

UNITED STATES FEDERAL COMMUNICATIONS COMMISSION

COMMERCIAL MOBILE SERVICE)
ALERT ADVISORY COMMITTEE)
MEETING)

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Date: March 12, 2007

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Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

COMMERCIAL MOBILE SERVICE)
ALERT ADVISORY COMMITTEE)
MEETING)

Commission Meeting Room
Federal Communications
Commission
445 12th Street, S.W.
Washington, D.C.

Monday,
March 12, 2007

The parties met, pursuant to the notice of the
Commission, at 10:07 a.m.

APPEARANCES:

MEMBERS:

- FRED CAMPBELL (FCC Chairman Martin's Designee)
- KENNETH MORAN (FCC Chairman Martin's Designee)
- ANN ARNOLD
- RALPH AUBRY
- RAYMOND BAN (via Telephone)
- DALE BARR
- ART BOTTERELL (via Telephone)
- CHERYL BLUM
- MARCIA BROOKS (via Telephone)
- DR. EDWARD CZARNECKI
- BRIAN DALY
- AMAR DEOL
- ROBIN ERIKKILA
- MARIA ESTEFANIA
- EDDIE FRITTS
- DALE GEHMAN
- CHRISTOPHER GUTTMAN-MCCABE
- JUDY HARKINS, Alternate
- VIC JENSEN, Alternate
- GARY JONES (via Telephone)
- DR. ROB KUBIK
- JOHN LAWSON
- THOMAS LYON (via Telephone)
- CHRIS MELUS, Alternate

1 RICHARD MIRGON
2 ILKKA JOHUANI NIVA
3 MARK PAESE
4 BILLY PITTS
5 ART PREST
6 PATRICK ROBERTS (via Telephone)
7 DAVID ROBINSON, Alternate
8 ANTHONY RUTKOWSKI
9 DOUG RUTLEDGE
10 EDWARD SALAS
11 LONNA THOMPSON, Alternate
12 PIERRE TRUONG, Alternate
13 DAVID WEBB
14 WILLIAM WERTZ
15
16 FCC STAFF:
17
18 LISA FOWLKES
19 JEFFERY GOLDTHORP
20
21 GUEST SPEAKER:
22
23 MAURICE KARL, PhD, Purple Tree Technologies
24

1 this committee, as well.

2 Congress has tasked this advisory committee
3 with developing recommendations for technical
4 standards and protocols to facilitate the voluntary
5 transmission of emergency alerts by commercial mobile
6 service providers. We anticipate that the
7 recommendations the committee will ultimately bring to
8 the FCC will allow the FCC to conduct a thorough and
9 successful rulemaking.

10 Because of the importance of this work,
11 Congress requires that this committee submit a final
12 report to the Commission no later than October 12,
13 2007, one year from the enactment of the WARN Act.
14 Today's meeting is particularly important, as we will
15 discuss the significant first steps taken by the
16 committee's members to meet this requirement.

17 I am impressed by the speed and efficiency
18 with which the committee has begun to attack these
19 important tasks, and I want to thank the committee for
20 the quality of its work to date. And we look forward
21 to continuing to work with all of you on this
22 important endeavor, and to the ultimate success of
23 this committee.

24 Ken Moran is going to act as the Chairman's
25 designee for the rest of this meeting. Thanks.

1 MR. MORAN: Thank you, Fred. I know Fred
2 has some other meetings to go to, but we appreciate
3 your comments, and let's begin.

4 We have a number of members who will be
5 participating via conference call. So I think that it
6 might be useful for all of us here at the meeting, and
7 all of us on the conference call, to introduce
8 ourselves so that people will know who is here,
9 because they can't see us, and we can't necessarily
10 see them.

11 So I think I'll start around the table here.
12 We'll just introduce ourselves, and we'll go around
13 the bridge so we'll all know who is participating.

