October letter should be treated as indications of the factual circumstances in this case, and that Shoosmiths has
{M/2/260} responded that the hypothetical observations are not intended to be factual but should be treated as hypothetical. I therefore do not address these hypothetical points, save to say that they are somewhat vague and I do not agree that the scenarios contemplated there would explain the various anomalies relating to the Lynn Wright documents which I have observed.

Virtual machines in connection with the Lynn Wright anomalies

113. In that correspondence it is suggested that among the operating system software used, Dr Wright used Citrix Xen based virtual machines. The letter provides various general observations about how computers could be managed. Where technical detail is provided, I have tried to answer it as follows.

114. I note that I have not seen any indications in the disclosure documentation that pertain to the use of Citrix Xen virtual machines.

{M/2/241} 115. The letter states that *"It should also be noted that there were over fifty computers at our client's residence which were accessed using "Admin" credentials, others under our client's personal login, a few under Lynn Wright, and some used generic credentials such as "Home"."* This is somewhat at odds with the suggestion that Citrix Xen virtual machines were used. The purpose of Citrix Xen server is to allow several users to run virtual computing sessions on a single server, thus taking the benefit of shared hardware and enabling several users to access computing resources remotely, and to store data centrally. If 50 physical computers were running in the manner described, it would not generally be needed to operate virtual machines, because the physical machines are in existence. It

would be possible to simply access the individual computers (whether directly, or over a network) without needing to create virtual machines.

{M/2/242} 116. Section 4 of this letter describes some generic concepts about how virtualised computer systems can be operated or managed. It describes concepts such as making a "Snapshot" which is similar to a backup in concept, and explaining in a round about way that virtual machine computers can behave in a manner similar to fully fledged computer systems in that they can store documents and information as well as maintaining their own set of audit logs and records. It is unclear to me what point precisely is being addressed by this section of the letter. In any event:

a. In many respects, a virtual computer can be treated as akin to a fully-fledged computer system.

b. I agree that the content of a virtual machine image or snapshot can retain evidentially valuable information to a forensic investigation.

c. Where such backups / snapshots have been retained, these should be the subject of in-depth forensic analysis.

{M/2/239} 117. Overall, the letter appears to suggest that Lynn Wright documents were created by logging in to a series of isolated virtual sessions, and running a separate virtual desktop session for each different document being authored. This appears to me to be a very cumbersome way to edit documents and one with no obvious benefit, requiring the user to take time to log in and out of different sessions in order to edit different documents, and also requiring the user to keep track of the relationship between the server sessions themselves, and the documents in progress at each time. That is a difficult and technical process.

118. I have considered whether a virtualisation environment of this kind could be desirable to keep data from different sessions segregated and apart. That is one reason that organisations sometimes use virtualisation, and I also operate virtual machines in this way in order to ensure that my analysis of documents in litigation is kept separate from any other computing work. However, that is not consistent with what I have seen in the disclosure dataset. To the contrary, the relationship between various Lynn Wright documents and other documents in the disclosure dataset indicates a pattern of editing based on creating each document from previous documents.

119. In summary,

a. I have not seen any indication within the disclosure dataset that would lead me to think that this

virtualisation process had been followed, other than the anomalous edit times in certain Lynn Wright documents. However, those are not the only anomalies within those documents, and form only part of my analysis.

b. The manner of editing of the Lynn Wright documents is also inconsistent with other evidence and analysis that I have conducted in response to the CoC table, which I have set out in appendices to this report.

c. I therefore do not think that the use of virtual machines can explain the anomalies present within the disclosure dataset.

Reply in relation to Chain of Custody Information

{K11} 120. Bird & Bird has provided me with Dr Wright's Chain of Custody spreadsheet dated 13 October 2023 titled "*Custody of Reliance Document – 13.10.2023.xlsx*" (the "**CoC Table**").

121. The CoC table lists out each Reliance Document and provides comments relating to the handling of the documents referred to.

Interpretation of the CoC Table

122. Many of the fields in the CoC Table are not technical in nature and I do not comment on these.

123. Other fields do relate to the documents themselves. However, the explanations given are rather vague or imprecise and in my opinion are often insufficient to provide a useful history in respect of these documents. For example,

a. The "origination date" has been left blank for all documents except 11. In respect of those 11 it is provided in general terms which do not assist me in a technical review such as "Late 1990s" or "Before the end of 2009".

b. in many cases Dr Wright states that documents were collected from CD-R media, but the field "Origination date" has been left blank. The following explanation is then given of the process:

Dr Wright has confirmed that he was not involved in the creation of the CDs, from which these files were taken. He recalls that, between 2005 and 2015, CD backups of certain files were made, and updated, on a regular basis (initially) by Lynn Wright and (subsequently) by various people

working for Hotwire/DeMorgan companies, including Nicholas Desmond, Bobby Wilson, Brendan Beveridge and Peter Chen. Dr Wright has also explained that he used a program called Virtual CD to save ISO files in digital format on a file server in the DeMorgan Australia office. He recalls that various people would write the virtual CD to a physical one to work on the files, and use them in their research.

