CONFIDENTIAL

09:17:52 IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF TEXAS
(TEXARKANA DIVISION)

BELL ATLANTIC CORPORATION and	)	Civil Action
DSC COMMUNICATIONS CORPORATION,	)	No. 5-96CV45
Plaintiffs,	)	
vs.	)	
AT&T CORPORATION and	)	
LUCENT TECHNOLOGIES, INC.,	)	VOLUME I
Defendants.	)	PAGES 1 - 133

NOTICE: PARTS OF THIS TRANSCRIPT MAY BE CONFIDENTIAL PURSUANT TO PROTECTIVE ORDER

Deposition of **RICHARD LEE SCHMALENSEE**, held at the offices of Baker & Botts, 1299 Pennsylvania Avenue, N.W., Washington, D.C., 20004, commencing at 9:39 A.M., Wednesday, January 8, 1997, before JANICE SCHUTZMAN.

GOVERNMENT EXHIBIT 1931

10:23:20 small.

10:23:20 Q. And you don't know what the 1996

10:23:22 numbers are?

10:23:26 A. I do not. Although again, given the

10:23:26 way the contract is written, exactly what the right

10:23:30 question is here is a little ambiguous. But I have

10:23:32 not seen a break-out for 1996.

10:23:34 Q. All right, sir. I'm going to change

10:23:42 topics a little bit here.

10:23:46 In your report you talk about what you

10:23:50 say is a delay on the part of AT&T in the

10:23:58 implementation of the TR-303 interface on the

10:24:02 switch?

10:24:04 A. Yes.

10:24:04 Q. And you draw some conclusions about

10:24:10 that delay.

10:24:24 You have written in the past about the

10:24:26 difficulty of predicting the outcome of research

10:24:32 and development projects in, especially in high

10:24:36 technology.

10:24:38 Do you recall that?

10:24:38 A. I don't recall, but I'm willing to

10:24:40 believe I've done it. In any case, I believe it.

10:24:44 Q. You believe it. Why don't you tell us

10:26:16 to the question.

10:26:16 Is it possible that the delay that you

10:26:18 describe was caused by a normal ordinary, the

10:26:28 normal ordinary difficulty in developing and

10:26:32 implementing a high technology interface?

10:26:32 A. Based on the AT&T documents that I

10:26:36 have seen, no, I do not believe it is.

10:26:38 Q. I'm sorry. Let me try this again.

10:26:44 I'm not asking you for your interpretation of the

10:26:46 evidence. I'm just simply asking whether or not if

10:26:52 you had not seen any evidence at all, if you had

10:26:54 not seen any AT&T documents, whether you would

10:27:02 agree with me that what you call a delay might have

10:27:06 been the result of a normal ordinary development

10:27:12 program with the difficulties that are inherent in

10:27:16 such programs?

10:27:18 A. We're now in a hypothetical world

10:27:18 apart from the facts of this case, as I understand

10:27:22 it.

10:27:22 Q. Well, we're not entirely apart from

10:27:26 the facts in the case. I'm just asking you whether

10:27:34 that is possible, without regard to what you saw in

10:27:34 the AT&T documents. I don't want you to take those

10:27:38 into consideration in your answer.

10:28:56 2 implementation of the TR-303 interface and the
10:29:04 3 switch had in fact been the result of normal
10:29:06 4 technical difficulties encountered in a project
10:29:14 5 such as the development and implementation of an
10:29:16 6 interface, and not the result of some predatory
10:29:20 7 conduct on the part of AT&T, would the effect on
10:29:30 8 Bell Atlantic have been the same?
10:29:30 9 A. If I understand your question
10:29:44 10 correctly, the answer must be yes by tautology.
10:29:54 11 You're saying assuming the same outcome, but a
10:29:56 12 different cause. Does the effect depend on the
10:30:02 13 cause or on the outcome? The effect depends on the
10:30:08 14 outcome.
10:30:08 15 Q. So the answer is the effect on Bell
10:30:08 16 Atlantic would have been the same if the cause of
10:30:12 17 the delay were something other than predatory
10:30:18 18 conduct on the part of AT&T?
10:30:20 19 A. Right. You're asking me to assume
10:30:22 20 that from outside AT&T/Lucent everything is as it
10:30:30 21 was. The only difference is that there is no
10:30:32 22 indication inside of any anti-competitive intent.
10:30:38 23 If everything outside is the same, it follows that
10:30:42 24 the effect is the same.
10:30:46 25 Q. And is the same true for DSC?

