

UNITED STATES OF AMERICA  
FEDERAL COMMUNICATIONS COMMISSION

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WIRELESS TELECOMMUNICATIONS BUREAU

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WORKSHOP ON THE ECONOMICS OF THE PROPOSED  
AT&T - T-MOBILE MERGER

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WEDNESDAY

JULY 13, 2011

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The Workshop met, in the Commission Meeting Room at the Federal Communications Commission, 445 12th Street S.W., Washington, D.C., at 9:00 a.m., Gregory Rosston, FCC, Senior Economist for Transactions, presiding.

MODERATORS PRESENT

GREGORY ROSSTON, FCC, Senior Economist for  
Transactions

JONATHAN BAKER, FCC, Senior Economist for  
Transactions

PATRICK DeGRABA, FCC, Chief Economist,  
Wireless Telecommunications Bureau

PANELISTS PRESENT

STEVEN SALOP, Charles River Associates

SERGE MORESI, Charles River Associates

R. CRAIG ROMAINE, Charles River Associates

STANLEY BESEN, Charles River Associates

JOHN WOODBURY, Charles River Associates

DENNIS CARLTON, Compass Lexecon

ROBERT WILLIG, Compass Lexecon

MARK ISRAEL, Compass Lexecon

C-O-N-T-E-N-T-S

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P-R-O-C-E-E-D-I-N-G-S

9:06 a.m.

MR. ROSSTON: Good morning and  
welcome.

I'm Greg Rosston, Senior Economist  
for Transactions at the Federal Communications  
Commission.

Thank you for attending today's  
confidential economist workshop on the  
proposed ATT/T-Mobile merger, which is WT  
Docket 11-65.

Joining me today from the Federal  
Communications Commission, at least up here,  
are Patrick DeGraba, Chief Economist in the  
Wireless Telecommunications Bureau, and  
Jonathan Baker, who shares the title of Senior  
Economist for Transactions.

Today's proceeding is subject to  
the Commission's ex parte rules. A limited  
summary ex parte notification stating that  
this meeting took place and identifying all  
participants, both on the panels and in the

1 audience, will be placed on the public record  
 2 within 48 hours.

3 So, please make sure you see  
 4 Charles or go back to the desk if you have not  
 5 yet signed in.

6 That notice will also indicate  
 7 that it will be supplemented by a redacted  
 8 transcript. A non-redacted transcript of this  
 9 ex parte meeting will be available within 10  
 10 business days. The redacted transcript will  
 11 be placed in the public record thereafter.

12 So, first, for the panelists, you  
 13 need to do what I'm trying to do, which is to  
 14 speak into the microphone when you speak.

15 We have two panel discussions  
 16 planned for today. We will have breaks midway  
 17 through the sessions as well as a break at  
 18 noon for lunch, hopefully for 90 minutes, if  
 19 we're on schedule.

20 And the purpose of this meeting is  
 21 to get information from the parties onto the  
 22 record and to help the FCC staff better

1 understand the economic arguments that are  
2 being made by AT&T and Sprint in this  
3 proceeding.

4 Jon, Pat, and I will ask a number  
5 of questions. We hope to promote a dialog in  
6 which a variety of economic theories and  
7 positions that are potentially relevant to the  
8 evaluation of the transaction are tested and  
9 assessed. Nothing that occurs in this session  
10 should be construed as a representation of the  
11 views of any agency participants, the FCC  
12 staff, more generally, any Commissioner or the  
13 Commission, and the U.S. Government as a  
14 whole.

15 In general, we expect to ask a lot  
16 of probing questions, and in the course of our  
17 discussion may make some statements that do  
18 not come in the form of a question. You  
19 should treat everything we say, even if it  
20 comes out in the form of "That makes sense" or  
21 "I understand" -- (laughter) -- as not  
22 position or agreement with a position taken by

1 either party, but an attempt to ensure the  
2 process today moves toward our goal of  
3 eliciting as much and as clear information as  
4 possible.

5 We will identify an initial side  
6 to respond to a question and try to permit  
7 both sides to engage in a dialog. That's why  
8 we are so close together here and doing this  
9 in this way.

10 Who we pick initially will be  
11 roughly split, but we won't rigidly alternate.

12 To keep things moving, the moderators will  
13 manage the time and questions and will allow  
14 comments from both sides, as appropriate. Of  
15 course, we reserve the right to interrupt and  
16 move things along.

17 We are asking the panelists to  
18 speak candidly today. Much of the material  
19 that will be discussed is subject to  
20 protective orders issued in this proceeding,  
21 and we expect that everyone in the audience  
22 and on the panel will treat the information

1 learned today in accordance with the terms of  
2 the protective orders.

3 Okay. Now participating in our  
4 first panel today from Compass Lexecon, on  
5 behalf of the applicants, are Dennis Carlton,  
6 Robert Willig, and Mark Israel. And joining  
7 us from Charles River Associates, on behalf of  
8 Sprint, are Steven Salop, Serge Moresi, and  
9 Craig Romaine.

10 And again, I am going to encourage  
11 you to speak into the microphone.

12 There was an agenda passed out,  
13 and we will roughly go according to that, but  
14 this is not a public forum or something where  
15 it is rigid. We are flexible and academics.  
16 So, we want to make sure we can get to the  
17 answers.

18 So, with that, Jon Baker is going  
19 to start the questioning.

20 MR. BAKER: Good morning.

21 So, Greg, if you could put up the  
22 first slide here?

1                   Can you all see this? You guys  
2                   can look over there.

3                   MR. ROSSTON: There should be hard  
4                   copies.

5                   MR. BAKER: Charles, did we make  
6                   just hard copies of all of them or just the  
7                   others? Just the two? Okay. So, you've just  
8                   got to look on the screen.

9                   And what you see on the screen are  
10                  -- I'll just describe it -- these are indices,  
11                  various price indices for various time series.

12                  The top line is a Consumer Price Index for  
13                  wireless or cellular telephone. The second  
14                  line is average revenue per unit, the green.  
15                  The third one is a Producer Price Index for  
16                  wireless. The blue one under that is a  
17                  Consumer Price Index for information  
18                  technology. The red one under that is dollars  
19                  per minute, revenue per minute, for wireless  
20                  from CTIA data.

21                  And all those series are  
22                  normalized. So, they start at 100, and they

1 are inflation-adjusted.

2 The purple is a series reflecting  
3 the average revenue per megabyte for AT&T that  
4 came out of one of the reports that the AT&T  
5 economists submitted. And so, it starts at  
6 100 with 2007 because that's when the time  
7 series began in the data.

8 So, my question is for the AT&T  
9 folks. Just to start us off, which of these  
10 series is the best reflection of recent price  
11 trends in the wireless industry?

12 MR. CARLTON: Hello.

13 MR. BAKER: Leave up the slide, I  
14 think.

15 MR. CARLTON: The simple answer is  
16 I don't know because I can hardly see that  
17 far.

18 (Laughter.)

19 So, I wasn't following --

20 MR. BAKER: Here, we'll give you  
21 one of those.

22 MR. CARLTON: So, your question,

1 Jon, is which is the most accurate pricing?

2 MR. BAKER: Correct. Trends in  
3 the wireless --

4 MR. CARLTON: I would have to look  
5 through them and think about it, but my  
6 general reaction is that these are nominal  
7 prices, I mean real prices. But you want to  
8 quality-adjust and I want to certainly look at  
9 that.

10 But I'm not sure I necessarily  
11 have a preference amongst them all. I would  
12 say that what would be important going forward  
13 is thinking about what is going to happen to  
14 marginal prices, and that in the future with  
15 capacity constraints growing and quality  
16 diminishing, in the absence of taking account  
17 of a lowered quality, my expectation is when  
18 you start adjusting series for quality  
19 deterioration, that prices will not continue,  
20 for example, on the rapid downward adjustment  
21 that will be shown without adjusting for  
22 quality. And I also think that we will be

1 moving to plans in which we have more marginal  
2 pricing of usage.

3 MR. BAKER: If we were to adjust  
4 for quality, how would we do it?

5 MR. CARLTON: Well, I can explain  
6 that in a while because we have actually tried  
7 to make some of those adjustments. The other  
8 cases I have been involved in, for example,  
9 the airline industry, the same problem comes  
10 up. How do you adjust for quality as quality  
11 changes?

12 And one way in which you can do  
13 that is you can look at a demand relationship  
14 in which you look at quantity demanded as a  
15 function of price and quality. Then, we will  
16 talk more about that probably later today.  
17 But you can then figure out what is a  
18 compensating price adjustment if there is a  
19 quality adjustment. And that has been done by  
20 the Department of Justice, for example, in  
21 airline mergers, and it is something, when we  
22 go forward a little bit, I will explain, if I

1 have some time and you ask me the question,  
2 how I have actually done it because we have  
3 done some additional work.

4 MR. BAKER: No, why don't you take  
5 a second and tell us now?

6 MR. CARLTON: Okay, Jon. Okay.  
7 First, let me say I am going to report on some  
8 additional work, and I fully understand that  
9 those models haven't been presented yet, and  
10 maybe there are slides you're going to  
11 present. But I understand that the backup for  
12 that, you haven't seen it. So, I fully intend  
13 to provide whatever backup you need so  
14 everyone understands what we are doing.

15 But we have done several things in  
16 order to try to calculate the effect, the  
17 competitive effects, of this transaction.  
18 What we have attempted to do is refine the  
19 analysis that we had previously done in order  
20 to estimate various types of marginal cost  
21 curves into the future for the merged firm and  
22 the non-merged firms, assuming that in the

1 case of the non-merger they would optimally  
2 invest and in the case of the merged firm it  
3 would optimally invest. We have done a merger  
4 simulation.

5 Then, what we have done is we have  
6 also calculated from that merger simulation,  
7 using that merger simulation, what quality  
8 changes are likely to occur. I will say --

9 MR. BAKER: May I just stop you?  
10 It sounds like you are describing something  
11 forward-looking rather than adjusting these  
12 time series backwards for quality?

13 MR. CARLTON: Yes.

14 MR. BAKER: Okay.

15 MR. CARLTON: I have not done  
16 backward adjustment, but let me just explain  
17 what I have done.

18 So, when we do the merger  
19 simulation, we calculate, consistent with our  
20 prior statement, output is going to go up,  
21 total output in the industry, and then price  
22 will go down.

1                   We have also, in the context of  
2                   that merger simulation, there are certainly  
3                   some quality attributes, not all but just some  
4                   -- we are still working to refine it -- some  
5                   quality attributes such as signal strength  
6                   that improve. And we have tried to figure out  
7                   how would you adjust the prices that come out  
8                   of the merger simulation for the quality  
9                   change?

10                   Then, what we have done is we have  
11                   looked at churn. **[Begin T-Mobile  
Confidential Information]**

12  
13  
14                   **[End T-Mobile Confidential  
Information]**. And we have used that to  
15                   figure out the marginal tradeoff between the  
16                   two. We have used that, for example, for the  
17                   signal quality adjustment. And there are some  
18                   other adjustments we have made, I can explain  
19                   those later, but, basically, that's how we  
20                   have done it.

21                   MR. BAKER: Yes. So, what I think  
22                   you are saying is that we could take from your

1 work here you are, in effect, computing a  
 2 marginal value of a quality change in dollars.

3 And we could look, if we wanted to, in  
 4 theory, earlier and apply that same marginal  
 5 value to previous quality changes and correct  
 6 some of the series that are on the figure in  
 7 order to create a quality --

8 MR. CARLTON: Yes, that's  
 9 certainly something you could do. Like I  
 10 said, we have only made one or two quality  
 11 adjustments --

12 MR. BAKER: I see.

13 MR. CARLTON: -- because that is  
 14 what is in our data, and we are trying to push  
 15 that forward.

16 I should also say that the general  
 17 technique is to estimate a demand structure.  
 18 We have a churn analysis. **[Begin AT&T  
 Confidential Information]**

19  
 20  
 21 **[End  
 AT&T Confidential Information].**

22 MR. BAKER: I see. Okay.

1 Do you folks have anything that  
2 you want to say about this or can I just --

3 MR. SALOP: I guess I'm looking  
4 forward to seeing this to see how this works  
5 out and being able to respond in writing to  
6 it.

7 I mean I've got, I guess, a couple  
8 comments. One is that I wish you would have  
9 taken this back, this series back further  
10 because we have run this movie before. And if  
11 you look at the period of time in the nineties  
12 when entry occurred, prices went down by a lot  
13 when we moved from duopoly to more competition  
14 and they have continued to come down, real and  
15 nominal prices, in quality --

16 MR. BAKER: Do you view that  
17 series as prices still coming down?

18 MR. SALOP: It starts in 2003. I  
19 would like it to go back to 1990.

20 MR. BAKER: But let's stipulate  
21 prices have fallen since 1990. But do you  
22 view it as still falling, looking at those

1 series?

2 MR. SALOP: I think if you look at  
3 the whole series, and we have got a figure in  
4 our report, you will see that prices fell  
5 faster when we moved from duopoly to a more  
6 competitive market, and they have slowed down  
7 somewhat over time. You can see it --

8 MR. BAKER: But you also weren't  
9 talking about quality-adjusted prices? We are  
10 just talking about the prices on these kind of  
11 series?

12 MR. SALOP: Yes, exactly. I mean  
13 I think one thing you can learn from prices is  
14 that, when there was a duopoly, prices were  
15 higher than when there was competition, and  
16 you may find that relevant for predicting what  
17 would happen to prices if competition is  
18 reduced as a result of the merger.

19 MR. BAKER: Okay.

20 MR. SALOP: The second comment I  
21 would make, I guess, is really kind of looking  
22 forward to the work that Dennis and Bobby are

1 doing. Quality is going to go up whether or  
2 not there is a merger. Capacity is going to  
3 be expanded whether or not there is merger.

4 It will be important, in looking  
5 at this work, to distinguish the capacity  
6 increases, the quality increases, that are  
7 merger-specific rather than simply merger-  
8 related.

9 MR. BAKER: Okay.

10 MR. WILLIG: Real quick, if you  
11 were doing a back-casting, and noticing that  
12 prices have come down in some meaningful  
13 sense, if that's right, that might be caused  
14 by a change in the competitive environment,  
15 but it also might have been the result of a  
16 change in the overall balance of capacity  
17 available as against demand.

18 Of course, we go back to 1990, and  
19 I haven't tried to re-engineer any study that  
20 you have done on that subject. But if I were  
21 to, I would certainly want to pay attention to  
22 just the supply-and-demand element of what

1 have been changes in prices as well as changes  
2 in quality over time, with capacity movements  
3 and spectrum changes being, obviously, very  
4 great in importance.

5 MR. SALOP: Right, for sure. For  
6 sure. We know that concentration, there are  
7 lots of reasons why concentration could go up,  
8 and they may or may not be related to prices.

9 What we do have in this industry  
10 is there have been some econometric studies  
11 that show, when competition went up, prices  
12 went down significantly.

13 MR. BAKER: Okay. Thank you. I  
14 want to move on. I want to move on to the  
15 next question and ask you. That's fine.

16 So, I wanted to ask this question  
17 first to the Sprint folks. There is a table  
18 in your declaration that we don't need to look  
19 at that is derived from porting data that  
20 shows that, as it turns out, **[Begin NRUF/LNP Highly  
Confidential Information]** **[End NRUF/LNP Highly  
Confidential Information]** percent of  
21 the customers leaving AT&T switch to T-Mobile.

22 Now, if we wanted to turn this

1        statistic into a demand cross-elasticity, we  
2        would need to compare it to the percentage  
3        change in the quality-adjusted price that  
4        prompted those customers to switch, I would  
5        think. And so, if we were going to do that,  
6        what should we assume about the average price  
7        change? Or can we do that at all?

8                    MR. SALOP: Well, I'm not sure you  
9        can do that. But what I say is that I am not  
10       sure why you need to convert it into a cross-  
11       elasticity of demand. We know that the  
12       diversion ratio times the margin is a good  
13       indicator of the closeness of competition, and  
14       you could use that.

15                   MR. BAKER: Well, the same issue  
16       would apply if we were to think of it as a  
17       diversion ratio, wouldn't it? We have to  
18       understand what the implicit price changes  
19       that are prompting this large a percentage  
20       switch --

21                   MR. SALOP: First, the porting  
22       data is not tied to price changes. You cannot

1 connect --

2 MR. BAKER: Yes.

3 MR. SALOP: That would be a big  
4 econometric project that we haven't done, and  
5 I've never seen anybody do it, to connect all  
6 the diversions to price changes.

7 But what I am saying is something,  
8 we are limited to a limited type of analysis  
9 that you might want to do. We do know that  
10 the first-round effects, if you assume that  
11 the diversions that you saw came from price  
12 changes, then you can -- it is that they are  
13 meaningful for understanding what would happen  
14 if there were price changes. Then you can  
15 calculate the UPP indices.

16 MR. BAKER: So, are you saying  
17 that, regardless of precisely how we interpret  
18 this **[Begin NRUF/LNP Highly Confidential  
Information]** **[End NRUF/LNP Highly Confidential  
Information]** percent figure, it creates a  
19 presumption that the diversion ratio from AT&T  
20 to T-Mobile is **[Begin NRUF/LNP Highly Confidential  
Information]** **[End NRUF/LNP Highly  
Confidential Information]**? Is that how we  
21 should think about it?

22 MR. SALOP: Yes, I think so.

1 MR. BAKER: Okay. Do you have  
2 anything you want to say or shall I go on?

3 MR. CARLTON: I agree that a  
4 diversion ratio, as you said, should be based  
5 on the response to price. And I think that  
6 one of the perhaps drawbacks of UPP, not by  
7 the authors who are promoting UPP, because  
8 they understand this. But in its  
9 implementation, I think people use market  
10 shares or proxies for what is really the  
11 change in quantity over the change in high  
12 price, the ratio of the two, that it is a  
13 price sensitivity.

14 The fact that they can use market  
15 shares, for example, or other measures rather  
16 than price sensitivity creates a false  
17 impression, I think, that you don't have to  
18 really worry about the demand elasticities and  
19 demand structures. That can be misleading.

20 Now, in this case, like Steve, I  
21 am not aware that anyone in this proceeding  
22 did a demand study to calculate those

1 diversion ratios. So, we are left with, what  
2 are the data? There is share of gross adds,  
3 market share reporting. None of them are  
4 really getting at exactly the right things.

5 On the other hand, if any analysis  
6 depends on which one of these measures, all of  
7 which have advantages and disadvantages. You  
8 know, market share has embedded customers who  
9 don't care to switch. So, it is not telling  
10 you about the marginal customers. And we can  
11 go through each one of them, some benefits and  
12 some relative disadvantages.

13 If an analysis depended on which  
14 one of these noisy measures were the right  
15 thing -- and by right thing, I mean the  
16 diversion ratio based on price response -- if  
17 the analysis depended on which one of those  
18 things you picked, I would be pretty nervous.

19 Now what I am going to show you in  
20 some of our work is that, no matter which one  
21 of those you choose, you get an output  
22 expansion. And that is why I find what we

1 have recently done confirmatory.

2 MR. BAKER: But let me just follow  
3 up with two quick things. One is I take it  
4 that, when you say "response to price," what  
5 we have been talking about, you mean response  
6 to quality-adjusted price, that if we had a  
7 quality change in confidence, we could convert  
8 it somehow into a price change that would be  
9 good enough?

10 MR. CARLTON: Yes. Exactly.

11 MR. BAKER: And second, do you  
12 believe that it gives you more confidence in  
13 using the market shares as a basis for  
14 computing diversion ratios, that the porting  
15 data -- my factual presumption, proposition is  
16 that the porting data is roughly consistent  
17 with what one would predict if diversion were  
18 proportional to market shares. So, you would  
19 see the kind of percentages you would see in  
20 the porting data using at least some measures  
21 of market shares.

22 If that were so, would that give

1 you confidence that the market shares are  
2 reasonably sensible as a basis for diversion  
3 ratios in the kind of analysis that Steve is  
4 talking about?

5 MR. CARLTON: No. Let's suppose  
6 that the diversion ratios were the same, no  
7 matter whether you used gross adds, porting  
8 data, or market share. That would tell me  
9 that it is not going to matter which one of  
10 the three I use; it is not going to tell me  
11 that they are correctly measuring price  
12 sensitivities.

13 But if you go through the data,  
14 there are, for example, the porting from, I  
15 think it is from, if you look who's with whom  
16 when you leave T-Mobile, when customers leave  
17 T-Mobile, where do they go? If you made an  
18 analysis based on market shares, you would  
19 underpredict how many people are going to say,  
20 Metro.

21 So, I'm not sure they exactly  
22 square.

1 MR. BAKER: Okay.

2 MR. CARLTON: With porting data,  
3 the other thing you would be careful of is  
4 there's sample selection problems in the  
5 porting data. You probably know that not  
6 everybody reports.

7 MR. BAKER: Yes.

8 MR. CARLTON: And not everybody  
9 who leaves takes their number with them. So,  
10 you have to correct for that or try to.

11 MR. BAKER: Okay. If it's quick,  
12 please.

13 MR. SALOP: I guess I think the  
14 first point is we have these different  
15 measures. There's proportional diversion.  
16 There's porting data. There's porting out  
17 percentages and you can calculate porting in.

18 Dennis has suggested we use gross adds. We  
19 have talked about that. We have debated that  
20 in the reports.

21 I think the first point is that we  
22 have all used ported data. I mean it would

1 just be wrong to say that porting data is  
2 useless.

3 Dennis used porting data in his  
4 report for analyzing AT&T to Metro. If it  
5 were worthless data, he wouldn't have done  
6 that. Dennis also used porting data in his  
7 Alltel declaration. I don't remember whether  
8 he actually calculated the GUPPI, but he used  
9 diversion ratios, based on the porting data,  
10 to say there was not a problem from the Alltel  
11 merger. Well, that door has to swing both  
12 ways, I think.

13 [Begin NRUF/LNP Highly Confidential  
14 Information]

15  
16  
17  
18 [End NRUF/LNP Highly Confidential Information]  
19 [Begin AT&T Confidential Information]

20 [End AT&T Confidential Information] [Begin  
21 NRUF/LNP Highly Confidential Information]

22 [End NRUF/LNP Highly  
Confidential Information]

If you looked T-Mobile to AT&T --

MR. BAKER: I don't think we need

1 to do all of this.

2 MR. SALOP: Okay. But there the

**[Begin NRUF/LNP Highly Confidential  
Information]**

3 **[End NRUF/LNP Highly Confidential  
Information]** are the outlier.

4 MR. BAKER: Okay.

5 MR. SALOP: And the others were  
6 closer.

7 MR. BAKER: Okay. I would like to  
8 move on to the next slide here. Can you see  
9 this? Maybe if you could find it for Dennis  
10 in that package?

11 This slide compares six providers  
12 of wireless services with national averages.  
13 The first four rows, which are retail  
14 subscriber shares, non-contract subscriber  
15 shares, retail ARPU, and monthly churn, are  
16 copied from the initial declaration of AT&T's  
17 economists. So, it is directly out of the  
18 report.

19 The lowest two rows, which  
20 indicate the average spectrum holdings in the  
21 top 10 CMAs and nationwide on a population-  
22 weighted basis, were computed by the FCC

1 staff. The spectrum at stake here was the 700  
2 MHZ, 800 MHZ, 1900 MHZ in AWS bands.

3 The figure in parentheses in the  
4 Sprint box recalculates its figure,  
5 attributing Clearwire's BRS band to Sprint.  
6 So, you can look at it both ways, if you care.

7 But my question is about, if you  
8 look at like the last three columns, comparing  
9 T-Mobile with MetroPCS and Leap. What I am  
10 wondering -- and it doesn't necessarily have  
11 to be from this figure, but this figure is  
12 what prompts my question -- is there anything  
13 about T-Mobile that would lead you to think it  
14 offers less of a competitive constraint to  
15 AT&T than Leap and MetroPCS? That's my  
16 question. Is T-Mobile less of a constraint  
17 than MetroPCS and Leap?

18 MR. CARLTON: You know, I think  
19 its market share, there's no question about  
20 it. So, its presence in the market, however  
21 you want to define the market, is going to be  
22 higher. So, there's no question, if you are

1 asking me do I think T-Mobile is more  
2 important than Metro or Leap in the  
3 marketplace, yes. And if you asked, has  
4 T-Mobile's market share been falling recently,  
5 and you would expect it would be less of a  
6 competitive presence than it has been, the  
7 answer to that question would probably be yes.

8 Do you think that T-Mobile's failure to have  
9 a path to LTE is going to make it less of a  
10 competitive presence? The answer is yes.

11 If you asked me those same  
12 questions for Metro, if you look at Metro's  
13 share, it has been growing. If you asked me,  
14 do I think Metro is going to be growing, the  
15 answer would be yes.

16 MR. BAKER: But there's nothing in  
17 the structural characteristics that you are  
18 observing that's leading you to these  
19 conclusions? It's something else?

20 MR. CARLTON: Well, no, I mean I  
21 think it is the structure of T-Mobile. Its  
22 infrastructure is such that they can't figure

1 out how to get to LTE.

2 Metro has developed a technology  
3 where they have implemented LTE. So, they've  
4 kind of leapfrogged.

5 So, I think that, going forward,  
6 you can predict Metro is going to be  
7 increasingly important and T-Mobile less  
8 important. But I think that really the key,  
9 I'm certainly agreeing with you that T-Mobile  
10 is more important in sort of market presence  
11 than MetroPCS.

12 But it is also the case that, and  
13 I am understanding you are asking that  
14 question to try and figure out, could there be  
15 an anti-competitive effect from the removal of  
16 T-Mobile? But the key point in this  
17 transaction, key point -- I mean there are  
18 other points. I'm sure we are going to  
19 discuss the efficiencies, and it is going to  
20 be the efficiencies from AT&T and T-Mobile  
21 that is going to lead to a output expansion  
22 regardless of which of our diversion ratio

1 measures we use.

2 MR. BAKER: Well, we will do  
3 efficiencies this afternoon. But let me just  
4 follow up one thing, then, before I ask you  
5 folks if you want to comment.

6 So, T-Mobile says it's stuck in  
7 the middle, was the phrase you used. And so,  
8 that experience of being stuck in the middle  
9 would seem to suggest that repositioning is  
10 difficult in this industry.

11 Now MetroPCS and Leap would seem  
12 to start from a worse position than T-Mobile  
13 with a less extensive tower system and less  
14 spectrum and less brand recognition. Should  
15 we expect that MetroPCS and Leap would  
16 reposition to replace competition lost by  
17 T-Mobile's departure?

18 MR. CARLTON: I would say that it  
19 depends in part. If AT&T, after the  
20 transaction, left a gap in the product  
21 spectrum that T-Mobile was providing, then I  
22 expect there would be market incentive for

1 other people to come in.

2 My impression of someone like  
3 Metro is that, with its new technology, LTE  
4 technology, for example, planned, that Metro  
5 sees itself as becoming more and more data-  
6 centric. I think it will be expanding sort of  
7 up the data-centric ladder as to which type of  
8 consumers it will continue to be attracting in  
9 addition to the consumers it is currently  
10 attracting.

11 But I think repositioning is  
12 certainly something that could occur. Whether  
13 it is Metro or Leap or even Sprint that tries  
14 to replace a gap, fill a gap, if the gap  
15 appears, I think that is somewhat speculative.

16 But I do think it is also important to  
17 understand it is not so obvious a gap will  
18 occur. Because as a result of the  
19 efficiencies, output is going up. So, I am  
20 not sure there is going to be a gap.

21 And what our simulations show is,  
22 as you would expect, if output goes up and it

1 is because of an efficiency, the combined firm  
2 is going to expand relative to everybody else.

3 MR. ISRAEL: Can I just jump in  
4 with one other? When I hear the phrase stuck  
5 in the middle -- you hear this in business-  
6 speak a lot -- I mean often I think what  
7 people are referring to is sort of an  
8 installed base and a capital infrastructure  
9 based on an installed base of customers. So,  
10 I mean, **[Begin T-Mobile Confidential Information]**

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16 **[End T-Mobile Confidential**  
17 **Information]**. It is obviously a  
18 fundamentally different question for a Metro  
19 and a Leap who come into new CMAs where they  
20 tend to grow quite rapidly. Actually, Metro  
21 has come in with an LTE product that has done  
22 quite well.

When you look at the average

1 shares, they can be lower in certain markets,  
2 but quite high in certain markets. So, I  
3 think the repositioning challenge is quite  
4 different on a sort of a fresh firm without an  
5 installed base with a different capital  
6 structure, able to make different decisions  
7 about how they serve a new market.

8 I think that is pretty reflected  
9 in how T-Mobile sees itself relative to those  
10 other competitors.

11 MR. ROSSTON: Can I just ask, you  
12 talked a lot about Metro's LTE product. From  
13 what I read some places, it was that the LTE  
14 product for MetroPCS wasn't as good as HSPA+.

15 Is that your understanding or is it actually  
16 a better product? My understanding is LTE  
17 comes in a lot of different flavors. Is it as  
18 good or not?

19 MR. ISRAEL: I'm not a network  
20 engineering expert. So, I will only say what  
21 I know. I do know there have been some recent  
22 news reports and some tests where the Metro

1       LTE speeds have been lower than certainly  
2       other LTE speeds and I think lower than 3G  
3       speeds.

4                   My understanding of where that has  
5       happened, what I understand is in the places  
6       where the Metro LTE speeds were lower, they  
7       had some issues with backhaul. Old copper  
8       backhaul might be the issue.

9                   And my understanding -- and,  
10       again, this sort of pushes the edge of what I  
11       know about the network -- is that T-Mobile has  
12       had a path to get kind of fiber and upgrade  
13       their backhaul, and some view that is an  
14       easier transition that Metro can potentially  
15       make.

16                   So, there will be LTE kind of  
17       ecosystem handsets, LTE spectrum, LTE  
18       technology. There might be one piece, the  
19       backhaul piece, where they might have to  
20       follow a path to invest in that.

21                   MR. BAKER: And the low levels of  
22       spectrum that Leap and MetroPCS have here

1 relative to T-Mobile don't give you pause with  
2 respect to the ability of those firms to roll  
3 out high-speed services in a way that would  
4 replace any competition lost from T-Mobile?

5 MR. ISRAEL: So, just to make sure  
6 I understand the bottom two rows, are these  
7 average spectrum holdings across the top 10  
8 CMAs by population?

9 MR. BAKER: The top 10 in the U.S.

10 MR. ISRAEL: So, in some sense,  
11 what we are seeing here is that Metro is  
12 stronger in some areas than other areas.

13 MR. BAKER: Yes, yes.

14 MR. ISRAEL: So, one piece is that  
15 in markets where they hold spectrum they have  
16 shown the ability to capture share. I mean  
17 they are not in every market.

18 My understanding is that, from  
19 where they stand, as far as we're thinking  
20 about their ability to grow, although there's  
21 different measures of this, they have sort of  
22 more, if you look at things like spectrum,

1 they appear to have more head room than some  
2 of the other guys in this ability to grow.

3 MR. BAKER: Do you want to chip  
4 in? Go ahead.

5 MR. SALOP: You guys have put an  
6 enormous amount on the table. My  
7 understanding of the facts is that Metro's LTE  
8 is not as good. It's only in 14 markets, and  
9 they have no plans to expand beyond that.  
10 It's slower than other 4G. Where they don't  
11 have 4G they only have 2G.

12 You know, Metro has basically got  
13 a different business plan. They have gone  
14 into some highly-urban markets with a  
15 different product, catering to a different set  
16 of consumers. They don't have a national  
17 rollout plan. In fact, they cater to  
18 consumers that don't want much roaming. If  
19 you roam too much, they cut you off.

20 On the other hand, T-Mobile is a  
21 national competitor. You can look at national  
22 shares. One thing we did was I asked, what

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**[Begin NRUF/LNP Highly Confidential Information]**

**[End NRUF/LNP**

**Highly Confidential Information].**

And if you look at their networks, if you look at the type of handsets they have, if you look at the type of service they have, it is just not comparable. And they're growing, but not much. I think they grew less than **[Begin NRUF/LNP Highly Confidential Information]** **[End NRUF/LNP Highly Confidential Information]**percentage point between 2010 and 2011.

The projections I have seen don't have them projecting out to become a major carrier.

If you look at an AT&T/Metro hypothetical merger and do the GUPPI, it would

1 be [Begin NRUF/LNP Highly Confidential  
 Information] [End  
 NRUF/LNP Highly Confidential Information] than  
 you would from

2 an AT&T/T-Mobile GUPPI.

