

Trial Hearing
MLI-OTP-P-0631

(Open Session)

ICC-01/12-01/18

1 International Criminal Court
2 Trial Chamber X
3 Situation: Republic of Mali
4 In the case of The Prosecutor v. Al Hassan Ag Abdoul Aziz Ag Mohamed Ag
5 Mahmoud - ICC-01/12-01/18
6 Judge Antoine Kesia-Mbe Mindua, Presiding, Judge Tomoko Akane and Judge
7 Kimberly Prost
8 Trial Hearing - Courtroom 3
9 Wednesday, 28 April 2021
10 (The hearing begins in open session at 9.32 am)
11 THE COURT USHER: [9:32:07] All rise. The International Criminal Court is
12 now in session. Please be seated.
13 PRESIDING JUDGE MINDUA: [9:32:23](Interpretation) Court is in session.
14 Courtroom officer, could you please call the case.
15 THE COURT OFFICER: [9:32:48] Good morning, your Honours, Mr President.
16 This is the situation in the Republic of Mali, in the case of The Prosecutor
17 versus Al Hassan Ag Abdoul Aziz Ag Mohamed Ag Mahmoud, case reference
18 ICC-01/12-01/18.
19 And we are in open session.
20 PRESIDING JUDGE MINDUA: [9:33:10](Interpretation) Thank you very
21 much, Mr courtroom officer.
22 Good morning to all.
23 We shall start with the appearances.
24 As usual, we'll start with the Office of the Prosecutor.
25 MS SACCHI: [9:33:23] Good morning, Mr President, your Honours. Today,

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1 for the Prosecution, there is myself, Paola Sacchi and Gilles Dutertre.

2 PRESIDING JUDGE MINDUA: [9:33:33](Interpretation) Thank you very
3 much, Prosecution. Thank you.

4 Good morning, Defence. For the Defence, please.

5 MS SUTHERLAND: [9:33:43] Good morning, Mr President, your Honours.

6 For Mr Al Hassan this morning, we have Ms Melinda Taylor, Ms Dolly Chahla,
7 Mr Shan Patel and myself, Kirsty Sutherland.

8 PRESIDING JUDGE MINDUA: [9:34:03](Interpretation) Thank you very
9 much, Ms Sutherland.

10 Now I'm turning to the Legal Representatives for Victims.

11 Maître?

12 MR KASSONGO: [9:34:12](Interpretation) Thank you very much, Mr
13 President, good morning all. The Legal Representatives for victims today is
14 represented with the team comprised by Claire Laplace, who is assisting me,
15 and myself, Maître Kassongo, and we'd like to thank you.

16 PRESIDING JUDGE MINDUA: [9:34:28](Interpretation) Thank you very
17 much, Mr Kassongo.

18 This morning, we shall start with the testimony of the 30th witness for the
19 Prosecution, P-0631. There we are.

20 So I'd like to turn to the witness.

21 Good morning, Mr Witness, can you hear what I'm saying?

22 WITNESS: MLI-OTP-P-0631

23 (The witness speaks English)

24 THE WITNESS: [9:34:55] Good morning. Yes, I can hear you.

25 PRESIDING JUDGE MINDUA: [9:35:00](Interpretation) Thank you very

1 much.

2 On behalf of the Chamber, I would like to welcome you. You shall be
3 testifying with a view to assisting the Chamber on -- in ascertaining the truth in
4 the case against Mr Al Hassan. As you will be aware, protective measures
5 have been put in place with a view to protecting your identity so that it not be
6 revealed to the public. So on each occasion that you will be furnishing details
7 that might reveal your identity, we shall talk about this in private session.
8 I hope you've understood what I've just said.

9 I shall now read the oath to you according to Rule 66(1) of the Rules of
10 Procedure and Evidence. So before you on your table, you have a piece of
11 paper with the oath, the solemn undertaking that you will be giving.

12 Can you hear what I'm saying, Mr Witness?

13 THE WITNESS: [9:36:24] Yes, I can hear you.

14 PRESIDING JUDGE MINDUA: [9:36:28](Interpretation) Very well. So I
15 would request that you read out the solemn undertaking that you have before
16 you out loud, please.

17 THE WITNESS: [9:36:40] I solemnly declare that I will speak the truth, the
18 whole truth and nothing but the truth.

19 PRESIDING JUDGE MINDUA: [9:36:53](Interpretation) Thank you very
20 much, Mr Witness. You are now under oath and the VWS as well as the
21 Office of the Prosecutor have already explained to you what this means.
22 I have a few practical pieces of advice to give you with regard to when you
23 address the Court. As you will be aware, everything that is said in this
24 courtroom is transcribed or written by court reporters and interpreted into
25 a number of languages by the interpreters, so it is important to speak clearly

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1 and slowly.

2 If you would like to intervene at any point or if you have a question to put,
3 please raise your hand to indicate that you would like to address the Court.
4 There we are. So I'm counting on your experience to apply the rules I have
5 just given you.

6 We shall now move to your examination -- the examination-in-chief, and I'm
7 handing over now to the Office of the Prosecutor.

8 Madam, please.

9 MS SACCHI: [9:38:33] Thank you, your Honour.

10 QUESTIONED BY MS SACCHI:

11 Q. [9:38:33] Good morning, Mr Witness. As the presiding judge has
12 indicated to you, it is important that you speak slowly.

13 Mr Witness, I will start by asking you very few questions on your personal
14 background, after which we will move to the three projects you worked on in
15 relation to this case.

16 MS SACCHI: [9:38:55] Your Honour, if we could move into private session
17 for approximately four minutes to elicit information of an identifying nature.

18 PRESIDING JUDGE MINDUA: [9:39:07](Interpretation) Mr Courtroom
19 officer, private session, please.

20 (Private session at 9.39 a.m.)

21 THE COURT OFFICER: [9:39:17] We are in private session, Mr President.

22 PRESIDING JUDGE MINDUA: [9:39:23](Interpretation) Thank you very
23 much, Mr Courtroom officer.

24 Madam Prosecutor, please.

25 MS SACCHI: [9:39:28]

1 Q. [9:39:28] Mr Witness, can you please state your full name, place and date
2 of birth.

3 A. [9:39:36] [REDACTED]
4 [REDACTED]

5 Q. [9:39:57] Where are you currently employed and in which position?

6 A. [9:40:01] [REDACTED]
7 [REDACTED]
8 [REDACTED]

9 Q. [9:40:18] Before being [REDACTED] where did you work and in
10 which position?

11 A. [9:40:25] I worked, before my actual employment, at [REDACTED]
12 [REDACTED].

13 Q. [9:40:43] For how long did you work in this position?

14 A. [9:40:49] I started this position in 2010 and ended it in mid-2018.

15 Q. [9:41:06] Very briefly, what was the focus of your work back then?

16 A. [9:41:15] My main work was documentation and
17 construct -- reconstruction of crime scenes; means, going to the crime
18 scenes -- crime scenes and major traffic accidents, documenting with certain
19 techniques according to imagery and surveying technology.

20 Q. [9:41:42] Thank you.

21 MS SACCHI: [9:41:45] Your Honour, we can now move back into open
22 session.

23 PRESIDING JUDGE MINDUA: [9:41:51](Interpretation) Courtroom officer,
24 please.

25 (Open session at 9.41 a.m.)