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10:49:22 2 Well, I certainly asked people at
10:49:26 3 NERA, who were going through a large number of
10:49:30 4 documents, to pay particular attention to that
10:49:42 5 question as regards both AIN and TR-303 and to pay
10:49:44 6 particular attention to that as they looked at
10:49:46 7 depositions and as they talked to people at Bell
10:49:50 8 Atlantic and DSC.
10:49:52 9 I concentrated on that question when I
10:49:56 10 talked with folks at those two companies. And I
10:50:02 11 also, to put it in context, the central hypothesis,
10:50:18 12 hypotheses have to do with the pattern of conduct,
10:50:18 13 not necessarily particular pieces of the pattern.
10:50:20 14 So while this is an important piece,
10:50:24 15 it had to be analyzed. And I did, and asked people
10:50:26 16 at NERA to keep in mind the broader question of
10:50:30 17 what was AT&T about in these areas, what is the
10:50:36 18 better hypothesis to explain the pattern.
10:50:38 19 Q. Well, I'm just interested in what you
10:50:40 20 did.
10:50:46 21 What analyses did you do to ascertain
10:50:48 22 which of those two hypotheses was correct?
10:50:50 23 A. I believe I answered that question. I
10:51:00 24 read documents, I looked at it in the broader
10:51:02 25 context of all of the material I was getting, so

10:51:10 that indications of, say, a predatory pattern of
10:51:14 conduct elsewhere could inform the most likely
10:51:18 explanation for delay.
10:51:24 I'm not sure what more you have in
10:51:26 mind.
10:51:26 Q. Did you do any other analyses other
10:51:28 than what you've just described?
10:51:30 A. You mean particular quantitative
10:51:32 studies, for instance?
10:51:32 Q. Anything.
10:51:34 A. As opposed to reading?
10:51:34 Q. Anything.
10:51:36 A. I read, I talked, I had others read
10:51:38 and talk on my behalf. That's what I did.
10:51:40 Q. Now your report is full of a lot of
10:51:44 factual assertions. And I'm not going to take you
10:51:50 through all of them; time won't allow that. I just
10:51:52 want to know whether the assertions in your report
10:52:02 are, the factual assertions in your report are
10:52:06 factual assertions that you have ascertained from
10:52:08 your own personal investigation of the facts or
10:52:12 whether they are assumptions that you were asked to
10:52:16 make and then to interpret.
10:52:18 A. I believe -- well, maybe we need to

11:17:26 know that we have been able to obtain data that
11:17:36 relates specifically to Lucent's/AT&T's switches
11:17:40 that would allow us to say that they attained what
11:17:48 is normally thought to be a key or maintained a key
11:17:54 aspect of monopolization, i.e. a dominant share or
11:17:54 dominant presence in the market.
11:17:58 As I said, I'm comfortable with the
11:18:00 notion that there is a restraint of trade and an
11:18:04 exercise of market power. Whether it rises to the
11:18:06 level of holding a monopoly share, I'm a little
11:18:18 nervous. And it's not a question, frankly, that I
11:18:20 recall attaching enormous significance to.
11:18:24 Again, the question is the overall
11:18:24 pattern of conduct here.
11:18:26 Q. Well, you understand that Lucent is
11:18:30 being charged with monopolizing in violation of
11:18:34 Section II of The Sherman Act?
11:18:36 A. I guess that's right.
11:18:36 Q. You don't know that --
11:18:38 A. I worry more about the, trying to
11:18:42 understand the economics than to try to understand
11:18:42 the legal questions. But that's consistent with my
recollection.
11:18:48 Q. And I'm just asking you whether you

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11:33:02 2 THE WITNESS: I mean --

11:33:02 3 MR. SAUNDERS: The witness answered my

11:33:08 4 question. There was no date limitation in my

11:33:08 5 question. And the record is going to stand the way

11:33:10 6 it is.