3 MR. WILLIG: But remembering, of  
 4 course, that the GUPPI of the whole UPP  
 5 framework has, as one of its well-understood  
 6 deficits the unwillingness or the inability,  
 7 to consider repositioning, the dynamic  
 8 effects, where business strategy, whether  
 9 branding or the type of customer, with the  
 10 nature of the brand, the promotion, the  
 11 character of the rate plans that are offered  
 12 are all up in the air and endogenous.

13 If it were to happen per the  
 14 simulations as a result of this merger, the  
 15 new AT&T/T-Mobile combination would have more  
 16 ability to serve at better prices, better  
 17 quality, more output. It is not clear what  
 18 that would do in the future to MetroPCS. It  
 19 wouldn't be a good environment for Metro to be  
 20 expanding by leaps and bounds. Never mind.

21 (Laughter.)

22 But in a scenario where someone

1 would imagine that, as a result of a deal  
2 contrary to our analysis, that somehow the  
3 offerings of the new AT&T would be much less  
4 advantageous to consumers, that, of course,  
5 creates what would be a giant market  
6 opportunity for the like of Metro and Leap and  
7 others.

8 And an awful lot of the so-called  
9 detriments, **[Begin AT&T and T-Mobile Highly  
Confidential Information]**

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12 **[End AT&T  
and T-Mobile Highly Confidential Information].**

13 They are business plan issues;  
14 what exactly Metro decides to do in the way of  
15 promotion, in the way of offering the rate  
16 plans is thoroughly endogenous.

17 MR. BAKER: But wouldn't we have  
18 said that about T-Mobile? Yet, they're stuck  
19 in the middle?

20 MR. WILLIG: Well, yes. They do  
21 talk about being stuck and being unable to see  
22 a clear path or any path to LTE. That sounds

1 somewhat less endogenous, to listen to what  
2 the business people are saying.

3 MR. BAKER: Yes, go ahead.

4 MR. SALOP: I have a couple of  
5 things.

6 MR. BAKER: Yes.

7 MR. SALOP: First of all, on this  
8 last point, MetroPCS -- I'm sorry -- T-Mobile  
9 certainly has hit a speed bump, but there's  
10 no reason to think they are in terminal  
11 decline. Just like Sprint came back from  
12 hitting a speed bump, we have every reason to  
13 think that T-Mobile is going to come back.  
14 They announced a challenger strategy in  
15 January to invigorate their competitiveness.  
16 They are moving forward even -- well, I  
17 suppose this is not a natural experiment for  
18 anything that has happened since just mid-  
19 March.

20 (Laughter.)

21 But they have the strategy.  
22 There's no reason to think that DT would just

1 let this asset disappear. DT also says, oh,  
2 we don't want to invest any more, as if they  
3 are just going to milk and let T-Mobile go  
4 into the ground. Well, we have seen many  
5 documents -- and these are not Charles River  
6 documents; these are T-Mobile documents. We  
7 have seen some T-Mobile documents -- I can  
8 talk about that, right?

9 MR. BAKER: Yes, anything on the  
10 record.

11 MR. SALOP: And those T-Mobile  
12 documents say that they **[Begin T-Mobile  
Highly Confidential Information]**

13 **[End**  
**T-Mobile Highly Confidential Information].**  
14 There is no reason to think that T-Mobile  
15 would have died.

16 As for T-Mobile network not being  
17 very good, well, T-Mobile has got the fastest  
18 4G network in the world. Their HSPA+ network,  
19 not quite 4G, but they were followed by AT&T,  
20 who expanded its HSPA+ network as a result.

21 HSPA has done better than anybody  
22 ever expected in terms of speed, faster than

1 MetroPCS, and it's getting faster all the  
2 time. There was an announcement in the press  
3 several months ago that T-Mobile has been  
4 working with Qualcomm, one more T-Mobile  
5 innovation, to expand the speed of HSPA, to  
6 double the speed.

7 And finally, to say that HSPA+ is  
8 not useful, what I found as the most kind of  
9 ironic statement in the entire record so far  
10 is that Mr. Hogg says AT&T would not have  
11 rolled out LTE everywhere to all 97 percent.  
12 They wouldn't roll out from 80 up to 97  
13 percent of the market because there's not much  
14 value to it because we already have HSPA+. I  
15 mean, now that is saying really good things  
16 about what T-Mobile has done as an innovator.

17 MR. BAKER: Let me follow up. You  
18 talked about the resurgent Sprint a moment  
19 ago. Suppose we started with the same kind of  
20 question I began with with the AT&T folks. If  
21 you put aside exclusionary conduct by the  
22 merged firm, is there anything about Sprint

1 that would lead you to think it couldn't  
2 expand to replace any competition lost by  
3 T-Mobile's departure?

4 MR. SALOP: Well, you mean replace  
5 like become just as powerful as T-Mobile and  
6 Sprint together?

7 MR. BAKER: I mean let's suppose  
8 we had a unilateral effects problem. Solve  
9 the problem through output expansion and  
10 whatever kind of repositioning that it would  
11 need to do.

12 MR. SALOP: I mean having two  
13 competitors out there with twice the market  
14 size is certainly going to give you more  
15 powerful constraint than if there is only one.

16 Sprint is handicapped with they  
17 have **[Begin Sprint Confidential Information]**

**[End Sprint confidential**  
**Information]** than AT&T. They  
18 have got inferior handsets, either as a result  
19 of exclusives or exclusionary conduct or just  
20 being smaller. But their handsets aren't as  
21 good.

22 They don't have GSM except on a

1 couple of phones. They don't attract people  
2 that want to go abroad as much. There are  
3 various ways in which Sprint is at a  
4 disadvantage relevant to AT&T. And there is  
5 no reason to think that they would be able to  
6 reposition to the point of being able to make  
7 up for it.

8 When you say absent the  
9 exclusionary conduct, there's a lot of  
10 meanings of that, Jon. I mean you could say  
11 suppose whatever exclusion there were in  
12 roaming and backhaul got corrected, okay,  
13 which I think is "iffy".

14 But there's still the issue that  
15 AT&T would be at a greater advantage in  
16 getting handset exclusives. I don't know how  
17 you are going to regulate that.

18 And on network infrastructure,  
19 which is a really important point, right now,  
20 in terms of financing network infrastructure  
21 for the next generation, T-Mobile is in there  
22 as a supporter, just like they supported the

1       Android, that they would be in there as a  
2       supporter of new spectrum. But without them,  
3       it all falls on Sprint.

4                   MR. BAKER: Okay, but we will do  
5       the exclusionary conduct in more detail this  
6       afternoon.

7                   MR. SALOP: But since we're  
8       talking --

9                   MR. BAKER: No, it's okay, and  
10      these folks have previewed efficiencies, too.  
11      So, it's okay.

12                   But just one quick question.

13                   MR. SALOP: But they haven't done  
14      the -- tradeoff --

15                   MR. BAKER: But I gather Dennis'  
16      simulation plans to do that.

17                   But with respect to MetroPCS, are  
18      these problems that you mentioned about  
19      roaming costs and handsets that Sprint would  
20      have also problems that MetroPCS and Leap  
21      would have?

22                   MR. SALOP:

1 I think they have them in spades. I mean  
2 we talked in our report  
3 about the impediments facing the fringe for  
4 expansion and new positioning, and they are  
5 enormous. I mean they have got slower -- they  
6 have a different product. They have slower  
7 data networks, inferior handsets, degraded  
8 roaming features because they don't have a  
9 national network.

10 MR. ROSSTON: Can I interrupt for  
11 a second? On the handset thing, you say  
12 Sprint wouldn't get access to handsets. Right  
13 now, T-Mobile is in the same position. You  
14 would need to be replacing T-Mobile's  
15 competition, right, not replacing AT&T? And  
16 so, getting access to handsets is trying to  
17 replace the competitive effect of T-Mobile,  
18 not necessarily the competitive effect of  
19 AT&T, right?

20 MR. SALOP: Right now, you have  
21 two people competing with AT&T and Verizon.

22 MR. ROSSTON: Right

MR. SALOP: And, then, you're only

1 going to have one. Now you're going to say,  
2 well, that one, like Super Mario, is going to  
3 suddenly become much more powerful. I don't  
4 see how that is going to happen, okay, how  
5 they are going to be able reposition to  
6 basically double their competitive vigor.

7 MR. ROSSTON: Do they have to  
8 double it or just take out the part that would  
9 be cut back in the quantity reduction from  
10 AT&T, if it were to do unilateral effects to  
11 raise price? Whether it is actually they have  
12 to double their output or just make it so the  
13 price increase isn't profitable?

14 MR. SALOP: I'm not sure. I mean  
15 I guess, if you are going to lower the DR down  
16 to --

17 MR. BAKER: The diversion ratio.

18 (Laughter.)

19 MR. SALOP: Sorry. Thank you,  
20 Jon. I would have to think about that.

21 But I think you would have to  
22 reposition significantly, and I don't see it

1       happening, either the ability or the  
2       incentive.

3                   MR. BAKER: Yes, we need to move  
4       on. So, please be quick, but go ahead.

5                   MR. CARLTON: In response to  
6       something Steve said earlier, it is not the  
7       case that the economic case for this  
8       transaction depends upon T-Mobile's demise or  
9       the T-Mobile market share fading away.

10                   I think it is the case that the  
11       current conditions show that T-Mobile is not  
12       expanding, it is in decline, and is not  
13       expected to introduce LTE. That does not mean  
14       it is going to disappear.

15                   Now merger simulations, we have in  
16       the "but-for" world T-Mobile having a marginal  
17       cost curve, that it's continuing to invest if  
18       it has to. And it is against that "but-for"  
19       world that we are going to find that output  
20       goes up.

21                   Second, PCS has been expanding.  
22       It is true, if you view it on the national

1 basis, as Steve said, over the last year or  
2 two, **[Begin NRUF/LNP Highly Confidential  
Information]**

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7 **[End NRUF/LNP Highly Confidential Information]**

8 MR. CARLTON: I don't think these  
9 types of numbers really are going to make the  
10 heart of the deal. The heart of the deal,  
11 when you do these GUPPis, when you do a merger  
12 simulation, is how much extra output are we  
13 going to get? It's not whether T-Mobile can  
14 reposition and can it rebreathe life back into  
15 it, so that it will take off.

16 The fact of the matter is, if AT&T  
17 gets T-Mobile's spectrum, it's like one plus  
18 one equals three. You get three units of  
19 output. You know, we can explain why that is,  
20 but that is what that is going on. That is  
21 the kick. That is why our simulations show  
22 there is an output expansion. That is why it

1 is pro-competitive.

2 Now I understand we can talk about  
3 PCS, T-Mobile, and the lost competition, but  
4 that is really what is driving our results.  
5 It is not an assumption that T-Mobile is  
6 disappearing.

7 MR. BAKER: Okay.

8 MR. CARLTON: So, I wanted to make  
9 sure --

10 MR. BAKER: So, this one I think  
11 will be quick for you folks, AT&T folks.  
12 Sometimes a wireless provider can address a  
13 spectrum constraint by increasing  
14 infrastructure or implementing a more  
15 spectrally-efficient technology. At other  
16 times, these options are impractical.

17 Suppose we were to look at CMAs  
18 where AT&T observes a reduction in its service  
19 quality, and maybe an increase in the  
20 frequency of dropped calls or slower network  
21 speed, something like that. And suppose in  
22 those CMAs we find AT&T has not reduced the

1 extent of its price discounts and promotions  
2 to new customers. What would we, then, infer  
3 about AT&T's marginal cost of expansion there?

4 MR. CARLTON: Actually, that is a  
5 good question. The way in which we do the  
6 merger simulation we need the marginal cost  
7 curve. What we asked AT&T to do is go through  
8 engineering estimates in five cities, exactly  
9 the question, what capacity do you have to  
10 add, how much does it cost to serve these  
11 extra customers in order to keep quality  
12 constant? And that's how we calculate our  
13 marginal costs.

14 Now What you can observe locally  
15 is that the quality differs across the  
16 country. And they have investment processes  
17 in which they try and improve quality where  
18 there is degradation. So, for example, **[Begin AT&T**

**Highly Confidential Information]**

19 **[End AT&T Highly Confidential Information]**  
would be a good example. They are going  
20 make a lot of investments to improve  
21 quality, and that is on the drawing board.

22 So, my impression from speaking to

1 people at AT&T is they are aware of quality  
2 degradation in particular cities and want to  
3 make sure it doesn't happen. And therefore,  
4 in allocating capital, they do allocate  
5 capital to try and remedy those problems

6 MR. BAKER: But what are they  
7 doing with local price discounting in those  
8 cities? Are they increasing discounting or  
9 reducing discounting? What would you expect,  
10 if you don't know?

11 MR. CARLTON: I would say I don't  
12 know all the details of that, but my  
13 understanding is, and talk about Mark's  
14 definition, my understanding is that there are  
15 national pricing plans. There are deviations  
16 from those in the sense that there are local  
17 promotions; there are handset deals. **[Begin AT&T  
Highly Confidential Information]**

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**[End AT&T Highly Confidential Information].**

MR. ISRAEL: Can I add just one thing, sort of from the T-Mobile point of view? I think you guys know from the

1 documents T-Mobile, sort of recently, over the  
2 last six months or so, has done a fair amount  
3 of reorganization and **[Begin T-Mobile Confidential  
Information]**

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11 **[End T-  
Mobile Confidential Information]**

12 **[Begin T-Mobile Highly Confidential  
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**[End T-Mobile Highly Confidential Information]**. It comes out to the tradeoff between what would the marginal cost be of adding another sub, what would the effect of another sub be on the quality of the existing subs, and what do we need to do to make ourselves price-competitive in the marketplace?

**[Begin T-Mobile Highly Confidential Information]**

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**Mobile Highly Confidential Information]**

MR. BAKER: Okay. Anything you  
want to say?

MR. SALOP: Yes, I want to respond  
to this. The local promotions, you can talk  
about these later, but in our view they don't  
amount to much. And I didn't see anything in  
the Christopher declaration or anything else  
that suggested that they were related to  
quality.

AT&T taking all these actions to  
economize on capacity, I believe Mr. Stravitz,  
our engineer, made the point that AT&T is  
still selling GSM phones, which are so  
spectrally-inefficient. So, they are doing  
things that are inefficient as well.

But the broader point I want to  
make is that, well, while we're getting ahead  
of the game on efficiencies, when you do the  
efficiency/consumer benefit tradeoff that  
Dennis is talking about in the to-be-seen

1 simulations, you need to take into account  
2 that this is going to take place in the  
3 context of a national market where some  
4 markets may be congested and many other  
5 markets may not be congested.

6 And if you have uniform national  
7 pricing, then, actually, the effect on  
8 consumers is complicated and needs to be taken  
9 into account. So, for example, just to make  
10 it simple, suppose AT&T increases quality in  
11 market A, and as a result, it raises the  
12 nominal price in Market A -- would like to  
13 raise the nominal price in Market A -- but  
14 would like to reduce the quality-adjusted  
15 price in Market A.

16 Well, if they do that to get that  
17 lower price in Market A, which is what I  
18 assume the simulations are going to talk  
19 about, well, if they raise the nominal price,  
20 then in Market B, where there were no  
21 congestion problems, the Market B consumers  
22 are worse off and the Market A consumers are

1 better off.

2 And if you are going to ask the  
3 question, "are consumers overall better off?"  
4 you are going to have to weight the number of  
5 consumers in Market B, or Market B, C, E, D,  
6 F, and so on, against the ones that benefit in  
7 Markets A1, A2, A3.

8 Now that is a much trickier sort  
9 of balancing.

10 MR. BAKER: And this requires  
11 national pricing, and you folks were assuming  
12 that -- the underlying factual dispute here is  
13 how much local discounting and promotion there  
14 really is, correct?

15 MR. SALOP: I would say I am  
16 looking forward to seeing the analysis that  
17 shows that local prices differ systematically  
18 according to the quality. The local promos  
19 are things like -- I looked up carefully the  
20 Washington, D.C.-area, promos that were  
21 mentioned by Mr. Christopher.

22 **[Begin AT&T Highly Confidential  
Information]**

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**[End AT&T Highly Confidential  
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MR. ISRAEL: Can I make one just very short -- this is just on a statement of fact. My understanding is that, as of -- just on the question of selling GSM phones -- my understanding is that dealing with these

1 issues, as of late 2010, AT&T stopped selling  
2 GSM phones to its post-paid base and continues  
3 to sell post-paid phones and things like  
4 GoPhones in some and its low-cost  
5 alternatives, but it is sort of a statement of  
6 needing to continue to serve the base that  
7 wants those, but is considering or thinking of  
8 moving towards phasing those out.

9 But I think that actually reflects  
10 the issue. It is difficult to transition off  
11 of GSM altogether. I think it is entirely  
12 unfair to say that AT&T hasn't been doing  
13 everything it can where that is sort of  
14 efficient in the sense that they can  
15 transition enough people off to get enough  
16 spectrum to help with the problems that they  
17 are facing.

18 MR. BAKER: Well, we'll talk about  
19 that.

20 MR. SALOP: I would like to take  
21 issue with that.

22 MR. BAKER: Okay.

1 MR. SALOP: I mean the prepaid  
2 people, they use up spectrum, too. So, if  
3 AT&T gives a GSM phone to a prepaid customer,  
4 it is still using up this very valuable, so-  
5 called very valuable spectrum.

6 MR. ISRAEL: But I think that is  
7 exactly the issue, right? I mean their GSM  
8 transition is one way you can try to deal with  
9 these issues. I think AT&T is doing that  
10 where it is cost-effective, but there is also  
11 a customer base that wants those options.

12 MR. SALOP: Yes, but AT&T, while  
13 they don't want to migrate their own GSM  
14 customers, they are happy to migrate the  
15 T-Mobile GSM customers.

16 MR. BAKER: Okay. We're going to  
17 get into all this in the afternoon. And so,  
18 let's hold off on this.

19 I think we are going to change the  
20 schedule slightly. Instead of one medium-  
21 sized break in the middle of the session, we  
22 will do two shortish breaks.

1 MR. CARLTON: Let me say one  
 2 thing. The intensity with which you go after  
 3 a customer is going to be related to your  
 4 capacity in a city, even if you have national  
 5 pricing. So, that it is wrong to say that  
 6 capacity constraints won't have any effect.

7 I mean Christopher's Reply  
 8 Declaration talks about some of the efforts.  
 9 But just even if you have national pricing,  
 10 how hard I go after a customer is going to  
 11 matter. In some sense, that is going to have  
 12 to come through.

13 MR. BAKER: But, again, you are  
 14 assuming some kind of local promotional  
 15 activity to say that.

16 MR. CARLTON: Well, just how many  
 17 stores I have, how many customers I have. How  
 18 long do you have to wait in line? What are  
 19 the hours of the store? I mean those are  
 20 harder to detect in the data, but it is not  
 21 inconceivable that that is what is going on.

22 MR. BAKER: Hold on. All right,

1 we'll look for the studies comparing store  
2 hours across CMAs.

3 (Laughter.)

4 And in the meantime, let's try to  
5 come back in five minutes and just do a quick  
6 break.

7 (Whereupon, the foregoing matter  
8 went off the record at 10:05 a.m. and went  
9 back on the record at 10:13 a.m.)

10 MR. BAKER: All right, let's  
11 reconvene.

12 One housekeeping note, which is  
13 that those hard copies of those slides we  
14 handed out, we've got to collect them at the  
15 end of our session.

16 And second, the Sprint folks  
17 wanted to say something succinct about  
18 something that we talked about before. So, I  
19 will let them succinctly add to the record.

20 MR. SALOP: Okay. Greg raised the  
21 question of, could Sprint just make up for the  
22 loss of T-Mobile? And I think, if it were a

1 homogenous product market, which is sort of  
2 the reasoning, I think, then, well, in some  
3 sense of Sprint had enough excess capacity, it  
4 could just make it up with an epsilon price  
5 decrease.

6 But with differentiated products,  
7 it is more expensive. If Sprint tried to make  
8 it up by cutting its price, then it would have  
9 to cut the price to all its customers. And  
10 so, that would be expensive. You know, it's  
11 hard -- they face a downward sloping demand  
12 curve.

13 And the other possibility, it  
14 seems to me, would be suppose Sprint reduced  
15 its costs, which is more in the spirit of  
16 repositioning. Somehow seeing an opportunity,  
17 Sprint reduces its costs and, therefore, gets  
18 more customers. But that is going to take  
19 huge investment costs for Sprint to reduce its  
20 costs sufficiently to prevent price from going  
21 -- to undo the unilateral effect. We could do  
22 that exercise, but I am quite sure that it

1 would take a massive reduction in Sprint's  
2 marginal costs.

3 MR. BAKER: All right, succinct  
4 Bobby, really short.

5 (Laughter.)

6 MR. WILLIG: What Steve has just  
7 said might make sense if, indeed, as a result  
8 of the merger, what AT&T post-merger did was  
9 offer the same old prices and the same old  
10 quality or improved price and improved  
11 quality, as our simulation suggests.

12 But in the event, as Steve's  
13 personal theory or Sprint's theory would  
14 otherwise suggest, the merger might elevate  
15 price or elevate quality-adjusted price, now  
16 Sprint doesn't have to lower its price to  
17 offer customers a better deal than what would  
18 be offered in the aftermath of the merger, if  
19 the merger is, indeed, an anti-competitive  
20 one, as you suggest.

21 So, what you just said makes no  
22 sense at all.

1 MR. SALOP: Well, let me try to  
2 explain it in a way that even you can  
3 understand.

4 (Laughter.)

5 MR. BAKER: This is going to be  
6 the last comment.

7 MR. SALOP: I believe that Greg's  
8 hypothetical was supposing there is a  
9 unilateral effect, a unilateral price increase  
10 as a result of the merger. Well, we all know  
11 that Sprint's optimal response in that would  
12 be to partially respond by raising its own  
13 price, not 100 percent perhaps --

14 MR. WILLIG: But not lower it, as  
15 you were saying.

16 MR. SALOP: Not lowered by what I  
17 was saying. So, therefore, Greg's  
18 hypothetical would say, no, Sprint is not  
19 going to do it, would not undo the anti-  
20 competitive effect.

21 And I took it a step further.  
22 Perhaps that is where it became complicated.

1       Suppose Sprint decided to reposition that, for  
2       some reason, irrational, as you point out, to  
3       make up for the loss, by how much would it  
4       have to reduce its own costs in order to have  
5       incentive to do that?

6               But, of course, the investment  
7       cost would not be free. So, it would be  
8       unlikely to occur.

9               MR. BAKER: Okay. I am going to  
10       leave this now and ask a different question.

11               Instead of analyzing unilateral  
12       effects in the GUPPI framework, which assumes  
13       that both brands remain after the merger, I  
14       want to discuss the consequences of AT&T  
15       phasing out the T-Mobile brand for the  
16       elasticity of the demand function facing AT&T  
17       with respect to its retail customers and its  
18       prices.

19               So, I want to ask a question that  
20       puts aside, for the purpose of the question,  
21       issues about the repositioning and entry and  
22       efficiencies that you folks keep wanting to

1 talk about collectively, and just ask:  
2 suppose we consider -- I guess this is for  
3 your folks, the AT&T side -- suppose we  
4 consider the pre-merger AT&T customers, retail  
5 customers, who are going to lose an attractive  
6 substitution option with the exit of their  
7 second choice, T-Mobile. So, it is not  
8 necessarily all the pre-merger AT&T customers,  
9 but some of them had T-Mobile as a second  
10 choice, and they are going to lose that  
11 option.

12 If there are a lot of these,  
13 should we conclude that, all else equal,  
14 AT&T's demand function would grow less  
15 elastic, giving it an incentive to raise  
16 price, or is there some reasonable possibility  
17 these customers think of Verizon, Sprint, and  
18 other providers as just about as good a  
19 substitute as T-Mobile would have been, and so  
20 that wouldn't happen?

21 MR. WILLIG: The straight  
22 diversion effect, which I think is what you

1 are alluding to, is what is the foundation for  
2 the simulation work and the UPP work that we  
3 have been talking about so far. When you  
4 unleash us, we will talk about that further.

5 The other influence, I would say,  
6 that I think your question does touch on,  
7 which is not really part of the more  
8 conventional simulation work that we have  
9 done, is that when you ask, what is the price  
10 elasticity or the range of elasticities of  
11 AT&T's pre-merger customers, and then ask,  
12 what happens to the elasticity of AT&T's  
13 newly-enlarged body of customers, well, now  
14 there is a mix of different people.

15 There's the original AT&T  
16 customers mixed in with those T-Mobile former  
17 customers who are now in some hybrid state  
18 because they're being offered, I presume, the  
19 same rate plans that T-Mobile used to offer  
20 them, and, yet the branding is different. Now  
21 it's AT&T. The network is better, is what our  
22 simulations would certainly suggest, but they

1 are also a different body of people.

2 It is plausible, although this is  
3 not something that we have studied in any sort  
4 of empirically-accurate way, but it is  
5 certainly plausible that those new T-Mobile,  
6 former T-Mobile customers who now are part of  
7 the extended AT&T have different price  
8 elasticities and different price/quality  
9 tradeoffs, and perhaps more price elasticity  
10 than the typical AT&T customer had been pre-  
11 deal.

12 MR. BAKER: But if most of them  
13 stick with their legacy plans for a while,  
14 aren't they, in effect, insulated from  
15 whatever happens with the rest of AT&T's  
16 pricing?

17 MR. WILLIG: In part, yes,  
18 although they have new options now, to the  
19 extent they can more smoothly move to other  
20 options that AT&T after the deal offers them.

21 But they can still stay with the old.

22 MR. ROSSTON: But, if AT&T

1 raised its prices, they're protected against  
2 price increases because they are in this  
3 legacy plan box, right?

4 MR. WILLIG: Yes, while they still  
5 have their old plans available to them.

6 MR. ROSSTON: Yes.

7 MR. WILLIG: Although they are  
8 experiencing the enhanced quality of the new  
9 network, even though they still have the  
10 opportunity to be on the old price plan, which  
11 made commercial sense as it was offered for  
12 the quality of service that T-Mobile was  
13 offering.

14 MR. BAKER: But that doesn't make  
15 the demand curve -- I mean we were talking  
16 about how the demand curve for AT&T changes.

17 MR. WILLIG: Right.

18 MR. BAKER: And so, the fact that  
19 there might or might not be a benefit for the  
20 T-Mobile customers who are sticking with their  
21 legacy plans in terms of quality doesn't  
22 affect the elasticity of the demand facing the

1 previous AT&T customers.

2 MR. WILLIG: Right, although this  
3 goes beyond, I think the usual state-of-the-  
4 art of UPP. But if you think that the step  
5 that you are trying to take it now, you could  
6 imagine that the AT&T pricing for those who  
7 are not on the old T-Mo plans might actually  
8 experience more elasticity than before to the  
9 extent that the former T-Mobile customers are  
10 now more motivated to come over to the other  
11 AT&T plans in response to changes in those  
12 prices. There may be an enhanced impact on  
13 the price of elasticity of demand that goes  
14 along with even the heritage AT&T services.

15 MR. BAKER: You mean you're  
16 saying, that you're assuming, for purposes of  
17 argument, that the typical pre-merger T-Mobile  
18 customer would be more likely to switch than a  
19 typical pre-merger AT&T customer? And, then,  
20 you're saying maybe this customer doesn't  
21 stick into the box that Greg talks about, but  
22 shifts over to an AT&T plan? And, then, that

1 makes the AT&T demand that is not in the box  
2 more elastic? Is that what you're --

3 MR. WILLIG: Yes, that's a real  
4 possibility, although it is not a study we  
5 have been able to do.

6 MR. BAKER: But the ones who are  
7 shifting over aren't the ones who are, they  
8 are not necessarily the ones who are the  
9 switchers, are they?

10 MR. WILLIG: They are folks who  
11 used to be T-Mo customers, and if your view is  
12 that, in general, T-Mo customers, by their own  
13 self-selection process pre-deal, are a body of  
14 customers apt to be more price elastic --

15 MR. BAKER: Yes.

16 MR. WILLIG: -- than, say, the  
17 pre-merger AT&T folks. Then that is a double  
18 effect.

19 MR. BAKER: But there is a  
20 selection process of which ones shift from the  
21 legacy T-Mobile plans to the AT&T plans?

22 MR. WILLIG: Right.

1 MR. BAKER: And so, that could be  
2 from among the T-Mobile group, a different  
3 group than the average --

4 MR. WILLIG: This, too, is too  
5 complicated for me. That's why it is a little  
6 beyond the state-of-the-art.

7 MR. BAKER: I think so.

8 MR. WILLIG: It goes right to your  
9 question.

10 MR. BAKER: But I think Steve  
11 might want to help.

12 MR. SALOP: Well, I think it could  
13 go either way.

14 MR. BAKER: He'll explain it to  
15 us.

16 MR. SALOP: But I was really, on  
17 this whole issue of the newly-satisfied T-Mo  
18 legacy customers, if the average contract  
19 lasts two years, and the expansion of the AT&T  
20 network is given to relieve these congestion  
21 problems, and it is going to take one year,  
22 then hardly anybody is going to be on a legacy

1 plan, is going to be protected by a legacy  
2 plan, it seems to me, in terms of getting the  
3 so-called higher-quality AT&T network.

4 Now maybe I am misunderstanding  
5 exactly what AT&T's promising to do, but --

6 MR. CARLTON: Well, let me just  
7 say my understanding of the question is, when  
8 you are talking about the legacy plan, there  
9 is the notion that AT&T, as it has done in  
10 past transactions, has typically kept the  
11 plans in place, so that the T-Mobile customers  
12 who are currently on a T-Mobile account will  
13 have the option of those plans.

14 Immediately, when the transaction  
15 occurs, even if you stay on a legacy plan, you  
16 will get the improved quality of the larger  
17 network. So, the T-Mobile customers will  
18 actually be getting a better deal, not just  
19 the same deal.

20 Now in terms of what happens to  
21 AT&T, obviously, their quality has improved.  
22 But, also, as I say, I won't bring in the

1 efficiency. The main thing is they are going  
2 to be expanding capacity and be expanding  
3 output, and that is going to be their  
4 incentive.

5 MR. SALOP: That was not my -- it  
6 is going to take a while to integrate the two  
7 networks. It is not like the merger is going  
8 to close on January 1st, and, then, the  
9 T-Mobile subscribers, all of a sudden, are  
10 going to benefit from this much better AT&T  
11 network.

12 MR. CARLTON: I agree integration  
13 can take a while. On the other hand, my  
14 understanding, for example, for roaming is  
15 they can switch that over pretty quickly.

16 MR. SALOP: Well, they can  
17 already, they are already roaming.

18 MR. CARLTON: Roaming on the AT&T  
19 -- a T-Mobile customer who is using T-Mobile  
20 right now can use the AT&T network after the  
21 transaction --

22 MR. SALOP: But I thought you said

1 the AT&T network was highly congested, and  
2 AT&T says the T-Mobile network is not very  
3 congested. Wouldn't it be the AT&T customers  
4 that would do better?

5 MR. CARLTON: It is this simple.  
6 Right now, T-Mobile in certain areas of the  
7 country roams on its own network. There are  
8 parts of the country where the AT&T network is  
9 superior, and therefore, that can immediately  
10 allow better roaming and better quality for a  
11 T-Mobile customer.

12 MR. SALOP: So, my question was  
13 the protection of the legacy customers. I  
14 thought most people upgrade their phone every  
15 two years. And at that point, you no longer  
16 would be, if you want to upgrade your phone,  
17 you would no longer get the legacy plan.  
18 Isn't that right?

19 MR. ISRAEL: From my  
20 understanding, I think the details are -- I  
21 don't know all the details. **[Begin AT&T Highly**  
22 **Confidential Information]**

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**[End AT&T Highly Confidential Information]**

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MR. BAKER: Okay. Let me move on and ask about, suppose we conclude that geographic markets for retail wireless service are local, but that many of them are similar in structure. And so, the likelihood of unilateral effects is correlated highly across the local markets.

So, as a matter of antitrust policy, would it make sense to capture that correlation by defining a national market in addition to the many local markets?

I guess you folks don't want to define the national markets. So, that's for you.

MR. WILLIG: Let me speak directly

1 to your question. The guidelines are  
2 perfectly clear, and logic backs this. If you  
3 have got a number of markets that are really  
4 distinct because the demand is distinct and  
5 the pricing can be distinct, then,  
6 nevertheless, the competitive analysis of a  
7 merger is much the same in each of them.  
8 Then, as a matter of analytic convenience,  
9 there is no problem with aggregating them for  
10 the sake of the analytics.

11 That doesn't mean necessarily that  
12 the prices aren't tied to each other and that  
13 they literally are one market when it comes to  
14 issues that actually involve the question of  
15 whether pricing can be distinct or not.

