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12 March 2018

Our Ref: KD/JL/KC/40252.7

Your Ref:

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Dear Madame President,
Dear Members of the Arbitral Tribunal,

BSG Resources Limited, BSG Resources (Guinea) Limited and BSG Resources (Guinea) Sarl ("BSGR") v. The Republic of Guinea ("Guinea") (ICSID Case No. ARB/14/22)

We hereby provide the Tribunal with BSGR's comments on the Final Report, filed by means of Mr Radley's Report for the Consideration of the Tribunal together with its annexes.

We understand from the Tribunal's letter to the Parties dated I March 2018 that BSGR is no longer required to make submissions on the need for an Authenticity Hearing.

In accordance with para. 29 of Procedural Order No. 16, BSGR hereby advises the Tribunal that it wishes to file comments on the transcripts of the examinations of Mamadie Toure in the Swiss criminal proceedings. These comments can be filed either by means of separate submissions or as part of the post-hearing submissions.

Yours sincerely,

Mishcon de Reya LLP

Muhande Reya LiP

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The Radley Forensic Document Laboratory

Forensic Handwriting & Document Examination Experts

Practice Principal: Robert Radley MSc, C Chem, FRSC, FCSFS, FSSoc Dip, FAE, RFP Ellen Radley BA PgDip (Law), MAE

IN THE MATTER OF AN ARBITRATION

UNDER THE RULES OF ARBITRATION OF THE INTERNATIONAL CENTRE FOR THE SETTLEMENT OF INVESTMENT DISPUTES

ICSID CASE No. ARB/14/22

BETWEEN:

- (1) BSG RESOURCES LIMITED
- (2) BSG RESOURCES (GUINEA) LIMITED
 - (3) BSG RESOURCES (GUINEA) SÀRL

Claimants

- V -

THE REPUBLIC OF GUINEA

Respondent

Mishcon de Reya LLP Africa House 70 Kingsway London WC2B 6AH

REPORT

FOR THE CONSIDERATION OF THE TRIBUNAL IN THE HEARING OF THE ABOVE MATTER

12th March 2018

The Radley Forensic Document Laboratory

Forensic Handwriting & Document Examination Experts

Practice Principal: Robert Radley MSc, C Chem, FRSC, FCSFS, FSSoc Dip, FAE, RFP Ellen Radley BA PgDip (Law), MAE

12th March 2018 Our Ref: RWR/kas/13526

REPORT

RE: BSG RESOURCES LIMITED AND OTHERS and GOVERNMENT OF GUINEA

Whilst written instructions in this matter have been received from Mishcon de Reya LLP of London, this report is addressed to the Tribunal for its consideration in the hearing of the above case.

I have been an independent expert in private practice for over 40 years. I hold the Diploma in Document Examination awarded by the Forensic Science Society. I have also been awarded the status of Registered Forensic Practitioner (specialising in the examination of handwriting and documents) from the Council for the Registration of Forensic Practitioners. The laboratory, shown on the cover page of this report is very well equipped for document examination and holds an extensive library. I have given evidence on several hundred occasions in the courts throughout the UK, Republic of Ireland, Jersey, Cyprus, Germany, Switzerland, Australia, New Zealand, Brunei, Hong Kong, Singapore, Gibraltar, Malta, South Africa, Kenya, Canada, Trinidad, Pakistan and the British Virgin Islands. My Curriculum Vitae is appended to this report (see Appendix A).

TABLE OF CONTENTS

Item	Description	Page No.
	SCHEDULE OF DOCUMENTS PRESENTED	4
	INSTRUCTION	4
	SUMMARY OF OPINION	5
	THE STRUCTURING OF MY REPORT	7
(1)	LIMITATIONS ON THE EXAMINATIONS	8
(2)	COMMENT ON THE "OVERVIEW"	10
(3)	GENERAL THEORETICAL CONSIDERATIONS AND TERMINOLOGY USED BY THE AUTHORS	11
(a)	The Unbalanced Nature of the Authors' Report – No Consideration of Alternative Propositions	11
(b)	The Terminology Adopted by the Authors	13
(c)	Illustration of the Fallacy of the "No Evidence Implications"	14
(d)	SWGDOC Standard Terminology	16
(e)	What Is Expected of a Fraudulent Document?	17
(4)	A CONSIDERATION OF THE AUTHORS' STATEMENT CONCERNING EACH OF THE DOCUMENTS IN QUESTION	20
	R24	20
	R25	22
	R26	23
	R27	24
	R28	29
	R29	30
	R30	33
	R31	34
	R32	34
	R269	35
	R346	36
	DOC A	36
	DOC B	37
	DOC C	38
	Conclusions	38

Item	Description	Page No.
(5)	ANNEX L – Responses to BSGR Comments on the Preliminary Report	38
(6)	RADLEY OPINION CONCERNING THE AUTHENTICITY OF THE QUESTIONED DOCUMENTS	43
(7)	CONSIDERATION OF GENERAL PRINCIPLES OF SIGNATURE EXAMINATION	44
(a)	The Basic Comparison Process	44
(b)	The Significance of Similarities and Differences	45
(c)	The Importance of the Range of Variation of the Genuine Signatures	46
(d)	The Nature of the Document in Question	46
(e)	The Importance of the Structure of the Master Signature	47
(8)	EXAMINATION OF THE SIGNATURES	48
(9)	Signatures in the name of Avraham Lev Ran – R24, R25 AND R26	48
(10)	RADLEY OPINION CONCERNING THE AUTHENTICITY OF THE AVRAHAM LEV RAN QUESTIONED SIGNATURE ON R24 – R26	53
(11)	Signature of Marc Struik	57
(12)	RADLEY OPINION CONCERNING THE AUTHENTICITY OF THE MARC STRUIK QUESTIONED SIGNATURE ON R27	61
(13)	Signatures in the Name of Asher Avidan	61
(14)	RADLEY OPINION CONCERNING THE AUTHENTICITY OF THE ASHER AVIDAN QUESTIONED SIGNATURE ON R28 AND R29	65
(15)	Signature of Issiaga Bangoura	66
(16)	Initials "A.L." on R26	67
(17)	Signatures of Toure and Tinkiano on R27	69
(18)	Signatures of Toure, Noy, Editayo Pabs-Garnon, Cissé and Bangoura	70
(19)	TABLE OF ALTERNATIVE PROPOSITIONS	70

The following documents have been presented for examination.

SCHEDULE OF DOCUMENTS PRESENTED

- A report of Riley Welch LaPorte & Associates dated 12th February 2018 in connection with the above case, including "ANNEX L – Responses to BSGR Comments on Preliminary Report" ("ANNEX L").
- 2. Copies of the Questioned Documents
- 3. Copies of the Comparator Documents
- 4. Two files of data enclosed with the report of Riley Welch LaPorte & Associates

INSTRUCTION

- 1. (i) To consider the report of Riley Welch LaPorte Associates dated 12th February 2018 and comment on the findings, interpretations and opinions expressed.
- (ii) To comment on the responses in the Riley Welch LaPorte Associates "ANNEX L Responses to BSGR Comments on Preliminary Report"
- 3. (iii) To examine and compare the copies of documents referred to in the Report of Riley Welch & LaPorte Associates dated 12th February 2018 in order to offer an opinion as to the authenticity of the signatures in question.
- 4. (iv) To make comment on the documentation detailed in the above report where relevant.
- 5. For ease of reference, I shall refer to the report of Riley Welch LaPorte & Associates dated 12th February 2018 as "the Report".
- 6. As I am unclear as to which examinations undertaken by Mr Welch and which were undertaken by Mr LaPorte, I shall refer to them either individually or both as "the Authors".

SUMMARY OF OPINION

Further to my examination of the documents in question, a more detailed outline of which follows, my findings and opinions are summarised below. A Glossary of Opinion is attached at Appendix B. It is strongly advised that the reader should study this in order to obtain a greater appreciation of the meanings of the terms of the scale of opinion that may be used.

Document Examination

- 8. (i) From a consideration of the Report, I am of the opinion that the continual reiteration of the phrase "there is no evidence of (fraudulent production of documents) ..." is inappropriate, potentially misleading and is used selectively in its interpretation of the evidence. It does not necessarily follow that the alternative situation that the documents are genuine represents the truth of the matter. In fact, the phrase should **not** be taken to imply that the documents are genuine. However, in my opinion, the tone of the Report continually reinforces this suggestion. Whereas the fact of the matter is that the absence of evidence of fraudulent production does not assist in determining the authenticity of the documents or the dates on which they have been produced.
- 9. (ii) Nowhere in the Report do the Authors consider alternative explanations for their observations which may be equally as likely in representing the truth of the matter.
- The Report is very thorough and details many worthy observations albeit, in the circumstances of the case, the examinations are **incapable** of determining whether or not the documents are genuine and on what dates they were produced.

Signature Examination

11. (iv) With respect to the authenticity of the signatures of Avraham Lev Ran, Marc Struik and Asher Avidan in the Report, the Authors offer conclusive opinions, with absolutely no reservations, that the signatures in question are all genuine. This report will show differences between known and all the questioned signatures which, in my opinion, cannot be reasonably explained. As such, I

do not consider that conclusive opinions can be given in the presence of such features.

- 12. (v) The comments made at ANNEX L Responses to BSGR Comments on the Preliminary Report address very few of the queries raised. This, in my opinion, is not helpful to the Tribunal or BSGR in trying to fully comprehend many of the comments within the Report.
- 13. (vi) In the Report, there are numerous other points concerning the document examination and interpretation of results with which I take issue. These numerous comments are covered within the main body of this report.
- 14. (vii) From my examination of the known and the questioned signatures on R24, R25 and R26, with respect to the signatures of Avraham Lev Ran, the differences in one particular stroke in **all** three questioned signatures leads me to the opinion that, on considering the potential ease of copying, the huge range of writing variation of Avraham Lev Ran and the differences present, the evidence overall has to be regarded as inconclusive as to whether he wrote the three signatures in question.
- 15. (viii) When considering R26, this report also takes issue with the Authors having disregarded a set of comparator initials for Avraham Lev Ran, which have skewed their conclusions as to his questioned initials on this document.
- With respect to the signatures of Marc Struik on R27, there are a fair number of demonstrable differences present relative to the known writings. In accumulation, these lead me to the opinion that there is weak to moderate evidence to support the proposition that the signature on R27 in his name was not written by Marc Struik but is a copy of his general signature style. The evidence is, however, far from conclusive but, in my opinion, over the balance of probability.
- 17. (x) With respect to the signatures of Asher Avidan, again, I find some differences to be present between known and questioned signatures. Due to the number and nature of the differences, I have experienced difficulties in assessing the

significance of these features. Consequently, I am of the opinion that the evidence is inconclusive as to whether Asher Avidan wrote the questioned signature.

18. (xi) To summarise, in my opinion, the Authors of the Report have not shown the documents in question to be authentic nor have they demonstrated that any of the documents were created at the times stated. In relation to the authenticity of the signatures on the questioned documents, I disagree with the conclusive opinions, without any reservations, of the Authors as there are demonstrable differences between the known signatures of Avraham Lev Ran, Marc Struik, Asher Avidan and those on the questioned documents.

THE STRUCTURING OF MY REPORT

- 19. Mr Welch and Mr LaPorte have undertaken a very thorough and extensive examination of the documents presented which encompasses techniques which may be used to explore the possible scenarios for the potential document production. The analytical procedures adopted are clearly what I would have expected from a full and proper examination, but it is the relaying of the information obtained, the inferences drawn and terminology presented with which I significantly disagree.
- On considering the Report of Mr Welch and Mr LaPorte, I find that there are significant differences in our approaches to the assessment of evidence, primarily with respect to the interpretation of evidence and the fact that no alternative scenarios are considered other than those they state ("no evidence" of fraudulent production). No positive opinions (other than on the signatures) are offered as to the actual authenticity of the documents concerned, but they merely record the absence of any evidence of falsification. At the same time, they cannot offer clear opinions as to the true date of production of any of these questioned documents as there are, in fact, no techniques to establish this. Nowhere in the Report do they offer a clear opinion on the authenticity of the documents i.e. at no stage does the Report state the documents to be demonstrably genuine (as that is not possible to prove) nor do they identify any dates of production.

- As a result, the Report will be dealt with on the basis of:
- 22. Limitations on the Examinations
- 23. Comment on the "Overview"
- General Theoretical Consideration and the Terminology Used by the Authors.
- A Consideration of the Authors' Statements Concerning Each of the Documents in Question
- My Opinion on the Document Examination (Excluding Signatures)
- Opinions Relating to The Signatures in Question
- 28. Table of Alternative Propositions

(1) LIMITATIONS ON THE EXAMINATIONS

- 29. In most cases that I undertake, a thorough examination will be undertaken in my own time and with my own equipment at the laboratory. The evidence would then be assessed and if any further issues or points of interest come to light, these would then be pursued or revisited on the original documents. In this particular case, I understand that I am not going to have the opportunity of examining the documents made available to Riley Welch LaPorte & Associates and this obviously restricts the scope of my examination as I only have their Report and Data Files on which to consider the documents.
- I have been requested to comment on the 199 page Report of Mr Welch and Mr LaPorte and over 1,000 pages of "electronic data" comprising photographs etc.
- 31. However, I am restricted in my consideration from the following points of view:
- I cannot assess the evidence first hand. However, I have to commend the quality of the photographs that are generally produced by the Authors and I have experienced little difficulty with respect to the examination of, for instance, the signatures' details etc.

- 33. (ii) I have to assume that the observations recorded in the reports are correct.
- 34. (iii) I have to assume that the Authors have not missed any other forensic evidence on the documents which I cannot detect on the copy material available to me.
- 35. (iv) I have to assume that the Authors have correctly interpreted certain points that cannot be properly examined on the copy documents produced to me.
- I have to rely on, for instance, the Authors' photographs and their (v) 36. interpretations of the ESDA lifts (which show dark grey writing impressions on a light grey background) which are notoriously difficult to accurately reproduce as copies (photographs). As such, it is difficult to assess how well the ESDA lifts are raised and reproduced and whether or not all impressions that are on the documents have, indeed, been detected. information given as to the conditions and methods used for the recording of the ESDA results nor is there any mention of modification of the procedure to secure the best results. There are a large number of parameters that can be modified to enhance weak impressions. Without running the ESDAs myself and inspecting the original lifts, it is difficult to ascertain whether clearer impressions could have been obtained. There is, for example, a reference in the report to weak impressions of a foreign script on one document, but no details of further testing or modification of operating parameters have been given with respect to possibly enhancing the impressions potentially allowing them to be deciphered.
- 37. (vi) I cannot determine the sequence of application of signatures and surrounding text. This has not been addressed by the Authors to ascertain whether or not there is evidence to allow the sequence of application ink/printing to be established, for instance whether the text was inserted on to the document *after* the signatures.
- ^{38.} (vii) I cannot assess certain other features which are not mentioned in the report but may be of significance e.g. security printing (a series of yellow dots on the paper, bespoke to a particular printer/copier) which **appear** to be present

on some of the documents which, if identified as security printing, may be of value in order to identify the source and potentially the date of the printing. However, without examining the original, it cannot be confirmed whether these, are, indeed, Counterfeit Protection System Codes (CPSC).

- These above points all obviously restrict the effectiveness of any commentary on the Report of the Authors.
- The Authors' examination would also have been hampered by the fact that (a) they are not working in their own laboratory (which will be fully equipped), (b) they only had four days to complete a vast amount of work on the originals, (c) I understand there was no opportunity for the Authors to revisit the original documents once they had been taken back by the FBI.