This explanation is open to interpretation about how the CD-Rs in question came to exist and it is not possible for me, from a technical perspective, to investigate it without more precise information being provided. In the following analysis, I have taken this to mean that the CD-Rs from which the documents were taken are said to have been created at some point between 2005 and 2015.

c. With the device descriptions, it is often not clear whether there is only one device by each name, or whether there may be multiple devices with the same names. For example, there are various CDs referred to in the CoC Table, and reference is also made to "Dell Laptop" as a collection source. However, no further information is provided about those devices, and I note that Annex 1 to Section 2 of the Disclosure Review Document refers to "73xCD/DVD" as electronic data sources. It also makes reference to 2 Dell brand laptops.

d. In other cases, technical detail is supplied but seems contradictory or confused, and does not precisely identify the information to be analysed. I give an example of this below where the CoC appears to indicate three possible people who were responsible for first creating a document, as well as three possible ways it was created and four possible original digital file formats.

124. In many cases it is therefore not possible to investigate the information provided or draw conclusions about it without a clearer picture. However, in other cases it has been possible to address specific points, or to do my best to understand the possible circumstances and answer each of them. Where it is vague, I have approached the CoC Table by considering the explanation given as best I could, taking into account different possible ways of interpreting the technical information given. I have tried to explain my understanding of it below in the course of setting out my comments. In some cases where there are different possible technical interpretations, I have tried to set those out in more detail.

{K/11}

125. As the CoC contains over 1,100 completed cells in the table, it is not practical to address each cell in turn one by one. However, there are several cells that repeat or contain similar types of explanation, and it is possible to address the points generally. I therefore begin by responding in summary, and then move on to address specific parts of CoC information where that is possible.

CoC Table and conflict with findings in my First Report

{G/11} 126. In my First Report, I explained my analysis of many documents which had multiple indications of tampering. For example, they included,

a. Touchup_TextEdit indications of editing PDFs,

b. hidden embedded content of past edits,

c. references to events or sources (such as URLs) which would have been in the future at the time that the documents were created,

d. the presence of fonts in a document, which had not yet been designed,

e. the presence of hidden embedded timestamps that post date the recorded last modified dates of the documents,

f. indications of conversion between different formats,

g. indications that they had been written in software not yet created at the purported dates of the documents,

h. references to document formatting schema which did not yet exist at the purported date of the documents, and

i. indications of content being copied from post-dating sources,

j. the presence of similar files in the disclosure dataset appearing to be different versions of the same document indicating a pattern of "backwards" editing from a purportedly later document to a purportedly earlier document, and

k. other incompatible technical details, such as an invalid checksum in an EXE file indicative of hex-editing, and others (this is not an exhaustive list).

{ID_000550} {H/1} 127. In many cases, the multiple anomalies present in the same document existed independently of each other. For example, in ID_000550 (addressed in Appendix PM1), the document contained a Grammarly timestamp, an indication of past editing, content apparently copied from post-dating source material and references in that material to future events and URLs, as well as other indications of tampering.

128. In most (or perhaps all) of the cases of inauthenticity to their purported dates, the anomalies

contradicted the Root Entry and Last Modified timestamps of the documents. As I have explained above in response to Dr Placks' paragraph E.3 (in his Executive Summary), this is an indication that the documents were not subsequently altered as a result of their handling, but that they exist in the same form in which they were written. The presence of anomalies is therefore more consistent with clock manipulation and backdating than it is of handling or later modification of documents. {I/1/3}

129. While it is often possible for some anomalies to arise in documents due to handling by the chain of custodians, I would make the following points in relation to deciding whether anomalies are explicable on that basis:

a. I cannot think of and have not ever encountered a circumstance where improper handling would give rise to anomalies of the kinds mentioned above.

b. In any case, I do not consider that an error of handling would be likely to give rise to *multiple* such anomalies in the same document.

c. As indicated by the summary above, the nature of the anomalies is very varied, even in respect of documents that (according to the CoC Table) were handled in the same way or came from the same source. It would be expected that if errors in the documents were due to their handling, then a consistent pattern across documents from the same source should be observable. However, no such pattern is observable. {K/11}

d. I am also familiar with handling errors, and have tried to take those into account throughout my analysis as I have explained in my First Report. As I explained at paragraph 236 of my First Report, I have been careful to bear in mind when anomalies in documents may have been created by handling errors. Where this might have led to effects that are indistinguishable from those which might have resulted from manipulation, I have said so and my analysis has been inconclusive. An example of this is in Appendix PM19 at paragraphs 8-12, where I considered the possible explanations of anomalies in ID_002261 but could not conclude as to whether the evident alteration was the result of poor handling or manipulation. I recommended inspection of the original file in its native format. Again, I understand that the original native file has not been identified or access has not been provided. {G/1/92} {H/100/4-6} {ID_002261}

130. Further, the ability to modify documents also depends on the manner in which document was stored and on the machines that stored them. For example:

a. As I explain in detail below, when documents are written to CD-R is it not possible later to

modify the content of those documents.