16 MR. BAKER: Okay. Let me just ask  
17 you Sprint folks, if we decide to analyze the  
18 transaction in a local geographic market and  
19 decline to also look at a national geographic  
20 market, what mistake could we make? What  
21 would we miss in our competitive effects  
22 analysis of unilateral effects?

1 MR. SALOP: Aside from what the  
2 casebook would say --

3 MR. BAKER: You can quote the  
4 casebook if you would like. This is -- never  
5 mind.

6 (Laughter.)

7 MR. SALOP: We think that the  
8 merger, that you would find the merger anti-  
9 competitive whether you analyze it as a series  
10 of local markets or whether you analyze it in  
11 a national market.

12 My concern is that, if you analyze  
13 it purely on a local market basis without  
14 awareness of the national market aspects, you  
15 can misdiagnose it or miss some of the anti-  
16 competitive problems that could occur. And  
17 most importantly, could come up with a remedy  
18 that does not address the national issues.

19 MR. BAKER: Well, that was the  
20 question. What would we misdiagnose in this  
21 in competitive problems?

22 MR. SALOP: Well, let's look,

1 first, at the interdependencies across the  
2 markets, you know, the narrowest idea. The  
3 quality of service depends on not only the  
4 quality in the home market, but the quality in  
5 other markets because we travel. So, if I  
6 live in Market A, but I travel to Market B,  
7 then the quality of the network in Market B  
8 would be relevant to me. So, that is one  
9 kind of interdependency. And you might ignore  
10 that if you just look at the local markets one  
11 at a time.

12 The second is that there is  
13 uniform pricing. That changes, that  
14 fundamentally changes the way the analysis  
15 works because like in the quality differential  
16 case that I discussed before.

17 You could also, if you stick at  
18 the local level, you might miss aspects of  
19 national competition that are very important;  
20 for example, handset competition or the  
21 importance of brand names. And you might  
22 ignore innovation competition.

1           So, if you take everything into  
 2           account, then, of course, the market  
 3           definition doesn't matter. If the only reason  
 4           why you were defining markets, geographic  
 5           markets, was to calculate an HHI, well, the  
 6           national HHI is like **[Begin NRUF/LNP Highly  
 Confidential Information] [End NRUF/LNP  
 Highly Confidential Information]**. And if you look  
 at  
 7           the local HHIs, **[Begin NRUF/LNP Highly  
 Confidential Information] [End NRUF/LNP  
 Highly Confidential Information]** percent of  
 the population  
 8           lives in CMAs that well exceed the screen.

9           So, at that level it doesn't  
 10          matter. It is just a question of the  
 11          competitive effects could get screwed up.

12          MR. BAKER: Okay. Let's go on to  
 13          this slide here, Greg.

14          This slide here indicates prices  
 15          and plans for wireless voice service that are  
 16          currently available for AT&T, Verizon, Sprint,  
 17          and T-Mobile off the websites. This is voice  
 18          service.

19          You can see there is a lefthand --  
 20          so, to explain the dots there, on the bottom  
 21          left is a price point for the same number of  
 22          minutes, I guess it's 200 minutes, that

1 Verizon and AT&T offer to senior citizens and  
2 Sprint offers to everyone. And there are  
3 three firms clustered at that first black dot.

4 Bobby says too many minutes, Mark.

5 (Laughter.)

6 So, then, the next black dot is,  
7 for that \$40 price, Verizon and AT&T and  
8 Sprint all offer 450-minute plans, and  
9 T-Mobile offers a 500-minute plan. And, then,  
10 the next one you see, it is the same kind of  
11 thing. Verizon, AT&T, and Sprint offer the  
12 same price point at 60, and T-Mobile has a  
13 slightly lower-priced and higher-minute plan.

14 And, then, the unlimited, T-Mobile, I think  
15 it might be, yes, there is an unlimited plan  
16 there for T-Mobile, too, that's cheaper.

17 But my question is, why are -- for  
18 the AT&T folks, I guess -- why are the  
19 datapoints clustered so tightly? Why don't  
20 these firms compete by offering voice plans  
21 that fill in the gaps more than they do in the  
22 figure?

1 MR. CARLTON: It must not be  
2 sufficient market demand to justify filling in  
3 the gaps. Otherwise, I assume they would have  
4 done it if it would have been optimal to do.  
5 But there is a product spectrum, and I assume  
6 that there is a discrete number of products  
7 they decided to offer. I am not sure I have  
8 any deeper -- I am not sure, Jon, exactly,  
9 actually, what your question is. Are you  
10 asking whether there's only a finite number,  
11 why there's not a continuum?

12 MR. BAKER: Well, you could take  
13 this a lot of ways. Or there are a bunch of  
14 questions. I wasn't sure how you were going  
15 to answer, either.

16 One thing I am asking you, also,  
17 what we could be seeing is pre-merger  
18 coordination around a set of prices. Another  
19 thing we could be seeing is price  
20 discrimination, where you are sorting  
21 customers who are self-selecting into  
22 different price points. And that if someone

1       were to really jump in the middle there, it  
2       would defeat all of the -- you would get a  
3       pooling equilibrium rather than a separating  
4       one.

5                       I mean, I am actually asking, what  
6       should we make of this figure? That's really  
7       my question.

8                       MR. ISRAEL: And it's also price  
9       plans are more dimensional than are captured  
10      on this figure, right? So, I mean, sometimes  
11      we are seeing clustering, but you understand,  
12      if you really have clustering, I think you  
13      would want to look at -- there's two examples  
14      that jump to mind: the size of handset  
15      subsidies and one that I know T-Mobile thinks  
16      about is how you deal with overages, which can  
17      be an issue for customers. A lot of people  
18      have overage charges. T-Mobile has shifted  
19      towards not overage charges, but if you go  
20      over a certain number of minutes, even if it  
21      is an unlimited plan, your speeds slow down.

22                      So, I mean, I think Dennis' point,

1       there is some evidence that people are using,  
2       if you think about the multi-dimensions of the  
3       plan, using different dimensions to try to  
4       fill where there is demand in the market.

5                   MR. BAKER:       This was honestly  
6       just, how do we explain this economic fact  
7       question. It didn't have a real point other  
8       than --

9                   MR. WILLIG:       Well, you suggest  
10       that in a market you see different rivals  
11       offering essentially, more or less similar  
12       products at pretty similar prices. It is  
13       certainly not a symptom of coordination. It  
14       is a symptom of competition, not to say that  
15       there might not be coordination going on in  
16       some abstract market, not this one.

17                   (Laughter.)

18                   This is a highly-competitive  
19       market, as your own agency has carefully taken  
20       note from the data.

21                   But to say that -- and I know that  
22       this was just to get the conversation going

1 -- but, surely, we shouldn't let the record  
2 reflect any possible inference that, from  
3 similar prices and the existence of similar  
4 plans, that it is not a wildly competitive  
5 market.

6 MR. BAKER: What do you make of my  
7 price discrimination suggestion?

8 MR. WILLIG: Oh, well, for any one  
9 carrier, it might well make sense to offer a  
10 variety of plans that fit the profiles of  
11 different customers in terms of what they want  
12 and how to match up the pricing, and the  
13 compensation, with needs.

14 I also agree with Mark -- and,  
15 obviously, you know this also -- but filling  
16 in the gaps between the points is what are the  
17 treatments of the customers who don't exactly  
18 use the 900 minutes that the plan has. And  
19 sometimes some plans say, yes, you can store  
20 up some unused minutes to the next month or  
21 the next six months. Sometimes they hit you  
22 over the head if you go one minute over.

1 There's a lot of variation.

2 MR. BAKER: So, your point, you  
3 and Mark are saying essentially that price is  
4 more complex than this number --

5 MR. WILLIG: That's surely true.  
6 That's right.

7 MR. BAKER: I see.

8 Anything you want to say?

9 MR. SALOP: Yes. Well, I would  
10 like to see the data on the handset subsidies  
11 and the overages to see what they amount to.

12 But what I take from this picture  
13 is the fact that post-paid carriers compete  
14 with other -- post-paid plans compete with  
15 post-paid plans and prepaid plans compete with  
16 prepaid plans.

17 I think the clearest example is,  
18 if you look at the trajectory of prices for  
19 the unlimited plans, if you look at that  
20 chronology, what you see is, what you saw is  
21 that Sprint offered a low price and, then,  
22 T-Mobile responded to the Sprint lower price.

1       And, then, Verizon responded a couple of  
2 months later to the lower Sprint and T-Mobile  
3 price, and AT&T matched Verizon that very  
4 same day.

5                   MR. BAKER:       Which was for  
6 coordination?

7                   MR. SALOP:       No, for competing  
8 against one another.

9                   MR. BAKER:    I see.

10                   MR. SALOP:     I'm not going to  
11 -- you know, whether that shows coordination  
12 or not --

13                   MR. BAKER:    I see.    Okay.

14                   Let me go to the next slide here  
15 because we are still in the same area of  
16 conversation.

17                   So, what this slide shows -- and  
18 it is a little hard to see on the screen, but  
19 you folks have it on the page -- this is, what  
20 this shows is the section up at the top,  
21 voice, little "I" up there, are the data  
22 points that were plotted on the graph.    And,

1 then, there's some additional prices, and the  
2 rest does not purport to be the full menu of  
3 what's available, but it's a lot of it.

4 So, there are add-on prices for  
5 smartphone data, for smartphone plans with  
6 data. So, for example, just to look in the  
7 first column, an extra 2 gigabytes of data on  
8 your plan for Verizon; you add \$30 to that  
9 voice plan, whichever one you started with.  
10 And there's some add-ons for texting. And,  
11 then, there's some, quote, "unlimited" plans  
12 in the bottom because I think they cap data  
13 allowance; they are unlimited in voice and  
14 texting.

15 So, the slide is just showing you  
16 there is a menu of voice plan price points  
17 and, then, there are add-on prices for data  
18 and text below.

19 And so, I want to assume, for the  
20 purpose of argument -- and I think this is for  
21 Sprint -- that these four firms, Verizon,  
22 AT&T, Sprint, and T-Mobile -- are sufficient

1 for successful coordination, and that pricing  
2 is effectively national. So, I just want to  
3 assume that for the purpose of the question.

4 So, with all these additional  
5 options below, does that make the product  
6 space too complex to make coordination  
7 feasible? Or, for example, could the firms  
8 coordinate and reach a consensus just for,  
9 say, raise the price of all the voice plans by  
10 \$5, and would that do it?

11 MR. SALOP: If this is all that  
12 there was, you wouldn't even need computers.  
13 You could just eyeball it.

14 But, even if it were more  
15 complicated, there are webcrawlers that they  
16 could follow each other's prices day by day.  
17 It's not very complicated.

18 MR. ROSSTON: He was asking about  
19 coordinating on what you should do as opposed  
20 to monitoring, I think.

21 MR. BAKER: Yes. On reaching  
22 consensus, not deterring cheating.

1 MR. WILLIG: Well, I mean, you're  
2 leaving out handsets, of course.

3 MR. BAKER: Okay.

4 MR. WILLIG: Not to avoid  
5 answering this question, but even though  
6 you've got an extra few dimensions in this  
7 table, and even though Steve can do a full  
8 analysis by eyeball, we know very well that  
9 there's lots of important competition. Just  
10 look at the promotions and what it is they're  
11 talking about on TV all the time.

12 In terms of grabbing each other's  
13 customers, it's not just pricing, although  
14 that does come into play, but, it's also the  
15 feature sets of the instruments that are being  
16 marketed along with the plans. And that is  
17 just wildly complex and diverse, as the FCC  
18 report tends to document.

19 MR. BAKER: I will concede for  
20 purposes of argument that coordination  
21 wouldn't be perfect if you didn't touch the  
22 handsets. But would it be successful if all

1 you did was, if all the firms, these four  
 2 firms, added \$5 to each of their voice plans?

3 Would that be a successful, if they could  
 4 deter cheating, could they reach a consensus  
 5 that way?

6 (Laughter.)

7 MR. WILLIG: That's a big if. If  
 8 they could collude, could they collude? Well,  
 9 maybe --

10 MR. BAKER: No, no, no, no, no,  
 11 because collusion, it could be that they can't  
 12 figure out -- they all have different  
 13 incentives and they can't agree on where to  
 14 go. I mean there's a problem there.

15 MR. WILLIG: Well, it's not at all  
 16 clear that they would all want to go to  
 17 whatever it is that you're hypothesizing.

18 But, also, keeping in mind that an  
 19 important element of the way consumers  
 20 perceive the offers -- and the companies are,  
 21 obviously, promoting that and responding to it  
 22 -- is by the design by the handsets.

1                   If you ask the average person that  
2 I ever talk to about this space, not doing a  
3 formal study, but  
4 just talking to people, people talk about the  
5 handsets, and what do they do and what are the  
6 features, and how much did it cost, instead of  
7 these particular features of what the usage  
8 plans are. Although that is important, too.

8                   MR. SALOP:       Okay.       So, you're  
9 saying it would be easy to, maybe it would be  
10 easy to collude on price, but they would still  
11 face competition for handsets?

12                  MR. WILLIG:       No, the two are  
13 inextricably linked, as some might say. If  
14 you are in some hypothetical world that I  
15 think Jon is asking us about, but totally  
16 hypothetical, if there was some attempt to  
17 coordinate on the profitability of offering a  
18 service and market share, which I imagine  
19 would be necessary, even in your make-believe  
20 world, one of the most natural ways for a  
21 carrier to break ranks, as it were, and to try  
22 to grab share, and maybe even benefit from the

1 fact that in your hypothetical other carriers  
2 thought they had some sort of a collusive  
3 deal, maybe one of the most effective ways to  
4 jump forward is to unleash the latest new  
5 handset that has been arranged with some  
6 manufacturer and advertise it, and get the  
7 real market edge for a while.

8 And would the other firms then  
9 say, "Oh, no, wait a minute. We really can't  
10 cut price because we had a Salop agreement not  
11 to, but here my rival is trying to steal my  
12 customers with a handset."? It's hard to  
13 imagine, it would be impossible to imagine  
14 stability on the price front if there is  
15 endemic instability on the technology front.

16 MR. SALOP: So, did AT&T cut price  
17 when Verizon getting the iPhone?

18 MR. WILLIG: I don't know that  
19 fact, one way or the other. There was a lot  
20 of speculation about what was going to be the  
21 impact of Verizon having the iPhone.

22 MR. SALOP: One thing I know, AT&T

1       tried to lock people in to longer-term  
2       contracts. It allowed unlimited data if you  
3       grandfathered in.

4                   MR. ISRAEL: **[Begin AT&T Highly  
5       Confidential Information]**

6  
7                                   **[End AT&T Highly  
8       Confidential Information].**

8                   MR. SALOP: Right, right.

9                   MR. CARLTON: So, the point of the  
10       question was to distinguish monitoring from  
11       reaching a consensus when the underlying  
12       carriers have very different infrastructure,  
13       including capacity constraints?

14                  MR. BAKER: Yes.

15                  MR. CARLTON: And I think it's  
16       clear, though, the more dimensions you have,  
17       especially even if everybody is homogenous, it  
18       is harder to reach agreement. And, then, it  
19       just gets more complicated when the  
20       infrastructure is different, as it is in this  
21       case. And that is in part in this merger,  
22       because the infrastructure is so different.

1                   But the element that is not here  
2                   is quality, and quality is quite varying. So,  
3                   if my quality is going down, and I'm losing a  
4                   lot of customers because of that, I am going  
5                   to have to respond in some way. And whether  
6                   it is giving away iPhones, whether it is not  
7                   trying to coordinate as well as I was perhaps  
8                   being hypothesized to do, I mean I think it is  
9                   clear, the more you imagine the dimensions of  
10                  the product space increasing, and my  
11                  expectation it is only going to continue to  
12                  increase as data becomes more and more  
13                  important, you are going to find whatever  
14                  hypothesized level of coordination more and  
15                  more difficult.

16                   Now that is a different question  
17                   than monitoring and, then, punishment. Those  
18                   are separate.

19                   MR. BAKER: Yes.

20                   MR. CARLTON: But I thought the  
21                   question was really going to agreement.

22                   MR. BAKER: Yes, you do have my

1 question correctly. And I think, am I right  
2 that your answer is that there are other  
3 dimensions besides the permanent price of plan  
4 -- and the ones you have highlighted are  
5 quality of service and handset features  
6 -- that cannot be held constant? Or let me  
7 put it this way: that consumers immediately  
8 convert into price units, so that the full  
9 price that they're thinking about is the price  
10 adjusted for all of these other things. So  
11 that a change in the price here would not be  
12 adequate to reach a consensus because you  
13 would have to also simultaneously do something  
14 in these other dimensions. Is that what  
15 you're saying?

16 MR. CARLTON: I think that's too  
17 extreme. I really don't think the world is no  
18 coordination or perfect coordination. I mean  
19 I think it's a spectrum.

20 I think the right place to start  
21 as your diagram is saying is, this is the  
22 existing state of the world, how will the

1 merger change the existing state of the world?

2 My own sense is the more product dimensions  
3 you have, the harder it is to maintain any  
4 sort of theory of coordination both from a  
5 monitoring and a detection point of view, as  
6 well as a consensus point of view.

7 But, certainly, I think all these  
8 features matter. As we get more complicated  
9 and more advanced in data use, the features of  
10 a phone will become more and more important  
11 than they are now even. And I think they are  
12 more important than they were 10 years ago.

13 So, I think the world is getting  
14 more complicated, not less. So, if you are  
15 looking forward, it is the change in the  
16 likelihood of coordination that you should be  
17 focusing on.

18 MR. SALOP: I think that, you  
19 know, the phones are doing more, but I think,  
20 as this chart shows very clearly, consumers  
21 value simplicity. And you are always going to  
22 have price points. Firms are always going to

1 limit the menu so that it is manageable for  
2 consumers.

3 But I agree there's a spectrum of  
4 coordination, and there's all different types  
5 of coordination as well. I mean there's the  
6 Stigler form of coordination. There is  
7 parallel accommodating conduct. There is  
8 mavericks. There is Stackelberg, and so on.

9 And coordination may not be  
10 perfect. I agree with that as well. And I  
11 also agree the issue is, what will the merger  
12 do to the likelihood of coordination?

13 And on that, the merger will  
14 reduce the number of dimensions because you  
15 will have this T-Mobile just X'ed out, and it  
16 will also affect the cost and benefits of  
17 coordinating in various ways. And on that, I  
18 think that the merger will make the market  
19 more vulnerable, more likely to cause  
20 coordination.

21 MR. BAKER: Let me follow up with  
22 you on something related to this. Suppose we

1 did have successful coordination after the  
2 merger, and the firms managed to lift prices  
3 on the entire menu of plans that they sold  
4 nationally, that maybe my theory worked.

5 But, then, suppose one of the  
6 providers obtains the exclusive rights to sell  
7 an attractive, new smartphone model or it  
8 increases the speed of its network in some  
9 cities more quickly than its rivals, some of  
10 the kinds of responses that Bobby, Dennis, and  
11 Mark were talking about.

12 Would you expect those  
13 developments to lead to a breakdown in a  
14 coordinated arrangement on service plan  
15 pricing?

16 MR. SALOP: I think I have to  
17 think about that question. I think probably  
18 not, but I would want to think about that some  
19 more and look at the evidence.

20 When AT&T got the iPhone, did plan  
21 prices between Verizon and AT&T diverge? That  
22 would be one question I would ask. When

1 Verizon got the iPhone, did it eliminate price  
2 dispersion on the basic plan between AT&T and  
3 Verizon? I think the answer to the latter is  
4 no. I don't think Verizon getting the iPhone  
5 did affect the price.

6 And when T-Mobile came out with  
7 the very first Android phone, and it was  
8 followed by Sprint with another phone, and,  
9 then, Verizon followed Sprint and T-Mobile,  
10 did Verizon's overall plans get out of line?

11 That is the sort of data that you  
12 would want to look at. I haven't looked at  
13 that data yet.

14 MR. BAKER: Are those appropriate  
15 to take a look at?

16 MR. WILLIG: Yes, it's not really  
17 responsive to your hypothetical, Jon, which is  
18 an interesting question, and I think the  
19 answer to it is very clear.

20 If you look at the world through  
21 the lens of some kind of repeated  
22 games/interaction among the players, and you

1 say, okay, there's two fronts. One is the  
2 handset front; the other is the pricing front.

3 Then ask whether, if somebody goes maverick  
4 against the purported agreement, as you were  
5 suggesting, say on the handset front, as a  
6 matter of just garden-variety first-year  
7 organization economics, that change against  
8 what was anticipated upsets what had otherwise  
9 been the ability of the firms to coordinate on  
10 the pricing dimension.

11 One firm jumps ahead with a  
12 handset in a way that was unanticipated by its  
13 hypothesized cartel mates. Then the need of  
14 the other firms to break ranks in price and do  
15 something to catch up and hang onto their  
16 volume becomes enormously magnified by the  
17 fact that somebody else went maverick on the  
18 technology front.

19 So, the two fronts are really  
20 inextricably linked in a game theory  
21 formulation of the analysis of cartelization,  
22 and generally goes in the direction of

1 somebody breaks ranks on one front, makes it  
2 much more likely that others are going to have  
3 to break ranks on the other.

4 MR. SALOP: Yes, I think that we  
5 need to look at the various models, and we  
6 need to look at the real world, at how  
7 business people actually behaved when  
8 something did happen to it.

9 MR. BAKER: That's what I want to  
10 talk about. Okay. What did you make of  
11 Steve's data suggestion?

12 MR. WILLIG: It's totally  
13 irrelevant.

14 MR. BAKER: Because there's no  
15 coordination of --

16 MR. WILLIG: Jon asked about a  
17 preexisting situation where there is collusion  
18 and what would happen if that collusion broke  
19 down on handsets --

20 MR. BAKER: Okay. I think we're  
21 far enough along in this to --

22 MR. SALOP: Jon, I would just like

1 you just to expand your hypothetical. As you  
2 think about it, it's not just raising price.  
3 It is also the failure to decrease price.

4 MR. BAKER: Yes. When I think  
5 about raising price, that would encompass a  
6 slowdown in the rate of decrease of price in a  
7 situation where that would have occurred more  
8 rapidly in the "but-for" world.

9 MR. SALOP: I mean the point I am  
10 trying to make is that, when these firms  
11 coordinate, if they coordinate, they may limit  
12 -- they may not go to optimal coordination.  
13 Instead, they may do something simple that  
14 works on a practical basis, even though it  
15 would not get them to the joint profit --

16 MR. BAKER: But, see, my  
17 suggestion for something simple was raise the  
18 voice prices by \$5 on all the map. And so,  
19 then, we have been talking since, I thought,  
20 about, suppose that worked?

21 And you guys were saying, well, it  
22 wouldn't work. As simple as it may be, it is

1 too simple, I think was your position.

2 MR. WILLIG: Not at all. As you  
3 know, the whole promise of everybody elevating  
4 price by, say, \$5, at that new position, by  
5 construct, the \$5 elevated price is not  
6 individually profit maximizing. It is only  
7 profit maximizing because of the supposed  
8 adherence by all of them to the new price  
9 point. But if one of them is going off and  
10 breaking ranks with technology, why would  
11 anybody anticipate that the prices are going  
12 to hang up at the individually irrational  
13 levels?

14 It would only be rational for  
15 folks to break ranks on the price --

16 MR. BAKER: But, surely, you are  
17 not suggesting that --

18 MR. WILLIG: I mean given that it  
19 has fallen apart on the technology --

20 MR. BAKER: You surely not  
21 suggesting, or maybe you are, that you have to  
22 coordinate on every dimension in order for

1 coordination to be successful?

2 Suppose the automakers were  
3 coordinating on the cars, but then one of them  
4 decided to introduce a new color. Would that  
5 defeat the coordination in the auto --

6 MR. WILLIG: You're noticing that  
7 handsets are different by color. That could  
8 be competitively important.

9 But, no, when something is  
10 extremely important, some intrinsic dimension  
11 of the product that people care about a great  
12 deal, it is going to have to be part of a  
13 successful collusive --

14 MR. SALOP: Also, there are ways  
15 to punish. I mean you're not getting us into  
16 all the coordination, but, you know, they can  
17 punish by offering to pay the early  
18 termination fees just of one carrier. So, if  
19 AT&T breaks ranks, Verizon can say, "Well,  
20 we're going to offer an early termination fee.

21 We are going to pay the early termination  
22 fees, but only for AT&T."

1 MR. BAKER: I want the lawyers in  
2 the room to realize that you're not to pass  
3 that back to your clients.

4 (Laughter.)

5 This is not going to be a forum  
6 for how to fix prices.

7 (Laughter.)

8 MR. SALOP: I actually believe  
9 that was one of Mr. Christopher's examples.  
10 So, they already --

11 MR. BAKER: They already knew.  
12 Okay.

13 MR. CARLTON: You want to contrast  
14 innovation competition to price competition.  
15 There's a difference between the two. If I  
16 come out, all of a sudden, with a new iPhone  
17 or a new phone and I catch my rivals by  
18 surprise, I'll get a whole chunk of business  
19 of people coming over. There's a discrete  
20 number of people who will come over, and it  
21 will take my rivals a while to respond.

22 That can be extremely disruptive

1 to any set of coordination because now you  
2 have changed the structure of the market  
3 shares. And so, what Bobby was saying is you  
4 change the underlying incentives to keep going  
5 along with whatever agreement you --

6 MR. BAKER: But not all new  
7 smartphone introductions are as important as  
8 the iPhone. Some of them may be just changes  
9 of color or closer to that --

10 MR. CARLTON: And the more  
11 dimensions you have, the more ways which  
12 marginal extensions of other dimensions can --

13 MR. BAKER: Okay.

14 MR. SALOP: There's no surprise.  
15 I mean there are long periods of announcements  
16 with respect to new handsets coming into the  
17 market.

18 MR. BAKER: Okay.

19 MR. SALOP: It could be  
20 disruptive. I'm not saying it's not  
21 disruptive, but it's not a surprise.

22 MR. BAKER: Okay.

1 MR. WILLIG: It could be a  
2 surprise if they're successful because no one  
3 actually --

4 MR. BAKER: Okay. Thank you,  
5 Bobby.

6 Suppose we conclude that the four  
7 largest firms, Verizon, AT&T, Sprint, and  
8 T-Mobile, could successfully coordinate in an  
9 appropriate geographic market, whatever that  
10 may be, without regard to other providers,  
11 Leap, MetroPCS, and whoever else.

12 Now there are some structural  
13 reasons to think T-Mobile may have less  
14 interest in coordinated pricing pre-merger  
15 than AT&T and Verizon. This is going to be  
16 for the Sprint folks. It has a relatively  
17 small share and it doesn't also sell wireline  
18 service. So, maybe it will benefit less from  
19 coordinated pricing. And its HSPA+ network  
20 lets them offer network speeds comparable to  
21 what AT&T and Verizon hope to offer for the  
22 next few years, potentially allowing it to

1 expand output inexpensively.

2 But Sprint also has a relatively  
3 small share in the wireline affiliate and a  
4 fast national network. So, should we conclude  
5 that coordination would remain constrained by  
6 Sprint after the departure of T-Mobile?

7 MR. SALOP: So, we're in a Jon  
8 Baker maverick world here.

9 MR. BAKER: Of course.

10 (Laughter.)

11 MR. SALOP: As between the two, I  
12 mean, I certainly would like to have two  
13 potential mavericks rather than one because  
14 sometimes you can't tell who the maverick is.

15 Now if you were sure that Sprint and T-Mobile  
16 were equally-strong mavericks, then the  
17 elimination of T-Mobile, by definition, would  
18 not have an effect.

19 But you don't know that. Either  
20 one could be the maverick. And, of course,  
21 the merger could affect -- you are also  
22 assuming away exclusionary conduct, and so on

1 and so forth.

2 MR. BAKER: Yes.

3 MR. SALOP: So, I would say, you  
4 know, you are halving your chance that you are  
5 still going to have a maverick, as good a  
6 maverick after the merger.

7 MR. BAKER: So, would it be  
8 possible that you actually need both to play  
9 that role, that because of differentiations in  
10 this industry --

11 MR. SALOP: And you could, yes.  
12 That could occur as well.

13 And, of course, there are other  
14 types of coordination besides that.

15 MR. BAKER: Yes.

16 MR. SALOP: But even within the  
17 maverick model, they could each be a maverick  
18 on some dimension, you know, different on the  
19 dimension in which they constrain things.

20 MR. BAKER: And so, you would be  
21 losing part of your maverick. You need both  
22 to be the maverick. You're losing part of it,

1 and you don't have a full maverick left, is  
2 kind of your sort of sense?

3 MR. SALOP: Well, there are  
4 various --

5 MR. BAKER: The possibility --

6 MR. BAKER: There are various ways  
7 you can look at it, but you're losing, if you  
8 have an index of maverickness, your  
9 maverickness index would go down.

10 MR. BAKER: Would that be the "M"?  
11 What would you call it?

12 (Laughter.)

13 Do you have anything you want to  
14 say about this or shall I go on?

15 MR. CARLTON: The only thing I  
16 would say is I think your question highlights,  
17 and Steve's answer, that if Sprint, if there  
18 were coordination, and that's what you're  
19 worried about, and T-Mobile was helpful was  
20 reducing it, Sprint is going to benefit  
21 because it's not going to totally replace  
22 according to Steve's answer. And, then,

1 Sprint would be in favor of this transaction.

2 MR. BAKER: Unless it's excluded,  
3 which Steve sort of said.

4 MR. CARLTON: No, not just unless  
5 it's excluded. That's one possibility. The  
6 other possibility is Sprint is worried about a  
7 more efficient rival, and you will have to  
8 sort through, reviewing the evidence, which  
9 one you think is more reasonable to justify  
10 why Sprint is complaining.

11 MR. SALOP: Well, actually, AAI  
12 did an event study. Dennis had done an  
13 events study in the Alltel deal. And what AAI  
14 did was they repeated Dennis' analysis for  
15 this deal with respect to Verizon. And they  
16 found that Verizon stock price went up as a  
17 result of the merger. So, that would be  
18 consistent with anti-competitive -- and, of  
19 course, Sprint's price went down, but  
20 Verizon's went up. So, that would be  
21 consistent with the anti-competitive theory,  
22 not the pro-competitive theory.

1 MR. CARLTON: Maybe, maybe not.

2 It might be speculating what the FCC might  
3 require for spinoffs and whether Verizon could  
4 buy some spectrum. So, it is a little more  
5 complicated without figuring out what it is --

6 MR. SALOP: They have thought that  
7 this spinoff, that what the FCC would do would  
8 be require AT&T to divest T-Mobile spectrum to  
9 Verizon as a way to correct the competitive  
10 problems.

11 (Laughter.)

12 MR. CARLTON: It could be an  
13 option, yes. It could be an option.

14 MR. BAKER: Okay. Let's move on  
15 here. Yes, that is another part of the  
16 agency.

17 All right. So, T-Mobile was the  
18 first mobile provider to launch a network and  
19 WiFi hotspots and the first to allow  
20 BlackBerry phones to push email, the first to  
21 introduce an all-in-one consumer device with  
22 the Sidekick, the first to challenge the

1        iPhone with an Android-based handset, and the  
2        key adopter of a fast HSPA+ network, and this  
3        year released a phone with Near Field  
4        Communication Technology for mobile payments,  
5        and the first voice over internet protocol  
6        application that lets people call friends  
7        within Facebook to leave a voice message with  
8        one click.

9                        So, given this record of  
10        innovation, shouldn't we worry that losing an  
11        independent T-Mobile will reduce competition  
12        in the introduction of new wireless services?

13                      MR. WILLIG: In a world where  
14        quality matters as much as it does, and this  
15        goes back to your last question, too, any  
16        imagined impact of going from four-plus good,  
17        useful fringe players to three plus that same  
18        useful fringe, has got to be put in the  
19        broader context of the very important  
20        efficiencies that we will talk about, I guess,  
21        this afternoon or repeatedly this morning.

22                      But we have actually shown you the

1 content, which is of very great importance,  
2 both to consumers and to the quality of the  
3 competition. So, we have these innuendos that  
4 going from four to three of the players, the  
5 so-called major players, is in some ways,  
6 there's theories about harm to competition,  
7 but equally strong and stronger the  
8 simulations show is the impact on the  
9 consumer, values obtained from competition in  
10 terms of pricing, in terms of the quality of  
11 the service, that the efficiencies will  
12 create. That's the key point.