(2) COMMENT ON THE "OVERVIEW"

- In paragraphs 8 to 12 on pages 5 8 of the Report, the Authors make a variety of comments, many of which I do not consider it my place to comment upon. However, for the record, there are various points that I would wish to clarify.
- On the third line from the bottom of page 6, the Report states "However, BSGR has now engaged a "new expert" who did not attend the four day inspection and therefore was not given the opportunity to observe all of the testing and ask questions per the ToR which has now resulted in a number of queries that would not have been necessary had the "new expert" been present for the testing".
- Whilst not physically present for the examination, I have viewed the video recordings of the examinations. Frankly, these do not assist me with respect to observing certain points. It is not possible to see precisely how the work is being undertaken and the results obtained. I would require sight of the original documents to clarify the position with respect to these points.
- At paragraph 10 on page 7, the Authors make comments to documents C-0112, C-0113 and C-0356 and indicate that these were not "disputed documents" or comparison documents.

As far as my instruction was concerned, consideration of these signatures was not part of my instruction (which was limited to the documentation examined and reported upon by Riley Welch LaPorte & Associates).

Furthermore, the suggestion that because these were stamped as "Forged", this would have had any effect on any consideration of these documents by myself is, frankly, absurd. As a result of someone having stamped this document as "Forged", that, in no conceivable way, would "taint" my opinion (not that I have examined or reported on these documents). It may be noted the first time I retrieved copies of these documents mentioned has, in fact, been to cross reference the comments made in the Report to them, after the completion of all the work on this case.

(3) GENERAL THEORETICAL CONSIDERATIONS AND TERMINOLOGY USED BY THE AUTHORS

- (a) The Unbalanced Nature of the Authors' Report No Consideration of Alternative Propositions
- In my opinion, the Authors' report is notable for what it does **not** say. Nowhere does it consider the likelihood of potential alternative scenarios or conclusions based on the evidence available, as I believe it should have done. I therefore consider the observations to be unbalanced.
- The Authors do not actually express an opinion relating to the authenticity of the documents in question in this particular case and whether they are genuinely produced. They only offer comments, observations of fact and express their views in terms of the lack of evidence demonstrating any fraudulent creation of the documents.
- 49. In this Practice, consistent not only with most other English forensic document examination practices, but many Practices worldwide, I express opinions which consider alternative propositions. This is known as a Bayesian approach. This approach, in effect and in very basic terms, adheres to Thomas Bayes' work

according to which one should consider alternative possibilities supported by the evidence as opposed to merely utilising the evidence to support a single predetermined proposition. This method is said to take into account the totality of evidence available i.e. considering all issues on "both sides of the coin" thereby assessing the likelihood of one proposition over another. In many areas of forensic science (e.g. DNA), mathematical statistics are adopted which will allow a "likelihood ratio", a mathematical figure, to be calculated. In the field of forensic document examination, that is not generally possible. However, the general concept of considering alternative propositions is widely adopted in this field so as to allow an overview of the entire weight of evidence as opposed to viewing evidence in one particular direction.

- 50. By way of example, when opinions are offered, these would be stated by most English Document Examiners as stated above in other countries such as Hong Kong, Canada etc, in the following terms:
- The opinion that "the evidence conclusively demonstrates" will have the alternative possibility also stated as "the alternative may be realistically disregarded";
- 52. (ii) The opinion that "there is very strong evidence to support the proposition that..." will have the alternative possibility stated as being "very unlikely";
- The opinion that "there is strong evidence to support the proposition that ..."
 will have the alternative possibility being stated as "unlikely";
- that..." will have the alternative possibility stated as being "but the evidence is far from conclusive".
- Assessing and stating the alternatives, in my opinion, gives greater meaning to opinions offered. With all the evidence before me, an opinion will be formed, whether this be for or against the propositions being tested or, may be inconclusive if the evidence is unclear or ambiguous. Where "positive" or "negative" opinions are offered, I assess whether the possible alternatives have merit and will present the

56.

same so as to show in the report an overall balanced opinion for the benefit of the Court or Tribunal. The Authors in this case have not followed this approach.

Nowhere within his report is there any alternative possibility considered for any of these numerous examples which may be equally likely in many cases. The Report does not evaluate what, if anything, the forensic evidence shows, or fails to likelihood the questioned show, about the documents having written/produced on the purported dates or later dates or not having been written/produced on the purported dates. Similarly, it does not state what the evidence demonstrates about which of those scenarios is more likely. Indeed, the numerous statements indicating there is "no evidence" to show falsification repeat negative statements. Nowhere within the report are there any statements (other than with the opinions they offer on the signatures) of any positive evidence recorded identifying the documents as being authentic. The entire Report (other than the signature opinions) is based on the accumulation of negative concepts.

(b) The Terminology Adopted by the Authors

The basis of the Report is the repeated use of the phrase that "there is no evidence..." (of falsification), used in over 60 occasions throughout the Report. In this particular case, with the terminology used by the Authors, it is extremely important that the inferences that may be suggested from a statement that "no evidence" exists of fabrication, should be balanced with respect to (i) whether there is any demonstrable evidence to the contrary i.e. genuineness, or (ii) whether there is no evidence to the contrary because the techniques are unsuitable or are **not capable** of furnishing such information.

In my opinion, where there is no clear demonstrable evidence to support a particular proposition (e.g. that the documents in question are fraudulently created) this has to be balanced against the fact that there is, similarly, no evidence to indicate that they were, in fact, executed on the dates given. The resultant opinion (as opposed to the recording of an observation of no evidence existing) is that, taking into consideration both views, the evidence has to be regarded as wholly inconclusive. This, in my opinion, applies to most comments made by the Authors

in the same vein throughout their Report.

The phraseology employed by the Authors can, in my opinion, possibly be misleading. A reader could interpret this form of continually repeated wording that there is "no evidence" that the questioned entries were written on any other date than purported, as implying that the documents were therefore written at the times stated and that they are genuine. This would, in my opinion, be incorrect.

This phraseology used by the Authors brings to mind the well known quotation that "The absence of evidence is not evidence of absence".

There has been much debate within the scientific community as to whether such "no evidence" statements are meaningful. The crux of the debate on this issue is whether or not an examination would have detected, in this case, positive evidence showing genuineness if it was, indeed, present. Consequently, the guiding assumption, if the "no evidence" statement is to have any credibility, must be that the examinations are capable of proving the document to be genuinely dated. In this case, the Authors' testing procedures are not capable of detecting the relevant evidence proving authenticity. This therefore fundamentally flaws the basis on which their "no evidence" statements are made.

The Authors' difficulty is, in fact, that there are few techniques in document examination which can, accurately or precisely, identify the date of production of a particular document. The Authors produce their opinions on the authenticity of the signatures but no opinion that the documents are authentic is given in relation to any of the numerous other areas which have been investigated.

(c) Illustration of the Fallacy of the "no evidence" Implications

63. The fallacy of possible implications derived from a "no evidence" opinion can be easily demonstrated.

The fallacy of the "no evidence" argument supposedly put forward by Carl Sagan, the astrophysicist, wherein he describes the situation of going to his second floor bedroom and looking out the window to see if there is an elephant in his small garden. He sees no elephant and as his garden is small and he would expect to

see an elephant if one was there. His eyes are capable of detecting one.

The phrase "there is no elephant in my garden" is meaningful because had there been one, he would clearly have seen it. His eyes can recall absolutely positive evidence to justify the opinion of no elephant being in the garden. However, if he goes to his second floor bedroom and looks out at the lawn for ants, he cannot see any. Does that justify him rendering an opinion that there is "no evidence of any ants being on the lawn"? The fact of the matter is, the grass is crawling with ants but his eyes are **not equipped** to positively identify them and cannot therefore do so.

- The above illustrates the point that for a "no evidence" comment to be reliable and meaningful, there clearly has to be the potential for positively identifying the ant. The statement as it stands is, in fact, correct as far as it goes but is, in fact, 100% incorrect in truth. The alternative situation should be addressed to correctly reflect the truth of the matter. Consequently, in my opinion, the correct statement may be considered as "There is no evidence of there being ants in the lawn although the alternative is equally likely as my eyes are incapable of accurate judgement in this situation".
- In this case, in most of the circumstances in the Report where a "no evidence" comment is made (in excess of 60 instances), there is no way of scientifically determining the point being addressed as **no techniques exist** for such determinations. As such, the comments are valueless but could be potentially misleading the reader and possibly biasing them to believe that the lack of evidence automatically implies the converse scenario to represent the truth of the matter.
 - 68. This is explored in further detail in relation to each of the Questioned Documents further in this report, but by way of example, in this case, the Authors suggest that there is "no evidence" to indicate that the adhesive stamps were attached to R25 on any date other than purported (potentially suggesting genuineness of the document). This cannot be reinforced by an opinion that "there is demonstrable evidence to show the adhesive stamps were attached to R24 at that time". No such evidence exists from the evidence before the Authors as there are no techniques for determining how long the

glue on a stamp has, in fact, been in contact with a paper. There is no way of determining how dry the glue is and the rate of hardening or any other possible technique to assist with this issue. Consequently, such "no evidence" comments, in my opinion are meaningless and potentially misleading to the reader.

69. Alternatively, there is "no evidence" the stamps were applied at the time stated. There is no way of determining the truth of the matter from an examination of the document.

(d) SWGDOC Standard Terminology

- 70. The Authors refer to the SWGDOC Standard Terminology for expressing conclusions and indicate, at paragraph 38 that "... we rely, in part, on numerous published Standards distributed by the Scientific Working Group for Forensic Document Examiners (SWGDOC)". Within Annex "B" of the Report, they mention the SWGDOC terminology for expressing conclusions of Forensic Document Examiners. This document runs for three pages detailing what terms are recommended also noting some terms which should be avoided.
- 71. Examples cited with respect to terminology is generally related to the examination of signatures albeit I am of the opinion that this standard is meant to be equally applicable to non-signature work.
- It is of significant note that nowhere within this document does the opinion terminology "no evidence" appear. This is not a recognised term and, as previously indicated, the whole issue of the phrase is much debated in the scientific field.
- 73. I refer to paragraph 4.2.1 at the foot of page 2 of the SWGDOC Standards (in Annex B of the Report). This indicates "Several expressions occasionally used by document examiners are troublesome because they may be misinterpreted to imply bias, lack of clarity, or fallaciousness and their use is depreciated The use of others is discouraged because they are incomplete or misused".
- The Standard cites expressions such as "cannot be associated/cannot be connected" in this regard. In this particular case, I consider the term "no evidence of fabrication" to be very similar to the statement that the evidence "cannot be

associated with a fraudulent act". The Standard continues and indicates that "these terms are too vague and may be interpreted as reflecting bias as they have **no counterpart** suggesting that the writer cannot be eliminated either" (my emphasis) (page 3 of Annex B to the Report). This statement is clearly supporting the Bayesian approach of considering alternatives which are notably absent in the Report.

It is also noted that the Standard has a "DISCUSSION" on weak opinions and draws attention to the potential misinterpretation of such opinions (page 3 of Annex B). Again, it indicates that in such circumstances "There should always be additional limiting wording or phrases (such as 'may have' or 'but the evidence is far from conclusive') when this opinion is reported, to ensure that the reader understands that the opinion is weak". The "no evidence" phrase, in my opinion, falls precisely in this category with no counterpart being noted and no qualifying phrase added.

(e) What Is Expected of a Fraudulent Document?

- The other aspect of the continual reiteration of "no evidence" of abnormality in the document gives rise to the question as to whether or not one would expect that to be the case if the documents are either genuine or fraudulently prepared. For instance, there are more than a dozen references to there being "no evidence of alteration by way of interlineations/additions to the texts". This is an absolutely proper consideration for the Authors to make. However, firstly, consider the situation wherein the document is genuine. Is it likely there would be an interlineation or addition to it? I consider that most unlikely. In those circumstances, normal business practice would be to reprint the document with the alterations/additions added.
- Secondly, if the document was fraudulently prepared, is it likely that an error would have been made requiring an addition or interlineation? Again, this appears most unlikely and the same comment applies concerning reprinting.
- The third possibility is, as properly considered by the Authors, whether there are any interlineations into an existing text which changes the meaning of the document for fraudulent means. However, having considered the texts of these documents, I

consider it difficult to see how an alteration to the texts could have been made so as to alter the documents meaning or, indeed, to have any blank space within the document in which an additional paragraph or two could be added.

- Consequently, whilst I am not criticising the Authors for considering these options (which are perfectly correctly pursued), I merely wish to point out that the **absence** of any interlineations within any text, is not potentially of significance in trying to establish the authenticity of the document other than ruling out a potentially unlikely scenario. In my opinion, the absence of this interlineation evidence is of no evidential weight in determining whether the documents in question are genuinely created, it merely reduces the potential way in which any document could be manipulated. It does not reinforce "the authenticity" status of any document.
- The repeated suggestion that there is "no evidence of distortion of signatures/initials commonly associated with a tracing or simulated forgery" again, **suggests** this is a significant observation.
- The Authors are, again, quite correct in stating the same if supported by the evidence but the evidential weight of such an observation, in some instances, is of minimal significance. Take, for example, Mamadie Toure's signature as illustrated below.



R-24.1 (Mamadie Toure)

82. It will be noted that this is a very basic signature starting with two downstrokes followed by a third downstroke which, loops in an anticlockwise direction through

the signature forming another loop, before proceeding from left to right into a further loop and a further single terminal downstroke. This is not a complex signature and as such, it is not a difficult signature to copy with some expected degree of success. Bearing in mind there is a considerable amount of money involved in this case, is it realistic to suggest that if a skilled penman was involved in copying the signatures, they would not be able to complete such a signature without recourse to:

- tracing (which would almost invariably lead to slowness of the pen and often, poor line quality);
- 84. (ii) having to laboriously draw the signature in producing a simulated copy of this basic structure.
- Consequently, from this signature, I do not feel that the suggestion that there is no evidence of "distortion commonly associated with traced or simulated forgeries" with respect to basic signatures is significant in the light of the fact that this signature is easy to copy, with an expected degree of good pictorial success, and should not require tracing guidelines or result in any other "distortion", presumably for instance, a slow drawn appearance etc.
- The sentence as stated above is repeated on numerous occasions throughout the report but that particular factor on some of the signatures bears, in my opinion, little evidential weight in the context of such signatures.
- Similarly, on page 149, the same comment is made concerning the initials "M.T." and "M.N.", both of these sets of initials being very basic and crude in detail. Again, I would consider it unlikely that a potential forger would have to trace these details because they could not write such basic constructions without guidelines or alternatively, labouring of the pen, carefully drawing the structure leading to a distortion (poor line quality/lack of fluency). Consequently, whilst the Authors are perfectly correct in considering these possibilities, the evidential weight of the non-appearance of tracing guidelines or distortion in the signatures in this situation is, in my opinion, of minimal evidential weight in cases such as that cited above.

(4) A CONSIDERATION OF THE AUTHORS' STATEMENT CONCERNING EACH OF THE DOCUMENTS IN QUESTION

I shall now make comment on the document examination aspect of the Report whilst I shall deal with the signatures later in this report. Consequently, my comments on the Report's statements regarding the document examinations are as follows.

- At the head of page 44, with respect to R24, the Authors state "There is no evidence of page substitution, text alteration, text addition or other irregularities to indicate that R24 was fraudulently produced". Alternatively, and equally correct, it could be stated that there is no positive, demonstrable evidence to show that R24 is authentic and was produced on the date indicated there is "no evidence" to demonstrate the truth of the matter either way.
- There are comments made on page 44 of the Report concerning matching staple holes and the rust stains. Clearly, these rusty staple holes are not of recent origin although it is not possible to state how long the staples were in the document and when they were removed. Only information concerning the staple composition, paper composition, paper humidity during storage and at the time the staple was applied etc would enable any form of guess to be made as to the attribution of age the staple has been in the paper. A "guess" is not a scientific appraisal.
- Matching printer types are noted for the two pages of R24. Whilst the Authors are absolutely correct in considering this point, the issue arises as to whether or not it is likely there has been a page substitution, bearing in mind the text and layout of the document and the production of the document as a whole. In many instances, one would not expect to find such differences i.e. if R24 is a two page genuine document, one expects the staple holes to match, the printer to match, the blue stamps to match etc. However, if the document is a total concoction, again, one may also expect staple holes to match, printing and stamps to match.