b. In other cases, when documents are sourced from a device with an operating system (like a personal computer), documents may be able to be altered but (i) this alteration would be unlikely to take place without updating the file metadata of the document and (ii) the alteration process would be very likely to leave some trace on the machine itself, for example in the system logs or in other areas in which system data is stored.

c. In cases where more specialised systems are used data may be even more readily available. For {K/11} example, the CoC refers to files being stored on a NAS, which stands for Network Attached Storage. That is a reference to a computing system typically dedicated to acting as a secure fileserver on a network. Such systems typically run somewhat specialised versions of operating systems to fulfil their purpose of preserving data, and consistently include very detailed logging functionality. Some NAS systems also provide version history support, and can retain previous drafts of files store thereon.

d. I would expect that inspection of those systems would allow for logs to be extracted, and the data integrity to be ascertained, which would allow any difficulties with the CoC to be resolved. However, access has not been provided to any such logs.

e. I also note that the CoC refers to files being copied between multiple devices and synced between devices. In those cases, I would expect it to be possible to gain information about data integrity by inspecting the different sources on site, to see whether copies of the files they contain differ from each other or not (and if so, how, and what metadata and logs are provided to identify when those changes took place). Access to those devices has not been provided.

CoC - Summary

131. Therefore it is my view that the CoC does not explain the points that arise from my analysis, which are independent of the custody of the document and how it has been handled. In particular, the CoC information does not appear to explain the various anomalies which are independently present in many documents and the varied nature of anomalies across the dataset from different sources. Had handling caused problems , there would have been opportunities to verify whether or not any problems had arisen as a result of handling or CoC issues by inspecting the devices themselves.

132. As I have explained in the Appendices to this Report, the CoC also contains information about how documents were stored and from where they were sourced, which appears to be contradicted by other

aspects of my analysis and external evidence. This includes indications that I have addressed in detail throughout Appendix PM43 and Appendix PM44, including: {H/219}{H/238}

a. the documents were shared on social media by a social media account in Dr Wright's name, [PM43 at 3-9] {H/219/1-4}

b. that Dr Wright's MS Word account used Grammarly to interact with them, [PM43 at 45-53] {H/219/18-23}

c. that the dates of sharing appear to be inconsistent with the information in the CoC but are contemporary to the embedded Grammarly timestamps within documents in the disclosure dataset; [See e.g. PM43 at 35, 59-61] {H/219/15} {H/219/25-26}

d. and the dates of sharing are also contemporary to the date on which certain documents were emailed from Dr Wright to Lynn Wright [PM43 at 10-16], which itself took place a few days before being collected for litigation by Alix Partners, and {H/219/4-7}

e. that the account "Lynn Wright" was in use at a time contemporary with Dr Wright's sharing of these documents [Appendix PM43 at 76-87]. {H/219/30-32}

DECLARATION

1. I understand that my duty is to help the Court to achieve the overriding objective by giving independent assistance by way of objective, unbiased opinion on matters within my expertise, both in preparing reports and giving oral evidence. I understand that this duty overrides any obligation to the party by whom I am engaged or the person who has paid or is liable to pay me. I confirm that I have complied with and will continue to comply with that duty.

2. I confirm that I have not entered into any arrangement where the amount or payment of my fees is in any way dependent on the outcome of the case.

3. I know of no conflict of interest of any kind, other than any which I have disclosed in my report. I do not consider that any interest affects my suitability as an expert witness on any issues on which I have given evidence.

4. I will advise the party by whom I am instructed if, between the date of my report and the trial, there is any change in circumstances which affects this.

5. I have shown the sources of all information I have used.

6. I have exercised reasonable care and skill in order to be accurate and complete in preparing this report.

7. I have endeavoured to include in my report those matters, of which I have knowledge or of which I have been made aware, that might adversely affect the validity of my opinion. I have clearly stated any qualifications to my opinion.

8. I have not, without forming an independent view, included or excluded anything which has been suggested to me by others including my instructing lawyers.

9. I will notify those instructing me immediately and confirm in writing if for any reason my existing report requires any correction or qualification or my opinion changes.

10. I understand that:

a. my report will form the evidence to be given under oath or affirmation;

b. the court may at any stage direct a discussion to take place between experts and has done in this case;

c. the court may direct that, following a discussion between the experts, a statement should be prepared showing those issues which are agreed and those issues which are not agreed;

d. I may be required to attend Court to be cross-examined on my report; and

e. I am likely to be the subject of public adverse criticism by the judge if the Court concludes that I have not taken reasonable care in trying to meet the standards set out above.

11. I have read Part 35 of the Civil Procedure Rules and I have complied with its requirements. I am aware of the requirements of Practice Direction 35 and the Guidance for the Instruction of Experts in Civil Claims 2014.

12. I confirm that I have acted in accordance with the Code of Practice for Experts.

13. I confirm that I have made clear which facts and matters referred to in this report are within my own knowledge and which are not. Those that are within my own knowledge I confirm to be true. The opinions I have expressed represent my true and complete professional opinions on the matters to which they refer.

Signed: DocuSigned by: Patrick Madden 5943D537458F4C0...

Dated: 17/11/2023