13 MR. BAKER: So, the answer is,  
14 even if there were a loss of innovation, there  
15 are consumer benefits in the form of the  
16 efficiencies from the transaction that one  
17 would hope would at least more than make up  
18 for any possible loss of --

19 MR. WILLIG: Well, without  
20 assenting to the idea that the record of good  
21 things that T-Mobile has done, and I'm sure  
22 those are all very real, can somehow be lost

1 to the marketplace after the merger. It is  
2 the market's record of innovation that  
3 matters, not each individual player's.

4 And the idea that the market would  
5 achieve better outcomes for consumers is not  
6 at all a statement that the overall pace of  
7 bold, new ideas would be affected by going  
8 from these four to these three, together with  
9 power of fringe.

10 MR. BAKER: So, the assumption  
11 would be that, had we not had T-Mobile ever,  
12 the market would have still gotten the same  
13 innovations. They would have just gone  
14 through some other firm. Is that the --

15 MR. WILLIG: We can't precisely  
16 put our fingers on that, but it is perfectly  
17 clear that these efficiencies which you will  
18 hear about in greater detail are advances to  
19 the market, not just because the consumers get  
20 them, but it enhances competition as well.

21 MR. SALOP: I would disagree. I  
22 mean it seems to me that T-Mobile has been a

1 disruptive innovator for a long time. There  
2 seems to be a culture, a real culture, of  
3 innovation at T-Mobile, as shown by your list.

4 And there are a couple more. Thee list is  
5 really pretty long.

6 But they have also been a  
7 technology leader. They were the founding  
8 member of the Open Handset Alliance, which  
9 developed the Android. They were the first  
10 Android phone. They were the a leader in 4G.

11 The idea that, if you take out one  
12 leader, you will get another leader that is  
13 just as fast, that seems to go the wrong way.

14 If you take out the firm who is leading, why  
15 would the other people run faster? You would  
16 think they would run slower.

17 Now, I mean, there may be  
18 complicated models where you can make it work.

19 But just the simple model, it seems to me  
20 that you lose the leader and things slow down.

21 MR. CARLTON: I think it is a  
22 little odd to be characterizing T-Mobile as a

1 leader. That is certainly not consistent with  
2 what analysts say when they say, quote, "stuck  
3 in the middle". It doesn't sound like a  
4 leader to me, or that T-Mobile was slow to  
5 move to 3G, or that T-Mobile has no clear path  
6 to LTE.

7 Yes, you see the annual reports,  
8 when they go through the new services of  
9 pricing plans, they never mentioned -- they  
10 mention a lot of other people. I can't  
11 remember whether we did five -- however many  
12 years we did, we didn't find T-Mobile.

13 So, there's no question, if you  
14 just have a few firms, some are going to do  
15 different things than others. No question  
16 about that. Whether you can characterize them  
17 as a leader, as a maverick, I think this  
18 characterization can give a misleading  
19 impression.

20 You should really look how this  
21 leader has been doing over the last year or  
22 two. Not too well. It has declined market

1 share. I'm not sure that I would characterize  
2 that as a leader.

3 So, however you characterize it, I  
4 think the main thing is that, as Bobby said  
5 earlier, it is the efficiencies that are going  
6 to drive this from the transaction. It is not  
7 this innovation competition that T-Mobile is  
8 providing. I think that really  
9 mischaracterizes the heart of the analysis  
10 that you have to do.

11 MR. BAKER: Okay.

12 MR. SALOP: I think you can't look  
13 at the level of a single year. It can't be  
14 that the No. 4 firm in the market hits a speed  
15 bump and loses some share and you say, "Ah,  
16 okay, the No. 1 firm can now buy them." That  
17 one-year time horizon is not good public  
18 policy.

19 And T-Mobile has got a long  
20 history of innovation. The Open Handset  
21 Alliance, the first Android phone --

22 MR. BAKER: But now we're

1 recounting the list.

2 MR. SALOP: I'm saying it's not  
3 Verizon that did it. And the last year and a  
4 half, they have been expanding HSPA+.

5 MR. CARLTON: I agree with Steve  
6 that --

7 MR. SALOP: Thank you.

8 MR. CARLTON: -- a constant market  
9 share does not mean you should allow any firm  
10 to buy it. So, to make it quite clear, the  
11 reason this transaction should go through is  
12 because the efficiencies generated will lead  
13 to more output, period. That's it.

14 It has nothing to do with that  
15 anybody should be allowed to get No. 4 because  
16 its market share is constant.

17 MR. BAKER: Okay, the last word on  
18 this question from Mark.

19 MR. ISRAEL: Okay. I would  
20 encourage to look back at history, and when we  
21 think about these innovations, to look at  
22 **[Begin T-Mobile Confidential Information]**

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**[End T-Mobile Confidential Information]**

So, I think it is worth looking at the history if you are going to think about whether T-Mobile has been disruptively changing the market and capturing share with these innovations. I just don't think you see it.

MR. SALOP: Well, very often, the innovator doesn't capture share because other people react to the innovation, but they keep trying. They keep pushing the market ahead.

MR. BAKER: Okay. Thank you.

Let's come back in seven minutes sharp and start again. So, by that clock, it would be about 17 after.

(Whereupon, the foregoing matter

1       went off the record at 11:09 a.m. and went  
2       back on the record at 11:17 a.m.)

3                   MR. BAKER:       Okay, let's get  
4       started again, please.

5                   So, I have some questions now  
6       about segmenting wireless customers when  
7       thinking about competitive effects. And for  
8       the Sprint folks, one possible way we could  
9       define a class of higher-quality service plans  
10      is to group together plans for which most or  
11      all of the customers use smartphones, which is  
12      a possibility.

13                  Do you think that at current plan  
14      prices many customers of smartphone plans are  
15      close to indifferent between choosing their  
16      current plan and a plan that is not a  
17      smartphone plan? Is this a sensible  
18      distinction to make?

19                  MR. SALOP:       I don't think I  
20      understand the question, Jon.

21                  MR. BAKER:    Is smartphone plans a  
22      market?

1 (Laughter.)

2 A lot of people who take plans for  
3 which most or all the customers use  
4 smartphones, that is what my definition is  
5 going to be. And would they switch to some  
6 other plan in response to a small price  
7 increase?

8 MR. SALOP: Well, we analyzed  
9 three markets, all wireless, post-paid, and  
10 enterprise.

11 MR. BAKER: Yes.

12 MR. SALOP: You know, business and  
13 government. I think your smartphone market is  
14 probably fairly close to the post-paid market  
15 and for the business and government market.

16 So, I think some post-paid people  
17 have just feature phones. So, I think it is a  
18 good question to ask. We'll have to think  
19 about that. I think it is a reasonable idea.

20 I think where it might be the  
21 strongest would be with respect to enterprise.

22 I mean the enterprise people, they need the

1 roaming. They need the data. They need the  
2 email. That might be part of business  
3 enterprise. That maybe is the smartphone  
4 market.

5 MR. BAKER: I'll get to enterprise  
6 in a second, but I'm going to stick with the  
7 smartphone plans more generally first.

8 Do you think that customers tend  
9 to migrate up a quality ladder over their  
10 lifetime as their income increases? You know,  
11 the way car buyers, I don't know whether  
12 they've ever actually did this, but, in  
13 theory, we're going to go from Chevys to  
14 Buicks to Cadillacs in the GM models.

15 MR. SALOP: I don't know how to  
16 tell you this, Jon, but the fifties aren't  
17 here anymore. People don't --

18 MR. BAKER: Do they have  
19 smartphones now?

20 (Laughter.)

21 MR. SALOP: -- increase their  
22 income over time.

1 (Laughter.)

2 MR. BAKER: But over their  
3 lifetime.

4 MR. SALOP: Maybe but it is the  
5 case --

6 MR. BAKER: Let me just finish the  
7 question.

8 MR. SALOP: Oh, I'm sorry.

9 MR. BAKER: In other words, the  
10 point is that that might be a reason why, once  
11 you get a smartphone, you never go back, a  
12 smartphone plan.

13 And so, suggesting that the demand  
14 for smartphone plans could be relatively  
15 inelastic, how do you react to that?

16 MR. SALOP: I haven't analyzed the  
17 data, but it certainly is the case that  
18 smartphones become, you know, the features of  
19 smartphones become ubiquitous. You become  
20 dependent on the use. I mean your email,  
21 you're expected, you know, once you start  
22 having access to your email 24/7, it is hard

1 to give that up. And so, there may be no  
2 ratcheting down.

3 But in terms of people ratcheting  
4 up, there is a lot of segmentation between the  
5 lower-end phone features offered by Metro and  
6 Leap and Boost, so in the prepaid space, and  
7 the higher-end phones offered in post-paid  
8 plans. I mean there's a lot of segmentation.

9 And in terms of your model, the  
10 prepaid tends to be people who are younger.  
11 And certainly, the prepaid tends to be people  
12 that have lower income.

13 But there are other dimensions as  
14 well that may not change. A lot of people  
15 with prepaid are on government subsidy, and it  
16 is unlikely that they are going to become rich  
17 eventually and get a smartphone.

18 Over time, I think the lower end  
19 of the market, the networks are slowly getting  
20 better, but the higher end is getting even  
21 better.

22 MR. BAKER: Let me see if Mark and

1 Bobby and Dennis have a view on any of this.

2 The smartphone market, the  
3 smartphone plan market?

4 MR. CARLTON: I think all of these  
5 questions about market definition and  
6 narrowing them or expanding them, I really  
7 don't think it matters, to tell you the truth,  
8 how you are going to define it, for what I  
9 think are the important issues of this case.

10 I think that, even if there is a  
11 segmentation on the demand side, you have to  
12 ask, "who are the participants in the  
13 market?". And, then, when you decide that,  
14 you've got to ask, well, does it really matter  
15 what the current market shares are if they  
16 have the capacity to switch and go into this  
17 market?

18 So, I really think, I mean, it's a  
19 useful exercise to get an understanding of the  
20 market and the demands characteristic, but I  
21 think, in trying to figure out the competitive  
22 effects, then the more narrowly you define

1 something, the more important it becomes as to  
2 who is in the, quote, "associated" close-by  
3 markets who could, through supply  
4 substitutability, now be a participant in the  
5 market.

6 So, your market shares, current  
7 market shares become less and less relevant  
8 the more narrowly you define the demand  
9 market.

10 So, I haven't done a study of the  
11 demand substitution for just smartphones, so I  
12 don't know the answer if you do the  
13 hypothetical monopolist test, but I think the  
14 real question is, as a result of this  
15 transaction, what do you think is going to  
16 happen in these markets?

17 Again, I know I'm repeating  
18 myself. It's efficiencies that are going to  
19 drive this deal and change your understanding  
20 of whether it is anti-competitive or not.

21 MR. SALOP: I just don't really  
22 understand that. I mean Dennis made the point

1 in his comments on the merger guidelines that  
2 it was essential to define markets, that the  
3 agencies needed the discipline of defining the  
4 market.

5 MR. CARLTON: Not the agencies; I  
6 said courts.

7 MR. SALOP: Well, they serve as --

8 MR. CARLTON: Because the agencies  
9 have smart economists and lawyers who don't  
10 need as crude devices as courts, but --

11 (Laughter.)

12 MR. BAKER: So, on the record,  
13 we're better than a court here.

14 (Laughter.)

15 MR. CARLTON: I think trained  
16 economists and antitrust lawyers need to rely  
17 less on crude devices than courts do,  
18 definitely, from a -- point of view, it  
19 prevents you from making errors. And that's  
20 what I said in the article.

21 Having said that, there's nothing  
22 wrong with using crude devices initially, and

1 it is a useful tool. You just don't want to  
2 be misled by it. That's my point, Steve.

3 MR. BAKER: Okay.

4 MR. SALOP: Dennis also said that  
5 the agency should define narrow markets if  
6 that's where the analysis goes.

7 MR. CARLTON: Yes, and I said that  
8 because, when you use unilateral effects,  
9 which the agencies do, the unilateral effects  
10 analysis is equivalent oftentimes to getting  
11 the same answers if you defined a narrow  
12 market. But the agencies, when they go into  
13 court, are unwilling to say that.

14 And I said that that tension  
15 should be alleviated. If you really think  
16 there is unilateral effects and that that's  
17 anti-competitive, you should not be  
18 embarrassed to say there is a narrow market,  
19 and, therefore, prices are going to go up.

20 MR. BAKER: Now let me ask you  
21 about another segment then along the same  
22 lines. So, enterprise customers might vary in

1 the number of users they bundle and the  
2 geographic scope of the service that their  
3 users will require. And they, presumably,  
4 make those needs clear to the providers when  
5 they are seeking price quotes.

6 If we were to think of just not  
7 even all enterprise customers, just the ones  
8 that have locations spread across the country,  
9 do those enterprise customers consider bids  
10 from any providers other than the four largest  
11 firms when making procurement decisions?

12 MR. CARLTON: I would assume if  
13 you are worried primarily -- I would have to  
14 analyze that. But my intuition would be, if  
15 you are a large firm with multiple locations,  
16 for ease of single-source supply, you might  
17 prefer, obviously, national carriers.

18 My understanding of the numbers  
19 for business enterprise is that T-Mobile has a  
20 share less than **[Begin AT&T Confidential**  
21 **Information]**

22 **[End AT&T Confidential Information]**  
percent, I think we reported. And that's all

1 business enterprises.

2 MR. SALOP: We did some analysis  
3 of this from the Sprint data. **[Begin Sprint  
Confidential Information]**

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6 **[End Sprint Confidential  
Information]**. We didn't report their  
7 share -- I don't think we have their share --  
8 but just how often they are there.

9 And we found that the regionals,  
10 Leap and Metro and U.S. Cellular, were  
11 identified **[Begin Sprint Confidential  
Information]** **[End Sprint Confidential  
Information]** percent of the  
12 opportunities weighted by value, and **[Begin  
Sprint Confidential Information]** **[End  
Sprint Confidential Information]**  
13 percent by another measure. So, that is  
14 consistent with the intuition.

15 MR. DeGRABA: Did you also look at  
16 the prices that prevailed when T-Mobile was  
17 and wasn't in the bidding?

18 MR. SALOP: I don't think we had  
19 that data.

20 MR. DeGRABA: Okay.

21 MR. SALOP: But we can check back  
22 and get back to you on that.

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MR. BAKER: Mark I think you were about to say something?

MR. ISRAEL: It does seem to me the relevant question is, well, first of all, on the earlier comment about defining smartphone markets or defining markets in general, I do think whether you go the step of defining a specific market or not, we are all in agreement that it's a differentiated products market and the cross-elasticities of demand matter, and we should be trying the best we can to understand where those cross-elasticities lie.

I would note from the T-Mobile data, and what I have seen from AT&T and other data, **[Begin AT&T, T-Mobile and NRUF/LNP Highly Confidential Information]**

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AT&T, T-Mobile and NRUF/LNP Highly  
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[End T-Mobile Highly  
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But, on business, I mean it seems  
to me whether you define a business market or  
not, the bottom line -- I think I would  
encourage the analysis of, is there evidence  
that when you have large business buyers,  
among whom T-Mobile has a quite small share,  
say between [Begin T-Mobile Highly Confidential  
Information] [End T-Mobile Highly  
Confidential Information] and [Begin T-Mobile  
Highly Confidential Information] [End T-  
Mobile Highly Confidential Information]  
percent, whether there's  
any evidence that those business buyers would  
suffer any inability to get a good price or a  
good discount with three competitors or four  
competitors or five, or however many remained.

What we know about the business  
market is that you have fairly powerful

1 buyers, and you're taking on a relatively  
2 small player, even if you think about T-Mobile  
3 being removed from that.

4 MR. SALOP: I've got a comment on  
5 that.

6 MR. BAKER: Okay.

7 MR. SALOP: T-Mobile, when it  
8 announced its challenger strategy in January,  
9 also talked about invigorating itself -- Mark  
10 is shaking his head yes -- taking a bigger  
11 position in the enterprise market.

12 MR. ISRAEL: **[Begin T-Mobile Highly  
Confidential Information]**

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**[End T-Mobile  
Highly Confidential Information].**

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MR. SALOP: That's important  
documents for you to look at.

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On the post-paid to prepaid, given  
what Mark raised, we did the hypothetical  
monopolist test for post-paid, and with a

1 diversion ratio [Begin NRUF/LNP Highly  
 Confidential Information] [End  
 NRUF/LNP Highly Confidential Information]  
 percent from post-  
 2 paid to prepaid. That is not nearly enough to  
 3 broaden the market to include prepaid.  
 4 You know, the recapture ratio  
 5 using KSOW methodology for market definition,  
 6 you would need a diversion rate on the order  
 7 of [Begin NRUF/LNP Highly Confidential Information]  
 [End NRUF/LNP Highly Confidential Information]  
 percent, not [Begin NRUF/LNP Highly Confidential  
 Information] [End NRUF/LNP Highly  
 Confidential Information] percent.

8 MR. BAKER: Okay. Some of the  
 9 discussion earlier this morning kept returning  
 10 to the magnitude of local discounting to new  
 11 customers. I'm a little unclear on what the  
 12 facts are here.

13 So, I am going to pose the  
 14 question sort of this way: suppose we had a  
 15 measure -- and I guess this is for you guys  
 16 because it's really your local discounting  
 17 that is at stake; for AT&T.

18 Suppose we had a measure of price  
 19 that AT&T is charging for a representative  
 20 customer for a typical plan and a handset  
 21 combination, and we could define that in some  
 22 way, in every city. And the measure accounted

1 for the local discounts, including the handset  
2 promotions and whatever activation fee  
3 discounts there are, whatever it would be,  
4 reductions, and any additional minutes that  
5 were valued, all the different kinds of  
6 promotions.

7 Do you have a sense, do you have  
8 any idea how much that price would vary across  
9 cities in a typical month for AT&T? So, it is  
10 a, "what are the facts about the extent of  
11 local discounting?" question.

12 MR. CARLTON: I don't have a  
13 numerical answer to your question. We haven't  
14 done that calculation. My general impression  
15 is what I said earlier, that from, say, the  
16 period 10 years ago until today, the variation  
17 in local prices, measured as you discussed,  
18 has diminished, and that it definitely has  
19 been movement to national price plans. And  
20 again, I have not done a numerical  
21 calculation; that is just my general  
22 impression.

1 I think it is the case, though,  
2 that quality variation now has become quite  
3 important, and as I said earlier, it is likely  
4 to become increasingly important in the  
5 future.

6 MR. BAKER: But you're not  
7 offering someone the better quality to sign up  
8 --

9 MR. CARLTON: Right. Even if the  
10 nominal prices are the same, the quality-  
11 adjusted prices may be varying quite a lot  
12 across cities.

13 MR. BAKER: But my question isn't  
14 how much do prices vary across cities per se.  
15 It's how much -- well, I guess it is. I  
16 guess I did ask that.

17 But, yes, then, let me rephrase  
18 the question. It's really, how much is the  
19 component of price that is attributable to  
20 local discounting is, let's say as a fraction  
21 of the total price or whether it is including  
22 the handsets or maybe the total user cost,

1 some measure of the total price, the piece  
2 that is the local discount that you all were  
3 pointing to before as important, how big was  
4 it?

5 MR. CARLTON: Yes, important is  
6 the matter of numerical characterization,  
7 deciding whether something is important or  
8 not. My understanding is it exists. As I  
9 told you before, my understanding -- again, I  
10 haven't done any calculations -- but my  
11 general impression is that the local variation  
12 in nominal prices has been changing over time  
13 towards more national plans. But now quality  
14 variation is quite large, and it is likely to  
15 be increasingly important in the future. So,  
16 the quality-adjusted prices will vary locally.

17 As far as the actual discounts  
18 that, say, Christopher refers to --

19 MR. BAKER: Yes.

20 MR. CARLTON: -- in his memo, I  
21 have not attempted to quantify all of them in  
22 a way that I could calculate magnitudes. But

1 my general impression is what I have said

2 would ring true, that **[Begin AT&T Highly Confidential Information]**

3

4 **[End AT&T Highly Confidential Information]** probably, but I haven't done

5 a calculation of that amount.

6 But I just want to repeat  
 7 something I said earlier. That is that the  
 8 effort you use to advertise to get customers,  
 9 local salesmen, that, too, should be counted  
 10 in these calculations.

11 MR. SALOP: Okay. We have some  
 12 data on this.

13 MR. BAKER: Oh, good. On their  
 14 prices?

15 MR. SALOP: No, on Sprint. Sprint  
 16 does not do much in the way of local  
 17 promotions. Sprint's entire local promotion  
 18 budget is **[Begin Sprint Confidential Information]** **[End Sprint Confidential Information]**

percent, and that  
 19 includes situations where a store manager  
 20 gives a one-off discount to get a customer to  
 21 buy.

22 With respect to AT&T, I only have

1        what    AT&T    said.        In    Centennial,    Mr.  
2        Christopher said that, "Very infrequently AT&T  
3        can lower plan prices in a local area to boost  
4        sales by offering promotion plans, generally  
5        lacking in some features of our standard  
6        plans.    All such rate promotions must be  
7        approved at senior levels and approval is  
8        rarely granted.    No promotions have been  
9        approved this year."

10                    MR.    BAKER:        This was in this  
11        proceeding?

12                    MR.    SALOP:        No, in Centennial.

13                    MR.    BAKER:        In Centennial.

14                    MR.    SALOP:        In Dobson, Mr. Roth  
15        says again, rarely approved; only two such  
16        promotions in 2007.

17                    And as I said before, we haven't  
18        gone through all of Mr. Christopher's local  
19        promotions that he mentioned in this  
20        declaration, but many of them were very, very  
21        short and did not amount to a lot of money.

22                    MR.    BAKER:        So, it sounds like

1 Sprint has a budget line for local promotions.

2 Does AT&T do that in its accounting?

3 MR. CARLTON: I don't know. I  
4 don't know for AT&T.

5 MR. ISRAEL: **[Begin AT&T Highly  
6 Confidential Information]**

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**[End  
AT&T Highly Confidential Information]**

22

So, it is worth investigating

1 more, I think, to what extent they use those.

2 I think your first question was, how real are  
3 those dollars relative to the overall price?

4 The one other thing I would notice  
5 from the T-Mobile side, which I know somewhat  
6 better, I mean if the question is broadly sort  
7 of local pricing, how important has it  
8 become --

9 MR. BAKER: I'm sorry. You  
10 weren't saying this was to every customer?

11 MR. ISRAEL: No, no, no.  
12 Certainly not. I think it's worth looking  
13 more at the extent to which they use those,  
14 the changes in those over time.

15 I'm just saying, to the extent  
16 that the local variation is more in handset  
17 subsidies, that is a real component of the  
18 overall price.

19 MR. ROSSTON: Don't we need to  
20 look at how a handset subsidy -- **[Begin**  
**AT&T Highly Confidential Information]**

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**[End AT&T Highly Confidential Information]** It's how that differs across the region, is that right?

MR. ISRAEL: I agree with that.

MR. ROSSTON: Okay.

MR. ISRAEL: It's just the numbers of the volume it could have -- I'm not saying you shouldn't -- but one other point to note is on the T-Mobile side. I think it makes the important point that we need to look at where these things are going in response to changes in local market conditions.

There has been a reorganization at T-Mobile over the last six months, which is entirely designed around local authority for things like **[Begin T-Mobile Confidential Information]** **[End T-Mobile Confidential Information]** and regional vice presidents who are in charge of local markets, which has included, among other things, **[Begin T-Mobile Confidential Information]**  
**[End T-Mobile Confidential Information]**.

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**[Begin T-Mobile Highly Confidential Information]**

**[End T-Mobile Highly Confidential Information].**

MR. SALOP: Maybe this is a way in which T-Mobile again is going to lead the market in a disruptive way. Maybe it is going to push towards more **Begin T-Mobile Highly Confidential Information]**

**[End T-Mobile Highly Confidential Information].**

But, of course, that would be lost as a result of the merger.

MR. ISRAEL:**[Begin T-Mobile Highly Confidential Information]**

1 [End T-Mobile Highly  
Confidential Information]

2 MR. SALOP: [Begin T-Mobile Highly  
Confidential Information]

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9 [End T-Mobile  
Highly Confidential Information]

10 A number of the other promotions  
11 are like market research. They are trials to  
12 see whether you want to roll it out on a  
13 national basis.

14 MR. BAKER: Okay. I'll go to  
15 Steve here and the team.

16 In many portions of the public's  
17 wireless spectrum, FCC policy has fostered  
18 multiple firms that experimented with  
19 different business models and technologies and  
20 innovations as their industry has grown. Is  
21 there an option value that the FCC ought to  
22 protect under its public interest standard in

1       having diverse owners manage a portion of the  
2       spectrum       that       is       experiencing       rapid  
3       technological change in growth and demand,  
4       independent of the competitive effects and  
5       efficiencies we have considered today?

6                   MR. SALOP:   Well, I am not sure  
7       why you would make it independent.   I mean the  
8       idea that you want to have multiple potential  
9       innovators who have different ideas of what  
10      the best approach is, that's important for  
11      innovation competition.       I mean, when you  
12      consolidate, you tend to follow the approach  
13      of the senior management of the acquired  
14      company.       You don't usually allow the  
15      independent decisionmaker to remain.   There is  
16      usually a company policy.

17                   MR. BAKER:   But suppose we found  
18      -- let's just make a hypothetical -- suppose  
19      we found that this transaction would, on  
20      balance, the efficiencies would lead to, I  
21      mean, no change in price or some slight price  
22      reduction.   So that if in a pure competition

1 analysis you didn't see a problem, and perhaps  
2 a tiny benefit, is there an independent  
3 justification under our public interest  
4 standard for being concerned simply because it  
5 is a good idea to have a diverse set of firms  
6 that are experimenting in how we're using the  
7 spectrum? Or should we only be looking at  
8 competition and not other public interest --

9 MR. SALOP: What I'm saying is, to  
10 reach that issue, you don't necessarily have  
11 to go to the broader public interest aspects  
12 of the statute because having a diverse set of  
13 decisionmakers will tend to spur greater  
14 innovation, greater variety, and greater  
15 variety of innovation, and hence more likely  
16 to get something new and good.

17 Now, if you are saying, could you  
18 also get at it under your public interest  
19 statute? Well, you're the lawyer. So, I'll  
20 leave that one to you.

21 MR. BAKER: Okay.

22 MR. WILLIG: I think it goes the

1 other way, actually.

2 MR. BAKER: Why is that?

3 MR. WILLIG: I think part of your  
4 question is, suppose there are no conventional  
5 antitrust concerns about this deal. Or, in  
6 fact, take it further and suppose there are  
7 perceived benefits to competition, as measured  
8 by the usual antitrust analysis, which is  
9 where we are coming out. Is there something  
10 else that goes in the opposite direction, from  
11 some view of maintaining diversity that  
12 history has created in the management and the  
13 use of these public assets, to the extent they  
14 are public legally?

15 I think it goes the other way. I  
16 think there's a public interest in allowing  
17 markets to work to shift in the way of which  
18 enterprise is managing which part of the  
19 spectrum, which portions of the spectrum  
20 assets are allowed to be combined into a  
21 single service. Rather than taking history as  
22 a source of inflexibility in terms of the

1 deployment of those public assets, allowing  
2 the fluidity of markets and controlled  
3 transactions to find the best deployment is a  
4 matter of genuine public interest.

5 MR. BAKER: Well, that may be, but  
6 that wasn't quite the question. I mean you're  
7 sort of saying that there's a benefit of  
8 moving spectrum to its most efficient use, and  
9 markets do a good job of that, and that's  
10 something we should applaud. I think this is  
11 what you're saying.

12 But I'm asking, is there an  
13 additional issue? Suppose that it would seem  
14 as though the market wanted to move it into the  
15 hands of all one firm. Should we be worried  
16 about that, even if there were production  
17 efficiencies that seem important, simply to  
18 protect the option value of having diversity  
19 in the future?

20 MR. WILLIG: You talk about, is my  
21 argument one that goes to monopoly?  
22 Absolutely not. I was taking as the predicate

1 for your question, which is a good question,  
2 absent conventional antitrust concern about a  
3 transaction, is the fact of the transaction a  
4 good thing for the public interest or  
5 something that ought to be stopped generally  
6 because the numbers of options from  
7 independent voices in the future might be an  
8 issue?

9 And I'm saying that, if we allow  
10 the market to exercise its fluidity of  
11 controlled transactions that do have an  
12 influence over which parts of public assets  
13 get to be used for which purpose, and in which  
14 combinations, that is a plus, given that we  
15 are in a setting where the conventional  
16 antitrust analysis says this is a good deal  
17 viewed narrowly for the consumer.

18 MR. BAKER: Okay.

19 MR. CARLTON: I think your  
20 question hypothesized that there would be  
21 diminution in some sort of innovative effort,  
22 and that should be part of your competitive

1 analysis. I think in this case there would  
2 not be, for a lot of reasons. And therefore,  
3 I don't see a separate interest for that  
4 reason. You may have other reasons.

5 But I think that was the focus of  
6 your question, about innovation competition.

7 MR. BAKER: I think you actually  
8 answered it the same way Steve did. I think  
9 that's what ultimately came out.

10 MR. CARLTON: Can I add one other  
11 thing?

12 MR. BAKER: Please.

13 MR. CARLTON: There is a  
14 literature about innovation competition, in  
15 how and whether, how it should be valued.  
16 This came up a long time ago in the GM/ZF  
17 case where the Department of Justice stopped a  
18 transaction that I was representing GM on.

19 And one of the main reasons was  
20 the loss of innovation that might occur in the  
21 future. They didn't let the transaction go  
22 through. And every year, and in fact, until I

1 published the paper which was 10 years later,  
2 I kept calling GM asking, "Well, did that  
3 person who you couldn't merge with, did they  
4 innovate, as the Justice Department was  
5 suggesting?" "No, no, no, no."

6 So, it is easy to project that,  
7 gee, they're doing a terrible job now or not  
8 such a good job now, but in the future they  
9 are going to be great and those are going to  
10 be great -- It is easy to say that; it is  
11 very hard to prove.

12 I think the history of looking at  
13 predicting where great innovations are going  
14 to come from in any industry, you do a very  
15 poor job. It is very hard. It is a very hard  
16 prediction.

17 So, the further out you're going,  
18 if you think there's some option value from  
19 protecting something, you should discount it  
20 by a very large number. So, I think in this  
21 transaction, innovation competition is not  
22 going to be a driving force.

1 MR. BAKER: But if the Justice  
2 Department had said there's a three chances  
3 out of four that ZF would have innovated,  
4 the fact that it didn't doesn't actually  
5 disprove that. The initial probability --

6 MR. CARLTON: But it does show the  
7 Justice Department is a pretty bad predictor.

8 And if you go back and look at the history of  
9 who predicts who is going to innovate in an  
10 industry, very hard to make these predictions  
11 very far into the future as to who are the  
12 actual innovators.

13 MR. SALOP: I think this actually,  
14 Dennis' answer relates back to the discussion  
15 we had on coordination a little while ago. I  
16 think if the firms succeed in coordinating on  
17 price, I don't think you can count on the  
18 firms increasing their innovation and,  
19 thereby, eliminating any of the anti-  
20 competitive harms from the higher coordinating  
21 price.

22 There is this argument that, if

1 the firms coordinate on price, well, then they  
2 will compete on quality or on innovation. I  
3 just don't think you can count on that.

4 I mean I think the classic case is  
5 actually airline regulation, right? I mean,  
6 when the airlines colluded on price through  
7 the CAB, they continued to compete on how good  
8 a bagel they gave you or the meal or the pitch  
9 of the seat, and all this stuff that we looked  
10 at when I was at the CAB. But in the end,  
11 consumers were worse off from having the CAB  
12 engage in coordinated pricing.

13 A lot of the profits were used up,  
14 but the fact they had used up the profits  
15 didn't mean the consumers were made better  
16 off. Consumers were worse off for the  
17 price fixing.

18 MR. CARLTON: Sutton's recent work  
19 is exactly, recent within the last 20 years --  
20 (laughter) -- in which you have price  
21 competition and, then, competition either on  
22 quality, advertising, or innovation.

1                   And Stigler had an article, I  
2                   think in the sixties about, when you have  
3                   multiple products, what you should be making  
4                   agreements on. And the point is that maybe  
5                   the marginal cost of enticing Carlton to  
6                   switch airlines by giving him 20 bagels or 30  
7                   bagels, eventually it stops. On the other  
8                   hand, the ease with inducing Carlton to switch  
9                   from one phone carrier to another, if you give  
10                  him a better handset, that is what you want to  
11                  look at. It is that differential --

12                  So, maybe the airline case, you  
13                  know, the rising margin of cost for attracting  
14                  Carlton with more and more bagels is pretty  
15                  hard. That's not necessarily the case in the  
16                  case of phones, where technology is changing,  
17                  people's demands for technology are changing.