7 BY MR. SAUNDERS:

11:33:16 8 Q. Dr. Schmalensee, what is it that AT&T

11:33:18 9 did that you believe was predatory in connection

11:33:22 10 with testing the DSC Litespan?

11:33:26 11 A. Well, as I've said before, one needs

11:33:34 12 to look at that as an element in a pattern. And

11:33:42 13 it's my understanding that its inoperability

11:33:44 14 testing, A, favored its own equipment, B, as

11:33:50 15 regards to third-party vendors, particularly DSC,

11:33:54 16 was a departure from industry norm, and

11:33:56 17 particularly a departure from reasonable

11:34:00 18 expectations, and the sort of inoperability testing

11:34:04 19 that was received at the hands of Nortel in

11:34:08 20 particular, but I believe Siemens as well. So it

11:34:16 21 acted to delay introduction of the DSC switch.

11:34:22 22 Q. Did AT&T have an obligation to test

11:34:24 23 the DSC Litespan?

11:34:24 24 A. Again, I would rely on industry

11:34:34 25 participants for their sense of what was the

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11:34:42 2 obligation assumed by the parties involved to flow
11:34:48 3 from AT&T's commitment to implement something
11:34:50 4 designed to permit third-party competition.
11:34:52 5 My sense of what I've read is yes, it
11:34:54 6 was generally thought that it did have an
11:34:56 7 obligation.
11:34:58 8 Q. Do you think that it had an
11:34:58 9 obligation? Do you as an economist who studied
11:35:02 10 this question, do you think AT&T had an obligation
11:35:04 11 to test the DSC Litespan?
11:35:10 12 A. Based on my understanding of what the
11:35:12 13 participants in the industry felt they could
11:35:14 14 reasonably infer from the promise, yes.
11:35:20 15 Q. So you are saying that, so your
11:35:20 16 inference is that AT&T announced that it was going
11:35:24 17 to implement the TR-303 interface on the switch and
11:35:28 18 from that you infer an obligation to test
11:35:32 19 competitors' equipment, is that correct?
11:35:34 20 A. I infer it because the industry
11:35:38 21 participants inferred it. What sense would it make
11:35:40 22 to implement a standard designed to permit
11:35:42 23 competition and then to make it impossible to do
11:35:46 24 competition by not providing testing?
11:35:52 25 Q. Now, Bell Atlantic complains in this

12:31:36 takes a little thought. But the question is if the
12:31:40 switch, if the Litespan is designed with that
12:31:42 capability, it may not be simple as a contractual
12:31:48 matter to separate the payment.
12:31:48 They might well have deferred if they
12:31:54 had known it was going to be available seven years
12:31:56 later or five years later. They might have adopted
12:31:58 or negotiated a different kind of contract.
12:32:00 Q. Right.
12:32:00 A. I don't know that. I don't know what
12:32:02 the feasible set is. But.
12:32:06 Q. You've never seen that contract?
12:32:08 A. The purchase contract?
12:32:08 Q. Yes.
12:32:08 A. I have not seen it.
12:32:10 Q. That wasn't one of the documents they
12:32:12 showed you?
12:32:16 A. There may be a document sitting in a
12:32:20 box. It's not a document I have seen. I expect
12:32:26 it's a document NERA staff have seen but I have
12:32:28 not.
12:32:28 Q. Would it be predatory if AT&T had
12:32:30 announced in 1988 that it was going to implement
12:32:38 TR-303 on the switch and then after it got into the