1 THE COURT OFFICER: [9:41:58] We are back in open session, Mr President.

2 PRESIDING JUDGE MINDUA: [9:42:04](Interpretation) Thank you very
3 much.

4 Madam Prosecutor, please.

5 MS SACCHI: [9:42:13]

6 Q. [9:42:13] Mr Witness, bearing in mind that we are in open session, can
7 you please indicate since when you have been working in your current
8 position?

9 A. [9:42:24] In my current position, I was employed kind of two times. I
10 had a short-term contract starting in October 2017 to the end of the year, 2017,
11 then got re-employed in my position in July 2018.

12 Q. [9:42:48] What type of projects are you normally dealing with in this
13 position?

14 A. [9:42:59] In my current position, we do several projects as the requests
15 also have multiple characters. Mostly it's related to imagery, working on all
16 kinds of scale of imagery coming from satellite imagery, down to ground
17 imagery. Also, we work with geographical spatial information.

18 In addition, we work also with 3D information derived by several
19 methodologies, like 3D laser scanning or a methodology called
20 photogrammetry.

21 Q. [9:43:48] Mr Witness, can you please look at tab 1 in your binder. For
22 the record, this is MLI-OTP-0078-0251.

23 MS SACCHI: [9:44:06] And, your Honour, this item is also at tab 1 of the
24 E-Court binder and since it contains the name of the witness, it should not be
25 publicly broadcast.

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1 Are you there?

2 A. [9:44:23] Yes, I see it.

3 Q. [9:44:25] Mr Witness, do you recognise this document?

4 A. [9:44:28] Yes, I do.

5 Q. [9:44:29] What is it?

6 A. [9:44:31] That's my curriculum vitae.

7 MS SACCHI: [9:44:39] Your Honour, before I proceed with my questioning, I
8 would like to mention that I will be asking some leading questions to the
9 witness. The reason is because this witness is neither a factual nor
10 a crime-based witness. Also the information to be elicited is already
11 contained in the witness report and is purely of a technical nature. Therefore,
12 the leading is not prejudicial to the Defence.

13 Lastly, this is also in line with paragraph 48 of the decision on the conduct of
14 the proceedings as it will facilitate the questioning of the witness in a focused,
15 precise and succinct manner.

16 PRESIDING JUDGE MINDUA: [9:45:31](Interpretation) I am in agreement
17 with you, Madam Prosecutor. This will not be detrimental to the Defence and
18 it is pursuant to our instructions.

19 MS SACCHI: [9:45:38](Overlapping speakers) Thank you, your Honour.

20 PRESIDING JUDGE MINDUA: [9:45:38](Interpretation) Please, go ahead.

21 MS SACCHI: [9:45:42]

22 Q. [9:45:43] Mr Witness, I will now ask you some questions in relation to the
23 first project you worked on in relation to this case.

24 Between the end of 2018 and the beginning of 2019, you prepared a report for
25 the Office of the Prosecutor on panoramic images, is that right?

1 A. [9:46:09] Yes, that is right.

2 Q. [9:46:12] Who is the person who instructed you?

3 A. [9:46:17] The instruction was made by the team of the case -- of the actual
4 case; namely, by the STL and its team members.

5 Q. [9:46:31] And what is the name of the STL, please?

6 A. [9:46:37] The name of the senior trial lawyer of the case is Gilles Dutertre.

7 Q. [9:46:45] You were asked to pixilate the faces of individuals visible and
8 the panoramic images of sites in Timbuktu created by a colleague of yours, is
9 that right?

10 A. [9:47:04] Yes, I confirm.

11 MS SACCHI: [9:47:10] Your Honour, by the colleague of the witness, I refer to
12 witness P-0127.

13 Q. [9:47:17] In addition, you were also asked to crop 101 panoramic images
14 which had been selected by the Mali team out of all these panoramic images, is
15 that correct?

16 A. [9:47:36] Yes, that's correct.

17 Q. [9:47:39] Can you now please look at tab 3 of your binder. For the
18 record, this is MLI-OTP-0069-1320 corresponding to tab 3 of the E-Court
19 binder.

20 MS SACCHI: [9:47:59] Your Honour, again, this item contains the name of the
21 witness and it should not be publicly broadcast.

22 Q. [9:48:15] Are you there?

23 A. [9:48:15] I am there.

24 Q. [9:48:16] What is this report about?

25 A. [9:48:19] So the -- the report, it's a technical report basically stating the

1 several stages been made on the selection and several working processes done
2 on panoramic images.

3 MS SACCHI: [9:48:50] Your Honour, I've been notified that the ERN is not
4 appearing in the French transcript. I will repeat the ERN for the record of the
5 report, which is MLI-OTP-0069-1320.

6 Q. [9:49:16] Mr Witness, I will direct you to page 0069-1323.

7 A. [9:49:32] Yes, I'm there.

8 Q. [9:49:33] At the bottom of the page, there is a name - which you should
9 not read out loud - a date and a signature.

10 Whose signature is it?

11 A. [9:49:43] That's my own. That is my own signature.

12 Q. [9:49:51] What is the date on this page?

13 A. [9:49:56] The date is the 21st of February 2019.

14 Q. [9:50:07] Before moving to the clarifications to this report - again, this is
15 MLI-OTP-0069-1320, which you provided in the context of your witness
16 preparation - I would like to show you some panoramic images in connection
17 with the report, so please keep the report by your side.

18 MS SACCHI: [9:50:37] Your Honour, this will be done directly from the
19 Prosecution bench and it can be broadcast publicly.

20 Q. [9:50:56] Please go to page MLI-OTP-0069-1322, we are at the heading,
21 "D." which reads, and I'm quoting:

22 "Anonymized faces of selected persons in the panoramic images (selected)".

23 I am now opening MLI-OTP-0066-0636, also at tab 5 of the E-Court binder. It
24 contains 14 folders and I'm opening as an example the folder called, Site_4.

25 Now it contains two images with the suffix "PIX". Am I correct that this

1 means that these panoramic images contain pixilated images?

2 A. [9:52:32] Yes, the suffix is indicating there should be images.

3 I have a question, I can't see them on my screen, should I just switch or...?

4 Yes, thank you.

5 Q. [9:53:02] Are you there now?

6 A. [9:53:03] Yeah.

7 Q. [9:53:04] So I will open now panoramic images starting with [Group
8 0]-MLI_0722. And I'm now zooming in on the person sitting under the tree on
9 the left side whose face is not visible.

10 These panoramic images contained in MLI-OTP-0066-0636 are the ones
11 described in the report at page MLI-OTP-0069-1322 in paragraph "D.", is this
12 correct?

13 A. [9:54:41] Yes, I can confirm that that's correct.

14 Q. [9:54:49] Please go now back to page MLI-OTP-0069-1323. The heading
15 of paragraph "F." reads, I'm quoting:
16 "Cropping of panoramic images (selected)".

17 A. [9:55:33] Yes, I'm there.

18 Q. [9:55:35] I will now open MLI-OTP-007 -- 67. Sorry, it should be
19 0067-1859, also at tab 8 of the E-Court binder. It contains one folder called,
20 "Panos_selected_PIX_CRP". The folder contains sub-folders named from
21 site_1 to 20 with the exception of site 9.

22 As an example, I will open site_04, which contains seven image files, all of
23 them ending with the suffix "CRP" and two of them also with suffix "PIX".

24 Am I correct that this means that this folder contains panoramic images which
25 were all cropped and two of them also pixilated?

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1 A. [9:57:46] Yes, that's correct. I can confirm that.