I appreciate that the Authors are being very thorough to ensure there has been no page substitution, but the question is what is the real evidential weight of the repeated suggestion of "no evidence" of fraudulent activity in this circumstance when one might not expect to find any. There is no alternative point of view being expressed other than the lack of evidence of fraudulent production. What their very thorough examination does do, in my opinion, is enhance the "air of authenticity" of the documents, within themselves and these comments make up a large section of the 65 "no evidence" of fabrication comments that the Authors make. Again, the sheer weight of these comments, in my view, does potentially cause bias to the reader in suggesting there is a huge amount of evidence supporting authenticity when, in fact, there is no positive evidence that the documents were, in fact, created on the date shown.

and draw a comparison, in paragraph 75, with the numbers on the adhesive stamps on K20. The Authors admit that they are not privy to nor have any information concerning the issuing of these adhesive stamps. However, at paragraph 76, they state "However, there were no anomalies to suggest that the Adhesive Stamps were attached to R24, R25, R26 and R27 in a significantly different time period than when the documents were purported to have been created". They could equally have stated that there is no positive evidence to suggest that the Adhesive Stamps were attached to those documents at those points in time. As previously stated, there is no technique to determine how long an adhesive has been in contact with the paper. In my opinion, such a comment is meaningless.

Paragraph 77 continues "our examination did not reveal any inconsistencies in the physical aspects of the Blue Round Stamps on pages 1 and 2 to indicate one or more of the stamps was placed on R24 in a significantly different period of time". There is "no evidence" to indicate that the stamps were placed on at that particular point in time. With respect to whether or not the stamps were applied to pages 1 and 2 separately, one would expect them to have the same physical attributes whether they were genuinely created at one point in time or if they were fraudulently created at one point in time. It is only if there has been a page substitution i.e. for example, if page 1 was substituted for a previous page 1, that the difference in the

stamps might be recorded. The Authors' other findings supports the proposition that there has been no page substitution.

- 95. In summary, firstly, reviewing the evidence with respect to R24, there is no positive evidence of either fraudulent production of the document and equally, there is no positive evidence to demonstrate them to be authentic or genuinely dated.
- Secondly, I acknowledge there is no evidence of page substitution on this document or in any other questioned document presented. Having acknowledged this, I will not comment repeatedly on the comments of the Authors who indicate that there are no interlineations or evidence of page substitution.
- However, the matching of the handstamps on the two pages, the lack of abnormalities with respect to the adhesive stamps, the matching of printer types of pages 1 and 2 and the matching of staple holes is what might be expected **both** in a genuine document created at one point in time whilst it is **equally likely** that if a document is fraudulently produced at one point in time, those features would **also** be expected to match. I will refer to this scenario in the report as the "Equally Likely Genuine/Forged Proposition".
- 98. As a result of this consideration, one can appreciate that this work, although essential for a thorough examination, takes the matter no further forward.
- 99. The Authors continue at paragraph 83 with respect to the signature examination which will be addressed at the end of this report.

- At the header of page 64 there is a statement that "There is no evidence of page substitution, text alteration, text addition, or other irregularities to indicate that R25 was fraudulently produced". Alternatively, and equally correct, it could be stated that there is no positive, demonstrable evidence to show that R25 is authentic and was produced on the date indicated.
- The Authors continue in the following paragraphs up to 104 indicating the consistencies between the two pages, with respect to staple holes, paper, printed text, handstamps and adhesive stamps. The findings as presented are what might

be expected from either a genuine document created at the point in time as stated or, alternatively, a document created later i.e. the Equally Likely Genuine/Forged Proposition applies.

The following paragraph of the Report relates to the signature examination of Avraham Lev Ran which will be dealt with later in this report.

- At the head of page 75, the Authors state "There is no evidence of page substitution, text alteration, text addition or other irregularities to indicate that R26 was fraudulently produced". Alternatively, and equally correct, it could be stated that there is no positive, demonstrable evidence to show that R24 is authentic and was produced on the date indicated.
- The Authors make further comment on various aspects of the document concerning the paper, toner, handstamps and adhesive stamps, culminating in their statement at paragraph 124 that "Given that R25 and R26 were purportedly executed on the same day (21 July 2006), the findings from the paper, toner, stamps and writing inks are consistent with the proposition that R25 and R26 were prepared at or around the same time as each other". That is agreed albeit, there is "no evidence" that they were prepared on the dates indicated and the Equally Likely Genuine/Forged Proposition applies to all their findings.
- Paragraphs 125 133 deal with signatures and initials which will be addressed later in this report.
- Paragraphs 135 137 discuss the ESDA findings and indicate R29 impressions of writings on R29 are found on R26 dated approximately 18 months earlier. The Authors indicate "... it should be noted that it is not unusual for impressions of signatures from later dated documents to be found impressed on earlier dated documents. This at times occur when accessing and using earlier dated documents as a source to confirm information that may relate to signing current documents".
- That is agreed and that is the explanation the Authors have chosen to put forward. However, an equally likely alternative proposition not considered is that often one

finds impressions from one document on top of another earlier dated document if they were fabricated at one point in time and this could also represent the truth of the matter.

At paragraph 139 there are observations that there are ink/toner transfers on the back of pages 3 and 4 of R26 and that the transfer on the reverse of page 3 was sourced to the text on page 4 or a document containing the same text and that this observation "could indicate that these pages were printed together". That is agreed but again, that is a likely scenario whether it is a genuinely or fraudulently created document i.e. the Equally Likely Genuine/Forged Proposition applies.

- At page 97, the Authors refer to R27 and indicate "There is no evidence of text alteration, text addition or other irregularities to indicate that R27 was fraudulently produced". Alternatively, and equally correct, it could be stated that there is no positive, demonstrable evidence to show that R27 is authentic and was produced on the date indicated.
- 110. R27 is produced with toner printing.
- 111. R27 paper shows all pages to be of one type.
- The Authors' mention of trash marks at paragraph 143 which cannot be matched to other documents is indicative of this document being an individual production. However, R24 R26 are printed by a printer that uses a different toner. This clearly indicates the availability of different photocopiers/laser printers. Indeed, it is noted that R24 and R25, which appear to be documents between the same parties and therefore possibly emanating from the same office, have different toner compositions, possibly suggestive of two different machines within the same office/ building. R27 shows, potentially, a further machine and that may be an indicator that a different location has been used to create the document or there has been an additional machine at a single location, assuming that these documents have, indeed, been created at one location. The facts of the matter are unknown, whether the documents be genuinely or fraudulently prepared.

Obviously, different machines, whether in one location or more than one location, may have different paper content.

- In relation to paragraph 145 regarding the Adhesive Stamp, the number on R27 114. stamp is of a lower numerical value that seen in R24, R25 and R26 but the Authors indicate no conclusion can be reached as to whether or not this out of sequence numbering is consistent with company practice. However, when it comes to the stamps on K20 (December 2009), the Authors suggest that the numbering "BB" will be after the "BA" and at paragraph 75 indicates "Since the "BB" prefix on K20 is expected to follow the "BA" prefix, which was used for the Adhesive Stamps on R24, then the sequencing of the Adhesive Stamps on R24 is consistent with them being applied before 16 December 2009" (my emphasis). On considering these comments, when the out of sequence stamps on R27 (BA0517678) July 2007 is encountered, compared with R26, July 2006, the number on R27 is lower than R26 (BA0622986) yet they draw no conclusion from this "out of sequence" use of stamps. It is inconsistent to apply a selective interpretation for K20 relative to the R24 – R27 stamps and not find any conclusion regarding of the out of sequence numbering on R27. One possible alternative not considered is that R27 was not produced on the purported date.
- 115. At paragraph 148, the Authors indicate that the Blue Round Stamp on R24 R27 shows that "... there has been no evidence of variation in the physical and chemical characteristics of these stamps within each document".
- 116. Whilst I am only dealing with colour copies, it does appear that the ink on the lower stamp is much darker, more purple coloured that that at the top. Consequently, whilst there are similarities between the stamps on one particular document, there also appear to be differences. However, I agree it would appear that defects within the stamps illustrated on R24 R27 are indicative of the same handstamp having been used but the reproduction of detail differs between these examples given. The degree of inking, the way in which the stamp is applied, whether two stamps have been made one after another before reinking to the document etc can have an effect on the clarity of the resultant impression.
- 117. The Authors compared the stamps used on R24 to R27 and illustrate, on page 100,

some of the differences between the stamps when the stamps from each of the different purported documents are compared to each other. What they appear to be implying is that there are differences between the stamps on different documents suggesting different points in time when the stamp has been applied. If this is the implication, in my opinion, this is not correct as illustrated by the two different reproductions of the stamps shown on R27. These are different, yet they are on one document and this is what may be expected if, for instance, one stamp is made with heavy ink deposit and the second stamp (at the top of the document) is made not being re-inked from the pad. Consequently, I am unsure of why the apparent differences shown on page 100 are relevant: they do not provide evidence that the documents were created on different dates or on what date they were created.

- Figure 30 on page 100 shows "Areas of physical differences when the stamps from each of the documents are compared with each other". However, as stated above, this can happen due to the way the stamp is applied, how much ink is on the stamp, whether the stamp moves from position to position without being re-inked etc.
- The illustration of R24 (top left) in Figure 30 purportedly shows, with the yellow 119. arrow, a difference i.e. a break in the line relative to the other impressions. In my opinion, this is just a typical poor inking effect or the result of a slightly different mode of application of the stamp to the paper. Note that the lettering immediately below the yellow arrow is also very poorly inked and the letterforms are broken. In my opinion, this is not a significant difference, and I find it difficult to understand the Authors' reasoning with respect to the yellow arrowed points as, whilst this is present on the third stamp on the document, the previous two, at the top of each page do not show this point of poor inking. This reasserts the fact that different applications, even on the same document would show physical differences in the resultant impressions. The same comment applies to the green arrows which actually appear to show similarities. There are breaks at "9 o'clock" on pages 2 of R25, on page 2 of R26 and on document R27 but not one on R24, dated the same as R25. I do not understand the point that the Authors are making other than, these could all have been produced at one point in time albeit, R27 is said to be dated a year after R25 and R26.

It is also noted that the Authors has been somewhat selective in the examples that 120. they give on page 100. At paragraph 148, the Authors suggest these illustrations are a "representative" sample, but they clearly are not. For instance, the left hand red arrow on the photograph of R27 on page 100, shows a break in the line yet this break is not apparent on the same stamp impression at the head of the document which appears to be of much lighter ink. These types of breaks in line, especially around the outer circumference may well be influenced by the way in which the handstamp is actually applied to the paper and if this is not precise, certain areas of the handstamp may not come into contact with the paper and therefore, ink is not applied. That appears to be the case with respect to the example given. Further, they have been taken at different magnifications which, to the eye, possibly, make them look more different than they are in reality. The green arrows appear to show similarities whilst the red arrows are just differences in ink distribution. This can happen, in my view, on two separate applications within seconds of each other. This is especially true bearing in mind that the R27 illustration is a heavily inked stamp and if that is not then returned to the stamp pad for re-inking, a second impression, say on R26, would show a much lighter application of ink, as is actually seen on these documents.

No clear conclusions are given in the Report as to what the similarities and differences mean. However, when one looks at many of the similarities between R25, R26 and R27 with regard to the features arrowed in green and the differing degree of breaking up/irregularity of lines between "5 o'clock" and "7 o'clock", it could be argued that such irregularities in the impression **could** be indicative of the stamps being applied at one point in time and the other differences between them being the result of the way in which the stamps have been applied or the volume of ink present. Clearly, the Authors have not considered this alternative position i.e. that R25 – R27 were, on the basis of this type of observation, created at one point in time.

122. With no uncontested documents showing this stamp from this time period, it is not possible to determine how this handstamp was functioning at that time.

123. With respect to the Blue Round Stamp, no information has been given, or is available, to determine whether this was the stamp used by that party at that particular point in time.

In summary with respect to this document, I consider the findings show the Equally Likely Genuine/Forged Proposition to apply and the matter in issue is not taken further forward.

125. At paragraph 158, the Authors report writing impressions which appear to be numbers were located at the top left hand corner of the page and could not source or decipher them. The report does not detail what steps were taken to try and decipher them. Their ESDA lift appears extremely dark but without any information as to how this has been run, and without seeing the original lift (these types of lifts being notoriously difficult to photograph accurately), I cannot comment further as to what may be apparent on this document and what methods of enhancing weak impressions might have been used in rerunning the ESDAs as opposed to merely trying to enhance undecipherable images with electronic software.

It is of interest to note that in the Data File 2, the Authors show scans of the front ESDA lift and the ESDA lift taken from the reverse. The ESDA of the reverse of the page shows clearly the mirror image including the entry "51-5502" which was not clearly decipherable on the front of the page. This indicates this impression has come through from the front page onto the reverse of the page. However, neither of the ESDAs of the front page show clearly this numeral. This indicates that their work on the first page may not be detecting all impressions. Consequently, it is possible that light impressions may not have been raised within the parameters (which can be changed) of the technique as used by them.

127. It is noted that the reproductions of his ESDA lifts show that numerous small sections of line have been punched out, presumably for ink dating but this has been completed **before** the ESDA work. This might be regarded as irregular as handling the document and punching holes clearly punch out parts of small impressions which could be vital whilst at the same time, the operation and handling of any document (to remove paper samples) has a potentially detrimental effect on the

detection of, especially weak, ESDA impressions.

R28

On page 110, the Authors indicate that with respect to R28, "There is no evidence of text alteration, text addition, or other irregularities to indicate that R28 was fraudulently produced". Alternatively, and equally correct, it could be stated that there is no positive, demonstrable evidence to show that R28 is authentic and was produced on the date indicated.

In paragraph 160, the Authors indicate, in the last sentence of that paragraph "Therefore, our conclusions with respect to R28 are based on the assumption that R28 was prepared and signed on or around 27 February 2008" (my emphasis). This assumption appears to be totally baseless with regard to scientific facts. I am not clear as to why they should assume it was produced that point in time and not fraudulently produced at another point in time. The basis of this assumption is, surely, the object of the exercise in hand i.e. to determine the date the documents were produced, not to assume a genuine date for the questioned document as this defeats the whole object of the examination process.

The situation is clearly stated by the Authors at paragraph 160 where they indicate 130. "... there is no definitive date for when the document [R28] was executed with the signatures ...". However, the Authors continue and state the reason "no definitive date" for when the document was executed is because "... there is no written date or legalization date". This, again, is a huge assumption that the written date or legalisation date, or both, are genuine. Again, I find this assumption wholly unacceptable as the essence of this examination is to determine whether the document in its entirety is genuine or not. Because a document bears a legalisation signature and stamp (which have not been checked for authenticity), one cannot assume that these would be genuine. Consequently, I consider the basis on which they are approaching this document, and potentially others, to be fatally flawed if assumptions of this nature are to be of such importance as to be mentioned in the Report. It suggests reliance on a preconceived notion of authenticity in these circumstances which is wholly misguided.

At paragraph 164, they indicate the type font is Times New Roman which was available in 2008. It has, indeed, been available for decades and is, to date, commonly encountered.

At paragraph 165, the Authors indicate R28 also bears round BSG Resources hand stamps. There do not appear to be any genuine comparison stamps of this source with which one can compare with to determine whether, at the point in time in question, that is how the genuine stamp was functioning and what its design may have been.

133. In my opinion, the Equally Likely Genuine/Forged Proposition applies and these observations take the matter no further forward.