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12:32:40 2 development realized that the development was
12:32:40 3 either too difficult or too expensive or not likely
12:32:44 4 to yield a sufficient profit and then announced to
12:32:46 5 the world that it was not going to develop it?
12:32:54 6 Would that be predatory?
12:32:56 7 A. Again, I'm not talking about
12:33:00 8 particular items of conduct, I'm talking about a
12:33:00 9 pattern of conduct.
12:33:02 10 Q. I want you to talk about this item of
11 conduct.
12:33:02 12 A. I hear you. I'm simply telling you
12:33:08 13 how I would approach the case and why I'm having
12:33:08 14 some difficulty --
12:33:08 15 Q. I'm asking just about this item.
12:33:10 16 A. Can I finish?
12:33:12 17 Q. Yes.
12:33:12 18 A. -- why I'm having some difficulty
12:33:14 19 separating out this item.
20 Excuse me now.
12:33:16 21 Q. I want you to separate out this item.
12:33:18 22 A. So you're asking whether a pattern of
12:33:20 23 conduct that is as it is, except that can't be
12:33:26 24 quite as it is, obviously, except that in what
12:33:28 25 period, when did they decide they can't do it?

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12:33:32 2 Q. Do you want me to ask the question
12:33:34 3 again?
12:33:34 4 A. Please. Sorry.
12:33:36 5 Q. Just don't read into it more than is
12:33:38 6 there.
12:33:38 7 Would it have been predatory for AT&T
12:33:42 8 to announce in 1988 that it was going to implement
12:33:44 9 TR-303 interface on the switch and then after it
12:33:48 10 got into the development process decide that it was
12:33:52 11 either too difficult or too costly or not
12:33:54 12 sufficiently profitable and then AT&T announce that
12:34:00 13 it was not going to implement TR-303 on the switch
12:34:02 14 after all?
12:34:02 15 Would that be predatory?
12:34:04 16 A. I think you've given me two separate
12:34:10 17 reasons, two different kinds of reasons. I think
12:34:14 18 they're two different kinds of answers. I think if
12:34:20 19 they make the promise in 1988, find out that it's
12:34:30 20 too difficult, too expensive, technical problems,
12:34:36 21 and say no, sorry, we're not, there may be a
12:34:38 22 contract issue.
12:34:40 23 Q. But there is not an antitrust issue?
12:34:44 24 A. As I sit here and think about it, I
12:34:46 25 don't see an antitrust issue.

12:34:46 The second is more complicated because
12:34:52 it depends on why they don't think it's
12:34:56 sufficiently profitable.
12:34:56 Q. People aren't going to buy enough of
12:35:00 them in enough quantities to make our normal rate
12:35:02 of return.
12:35:02 A. Well, there are two possibilities
12:35:06 there: One, that people aren't going to buy,
12:35:12 aren't interested enough in the 303 upgrade to the
12:35:14 software, which is where the ICDU's and the various
12:35:16 other things we need to develop.
12:35:18 The other possibility is that they
12:35:20 decide they're not going to make sufficient money
12:35:22 because there will be competition from remotes for
12:35:26 ICDU's and peripheral units and that it's the
12:35:34 emergence of competition that threatens the
12:35:34 profits.
12:35:36 Then I think we potentially, then we
12:35:40 go into antitrust territory because the reason for
12:35:50 walking away under that hypothetical is that the
12:35:50 fear of competition emerging, that's a rather
12:35:54 different matter. That says they walk away in
12:35:56 order to prevent the emergence of competition
12:35:58 because the competition threatens profits. If