18                  If you give them a fancy phone, it allows  
19                  them to do a lot of things. You can induce  
20                  changes.

21                  So, I don't agree that if you  
22                  elevate the price, if you did, you assume

1 you've elevated the price, that that wouldn't  
2 induce more competition. That's what comes  
3 out of Sutton's models.

4 MR. SALOP: Ah, so another merger  
5 defense, that it will raise prices and induce  
6 more competition that will make consumers  
7 better off.

8 (Laughter.)

9 MR. CARLTON: I didn't say that.  
10 The hypothesis was, your hypothesis was you  
11 elevated price, and you said that induces no  
12 more competition. And my answer to that is I  
13 don't think that's right.

14 MR. SALOP: Okay. What I think is  
15 I don't think it would induce sufficient  
16 competition. Indeed, your whole example of  
17 the handset is a good example because not  
18 everybody wants an iPhone. Some people would  
19 rather have a lower-quality handset, but  
20 cheaper service.

21 MR. CARLTON: I agree with that.  
22 I'm not saying it eliminates -- the whole

1 point of Stigler's article and Sutton's work  
2 is there's a tradeoff between the two. And  
3 comparing a bagel, an extra bagel, to a fancy  
4 handset I think is not empirically relevant.

5 MR. WILLIG: I think a more  
6 pertinent lesson from the airline history, if  
7 you would like to hear it --

8 MR. BAKER: I'd love to hear it,  
9 Bobby.

10 (Laughter.)

11 MR. WILLIG: The way I conduct  
12 myself here is to not try to grab the  
13 microphone and just talk over people, but to  
14 hope that there will be space for me. So, I  
15 think you should be accommodating to that.

16 (Laughter.)

17 MR. BAKER: Go ahead.

18 MR. WILLIG: One of the great  
19 lessons, I think, of the airline deregulation  
20 history was quite apart from pricing, as long  
21 as the CAB was in the business as it was of  
22 telling the airlines where they could operate

1 and what their responsibilities were, and not  
2 allowing them to change what operations they  
3 chose to use the market for.

4 We had the system of airline  
5 flight architecture along with bagel  
6 competition. But as soon as the CAB got out  
7 of the business of telling the airlines what  
8 they could and could not do, massive  
9 innovation took place, architectural  
10 innovations.

11 MR. BAKER: You mean hub and  
12 spoke --

13 MR. WILLIG: Hub and spoke and all  
14 manner of mixtures in hub and spoke and linear  
15 operations of the Southwest --

16 MR. BAKER: Well, as interesting  
17 as that experience is, I think we should move  
18 back to wireless.

19 Pat, did you want to ask  
20 something?

21 MR. DeGRABA: Yes, let me ask the  
22 following question, which is you had a nice

1 story about fluidity of markets. And so, one  
2 option is to say, okay, if these guys  
3 organically compete, and there's a huge shift  
4 towards one firm and maybe even exit of some  
5 other firms, that's an okay thing. But should  
6 the regulator draw the line at letting one  
7 firm buy a competitor, and a fairly  
8 substantial competitor, as opposed to allowing  
9 competition to actually generate that change  
10 in the market share and the reduction in the  
11 number of competitors?

12 MR. WILLIG: Yes, I mean, what I  
13 was saying was, given the antitrust analysis  
14 comes out saying the deal is okay or even  
15 propitious for consumer welfare, is there a  
16 separate public interest in stopping some  
17 consolidation that passes the antitrust test?

18 And I presume a merger to monopoly is not apt  
19 to be in that category is your question?

20 Given the antitrust analysis is  
21 fine, market diversity, allowing controlled  
22 transactions, fluidity is a positive for the

1 public interest is what I am trying to convey.

2 MR. DeGRABA: If it's hard to  
3 measure the likelihood of innovation, do we  
4 have to err on the side of overestimating the  
5 chances of innovation or be very conservative  
6 and say we can't measure likely harm to  
7 innovation, go with a small current  
8 efficiency?

9 MR. WILLIG: Despite all our  
10 abilities to do analysis, the answer is pretty  
11 flat. Shall we just go with our intuition  
12 about innovation? Maybe so, maybe not.

13 But I think here we have very  
14 positive evidence that the antitrust analysis  
15 comes out positive for consumer welfare. So,  
16 I don't think it's that close a call in the  
17 whole analysis.

18 MR. BAKER: Okay. Well, then I  
19 think we are going to conclude for the  
20 morning.

21 One housekeeping thing. We have  
22 been told we have to get those slide packs

1 back so they don't leave the room. So, we  
2 would like to hold onto them.

3 MR. ROSSTON: We'll give them back  
4 to you after lunch, but we need to hold onto  
5 them for now.

6 MR. BAKER: And so, we will  
7 reconvene at 1:30?

8 MR. ROSSTON: Yes, 1:30.

9 MR. BAKER: 1:30, the same place.  
10 See you then.

11 Oh, the topics for the afternoon  
12 are efficiencies, raising rivals' cost, and  
13 exclusionary effects, and the "but-for" world.

14 (Whereupon, the foregoing matter  
15 went off the record for lunch at 11:56 a.m.  
16 and went back on the record at 1:29 p.m.)

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1:29 p.m.

MR. ROSSTON: Okay, welcome back for our second panel. Once again, the moderators are going to manage the time and any questions and allow comments from both sides, as appropriate.

I would like to issue a reminder.

Much of the material that will be discussed is subject to the protective orders issued in this proceeding and we expect everybody in the audience and on the panels will treat the information learned today in accordance with the terms of the protective orders.

We have the same, Patrick DeGraba, Jon Baker, and me, and the same group from Compass Lexecon, and joining us on Charles River are Steve Salop, Stan Besen, and John Woodbury.

So, this segment of the meeting I want to focus on the proposed efficiencies that AT&T claims will result from the merger.

1 We have heard, we have sort of been  
2 foreshadowing this all morning. What we want  
3 is trying to understand, at least from our  
4 perspective, what is the shape and level of  
5 the marginal cost curves with and without the  
6 merger. In the same vein, I want to focus on  
7 incremental benefits of the merger as opposed  
8 to the "but-for" world.

9 And I've got a lot of questions.  
10 So, I want short, crisp answers on facts,  
11 especially upfront where I am going to start  
12 just trying to get some fact questions. So, I  
13 would love to make sure that we get through as  
14 much as possible in this section.

15 So, I would like to start -- maybe  
16 if you hit the B key, open it, and go to the  
17 next slide. Great.

18 So, this chart, Dennis, should  
19 look familiar. It is basically a replication  
20 of Chart 1, Table 1 from your report. Okay?

21 And to me, I just wanted to make  
22 sure, I want to do some factual clarifying

1 questions to understand what the technology or  
2 assumptions are that go behind the economic  
3 arguments. And, then, we are going to get  
4 more into the economic questions, but, first,  
5 it is going to start on some technology stuff.

6 I want to make sure that the  
7 Sprint guys think that this table is accurate  
8 as to what's going on and that this is a  
9 reasonable representation of the bands and the  
10 technologies that are being used in this, and  
11 make sure that no one has any objections to  
12 that.

13 What I want to do is use this  
14 table to figure out how the efficiencies are  
15 going to play out. So, Dennis, in your second  
16 report you had a Table 3 that developed a set  
17 of estimated capacity increases in a base and  
18 final case.

19 What I wanted to first ask was,  
20 how long does it take to get to the base case  
21 and then to get to the final case in that  
22 report? Because it wasn't clear at all from

1 what I read how long these transactions would  
2 take.

3 MR. CARLTON: My recollection is  
4 the transitions would take different amounts  
5 of time, depending upon which city. I think I  
6 would have to check, but the base case would  
7 be quicker.

8 Certainly, in a two-year period,  
9 if I remember correctly --

10 MR. ROSSTON: I'm sorry, did you  
11 say two?

12 MR. CARLTON: Two.

13 MR. ROSSTON: Okay.

14 MR. CARLTON: But I would have to  
15 check that. But that my general recollection,  
16 I would have to go back exactly to know this,  
17 but there was somewhere between 2012 at the  
18 earliest and 2016, with I think -- I would  
19 have to check -- 2014 being the median.

20 But probably what I should say is  
21 that, since that time, we have done what you  
22 just suggested, comparing the marginal cost

1 curves, and that the calculation you refer to  
2 in the last written submission is not  
3 calculating a marginal cost curve. And we  
4 have since done that for the "but-for"  
5 standalone world, no merger, and the merger  
6 world.

7 MR. ROSSTON: Okay.

8 MR. CARLTON: And I could try to  
9 take you through that.

10 MR. ROSSTON: Okay. I think that  
11 is probably something we should definitely get  
12 to. It may not be efficient to sort of learn  
13 that whole thing at this point in time. If we  
14 are going to walk through a long set of  
15 calculations, I am not sure that --

16 MR. CARLTON: It wouldn't be  
17 long --

18 MR. ROSSTON: Okay.

19 MR. CARLTON: -- I assure you.

20 MR. ROSSTON: Yes. And, then, how  
21 long does it take to get to -- that was to get  
22 to the base case? How long would it take to

1 get to the final case in terms of the whole  
2 transition? Was that 2016 or was that later?

3 MR. CARLTON: For the base case,  
4 my recollection, is within two years, but I'll  
5 have to check that.

6 MR. ROSSTON: Okay.

7 MR. CARLTON: But for the final  
8 case, which involves more integration and  
9 transition to LTE, my recollection, like I  
10 said, was the years were, it covered the years  
11 2012 to 2016. My recollection is the median  
12 was 2014.

13 But for the marginal cost  
14 calculations that I was referring to, those I  
15 can be more specific about. Those were done  
16 for the years 2014 and 2015, because those  
17 were the years that couldn't readily be done  
18 under certain engineering assumptions for us.

19 MR. ROSSTON: Okay. So, if I look  
20 at this chart that is up there and I try to  
21 think about what are the stages of how this  
22 transition is going to work, my understanding

1 is, if you could walk through, there are GSM  
2 efficiencies that come about immediately, or  
3 the initial channel pooling efficiencies and  
4 control channel efficiencies that would allow  
5 some of the GSM spectrum in 1900 to be moved  
6 from GSM to -- customers would be sort of on  
7 less GSM spectrum and, then, some of that  
8 would go to UMTS, is that right?

9 MR. CARLTON: I would really have  
10 to check that. I think that's right, yes.

11 MR. ISRAEL: To be fair, there  
12 definitely are those control channel and  
13 channel pooling efficiencies you talked about  
14 in GSM. I don't want to overstate and say  
15 they happen immediately, like you said, but  
16 they happen quickly, and that leads the  
17 transition of spectrum to UMTS in the 1900  
18 band.

19 MR. ROSSTON: And then, also, the  
20 UMTS, the AWS, the X at the farthest bottom  
21 right is going to disappear from UMTS and move  
22 over to LTE? Is that the next transition

1 after you -- do you have to transition the  
 2 T-Mobile subscribers off of that X and onto  
 3 the AT&T network? Is that right?

4 MR. ISRAEL: There's a lot in  
 5 that. Let me just say, I mean, the short  
 6 answer is, yes, the plan is to transition  
 7 T-Mobile's AWS, over time to transition  
 8 T-Mobile's AWS spectrum over to the LTE  
 9 offering.

10 **[Begin T-Mobile Confidential  
 Information]**

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14 **[End T-Mobile Confidential  
 Information]**, a lot of markets in which  
 15 T-Mobile has a fair amount of spare AWS  
 16 capacity which could be moved to LTE right  
 17 away. And, then, there would be other markets  
 18 in which there would be a transition over time  
 19 as people moved over to LTE.

20 MR. ROSSTON: So, does this  
 21 require handset transitions for the T-Mobile  
 22 subscribers to achieve these efficiencies? Do

1 you have to get handset transitions to do  
2 that?

3 MR. ISRAEL: I mean it depends on  
4 which specific market you're talking about,  
5 **[Begin T-Mobile Confidential Information]**

6 **[End T-Mobile Confidential**  
7 **Information]**, and not to use what in  
8 some markets is substantial T-Mobile extra or  
9 spare AWS capacity. But, yes, ultimately,  
10 moving customers over to LTE is part of the  
11 plan in markets in which that needs to be  
12 done.

13 MR. ROSSTON: And so, how did you  
14 determine how long it is going to take to do  
15 these transitions, to move the customers off  
16 and to transition the spectrum?

17 MR. CARLTON: Well, I think the  
18 short answer is we didn't make that  
19 determination. AT&T engineering had a model  
20 of marginal cost transitions. I mean we're  
21 not talking about marginal costs here, but in  
22 what I was talking about earlier for the  
marginal costs for 2014, they used their

1 estimates of reasonable times to do these  
2 transitions in order to figure out what would  
3 be the marginal cost, so adding additional  
4 people.

5 MR. ROSSTON: Okay.

6 MR. ISRAEL: They have done  
7 transition -- so, I agree with the answer and  
8 sort of AT&T's judgment on our analysis of the  
9 movement. And they certainly -- we will  
10 probably get more into this -- have done some  
11 transitioning of people, say, from GSM to UMTS  
12 or different kind of customers. So, it's  
13 their analysis of what sort of time it takes  
14 to get that handset penetration in the market,  
15 based on the time it has taken to get handset  
16 penetration in the market in earlier  
17 technology transitions.

18 So, that is based on sort of their  
19 historical experience with transitions. Like  
20 I said, I mean, obviously, the spectrum  
21 transitions, where there is extra spectrum  
22 available, are easier than to model than a

1 spectrum integration question.

2 MR. ROSSTON: So, it sounds like  
3 you are relying heavily on the engineering  
4 decisions of how long they say it is going to  
5 take. It seems to me like there are lots of  
6 alternative tools that you could take that  
7 might either take longer or shorter, and there  
8 is a fair degree of uncertainty in this? Or  
9 is that --

10 MR. CARLTON: Well, in what I was  
11 describing about the marginal cost curve, I  
12 think it is fair to say that it allowed us to  
13 improve our analysis and advance our analysis  
14 from what we had submitted.

15 I would also say it's ongoing, our  
16 analysis. But it does rely upon underlying  
17 production functions or engineering  
18 calculations that are being supplied to us by  
19 AT&T as to how they would be producing, what  
20 we have done so far, in five cities in 2014 as  
21 a merged firm versus as separate firms.

22 MR. ROSSTON: Okay. Before I ask

1       you about your marginal cost curve, is there a  
2       difference in the HSPA that is being run on  
3       T-Mobile versus the AT&T HSPA? In particular,  
4       is one HSPA+ and one not HSPA+ for parts of  
5       the country?

6                       MR. ISRAEL: I know that T-Mobile  
7       has rolled out HSPA+ and AT&T has rolled out  
8       HSPA -- I don't know if it matches up in every  
9       market market-by-market, but both of them have  
10      moved --

11                      As I understand it, **[Begin T-Mobile**  
**Highly Confidential Information]**

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[End T-Mobile Highly Confidential Information].

MR. ROSSTON: Okay. Before I go on, did you guys have any reactions to this that you wanted to correct or think about or anything?

MR. SALOP: I think it's fascinating.

(Laughter.)

And we would like to see more of it. We would really like to see the model, so that we can comment on it in an intelligent way.

MR. WOODBURY: And it's not just us. I think it is the Commission as well, the Commission staff. We have to be able to test what Compass Lexecon has done on behalf of AT&T. We can't test that without knowing what the details are.

We have gotten a lot more just

1 from these few minutes about the details than  
2 in the declarations. That's useful, but we  
3 would certainly like more.

4 MR. ROSSTON: All right. Maybe  
5 now we can turn, I don't know, do you think  
6 you could -- I mean my problem is I have a lot  
7 of questions and I'm not sure how long it will  
8 take you guys to describe the model. I mean  
9 give me an estimate.

10 MR. CARLTON: It might go pretty  
11 quickly.

12 MR. ROSSTON: But I think I may  
13 cut you off because my guess is that it is  
14 going to take a lot of work for us to sort of  
15 -- you can give us a big picture, but I think  
16 we are going to have work through a model to  
17 understand exactly what happens.

18 MR. CARLTON: You weren't here  
19 this morning, but I did say I understand I am  
20 going to be presenting these results and that  
21 they weren't in our last submission.

22 MR. ROSSTON: No, I'm sorry,

1 Dennis --

2 MR. CARLTON: And I fully  
3 understand that, of course, I will make  
4 every --

5 MR. ROSSTON: Yes. So, if you can  
6 take two or three minutes and explain what you  
7 have done?

8 MR. CARLTON: The basic logic  
9 would be, is the following: in 2014, we  
10 calculate a margin of cost curve for the  
11 merged firm. That cost curve can be thought  
12 of as being built up from the fact that in,  
13 say, a particular city, as you need to serve  
14 more and more people, you have to go to higher  
15 and higher cost technologies.

16 **[Begin AT&T Highly Confidential**  
17 **Information]**

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1                   **[End AT&T Highly Confidential**  
2                   **Information].**

3                   And depending upon the situation  
4                   in each city, the technologies that are  
5                   appropriate will differ because each city has  
6                   very different capacity constraints.

7                   MR. ROSSTON:     But doesn't it  
8                   differ, presumably, by almost city block  
9                   within a city, as opposed to across cities?

10                  MR. CARLTON:    That's correct.

11                  MR. ROSSTON:    Okay. I just wanted  
12                  to make sure I understand.

13                  MR. CARLTON:    And therefore, the  
14                  engineering model is taking account of the  
15                  characteristics in the city. We asked that  
16                  they try to keep quality constant, as they are  
17                  trying to calculate what they need for  
18                  investments in order to keep quality constant  
19                  if demand is expanding.

20                  So, we would be tracing out a  
21                  marginal cost curve. And we are tracing out a  
22                  marginal cost curve using their information  
                  for the merged firm in which that merged firm

1 is making optimal investments in the city.

2 And similarly, we have the "but-  
3 for" world. In the "but-for" world, the  
4 parties aren't merged and they are, though,  
5 allowed to separately be making their  
6 decisions as to what technologies to employ as  
7 demand is expanding.

8 I would just make one thing clear.

9 I am not allowing, for example, T-Mobile to  
10 be purchased by Sprint. I mean that's not one  
11 of the alternatives that I am allowing, though  
12 it is a suggestion in the CRA papers. But I  
13 exclude that.

14 So, clearly, what I am doing is  
15 each firm is staying separate in the "but-for"  
16 world, optimal investments, get the marginal  
17 cost curve.

18 MR. ROSSTON: In your marginal  
19 cost curve, what is Q? Is Q like a number of  
20 subscribers probabilistically across a city?  
21 Or how do you measure Q?

22 MR. CARLTON: Q is actually --

1 Mark, you can probably explain how we  
2 calculate Q. We actually eventually turn it  
3 into number of subscribers. I don't know if  
4 you want to go into that detail.

5 MR. ROSSTON: No, just sort of at  
6 a big-picture level.

7 MR. ISRAEL: The model works at  
8 the sector level. So, I mean, Q has a demand  
9 projection, the usage projection growth, but  
10 it breaks down based on current distribution  
11 by sector and then a growth path that AT&T  
12 uses in the ordinary course.

13 MR. ROSSTON: Okay.

14 MR. BAKER: In the "but-for"  
15 world, does T-Mobile get the spectrum in the  
16 breakup fee?

17 MR. CARLTON: No. I will have to  
18 go back and check. My understanding is we  
19 just kept T-Mobile as it is right now.

20 It's an interesting policy  
21 question.

22 (Laughter.)

1                   That leads to all sorts of game  
2 theoretics, how you write a deal.

3                   (Laughter.)

4                   But, in any case --

5                   MR. SALOP:   Only for the future.

6 This deal's already written.

7                   (Laughter.)

8                   MR. CARLTON:  It still raises the  
9 appropriate policy response.

10                  But, anyway, so that's what we do.

11                  MR. BAKER:  So, does Q in the --

12                  MR. CARLTON:  So, let me just say  
13 one more thing, then I'll take your question.

14                  The market cost curve of the combined firm is  
15 superior to the sum of the market cost curves  
16 of the two firms because of certain  
17 engineering efficiencies, some of which we  
18 talked about, some of which Hogg talked about  
19 in much more detail in his affidavits.

20                  MR. ROSSTON:  Okay.  I want to  
21 think about sort of some of the things -- you  
22 guys seem to have a very big difference of

1 opinion on this side of table where it is  
2 extremely expensive to add capacity and it's  
3 almost zero to add capacity. It's low versus  
4 high.

5 MR. SALOP: Our assumption was not  
6 that it was costless to increase capacity.  
7 Quite the contrary.

8 MR. ROSSTON: I just have said  
9 low. I apologize for mischaracterizing it.

10 MR. SALOP: Actually, I think a  
11 more proper characterization of our position  
12 would be it is feasible to increase capacity  
13 beyond the assumptions being made.

14 MR. ROSSTON: Okay. So, I want to  
15 start first to try to break down, even though  
16 I don't have your new marginal cost model, but  
17 I am going to guess, based on your previous  
18 declaration, what goes in, and what you have  
19 just described, what goes into it.

20 MR. BAKER: Could I just  
21 interrupt? When do you expect to share the  
22 new analysis?

1 MR. CARLTON: Soon, very soon, as  
2 soon as we can --

3 MR. BAKER: Like days or weeks or  
4 what?

5 MR. CARLTON: We could certainly  
6 provide you something within days. I can give  
7 you right now some output that I am happy to  
8 talk about. Because we have done it in five  
9 cities. And in those five cities, when we do  
10 these merger simulations, we find output  
11 expansions of -- about **[Begin AT&T Highly Confidential Information]** **[End AT&T Highly Confidential Information]** percent --

12 MR. BAKER: We don't need to hear  
13 the details about that. I just wondered how  
14 long you expect to take.

15 MR. ROSSTON: So, one of the key  
16 pieces that was told to us, and in the  
17 declarations, was the access to **[Begin AT&T Confidential Information]** **[End AT&T Confidential Information]**  
18 T-Mobile cell sites, and AT&T saying it would  
19 take **[Begin AT&T Highly Confidential Information]** **[End AT&T Highly Confidential Information]**  
20 years at current speeds to achieve  
the merger.

21 How many of these **[Begin AT&T Confidential Information]** **[End AT&T Confidential Information]** cell  
22 sites are really critical? I mean,

1 presumably, there are some number that are  
2 immediately important and some number that are  
3 not very important for increasing capacity.

4 If you wanted to really have a big impact on  
5 the marginal cost curve, would you need to get  
6 access to 500, 1,000, 10,000? Do you have any  
7 idea of the magnitude of the number of these

8 **[Begin AT&T Confidential Information]**  
9 **[End AT&T Confidential Information]**  
cell sites that would be really

important?

10 MR. ISRAEL: I don't think we have  
11 a number on that. I mean I don't know.  
12 There's a sliding scale.

13 MR. ROSSTON: Right.

14 MR. ISRAEL: Obviously, this does  
15 have to be AT&T engineering.

16 MR. ROSSTON: Okay. So, if you  
17 wanted to get half the efficiencies, how  
18 many --

19 MR. ISRAEL: **[Begin AT&T Confidential Information]**

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[End AT&T Confidential Information].

MR. ROSSTON: So, presumably, it is a declining benefit as you go down the scale. The [Begin AT&T Confidential Information] [End AT&T Confidential Information]--

MR. ISRAEL: I'm sure that there are --

MR. CARLTON: [Begin AT&T Highly Confidential Information]

[End AT&T Highly Confidential Information].

MR. ROSSTON: But not on all [Begin AT&T Confidential Information] [End AT&T Confidential Information]--

MR. ISRAEL: You mean of the T-Mobile? I am sure there are T-Mobile cell

1 sites that are more and less valuable --

2 MR. ROSSTON: Right.

3 MR. ISRAEL: -- in terms of their  
4 ability to offset investment. The point is  
5 that AT&T makes an engineering decision about  
6 which ones fit into the network and then  
7 models, sort of models, they would ordinarily  
8 use, what that does to their ability to serve  
9 the capacity load.

10 MR. ROSSTON: So, I assume in your  
11 model that you have now got an estimate of  
12 what's the cost of replicating these  
13 additional cell sites without the merger, just  
14 the cell site portion of it?

15 MR. ISRAEL: Correct. I mean the  
16 way the model works, and to be clear, is that,  
17 with the merger, they take in these **[Begin AT&T**  
**Confidential Information]** **[End AT&T**  
**Confidential Information]**, or  
18 whatever number that they will come to,  
19 additional cell sites. And that allows them  
20 to serve a certain amount of traffic at a  
21 fixed quality level. Without the merger, to  
22 replicate that, they would have to make some

1 investments.

2 I'll say one thing the model  
3 actually does is, basically, assume that they  
4 can split cells and make those investments  
5 right away, as necessary. In fact, I think,  
6 in reality, that the situation is in some  
7 cases you can split cells; in some cases that  
8 is just not feasible, I think, as Jon said  
9 earlier.

10 So, the model is basically looking  
11 at, assuming you can do it, how much more  
12 expense would there need to be to do those  
13 cell site investments that you would not have  
14 to do if you had the T-Mobile cells?

15 MR. ROSSTON: Okay.

16 MR. SALOP: Can I just clarify  
17 with two clarifications? And these really are  
18 clarifications.

19 One is, when you refer to marginal  
20 cost, do you mean marginal investment cost? I  
21 thought I heard you say that. As opposed to  
22 marginal cost of production?

1 MR. CARLTON: Marginal, it's the  
2 incremental capital cost.

3 MR. SALOP: Capital cost, marginal  
4 capital cost?

5 MR. CARLTON: Yes, appropriately  
6 amortized. That is really the part of the  
7 model that engineering, the AT&T engineering  
8 folks have done.

9 In terms of the marginal cost  
10 curve that would be drawn based on the other  
11 parts of the operation, we have not assumed  
12 anything about that, other than it is --

13 MR. ISRAEL: Just to be clear,  
14 because it was a clarification, what we have  
15 is the incremental costs associated with this  
16 network investment. So, there's a capital  
17 cost piece. There is also an op-ex piece  
18 associated with that additional network --

19 MR. SALOP: Is it like when you  
20 said that, when you compare it like for,  
21 absent the merger, you might have not just  
22 cell split? You would have to go into DAS or

1           whatever the next best is? Whereas, with the  
2           merger, you would be able to get along with  
3           just cell splitting ?

4                       MR.     ISRAEL:           Yes,     the  
5           hypothetical --

6                       MR. SALOP:   Is that the structure?

7                       MR. ISRAEL:   Hypothetically. I  
8           mean there are cases with the merger -- I mean  
9           it is trying to model what they need to do  
10          with the merger. There are cases with the  
11          merger where you would still need a DAS in a  
12          certain spot.

13                      MR. SALOP:   Yes, but you can use  
14          more of the more efficient technologies?

15                      MR. ISRAEL:   Exactly. Exactly.

16                      MR. SALOP:   Okay.

17                      MR. BESEN:   Can I ask just three  
18          quick clarifying questions?

19                      Is it only going to be five  
20          markets or is it going to be more than that?

21                      MR. CARLTON: We think we will be  
22          able to do it for 19.

1 MR. BESEN: For 19?

2 MR. CARLTON: And -- there are 19  
3 markets that AT&T has run the model for. We  
4 have only analyzed five of those. The 19,  
5 roughly, span a range of capacity  
6 constraints --

7 MR. ROSSTON: We need to make this  
8 quick. Just say yes.

9 MR. CARLTON: Yes.

10 MR. BESEN: Just one more.  
11 Presumably, AT&T was making plans, absent the  
12 merger, for capacity expansion. Have you  
13 calibrated the model to compare it to the  
14 actual capital planning plans that AT&T was  
15 making, absent the merger?

16 MR. CARLTON: I think the short  
17 answer to that is the calculation we are doing  
18 now is really to enable us to calculate a  
19 marginal cost curve. I was not able to follow  
20 their business documents related to some of  
21 the things they are doing for us now, **[Begin AT&T  
22 Highly Confidential Information]**

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MR. ROSSTON: So, let me ask the Sprint side. So, one of the things that you guys brought up was that a large number of the cell sites would be operated by companies like American Tower. Do you have an idea of what percentage of the T-Mobile towers or towers in general are operated by third-party tower providers?

MR. SALOP: I don't have those, as we sit here. Do you?

MR. BESEN: No. We're just starting to get through the various documents, and I'm sure we'll find this out.

Maybe Mark knows the answer.

MR. ISRAEL: I don't know the percentage, as I sit here. Certainly, a fair number are.

MR. ROSSTON: So, couldn't AT&T gain access to those towers without the merger

1 and, also, even to the ones that are owned and  
 2 operated by T-Mobile? You know, thinking  
 3 about what's an alternative that doesn't  
 4 require a merger to get access to this  
 5 additional capacity.

6 MR. ISRAEL: I mean my  
 7 understanding is that there are various  
 8 reasons why that would be quite difficult. **[Begin T-  
 Mobile Confidential Information]**

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13 **[End T-Mobile Confidential  
 Information].**

14 As far as making use of the  
 15 T-Mobile towers, again, I understand the sort  
 16 of network integration and things that would  
 17 be required as we said, the idea is  
 18 eventually these towers, I mean AT&T  
 19 integrates them and is able to put their own  
 20 hardware on them, as they are purchasing  
 21 T-Mobile and purchasing those rights to the  
 22 towers and the contracts. That would be in

1 both cases very difficult to do, absent joint  
 2 ownership and the ability to integrate those  
 3 networks.

4 MR. ROSSTON: Again, I don't know  
 5 this at all. What is the cost to lease a  
 6 space on a tower versus building a tower? I  
 7 mean, is there any thought in the model about  
 8 ones that would be built as opposed to leased,  
 9 or not? Or just what does it cost to lease a  
 10 space on a tower? Do you have an estimate of  
 11 that?

12 MR. CARLTON: I don't have one off  
 13 the top of my head. Obviously, we can look  
 14 into the model as to what the expenditures  
 15 are.

16 My understanding is -- well --

17 MR. ISRAEL: The model, the way  
 18 the model works is I think it's **[Begin AT&T Highly Confidential Information** **[End AT&T Highly Confidential Information]** for a  
 19 cell tower and then it capitalizes that over  
 20 **[Begin AT&T Highly Confidential Information]**  
**[End AT&T Highly Confidential Information]** years  
 to come up with sortof the  
 21 monthly fee. **[Begin AT&T Confidential Information]**  
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MR. ROSSTON: Except that, if you lease space on a tower, you may be sharing it with two or three or four other people, right, I would think?

MR. BAKER: Now you're talking about leasing a tower, not leasing space.

MR. ISRAEL: Sure. So, I mean, it is a fair question. I don't have, as I sit here, an estimate of the ability to share space. I understand, again, that from the towers that we are talking about from T-Mobile the assessment is that **[Begin AT&T and T-Mobile Confidential Information]**

**[End AT&T and T-Mobile Confidential Information].**

MR. ROSSTON: So, one of the things, when AT&T's engineers came in and talked to us, they talked about being

1 extremely difficult to speed up the process of  
 2 acquiring space on towers and constructing its  
 3 own, and that sort of thing.

4 And I wanted to ask, in your first  
 5 report you talked about the competitive  
 6 effects of Lightsquared, which would have to  
 7 go 40,000 cell sites by 2015, and trying to  
 8 figure out why AT&T is having trouble  
 9 expanding beyond **[Begin AT&T  
 Confidential Information] [End AT&T  
 Confidential Information]** a year when  
 it expects

10 the other to be at 40,000. Shouldn't there be  
 11 a way for AT&T to speed up the process, if it  
 12 is going to expect competitors to do so?

13 MR. CARLTON: I don't know the  
 14 precise answer to your question. I assume it  
 15 depends on where you want to put the cell  
 16 towers. But my understanding is that in this  
 17 engineering model AT&T is by 2014, assuming  
 18 they can overcome the practical hurdles there  
 19 are to obtain cell space, if they have to do  
 20 cell splitting, for example.

21 MR. ROSSTON: Okay.

22 MR. CARLTON: And that's why 2014-

1 2015 they feel that they have a model that can  
2 be used for our purposes.

3 MR. ROSSTON: So, even on their  
4 own, they have a model that they could use?  
5 In your estimate, they have a model for AT&T  
6 without the merger as well?

7 MR. CARLTON: Yes. They have a  
8 model of marginal cost curve of AT&T without  
9 the merger as well as T-Mobile without the  
10 merger, both doing marginal cost, both  
11 assuming that they can get access to cell  
12 splitting, if that is the way to handle it.  
13 And, then, at some point, they have to go to  
14 high-cost technologies, as you point out, that  
15 varies by different parts of the city.