At paragraph 176, the Authors refer to the examination having been undertaken in order to determine if there was any transfer of ink/toner. The reference to "right reading", (i.e. not mirror images) means that this is **not** the result of one printed page being placed face down on R28 with wet ink. The Authors' interpretation of right reading can only, effectively, appear as they indicate. The question the Tribunal may wish to consider is why R24 should be below R28 at a time when it was copied. If this is the case, and R24 has been below R28 at the time, a question arises. Why were R24 and R28 together at that point in time when copied when they are dated two years apart, made between different parties and are different types of document?. One explanation could be that this is part of a mass fabrication and the documents were all together at one point in time for the process which has been undertaken. However, the Authors do not consider or comment on this possibility.

In summary, when one considers the Authors' comments on R28, ignoring their assessment of the signatures, in my opinion, they do not present any evidence demonstrating authenticity. At the same time, they ignore the issue of the reproduction of part of R24 on R28.

R29

On page 120, the Authors refer to R29 and indicate "There is no evidence of text alteration, text addition or other irregularities to indicate that R29 was fraudulently

produced". Alternatively, and equally correct, it could be stated that there is no positive, demonstrable evidence to show that R29 is authentic and was produced on the date indicated.

- 137. At paragraph 177, the Authors, again, make this wholly baseless assumption that "R28 was prepared and signed on or around 28 February 2008". Comments have already been made on this assumption point and adoption of a starting point with a preconceived notion of the documents.
- The actual situation with respect to R29, again, is expressed in paragraph 177 of the Report where the Authors indicate "... there is no definitive date for when the document was executed ...".
- At paragraph 180, the Authors indicate that the printing on R29 "... was created with an office machine system utilizing inkjet technology". This gives the impression R29 was actually created in an office, which is not necessarily correct, as opposed to the possibility of a domestic printing which is the location for many fraudulent documents being made. There is no way of determining where the documents were created at home or at an office. The "domestic" or household market (in the UK at least) is predominantly inkjet based.
- and relate them to the matching paper and stamp on R28. These documents are dated only one day apart and therefore it is reasonable to suggest the same stamp, inks, paper etc may have been used. However, they may have been used either on two genuine documents created one day apart or, equally, they may show the same similarities if they have been created fraudulently at one point in time.
- The Authors' statement that there is "no evidence" to indicate the stamps were placed on R28 and R29 at significantly different time periods is consistent with the observations, whether they are genuine or fraudulent documents. Again, the Equally Likely Genuine Forged Proposition applies.
- At paragraph 188, the Authors suggest that there is "no evidence" by way of alteration by interlineation/addition. The grid over page, at page 126 is, however,

not in perfect alignment. The entry "Pour la societe BSG Resources" appears indented relative to the lines above. Surely, this may, in fact, suggest that this is an insertion or later addition, otherwise the "P" would align with the other entries above. It is clearly well displaced to the right relative to the line above commencing "Conakry....". However, an alternative explanation could be that, accidentally, a space has been accidentally typed prior to the entry being made.

- At paragraph 190, the fact that the signature in the name of Mamadie Touré is executed on R28 resting on R29 leads the Authors to the view that they are unable to determine any significance regarding this finding. It could well be the case that these were genuinely prepared and she signed one on top of the other at one particular point in time as detailed. The alternative position is that they were fraudulently created and both signed one after another with R28 on top of R29.
- 144. At paragraph 191, the Authors indicate that "examinations revealed evidence of ink/toner transfer on the front of R29, however, the examinations and comparisons failed to reveal the source of the ink/toner transfer".
- 145. It can be stated that there is a clear difference between ink and toner but the Authors do not differentiate between these materials in several paragraphs in the Report. If it is clearly an inkjet ink that has been transferred onto the face of R29, it must have come from an inkjet printed document. Similarly, if it is toner transfer, then it has come from a toner printed document.
- As a general comment, the Authors frequently refer to the transfer of "ink/toner" from one document to another and generally associates those two documents as having been printed together. That, indeed, is one possibility although there is an alternative. It is not, in fact, uncommon to find offsetting of toner that has attached itself, albeit only lightly, onto the other document in close contact. Sometimes when one takes documents from such a file, one can feel the documents being pulled apart with a slight attachment of one document to the next. This can happen over a short or long period of time. Some toner may be transferred from one document to the other. Indeed, we have received many letters, folded into three, the envelope having run beneath the Post Office transport rollers which has caused the toner to

slightly stick to the paper in which it is in contact. Old papers within compacted files can also show this effect.

- Similarly, where one sees offsetting of inkjet printing onto the reverse of another document, this is, **usually**, the result of one document being on top of the other whilst the ink is wet.
- The alternative is where one has a situation where there is inkjet printing transferred from one document to another, it is also **possible**, although dependent upon unusual circumstances, that this is the result of documents that may be slightly damp or held in humid conditions being compacted against one another in a file and over a period of time. One may then find a slight offsetting of the inkjet printing from the lower document onto the back of the top document. This may be particularly applicable to tropical regions in parts of the world that experience high ambient humidity at times.
- Accordingly, it is clear that there are a number of alternative propositions arising from the transfer of ink/toner from one document to another.
- 150. In summary, with respect to R29, the Authors indicate they cannot date the production of the document and can only assume its date of production. Their other comments, other than the signature opinions, have no significant meaning, in my opinion, relative to the issue of authentication.
- Their findings on these documents are, in my opinion, in line with the Equally Likely Genuine/Forged Proposition.
- Overall, the Authors are unable to show any meaningful, demonstrable evidence of authenticity. I deal with their opinions on the authenticity of the signatures later.

R30

At the head of page 129, the Report states "There is no evidence of text alteration, text addition or other irregularities to indicate that R30 was fraudulently produced". Alternatively, and equally correct, it could be stated that there is no positive, demonstrable evidence to show that R30 is authentic and was produced on the date indicated.

Paragraph 193 states "... the original R30 or a copy/image of it, and Document C were at one time together when the staining occurred on Document C". The staining pattern does appear to agree, to a degree on these pages, indicating these documents were probably in contact one with another. As one cannot determine at what point in time the staining occurred, I do not find this relevant with respect to the issue of authenticity of the document.

R31

On page 134, the heading with regard to R31 for the Report indicates "There is no evidence of text alteration, text addition or other irregularities to indicate that R31 documents were fraudulently produced". Alternatively, and equally correct, it could be stated that there is no positive, demonstrable evidence to show that R31 is authentic and was produced on the date indicated.

Paragraphs 201 – 214 consider the format of the two pages, the papers, printing, stamps, printing alignment, indentation and ink transfer. All of these examinations support a hypothesis that the two pages of R31 were created at one point in time. However, the Equally Likely Genuine/Forged Proposition applies and these examinations do not provide any positive, demonstrable evidence relating to the authenticity of the document or its date of production.

R32

157. At page 144, the Authors refer to R32, DOC A and DOC B and indicate "... there is no evidence to indicate that R32, DOC A and DOC B were fraudulently prepared". Alternatively, and equally correct, it could be stated that there is no positive, demonstrable evidence to show that R32 is authentic and was produced on the date indicated.

The evidence that page 2 of R32 was not originally attached to page 1 of R32 but rather there is evidence that page 1 from R32 was originally fastened to DOC B and the same with respect to R32 and DOC A, is agreed and is most likely, in my opinion, to be the result of an office mix up. When one has two copies of the same document which, for example, are not stapled or have been un-stapled and are, for instance, photocopied, it is very simple for the pages to become mixed up and page

1 of one of the documents is wrongly stapled to page 2 of the other document. In my experience, this is not an unusual observation to make when individuals are not, for instance, paying much attention to the photocopying process.

The further limited examinations that have been undertaken on R32, DOC A and DOC B again produce results which are expected in the Equally Likely Genuine/ Forged Proposition and take the matter no further forward relating to the authenticity of the documents or their date of production.

R269

On page 159, the heading with respect to this document indicates "There is no evidence of page substitution, text alteration, text addition or other irregularities to indicate that R269 was fraudulently produced". Alternatively, and equally correct, it could be stated that there is no positive, demonstrable evidence to show that R269 is authentic and was produced on the date indicated.

The comment on the rust marks etc is as previous albeit the rusting is quite extensive and therefore, that suggests that it has been in a stapled state for a fair period of time. However, the document does indicate that it was executed in Sierra Leone which has a tropical climate including periods during the rainy season of very high humidity. I have no information, however, on how the documents have been stored after their alleged place of execution. However, as previously indicated, there is an additional consideration that has to be made as to whether the paper has been subjected to high humidity at some point in time and possibly then filed away whilst in a humid state, thereby accelerating the oxidation of the staple. Again, it is not possible to predict the period in time that it has taken for the rust to form on the staple and be transferred to the document.

In paragraph 234, the Authors state that "The machine printed text on R269 was created with an office machine system utilizing inkjet technology". As previously stated, the fact that inkjet technology was used to produce the document does not necessarily mean that this is an office based machine that has been used to construct the document.

163. At paragraph 241, the Authors indicate some "faint impressions" were revealed "that

could not be completely deciphered".

At paragraph 242, the Authors indicate that "No other meaningful or discernible impressions were observed in the documents". What the Report does not say is the efforts in which the Authors went to, to try and clarify the weak impressions which may possibly be of some significance. I appreciate the potential problem the Authors have in that they had limited time to examine the originals and proper clarification of weak images can be very time consuming. There are five or six different parameters that can each individually be varied, some of which take considerable time to set up and hence a full treatment of the document(s) to get best possible impression images can, sometimes, take a very long time. I appreciate the Authors may not have had that amount of time if they only had four days to complete all the work.

R346

- The heading on page 172 relating to R346 indicates "There is no evidence of text alteration, text addition or other irregularities to indicate that R346 was fraudulently produced". Alternatively, and equally correct, it could be stated that there is no positive, demonstrable evidence to show that R346 is authentic and was produced on the date indicated.
- Paragraph 252 states page 1 was superimposed on page 2 in order to compare formatting, etc.
- 167. Further comments were made at paragraph 252 that the two pages of this document show similar formatting, left and right hand margin use and evidence of similar hole alignment. However, again, this is what one might expect of a two page document being either genuinely or fraudulently prepared and the Equally Likely Genuine/Forged Proposition applies. These additional comments do not contribute any meaningful evidence with respect to the authenticity of the document or its date of production.

DOC A

At the head of page 180, with respect to DOC A, the Authors state "... there is no evidence to indicate that DOC A was fraudulently prepared". This comment is

made further to extremely limited examinations namely the initials (for which there are no comparisons) and the absence of any interlineations.

It is noted that the initials "M.T." are said to represent those of Mamadie Toure albeit, the other documents bearing signatures in her name are equally brief and in a totally different format. The reason for this substantial difference, if one compares the "M.T." initials on page 180 with the "signature" of Mamadie Toure as shown on, for instance, page 169, is unclear. Adapting the Authors' terminology, it could be stated that there is "no evidence" to indicate that these initials and signatures were, indeed, written by the same individual. However, I accept they could have been written by the same individual or, alternatively, they could have been written by different individuals. There is no demonstrable evidence to ascertain the truth of the matter. Alternatively, and equally correct, it could be stated that there is no positive, demonstrable evidence to show that DOC A is authentic and was produced on the date indicated.

DOC B

At the head of page 185, the Authors indicate "... there is no evidence to indicate that DOC B was fraudulently prepared". Alternatively, it could be stated that there is no positive, demonstrable evidence to show that DOC B is authentic and was prepared on the date indicated. The observations on these two R32 and DOC B documents merely confirms the typical "mix up" situation of two documents having their pages swopped as previously indicated.

The Authors acknowledge there are no known initials available for comparison against the Toure and Noy initials and therefore there is no starting point to determine the authenticity of the initials. However, the Authors make the comment at paragraph 262 that "... there is no evidence of distortion commonly associated with traced or simulated forgeries". It is agreed these appear freely and spontaneously executed but the question, as previously discussed, is whether, in fact, such very brief and basic letterforms need to be traced or slowly and carefully executed in a simulation of such simplistic signature structuring is a realistic proposition.

DOC C

At the head of page 191, the Authors indicate "... there is no evidence to indicate that DOC C was fraudulently prepared". Alternatively, it could be stated that there is no positive, demonstrable evidence to show that DOC B is authentic and was prepared on the date indicated.

The comment at paragraph 273 is agreed that they "may all have been written by the same person". However, without knowing the format of an authentic signature, this statement does not progress the matter further with respect to the authenticity of the document itself.

Conclusions - Page 198

The Authors state at the end of the first line of their Conclusions that they have made a "full consideration of the findings". I would suggest that they have looked at the documents in an extremely one sided fashion and have not considered any alternatives that are **equally likely**.

The most notable point with respect to the Conclusions relating to the documents as a whole (excluding, in this section of my report, opinions on signatures) is that at nowhere in the Conclusions, or indeed within the report, do the Authors offer an opinion that the documents as a whole are **authentic** which is the sole exercise referred to in paragraph 3 of the "Terms of Reference for the Tribunal-Appointed Experts". This states "The Experts' mandate is to assist the Tribunal in ascertaining the authenticity of the Disputed Documents". They do not appear to have complied with that request.

(5) ANNEX L - Responses to BSGR Comments on the Preliminary Report

A large number of queries have been raised by BSGR, the responses to which are found in ANNEX L. However, many of the issues and questions raised are not addressed or answered to any significant extent (if at all) with many being responded to with "standard" responses being repeatedly given.

As the issues raised In ANNEX L are extensive and, in the main, have not been addressed, I shall not make detailed comments other than the following. I also address the responses in Annex L to BSGR's queries on signatures in the section

on signatures later in this report.

With respect to point 1, this states "The conclusions in the Preliminary Report ("PR") do not appear to provide an opinion as to the authenticity of the Disputed Documents, but rather provide that there is no evidence that the Disputed Documents were fraudulently produced. Can a positive determination of authenticity be made from a finding of "no evidence" to the contrary?"

The response is that "There is no ambiguity to our conclusions". The Authors then reiterate a point that they find "no evidence" the documents were created fraudulently.

In my opinion, there is, in fact, extreme ambiguity. They do not make any reference to the alternative situation and they do not indicate, for example, that "Because there is no evidence of fraudulent production the documents are therefore genuine". The Authors do not explain, at any point, where their "no evidence" opinion lies on any form of scale of authenticity. Without that definition and a statement that the lack of evidence of fraudulent production therefore means the documents are genuine, their statement must show that the evidence is inconclusive and does not actually direct the Tribunal on the issue of authenticity.

Point 2d asked, "In the event that it is considered that the Bayesian approach is not relevant, please provide an explanation for the same."

The Authors respond stating that some examiners "do not accurately apply the necessary mathematical formulae developed by Bayes and do not use the model as intended". However, the "Bayesian approach" (as opposed to the application of Bayesian statistics) is a very general term which, in the field of forensic document and handwriting examination, is not applicable on a mathematical basis. A Bayesian approach is the concept of considering "both sides of the coin" and looking to see whether there are reasonable alternative scenarios which could equally apply and assessing the same. There are no statistics that can be applied in this type of document examination case. That is not what the question was referring to.

I note the Authors state "Misrepresenting the Bayesian approach was the basis of a 2010 UK Court of Appeal Ruling where the court asserted that Bayes theorem and likelihood ratios should not be used in evaluating forensic evidence, except for DNA and 'possibly other areas where there is a firm statistical base'".

The case referred to, Regina v T, in fact, related to shoe mark prints and a statistical analysis of them. It revolved around the use of a very limited statistical data on shoe marks. This was the essence of the Appeal. The Judges could not agree that the mathematical formula put forward by the forensic scientist was applicable as it was only as good as the reliability of data used. On the evidence and data available, this was considered inadequate. The Judges also noted that there were "numerous other factors" which had not been taken into consideration which, again, underlines the statistics proffered.