12:36:00 2 that's the source of threat for profits, it seems
12:36:02 3 to me we are dealing with an antitrust issue.
12:36:04 4 Q. Would you describe the TR-303
12:36:08 5 interface as an open interface?
12:36:14 6 A. Assuming I'm not missing some hidden
12:36:18 7 meaning in the term, that's my understanding, yes.
12:36:24 8 It's intended to be by the developers an open
12:36:24 9 interface.
12:36:24 10 Q. It's intended to permit vendors other
12:36:30 11 than AT&T or Lucent to market their remote
12:36:38 12 terminals for attachment to the AT&T switch?
12:36:40 13 A. That's correct.
12:36:40 14 Q. Would you similarly describe the AIN
12:36:46 15 interface as an open interface, that is to permit
12:36:54 16 software developers other than AT&T to write
12:36:58 17 applications software off the switch?
12:37:00 18 A. Yes. That's my understanding of the
12:37:02 19 intention.
12:37:02 20 Q. Now, would you agree with me that the
12:37:12 21 development, the actual development of a TR-303
12:37:20 22 interface on a switch is inconsistent with
12:37:30 23 monopolization or an intent to monopolize or an
12:37:32 24 attempt to monopolize the remote digital terminal
12:37:36 25 market?

12:41:28 attach their remote digital terminals, inconsistent
12:41:32 with monopolization of the remote digital terminal
12:41:36 market?
12:41:38 A. Plainly, since they did develop it,
12:41:50 and my report says that that development is part of
12:41:54 a pattern of conduct that is consistent with at
12:41:56 least an attempt to monopolize, the answer to your
12:42:00 question must be no. But I must misunderstand your
12:42:00 question.
12:42:02 Q. Either I'm misunderstanding or you're
12:42:04 misunderstanding. But you're, as I heard your
12:42:08 testimony right now, you've just testified under
12:42:08 oath that the development of an open interface is
12:42:14 consistent with an attempt to monopolize the remote
12:42:16 digital terminal market?
12:42:18 A. As part of a pattern of conduct laid
12:42:20 out here.
12:42:20 Q. I didn't say anything about a pattern
12:42:22 of conduct.
12:42:24 A. But one must.
12:42:26 Q. I'm asking you just this one fact, is
12:42:26 this one fact, the development of an open interface
12:42:30 consistent or inconsistent with an intent to
12:42:34 monopolize the remote digital terminal market, just

12:43:42 asking whether it proves it, I'm just asking
12:43:42 whether it is consistent or inconsistent with
12:43:46 monopolization or an attempt or an intent to
12:43:48 monopolize the remote digital terminal market.
12:43:52 If you can't answer that question,
12:43:54 fine. The jury will hear your testimony, they'll
12:43:56 see your face on this videotape and they will
12:43:58 understand that you cannot tell them whether that
12:44:00 fact is consistent or inconsistent with
12:44:04 monopolization. So be it.
12:44:06 A. I'll try one more time.
12:44:08 Q. Fine.
12:44:08 A. I don't believe that's a well posed
12:44:10 question, for reasons we have discussed.
12:44:12 As I've said in the report and said to
12:44:16 you orally, that fact is present in a pattern of
12:44:18 conduct that I have described in my report that is
12:44:20 consistent with an attempt to monopolize.
12:44:22 What other question you might be
12:44:24 asking me, I simply don't understand. You're
12:44:26 asking me to consider some isolated hypothetical.
12:44:32 Just not well posed, sir.
12:44:32 Q. Look at the camera, Doctor, and
12:44:34 explain to the jury how it can be that the