16 MR. ISRAEL: My understanding is,  
17 when you see cases in which somebody has built  
18 out a lot in a short period of time, there is  
19 a lot of back work that was done and planning  
20 that has to be done.

21 So, I think, as I understand it  
22 from looking at the stuff, the overall time

1 period, starting from where AT&T is today,  
2 actually, obtaining the rights to do it and  
3 going out and planning it and doing it is  
4 potentially longer than a year. Again, none  
5 of that affects our model, which is just cost-  
6 based.

7 I do think a big part of the issue  
8 is where you need the cells relative to where  
9 your network is. So, it is a very different  
10 question on an apartment building in New York  
11 as opposed to a greenfield build somewhere  
12 else.

13 MR. ROSSTON: Are there costs when  
14 you are just integrating the cell, the  
15 T-Mobile cell -- are there costs in your model  
16 for adding the radios to a T-Mobile cell site?  
17 Or do they have to put in new antennas that  
18 get the 850 and 700 MHZ spectrum on there?

19 MR. ISRAEL: **[Begin AT&T**  
**Confidential Information]**

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1                   **[End AT&T Confidential**  
2                   **Information].**

3                   MR. ROSSTON:   Okay.

4                   MR. BESEN:    Can I ask just a quick  
5                   question?

6                   MR. ROSSTON:   Yes.

7                   MR. BESEN:    Is this a regular  
8                   model that AT&T uses in the planning process,  
9                   apart from this transaction?

10                  MR. CARLTON:   That's what I tried  
11                  to answer earlier. My understanding is, no,  
12                  these are calculations that may be based on  
13                  some of the ordinary models they used in  
14                  planning. But, in order to assist us, they  
15                  did additional calculations.

16                  MR. BESEN:    Thank you.

17                  MR. ROSSTON:   So, in both cases  
18                  you are sort of figuring out exactly what it  
19                  would cost in integrating it? The techs have  
20                  to go and visit the radio sites and put on new  
21                  radios and everything in the merger. Or they  
22                  have to build new cell sites and do other  
                  things? Okay.

1           So, I started out just focusing on  
2           the cell sites, and there are a whole bunch of  
3           other things that were listed. Dennis has  
4           talked about WiFi and oDAS and other  
5           mechanisms being much more expensive. And I  
6           was wondering if you had thoughts about how  
7           AT&T has done it? You talked about this in  
8           your report, about how AT&T has done it and  
9           could do things to be more efficient. Do you  
10          have estimates of what it would cost to do,  
11          whether these things are substantially higher  
12          in marginal costs? And would they have to do  
13          these additional systems?

14                   MR. SALOP:       Well, I mean, you  
15          know, the Stravitz declaration, which you  
16          have, talks about alternative ways that AT&T  
17          could expand capacity without the merger. I  
18          don't know whether Dennis' model is following  
19          the levers that Stravitz was recommending or  
20          not because we don't have access to the model.

21                   It does occur to me that one lever  
22          that Stravitz talked about was accelerating

1 the rollout of Light -- of LTE. And so, I  
2 think the question would be, does the model  
3 contemplate an accelerated rollout of LTE and  
4 reject that as being higher cost or does it  
5 not consider it?

6 MR. CARLTON: My understanding is  
7 it considers the rollout of LTE in both the  
8 merged firm case and the standalone cases, and  
9 it is attempting to minimize its cost as it  
10 expands and choosing that technology which is  
11 most relevant. Whether it accords with what  
12 Mr. Stravitz thinks is the optimal rollout  
13 versus whether AT&T thinks that, I can't  
14 comment on.

15 MR. SALOP: As a clarification --  
16 I think this is clarification -- Stravitz  
17 talks about the acceleration of the LTE  
18 rollout; that might affect things in 2012 and  
19 2013. Whether or not it affects things in  
20 2014, I just don't know.

21 And I guess the clarification  
22 question, then, is when you're doing this

1 marginal cost curve to achieve a certain  
2 capacity in 2014, are you focusing only on  
3 2014 or are there implicit results coming out  
4 for 2012 and 2013 that you then also report as  
5 part of the model?

6 MR. CARLTON: There is a  
7 transition over time. The reason we are  
8 choosing 2014 and 2015, my understanding is  
9 that the transition period, **[Begin AT&T  
Confidential Information]**

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**[End AT&T Confidential  
Information]**. But if you said,  
"What are you going to in 2012?" they're not  
sure. They think they can get it done by  
2014.

So, therefore, if you use their  
model, this is my understanding, for 2012, you  
would get much lower estimates of marginal

1 cost than would occur practically if they had  
2 to go out, say, in New York City and add all  
3 these cell sites.

4 But by 2014 --

5 MR. SALOP: Much lower or much  
6 higher?

7 MR. CARLTON: Much lower because  
8 they are not building in the fact that  
9 **[Begin AT&T Confidential Information]**

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**[End AT&T Confidential Information].**

17 MR. CARLTON: Both for the merged  
18 firm and the standalone firms?

19 MR. SALOP: Okay. So, the cost  
20 savings between the merger and the non-merged  
21 firms would be the difference in the costs --

22 MR. CARLTON: Yes.

1 MR. SALOP: -- as of 2014?

2 MR. CARLTON: 2014, yes, that's  
3 what we're using it for, or 2015.

4 MR. BAKER: I was just going to  
5 ask, it sounds like you are relying on  
6 estimates from the engineering group about,  
7 for example, how long the various steps will  
8 take. Will they be explaining the bases of  
9 those estimates for how long it will take for  
10 the transition time? Or is that already in  
11 our record?

12 MR. CARLTON: I don't know the  
13 precise answer to your question. I would  
14 expect that, if you would like to see or have  
15 us describe the underlying modeling, or  
16 description of the underlying model, we would  
17 tell you what they are assuming about time and  
18 in transition times.

19 **[Begin AT&T Confidential Information]**

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21 **[End AT&T Confidential Information].**

And obviously, all of what we  
22 are doing is trying to advance the analysis,

1 and we will continue to be working on all  
 2 parts of it.

3 MR. BAKER: I'm looking forward to  
 4 seeing this. But what I was just suggesting  
 5 is we would appreciate not just knowing what  
 6 the assumptions are, but the basis for those  
 7 assumptions and where we have that, if  
 8 anywhere, in our record.

9 MR. ISRAEL: Just to be clear, you  
 10 are asking for the time it will take to  
 11 integrate the two networks or also the time or  
 12 sort of the engineering assumptions about  
 13 doing cell splits versus doing DAS -- ?

14 MR. BAKER: Essentially,  
 15 everything that you're -- everything  
 16 important.

17 (Laughter.)

18 MR. ISRAEL: I mean this really  
 19 goes to the clarification. So, thinking about  
 20 alternatives, I mean AT&T is thinking all the  
 21 time about at what rate they can transition  
 22 spectrum and people to LTE. I think every day

1 going out and trying to see where it could lay  
2 cell towers and what cell towers are possible  
3 to get. All of these options to model, we'll  
4 give you as much information as we can. But  
5 the model reflects what they see as the  
6 ability of the standalone network to pursue  
7 these other options.

8 MR. SALOP: When you calculate, in  
9 the end, you're going to calculate the delta  
10 cost, is that right, for a given capacity?

11 MR. CARLTON: You can calculate  
12 how much lower marginal cost would be for the  
13 combined firm than for AT&T or than for  
14 T-Mobile.

15 MR. SALOP: I guess I'm trying to  
16 distinguish between marginal cost and total  
17 cost. So, if you thought that T-Mobile was  
18 going to build to a capacity of X and AT&T was  
19 going to build to a capacity of Y in 2014, you  
20 could calculate the cost of doing that  
21 standalone versus the cost of them getting to  
22 the same X, say the same X, in 2014,

1       standalone.       Is that the definition of  
2       efficiencies that you're using or is it  
3       something else?

4                   MR. CARLTON: Well, the specific  
5       definition we are using for efficiencies when  
6       we do the merger simulation is the marginal  
7       cost savings, which is what you need in order  
8       to do the merger simulation to figure out, in  
9       a differential product world, if you do a  
10      Bertrand price simulation, what the new  
11      equilibrium would be with and without the  
12      merger. And that's what we do.

13                   If you are asking me, would it be  
14      possible to integrate under the marginal cost  
15      curves, I suppose we could do that. We  
16      haven't done that. I suppose that's a  
17      numerical calculation.

18                   MR. ROSSTON: So, I want to cut  
19      this short because I think we're going to have  
20      a lot more discussion of your model when we  
21      actually get your model and we hear from you  
22      guys in reacting to the model and speculating

1 about what it is or what it is not doing.

2 Given the short amount of time that I have on  
3 efficiencies, I think I am going to stop --  
4 Steve?

5 MR. SALOP: I just wanted to find  
6 out about the simulation model.

7 MR. ROSSTON: Well, I think you  
8 will find out about it, you will be able to  
9 hopefully see all the details that go behind  
10 the simulation model. If they do a good job  
11 in presenting it to us, then you'll see  
12 exactly what's going on, and we'll find that  
13 out when we see it.

14 So, some significant portion of  
15 the efficiency gains, at least at the start,  
16 come from GSM efficiencies that allow less  
17 spectrum to be used for GSM and, therefore,  
18 being able to move to HSPA, at least according  
19 to the chart, right, that those aren't moved,  
20 at least initially to LTE?

21 And so, what I wanted to ask the  
22 Sprint guys: should the transition costs

1 incurred by the T-Mobile customers, how  
2 significant should we consider those in  
3 thinking about the net effects of the merger,  
4 the transition costs for T-Mobile customers  
5 who might have to move away from GSM and HSPA+  
6 that they have chosen?

7 MR. SALOP: Well, integration  
8 costs are negative efficiency that would need  
9 to be taken into account in the evaluation of  
10 merger-specific efficiency methods, sure.

11 MR. ROSSTON: Okay. Are there a  
12 lot of customers who would have to move in  
13 this case, who have to change handsets and  
14 other things? And were those included in your  
15 marginal cost estimates?

16 MR. ISRAEL: I mean, to be clear,  
17 there's sort of different categories you're  
18 talking about, right? The GSM, I mean  
19 certainly the transitioning GSM -- whether you  
20 can migrate people out of GSM as a way to deal  
21 with spectrum capacity is something the  
22 company is thinking about now.

1           You know, AT&T has already sort of  
2 explored that option. Well, I think on the  
3 GSM side, what the merger really does is  
4 things like channel pooling efficiencies and  
5 control channel efficiencies that free up  
6 spectrum without having to move customers to  
7 new spectrum and allow you to move spectrum up  
8 to UMTS in order to have more capacity in  
9 UMTS.

10           So, there I think, in fact,  
11 similar to all of our analysis, what the  
12 analysis is saying is, even if you tried to  
13 migrate people from GSM to UMTS now, you would  
14 have to migrate enough to be able to have  
15 spectrum, and that would potentially be costly  
16 in terms of subsidies you would have to give  
17 them. The merger frees up a bunch of spectrum  
18 from these efficiencies to make that done  
19 without that cost.

20           So, you're asking about -- I guess  
21 that was the question.

22           MR. ROSSTON: I'm going to get to

1 subsidies in just one second. So, when we  
 2 talk to AT&T engineers about migrating  
 3 customers, ultimately, the transition  
 4 spectrum, you need new base station equipment  
 5 in spectrum and you also have to get the  
 6 customers to get the new handsets, appropriate  
 7 handsets, that would work on either UMTS or  
 8 LTE.

9 So, in a world without the merger,  
 10 it seems like AT&T could move spectrum away  
 11 from GSM to UMTS, and ultimately LTE, by  
 12 providing incentives for subscribers to move  
 13 off of GSM, right?

14 MR. ISRAEL: **[Begin AT&T Highly Confidential**  
 15 **Information]**

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**[End**

**Highly Confidential Information].**

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MR. ROSSTON: But what you want to  
 do, I think, is you want to get people to have  
 handsets that would work on UMTS, maybe work  
 on GSM and UMTS, but you want them not to have

1 GSM-only handsets. This is one way of getting  
 2 the spectrum to transition in a non-merger  
 3 world.

4 If you could go two slides  
 5 forward? I think we skipped one of my slides.

6 No, the migration example. Yes.

7 So, this is just an example. AT&T

8 I think has **[Begin AT&T Confidential**  
**Information]** **[End AT&T**  
**Confidential Information]** GSM-only  
 subscribers,

9 at least according to Mr. Hogg. And  
 10 presumably, AT&T knows its highest-volume  
 11 customers. Presumably, it could replace, **[Begin**  
**AT&T Confidential Information]**

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**[End AT&T**  
**Confidential Information]?**

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And I just sort of wanted to think  
 about, when we talked to the engineers, they  
 said, no, there's no way you could do this.  
 And trying to think as an economist, I think  
 there's got to be ways to provide incentives  
 to get people to go off the spectrum, isn't  
 there?

1 MR. ISRAEL: Certainly, the idea  
2 that you could potentially migrate people off  
3 GSM to UMTS is something that AT&T has thought  
4 about. I mean, in terms of your economic cost  
5 calculations here, they have actually done  
6 some analyses and experiments, as I understand  
7 it, where they gave people, I think it was  
8 **[Begin AT&T Highly Confidential Information]**  
9 **[End AT&T Highly Confidential Information]**, to try to get them  
10 to  
11 move. And for the customer base they have on  
12 GSM, **[Begin AT&T Highly Confidential Information]**  
13 **[End AT&T Highly Confidential Information]** percent take  
14 rate on that **[Begin AT&T Highly Confidential Information]**  
15 **[End AT&T Highly Confidential Information]**.

16 So, they have certainly thought  
17 about this. I think in many markets, say in  
18 **[Begin AT&T Highly Confidential Information]**  
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[End AT&T Highly  
Confidential Information].

MR. ROSSTON: Did you guys look at any examples where Sprint has migrated customers or have any idea about the cost of what it would take to get people to switch handsets to more efficient handsets?

MR. SALOP: No, we haven't looked at that. We would have to.

I guess the idea that AT&T would not be able to migrate the people, we didn't look for that data because it just didn't seem plausible to us. So, we would be interested in seeing those documents.

MR. WOODBURY: And just as a clarification, my understanding is that the



1 by moving these guys onto UMTS," well, why not  
2 increase the cost of a phone?

3 MR. ISRAEL: And again, I think  
4 more will be coming into the record, but in  
5 response to some of these questions, from the  
6 AT&T business people, my understanding is that  
7 AT&T itself at a retail level has stopped  
8 selling GSM phones to post-paid customers and  
9 is phasing out the GoPhones, has plans in  
10 place to phase out the prepaid stuff over the  
11 course of, say, **[Begin AT&T Highly Confidential  
Information]** **[End AT&T  
Highly Confidential Information]**. But more  
12 facts will come in from the AT&T business  
13 people on that.

14 And one other thing to point out  
15 on migration is that, if you are going to  
16 migrate spectrum from GSM to UMTS, you have  
17 got to do it in blocks of 10 MHZ. You have  
18 got to get channels on the UMTS in 10 MHZ  
19 blocks.

20 So, in many markets AT&T has said,  
21 can we get down to 15, can we get down to 5 in  
22 GSM? There's a cost associated with migrating

1 people. And in lots of situations, if you are  
2 able to migrate 7 or 8 MHz, it doesn't do you  
3 any good at all because you can't transition  
4 to UMTS in less than a 10-MHz block.

5 MR. ROSSTON: Okay. All right.  
6 One of the things that you guys said in your  
7 declaration was that, gee, AT&T has invested  
8 less in its network, and these capacity  
9 constraints that they are facing now are a  
10 result of underinvestment. I am wondering  
11 how, as a policy matter, we should think about  
12 who is to judge and how do you figure out what  
13 does underinvestment mean in terms of the  
14 context. You guys claim underinvestment; they  
15 would say, well, they invested at a prudent  
16 level. And how, as an agency, we should think  
17 about whether we should credit or not credit  
18 them with having a merger that does have a  
19 steeply-increasing marginal cost curve, and  
20 whether it is a problem of unexpected success  
21 of an iPhone or other things, and how we  
22 should think about that?

1 MR. SALOP: Well, I think the  
2 first question is, should moral hazard matter  
3 in terms of policy? And assuming that you  
4 think that moral hazard should matter -- I'm  
5 sorry -- assuming that you think that moral  
6 hazard should matter, then you need to  
7 evaluate whether they were being prudent or  
8 whether they were not going as far as they  
9 should have. And for that, an obvious  
10 comparison would be relative to what the other  
11 people did.

12 MR. ROSSTON: Reaction to that?

13 MR. CARLTON: When Steve refers to  
14 moral hazard, obviously, I agree you've got to  
15 be careful about moral hazard, but I can't  
16 imagine -- first of all, to say that AT&T was  
17 not optimally investing based on what I think  
18 -- I'm an economist; I don't run a phone  
19 company -- makes me a little nervous.

20 But if you just look at the  
21 numbers, my understanding is over the last few  
22 years they have spent \$21 billion. Over the

1 last few years, if you look over the last two  
2 years, AT&T's market share has gone up;  
3 Verizon's has stayed basically about the same;  
4 Sprint has gone down; T-Mobile's has gone  
5 down; U.S. Cellular has gone down. It doesn't  
6 sound to me they're doing too bad.

7 So, I'm just worried about  
8 retrospectively saying something like, "Oh,  
9 you should have done something else," and "the  
10 fact that you were," according to some  
11 economists, "not optimally investing, I know  
12 why you were doing it. It was because you  
13 were always intending to take over T-Mobile,  
14 and you were going to then get Carlton to say  
15 these marginal cost curves."

16 (Laughter.)

17 Maybe; I can't rule it out, but I  
18 wouldn't base policy on it.

19 MR. SALOP: I think that it  
20 doesn't matter -- first of all, whether they  
21 were investing optimally for them isn't the  
22 question. It's whether they were investing

1       optimally from the point of view of public  
2       policy in a context in which they are saying  
3       we need to take out T-Mobile from being an  
4       independent competitor because we don't have  
5       enough capacity to service our customers.

6                       Well, you know, the customers  
7       could be serviced by other carriers. So, it  
8       is not like people are out there starving if  
9       AT&T doesn't have enough capacity. And AT&T  
10      is saying, "We need to eliminate competition  
11      from T-Mobile, as much competition as there  
12      is." And we disagree on both sides of the  
13      table on how much competition T-Mobile  
14      provides. But say, "We're going to eliminate  
15      that competition in order to give us more  
16      capacity."

17                      And that's why the question  
18      arises. It is not whether it was optimal. Of  
19      course, it was optimal for AT&T. That's our  
20      assumption. It's always optimal for the  
21      company. But is it optimal from the point of  
22      view of public policy?

1 MR. CARLTON: I think,  
2 retrospectively, asking a firm to make  
3 investment decisions for some criteria other  
4 than their own profit maximization gets into  
5 very difficult ground. But I agree that the  
6 right question today is, if you think that the  
7 elimination of T-Mobile causes the elimination  
8 of some competition, the question is, even if  
9 you think that, "do these efficiencies  
10 overcome whatever concerns you have?". That,  
11 I think, is the right question.

12 And therefore, looking  
13 retrospectively, first of all, as I said, if  
14 you look retrospectively, it is not clear -- I  
15 mean I'm not an engineer, and I haven't  
16 attempted to optimally run a phone company,  
17 but it is not obvious AT&T is doing badly.

18 Second, I think it would be very  
19 bad, retrospectively, to be asking, "is  
20 someone optimally invested from the point of  
21 view of public policy?". They won't know what  
22 that means. What is a businessman to do?

1 MR. ROSSTON: Mark, you made a  
2 point about needing 10 MHZ blocks to move.  
3 And one of the things that you think about  
4 antitrust is, is there a way to achieve the  
5 same efficiencies without reducing  
6 competition? And there have been additional  
7 blocks of spectrum available, like Terrastar  
8 and the Lightsquared spectrum. Why couldn't  
9 AT&T have used those that it says are good for  
10 its competitors? Why couldn't it, then,  
11 access those kinds of blocks of spectrum for  
12 achieving these same spectral efficiencies in  
13 moving to LTE?

14 MR. ISRAEL: I mean, again,  
15 there's a couple of questions in there, right?  
16 I mean my understanding -- the specific  
17 question about GSM spectrum, right, and the  
18 ability to move GSM spectrum to UMTS, is that  
19 T-Mobile and AT&T both operate in the 1900  
20 block. And so, with the efficiencies that are  
21 very specific to that, that aren't about  
22 trying to costly move subscribers, but are

1 about channel pooling efficiencies and control  
2 channel efficiencies. They are able with this  
3 transaction to move spectrum within the same  
4 band to their UMTS service as it stands.

5 There is a separate question  
6 about --

7 MR. ROSSTON: Do they have to put  
8 new radios up to switch a band from GSM to  
9 UMTS?

10 MR. ISRAEL: If you are going to  
11 add another 10 MHZ to UMTS, you are going to  
12 have another carrier. There is going to be  
13 some cost to the tower to put in new --

14 MR. ROSSTON: So, you would have  
15 to do that? Okay.

16 MR. ISRAEL: **[Begin AT&T Highly  
Confidential Information]**

17  
18  
19 **[End AT&T Highly Confidential  
Information]**. But, certainly, if you  
20 are going to add another carrier, there is  
21 cost in the tower.

22 The separate question you're

1 asking, though, is -- and again, just to be  
2 clear, now those efficiencies are not coming  
3 from moving handsets over or any of that.  
4 They are coming from the fact that T-Mobile  
5 and AT&T both operate in the same spectrum and  
6 they can get control channel efficiencies and  
7 channel pooling efficiencies that will enable  
8 them to move that 1900 spectrum up to UMTS.

9 **[Begin AT&T Highly Confidential  
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**[End AT&T**

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MR. SALOP: So, that was not part

1 of, [Begin AT&T Highly Confidential  
Information]

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MR. ISRAEL: [Begin AT&T Highly  
Confidential Information]

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[End AT&T  
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MR. SALOP: So, for AT&T, but what  
about with respect to T-Mobile? Did you look  
at it to see whether it was a way for T-Mobile  
to move out the marginal cost curve?

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MR. ISRAEL: [Begin T-Mobile Highly  
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**[End T-Mobile Highly Confidential Information]**

MR. SALOP: Okay. And this was all premised on T-Mobile getting a path to LTE, this exercise?

MR. ISRAEL: Getting a path - it's all premised on the transaction enabling AWS spectrum to be --

MR. SALOP: No, I mean absent the transaction.

MR. ISRAEL: No.

MR. SALOP: Absent the transaction, marginal cost for T-Mobile --

MR. ISRAEL: Is based on the business reality that they don't have any way

1 to get to LTE.

2 MR. ROSSTON: I think you're  
3 asking, is Q an LTE Q or is Q an HSPA Q, or  
4 what is Q measured in, units of subscribers?  
5 You said it was ultimately subscribers, but is  
6 it LTE subscribers?

7 MR. ISRAEL: It is megabytes of  
8 use based on the traffic --

9 MR. ROSSTON: Okay.

10 MR. ISRAEL: -- projections that  
11 AT&T uses.

12 MR. SALOP: So, it is premised on  
13 HSPA+?

14 MR. ISRAEL: **[Begin AT&T and T-Mobile  
Highly Confidential Information]**

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18 **[End AT&T and T-Mobile Highly  
Confidential Information].**

19 MR. SALOP: So, you used, it was  
20 what AT&T would do with T-Mobile's network if  
21 AT&T owned T-Mobile's network, but didn't own  
22 AT&T's network?

1 MR. ISRAEL: It's an engineering  
2 model that AT&T put together that made their  
3 best judgments about what, with an HSPA+  
4 network, what T-Mobile would need to do to  
5 serve the capacity that it was projecting or  
6 the demand that it was projecting.

7 In order to have an apples-to-  
8 apples-to-apples quality-constant comparison,  
9 AT&T ran through their engineering model, what  
10 would need to be done to T-Mobile's HSPA --  
11 **[Begin AT&T Confidential Information]**

12  
13  
14 **[End AT&T  
Confidential Information].**

15 But it was based on their  
16 projections of what would need to be done to a  
17 UMTS network, if they also run one, in order  
18 to meet the capacity at this quality.

19 MR. ROSSTON: So, this assumes  
20 that neither AT&T nor T-Mobile would get  
21 additional spectrum?

22 MR. ISRAEL: That's correct.

1 MR. ROSSTON: Okay. Let me move  
2 on.

3 MR. WOODBURY: Actually, can I  
4 just ask one clarification question? In his  
5 declaration, Mr. Hogg -- is that how it's  
6 pronounced? -- Mr. Hogg had indicated that one  
7 of the benefits of the deal is that we can  
8 take the money that we were going to use to  
9 purchase new spectrum and repurpose it for  
10 other reasons. And I interpret that to mean  
11 that the standalone AT&T, in fact, would  
12 purchase new spectrum. Am I misinterpreting  
13 that?

14 MR. SALOP: Or was the exercise  
15 carried out, for the purposes of doing the  
16 simulation model something different than what  
17 they would have done as a practical matter as  
18 a company?

19 MR. ISRAEL: **[Begin AT&T Highly**  
20 **Confidential Information]**  
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**[End AT&T Highly Confidential Information]**

MR. SALOP: But he said in his declaration that they would have bought spectrum.

MR. ISRAEL: **[Begin AT&T Highly Confidential Information]**

**[End AT&T Highly Confidential Information].**

MR. BAKER: But you're planning to give us the documentation not just on the economics of the model, but the engineering assumptions? So, this will be incorporated?

MR. ISRAEL: The assumptions that are built into the model as the but-for an ATT

1 path --

2 MR. SALOP: Does this relate to  
3 the LTE issue as well?

4 MR. ROSSTON: Hopefully, they will  
5 give us all the pieces of the model.

6 I am going to move on. Since I  
7 have 15 minutes left, let me --

8 MR. BESEN: It's actually just  
9 one --

10 (Laughter.)

11 MR. ROSSTON: You've got 30  
12 seconds.

13 MR. BESEN: It would be very  
14 important to calibrate the assumptions to  
15 compare it to the plans that each of the  
16 separate companies actually had as opposed to  
17 what the models generate, as a separate piece  
18 of information --

19 MR. ROSSTON: So, let me shift  
20 gears a little bit and talk about coverage  
21 expansion. And one of the things that AT&T, I  
22 understand AT&T claims, with the merger, it is

1 going to provide LTE service to 97 percent of  
2 the country by some date, 2017, 2018, as  
3 opposed to 80 percent of the country by 2013,  
4 in the absence of the merger.

5 So, what I wanted to know was,  
6 what are the changed economic incentives that  
7 caused this? Or should we, as economists,  
8 consider this more of a promise as opposed to  
9 actually something that is now in AT&T's self-  
10 interest to do as profit-maximizing, where it  
11 was 80 percent before and now it is 90 percent  
12 as a profit-maximizing thing?

13 MR. CARLTON: First of all, we  
14 haven't investigated the incentives to deploy  
15 LTE to 97 percent versus 80 percent. My  
16 understanding is that what we are doing in  
17 our, certainly in our marginal cost analysis,  
18 whatever the migration path is is built in,  
19 and we could look at it.

20 But if you're asking specifically,  
21 if AT&T has said that, if this merger goes  
22 through, they are going to do 97 percent, I



1       What I said was that, because of the  
2       efficiencies of the transaction, they come  
3       from, you know, the shifted out marginal cost  
4       curves.     Embedded in those shifted out  
5       marginal cost curves are the ability to shift  
6       to LTE faster than might otherwise have  
7       occurred.

8                     In answer to your question -- and  
9       that's on the city-by-city basis -- in answer  
10      to your question about the 97 percent rollout  
11      throughout the country, I have not  
12      investigated whether their increased  
13      incentives to provide output from the  
14      efficiencies would generate LTE to 97 percent  
15      of the country, because I just have not  
16      investigated that.

17                    Based on what I have seen, they  
18      have certainly got an incentive to provide  
19      increased output.   And since LTE is one way to  
20      provide that increased output, there would be  
21      an incentive to provide more LTE.   But I  
22      cannot say that I have investigated that it

1 goes to 97 percent.

2 MR. ROSSTON: So, would your  
3 marginal cost curves be substantially  
4 different in densely-populated areas and  
5 lightly-populated areas? Sorry, I didn't mean  
6 the marginal -- the change in the marginal  
7 cost curves because of the merger, is what I  
8 meant to say. I would think you would have  
9 less of a change in lightly-populated areas  
10 where AT&T already has the 700 MHZ spectrum  
11 that is good for covering lightly-populated  
12 areas, so the merger wouldn't change those  
13 marginal cost curves very much. Whereas, **[Begin**  
**AT&T Confidential Information]**  
14 **[End AT&T Confidential**  
**Information]**, according to your  
15 model, it would change it a lot. Is that a  
16 reasonable interpretation?

17 MR. CARLTON: A reasonable  
18 interpretation is the increment from the  
19 lowering of marginal cost as a result of the  
20 merger differs across cities. And in a place  
21 like **[Begin AT&T Highly Confidential Information]**

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1                                   **[End AT&T Highly  
Confidential Information].**

2                                   It is the case, by the way, I mean  
3                                   you talk about capacity constraints as if it  
4                                   is a zero-one. I mean, obviously, you have a  
5                                   rising marginal cost curve.

6                                   It is the case that for one of the  
7                                   cities we chose, **[Begin AT&T Highly  
Confidential Information]**

8   **[End AT&T Highly  
Confidential Information]**to  
9                                   simulate, which is not necessarily considered  
10                                   a highly capacity-constrained city, we still  
11                                   do get efficiencies, even in those cities,  
12                                   because of things like cell splitting and the  
13                                   like.

14                                   So, I don't want to imply that  
15                                   there are no efficiencies in those other  
16                                   places. In fact, **[Begin AT&T and T-Mobile Highly  
Confidential Information]**

17   **End AT&T and T-Mobile Highly Confidential  
Information]** percent.

18                                   But, certainly, I agree with the  
19                                   general thrust of your comment that the  
20                                   incremental benefit of this merger will differ  
21                                   locally depending on capacity constraints.

22                                   MR. ISRAEL: I mean I think this  
                                 is obvious in what you said. I mean,

1 certainly, some of the 19 areas that we have  
2 and can look at, or will be looking at, are  
3 very rural areas. It is going to depend on  
4 the balance between spectrum holdings and  
5 usage.

6 MR. ROSSTON: So, if Verizon, I  
7 mean sort of getting away from the cost side  
8 of things, if Verizon is already planning to  
9 cover more than 95 percent of the country with  
10 LTE, wouldn't AT&T have an incentive to deploy  
11 LTE as a competitive response so it wouldn't  
12 be attacked with these maps that show -- so we  
13 don't get deluged with those again, even  
14 absent the merger?

15 (Laughter.)

16 MR. CARLTON: That might be. That  
17 creates an incentive. How important it is, I  
18 don't know. Like I say, we have not  
19 investigated whether the incentive from the  
20 merger would sufficiently lower the marginal  
21 cost curve such that they build out LTE to 97  
22 percent through the country. I can't tell you

1 about the 97 percent. All I can tell you is  
2 that in the cities we've investigated, there  
3 are large effects with the merger, and part of  
4 that is coming from the fact that there is  
5 faster LTE deployment.

6 MR. ISRAEL: I think it's also  
7 important to be clear that LTE is not all the  
8 same, and some people have brought up speed  
9 tests on Metro. As I understand it, LTE gets  
10 substantially better as you can roll it out,  
11 say, in a 20-MHZ block instead of a 10-MHZ  
12 block without affecting non-linear -- because  
13 of the LTE technology, as I understand it,  
14 there is an enormous advantage to rolling it  
15 out in larger blocks of spectrum.

16 So, I think a big part of the  
17 advantage from the deal is to **[Begin T-Mobile  
Confidential Information]**

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20 **[End T-Mobile Confidential Information],**  
and add it to the AT&T AWS spectrum,  
21 to have a more robust LTE offering, which  
22 would be an important competitive response of

1 other people. I mean you can get hit with a  
2 map on LTE speeds instead of just on LTE  
3 locations.

4 MR. ROSSTON: So, the last  
5 question on this piece was one of the things  
6 the Commission is worried -- concerned about --  
7 - is trying to get broadband to lots of rural  
8 areas. If Verizon is already going to cover  
9 more than 95 percent of the country with its  
10 LTE network, would we get a lot of additional  
11 wireless broadband coverage from AT&T's  
12 promise? Do you have any thoughts on that?

13 MR. CARLTON: I have not  
14 investigated that.

15 MR. ROSSTON: Okay. Did you want  
16 to do your followups?

17 You look like you're about to say  
18 something. No?

19 MR. SALOP: I wanted to say  
20 something about the LTE rollout, but I will  
21 wait.

22 MR. ROSSTON: The rollout? The 97

1 percent rollout?