That was the basis of the Judgment and not one applicable to our field. The Judgment did **not** indicate the general concept that a reasonable alternative explanation could be considered. Indeed, the Court upheld that concept, i.e. the alternative scenario being possible, and upheld the Appeal as a result of the **statistics** put forward.

That is what I believe the "Bayesian approach", as stated in point 2, relates to and I am somewhat surprised that the Authors did not understand the meaning of this phrase.

Indeed, their response to question 2a, "Please explain the alternative propositions which may be considered as a result of the evidence or lack of evidence uncovered during the inspection" merely draws the response that "All of the findings from our examinations are included in the report and there is no evidence to support the proposition that any of the Disputed Documents have been fraudulently prepared". This gives rise to their standard response which is clearly lacking credibility as nowhere in the Report is any alternative considerations made on any of these issues i.e. that there is "no evidence" to demonstrate the documents are authentic or that they were created on the dates presented.

At point 15, the question is posed, "Did the Experts identify any positive evidence

that the adhesive stamps were attached to R-24, R-25, R-26, R-27, R-28 and R-29 on the purported date?"

The response is that there is no accepted methodology to determine this and they continue to state that the query "calls for speculation and we will not render any 'speculative' or 'non-scientific' conclusions". However, the response that there is "no evidence" that these were attached to the documents at any other point other than that suggested is, surely, of a very speculative nature. One has to ask that if the Authors acknowledge that there is no accepted methodology to resolve this position, why is the comment made that there is "no evidence" of application at a later point in time? The evidence of when these stamps were applied is wholly inconclusive. In my opinion, this should have been stated in the Report as opposed to the "no evidence" that the stamps were attached at any other point in time being made.

190. At point 30, the question is raised "Please explain what efforts the Experts undertook to try to decipher the numbers at the top left hand corner of R-27.10".

The response is that Photoshop CS5 software was utilised to try and enhance the image i.e. the Photoshop facilities were used to try and enhance the weak areas of the image on the ESDA trace. The alternative position is that at the time of running the ESDA, when a partial impression is raised, one tries to obtain a better ESDA trace directly from the document by rerunning the document under differing parameters – changing the humidity of the document, changing the ambient humidity of the room, changing the humidity of the beads used, alteration of charge times different methods of toner application etc. It is these parameters that may be modified so as to produce a better image, first hand from the document itself. The other process adopted by them is to try to adopt electronic processes to enhance a weak image which may not be capable of being electronically enhanced.

The question at point 32 asks them to identify the method of running the documents, ambient temperature, relative humidity, whether the document was humidified and for how long etc and draws a blanket response to the examinations that were performed "using conditions described in the SWGDOC Standard and recommended by the manufacturer". However, the SWGDOC Standard does not

detail how the best impressions can be retrieved from a document as there are so many varying parameters that may help. Similarly, the general issues raised by the manufacturer in the ESDA manual do not go into the large number of varying parameters that have been reported widely in papers/publications which modify and enhance the ESDA capabilities (some of which were detailed earlier). Keeping records of the conditions referred to above is, in my opinion, a standard practice in order to record the details of the examination.

Point 57 requested an explanation of "the significance (if any) of the waved and drawn horizontal lines of the signature shown in image R-269.2" (see page 164). The response from the Authors is that a "proper review and evaluation of the more than 1100 file images supplied with the PR would reveal that the paper is significantly wrinkled". The photograph on page 164 does, indeed, show the document to be wrinkled and creases can be clearly seen. However, these creases do not appear to significantly correspond with the waved portions of the mainly horizontal lines in question.

At point 61, relating to R346, the question indicates that these images are highly pixelated and built up of "building blocks" and asks "on what basis do the Experts conclude that this jagged outline is 'evidence of fluency'?". The response suggests the evidence of fluency "include tapering of strokes, evidence of hooks, and variations in line widths". Whilst the Authors point out that the evidence is far from conclusive, I find difficulty in appreciating any of the points mentioned, especially bearing in mind the images are built up of square blocks and pixels. Whether these are fluently executed is, in my opinion, quite indeterminate from page 173 and should, in my opinion, be stated as such.

At point 65, a general question relating to substituted pages often being different is put to the Authors who merely disagree on the basis that there is "no evidence to support this proposition". They are not prepared to make any concession whatsoever even on general questions relating to different possible situations. This, in my opinion, is not helpful for the Tribunal in understanding the totality of the evidence.

196. In summary, regrettably, these responses have done little to assist either the Tribunal or BSGR to understand the basis of much of their report.

(6) RADLEY OPINION CONCERNING THE AUTHENTICITY OF THE QUESTIONED DOCUMENTS

- 197. Taking the document examination aspect of this case (currently excluding the signature opinions which will be dealt with later), there is no evidence of authenticity of that any of the documents were, indeed, created on the dates indicated and not at some later point in time whilst at the same time, there is no evidence of fraudulent production.
- The issue is further complicated by the fact that I have not been instructed how the documents are said to have been individually created. This issue may be considered in a two step approach.
- 199. (i) If the documents were **genuinely created** on the dates indicated, it would be expected they would have been produced on different occasions, under different circumstances, hence giving rise to the various printers, pens used etc.
- The difficulty arises when one considers the possibility of how these documents would have been created **if fraudulently produced**. In this case, these factors, as far as I am aware, are unknown. A variety of issues arise. How many different individuals may be involved in the production of the documents is unknown. The potentially different locations in which the documents could have been fraudulently produced is unknown. Whether the documents were created around one period in time or whether these may have been generated over a period of time, is unknown.
- 201. It would be pure speculation to attempt to proffer any scenario to explain how fraudulent documents might be created as there are so many, unknown, potential scenarios.

202. On the evidence before me, whilst I appreciate there may be "no evidence" of fraudulent production, it does not necessarily follow that the documents are genuine.

- 203. As stated throughout the report, there is no demonstrable evidence of authentic or fraudulent production of the documents. Further, the dates of production cannot be established.
- As a result, as the absence of evidence of fraudulent activity does not make the documents genuine, on the evidence before me, I consider the issue of the authenticity of these individual documents (and as a collective group) to be wholly inconclusive. There is no defining evidence, one way or the other, to show where the balance of probability lies.

(7) CONSIDERATION OF GENERAL PRINCIPLES OF SIGNATURE EXAMINATION

(a) The Basic Comparison Process

- 205. As the Report does not give any detail concerning how signatures are examined and the important considerations that must be taken into account, I shall briefly detail what I believe to be some of the important considerations.
- One of the primary objectives of any signature comparison is the initial examination of a large number of known authentic signatures to determine how much an individual varies their signature and to establish the range of variation for each particular minute part of each element of the signature. Once the ranges of variations are established for all of these points, the corresponding features in the questioned signature may then be compared with the range of variation to determine whether it falls inside that range (a similarity) or outside of it (a difference). Other macro features such as proportioning, alignment, relative slopes of elements etc are also compared. A final assessment is then made of the number and nature of similarities and differences in formulating an opinion as to the authenticity of the signature in question. From the above, it may therefore be appreciated that it is important to establish how wide the ranges of variation of signature elements an individual may produce so as to be able

to assess the evidence in the most reliable way.

(b) The Significance of Similarities and Differences

The most commonly encountered form of forgery is a freehand simulation i.e. a freehand copy of a master signature. These can vary enormously in quality from very good simulations by a skilled penman (and who has good observational habits), to individuals who have very poor ability in reproducing what they believe they are observing.

In the case of a skilled penman, their ability in copying a particular signature structure will result in a good likeness to the signature being copied. One therefore expects what may be a wide range of features to be accurately reproduced (similarities) in the simulation, by definition. There may be few differences of note and many of these may be of a very subtle nature.

When dealing with skilled penmen, the assessment of subtle differences between a questioned signature and a large body of comparison signatures can be difficult. The document examiner has to assess such subtle differences and try and balance the likelihood of these differences being an error of forgery or being the result of genuine natural variation of the writer. However, it is a generally accepted fact that the differences, when observed, are of greater evidential value than similarities purely as a result of the consideration of the nature of the copying process invariably giving rise to similarities between the simulation and the master signature being copied.

A structural difference in one particular feature between a questioned signature and the body of comparison material is naturally of note. If this is then compounded by a further structural difference observed between known and questioned signatures, then the consideration is how likely, or unlikely, is it that two such features, found in combination in **one** questioned signature, are not found in the large body of comparison signatures. Increasing numbers of differences between known and questioned signatures obviously raise greater questions as to the authenticity of the signature in question. This process will continue until a situation is arrived at wherein the examiner may consider that such a coincidence of the differences, all appearing in one supposedly genuine signature, is unlikely to the extent that the

examiner may consider the more likely explanation for these differences is that the signature in question is a simulation.

The nature of differences can relate to structural features such as the design of elements, the relative proportions of elements one to another, the relative internal proportioning of the element (e.g. the relative size from one part of the letter relative to the overall size), spacing of elements, slopes of elements, variation of pen pressure, line quality and fluency. These are all important features when considering the authenticity of a signature. Often a simulator may be good in one particular area of signature reproduction but poor in other areas. For instance, they may reproduce the design and shape of letters well but their fluency in doing so may be poor. Particular pen movements may be well reproduced by the individual and others less accurately.

In multiple forged signatures, certain elements of the design of a questioned signature may be well reproduced on subsequent occasions but often it will be noted that one particular element is constantly poorly reproduced, possibly as the result of the writer not appreciating that particular point or not taking care to ensure that, for instance, a basic pen movement is correctly reproduced.

(c) The Importance of the Range of Variation of the Genuine Signatures

213. The more variable the comparison signatures, the larger the "target" for the forger.

When considering the ease of copying, the greater the variability in the known writings, the easier it is for any potential forger to hide inaccuracies in the copying process. Consider the case where there is a particularly large range of variation for a signature style. If a forger attempts to copy an "average signature" (whatever that may be) but incorrectly copies what they intended the shape to be, that error of forgery may still be encompassed within the wide range of writing variation exhibited in the highly variable comparison signatures presented. As such, this and other errors of forgery may not be detected as they still fall within the range of writing variation of the individual concerned.

(d) The Nature of the Documents in Question

215. There are different types of forgeries that can be considered. The most difficult type

of document to forge is where there is only a single chance to sign a document wherein the simulator has to "get it right first time". That is always difficult and the situation is made more difficult if this has to be done in front of a witness.

216. However, many forgeries are produced on documents for which there can be a virtually endless supply i.e. 10 or 20 prints of a particular forged document can be run off and the simulator can execute a large number of simulations. He or she can then select, at the end of the simulation processes, the signature considered to be the best.

(e) The Importance of the Structure of the Master Signature

It virtually goes without saying that the more basic a master signature being copied, the more likely it is that it can be simulated with some degree of success. The easier a signature is to be copied with some degree of anticipated success, the more difficult the evidence may be for the document examiner to interpret the observations with a high degree of confidence and high level of accuracy. This was illustrated in a case many years ago where a cheque for nearly £1 million was signed with an "A.". When examined by three forensic experts, none could identify whether or not the signature was genuine or not because such a structure had to be regarded as well within the writing capability of a significant percentage of the population as a whole. The relatively basic nature of the signature limited the appraisal of the likelihood of forgery to such an extent it precluded the experts from giving an opinion as to whether the "signature" was genuine or a simulation.

All of these above features have to be taken into consideration when assessing a questioned signature.

In this particular case, we do not have to deal with such a basic signature as described above albeit this consideration, to a limited degree, does come into play and is coupled with the previous point – the importance of the range of variation of the genuine signatures. This is particularly so when assessing the Avraham Lev Ran signatures, and possibly, to a lesser degree, the Marc Struik signature. The former signature style as shown in the charts at Appendix C may be described as a series of often very angular, backwards and forwards pen movements terminating (or beginning) a with a separate short,

near vertical line. The variation within his signatures presented for comparison, is quite considerable.

With respect to the Marc Struik signature, a chart of these known and questioned signatures can be found at Appendix D. Much of these signature styles comprise rhythmic looping pen movements with an intermediate "S" type of structure. The signature is completed with an undulating near horizontal line and terminal anticlockwise loop.

Neither of these two individuals' signatures contain a large number of highly complex pen movements, the criteria that normally makes successful simulation more difficult.

(8) EXAMINATION OF THE SIGNATURES

(9) Signatures in The Name of Avraham Lev Ran - R24, R25 And R26

Conclusive opinions have been offered as to the authenticity of these signatures on R24 to R26 by the Authors of the Report (paragraphs 88, 108 and 133). According to the Report, the opinion is based, in all three cases, on the statement that "When comparing the known writing of Avraham Lev Ran with the disputed signatures, the evidence revealed numerous significant similarities. Although the signature is a stylistic signature (lacking readable and well-formed characters), the characteristics observed include height relations, proportions, spatial relations, hooks, tapering strokes, and retraces. On the basis of this [i.e. "the significant similarities"] it has been concluded that Avraham Lev Ran wrote the disputed Avraham Lev Ran signatures on [R24, R25 and R26]" (my emphasis).

The similarities between known and questioned signatures has been sufficient for the Authors to form a conclusive opinion with no reservations whatsoever.

Their statements are significant as they reveal that the basis of the opinion is on similarities **alone.** There is no mention of differences, assessment of differences etc. However, I do not consider that this is correct procedure. The SWGDOC Standard for Examination of Handwritten Items (which the Authors states they have

adhered to) states, at paragraph 7.12.5 that there is a need to:

"Evaluate the similarities, **differences**, and limitations. Determine their significance individually and **in combination**" (my emphasis).

A signature is shown to be genuine **not** by similarities (which will inevitably be present in any good copying process) but by **the lack of significant differences**. The better the forgery, the more the similarities and less the differences will be present in the simulation.

To underline the above point, I would refer to Albert S. Osborn's Questioned Documents, 2nd Edition (1929), page 245 – see Appendix F. Osborn is probably the most quoted of all authorities on the subject of handwriting and signature examination in the English-speaking world. He states:

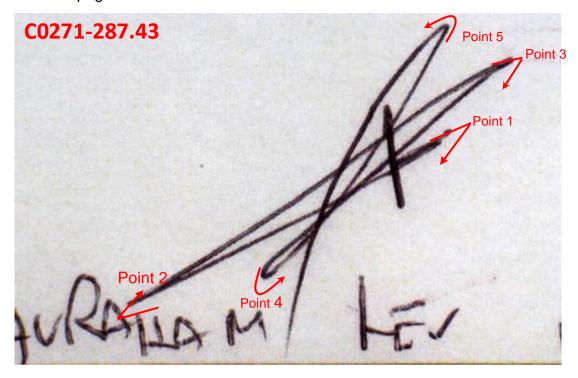
"In identifying a person, for example, scars, deformities, fingerprints, or a series of accurate measurements, must be depended upon and finally, if the conclusion of identity is reached, either in a person or a handwriting, there **must not remain significant differences that cannot be reasonably explained**. This ignoring of the differences, or the failure properly to account for them, is the cause of most errors in handwriting identification". (Osborn's emphasis).

229. Note: on the basis of the SWGDOC Standard Terminology for Expressing Conclusions, the definition of "Identification (definite conclusion of identity)" is – "this is the highest degree of confidence expressed by document examiners in handwriting comparisons. The examiner has no reservation whatsoever, and although prohibited from using the word 'fact', the examiner is certain, based on evidence contained in the handwriting, that the writer of the known material actually wrote the writing in question".

230. The question of whether the Authors accepted the Osborn approach was raised at point 19 of Annex L, within the questions raised by BSGR, but this was not answered directly by the Authors.

In my opinion, it is difficult from the Report to follow the structure of the known and questioned signatures. From my interpretation of ink flow faults within these

signatures, I believe the structure of the signature to be represented by the diagram over the page.