2 Q. [9:57:52] I will open as an example, the first one on the list named
3 "[Group]-MLI_0722".

4 Would I be correct that the panoramic images contained in MLI-OTP-0067-1859
5 relate to report MLI-OTP-0069-1320 at page 1323, paragraph "F."?

6 A. [9:59:07] Yes, that's one example of them.

7 Q. [9:59:30] Mr Witness, I am now moving to the clarifications and
8 corrections to the report - so we're still on the same report - so tab 3 of your
9 binder, MLI-OTP-0069-1320.

10 I will start with one correction which resulted in a report dated 14th of April
11 2021, drafted together with your colleague, P-0127, after your witness
12 preparation had taken place.

13 Please look at the first sentence in your report, MLI-OTP-0069-1320 at
14 page 1321, under paragraph "A." It states, and I'm quoting:

15 "The selection of the relevant panorama images was based on a total of 367
16 panoramic images ..."

17 Can you please clarify what is the total amount of panoramic images which
18 were in fact registered?

19 A. [10:01:16] Yes, thank you. The total amount of images produced and
20 registered is 368. 3-6-8.

21 Q. [10:01:35] So the sentence I've read out to you should read, in fact:
22 The selection of the relevant panorama images was based on a total of 368
23 panoramic images.

24 Is that correct?

25 A. [10:01:52] Yes, that's correct.

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1 Q. [10:01:59] Now, based on the correction you just provided, can I please
2 ask you to look at page MLI-OTP-0069-1322 of the same report, in particular,
3 section "C."

4 A. [10:02:27] Yes.

5 Q. [10:02:28] The first sentence under this heading reads, and I'm quoting:
6 "In order for completeness the non-selected 266 panoramic images have been
7 registered..."

8 Am I right that the correct figure of non-selected panoramic images should
9 be 267?

10 A. [10:02:58] For completeness, yes, that's right.

11 Q. [10:03:06] Can you now please look at page MLI-OTP-0069-1323, in
12 particular, paragraph "E."

13 The first sentence after the list of sites reads, and I'm quoting:

14 "The 76 panoramic images have been registered together with the
15 remaining 180 images..."

16 Now, in relation to these remaining images you referred to in this sentence, am
17 I right that the correct figure should in fact be 191 instead?

18 A. [10:04:07] 181. Excuse me, 170 -- no, 191, you're right. My apologies.
19 And it adds up correctly.

20 Q. [10:04:47] Thank you, I was doing the maths myself.

21 At page --

22 PRESIDING JUDGE MINDUA: [10:04:58](Interpretation) Ms Sutherland?

23 MS SUTHERLAND: [10:04:59] Forgive me, I understand there's an issue with
24 the mathematics, but I'm just wondering if we could possibly have some
25 clarification as to the basis of the mistake.

1 PRESIDING JUDGE MINDUA: [10:05:22](Interpretation) Madam Prosecutor,
2 this is a question I was going to put as well.

3 How does it suddenly change like that?

4 MS SACCHI: [10:05:29](Overlapping speakers)... your Honour.

5 Q. [10:05:29] Mr Witness, can you explain the reason for the different figures
6 you're providing now?

7 A. [10:05:34] Yes, thank you. In order to clarify this, it's been stated that
8 there have been -- 368 panoramic images have been produced. As you can see
9 on the page MLI-OTP-0069-1321, under heading "A.", and there, the
10 numbering -- bullet point number 3., it states that on the 24th of August 2018,
11 another image got transferred -- produced. It's replacing one image on site 1.
12 So actually, there were two images containing the same content, that's why I
13 reduced them to 167 (sic).

14 Does that clarify this question?

15 Q. [10:06:59] You said that there was an additional panoramic image that
16 was created, so that would make it to ... That's correct, 368.

17 A. [10:07:14] Yeah.

18 MS SACCHI: [10:07:29] Your Honour, there appears to be a mistake in the
19 transcript at page 14, line 6, I believe that it's mentioned:

20 I would reduce them to 167.

21 But, I believe that the witness mentioned 367.

22 Q. [10:07:56] Mr Witness, can you please confirm?

23 A. [10:07:58] Yes.

24 Q. [10:08:06] Moving on to the next clarification, at page MLI-OTP-0069-1321,
25 in footnote 1, you refer to "Mission report", yet there is no ERN.

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1 I would ask you to look at tab 67 of your binder.

2 A. [10:08:57] Yes.

3 Q. [10:08:58] It contains a report with ERN, MLI-OTP-0063-0037. Is this the
4 "Mission report" you're referring to?

5 A. [10:09:19] Yes, that's the "Mission report" I'm referring to in this footnote.

6 Q. [10:09:24] Still on the same report at pages MLI-OTP-0069-1321 and
7 MLI-OTP-0069-1322, you refer to, "*Technical report on Mali II Panoramas_SC*."
8 and the extension for a PDF file.

9 For instance, I'm referring to the first sentence under paragraph "A." at
10 MLI-OTP-0069-1321 with the heading,
11 "Provided source panoramic pictures (chronology of delivery)" and there is no
12 ERN mentioned.

13 Now can you please look at tab 65 of your binder.

14 A. [10:11:13] Yes, I'm there.

15 Q. [10:11:16] It contains an ERN -- a report with ERN MLI-OTP-0064-0806.
16 Is this the report you intended to refer to?

17 A. [10:11:35] Yes, on both sides I'm -- I'm referring to this report.

18 Q. [10:11:45] Still on pages 0069-1321 and 0069-1322, you also refer to an
19 Excel spreadsheet or table called, "Panoramas_MLI2" and the extension for an
20 Excel file, and I'm referring, for instance, to the first sentence under paragraph
21 "B." at page 0069-1321 with the heading: "Selection process MLI II..." and there
22 is no ERN mentioned.

23 Can you now look at tab 4 of your binder.

24 A. [10:13:04] Yes, I'm there.

25 Q. [10:13:07] It contains an Excel spreadsheet with ERN MLI-OTP-0064-0805.

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1 Is this the Excel spreadsheet you referred to in your report?

2 A. [10:13:33] Yes, it is.

3 Q. [10:13:39] I have now some questions in relation to this table or Excel
4 spreadsheet and, again, the ERN is MLI-OTP-0064-0805. And this is in
5 response also to tab 4 of the E-Court binder.

6 MS SACCHI: [10:15:00] Your Honour, for technical reasons, I will be opening
7 the item from the Prosecution bench and it can be broadcast publicly.
8 Your Honour, with your leave, I would move into private session to ask only
9 one question and it will take one minute, if not less.

10 PRESIDING JUDGE MINDUA: [10:15:25](Interpretation) Court officer,
11 private session, please.

12 (Private session at 10.15 a.m.)

13 THE COURT OFFICER: [10:15:31] We are now in private session, Mr
14 President.

15 PRESIDING JUDGE MINDUA: [10:15:36](Interpretation) Thank you very
16 much.

17 Prosecutor.

18 MS SACCHI: [10:15:40]

19 Q. [10:15:42] Mr Witness, who created this list?

20 A. [10:15:48] I created this list.

21 Q. [10:15:51] Mr Witness, did you create this list alone or with somebody
22 else? And, be mindful that we're in private session, so you can mention
23 names.

24 A. [10:16:12] Yes, so the list got created together with [REDACTED] and it
25 contains the selection of those 101 images and the selection was delivered to

1 me by [REDACTED]

2 MS SACCHI: [10:16:51] Your Honour, we can now go back into open session.

3 PRESIDING JUDGE MINDUA: [10:16:56](Interpretation) Court officer, open
4 session please.

5 (Open session at 10.16 a.m.)