2 MR. SALOP: The 97 percent.

3 MR. ROSSTON: Yes, why don't you  
4 do that? I'm going to leave that topic. So,  
5 why don't you ask it?

6 MR. SALOP: Are we allowed to talk  
7 about confidential documents here?

8 MR. ROSSTON: Yes.

9 MR. SALOP: **[Begin AT&T Highly  
10 Confidential Information]**

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**AT&T Highly Confidential Information]**

**[End**

1 So, maybe I'm misinterpreting the document,  
2 but that's what it said.

3 MR. ROSSTON: Okay. So, I want to  
4 ask a question. This sort of goes towards, in  
5 the absence of the merger, doesn't AT&T  
6 without the merger, or with the merger, adding  
7 spectrum to AT&T's inventory would be used to  
8 expand GSM and UMTS service, the capability of  
9 serving more GSM subscribers on the same  
10 spectrum or converting that to UMTS, and  
11 actually reduce its need to roll out LTE and  
12 maybe slow own the rollout of LTE possibly,  
13 because it has more capacity in its GSM and  
14 UMTS spectrum? Is that a possible  
15 ramification of the merger, that LTE may  
16 actually be slowed down because of this,  
17 because it reduces the capacity constraint  
18 somewhat?

19 MR. ISRAEL: **[Begin AT&T Highly**  
20 **Confidential Information]**  
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MR. ROSSTON: Sort of following  
up, then, in the event the merger doesn't go  
through -- and this goes towards Jon's  
question -- would the transfer of the AWS

1 spectrum to T-Mobile slow down AT&T's LTE  
2 deployment and possibly accelerate T-Mobile's  
3 LTE deployment because it now has the  
4 additional spectrum that it could use?

5 MR. ISRAEL: This is the question  
6 about the spectrum that --

7 MR. ROSSTON: This is in the "but-  
8 for" world, right. If the merger doesn't go  
9 through, if T-Mobile gets spectrum, and,  
10 presumably, then, according to your answer to  
11 the previous question, would have the ability  
12 to roll out LTE more rapidly?

13 MR. CARLTON: T-Mobile gets  
14 spectrum from whom?

15 MR. ROSSTON: From AT&T.

16 MR. CARLTON: Oh, in the breakup?

17 MR. ROSSTON: Yes.

18 MR. CARLTON: We have not analyzed  
19 the breakup. And I haven't fully thought it  
20 through.

21 It seems to me an issue as to, if  
22 AT&T is sure this is going to go through, and

1 they give a large breakup fee, and, then, as a  
2 result of the large breakup, it does involve  
3 spectrum, the Commission says, "Oh, gee, this  
4 is going to be great. I'm just not going to  
5 let the deal go through," and, basically, AT&T  
6 gets clobbered and loses spectrum, I am not  
7 sure that's --

8 MR. ROSSTON: I wasn't asking  
9 about the incentives or anything. I was just  
10 saying, what is the net effect of it?

11 MR. CARLTON: We would have to  
12 look at what the state of the world is in a  
13 breakup. We have not modeled that. So, we  
14 would have to look at that.

15 MR. ISRAEL: **[Begin T-Mobile Highly**  
16 **Confidential Information]**

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MR. BAKER: Okay. I wanted to ask, even though I know we are going to actually learn what's in your interesting simulation model in a short while, I can't help but be like Steve here.

(Laughter.)

So, I have a question. I have two questions, just things that occurred to me, about how you are doing it. And I'll just ask them both here, too.

One is, are you going to account for the phaseout of the T-Mobile brand when

1 you simulate the pricing, you know, after you  
2 work through the marginal cost effects?

3 And the second is, what are you  
4 assuming about what other firms are doing in  
5 investing in quality improvements as the  
6 merged firm does in your analysis? I'm just  
7 curious.

8 MR. CARLTON: So, for other firms  
9 -- correct me; you know, jump in, Mark -- we  
10 have done constant marginal costs.

11 MR. BAKER: Okay.

12 MR. CARLTON: So, we just leave  
13 the marginal costs the same.

14 MR. ROSSTON: So, why do they have  
15 constant marginal costs when AT&T's is steeply  
16 increasing? I guess that gives them the best  
17 way of responding to any output increases? Is  
18 that why you do that?

19 MR. CARLTON: Well, I think we do  
20 it for simplicity because we don't know that  
21 the marginal cost curves are going to go up.

22 MR. ISRAEL: I mean, going

1 forward, when the AT&T marginal cost curves  
2 are higher, you can make different assumptions  
3 about the other firms. We don't have any  
4 basis for that. I mean it's an interesting  
5 question. I mean, given that what really  
6 drives the results is the change in the AT&T  
7 marginal cost, and whether that's large enough  
8 to overcome the competitive effects, based on  
9 what we have seen, the model is quite robust  
10 to variation in those sorts of assumptions.

11 MR. SALOP: Well, what would  
12 happen if you would assume that Sprint's  
13 costs, marginal costs, say, were equal to what  
14 a T-Mobile's marginal costs would be, absent  
15 the merger?

16 MR. ISRAEL: It is not an analysis  
17 we have separately done. I mean the key  
18 driver of the analysis is the change, the  
19 efficiencies that AT&T and T-Mobile get  
20 collectively.

21 MR. CARLTON: We could do that  
22 experiment. But, just to give my intuition,

1 the intuition is that the marginal cost change  
2 of these merged companies, that it is going to  
3 swamp these output effects, independent of  
4 what is happening to the other firms.

5 Now I understand we are going to  
6 talk about vertical exclusion and you want to  
7 raise Sprint's costs. My suspicion is you are  
8 going to have to raise them a lot to undo  
9 these output effects that are coming from the  
10 incremental benefits of the transaction on  
11 marginal cost.

12 MR. BAKER: I have another  
13 question on the phaseout of the brand.

14 MR. CARLTON: And I should say,  
15 you know, the robustness experiment, we can do  
16 the one you are suggesting and we will. But  
17 we have done just a few; we haven't attempted  
18 to do a lot, but we have done a few. We still  
19 get these output effects, even if we cut in  
20 half the marginal cost savings that we have  
21 estimated.

22 And we've experimented up and down

1 with the profit margins to try, and we have  
2 not raised Sprint's to exactly what you said.

3 We can do that. But we have changed the  
4 profit margins and the marginal costs that  
5 way, and we still get these results. We think  
6 they're pretty robust. But, as I say, we will  
7 be happy to do that experiment, and we can  
8 continue to analyze the model.

9 MR. BAKER: And my other question,  
10 about the brand, the phaseout of the T-Mobile  
11 brand?

12 MR. CARLTON: We talked about this  
13 earlier, about the commitment to the existing  
14 T-Mobile customers. We have not modeled that.  
15 So, that is not in our model.

16 MR. BAKER: Meaning that there is  
17 diversion to T-Mobile in your model?

18 MR. CARLTON: Yes. Yes. Both to  
19 and from, right. And no constraint that the  
20 price can't go up. So, if that was going to  
21 happen, that could happen.

22 And, then, second, in terms of the

1 T-Mobile brand, we keep the characteristics of  
2 the products in the market fixed.

3 MR. BAKER: I see.

4 MR. CARLTON: We are not allowing  
5 for repositioning.

6 MR. BAKER: By anyone else or --

7 MR. CARLTON: By anyone else or  
8 us.

9 MR. BAKER: All right. Well,  
10 we'll look forward to the details and the  
11 backup.

12 MR. SALOP: By eliminating the  
13 T-Mobile brand, that is like raising the price  
14 of T-Mobile out to infinity, right?

15 MR. CARLTON: Not quite.

16 MR. SALOP: Out to the choke  
17 price. I'm sorry.

18 MR. CARLTON: No, no, that's not  
19 right. It depends. The T-Mobile -- you have  
20 to define what you mean by T-Mobile. If what  
21 you mean by T-Mobile is the pricing and the  
22 package of service that it is offering, that

1 we keep. Its true, in our model -- the  
2 product demand curve for T-Mobile stays  
3 constant in our model with one caveat.

4 There is a quality improvement as  
5 a result of the transaction. And we talked a  
6 little bit about how it would happen  
7 immediately, but it would happen even over  
8 time.

9 But the quality improvement, we do  
10 try to adjust for how that affects the demand  
11 curves.

12 MR. DeGRABA: Don't you have to  
13 prevent customers from Sprint and Verizon from  
14 being able to go to these T-Mobile products?

15 MR. CARLTON: We allow that.

16 MR. DeGRABA: Right, but,  
17 presumably, they're not going to be available.

18 So, wouldn't you have to eliminate that from  
19 the model, to model this notion that AT&T  
20 would just grandfather in all of the existing  
21 T-Mobile customers, and then not have that set  
22 of -- that menu of prices won't actually be an

1 option for any customer that wasn't already on  
2 it?

3 MR. CARLTON: Mark answered the  
4 technical details, but we do not impose the  
5 condition that the price is fixed for the  
6 existing base in our simulation model.

7 MR. ROSSTON: Well, I think we are  
8 at a point where time is up.

9 We definitely want your model with  
10 all of the assumptions and the ability to play  
11 with the model. We want it.

12 (Laughter.)

13 MR. CARLTON: I didn't say that we  
14 kept the price constant in the model.

15 MR. ISRAEL: No, no, I mean the  
16 T-Mobile products and the price plans we keep.

17 **[Begin AT&T Highly Confidential Information]**

18 **[End AT&T  
Highly Confidential Information].**

19 MR. ROSSTON: So, we definitely  
20 want that as much as possible, so we can play  
21 with it and understand it.

22 We are take a break. And if you

1 want to end by four o'clock, we will start  
2 again precisely at three o'clock.

3 That's it.

4 (Whereupon, the foregoing matter  
5 went off the record at 2:47 p.m. and went back  
6 on the record at 3:00 p.m.)

7 MR. DeGRABA: All right, so let's  
8 get started. We are planning on ending at  
9 4:00.

10 Once again, as Greg said earlier,  
11 crisp, short answers for the questions.

12 So, my first question is about  
13 roaming. The simplest theory presented about  
14 why this merger is harmful roaming is that  
15 there are two national GSM markets -- or two  
16 national GSM networks -- and they're going to  
17 merge into one. And so, a number of  
18 commenters have said this is going to reduce  
19 competition in the roaming market.

20 AT&T has come back and said, "No,  
21 no, no, none of the people who need to buy  
22 roaming have handsets that can roam both on

1 AT&T and T-Mobile's network. And so, there  
2 really is no effective competition for  
3 roaming."

4 So, my first question is to  
5 Sprint, which is, is there any evidence that  
6 there actually is competition for GSM roaming  
7 today and, if so, what is it?

8 MR. SALOP: Okay. Well, I guess I  
9 want to make just one opening remark about  
10 exclusion. And that is the way in which  
11 exclusion fits into this merger analysis is  
12 that it reinforces the horizontal effects.  
13 Because the focus is on reinforcing the  
14 horizontal effects, we need to look at all the  
15 sources of exclusion. Looking at them one at  
16 a time, you could end up not adding them up.  
17 They all have to be added up at the end rather  
18 than each one looked at them in isolation.

19 Okay. So, having said that, there  
20 appears to be GSM wholesale roaming  
21 competition today between T-Mobile and AT&T,  
22 and that wholesale roaming competition would

1 be eliminated as a result of the merger. So,  
2 in terms of the narrow question that you ask,  
3 yes, there will be elimination of GSM  
4 wholesale competition.

5 MR. DeGRABA: Okay. Can you sort  
6 of give me some examples of where there is  
7 that competition or what it is that I should  
8 be looking at? Because there's very little,  
9 if anything, in the record that actually  
10 points to, here's a place where a customer  
11 is --

12 MR. SALOP: I mean I can just give  
13 you some random things that come to mind.  
14 Maybe John and Stan have a lot more.

15 T-Mobile says that they are just a  
16 roaming customer for AT&T. AT&T sells roaming  
17 to other people. T-Mobile sells roaming to  
18 other people. So, it would seem from that  
19 that they compete because the handsets can  
20 pick up more than one band.

21 Cincinnati Bell talks about losing  
22 roaming competition between AT&T and T-Mobile.



1 MR. DeGRABA: It's possible, but  
2 there is nothing - it's a pretty sparse  
3 discussion.

4 MR. SALOP: It will be a good  
5 thing for you to interview them.

6 MR. DeGRABA: It will be.

7 (Laughter.)

8 MR. BESEN: The question was,  
9 could people take advantage of competition  
10 between them? And obviously, Cincinnati Bell  
11 did try to, which suggests that, in fact,  
12 their phones would have worked on either  
13 network, which I thought your question was.

14 MR. WILLIG: Yes, so just to wind  
15 it back to your question and then Steve's  
16 opening remarks, and answer, we are talking  
17 about exclusion here, foreclosure, impact on  
18 competition, or at least Steve wants to, and I  
19 think we should.

20 And Steve says we have got to add  
21 up all the different sources of possible  
22 exclusion and foreclosure. It's the old "five

1 times zero equals zero" equation.

2 We are going to have to look at  
3 each one of them to see if there's any  
4 discernible impact from the deal, the merger  
5 that you're analyzing, on exclusion, and it  
6 makes sense to start with Sprint since Sprint  
7 is here and, in some sense, attempting to  
8 complain about these kinds of forces.

9 But just do keep our eyes on that  
10 ball as well as talking more generally in  
11 worrying about Cincinnati Bell, as appropriate,  
12 if that is appropriate.

13 So, we are starting with roaming,  
14 let's talk about domestic roaming. I just  
15 don't see any economic case for thinking  
16 there's any horizontal impact from the merger  
17 on Sprint as a customer for roaming services.

18 MR. DeGRABA: We'll get to Sprint  
19 in a minute. I want to talk about things --

20 MR. WILLIG: Yes, well, Steve  
21 started --

22 MR. DeGRABA: Right, I know. I

1 know.

2 MR. WILLIG: Yes.

3 MR. DeGRABA: Right. But I didn't  
4 ask him about Sprint.

5 (Laughter.)

6 I just asked about this particular  
7 simple, here's one theory of harm. The GSM  
8 roaming market has got a problem. They say  
9 Cincinnati Bell. You said, "No, there really  
10 isn't an issue here at all."

11 MR. WILLIG: No, no, I'm talking  
12 about Sprint. And CDMA carriers generally, of  
13 course.

14 MR. DeGRABA: Right.

15 MR. WILLIG: So, let's go on to  
16 GSM carriers.

17 MR. DeGRABA: Well, right, to GSM  
18 carriers, right.

19 MR. WILLIG: So, it's my  
20 understanding, then, for 3G roaming services,  
21 AT&T, premerger, and T-Mo are not really  
22 effective or active rivals because of spectrum

1 issues. Spectrum bands are just different,  
2 that they're offering -- so if a carrier is  
3 looking for roaming, the two are really not  
4 very convenient substitutes.

5 That's not necessarily at all the  
6 case for 2G where that particular impediment  
7 to competition may actually not be  
8 controlling. So, we need to go deeper and  
9 look more completely at that situation before  
10 reaching some sort of an assessment.

11 But, again, the first thing to say  
12 is that whatever issues there are in that  
13 space, they are not going to double-back and  
14 affect the overall competition that is  
15 important for people as customers for wireless  
16 services, as per Sprint --

17 MR. DeGRABA: But at least the  
18 Cincinnati Bell customers --

19 MR. WILLIG: Well, let me talk  
20 about that.

21 MR. DeGRABA: -- who claim to  
22 currently have -- yes?

1 MR. ROSSTON: I just want to ask,  
2 your question, your point was that -- Jon, can  
3 you put back up Dennis' Table 1?

4 MR. BAKER: Yes, I've got it.

5 MR. ROSSTON: So, this is --

6 MR. BAKER: How do we get it from  
7 the --

8 MR. ROSSTON: It's up on the  
9 screen now.

10 So, this is just to clarify. Your  
11 point is that T-Mobile operates in the AWS  
12 band for UMTS, the 3G, and that AT&T operates  
13 in 1900 and 850, so they're in different  
14 bands, and that's why the roaming doesn't go  
15 across them.

16 My understanding is that the  
17 T-Mobile handsets actually operate in all  
18 three bands. So, that when T-Mobile customers  
19 roam -- so that Cincinnati Bell could use a  
20 T-Mobile-compatible handset to roam. So, I am  
21 not sure your -- is that what you were  
22 arguing, was that just because they are

1 different bands, the T-Mobile customer handset  
 2 wouldn't work?

3 MR. WILLIG: What I was arguing  
 4 was, first of all, not about Cincinnati Bell  
 5 because I, like you, find that a very complex  
 6 situation. It's a one-off situation. We can  
 7 talk about it a little bit, but we should  
 8 cloister it as a separate set of facts and  
 9 considerations from marketwide impact. It's  
 10 really a unique situation.

11 **[Begin AT&T and Cincinnati Bell  
 Wireless Highly Confidential Information]**

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 13  
 14 **[End AT&T and  
 Cincinnati Bell Wireless Highly Confidential  
 Information]**

15 MR. ROSSTON: But, just  
 16 technically, you said that third-party guys  
 17 didn't have handsets that worked on both.

18 MR. WILLIG: -- going back to  
 19 Cincinnati Bell --

20 MR. ROSSTON: I would just use  
 21 them as an example. They could have a  
 22 T-Mobile-like handset that would span all

1 three bands.

2 MR. WILLIG: Well, I think  
3 Cincinnati Bell is actually a fairly unique  
4 special case and a commercially-difficult one,  
5 and one that is not indicative of a marketwide  
6 problem, just to get that out.

7 MR. ROSSTON: Okay.

8 MR. WILLIG: That doesn't mean you  
9 shouldn't look at it, interview them,  
10 whatever, but I think you should keep in mind  
11 to view it as a special difficult commercial  
12 conflicting situation.

13 My understanding is that generally  
14 those 3G GSM carriers don't have handsets that  
15 would work alternatively between AT&T services  
16 as offering roaming to those carriers and T-  
17 Mobile. Generally, 3G is not a source of  
18 active competition for roaming for the  
19 carriers who are the customers of AT&T and  
20 T-Mobile in roaming space. Cincinnati Bell,  
21 again, maybe some sort of one-off exception.

22 MR. ISRAEL: It is the spectrum

1 issue. I mean you are right that there are  
 2 phones, T-Mobile has phones that work in both  
 3 spectrum, but we are looking for active  
 4 examples of competition. The issue is that  
 5 the phones people generally have in the  
 6 marketplace, aside from AT&T and T-Mobile,  
 7 generally don't work in both bands.

8 MR. SALOP: What does one-off mean  
 9 in this context? I mean Cincinnati Bell is  
 10 the largest of the fringe players that uses  
 11 GSM. So, whether it's one-off or not, they  
 12 are one of the few fringe players that  
 13 actually has a measurable share.

14 MR. WILLIG: **[Begin AT&T and  
 Cincinnati Bell Wireless Highly Confidential  
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21 **[End AT&T and Cincinnati Bell  
 Wireless Highly Confidential Information].**

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There is a commercial conflict



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**[Begin AT&T and T-Mobile Highly Confidential Information]**

**[End AT&T and T-Mobile Highly Confidential Information].**

MR. DeGRABA: Right. And that's the next question, which is, right, so why should we believe that those terms -- you've argued that all of these contracts are reciprocal. Cincinnati Bell has argued that certainly the deal with AT&T that it has is not reciprocal, at least in lots of other terms, in terms of when they have to use AT&T's network and other concessions that they claim they have to make, that you might not

1 call concessions, but at least the terms that  
2 look reciprocal. Cincinnati Bell has to do a  
3 bunch of stuff for AT&T, and AT&T doesn't have  
4 to do it back to Cincinnati Bell.

5 And so, shouldn't we expect that,  
6 whether a contract is symmetrical or not or  
7 reciprocal or not is an endogenous decision  
8 and will depend on whether AT&T actually needs  
9 the other carrier's network to fill in holes  
10 in its own network or whether it is primarily  
11 a competitor that wants to roam, and that AT&T  
12 doesn't particularly want or need a lot of  
13 roaming from them.

14 MR. WILLIG: Yes. So, again, in  
15 **[Begin AT&T Highly Confidential Information]**  
**[End AT&T Highly Confidential**  
**Information]**, AT&T is needing what it  
16 gets from its partner in roaming, more, at  
17 least quantitatively, than what the partner  
18 needs from AT&T.

19 Cincinnati Bell is an exception to  
20 that. At one time, it was reciprocal, but  
21 AT&T built its own facilities in Cincinnati  
22 Bell territory. It is now sort of a one-way

1 deal, and that is part of, I think, what  
2 generated the commercial conflict, was the  
3 change in the relationship.

4 MR. SALOP: **[Begin AT&T Highly  
Confidential Information]**

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16 **[End AT&T Highly Confidential  
Information]**

17 MR. WILLIG: Well, you're offering  
18 an interesting hypothesis about, say, market  
19 shares in the different territories of roaming  
20 customers of AT&T. I haven't looked at that.

21 Have you?

22 MR. SALOP: A little bit. A

1 little bit, and I'm also saying that you  
2 shouldn't count. I am saying you shouldn't  
3 count [**Begin AT&T Highly Confidential Information**]  
4 [**End AT&T Highly Confidential**  
5 **Information**] AT&T's roaming  
6 agreements involve them being a net buyer; I  
7 don't think --

8 MR. WILLIG: That is actually  
9 true.

10 MR. SALOP: Yes, it may be true,  
11 but it may be that the ones where it is a net  
12 buyer are less important competitively than  
13 the ones in which it is a net seller. But I  
14 basically agree with Pat, that symmetry now  
15 does not ensure symmetry in the future, that  
16 that's the real point.

17 MR. DeGRABA: [**Begin AT&T Highly**  
18 **Confidential Information**]

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23 [**End**  
24 **AT&T Highly Confidential Information**] for  
25 which the terms could be much worse and much

1 higher.

2 MR. WILLIG: **[Begin AT&T Highly**  
3 **Confidential Information]**

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**[End AT&T Highly Confidential Information]**

5 MR. DeGRABA: Right.

6 MR. WILLIG: **[Begin AT&T and T-**  
7 **Mobile Highly Confidential Information]**

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11 **[End AT&T and T-Mobile**  
12 **Highly Confidential Information] --**

13 MR. DeGRABA: No, this is just a  
14 question about you said don't worry about

15 roaming; **[Begin AT&T Highly Confidential**  
16 **Information]**

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20 **[End**  
21 **AT&T Highly Confidential Information]**

22 MR. WILLIG: That's really the  
question.

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MR. DeGRABA: Okay.

MR. WILLIG: Let me respond to it  
before anybody else comes in.

(Laughter.)

MR. DeGRABA: You've got a minute.

MR. WILLIG: **[Begin AT&T Highly  
Confidential Information]**

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[End

**AT&T Highly Confidential Information]**

MR. DeGRABA: Were those documents in your declaration? I don't remember seeing those.

MR. WILLIG: Yes, I think this is --

MR. DeGRABA: Okay. So, you can send them to us.

MR. WILLIG: We can do that, yes.

MR. ROSSTON: And I assume you want that marked confidential for the record, would be my guess.

MR. WILLIG: Not personally, but you can ask --

(Laughter.)

MR. SALOP: I think that notion that a carrier would look for simplicity in its pricing goes back to our discussion earlier about coordination in the price points.

1 But I think I have got one other  
2 point to make. And that is, suppose it is **[Begin**  
**AT&T Highly Confidential Information]** **[End**  
**AT&T Highly Confidential Information]**

3 cents per MOU. And there is also an issue  
4 about marginal cost per sub for the AT&T  
5 contracts, for AT&T versus for the other  
6 carrier.

7 **[Begin AT&T Highly Confidential**  
**Information]**

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**[End AT&T**  
**Highly Confidential Information].**

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MR. DeGRABA: Okay. Okay. Thank  
you.

22

The next question for Sprint is

1 sort of more abstract maybe than I would like,  
2 but I will try it this way. So, you have a  
3 theory that I will characterize as the  
4 following. It's not that difficult, right?

5 It says, if you've got an  
6 integrated firm that sells both output and an  
7 input that someone else uses to make that  
8 output, and the price of the output goes up,  
9 it has an incentive to increase the price of  
10 the input. And then, you have applied this to  
11 backhaul and said --

12 MR. SALOP: And to roamrng.

13 MR. DeGRABA: -- and to roaming,  
14 right. So, both of these things, and said, if  
15 the merger occurs and the retail price goes up  
16 as a result of the merger, you are also going  
17 to have an increase in the price of backhaul  
18 and roaming, which is where Sprint comes in,  
19 right? So, that is going to raise the price  
20 not only to Sprint, but everybody else.

21 And so, my first question rs, do  
22 we need to find a competitive harm at the

1 retail level before we have to worry about  
2 both the roaming application of this theory  
3 and the backhaul application of this theory?

4 MR. SALOP: Well, we'll put some  
5 of it in the context of roaming.

6 MR. DeGRABA: Okay.

7 MR. SALOP: Because since we get  
8 into backhaul --

9 MR. DeGRABA: Okay. With the  
10 roaming, that's fine.

11 MR. SALOP: -- I think we are  
12 getting into a lot of other issues.

13 MR. DeGRABA: All right.

14 MR. SALOP: You've got the logic,  
15 basically correct. AT&T unilaterally raises  
16 its retail price post-merger. That leads  
17 Verizon to want to respond by unilaterally  
18 raising its retail price, what John Vickers  
19 calls the multilateral effect. It is still  
20 unilateral. And once Verizon raises its  
21 retail price, then it has an incentive to  
22 raise the roaming price, too. I have now

1 named this the unilateral price support  
2 theory.

3 MR. DeGRABA: Okay.

4 MR. SALOP: So, it does say that  
5 if  
6 there were no diversion between AT&T and  
7 T-Mobile, and there were no unilateral effect,  
8 then it would not affect Verizon's incentives.

9 Now there is a more complicated theory for  
10 Verizon. It's not literally coordinated, but  
11 it's two levels, two production levels. Even  
12 if there is no unilateral effect by AT&T after  
13 the merger, the fact that AT&T and T-Mobile  
14 are merged would affect, might affect their  
15 reaction to Sprint raising its retail price,  
16 so that they would react by more. And  
17 Verizon, knowing that, would have a greater  
18 incentive to raise Sprint's roaming price  
19 because it would cause a differential  
20 reaction.

21 So, it is, you might call it  
22 quasi-coordinated. I mean it's not common  
understanding a la Stigler. It is not

1 parallel accommodating conduct. But it is  
2 Verizon taking into account how AT&T will be  
3 affected.

4 But, you know, the unilateral  
5 price support theory is derivative of the  
6 unilateral effects.

7 MR. WILLIG: Well, I think it is  
8 worthwhile trying to not understand the third-  
9 order theory, which I don't by the way. But  
10 understand the extent to which these exclusion  
11 ideas that have been floating around all day  
12 long, because Steve keeps dropping back to  
13 mention it, really do rely in the first  
14 instance on the theory that somehow horizontal  
15 effects will predominate and that prices will  
16 go up for consumers, and margins will go up  
17 for end-service providers.

18 And frankly, I mean if you all  
19 thought, if we all thought that that was going  
20 to be the result of the merger, we wouldn't  
21 have to go to complex theories because that  
22 alone would be an antitrust problem.

1                   But, in fact, what our analyses  
 2 show is that the efficiencies overwhelm any  
 3 sort of ordinary unilateral or even  
 4 coordinated set of incentives for the carriers  
 5 to raise price at retail in the first  
 6 instance.

7                   And I think maybe we are agreeing  
 8 that if that's the case, we don't have to even  
 9 continue talking about these vertical or  
 10 exclusionary issues. We'll never get there.  
 11 But if we wanted to go home by 3:30, that  
 12 might --

13                   (Laughter.)

14                   MR. DeGRABA: I have to work until  
 15 at least 6:00 though. I don't get to go home  
 16 when you say.

17                   (Laughter.)

18                   MR. SALOP: I guess I should show  
 19 my reaction to that.

20                   MR. DeGRABA: Okay, Steve.

21                   MR. SALOP: One is, with respect  
 22 to the unilateral, it means there is a bigger

1 unilateral effect, and you would measure by  
2 the GUPPI, for example. The GUPPI, the  
3 effective GUPPI would go up somewhat.

4 Secondly, in terms of, would your  
5 efficiencies swamp unilateral and coordinated  
6 effects?, my understanding is that your  
7 simulation model assumes unilateral. Does  
8 your simulation model also assume that there  
9 could be coordination affected by the merger?  
10 And the efficiencies are big enough to swamp  
11 that coordination as well?

12 MR. WILLIG: Not formally, but I  
13 haven't seen a theory, including your CMMI  
14 theory.

15 MR. SALOP: It's CPPI, thank you.

16 MR. WILLIG: Yes, whatever.

17 (Laughter.)

18 -- that has any credible basis for  
19 making us think that there ought to be a  
20 separate worry here about coordinated effects.

21 I would love to have a theoretical  
22 seminar on that paper, but it just doesn't --

1 it's internally inconsistent.

2 MR. DeGRABA: We can talk about  
3 it, but not in --

4 MR. WILLIG: Yes. Shall we have a  
5 separate day on that?

6 MR. DeGRABA: Yes, a separate --  
7 yes, no problem.

8 MR. SALOP: Well, do you have the  
9 paper?

10 MR. WILLIG: The one that you  
11 submitted the other day, yes.

12 MR. DeGRABA: Right. Okay, good.  
13 All right. We don't need to talk about that  
14 now. Thank you.

15 MR. WILLIG: No?

16 MR. DeGRABA: No.

17 (Laughter.)

18 MR. WILLIG: Can we stop talking  
19 about coordination then?

20 MR. DeGRABA: No.

21 MR. WILLIG: Oh.

22 MR. DeGRABA: Okay. So, you have

1 no problem in principle with the theory behind  
2 this notion of prices. That if the prices go  
3 up, the retail prices, you just have a quibble  
4 with you don't think that there's going to be  
5 a horizontal effect?

6 MR. WILLIG: No, no, there's two  
7 parts. I mean the first is I don't think  
8 there's evidence around -- and we have strong  
9 evidence in the other direction of a  
10 horizontal effect --

11 MR. DeGRABA: Right.

12 MR. WILLIG: -- at that level of  
13 consumers buying wireless services.

14 But, second, I don't see a  
15 particularly strong -- in fact, if anything,  
16 it is third order, de minimis, a small thing  
17 multiplied by a small thing, multiplied by a  
18 small thing.

19 Given just basic factoids in this  
20 market, connecting the horizontal level with  
21 some sort of incentive to make life difficult  
22 for one's rivals, I think the connective is

1 extremely weak here.

2 MR. DeGRABA: So, have you looked  
3 at the likely effects on Sprint's roaming  
4 cost?

5 MR. SALOP: Well, when the two  
6 CDMA carriers in Mexico merged, Sprint's  
7 roaming cost **[Begin Sprint Confidential  
Information] [End Sprint Confidential  
Information]**.

When AT&T and Cingular  
8 merged, T-Mobile's -- was it T-Mobile's? --

9 MR. BESEN: AT&T Wireless and  
10 Cingular merged.

11 MR. SALOP: Yes. Whose cost went  
12 up by **[Begin T-Mobile Highly Confidential  
Information] [End T-Mobile Highly  
Confidential Information]**

13 MR. BESEN: **[Begin T-Mobile Highly  
Confidential Information] [End T-  
Mobile Highly Confidential Information]**

14 MR. SALOP: **[Begin T-Mobile Highly  
Confidential Information]**  
15 **[End T-Mobile Highly  
Confidential Information]**

16 So, you know, there's a potential  
17 big number here. Now I know that the  
18 Commission has passed a rule saying that the  
19 carriers need to charge commercially-  
20 reasonable rates for roaming. So, that may  
21 eliminate, except for Verizon's question  
22 whether you can do the rule -- several

1 problems with the regulation that I see.

2 One is, you know, you can, what we  
3 used to call the 3Ds, degrade, deny, and  
4 delay.

5 (Laughter.)

6 So, the roaming service could  
7 break, even though there's regulation.

8 Secondly, a second problem is that  
9 commercially-reasonable is not antitrust  
10 competitively-reasonable. I mean it's  
11 commercially-reasonable for a monopolist to  
12 charge the monopoly price. So, I am not sure  
13 that the rule helps.

14 But, of course, you could fix  
15 that. You could, in principle, tell AT&T  
16 whatever you want about what they need to do  
17 with their roaming rates. But that is not  
18 going to help Sprint because you can't, as  
19 part of the negotiation with AT&T over this  
20 merger, you can't regulate Verizon.