- In the case of R24 and R25, I consider there are clear unexplained differences present between the questioned and known signatures of Avraham Lev Ran.
- 233. It will be seen that the structure of the signature is very basic in design, effectively three backwards and forwards pen movements and a short, near vertical line.
- 234. I am unclear, from the diagrams on pages 56 and 69 of the Report, as to precisely what the arrows are supposed to represent as there are some arrowheads in, what appear to be, different directions to those given above. I am unclear as to whether these blue arrows in the Report are meant to merely illustrate sections of line and relative placement of elements within the signature or whether these are supposed to represent the direction of lines.
- 235. My assessment of the direction of pen movement throughout the signatures is reliant on ink flow defects observed which invariably appear **after** a pen has turned an angle e.g. signatures C0271-287.1, C0271-287.3, CO271-287.14 etc show a "skip" (a very poorly inked portion of the line) **after** the turn at point 2 as per the illustration above. This, in my opinion,

clearly identifies the direction of execution of the signature as defects always appear after the turn, not before it.

- The variability of the signature can be seen through the forty seven comparison signatures as shown in the comparison charts at Appendix C. Note, the chart shows the document identification numbers in red, the black numerals are merely the printed page numbers on the documents from which the photographs are taken.
- 237. (i) Consider the structure of the signatures such as C0271-287.1 and CO271-281.43ii. These are very foreshortened relative to other signatures which contain more written elements.
- 238. (ii) Consider CO271-287.1 and CO271-287.2. The first signature shows two highly angular points on the right hand side of the signature (points designated in the previous illustration as 5.3) whilst the second signature shows well rounded loops. CO271-287.3 shows a combination of a loop and a very angular bend.
- In the same example signatures, compare the length of the strokes at points 2 and 4. Point 2 is far longer (i.e. to the left) than point 4. However, compare these relative lengths in CO271-287.15 where they are equal lengths. Also note CO271-287.31 which shows an exceptionally short point 4.
- 240. (iv) Compare the length of stroke at point 5 and point 3 in CO271-287.1 to CO271-287.3. The first example shows point 5 to extend beyond point 3 to the right, the second signature shows these two points to be of equal length to one another. Note the third signature shows point 5 to be significantly to the left of point 3.
- 241. (v) Considering CO271-287.1, the up/down pen strokes culminating in points 3 and 5 are effectively parallel to one another whereas CO271-287.3, they are at an angle one to another, as shown in most examples.
- 242. (vi) On CO271-28743, the stroke that commences at point 1 is a relatively long left to right stroke followed by a retrace (below it) towards point 2 (possibly overwritten) i.e. a long introductory stroke to the line running down to point 2.

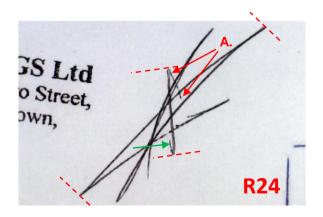
CO271-287.2 shows no such stroke, whist CO271-287.3 shows a line that runs down to point 2 being **above** the introductory stroke. CO2710287.42 appears to show no introductory stroke. CO271-287.15 shows a rounded **hook** into the stroke that runs to point 2. It can therefore be appreciated with respect to these points that the signatures contain a wide variety of strokes, and as such, it would be extremely difficult to form a structure which would fall outside this range of variation.

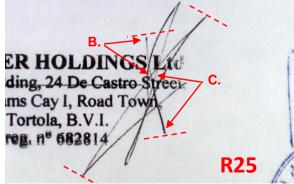
- 243. (vii) CO271-287.31 shows that the line running from point 1 to point 2 and then onwards to point 3 has a retrace at the bottom with these two lines forming a narrow angle. If one compares that with CO271-287.16, it can be seen there is no retrace of this element of the signature and the rounded angle is substantially wider.
- viii) The final loop from point 5 that makes the final downward pen movement on CO271-287.3 is very broad, whilst on CO271-287.19, it is extremely narrow and on CO271-287.23, it is a retraced line.
- There are many more obvious, very wide variants within the known writings that could be detailed. However, for the sake of brevity, having shown the type of feature to which I am referring, I will merely state that, in my opinion, every element of this signature shows considerable variation. Consequently, in assessing the "target" for any potential forger to copy this signature, the boundaries for variation for all of the above features (and many more that could be detailed within the signature), is considerable. A simulation would have to be executed particularly badly for elements such as those detailed above to fall **outside** these extremely wide ranges of variation. If a simulator makes an error in the length of a copied stroke it would have to be substantially wrong, with such a large range of variation for that stroke, for the length of the incorrectly copied line to fall outside that range of variation and therefore be identified as an indication of forgery.
- This factor, that the simulation would have to be extremely wrong if it is to fall outside the variants seen, is a significant factor in assessing the likelihood of this type of signature being successfully copied with a fair degree of accuracy so that

any errors of forgery will still fall within each of these huge ranges of variation.

(10) RADLEY OPINION CONCERNING THE AUTHENTICITY OF THE AVRAHAM LEV RAN QUESTIONED SIGNATURE ON R24 – R26

- When considering structures of R24 R26 Avraham Lev Ran signatures, most features do fall within the range of variation exhibited in the known writings. However, I consider that there are a few points which do not comply with respect to the range of variation and fall outside the same.
- The very important feature that I note with respect to these three signatures is that they **all** have irregularities in one stroke not found within the forty seven comparison signatures presented. This is with respect to the downstroke cutting through the zigzagging lines.
- 249. Consider R24, there is a fairly long, and what appears from the enlarged photographs, to be a slightly hesitant long upwards introductory stroke illustrated at "A" below. Such a long, almost spindly upstroke is not seen throughout the known writings albeit, CO271-287.21 shows a very light stroke which appears to barely touch the paper, as does CO271-287.16. However, both these examples show the pen to hit the paper initially very lightly and as it moves towards the position of the commencement of the downstroke of the line, the pen pressure (line thickness) gets heavier. The mode of placement of the pen on the paper whilst moving appears to be exhibited at "A" in R24 and that is, in my opinion, a quite different writing action.





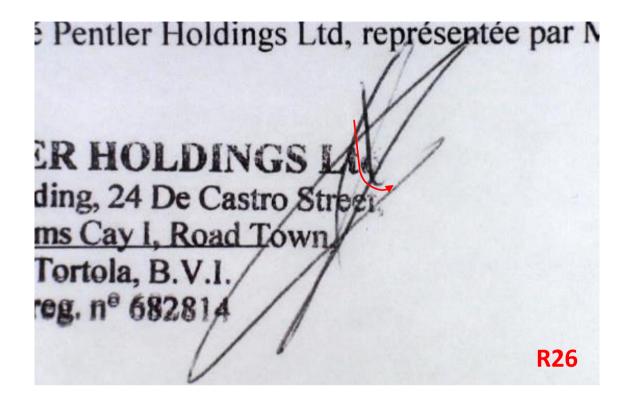
250. It can also be noted that the end of the downstroke in R24 shows a distinct upwards and leftwards hook as the pen is lifted off the paper (arrowed in green). This is in contrast to the vast majority of comparison signatures which show the downstroke to be made wherein the pen halts and is lifted off the paper. I acknowledge there are at least two examples of such hooks, on CO271-287.13 and CO271-287.19, however, both of these show very faint traces of a hook and not as clearly reproduced (not as heavy pen pressure) as that seen on R24. This feature in R24 is therefore a rare occurrence.

251. Considering R25, this signature appears to be far more of a "star" shape with the extremities of the vertical downstroke through the signature protruding to form additional star "points". Note, the unusually large protrusion either side of the main line from point 2 to point 3 illustrated at "B" and "C".

252. One can also note that these vertical strokes in R24 and R25 are disproportionately long relative to the stroke that determines the width of these signatures i.e. the stroke from point 2 to point 3 (the lengths of these strokes denoted by the red dotted lines). On measuring the same, these vertical strokes are significantly longer in relative terms than the corresponding ratio of lengths seen in all the comparison material.

The unusual length of both of these vertical downstrokes in R24 and R25, outside the range of variation of all of the other forty seven comparison signatures, are notable not only for their appearance in two questioned signatures but also as these two questioned documents are said to be signed some four months apart. Consequently, it has to be a considerable coincidence if both of these signatures are genuine and two months apart, this very basic downstroke is incorrectly applied to the signature in each instance. An alternative way of looking at this "coincidence" is that these two signatures have been simulated at one point in time. This alternative position might also be regarded as being supported by the fact that the inks for the Avraham Lev Ran signatures on R24 and R25 (signed four months apart) are both coincidentally identified by the Authors as black ballpoint pen number 1. An alternative consideration could also be entertained that this is what might be expected if one individual has simulated these two signatures (reproducing

the incorrectly structured downstroke) at one point in time using a single pen.



- On considering R26, it will be noted that at the bottom of this vertical stroke, the pen is manipulated in the fingers to form a significant **curve** with the pen gradually lifted from the paper, leaving a tapering stroke towards "2 to 3 o'clock". This is not seen in any of the forty seven comparison signatures, most of which, as stated previously, produce an emphatic downstroke, the pen stops and the pen is lifted from the paper or, occasionally, **the pen is lifted to the left** with a very light upwards dragline (hook) being produced **after the pen has halted**. CO271-287.35 shows a minute, angular upward hook to the right but this is a totally different writing action when lifting the pen from the paper than is seen in R26.
- 255. This feature of R26 therefore differs from the other forty seven known writings presented.
- 256. It may be noted that the way in which the pen is often applied to the paper and lifted from the paper is an element poorly reproduced by simulators as, in my experience, little attention is given to this aspect of the movement of the pen in the air onto the paper and conversely, the movement of the pen from the paper into the air.

257. I find it of considerable significance that these features, all relating to this single stroke on all three questioned signatures produced on different dates, fall outside the ranges of variation for the corresponding features shown in the forty seven comparison signatures.

As previously stated in the General Commentary on Handwriting and Signature Examination section of this report, often a simulator will take great care with the more difficult aspects of the signature but when an "obvious" downstroke has to be executed, often little care will be taken in its production because it is "only a short downstroke" and, consequently, errors in reproduction can, and do, occur in such features.

259. There are few other differences worth noting between the questioned signatures and the comparison material.

In assessing the evidence, I have taken into consideration the simplicity of the signature, the large range of variation of virtually every element of the comparison signatures and have noted the consistent feature relating to the incorrect structuring of the downstroke in the signature.

I have borne in mind those above points and the fact that a potential simulator has a huge "target" to aim for which could mask errors in any copying process. I have had considerable difficulty in assessing the evidence to the extent that I am of the opinion that the evidence is inconclusive as to whether these signatures are (i) unusual signatures of Avraham Lev Ram, which all show problems in the production of the downstroke (executed on different dates), or (ii) simulations in which little attention has been given to this stroke.

With respect to the Report, this makes no mention of these points although they are clearly observable and measurable. However, the Authors do, refer, at paragraphs 88, 108 and 133, to observations they have made including "height relations" (which presumably would include the length of the vertical downstroke), and "proportions" i.e. the relative lengths of the vertical lines and line from point 2 to point 3. As no comment has been made in the Report, presumably this has not been therefore taken into consideration. Similarly, there is no mention of the other issues raised

above with respect to signatures R24 – R26.

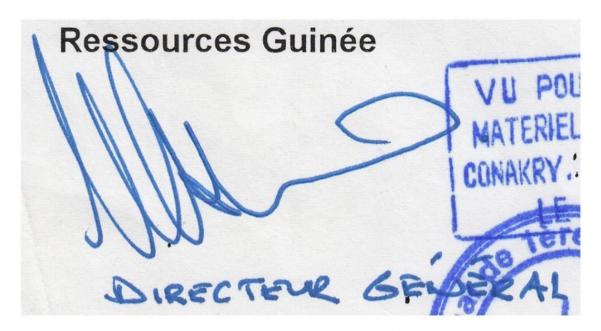
The issue of differences was raised at point 19 of Annex L (within the comments raised by BSGR) where the Authors were requested to identify any differences. In their answer, the Authors merely reiterate that they use generally accepted principles and the opinions are reviewed by a certified document examiner etc. Their response is evasive and does not attempt a direct answer to any of the questions raised with respect to this issue.

The answer to the specific question raised at point 24 in Annex L, relating to the questioned Avraham Lev Ran signatures is "There is no evidence of any differences that would suggest someone other than Avraham Lev Ran signed the document" (my emphasis).

I can see no logical reason why the differences indicated above should not be taken into consideration. I do not consider they can properly be ignored. They are present and they are notable parameters yet the Authors have either failed to recognise these points or consider they are not worthy of mention, albeit they are clearly differences. I do not accept that these features can be, or should be, ignored as these constitute an integral part of the signature examination, the essence of which is to identify similarities and differences.

(11) Signature of Mark Struik

266. R27 bears a questioned signature in the name of Mark Struik. Again, this is a fairly basic signature comprising three loops followed by a cursive "S" shape which joins to a following loop. The pen continues and descends. There is a slight kink in the line before the line extends horizontally from left to right and curves back upon itself. This, in my opinion, for a competent penman is not a very difficult signature to copy with some expected degree of success. This signature is shown over the page.



R-27 (Marc Struik)

- On the basis of the "numerous significant similarities" (paragraph 156), the Authors conclude that Mr Struik wrote this signature. Their opinion is given with no reservations whatsoever.
- In Annex L, with respect to point 35 asking whether the Authors found differences between the Marc Struik signature in question and the comparison material, they indicate "There is no evidence of any differences that would suggest someone other than Marc Struik signed the document".
- ^{269.} I disagree as there are, in my opinion, demonstrable differences present.
- 270. Twenty six comparison signatures are presented whilst the questioned signature is shown over the page.
- 271. Photographic illustrations of known and questioned Marc Struik signatures are found in Appendix D.

Illustration of Points Raised Hereafter



- 272. The differences are illustrated on the photograph above.
- The questioned signature R27 shows a very thin initial loop, there being only one other (K3.1) in the twenty six comparison signatures showing this to the same degree. Therefore, this is an obviously rare occurrence.
- 274. 2. If one considers the length of the loop of this first stroke relative to the overall height of the structure, the loop represents almost exactly half the height of this element. This is illustrated with the dotted red lines showing the crossing point of the upstroke and downstroke and bears half the height of the element. None of the twenty six known signatures show this proportioning.
- The second loop of the questioned signature is similarly very thin and whilst isolated examples of a thin second loop do appear in the known writings, the **combination** of a very thin first loop and second loop does not appear to the extent noted in the questioned signatures. K17.13 is probably the nearest in comparable structures. The combined width of the loops in the questioned signature is slightly less than the combined width of the loops in K17.13.
- 276. 4. In the questioned signature, following the three initial looped elements, the pen rises so as to touch the preceding loop, descends whereupon it virtually **retraces** itself before looping downwards into the next element. Only a **very**

thin loop is formed. This near retracing of the element and the subsequent retrace of the joining loop is not seen in combination within the twenty six known writings. A similar pen movement is seen in K10.3 but this is not such a thin loop to the same extent as seen in the questioned signature.

- The curvature of the joining stroke from the above described element which descends and then bends upwards into the following vertical element has a tighter curvature than seen in any of the twenty six known writings.
- Following that curving joining stroke, a further vertical element, shown as a **loop** in all of the comparison signatures, is not drawn as a loop in the questioned signature but is a straight up/down stroke which retraces itself to a large extent. None of the twenty six comparison signatures show this retracing.
- 7. The small kink that follows this downstroke is quite pronounced and there are only two comparison signatures that show anything near the depth and same curvature, namely K7.3 and K14.2. This is therefore a rare feature but not a true difference.
- Pollowing the anticlockwise dome of the terminal loop, the pen then curves to the right with a fairly lengthy curving stroke which shows a relatively angular bend as illustrated with red arrows on the illustration. However, the angularity of this stroke is, in my opinion, significantly different than seen in the known writings with one possible exception: K19.18 that does show a short small angular kink. In the known writings generally, this terminal stroke is very much the result of the pen flying off the paper towards "4 o'clock" and does not show the pronounced angular bending seen in the questioned signature where the fingers have pushed the pen through a further change of direction i.e. there appears to be a distinctive double action of the pen causing an angular bend in the questioned signature.
- 9. As a general point and one which is partially related to issues previously raised, if one looks at the relative proportions of the height to width of the first five elements (as illustrated with the dotted turquoise lines), the questioned

signature fits into a far taller rectangle than any of the twenty six comparison documents. This illustrates not only the fact that the loops are narrow but also the **joining strokes** on the baseline between the loops are narrower than seen in the comparison documents.