6 THE COURT OFFICER: [10:17:00] We are back in open session, Mr President.

7 PRESIDING JUDGE MINDUA: [10:17:05](Interpretation) Thank you very
8 much.

9 Prosecutor.

10 MS SACCHI: [10:17:07]

11 Q. [10:17:09] Now, MLI-OTP-0064-0805 contains three separate sheet tabs,
12 the one we're looking at now is the sheet tab called, "**PanoGroups**".

13 MS SACCHI: [10:17:30] And your Honour, this is also the third page of the
14 document at tab 4 in the physical binder.

15 Q. [10:17:40] Mr Witness, on this tab, there are different columns named
16 with letters of the alphabet. Column A lists the site numbering, is this correct?

17 A. [10:17:56] Yes, that's correct, I can confirm that.

18 Q. [10:18:01] Column B lists the file names of the panoramic images, is this
19 correct?

20 A. [10:18:13] Yes, that is also correct.

21 Q. [10:18:17] Column C lists the number of individual images used to create
22 each panoramic image, is this correct?

23 A. [10:18:33] Yes, I can also confirm that.

24 Q. [10:18:37] And starting from column D, it lists the ERN of all the
25 individual images used to create each panoramic image, is this correct?

1 A. [10:18:54] Yes.

2 Q. [10:18:58] Are you in a position to remember what is the total amount of
3 single images which were used to create these 101 panoramic images?

4 A. [10:19:17] No, I -- I can't remember by heart, I (indiscernible).

5 Q. [10:19:27] Mr Witness, I will redirect you now to your report at tab 3,
6 MLI-OTP-0069 page 1321. In paragraph "D."-- "B.", sorry, the last paragraph
7 on this page reads, and I'm quoting:

8 "Using the spreadsheet allowed also a check of the indicated amount of origin
9 source images. Note that the following panoramic images are missing single
10 images in within their indicated range..." and you list three panoramic images.

11 If we could have now again the Excel spreadsheet MLI-OTP-0064-0805, we can
12 look at an example of one of these three panoramic images, and I'm now at site
13 10 called - as we can see in column B, "[Group 2]-MLI_1867".

14 Now, if we move horizontally on this row, we see that between column F and
15 column H, there is an empty cell. Am I right that the empty cell here
16 corresponds to the missing image?

17 A. [10:22:13] Yes, you are right there.

18 Q. [10:22:20] Are you in a position to explain why this image is missing?

19 A. [10:22:28] Yes, according to the production of all those panoramic images
20 through my colleague, he mentioned to me that he had to -- usually they used
21 a range of images to produce one panoramic image. For example, when you
22 say image number 1, up to image number 10, for example, and you matched
23 them together and you create the panoramic file, and for each panoramic file
24 you create, it also says the amount of images it was using, in that case it would
25 have been 10. But he said due to some difficulties in the production, he had to

1 remove some of those images in the -- in the range.

2 In my example, for example, image number 7 should have been removed, so
3 then it still says in the file naming that it's the panoramic image, that it's
4 using -- images range from one to 10, but then it would say nine images used.
5 So I was using this Excel spreadsheet to indicate where it says the amount of
6 image used in the file name also confirms the range indicating in the file name.

7 Q. [10:24:05] Mr Witness, other than these panoramic images, which we
8 have seen, Mr Dutertre also requested you to prepare aerial panoramic images
9 using images taken by a drone, am I correct?

10 A. [10:24:22] Yes, that's correct.

11 Q. [10:24:29] Which software did you use to create these panoramic images?

12 A. [10:24:36] For that software, I used -- for that process, I used a software
13 called PTGui Pro version.

14 Q. [10:24:52] And very briefly, how does this software work?

15 A. [10:24:57] Very briefly, this is a software where you are able to merge
16 single images together to a spherical image, also known as a panoramic image.

17 Q. [10:25:29] And in relation to the video frames you used, to which video
18 are you referring to?

19 A. [10:25:40] There were several videos I used. The one I'm -- when I look
20 at my report at MLI-OTP-0069-1323, under the heading "G.", I used several
21 source videos for each site where it was available, and the naming of the
22 resulting panoramic images are referring to the source. For example, here,
23 site 1, then the name of the video created by this drone. There were two
24 different drones used during this mission, so it's also indicating the sensor, and
25 also the video ERN number.

Trial Hearing
MLI-OTP-P-0631

(Private Session)

ICC-01/12-01/18

1 Q. [10:26:44] You just referred to a mission, are you in a position to say who
2 was in this mission?

3 A. [10:26:58] Yes, I am.

4 Q. [10:27:02] Can you please state the name of this person.

5 A. [10:27:09] Yes, on this mission, I'm referring to the report, it was [REDACTED]
6 [REDACTED] Mr Xavier Laroche. Also, he was
7 there with an assistant or another person, I'm not sure if I can mention the
8 name here.

9 PRESIDING JUDGE MINDUA: [10:27:32](Interpretation) Prosecutor, we're in
10 open session.

11 MS SACCHI: [10:27:35] That's correct, your Honour. If we could move into
12 private session very briefly for the second name of this person.

13 PRESIDING JUDGE MINDUA: [10:27:45](Interpretation) Private session,
14 please, court officer.

15 (Private session at 10.27 a.m.)

16 THE COURT OFFICER: [10:27:51] We are in private session, Mr President.

17 PRESIDING JUDGE MINDUA: [10:28:05](Interpretation) Thank you very
18 much.

19 Prosecutor.

20 MS SACCHI: [10:28:09] Thank you, your Honour.

21 Q. [10:28:11] Mr Witness, if you could please state the name of this second
22 person that you were about to mention.

23 A. [10:28:18] Yes, maybe the pronunciation is not really right, but I think it's
24 [REDACTED] something like this.

25 MS SACCHI: [10:28:32] Your Honour, we can move back into open session.

Trial Hearing
MLI-OTP-P-0631

(Open Session)

ICC-01/12-01/18

1 PRESIDING JUDGE MINDUA: [10:28:39](Interpretation) Court officer, open
2 session, please.

3 (Open session at 10.28 a.m.)

4 THE COURT OFFICER: [10:28:47] We are back in open session, Mr President.

5 PRESIDING JUDGE MINDUA: [10:28:53](Interpretation) Thank you very
6 much.

7 Prosecutor.

8 MS SACCHI: [10:28:57] Thank you, your Honour.

9 Just a brief note for the Court, when the witness is referring to Mr Xavier
10 Laroche that would be witness P-0120 -- sorry, P-102.

11 Q. [10:29:10] Mr Witness, are you able to -- are you able to tell when this
12 mission took place?

13 A. [10:29:25] I don't know the exact dates, I would have to look at the
14 mission report, but I believe it was in 2018, in mid-2018, but I'm not -- I don't
15 want to be too specific here.

16 MS SACCHI: [10:29:46] Your Honour, I will now open MLI-OTP-0068-3199,
17 also at tab 9 of the E-Court binder and it can be publicly broadcast.

18 Q. [10:30:18] Now, this folder contains 17 image files and I will open as an
19 example the first one, starting with site 1.

20 Do you recognise these files?

21 A. [10:30:43] Yes, I do.

22 Q. [10:30:47] Am I right that they correspond -- the files in
23 MLI-OTP-0068-3199 relate to MLI-OTP-0069-1323, paragraph "G." with the
24 heading: "Creating panoramic aerial images from drone footage".