21 MR. DeGRABA: Right. So, is it a  
22 potential harm from this merger that we don't

1 have T-Mobile as a benchmark to think about  
2 what a commercially-reasonable rate is?

3 MR. SALOP: Well, you don't have  
4 competitively-reasonable, and it doesn't  
5 matter because you can't, unless AT&T and  
6 Verizon cooperate in some way, you can't make  
7 a merger condition that Verizon does not raise  
8 its roaming rate.

9 MR. WILLIG: Can we just rewind a  
10 little bit?

11 MR. DeGRABA: Sure.

12 (Laughter.)

13 MR. WILLIG: I'm really  
14 confused --

15 MR. DeGRABA: All right.

16 MR. WILLIG: -- listening to  
17 Steve.

18 We are talking about Sprint now --

19 MR. DeGRABA: Yes. Right. Good.  
20 Okay. Good.

21 MR. WILLIG: -- because that was  
22 the question, and it makes sense -- what I

1 said, and you tried to stop me, but let's  
2 remember what I said.

3 MR. DeGRABA: Right.

4 MR. WILLIG: Sprint is not a  
5 roaming customer of AT&T or T-Mobile. It's  
6 CDMA versus GSM. And so, talking about  
7 horizontal impacts from this deal on Sprint as  
8 a roaming customer is just in another  
9 universe.

10 MR. ROSSTON: But couldn't it be  
11 an LTE roaming customer at some point in the  
12 future?

13 MR. WILLIG: Well, at some point,  
14 but there would still be plenty of options at  
15 that point. There's nothing special about the  
16 pairing up between AT&T and T-Mobile, as  
17 arguably there is today because of their GSM  
18 status.

19 And if we move on to backhaul,  
20 which I think was in the air as well, because  
21 we're adding up all these non-exclusionary  
22 effects and getting zero effect.

1 MR. SALOP: Can we finish roaming  
2 first?

3 MR. DeGRABA: So, let's just talk  
4 about Sprint, yes, right.

5 MR. WILLIG: So, no problem with  
6 roaming. We're okay with that?

7 MR. DeGRABA: Tell me about Sprint  
8 and roaming, if you have something to say  
9 about that. You seem to like -- are you done  
10 with that?

11 MR. WILLIG: Well, Steve was now  
12 focusing on Sprint, and if we focus on Sprint,  
13 there is no issue in the backhaul frame either  
14 for Sprint.

15 MR. BAKER: So, we might care  
16 whether it's Sprint or not.

17 MR. SALOP: Don't worry, we'll get  
18 to backhaul. We'll go to Starbucks. If we  
19 can't finish it here, you and I will go to  
20 Starbucks.

21 (Laughter.)

22 MR. DeGRABA: Backhaul is next.

1 MR. SALOP: On LTE roaming and  
2 Greg's question, actually, there is an issue  
3 about LTE roaming. I mean we have not nailed  
4 down the evidence, but you can.

5 Cincinnati Bell, and I believe  
6 somebody else, said that AT&T and/or Verizon,  
7 either individually or cooperatively -- I  
8 can't really tell from reading the --

9 MR. DeGRABA: The submission?

10 MR. SALOP: -- declarations --  
11 have pressured handset manufacturers to make  
12 handsets that only work on the bands, on the  
13 B&C bands, I think it is, that Verizon and  
14 AT&T use, and would not work on the A band  
15 which the fringe uses.

16 And so, there could be a roaming  
17 problem, in essence, a refusal-to-deal problem  
18 in LTE roaming, not naked refusal to deal,  
19 but, rather, through a control over the  
20 handset manufacturers and the standards that  
21 are used for the handsets. So, that is still,  
22 I believe, a live issue.

1 MR. DeGRABA: Right. Let me  
2 transition to that question because, actually,  
3 I had a more general question, which is I  
4 don't remember there being issues of  
5 pressuring. But let me ask this question: as  
6 networks become larger, they have less  
7 incentive to cooperate on certain issues of  
8 interoperability. And is it the case or is it  
9 not the case that, if you have large networks  
10 and non-interoperable technologies, that you  
11 can effectively get handset exclusivity  
12 without actually contracting for handset  
13 exclusivity?

14 So, if AT&T is large enough,  
15 clearly, third-party vendors will have an  
16 incentive to build handsets to the AT&T specs.  
17 And if there are some specifications that are  
18 used by a small number of carriers, isn't it  
19 the case that vendors might not have an  
20 incentive to actually build handsets or other  
21 equipment to that spec?

22 MR. SALOP: Yes, we talked about

1 that in detail with respect to network  
2 infrastructure. We talk about that in detail  
3 with respect to network infrastructure  
4 equipment. It could also apply to handsets.  
5 And, of course, in handsets you also have the  
6 concern about exclusivity and other  
7 exclusionary conduct for handsets.

8 MR. DeGRABA: Okay. Is there an  
9 issue that the regulator ought to consider  
10 that large downstream customers tend to have a  
11 big influence on what I will call the  
12 ecosystem, for lack of a better word?

13 (Laughter.)

14 And should the regulators be  
15 concerned about managing those sorts of  
16 issues?

17 MR. WILLIG: So, we're talking now  
18 about R&D, product development in the handset  
19 space?

20 MR. DeGRABA: Yes.

21 MR. WILLIG: Yes, there's a lot to  
22 be said -- this is a big space, to be sure.

1 MR. DeGRABA: Okay. We've got a  
2 few minutes.

3 MR. WILLIG: The first thing on my  
4 list is that handset design and handset  
5 arrangements are literally in a worldwide  
6 market. Yes, you might think that AT&T is a  
7 sizable player. AT&T is important in the U.S.  
8 AT&T is something like 3 percent of the  
9 world  
10 when it comes to subscribers and maybe 9 or 8  
11 percent when it comes to smartphone  
12 subscribers. So, AT&T is important to us. It  
13 is what this day is about, but in terms of  
14 being a dominant force on the world stage,  
15 which is where manufacturers are conducting  
16 their R&D to address. There is sort of no  
17 sense of the kind of dominance that might even  
18 raise these kinds of considerations as an  
19 issue.

20 In terms of the scale economies  
21 question, which is also running behind your  
22 remarks, I think there's plenty of scale  
economies, very important. R&D scale

1 economies, when it comes to the core platform  
2 of handset design, and the kind of  
3 breakthrough is something that could be  
4 applicable worldwide, but it costs plenty of  
5 money to come up with it.

6 So, the more sales a manufacturer  
7 can hope to make, the more willing the  
8 manufacturers are to invest in that R&D to get  
9 returns to recover their investment, should  
10 they be lucky enough to come up with a winning  
11 design.

12 What that means is that the  
13 manufacturers are very anxious to make sales.

14 And the last thing that would be in their  
15 interest is to design very narrowly for the  
16 platform to fit the interest of any one  
17 carrier or any one collection of carriers on  
18 the world stage.

19 At the same time, the  
20 manufacturers can build in particular features  
21 that are suited to the perceived customer  
22 demands of the particular country or tranche

1 of customers, and, also, to fit a particular  
2 frequency band.

3 But I understand that the R&D cost  
4 and the effort for those kinds of adaptations  
5 are way smaller than the basic R&D costs for  
6 the entire platform. And so much smaller  
7 that, in fact, manufacturers can afford to  
8 address smaller tranches of customers with  
9 those features, even if not for the entire  
10 platform, which is aimed at the world market.

11 MR. DeGRABA: Steve?

12 MR. SALOP: I think Sprint will  
13 eventually get the iPhone.

14 (Laughter.)

15 And we're not saying that it is  
16 going to be a permanent exclusive. But the  
17 larger carriers can afford to pay more for  
18 exclusives, and after the merger AT&T will  
19 have the ability and incentive to pay even  
20 more for exclusives and extend it a little  
21 longer and a few more exclusives than it might  
22 have gotten.

1                   AT&T does not need to corner the  
2 market, or AT&T and Verizon do not need to  
3 corner the market, in handsets in order for  
4 there to be an effect. What they need to do  
5 is get an edge on the cutting-edge handsets.  
6 I mean we certainly see that the smartphones -  
7 - AT&T and Verizon have a lot more  
8 smartphones, and they tend to have the higher-  
9 end smartphones over the smaller carriers. I  
10 mean AT&T has 28 smartphones; Verizon has 21;  
11 MetroPCS has 4.

12                   Yes, so a manufacturer is going to  
13 worry about how many units they sell, but they  
14 are still going to want to go to the leading  
15 carriers. iPhone, Apple did not approach  
16 Sprint. They did not, as far as I know, they  
17 didn't approach T-Mobile, either.  
18 And even in  
19 the second round, when they got rid of the  
20 AT&T exclusive, so it's now a dual-exclusive  
21 with Verizon, they are not selling iPhone to  
22 T-Mobile and to Sprint, let alone to MetroPCS  
and Leap.

1 MR. DeGRABA: Okay. So, I have  
2 two questions. The first one is, okay, so you  
3 read off the numbers of smartphones, but  
4 shouldn't you expect the number of smartphones  
5 to kind of be correlated with the number of  
6 customers. The math isn't all that quick in  
7 my head, but it is not all that far off.

8 MR. SALOP: So, they have an  
9 advantage that their subscribers have more  
10 choice as to the type they want. And also,  
11 the question would be, how many of these are  
12 exclusive versus non-exclusive?

13 So, if you look at the top  
14 handsets, the ones that are just coming out  
15 and are innovative in some sense, how many of  
16 them did Sprint get versus how many went to  
17 AT&T and Verizon? That would be the  
18 measurement.

19 MR. DeGRABA: Okay. My second  
20 question is, right, so we think that AT&T  
21 would have more of an incentive to get  
22 exclusives, but isn't the right sort of model

1 to write down, take the number of exclusives  
 2 that T-Mobile has and AT&T has separately;  
 3 when you merge the firm, would you expect the  
 4 merged firm to have more exclusives or fewer  
 5 exclusives?

6 MR. SALOP: Yes, I think the model  
 7 would say AT&T would have a greater incentive  
 8 to get exclusives. Together, there is an  
 9 economy of scope in protecting market power.

10 The anti-competitive incentive to  
 11 get an exclusive is that you get to spread the  
 12 higher price, a higher price because there is  
 13 market power, and, secondly, the higher price  
 14 over a larger group of subscribers. And those  
 15 two pieces together lead you to bid more for  
 16 an exclusive.

17 MR. DeGRABA: Bobby, it sounded  
 18 like you had a response to that.

19 (Laughter.)

20 MR. WILLIG: Oh, could you hear  
 21 me?

22 MR. DeGRABA: Yes, I heard you.

1 (Laughter.)

2 MR. WILLIG: First of all, it's  
3 important not to confuse competition with  
4 market power. If we have these arrangements  
5 leading to more and better designs more widely  
6 available, even though some of them have some  
7 exclusivities attached to them, that's a sign  
8 of competition, and the consumer is better off  
9 for it.

10 And actually, I think the biggest  
11 lesson from the iPhone history, which is  
12 certainly quite unique and probably not  
13 emblematic until the next unimaginable leap  
14 forward, a great day in my life because my  
15 AT&T phone doesn't work very well.

16 (Laughter.)

17 The biggest lesson is the Android  
18 reaction and how the iPhone was amazing and,  
19 then, a year, year and a half later, the  
20 Android is out. It is, some way, my kids say,  
21 just as good and better, and an enormous  
22 proliferation of different versions and

1 flavors, and everybody has it available. And  
2 it didn't turn out to be commercially best for  
3 the manufacturer and the operating system  
4 provider, Google, to make it uniformly  
5 exclusive. There are some versions that are a  
6 little bit exclusive, but the basic design of  
7 the Android is everywhere. And that was,  
8 arguably, kicked off by the iPhone  
9 arrangement, which, according to Apple, needed  
10 that kind of exclusivity.

11 The other thing I want to say --

12 MR. SALOP: Which you might not  
13 have gotten the --

14 MR. WILLIG: The other thing I  
15 wanted to say before losing the microphone --

16 (Laughter.)

17 MR. SALOP: I thought you were  
18 done.

19 MR. WILLIG: That's called a  
20 breath.

21 (Laughter.)

22 MR. SALOP: Well, let me know when

1       you're done.

2                       MR. WILLIG: I sure will, and it's  
3       not yet.

4                       (Laughter.)

5                       It is not just size that  
6       determines the desirability of a wireless  
7       carrier for a deal with a particular  
8       manufacturer who has got an interesting new  
9       design with some distinguishing  
10      characteristics. It is how big a clear field  
11      does that carrier offer to make sales to the  
12      customers? If you've got a big carrier with  
13      lots of exclusives already, and a lot of  
14      people on contracts with their phones, which  
15      they still like, that means that is not a very  
16      fertile place for the manufacturer of a new  
17      design to make a new deal, exclusive or  
18      otherwise.

19                      Much more desirable would be, if  
20      there were a smaller carrier with less  
21      congestion of the handset matchups with its  
22      customers. So, it is a more fertile field to

1 make an exclusive deal.

2 And, Pat, you posed the question  
3 earlier I think in just the right way. If we  
4 are trying to think about a pure economic  
5 comparison, think about a state of play, a  
6 slice of time in the market, and there's  
7 already carriers of different sizes and they  
8 have deals of different varieties with  
9 existing handsets.

10 And now imagine two states of the  
11 world, the merger world where AT&T and  
12 T-Mobile are together, and they've got a bunch  
13 of phones with exclusives and people are  
14 signed up, versus the world where the two of  
15 them are separate. And now imagine Sprint is  
16 bidding against all the other players in the  
17 market for a new deal with a new, lovely phone  
18 that's being shopped around. Which is a more  
19 propitious environment for a Sprint to make  
20 the deal on the new phone? Is it the world  
21 where AT&T and T-Mobile are together with a  
22 lot of congested customers and a lot of phones

1 that are already signed up? Or is it those  
2 two separate bidders, and each of whom has  
3 fewer?

4 I tend to think it is a better  
5 world for Sprint when there's a merger because  
6 it's fewer bidders. So if you believe in an  
7 auction theory of competition, there's less  
8 competition for Sprint to grab the new design  
9 in that world. Is that to be a more congested  
10 playing field and Sprint is offering a more  
11 open playing field, on Steve's theory?

12 So, I think that is the right  
13 theoretical framework to ask your question.  
14 And while it is a tough problem to work out on  
15 full generality, my intuition is that it is a  
16 better world for Sprint to get the new design  
17 when it is facing AT&T and T-Mobile together  
18 than separately.

19 MR. DeGRABA: Okay. Steve, he's  
20 done.

21 MR. SALOP: Are you done?

22 MR. WILLIG: I am done.

1 MR. DeGRABA: He is done.

2 MR. WILLIG: Right, Pat.

3 MR. DeGRABA: Yes.

4 (Laughter.)

5 MR. SALOP: Okay. Well, first,  
6 the Android, it is a good example. The  
7 Android did respond, but the prime mover for  
8 getting the Android out there was actually  
9 T-Mobile. It was the founding member of the  
10 Open Handset Alliance, which created the  
11 Android. It had the first Android phone.  
12 And, then, I guess, according to Bobby's way  
13 of analysis, there was free-riding by Sprint,  
14 not by Sprint. They were in the Alliance,  
15 too. They shared the cost. There was free-  
16 riding by Verizon, which was not in the Open  
17 Handset Alliance. So, I think the Android  
18 actually supports the other side.

19 With respect to the general  
20 question that Bobby raised about exclusives  
21 being efficient versus anti-competitive, I am  
22 not claiming -- and I hope we were clear about

1 this in our report -- we are not claiming that  
2 all exclusives are anti-competitive.  
3 Exclusives, clearly, at least to some degree,  
4 are efficient.

5 The question here is not whether  
6 exclusives generally are efficient or  
7 generally anti-competitive. The issue is the  
8 impact of the merger. And I have a different  
9 auction model in mind for Bobby than Bobby  
10 does. I think when you are bidding for an  
11 exclusive or bidding against somebody who  
12 wants an exclusive, the issue is what the  
13 other person is willing to bid and able to  
14 bid.

15 And after the merger, AT&T will  
16 have the incentive to bid higher for a given  
17 exclusive than it did before the merger  
18 because it will have more subs and because,  
19 since it is going to get some market power, it  
20 will have a higher price to protect than if  
21 T-Mobile were out there.

22 So, although Sprint would only

1 have to compete against AT&T and T-Mobile, in  
2 competing for an exclusive, Sprint was mainly  
3 worried about competing for the exclusive or  
4 the non-exclusive against AT&T, and AT&T is  
5 now going to have the ability and the  
6 incentive to bid more.

7 MR. DeGRABA: Okay. So, if you've  
8 got models and you want to submit them, we are  
9 happy to look at them.

10 I want to move on to backhaul.  
11 All right? And so, sort of the leading sort  
12 of discussion of backhaul here basically says  
13 that there are third-party providers in  
14 backhaul out there. They need to reach some  
15 minimally-efficient scale. This merger will  
16 eliminate T-Mobile as a customer for third-  
17 party backhaul. That will tend to drive,  
18 well, it certainly will lower the profits of  
19 third-party backhaul providers that were  
20 signed to T-Mobile, and enough of them have  
21 told us that.

22 And so, my question is, what do we

1 have to see in order for us to conclude --  
2 well, there's two questions. The first  
3 question is, if this does, in fact, raise the  
4 price of backhaul, is it an issue that we  
5 should consider for the merger?

6 And the second one is, assuming it  
7 is an issue, we ought to look for -- for the  
8 merger, what do we have to see in the market  
9 or what do I have to do to sort of determine  
10 what we have to do to determine where, in  
11 fact, this is likely to happen and how big  
12 this effect is going to be?

13 So, I will start with Steve.

14 MR. SALOP: Okay. First of all,  
15 there's two anti-competitive theories of  
16 backhaul, not one. One theory is the one we  
17 talked about earlier, the unilateral price  
18 support.

19 MR. DeGRABA: Right. We did that  
20 one. Okay.

21 MR. SALOP: Okay.

22 MR. DeGRABA: Yes.

1                   MR. SALOP:       And the other is  
2 customer foreclosure.

3                   MR. DeGRABA:    Right.

4                   MR. SALOP:       And you know, the  
5 history of the analysis of customer  
6 foreclosure goes back. There is Bobby and  
7 Janusz's brief on behalf of the good old AT&T.

8                   Remember, the rulemaking that is  
9 still going on was actually started by Bobby  
10 and Janusz back in 2002 when AT&T was not an  
11 ILEC.

12                   What?

13                   MR. DeGRABA:       Never mind.     Go  
14 ahead.

15                   MR. SALOP:       And there, they talked  
16 about customer foreclosure. They talked about  
17 the advantages that the ILEC has. So, it's a  
18 very nice paper.

19                   (Laughter.)

20                   So, I think the situation now is  
21 the question of, what does Ethernet backhaul  
22 do to the story? Okay? Ethernet backhaul

1       seems to be coming.

2                   And I think the issue there, to  
3       just try to unpack it all, because it is  
4       complicated facts, I think there are various  
5       market situations at different sites and at  
6       different groupings of sites. And we need to  
7       unpack that to answer your question of what  
8       would the Commission need to look at.

9                   So, I think I agree with Bobby and  
10       Janusz that you need to look site by site or a  
11       small group of sites. National, as they  
12       pointed out to Fred Kahn and Bill Taylor,  
13       national statistics just don't cut it, don't  
14       cut it here.

15                   MR. WILLIG: So, it's a national  
16       market.

17                   MR. SALOP: Thanks, Fred.

18                   (Laughter.)

19                   Bobby's main criticism in his  
20       affidavit, factual criticism, was that  
21       T-Mobile has already moved into Ethernet. And  
22       I think that is a very important fact that you

1 need to trace, track down. So, if they have  
2 already moved, then there can't be a customer  
3 foreclosure issue at the sites to which they  
4 have already moved.

5 So, where backhaul can be a  
6 problem, either for customer foreclosure or  
7 for unilateral price support theories, are  
8 only going to be situations where T-Mobile has  
9 not yet moved, in terms of merger impact.

10 So, there's two kinds of markets.  
11 If you think about this as a tree, there is  
12 one branch of the tree that T-Mobile has  
13 already moved and, then, there is a branch  
14 they haven't moved yet. And where they  
15 haven't moved yet, there's ones where they  
16 will they move and then there's ones where  
17 they will never move.

18 So, my understanding is that, both  
19 from Sprint and from doing some reading about  
20 T-Mobile, that there is **[Begin Sprint  
Confidential Information]**

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[End Sprint  
Confidential Information].

MR. BAKER: UPS is unilateral --

MR. SALOP: Unilateral price  
support.

MR. BAKER: -- price support?

MR. SALOP: And so, there, if we  
are in the TDM world -- or willing talk about  
the advantages that the ILEC have, and there  
is the channel termination issue, market power  
and -- termination, even if there's  
competition, transport, the whole deal.

In some of those, Sprint and the  
fringe will not be able to be hurt because  
they have got long-term contracts that may not  
expire for a really long time. So, then, they  
would be protected by the long-term contracts  
and higher price, but there could still be the  
3D's -- delay, degrade, deny -- during the  
short-term.

Now my understanding from Sprint

1 is **[Begin Sprint Confidential Information]**

2 **[End Sprint**  
3 **Confidential Information]** And I got a sense  
4 that  
5 maybe that was the story for T-Mobile, too,  
6 but whatever it is, I'm not making a claim;  
7 that's a fact you need.

8 Now where they will move, and,  
9 then, there's others where they are going to  
10 move to Ethernet, but they haven't yet, some  
11 fraction of those. And among those, there are  
12 three kinds of sites. There are ones that are  
13 ILEC-only. And so, where it is ILEC-only, it  
14 is the unilateral price support concern. Some  
15 where there are just, say, two competitors,  
16 just the ILEC. And my understanding from  
17 learning about this is the main competitor of  
18 the ILEC is the cable company, the local cable  
19 company. Where there are just two, or where  
20 those two have a big advantage, you could have  
21 customer foreclosure because, if you take up  
22 T-Mobile, then there is going to be less room  
for the cable company to come in. There could  
also be unilateral price support. Even though

1       there's two, you've got -- more initials --  
2       DLSS problem.

3                       With two, with the vertical  
4       problem, the merger leads to higher input  
5       prices, which leads to higher output prices.  
6       So, in other words, where T-Mobile has not yet  
7       moved into Ethernet, has not signed a  
8       contract, there could be a situation where the  
9       ILEC has a natural monopoly. There could be  
10      situations where it is just the ILEC and the  
11      cable company, as the two main competitors.

12                      And in the second, you have  
13      customer foreclosure as well as unilateral  
14      price support. In both, you have the  
15      unilateral price support.

16                      Then, there could be other markets  
17      where there is the ILEC, well, maybe not the  
18      ILEC at all, maybe just the cable company. No  
19      problem. Or the ILEC, the cable company, and  
20      some other AAVs equally well-situated. And  
21      there, you wouldn't have a problem.

22                      Now my understanding on this

1       latter group, there are some, from talking to  
2       Sprint, there are some places where the cable  
3       company has the natural monopoly, not the  
4       ILEC. So, there, there wouldn't be a problem.

5               But ones in which it is the ILEC,  
6       the cable company, and other AAVs, most of  
7       them, the other AAVs, don't have the economy  
8       of scope. And so, they are going to be at a  
9       significant price disadvantage.

10              So, the number where it is just  
11       the ILEC and the cable company that is going  
12       to be the predominant number, where there is  
13       competition, you are not going to have a lot  
14       of places where the other AAV is going to be a  
15       strong competitor, enough to constrain OSS.

16              So, those are what I think the  
17       facts are. I think you might agree with all  
18       of that except the numbers.

19              (Laughter.)

20              What do you disagree about in the  
21       theory?

22              MR. WILLIG: Is it my turn?

1 MR. SALOP: Yes.

2 MR. DeGRABA: Do you have  
3 something that you want to add to that? Or  
4 subtract from that?

5 (Laughter.)

6 MR. WILLIG: Okay.

7 MR. DeGRABA: Yes, we've got eight  
8 minutes here.

9 MR. WILLIG: I'll use them all.

10 MR. DeGRABA: No, no, no.

11 MR. WILLIG: Well, that's a long  
12 answer to the question that you had asked.

13 MR. DeGRABA: Right. So, give me  
14 a quick response.

15 MR. WILLIG: Right. Okay. Well,  
16 for the starting place, I remember, we should  
17 all remember what we are here for today, which  
18 is to talk about the merger and its possible  
19 effect on competition that's negative, instead  
20 of positive.

21 And so, first of all, T-Mobile  
22 does not supply backhaul so there is no direct

1 horizontal issue. So, there is nothing  
2 obvious and direct about the merger that is  
3 going to harm competition when we think about  
4 a backhaul market or sales of backhaul.

5 Second of all, I didn't  
6 understand, I think even after reading the  
7 record later, I don't understand most of the  
8 theories that Steve was spinning. But let me  
9 point out that, even if you guys understand  
10 one of them or two a little bit, for it to be  
11 of concern today, there has to be some  
12 connection to the merger. And so, therefore,  
13 some changed incentive on the part of AT&T to  
14 make, I guess, T-Mobile do something that it  
15 wouldn't otherwise do, for the sake of raising  
16 somebody else's cost of getting Ethernet  
17 backhaul in some market or two, in terms of a  
18 localized competition analysis, instead of  
19 national. And that somehow has to have an  
20 impact on AT&T's ability to make extra money  
21 at the retail level. If there are steps  
22 there, every step is just de minimis.

1                   So, let's go to Steve's pieces of  
2 factoids. I have a few numbers.

3                   MR. DeGRABA: Okay. Proceed.

4                   MR. WILLIG: I do know that, from  
5 the point of view of where T-Mobile is today,

6 that about **[Begin T-Mobile Highly Confidential Information]** **[End T-Mobile Highly Confidential Information]** of its cell sites are already

7 equipped with fiber and, where they are,  
8 T-Mobile uses them for **[Begin T-Mobile Highly Confidential Information]** **[End T-Mobile Highly Confidential Information]** of its backhaul needs at those sites.

9 I also know that **[Begin T-Mobile Highly Confidential Information]**

10 **[End T-Mobile Highly Confidential Information]**. So that, by the end of the year, I think, 2011, that **[Begin T-Mobile Highly Confidential Information]** **[End T-Mobile Highly Confidential Information]** percent will become **[Begin T-Mobile Highly Confidential Information]** **[End T-Mobile Highly Confidential Information]**

11 percent, counting cell sites; that those cell sites account for **[Begin T-Mobile Highly Confidential Information]** **[End T-Mobile Highly Confidential Information]** of T-Mobile subscribers. So, they are **[Begin T-Mobile Highly Confidential Information]**

12 **[End T-Mobile Highly Confidential Information]**.

13 So, Steve was asking where is there not already a commitment to Ethernet buildout. And so, we are left with those **[Begin T-Mobile Highly Confidential Information]** **[End T-Mobile Highly Confidential Information]** percent of places.

14 Verizon has said publicly Ethernet

1 everywhere for it. It is certainly in small  
 2 places as well as big. So, there is really  
 3 very little evidence in the environment, in  
 4 the ecosystem of backhaul, that there's issues  
 5 about whether Ethernet will be forthcoming.  
 6 And certainly, AT&T has no special advantage  
 7 in being a supplier of Ethernet backhaul. **[Begin**  
**AT&T Highly Confidential Information]**

8  
 9

10 **[End AT&T Highly Confidential**  
**Information]**

11 MR. DeGRABA: Okay. All right.  
 12 Yes. All right. So, I'm going to cut you  
 13 off. I have another question that I want to  
 14 ask, and I'll start over here.

15 A number of commenters have said  
 16 on the record that sort of **[Begin Zayo Highly**  
**Confidential Information]**

17  
 18

19 **[End Zayo Highly Confidential**  
**Information]**. And that's probably an  
 20 oversimplification, but we'll sort of take  
 21 that as a stylized fact.

22 My question is, if that, in fact,

1 is going on, should we be worried in the  
2 context, of course, of the merger?

3 MR. SALOP: There are two reasons  
4 why you might worry about that. One reason  
5 might be if they charged each other high  
6 prices because then it would be sort of mutual  
7 raising each other's cost as a way to push up  
8 the retail price.

9 MR. DeGRABA: Okay. And tie that  
10 to the merger. So, all right.

11 MR. SALOP: That would be a  
12 Section 1 violation, I guess.

13 (Laughter.)

14 MR. DeGRABA: That's not a merger  
15 issue. That's like, oh, I have to go back to  
16 the FTC and worry about that, right?

17 (Laughter.)

18 MR. SALOP: You might be in that  
19 business as well.

20 The way in which it could be  
21 related to the merger is, to the extent you  
22 are in one of the markets where there is a

1 customer foreclosure concern, then if Verizon  
2 is taken out or AT&T is taken out, in addition  
3 to T-Mobile being taken out, then it is more  
4 likely to drive a potential entrant to a  
5 situation where they are below a minimum  
6 viable scale.

7 MR. DeGRABA: Okay. Bobby? Or  
8 anyone else here? I'm not restricting it just  
9 to Bobby.

10 MR. WILLIG: The one fact that you  
11 didn't let me mention --

12 MR. DeGRABA: Okay. Well, this is  
13 your chance.

14 MR. WILLIG: -- and it applies  
15 here as well, is that when you looked at  
16 Sprint's economics, the idea is somehow the  
17 merger effect is to foreclose Sprint or raise  
18 Sprint's cost, and maybe that is why Sprint  
19 sent Steve here. It is hard to discern,  
20 actually, from the theories that we are  
21 hearing anyway.

22 What Sprint pays to AT&T to

1 backhaul is **[Begin Sprint Confidential Information]**

2

**[End Sprint Confidential  
Information]**

3 something like that. So, if all of these  
4 theories amounted to a 10, 20 percent, which  
5 is certainly not my view, but if one were to  
6 imagine that sort of escalation of the already  
7 **[Begin Sprint Confidential Information]**

8

9 **[End Sprint Confidential  
Information].**

10 And what does the merger have to  
11 do with that? You have to get into the  
12 diversion ratio between Sprint not and AT&T,  
13 but Sprint and T-Mobile, because that is the  
14 difference that the merger makes.

15 **[Begin Sprint Confidential Information]**

16

17

18 **[End Sprint Confidential Information].**

19 MR. DeGRABA: All right. I am  
20 going to add two minutes of penalty time here  
21 because you guys were chatting amongst  
22 yourselves.

1 (Laughter.)

2 MR. SALOP: If we are going to add  
3 two minutes of penalty time, I just want to  
4 say this would apply in the Verizon --

5 MR. DeGRABA: Okay. Right. Okay.  
6 Wholesale. Cablevision has suggested that  
7 T-Mobile was a particularly good network to  
8 cooperate with it and any other wireline  
9 carrier, that thought that maybe there was  
10 some real good reason to have both wireline  
11 and wireless service. And they have argued  
12 that the merger will take one of those really  
13 good guys out of the market.

14 Is this something that we should  
15 be worried about in this merger?

16 MR. SALOP: To the extent there's  
17 a bundling issue, yes, then it can raise  
18 barriers to entry to those guys.

19 MR. DeGRABA: Okay.

20 MR. WILLIG: I'm just not hearing  
21 from the question what is the purported change  
22 in the companies' incentives to the merger.

1 MR. DeGRABA: It's not a company  
2 incentive. It is -- there will be less  
3 competition. Call it potential entry, right?

4 But if you thought that a wireline carrier  
5 needed to pair with a wireless network to  
6 offer some bundle of products someday, and  
7 there aren't that many left, and one of them  
8 goes away from the merger, is that something  
9 that we should be concerned about?

10 MR. WILLIG: I don't know if that  
11 is a discernible relevant market, to worry  
12 about horizontal effects, but I don't know.

13 MR. DeGRABA: Okay. All right.  
14 It's four o'clock. And so, I want to thank  
15 everyone for coming.

16 Also, remember, everything here is  
17 a secret, apparently.

18 (Laughter.)

19 MR. ROSSTON: Just the secret  
20 things are --

21 MR. DeGRABA: Yes, just the secret  
22 things are secret, right? You all signed

1 protective orders. Don't forget to honor  
2 them.

3 I do not know what we will  
4 actually post regarding this, whether we will  
5 have -- all right, Greg said something more  
6 was going to happen.

7 Thank you all for coming. We  
8 appreciate it. And we look forward to more  
9 submissions from both sides based on what we  
10 said here today.

11 Thank you.

12 (Whereupon, at 4:01 p.m., the  
13 meeting was adjourned.)

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**Pages 326-365 comprise an index, which has been redacted in its entirety to prevent reverse engineering of the redactions in the body of the transcript.**

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