All of these features may be regarded as differences not found in the twenty six comparison signatures presented or rarities rarely found, yet a conclusive opinion is offered by the Report Authors as to authenticity, apparently disregarding these demonstrable differences.

The Authors have not referred to any of the differences nor have they made any comment concerning the ease with which this type of signature may be copied by a skilled penman. This always has to raise concerns in any signature examination as, obviously, the easier it is to copy a signature, the more uncertain the opinion of authenticity is likely to be.

(12) RADLEY OPINION CONCERNING THE AUTHENTICITY OF THE MARC STRUIK QUESTIONED SIGNATURE ON R27

284. Bearing in mind the above differences (also combined with a number of features of considerable rarity), all of which are found in this one questioned signature, I do not consider this questioned signature to be a natural and normal signature of Marc Struik.

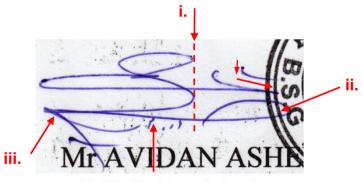
The combination of differences which fall outside the range of writing variation as shown in the twenty six samples of Mr Struik's signature lead me to the opinion that there is weak to moderate evidence to support the proposition that this was not written by Marc Struik but is a copy of his general signature style. The evidence is, however, far from conclusive but, in my opinion, over the balance of probability.

(13) Signatures in the Name of Asher Avidan

286. These signatures appear on R28 and R29.

At page 114, paragraph 169 of the Report, the Authors indicate there are fourteen comparison signatures and these are adequate for comparison purposes. They offer an opinion that the signatures on R28 and R29 in the name of Asher Avidan were, in their opinion, written by him with no reservations on their opinion.

- As with the statements concerning their other signature examinations previously discussed, the Authors appear to be reliant upon a variety of "significant similarities". I have already given my comment on the issue of reliance on similarities only and will not reiterate the same.
- Again, their responses to questions raised in Annex L concerning potential differences between known and questioned signatures of Asher Avidan again, prompts the response there is no "evidence of differences that would suggest someone other than Asher Avidan signed the document" etc.
- 290. I do not agree with their stated conclusive opinion. On comparing the questioned signatures in the name of Mr Avidan (see photographic charts at Appendix E) with the comparison documents presented, there again, appear to be a number of differences, as follows.



R-28 (Avidan Asher)

- 291. (i) If one draws a vertical line on R28 from the right-hand side of the upper loop, this is in line with the lower loop of the "S" shape as shown by the dotted line.

 None of the questioned signatures show this alignment.
- 292. (ii) From the end of the bottom of the "S" shape in R28, there is a long horizontal stroke that then bends and forms a curved dome in an anticlockwise direction. The way in which the horizontal transforms into the arc of the

dome is very rounded with a relatively large radius of curvature. Generally, the change of direction is fairly sharp in the known writings.

- 293. (iii) Beneath the main portion of the signature, the known signatures show a clockwise looped pen movement with an extended downward tail similar to the shape of a crossed "9". Whilst there is a form of reproduction of that element in R28, there is no significant loop whatsoever. This absence of a loop, merely a sideways "V" shape, is not seen in any of the known signatures.
- The element (short "L" shaped line) towards the top right hand corner of the signature in R28 appears to show the pen hitting the paper, moving slightly downwards before turning at near right angles. To make such a turn, the pen has to virtually stop and then turn i.e. a deliberate change of direction. In the known writings, this element is shown in various forms but generally, the marking on the paper is the result of an introductory stroke as the pen is still moving to the commencement of the horizontal stroke, not a right angled introductory stroke as seen in the questioned signature. It is acknowledged that this is quite a variable structure in the known writings and I attribute little significance to this observation albeit there is no example in the comparisons in this form.
- 295. Consequently, there are elements in R28 which do not correspond well with the fourteen known writings and again, in my opinion, these differences should be noted by the document examiner. However, the Authors attribute no importance to what are demonstrable differences and their Report reflects no reservations whatsoever.
- The signature on R29 in the name of Asher Avidan also bears some interesting points of difference.



R-29 (Avidan Asher)

- 297. (i) The supposedly smooth curving stroke representing the "diagonal" of the "S" shape has an irregular clockwise bend in it. The shape of this line is not seen in any of the known writings. This type of somewhat awkward stroke is out of keeping with the mode of execution of the known writings but is the type of feature sometimes observed in simulations.
- Through the looped "9" shaped element beneath the left hand side main portion of the signature, there is a reproduction of what should be the rapidly written horizontal dash (often with a hook into the beginning of it on the left in the comparison signatures). In the known writings, it is clearly very rapidly executed with smooth movement of the pen and tapering on the right-hand side as the pen speeds in the rightward direction flying from the paper. R29 can be seen to be a waved line (not conducive with a fluent dashed off, "flying" pen movement).
- 299. Furthermore, instead of being tapered at the end in the direction of the pen movement to the right, there appears to be a very slight downward hook i.e. the pen has come to a near stop before flicking off the paper in a **downward** direction (unlike the known writings where the pen comes off the paper towards "3 o'clock").
- After the "S" shape, the pen moves from left to right in a horizontal direction followed by a terminal loop. The loop proceeds as illustrated by the arrow on the photograph above and bends rather angularly, almost vertically, and descends. It then bends **once again**, towards "5 o'clock" i.e. this loop is made up of a long stroke, a following bend and yet a **further** bend. The pen is not flying off the paper at the terminal position. The known writings do not show this pen lifting motion and are quite different. They show the pen to

loop around and terminate with the pen rapidly flying off the paper either without a significant bend or, if there is a bend, there is only **one** bend.

The angular bending of this questioned signature terminal therefore appears "drawn" at this point with the fingers forcing the pen through a tight angular curve, the pen lifting from the paper towards "5 o'clock".

Again, the Authors of the Report seem to have either ignored or not taken any heed of these points although there is no obvious reason for their presence and therefore, they should be regarded as differences as they differ with respect to all known writings.

It is of interest to note that I find there to be differences, in a similar vein one to another, in the terminal strokes of both the Asher Avidan signature above and the terminal stroke of the Marc Struik signature. In both instances there appear to be angular bends at the end in an irregular fashion. The question that arises is whether or not such errors in pen lifting action in both of these signatures are the result of (i) unusual writing practices by both writers or (ii) whether they could both be failings of a simulator in this lifting action or (iii) coincidence.

(14) RADLEY OPINION CONCERNING THE AUTHENTICITY OF THE ASHER AVIDAN QUESTIONED SIGNATURE ON R28 AND R29

I have again encountered considerable difficulties in trying to assess the significance of the points raised above. There does exist clear, demonstrable differences between the known and questioned signatures and clearly from this point of view, I disagreed with the Authors' conclusive opinion of authorship, without any reservation despite demonstrable differences. I see no logical reasoning why demonstrable differences should be ignored.

However, whilst there are some differences on both of these signatures, regarding the overall significance of them when trying to determine whether these are a limited number of differences within a good quality simulation or merely natural variations not exhibited in the comparison signatures presented to date, I find there

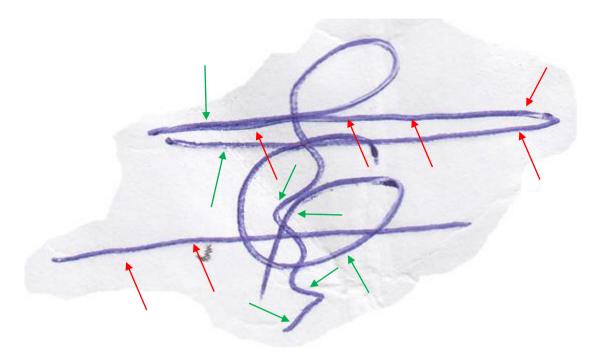
is no clear evidence one way or the other. Consequently, I am of the opinion that the evidence is inconclusive as to whether Asher Avidan wrote these questioned signatures.

(15) Signature of Issiaga Bangoura

At paragraph 238 of the Report, the Authors indicate they undertook an examination of the signatures on R269 (albeit they had no comparison signatures) and noted that "there is no evidence of distortion commonly associated with traced or simulated forgeries". However, the Authors indicate that "The Issiaga Bangoura signature likewise bears evidence of fluency especially with respect to the non-horizontal movements which have smooth even lines with tapered strokes and pen pressure variation. The long horizontal strokes have some slight waviness that appear to be the result of the wrinkled nature of the paper".

However, on page 164, there is a photograph of the signature in question of Bangoura which appears, in my opinion, to be quite laboured and therefore not fluent. There seems to be a general evenness of pen pressure with the exception of the tapering stroke (indicative of lighter pressure) on the terminal stroke only. The lines written horizontally are undoubtedly waved, as arrowed in red. The Authors state, in paragraph 238, that this appears to be the result of the wrinkled nature of the paper. However, from the photographs, the wrinkles do not appear to be in the vicinity or to cross the inkstrokes where they are wavy. Some of the observed heavy wrinkles when crossing the ink lines do **not** appear to create waviness in the signature lines. This is illustrated with the green arrows on the photograph over the page. It therefore appears that the pen is moving slowly and not in the smooth fashion. This is, in my experience, often found within simulations.

308. Without sight of the original document, I cannot comment further albeit, if the photograph of the signature as presented by the Authors does show the extent of the heavy wrinkling, this does not explain the other areas of waved lines which do not appear to cross wrinkles in the paper.

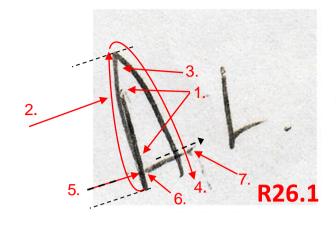


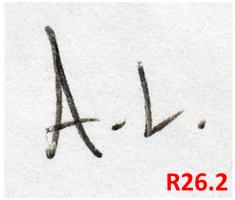
R-269.2 (Issiaga Bangoura)

(16) Initials "A.L." on R26

The Authors recognise this is a limited examination due to the brevity of the entries. Again, they mention "some limited similarities" yet fail to make reference to the obvious differences present in R26.1 (page 132) where the construction of the "A" is totally different to the other "A"s on that document, and to the comparison signatures that they have used of Avraham Lev Ran.

310. The differences are shown over the page.









- 311. 1. R26.1 shows the "A" to be constructed with a lengthy heavy initial downstroke, not seen in the comparison material or the other initials.
- This is followed by an upstroke which is slightly clockwise, not seen in the other initials.
- 313. The pen then turns to form a wide angle, not seen in the other initials.
- 314. 4. A downstroke is drawn which curves in a clockwise direction, not seen in the other initials.
- The crossbar starts at a very low position i.e. only slightly above the imaginary writing baseline, not seen in the other initials.
- The crossbar starts inside the inverted "V" shape, not seen in the other initials where the crossbar starts substantially to the left of the initial stroke.

7. The punctuation after the "A" in R26.1 is very close to the end of the horizontal bar which one assumes to be the last stroke of the "A". This is not shown in any of the other initials. The punctuation mark is also in line with the cross bar of the "A", not seen in any of the other initials.

Despite these obvious seven features of difference, there is no comment on this but rather, the Authors prefer to adopt the view, in paragraph 132, that there are "indications" that Avraham Lev Ran may have written the initials in R26 but they cannot offer "a more conclusive opinion". I am very surprised that such obvious differences are not recognised in their Report.

Their chart on page 83 marks the "A" on R 26.1 with only a single arrow suggesting some form of difference. However, when differences are observed between the various comparison signatures initially presented shown on page 81, they exclude some of those from the examination because they differ with regard to the other set of known initials. This elimination of samples suggests that they have considered the possibility that the comparison signatures initially presented were indeed written by two different individuals. Whilst due concern is therefore raised on the specimens, no such concern is expressed on the obviously differing initials in question.

This also raises another interesting point, as to why the Authors have eliminated one set of initials (that do not look similar to the questioned ones) as being the "rogue comparison" set. Equally, it could be that the discarded "rogue set" are indeed the writings of Avraham Lev Ran and that the ones that they adopt for comparison (which correspond with some of the questioned initials) are the ones written by a different individual.

(17) R27 – Signatures of Mamadie Toure and Lansana Tinkiano on R27

At paragraph 150, with respect to R27, the Authors comment that there are no comparison signatures of Toure and Tinkiano. Consequently, it cannot be determined whether these are genuine signatures or possible simulations. The Authors also indicate that the Tinkiano signatures on R25 – R27 appear pictorially similar but have no comparison signatures to take the matter further.

The Authors' comments at the end of paragraph 151 that the Tinkiano signatures may have been written by one person is, perhaps, what is expected according to the Equally Likely Genuine/Forgery Proposition and in these circumstances, these comments do not take the issue of the authenticity of this document or the date of creation issue any further.

(18) Signatures of Toure, Noy, Editayo Pabs-Garnon, Cissé and Bangoura

Cissé and Bangoura on these documents are irrelevant as no comparisons were available and as such, these signatures do not take the matter further with respect to the authenticity of the documents or with issue of their date of production.

(19) TABLE OF ALTERNATIVE PROPOSITIONS

The following table is shows an illustration of the Equally Likely Genuine/Forgery Proposition mentioned throughout this report and a summary of the possible alternatives (which have not been mentioned in the Report) with regard to comments the Authors make.

R24 to R29

Paragraph of the Report	Selected Observations Expressed by the Authors	Alternative Propositions
Above 69	"There is no evidence of page substitution, text alteration, text addition, or other irregularities to indicate that R24 was fraudulently produced".	, and the second
76	" there were no anomalies to suggest that the Adhesive Stamps were attached to R24, R25, R26 and R27 in a significantly different time period than when the documents were purported to have been created".	the equally likely proposition that the

77

"... our examination did not reveal any inconsistencies in the physical aspects of the Blue Round Stamps pages 1 and 2 to indicate one or more of the stamps was R24 placed on in а significantly different time period".

This is agreed between the page 1 stamp and top of page 2 stamp. However, the lower stamp on page 2 shows some poor reproduction of detail i.e. differences. On page 100 the Authors class that poor reproduction of this area of the stamp as a difference when comparing to R25 - R27. Yet this difference appears to be ignored when comparing the stamp impressions on R24 with one another.

The Authors did not compare the stamp from page 1 of R24 in their chart on page 100. Had they used that alternative stamp, it would not have shown the differences illustrated.

The Authors cannot demonstrate any evidence identifying precisely when the stamps were placed on the documents nor when the documents were created. They have assumed the Round Blue Stamps are genuine stamps impressions without any comparisons being available.

The Authors have not mentioned or apparently considered the Equally Likely Genuine/Forged Proposition which applies.

80

"... it is more likely that a 'Pentler Holdings Ltd' stamp was applied to an original of page 2, which was then copied. However, the quality of printing on pages 1 and 2 are consistent with each other indicating that both pages may have been copied, but then executed with original signatures and other original stamps".

No original is available and therefore, one cannot determine whether the Pentler stamp was actually applied to the original of that document, the alternative being that it could have been removed from another document and copied onto this Transposition copy document. of signatures stamps from and one document onto another is a simple task, generally undetectable and often used in the creation of fraudulent documents.