25 A. [10:31:34] Yes, that's right, that's one example.

1 MS SACCHI: [10:31:45] Your Honour, before I move on to the next project, I
2 would like to mention for the information of the Court, that the panoramic
3 images referred to in MLI-OTP-0069-1320 were used by witness P-0204 and
4 witness P-03 -- sorry, 630 to create the situ interactive platform with ERN
5 MLI-OTP-0078-0985 referred to in the Rule 68(2)(b) application.

6 Q. [10:33:06] Mr Witness, I'm now moving on to the second project you
7 worked on in 2020, related to a panoramic image of the interior of the Hotel La
8 Maison.

9 Who instructed you to prepare this project?

10 A. [10:33:28] Mr Gilles Dutertre instructed me.

11 Q. [10:33:34] What were you requested to do by Mr Dutertre?

12 A. [10:33:43] [REDACTED]

13 [REDACTED]

14 [REDACTED]

15 Q. [10:34:12] [REDACTED]

16 [REDACTED]

17 A. [10:34:20] [REDACTED]

18 [REDACTED]

19 MS SACCHI: [10:34:34] And for the Court's information, Éric Baccard is also
20 witness P-0055.

21 Q. [10:34:40] Do you also remember when this mission took place?

22 A. [10:34:48] 2013 by heart, but I can't remember -- I don't remember the
23 exact dates.

24 Q. [10:35:05] Who selected the images among the ones taken by Éric Baccard
25 to be used for this project?

1 A. [10:35:13] I was provided with a data carrier by the team, and, after
2 reviewing them, I made a selection of the visible images.

3 Q. [10:35:31] And in which format were the pictures?

4 A. [10:35:37] As I remember, I -- can I look at the report already or
5 (indiscernible) later on? As I remember they were JPEG images.

6 Q. [10:35:55] We will look at your report in a moment, if you could --

7 A. [10:35:58] Okay, thank you.

8 Q. [10:35:59] -- if you could please explain first, the software which you used
9 to create the panorama?

10 A. [10:36:08] For this particular image, I used the same software just
11 mentioned before called PTGui.

12 Q. [10:36:21] And can you explain, again very briefly, how it works? If it
13 works differently from what you explained before?

14 A. [10:36:30] No, it's basically for the same intention used to combine those
15 images.

16 Q. [10:36:40] And what was the outcome of this process?

17 A. [10:36:45] The outcome was a panoramic image covering a horizontal
18 area of 360 degrees and something about 40-something degrees in vertical.

19 MS SACCHI: [10:37:12] Your Honour, I will now open from the Prosecution
20 bench MLI-OTP-0069-7347, corresponding to tab 11 of the E-Court binder, and
21 it can be broadcast publicly.

22 Q. [10:37:48] Mr Witness, do you recognise this image?

23 A. [10:37:59] Yes, I do.

24 Q. [10:38:02] Can you state what it is?

25 A. [10:38:06] That's the end product of the stitching process with the

1 software with the selected images by me -- yeah, of this report, the final
2 product.

3 Q. [10:38:23] If you can now please look at tab 10 of your binder
4 corresponding to tab 8 of the E-Court binder, MLI-OTP-0069-7379.

5 MS SACCHI: [10:38:30] And since this item contains the name of the witness,
6 it should not be publicly broadcast.

7 THE WITNESS: [10:38:55] Yes.

8 MS SACCHI: [10:38:55]

9 Q. [10:38:55] What is this document?

10 A. [10:38:58] So this is a technical report prepared by me, by myself,
11 explaining the methodology of the production of the specific panoramic image.

12 Q. [10:39:17] If you could please go to page 0069-7384.

13 A. [10:39:33] Yes.

14 Q. [10:39:36] At the bottom, there is a name - not to be read out loud - a date
15 and a signature. Whose signature is this one?

16 A. [10:39:46] That's my own signature.

17 Q. [10:39:51] And what is the date?

18 A. [10:39:53] The date is the 12th of February 2020.

19 Q. [10:40:01] Mr Witness, I have one last question for you in relation to
20 a different project you worked on that was not conducted by you, but which
21 you assisted by taking photographs in 2017.

22 Can you please look at items from tab 14, MLI-OTP-0049-2 -- sorry, 0692, that
23 would be the full ERN, to tab 64, MLI-OTP-0049-0743.

24 MS SACCHI: [10:41:00] And if the court officer could maybe display for the
25 public, item 60 on the Prosecution list, which is MLI-OTP-0049-0738.

- 1 Q. [10:41:20] Have you looked at all the pictures in your binder?
- 2 A. [10:41:27] Not all of them.
- 3 Q. [10:41:33] If you could please do.
- 4 A. [10:42:57] Yes.
- 5 Q. [10:42:59] Can you confirm you have looked at all the pictures?
- 6 A. [10:43:03] I have looked from tab 14 to tab 63, so yes, I did.
- 7 Q. [10:43:15] Can you look at 64 as well, please.
- 8 A. [10:43:19] Yes, then I look at too, 64, yes.
- 9 Q. [10:43:24] Who is the author of these photographs?
- 10 A. [10:43:29] The author is me, I -- I took the photographs.
- 11 Q. [10:43:36] And can you please tell in which context you took these
- 12 photographs?
- 13 A. [10:43:42] I was asked to assist the view of some evidence back in 2017,
- 14 where I assisted in, yeah, documenting that (indiscernible) material.
- 15 Q. [10:44:03] Thank you, Mr Witness, I have no more questions for you.
- 16 MS SACCHI: And your Honour, before I conclude, I would like to mention
- 17 for the information of the Court that these pictures refer to report
- 18 MLI-OTP-0056-0041, from witness P-0915, submitted through the 68(2)(b)
- 19 application concerning this last witness.
- 20 And this concludes my questioning, your Honour.
- 21 PRESIDING JUDGE MINDUA: [10:44:59](Interpretation) Thank you very
- 22 much, Madam Prosecutor. So this is the end of the examination-in-chief, is it?
- 23 MS SACCHI: [10:45:07] Yes, your Honour.
- 24 PRESIDING JUDGE MINDUA: [10:45:09](Interpretation) Thank you very
- 25 much.

1 So I shall now turn to Mr Kassongo.

2 Do the Legal Representatives of Victims have any questions to put after this
3 examination-in-chief on the part of the Prosecutor?

4 MR KASSONGO: [10:45:24](Interpretation) Thank you very much, Mr
5 President, your Honours. After having heard the examination in chief on the
6 part of the Prosecution and with the answers furnished by the witness, the
7 Legal Representatives for the Victims have no intention of putting any
8 questions to this witness. However, with the leave of the Chamber, of course,
9 the team of the Legal Representatives for the Victims would like to thank the
10 witness for the clarity of the information provided.

11 PRESIDING JUDGE MINDUA: [10:46:00](Interpretation) Thank you very
12 much, Mr Kassongo.

13 Now let me turn to the Defence.

14 Ms Sutherland, are you at the ready? We have 15 minutes before the break.

15 MS SUTHERLAND: [10:46:11] Mr President, we have yet to distribute our
16 binders; so for that reason, we would ask that perhaps it would be wise to take
17 the break now and recommence at 11.30.

18 PRESIDING JUDGE MINDUA: [10:46:30](Interpretation) We are not opposed
19 to -- the Chamber is not opposed to that. But I would indicate that the Office
20 of the Prosecutor used one hour and six minutes; so you understand what I
21 mean by that.