12:44:38 2 development, the actual development of an open
12:44:44 3 interface can be consistent with monopolization of
12:44:44 4 the remote digital terminal market.
12:44:46 5 Explain to them.
12:44:48 6 A. The pattern of conduct in this case,
12:44:54 7 which is what I assume we are talking about, which
12:44:58 8 includes the development of such a standard, also
12:45:04 9 includes delay in its development, particularly
12:45:04 10 delay in release of the large line interface when
12:45:08 11 available for release, and delay in
12:45:16 12 interoperability testing for third-party vendors,
12:45:16 13 with a ton of documentary evidence that makes clear
12:45:18 14 this delay was intended to advantage AT&T's
12:45:22 15 competing large line remote digital terminal, the
12:45:30 16 SLC 2,000, then under development, that terminal
12:45:32 17 required the TR-303 interface.
12:45:36 18 The pattern of behavior we observe is
12:45:40 19 delaying the availability of that interface to
12:45:42 20 third-party vendors until the SLC 2,000 is
12:45:48 21 available for competition, in the obvious hope of
12:45:50 22 giving that equipment a strong market position in
12:45:56 23 the event that approach does not appear to have
12:45:58 24 succeeded.
12:46:00 25 Q. All right.

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12:46:00 2 A. How's that?

12:46:00 3 Q. Now, Doctor, look at the camera again

12:46:04 4 and answer the question that I asked you, which

12:46:04 5 was:

12:46:08 6 How can it be that the development of

12:46:10 7 an open interface is consistent with an attempt to

12:46:16 8 monopolize the market for terminals?

12:46:20 9 How can that be?

12:46:22 10 A. I answered the question in the context

12:46:26 11 of this case. You must want me to answer it in

12:46:26 12 some other context that you have not defined for

12:46:28 13 me, sir. I'm doing my best here. But if you won't

12:46:32 14 tell me what it is you're asking me to assume --

12:46:34 15 You seem to have some theological

12:46:36 16 principle here rather than a fact based principle.

12:46:38 17 And I frankly, as an economist, don't get it.

12:46:42 18 Q. You did some work on Microsoft, didn't

12:46:44 19 you?

12:46:44 20 A. I did.

12:46:44 21 Q. You are familiar with the computer

12:46:46 22 industry, right?

12:46:48 23 A. Broadly.

12:46:48 24 Q. Now let's assume that Microsoft

12:46:56 25 refused to make its interface available between

12:46:58 Windows '95 and application programs. I understand
12:47:10 they didn't do that, but let's assume they did do
12:47:10 that.
12:47:10 A. Okay.
12:47:10 Q. Would that fact be consistent with an
12:47:12 attempt to monopolize the market for application
12:47:16 programs?
12:47:16 A. It could be, but you'd have to know
12:47:20 more.
12:47:20 Q. But it could be?
12:47:20 A. It could be.
12:47:22 Q. Would it be inconsistent with an
12:47:24 attempt to monopolize that market?
12:47:30 A. I'd really have to know more about
12:47:32 what was going on.
12:47:32 Q. Just that.
12:47:34 A. Just that?
12:47:34 Q. Right.
12:47:36 A. All I know is that?
12:47:36 Q. Right.
12:47:38 A. And you're asking me does that suggest
12:47:38 that they're trying to monopolize the market.
12:47:42 Q. Right.
12:47:44 A. Provides some evidence in that

12:47:50 direction, yes. Some.

12:47:50 Q. Now if in fact they opened up the

12:47:52 interface and provided the API's you would also

12:47:56 argue, and you probably have argued that that's

12:48:00 inconsistent with monopolizing the application

12:48:02 software market, right?

12:48:02 A. Provides some quantum of evidence in

12:48:06 the other direction.

12:48:06 Q. It does?

12:48:08 A. Yes.

12:48:08 Q. All right. Great. That's my

12:48:10 question. That is my question. I just want to

12:48:14 know whether developing an interface, an open

12:48:20 interface on the FIVE ESS switch provides some

12:48:26 evidence that would lead you to believe that there

12:48:30 either was or was not an intent or attempt to

12:48:36 monopolize the terminal market. Just that fact,

12:48:42 nothing else.

12:48:56 A. That fact by itself provides some

12:49:04 evidence, although I must say not much, and

12:49:08 evidence that is outweighed in my judgment by the

12:49:10 rest of the pattern of conduct, that points against

12:49:16 monopolization.

12:49:18 Q. Or an attempt to monopolize?