The Authors have not mentioned or apparently considered the Equally Likely Genuine/Forged Proposition which applies.

88

Regarding the Avraham Lev
Ran signature on R24, "...
the evidence revealed
numerous significant
similarities.... On the basis of
this, it has been concluded
that Avraham Lev Ran wrote
the disputed Avraham Lev
Ran signature on R24".

The Authors have not mentioned in the Report any differences present in the signatures contrary to what they suggest at paragraph 38 in relation to complying with the **SWGDOC** Standard for Examination of Handwritten Items. paragraph 7.12.5 i.e. the consideration of differences. I do not consider that one can have an absolutely conclusive opinion as to the authenticity of a signature when clear differences are The alternative is that the observed. signature is a simulation.

88,	108
and	133

"Avraham Lev Ran wrote the disputed Avraham Lev Ran signature (s)..."

In addition to not having mentioned the differences referred to in my report, the Authors have not mentioned combined evidence (contrary to the SWGDOC Standard for Examination of Handwritten Items, paragraph 7.12.5) nor have they mentioned the presence of a clear difference in all three Avraham Lev Ran signatures (the downstroke construction). Therefore, they have not mentioned the alternative possibility that this is a repeated error by a forger, when "obvious" writing the carelessly downstroke.

The fact that the inks used for these signatures on R24 and R25 are designated "black ballpen 1", also gives rise to the possibility that these two signatures, dated months apart, were actually appended at one point in time, with the forger repeating their error on sequential signatures written with the same pen.

93	Regarding Ink/Toner	The Authors do not consider the
	Transfer,	possibility that two documents pressed
	"Examinations and	tightly together in a file for a period of
	comparisons revealed that	time may cause transfer of toner/ink from
	the ink/toner was sourced to	document to document.
	R24, page 2 or a document	
	containing the same text.	The Authors have not mentioned or
	Therefore, this evidence	apparently considered the Equally Likely
	could indicate that these	Genuine/Forged Proposition which
	pages were printed together".	applies.
94	Regarding offsetting on R24,	As above.
	"Therefore, this evidence	
	could indicate that these	
	pages were printed together".	
100	"Although there is a large gap	The Authors do not mention the other
	in the serial number	alternative - that these stamps were
	sequence, and the higher	applied out of sequence in what could
	numbered Adhesive Stamps	have been a fabrication process.
	were used before the lower	
	numbered Adhesive Stamps	
	based on when R24 and R25	
	are purported to have been	
	legalized, there is no	
	evidence to indicate that the	
	Adhesive Stamps were	
	attached to R25 on any other	
	date than purported".	

101	"The class and individual characteristics of the Blue Round Stamps used on pages 1 and 2 contained similar features, including subtle defects. Therefore, there is no evidence to indicate one or more of the	
	stamps was placed on pages 1 and 2 of R25 in significantly different time periods".	
108	Regarding the Avraham Lev Ran signature on R25, " the evidence revealed numerous significant similarities On the basis of this, it has been concluded that Avraham Lev Ran wrote the disputed Avraham Lev Ran signatures on R25".	mentioned the aspect of the signature structure being basic and therefore potentially within the ability of a skilled penman. They have not mentioned the highly variable nature of the known
109	"As can be seen from the grid along with other observations, there is no evidence of alteration by way of interlineations/additions".	A different font has been used for half of page 2 albeit this may well have been copied from another document. The Authors have not mentioned or apparently considered the Equally Likely Genuine/Forged Proposition which applies.

	,	
111A	"Examinations and	R24 and R25 bear the same date and
(wrong	comparisons revealed that	therefore this observation is not
paragraph	the ink/toner was sourced to	unexpected. The Authors have not
numbering,	page 2 of R25 or a document	mentioned or apparently considered the
refers to	containing the same text.	Equally Likely Genuine/Forged
99 on	Therefore, this evidence	Proposition which applies.
page 74)	could indicate that these	
	pages were printed together".	
119	"The class and individual	The Authors have not mentioned or
	characteristics of the Blue	apparently considered the Equally Likely
	Round Stamps used on	Genuine/Forged Proposition which
	pages 1, 2, 3 and 4 of R26	applies.
	contained similar features,	
	including subtle defects.	
	Therefore, there is no	
	evidence to indicate one or	
	more of the stamps was	
	placed on pages 1 through 4	
	of R26 in a significantly	
	different time period".	

125

Regarding the "A.L." initials on R26, "The signatures and initials reveal evidence of fluency with good line quality, pen pressure variation, hooks and tapered strokes. Therefore. there is no evidence of distortion commonly associated with traced simulated or forgeries".

There are considerable clear anomalies in the construction of the first set of initials on R26 of which there is absolutely no reference in the Report. The Authors discard some of the comparison initials because they are different to the other However, when it comparison initials. comes to the first set of initials on R-26, which are also totally different from the other initials, they make no mention of this in the Report. The alternative is that this page was not signed by "A.L." but no mention of this possibility is given or considered.

128

Regarding the initials C0084 and C0330, "Although initials two of the three distorted on the appear C0084 documents, the initials do exhibit variation, and there some limited internal consistency within each set of initials as well as amongst each other. On the basis of the distorted nature of the initials on C0084.6, the three sets of initials were not used for examination and we are unable to determine if they written by another were writer".

These two sets of initials differ relative to one another but they have not considered the alternative, that the set of comparator initials discarded by the Authors (on the basis that they were different to certain of the other comparator signatures and the questioned initials) are the genuine ones and the set the Authors use to compare against the questioned initials are not. There appears to be a high degree of selection as to which initials are to be discarded with no evidential backing for the selection other than they differ from the questioned initials.

	T =	[
130	Regarding the "A.L." initials,	This is a selective comment. The
	"Observations also revealed	similarities are between only three sets of
	that there is pictorial similarity	the initials in question and the selected
	between the disputed [initials]	comparisons. The first set of initials are
	and the known comparison	wholly different. The alternative, that the
	[initials]".	discarded set could be the applicable
		comparison material, is not mentioned.
132	Regarding the "A.L." initials	This does not consider the alternative that
	on R26, "When comparing	at least one set of these initials, on page
	the known writing of Avraham	1, are of different authorship to the
	Lev Ran with the disputed	others, albeit there is very strong
	initials, the evidence revealed	demonstrable evidence of significant
	some limited similarities.	fundamental differences between the
	These similar handwriting	
	habits include height	1 0
	relations, proportions, special	•
	relations, and diacritic	Willer:
	markings. On the basis of	
	this there are indications that	
	Avraham Lev Ran may have	
	written the disputed A.L.	
	initials on R26".	

		,
133	Regarding the Avraham Lev	One cannot have an absolutely
	Ran signature on R26, "the	conclusive opinion when differences are
	evidence revealed numerous	observed, as demonstrated. The Authors
	significant similarities On	do not mention the differences and do not
	the basis of this, it has been	mention the alternative that these
	concluded that Avraham Lev	differences could be the result of
	Ran wrote the disputed	simulation.
	Avraham Lev Ran signature	
	on R26".	Nowhere in any of the signature
		examinations do the Authors mention the
		possibility of simulation by a skilled
		penman copying a relatively basic nature
		style which is highly variable.
134	Regarding interlineations,	The alternative proposition is that the
	"The four pages comprising	difference in line spacing is due to these
	R26, revealed a horizontal	entries being separately created.
	line spacing of 13.1 points for	
	page 1 and 13.9 points for	The Authors have not mentioned or
	pages 2 through 4. The	apparently considered the Equally Likely
	difference in line spacing is	Genuine/Forged Proposition which
	attributed to the change in	applies.
	font size for pages 2 through	
	4 As can be seen from the	
	grids along with other	
	observations, there is no	
	evidence of alteration by way	
	of interlineations/ additions".	

137	"In regard to the dates and	The alternative, not mentioned in the
137		· ·
		Report, is that impressions transferred
	R29 (approximately 18	from one document onto a later dated
	months), it should be noted	document can also appear in a mass
	that it is not unusual for	fabrication process where the documents
	impressions of signatures	are all produced together at one point in
	from later dated documents	time.
	to be found impressed on	
	earlier dated documents.	
	This at times occur when	
	accessing and using earlier	
	dated documents as a source	
	to confirm information that	
	may relate to signing current	
	documents".	
	documents.	
139	Regarding ink toner/transfer	Alternatively, the transfer could, as
	on pages 3 and 4 of R26,	previously described, be by compression
	"Therefore, this evidence	of the document.
	could indicate that these	
	pages were printed together".	The Authors have not mentioned or
		apparently considered the Equally Likely
		Genuine/Forged Proposition which
		applies.

145	"Although the serial number	This is contrary to opinions expressed
	on the Adhesive Stamp used	with respect to the sequence of Adhesive
	on R27 is lower in sequence	Stamps as argued by the Authors
	than the serial numbers on	referring to the "BB" stamps on document
	the stamps on R24, R25 and	K20, paragraph 75. The Authors are
	R26, no conclusion can be	applying the argument in one direction
	reached as to whether or not	only.
	this is consistent with	
	company practice as	
	discussed previously".	
148	" there has been no	The Authors make no comment that there
	evidence of variation in the	would not be physicochemical
	physical and chemical	characteristics changing the stamps if
	characteristics of these	they had been mass produced. In Figure
	stamps within each	30, they do not take into consideration the
	document Using	fact that every time one applies a stamp
	representative stamps from	to a document, a slightly different
	each of the R24, R25, R26	
	and R27 documents, Figure	·
	30 shows some of the	
	differences between the	
	stamps when the stamps	
	from each of the different	
	purported documents are	
	compared to each other".	
151	Regarding the Tinkiano	This is meaningless as the Authors have
131		· ·
	signatures on R25, R26 and	no Tinkiano genuine signatures for
	R27, " there are indications	comparison and therefore there is no
	that these signatures may	_
	have all been written by the	signatures, albeit possibly by one person,
	same person".	are genuine or otherwise.

Regarding the signature of Struik on R27, "... the evidence revealed numerous significant similarities... On the basis of this, it has been concluded that Marc Struik wrote the disputed Marc Struik signature on R27".

The Authors have not considered any differences present contrary to what they suggest at paragraph 38 regarding the SWGDOC Standard for Examination of Handwritten Items, paragraph 7.12.5. One cannot have an absolutely conclusive opinion when clear differences are observed as demonstrated. The alternative explanation for these differences should have been noted and the alternative (simulation) mentioned and considered.

160

156

Regarding R28, "Although this document is dated 27 February 2008. which indicated in the machine printed text, there is definitive date for when the document was executed with the signatures since there is no written date or legalization date. Therefore. our conclusions with respect to R-28 are based on the assumption that R-28 was prepared and signed on or around 27 February 2008." (my emphasis).

This is a considerable assumption and should be a major area of investigation to determine if the document was actually created at that time and not a preconceived view that the document is, effectively, genuine. The alternative that it is not genuine but created later is not considered or mentioned. As this is the case, their comments are valueless.

		,
Figure 33	"The blue arrows in the chart	In the Report chart of Marc Struik, no
page 106	represent similar handwriting	points of difference have been illustrated,
	habits between the disputed	there is no mention of these points of
	signature and the known	difference and no alternative reasoning
	comparison signatures"	for them has been mentioned i.e. the
		alternative possibility that the differences
		are the result of simulation.
173	Regarding the Asher Avidan	The Authors have not mentioned any
	signature on R28, " the	differences present. One cannot have an
	evidence revealed numerous	absolutely conclusive opinion when clear
	significant similarities On	differences are observed as
	the basis of this, it has been	demonstrated. The Authors have not
	concluded that Avidan Asher	mentioned the ease of copying such a
	wrote the disputed Avidan	basic signature, the wide range of
	Asher signature on R28".	variation etc. is not mentioned and not
		considered.
Figure 39	Regarding line spacing on	The Authors have not mentioned or
page 118	R28,	apparently considered the Equally Likely
	" there is no evidence of	Genuine/Forged Proposition which
	interlineations by way of text	applies.
	or line substitution."	
176	Regarding right-reading text	No further conclusions are drawn in
	from R24 appearing on R28,	respect of this point, which must be seen
	" the evidence indicates	as an anomaly. The question of why
	that this is not a transfer, but	should R24 be behind R28 when copied
	may rather be a result of	arises. A consideration of the fact that this
	page 1 of R24 being behind	could happen if these documents were
	R28 when R28 was scanned	fraudulently prepared together and copied
	and subsequently printed".	has not been mentioned.

182	Regarding the black B.S.G.
	Resources stamp,
	"Therefore, there is no
	evidence to indicate that
	these two stamps were
	placed on R28 and R29 at
	significantly different time
	periods".

There is no demonstrable evidence to say when the stamps were applied. The equally likely alternative could be the case i.e. that they were applied at significantly different points in time. It is not possible to determine this point and should therefore have been recorded as inconclusive. The Authors have not mentioned or apparently considered the Equally Likely Genuine/Forged Proposition which applies.

187

Regarding the signature on R29 in the name of Asher Avidan, "... the evidence revealed numerous significant similarities... On the basis of this, it has been concluded that Avidan Asher wrote the disputed Avidan Asher signature on R29".

The Authors have not considered any differences present, contrary to SWGDOC Standard for Examination of Handwritten Items, paragraph 7.12.5. One have cannot an absolutely conclusive opinion when clear differences are observed as demonstrated. The differences should have been addressed. mentioned and the alternative explanation (simulation) considered. No mention is made of the ease of copying such a basic signature, the writing variation etc. which could give rise to alternative considerations.

Figure 42	Chart comparing questioned	The questioned signature on this chart is
page 124	signature to known writings	cluttered by blue arrows and one cannot
	of Avidan Asher.	see the outline detail of this questioned
		signature. Again, similar handwriting
		habits are illustrated. No differences
		have been marked.
190	Regarding the impression of	It could be that the documents were
	the Toure signature from R28	fraudulently produced en masse but this
	being impressed on R29,	has not been considered. The alternative
	which is dated one day later,	is that they were produced genuinely
	" we are unable to	together and signed one on top of the
	determine any significance	other. There is no evidence to determine
	regarding this finding".	the truth of the matter.
	which is dated one day later, " we are unable to determine any significance	is that they were produced genuir together and signed one on top of other. There is no evidence to determ

DECLARATION

I, ROBERT WILLIAM RADLEY DECLARE THAT:

- I understand that my duty in providing written reports and giving evidence is to help the Tribunal, and 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 and will continue to comply with my 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.
- 4. I do not consider that any interest which I have disclosed affects my suitability as an expert witness on any issues on which I have given evidence.
- 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 my answers to points 3 and 4 above.
- 6. I have shown the sources of all information I have used.
- 7. I have exercised reasonable care and skill in order to be accurate and complete in preparing this report.
- 8. 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.
- 9. I have not, without forming an independent view, included or excluded anything which has been suggested to me by others, including my instructing lawyers.
- 10. I will notify those instructing me immediately and confirm in writing if, for any reason, my existing report requires any correction or qualification.
- 11. I understand that:
- 12. (i) my report will form the evidence to be given under oath or affirmation;

- 13. (ii) questions may be put to me in writing for the purposes of clarifying my report and that my answers shall be treated as part of my report and covered by my Statement of Truth;
- 14. (iii) I may be required to attend the Tribunal to be cross-examined on my report by a cross- examiner assisted by an expert;
- 15. (vi) I am likely to be the subject of public adverse criticism if the Tribunal concludes that I have not taken reasonable care in trying to meet the standards set out above.
- 16. I have read Part 35 of the Civil Procedure Rules, the accompanying practice direction and the Guidance for the instruction of experts in Civil Claims and I have complied with their requirements.
- 17. I am aware of the practice direction on pre-action conduct. I have acted in accordance with the Code of Practice for Experts.

STATEMENT OF TRUTH

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.

ROBERT W. RADLEY

Forensic Handwriting & Document Examiner

Madley.