22 Thank you very much, Ms Sutherland.

23 We shall now rise, take the break and reconvene at 11.30.

24 (Trial Chamber confers)

25 PRESIDING JUDGE MINDUA: [10:47:20](Interpretation) Ms Sutherland, the

1 Chamber is of the mind that half an hour would be enough for the break,

2 would it not?

3 MS SUTHERLAND: [10:47:32] Mr President, I'm entirely in your hands. We

4 will -- if it reassures you, I don't anticipate taking too long myself.

5 PRESIDING JUDGE MINDUA: [10:47:45](Interpretation) Very well. So we

6 shall rise and we shall reconvene at 11:20 -- 11:20. Court is suspended.

7 THE COURT USHER: [10:47:59] All rise.

8 (Recess taken at 10.47 a.m.)

9 (The hearing resumes in open session at 11.21 a.m.)

10 THE COURT USHER: [11:21:36] All rise. Please be seated.

11 PRESIDING JUDGE MINDUA: [11:21:50](Interpretation) Court is in session,

12 once again.

13 Ms Sutherland, over to you for your cross-examination of the witness, please.

14 MS SUTHERLAND: [11:22:11] Thank you very much, Mr President.

15 QUESTIONED BY MS SUTHERLAND:

16 Q. [11:22:17] Good morning, Mr Witness. We will both be speaking in

17 English. I have a terrible tendency to go too quickly for the interpreters, so I

18 will be being kept in check by my assistant. If I pause unnaturally or ask you

19 to pause unnaturally, it will be because of that, so let's see how we do.

20 Mr Witness, earlier you were explaining there was some issues with

21 mathematics in your report, which would appear to indicate that there's very

22 much a human element in the process.

23 Would you agree that there is room, therefore, for human error in the work

24 that you are doing?

25 A. [11:23:06] Yes, to a certain degree, I guess, yeah.

1 Q. [11:23:10] And could you --

2 A. [11:23:10] Yeah.

3 Q. [11:23:10] -- explain where and when that can occur?

4 A. [11:23:17] The human error, that -- that can always happen; a very
5 abstract question. I would say the human error can be minimised by simple
6 mechanisms like a peer review, for example. But there's -- there's always a
7 risk of something that appears in all kinds of work that is done by humans.

8 Q. [11:23:40] And do you have a peer review mechanism within your office?

9 A. [11:23:45] Within our office, usually reports get peer reviewed by
10 colleagues, yes.

11 Q. [11:23:51] Can you explain in a little bit -- with a little bit more precision?

12 A. [11:23:56] As soon --

13 Q. [11:23:57] Which colleague, for instance?

14 A. [11:23:58] Usually colleagues with quite similar background are asked to
15 peer review your report or cross-check it for grammatic -- usually, it's
16 grammatical corrections, as you can hear, I'm not a native English speaker - but
17 also on checking some numbers.

18 Q. [11:24:19] And did that occur with each of the reports that you'd
19 prepared?

20 A. [11:24:24] Yes.

21 Q. [11:24:26] Are you able to identify - although, we would have to go into
22 private session - who peer -- conducted those peer reviews?

23 A. [11:24:35] I sent a review, I sent a -- not the review, I sent the papers to
24 my colleague who prepared those panoramic images in the first place.

25 Q. [11:24:45] Thank you. Were there -- for any of the reports, any of the

1 images that you were dealing with, were there any issues with the way in
2 which these were collected in the field?

3 A. [11:25:06] Can you please elaborate on this, I don't know what you mean.

4 Q. [11:25:09] For instance, my understanding is that to take a panorama, it's
5 ideal if a tripod is used. Were tripods used?

6 A. [11:25:21] To my understanding that was not the case there, yeah.

7 Q. [11:25:25] Not the case, when?

8 A. [11:25:26] During this mission.

9 Q. [11:25:28] Which mission?

10 A. [11:25:30] In the one I'm referring to in the report.

11 Q. [11:25:34] Is that the 2018 mission?

12 A. [11:25:39] Yes.

13 Q. [11:25:46] Were there -- what problems did that create?

14 A. [11:25:52] It can create some difficulties in combining the images as the
15 ideal situation would be that the camera is always rotating around its centre
16 point. Is that clear enough?

17 Q. [11:26:15] So when you -- sorry, when you said "difficulties combining",
18 what -- can you elaborate with precision what -- what those difficulties are and
19 what combining -- what you mean by "combining"?

20 A. [11:26:32] Combining to -- into a panoramic image, you take several
21 single images taken by the camera, okay? In the ideal world, this camera
22 would -- would have been set on a tripod and always rotated in the same angle,
23 in the same orientation, ensuring that each single image taken during this
24 process got enough overlap with the prior one. So you have in those
25 overlapping areas enough identical points to combine them into one

1 spherical image. Combining it -- you could also refer maybe in stitching
2 together, sort of a term used.

3 Q. [11:27:28] And just to be very very clear, when you say "spherical", do
4 you mean spherical or do you mean circular?

5 A. [11:27:37] Spherical.

6 Q. [11:27:40] Spherical.

7 A. [11:27:41] Yeah.

8 Q. [11:27:42] So there's a -- both a --

9 A. [11:27:45] Maybe for --

10 Q. [11:27:47] (Overlapping speakers) horizontal image and the --

11 A. [11:27:48] Vertical, exactly. An ideal panoramic image - if you have the
12 equipment and you have the time to do it - would be to set it on a tripod. You
13 do all the image in a horizontal way of view and it's also in a vertical way of
14 view. Maybe for your understanding, that you just stand on one spot, and
15 you turn yourself around, like without moving away from the spot and you
16 look up and down the whole time. You see everything, except what is under
17 your feet.

18 Q. [11:28:23] Thank you. So if they weren't taken with a tripod, did this
19 have any negative impact on your ability to make the panoramas?

20 A. [11:28:35] It makes it harder, yes.

21 Q. [11:28:37] And for whom?

22 A. [11:28:39] For the one whose processing those panorama -- those single
23 images in terms to produce a panoramic image.

24 Q. [11:28:49] And is it -- were you doing it manually?

25 A. [11:28:55] What manually?

1 Q. [11:28:56] The stitching together of the panoramas?

2 A. [11:29:01] We have to distinct here. There were an image -- panoramic
3 image process production, the big bulk was done by my colleague I referred to.
4 There are images created by me. They were basically those aerial images
5 and -- and also the one from the second product I referred to, where we saw
6 this example before.

7 Q. [11:29:34] When you say created by you --

8 A. [11:29:36] Yes.

9 Q. [11:29:37] -- you -- which, what do you mean? What do you mean,
10 created by you?

11 A. [11:29:44] Okay, they're -- they're -- when we speak of the whole bulk of
12 images - yes? - of panoramic images, we speak about today or got registered,
13 a big part was -- was done by my colleague I referred to, only a small part was
14 done manually by me. And, this is, namely, the one -- the panoramic images
15 they were derived from the footage from a drone, from unmanned aerial
16 vehicle, and the single panoramic image got derived from this, yeah, a separate
17 project where only one image was -- was created from this room we just had
18 a look at.

19 Q. [11:30:33] And with the aerial images, when you say you created the
20 image, did you do that manually?

21 A. [11:30:41] Yes.

22 Q. [11:30:42] How did you do that?

23 A. [11:30:43] The image was taken out of the video footage, as it's stated in
24 the report, and you have to imagine that this drone took off on a certain place,
25 then it was hovering in the air, rotating and turning constantly, and rotating to

1 camera in a horizontal way and also in a vertical way. So out of this images,
2 we were able to extract single frames and then combine those frames into one
3 panoramic image.

4 Q. [11:31:25] Is the nature transforming something three dimensional into
5 two dimensional, is it fair to say that that's inherently distorting?

6 A. [11:31:41] I don't understand your question. But also I want to refer that
7 we are always working in a two-dimensional way here, yeah?

8 There's -- there's no third dimension included in the work here.

9 Q. [11:31:59] For instance, you wouldn't be able, in isolation, to use the
10 images to calculate distances?

11 A. [11:32:11] Exactly.

12 Q. [11:32:12] Because there's the nature of putting something that is real life
13 three dimensional into two dimensions --

14 A. [11:32:22] Exactly.

15 Q. [11:32:22] -- forbids that?

16 A. [11:32:24] Yeah.

17 Q. [11:32:25] Thank you. At Prosecution bundle tab 2, and the reference is
18 MLI-OTP-0066-0559 at page 0560, at footnote 3, do you -- can you see that?

19 A. [11:32:54] Excuse me, we are on tab 2, right?

20 Q. [11:33:08] Prosecution bundle, tab 2.

21 A. [11:33:11] That's the big binder. Apologies. Ah, I see. Yes, please.

22 Q. [11:33:24] So at the bottom of the page, at footnote 3, it reads:

23 "The naming in the Technical report (PRF#360065) was has been done
24 sequential ordered by sites."

25 Mr Witness, the Defence bundle, so the other one, tab 4, and the MLI number is

Trial Hearing
MLI-OTP-P-0631

(Open Session)

ICC-01/12-01/18

1 MLI-OTP-0077- -- oh, I've got the wrong number, 43 -- 4385, at page 4395, at
2 paragraph 10, and I will read the paragraph for the record, it reads:
3 "PS directed the Witness's attention to the fact that in site 1, in folder
4 MLI-OTP-0067-1860, there is one panoramic image which is named "DELETE".
5 He was asked to clarify what that meant. P-0631 stated having no answer for
6 the question since it was not him who named the panoramic images but stated
7 it was him who grouped the panoramic images into the respective folders."
8 Is that an accurate description of what you told the Prosecution?

9 A. [11:35:19] Yes.

10 Q. [11:35:20] So are you able to tell us who did name the panoramic images?

11 A. [11:35:26] Also those was one of those panoramic images created by my
12 colleague.

13 Q. [11:35:31] But the panoramic images in general, who named them?

14 A. [11:35:36] I -- also my colleague, I don't know the methodology, what was
15 used. I am -- yeah, I don't want to make any assumptions here.

16 Q. [11:35:48] But you were the one who grouped the images into the folders?

17 A. [11:35:52] Yes.

18 Q. [11:35:52] How did you do that?

19 A. [11:35:55] Because it was part of the -- because I am -- it was part of the
20 bulks. He delivered those panoramic images he created to me in bulks, and
21 you have to imagine it's like a zip file containing several folders, in those
22 folders mentioning the sites. So I -- this is how -- how it got classified.

23 Q. [11:36:29] When you say "he", who are you referring to?

24 A. [11:36:32] My colleague who created those panoramics.

25 Q. [11:36:35] Ah, okay. So the --

1 A. [11:36:36] So the delivery already were sorted by sites.

2 Q. [11:36:43] Were you able to independently verify that the photographs
3 belonged in those groups?

4 A. [11:36:52] No.

5 Q. [11:36:54] No. Is this software that you were using able to -- for instance,
6 if the software were presented with 1,000 images, would it be able to sort into
7 sites itself or does that require a sort of human element?

8 A. [11:37:21] I have to say I can't give you an answer to this because that was
9 a difference *software to use -- he used for this production of the images; so I
10 can't tell you anything about it.

11 Q. [11:37:34] Okay. So the panoramic images were dictated by the folders
12 that were predetermined? Is that -- am I getting the methodology the right
13 way around?

14 A. [11:37:50] We got the -- so with "we", I mean, refer to my colleague and
15 me. We got the raw images, yeah? So the images taken on the mission
16 already sorted by site, site 1, and then you have a whole bunch of images.
17 Those were taken by my colleague to create those panoramic images. Then he
18 gave them to me also in site folders, site 1, with all the panoramic images
19 he'd -- he'd taken, and so they were -- yeah, then registered.

20 Q. [11:38:30] So if there were a problem at the very first step of organising
21 the photographs into site folders, for instance, a rogue photograph goes into
22 the wrong folder, would you and/or the software be able to identify that?

23 A. [11:38:51] I don't know if the software would be able to handle that. I
24 think a manual review would have been possible, yes.

25 Q. [11:39:07] And as to the locations of the sites, was there any way of

1 independently verifying their location?

2 PRESIDING JUDGE MINDUA: [11:39:33](Interpretation) Prosecutor.

3 MR DUTERTRE: [11:39:34](Interpretation) Yes, your Honour. I would

4 remind everyone or perhaps we could -- perhaps we don't need to go into

5 closed session, but something very precise has been asked for to pixelize

6 panoramas and to crop them. So all these questions are speculative, and, I've

7 allowed them, but I don't know to what extent it helps the Chamber with

8 regards to the answers. He made a panorama -- he indicated this, he can be

9 asked questions on that, but with regards to how and why et cetera, that is

10 a very specific task.

11 PRESIDING JUDGE MINDUA: [11:40:16](Interpretation) Ms Sutherland.

12 MS SUTHERLAND: [11:40:33] Mr President, I'm just trying to understand the

13 process by which this was done. He is one of the only witnesses whom we

14 can ask about this, and, from my own personal understanding - and, therefore,

15 I would assume it would assist the Bench - I find it important to understand

16 where error can creep in and how, if that -- whether that can be resolved and

17 by whom.

18 PRESIDING JUDGE MINDUA: [11:41:04](Interpretation) Prosecutor, I think

19 that Ms Sutherland is right, is she not? In terms of the methodology and the

20 system?

21 MR DUTERTRE: [11:41:20](Interpretation) The witness indicates that the -- he

22 wasn't the one who did the panoramas. Now, the person who did them will

23 come and testify; so Ms Sutherland can usefully ask questions with regards to

24 that, knowing that this witness - where it concerns the essential parts of the

25 panoramas - has pixelised them and cropped them. * He made

1 drones...panoramic images from the drone images and another panoramic
2 image. Perhaps questions could be asked with regards to those elements, rather
3 than elements which were made by his colleague.

4 MS SUTHERLAND: [11:42:04] I'll move on, Mr President.

5 PRESIDING JUDGE MINDUA: [11:42:08](Interpretation) Please go ahead.

6 MS SUTHERLAND: [11:42:09]

7 Q. [11:42:10] Regarding the panoramas from the aerial -- of the aerial
8 panoramas, can -- can errors creep in regarding orientation taken from
9 those? Does that make sense?

10 A. [11:42:29] I don't know what you mean with orientation.

11 Q. [11:42:33] Could it be the wrong way around, essentially?

12 A. [11:42:39] I still don't know what you mean with the wrong way around.

13 Just to clarify the methodology applied there, so there were video footage
14 taken - yeah? - on a certain location, also documented with GPS locations in
15 there. This drone took off on a vertical flight to a certain altitude and it turned
16 around its axis to take a video footage. Out of this video footage, it took
17 single frames with the software. Then, with those single frames, you create
18 a panoramic image.

19 And I don't know what you mean with the orientation? Maybe you can
20 elaborate on this.

21 Q. [11:43:37] I suppose what I'm asking is, is it possible that any errors can
22 creep in at that point?

23 A. [11:43:44] How -- how would you define an error in there? I don't
24 understand that.

25 Q. [11:44:01] Does it independently measure 360 degrees or could you take

1 a 270 degree picture and then it would create a 360 degree --

2 A. [11:44:14] If you just know, it's 360 degree pictures because you would be
3 able to detect that when there would be some -- some missing content. For
4 example, if you're standing in the room, and with 270 degrees, one wall is
5 missing, so...

6 Q. [11:44:41] It's easy to tell that in a four-wall room, but less easy at sea, for
7 instance?

8 A. [11:44:52] On the sea, there might be a possibility to see that, yes.

9 But -- but also it's -- out of experience, I can say it's very easy to distinct if
10 there's some content missing if you have like certain gaps or steps on adjoining
11 areas.

12 Q. [11:45:23] The panorama that you made of the Hotel La Maison, how did
13 you geolocate that?

14 A. [11:45:40] Is it geolocated? Does it have a GPS column on it or ...

15 Q. [11:45:48] Well, how did you -- did you independently verify where it
16 was?

17 A. [11:45:51] No, I just -- I just worked with the images.

18 Q. [11:45:59] And were there any problems with the way that those images
19 were collected in the field?

20 A. [11:46:06] As stated in the report, it was -- it was possible to merge them
21 together to a certain degree of quality, yes.

22 Q. [11:46:20] What do you mean by "to a certain degree of quality"?

23 A. [11:46:28] Also as stated here, it was those pictures, those selected
24 pictures, in order -- when they were taken in 2013, I believe they were not
25 taken in a -- in a manner to create a panoramic to -- yeah, to the best

1 methodology to -- to apply it to. So it means also no tripod. And as I was
2 also explaining, there was different aperture used, so you had -- also have
3 a certain different extent of light in there, so it was harder to merge them
4 together, yes, to stitch them.

5 Q. [11:47:07] And you stitched them manually?

6 A. [11:47:09] Yes.

7 Q. [11:47:10] Was that because it was problematic?

8 A. [11:47:13] Yes, also.

9 Q. [11:47:17] Were they taken from multiple points of view?

10 A. [11:47:31] How would you define it? That they're -- I -- I assume it's
11 unavoidable that it's not exactly the same. So this is why there were those
12 difficulties.

13 Q. [11:47:53] And how do you overcome those difficulties?

14 A. [11:47:59] That you have to find corresponding points, so-called tie points
15 between the overlap of those single images.

16 Q. [11:48:12] And if you were at a different distance from a specific point --

17 A. [11:48:16] Yeah.

18 Q. [11:48:17] -- would that have to be remedied at the point when you're
19 stitching the images together?

20 A. [11:48:24] Yes.

21 Q. [11:48:25] And how would you do that?

22 A. [11:48:27] I mean, those are difficulties, it's a transformation at the end.
23 So, for example, if you take a picture from an area really close and then you go
24 further away, you still have those corresponding points, but obviously the
25 distances between those are different. So then it will give you a number,

1 a quantitative, a number of this error.

2 Q. [11:49:00] What do you mean by that?

3 A. [11:49:03] Okay, so you have two images and you have the same content

4 in there, for example - yeah? - but they were taken from a different distance.

5 Let's say you take a picture of the same triangle, yeah? One is close and one is

6 further away, and then of course the -- then you say, This corner of the triangle

7 is the same corner of this triangle in those images - and you do it with all three

8 of them - then it would say, Listen, there's a certain degree of error in there

9 because the distance, and, we speak in a unit of pixels, is different.

10 Q. [11:49:50] So you would list the margin of error?

11 A. [11:49:53] Yeah.

12 Q. [11:49:55] And would that be listed in your report?

13 A. [11:50:01] Yes.

14 Q. [11:50:02] And does that risk greater levels of distortion?

15 A. [11:50:08] To a certain degree, yes. So it's also not possible to merge

16 something together what is made on a really close range than, for example,

17 than on a -- on a faraway distance.

18 Q. [11:50:24] And if something -- if a photograph is taken from one corner of

19 a room and then from another corner of the room, what kind of problem does

20 that create?

21 A. [11:50:35] Yeah, then that would not work. Yeah. First of all, you don't

22 probably have enough overlap, but even if you took it from the same time, it's

23 the -- the perspective distortion of the image would be too big.

24 Q. [11:51:04] Thank you very much, Mr Witness.

25 MS SUTHERLAND: I have no further questions, your Honour.

1 PRESIDING JUDGE MINDUA: [11:51:21](Interpretation) Ms Sutherland, if I
2 understand correctly, this is the end of your cross-examination?

3 MS SUTHERLAND: [11:51:28] Yes, Mr President.

4 PRESIDING JUDGE MINDUA: [11:51:43](Interpretation) Very well, thank
5 you very much.

6 Obviously, I don't think, but I'm going to ask the question to the Office of the
7 Prosecutor, if there any additional questions?

8 MS SACCHI: [11:51:57] No, your Honours, there aren't.

9 PRESIDING JUDGE MINDUA: [11:52:01](Interpretation) Very well, thank
10 you very much, Madam Prosecutor.

11 Witness, I now turn towards you. We are therefore coming to the end of your
12 testimony and on behalf of the Chamber, I would like to thank you once again
13 for having answered the questions in a clear and precise manner. Your
14 testimony is now over. I would like to wish you all the best in your work for
15 the future.

16 (The witness is excused)

17 PRESIDING JUDGE MINDUA: [11:52:50](Interpretation) I now turn to the
18 Office of the Prosecutor.

19 So I understand that our next witness, the 31st, will be witness P-0617, is that
20 correct?

21 MR DUTERTRE: [11:53:01](Interpretation) The next witness, your Honour, is
22 P-617 on Monday. I have a hesitation as to whether it's the 31st or the 30th.
23 What is certain is it's 617.

24 PRESIDING JUDGE MINDUA: [11:53:19](Interpretation) It's the 31st
25 according to my calculations.

1 Very well, so that will be the witness for Monday, 3rd of May at 9.30.

2 We are now coming to the end of this hearing.

3 I would like to thank of course the parties and participants. I would also like
4 to thank the court reporters and the interpreters, and I also will not forget our
5 security officers who are with us. And, our audience today in the gallery, we
6 have one person, and I would like to thank that person for coming as well as
7 the public who is following us from afar.

8 I would like to wish you all a very good day.

9 We shall now adjourn.

10 Court is adjourned.

11 THE COURT USHER: [11:54:13] All rise.

12 (The hearing ends in open session at 11.54 a.m.)

13 CORRECTIONS REPORT

14 The following correction, marked with an asterisk and included in the
15 audio-visual recording of the hearing, is brought into the transcript.

16 Page 33 line 9

17 "of ware" Is corrected to "software"

18 SECOND CORRECTIONS REPORT

19 The following correction, marked with an asterisk and not included in the
20 audio-visual recording of the hearing, is brought into the transcript.

21 Page 34 line 25-page 35 line 2:

22 ' This is something that he did with the drones, so panoramas were done using
23 drones.' Is corrected to

24 ' He made drones...panoramic images from the drone images and another
25 panoramic image.'