14 My name is Ken Moran of the FCC.

15 MS. FOWLKES: Lisa Fowlkes, FCC.

16 MR. GOLDTHORP: Jeff Goldthorp, FCC.

17 MR. WERTZ: William Wertz, Michigan
18 Association of Broadcasters.

19 MS. ARNOLD: Ann Arnold, Texas Association
20 of Broadcasters.

21 MR. AUBRY: Ralph Aubry with Battelle.

22 MR. BARR: Good morning. Barr, Dale Barr,
23 from the NCS DHS.

24 MS. BLUM: Cheryl Blum from the
25 Telecommunications Industry Association.

1 MR. CARTER: Steve Carter, Qualcomm,
2 Incorporated.

3 MR. CZANECKI: Ed Czanecki, SpectraRep.

4 MR. DALY: Brian Daly, Cingular
5 Wireless/AT&T.

6 MR. DEOL: Amar Deol, Nortel Network.

7 MS. ESTEFANIA: Maria Estefania, the
8 Alliance for Telecommunications Industries Solutions.

9 MR. ERKKILA: Robin Erkkila with Intrado.

10 MR. FRITTS: Eddie Fritts with Global
11 Security Systems.

12 MR. GEHMAN: Dale Gehman, Poarch Band of
13 Creek Indians.

14 MR. GUTTMAN-McCABE: Chris Guttman-McCabe
15 with CTIA.

16 MS. HARKINS: Judy Harkins, representing
17 WGBH National Center for Accessible Media. And I'm an
18 alternate for Marcia Brooks, who is on the bridge.

19 MR. JENSEN: Jake Jensen, representing
20 American Association of Paging Carriers.

21 MR. KUBIK: Rob Kubik, Motorola.

22 MR. LAWSON: John Lawson, Association of
23 Public Television Stations.

24 MR. MELUS: Chris Melus, Sprint/Nextel.

25 MR. MIRGON: Dick Mirgon, APCO

1 International.

2 MR. NIVA: Ilkka Niva, Nokia.

3 MR. PAESE: Mark Paese with NOAA.

4 MR. PITTS: Billy Pitts with the NTI Group.

5 MR. PREST: Art Prest with the Rural
6 Cellular Association.

7 MR. RUTKOWSKI: Tony Rutkowski with
8 VeriSign.

9 MR. RUTLEDGE: Doug Rutledge, Alltel.

10 MR. SALAS: Ed Salas, Verizon Wireless.

11 MS. THOMPSON: Lonna Thompson, Association
12 of Public Television Stations.

13 MR. TRUONG: Pierre Truong, Ericsson.

14 MR. WEBB: David Webb with FEMA.

15 MR. MORAN: Thank you. That's everyone at
16 the table. We'll go around the bridge, make sure we
17 have who I think is on the bridge right now. And I
18 would ask the people on the bridge to mute their
19 phones except when they're going to speak.

20 Raymond Ban, are you there?

21 MR. BAN: Yes. Ray Ban of the Weather
22 Channel, present.

23 MR. MORAN: Thank you. Art Botterell?

24 MR. BOTTERELL: Yes, good morning. Art
25 Botterell from the Office of the Sheriff of Contra

1 Costa County, California. Good morning.

2 MR. MORAN: Good morning. Marcia Brooks?

3 MS. BROOKS: Good morning.

4 MR. MORAN: Good morning.

5 MS. BROOKS: Marcia Brooks with the National
6 Center for Accessible Media at WGBH.

7 MR. MORAN: Marian Dunn-Tudor? Marian?

8 (No response.)

9 MR. MORAN: Gary Jones?

10 MR. JONES: Yes. Gary Jones with T-Mobile
11 US and Deputy Chair of the -- Group.

12 MR. MORAN: Pat Roberts?

13 MR. ROBERTS: Pat Roberts for the Florida
14 Association of Broadcasters.

15 MR. MORAN: Paul Wilcock?

16 (No response.)

17 MR. MORAN: Kelly Williams?

18 (No response.)

19 MR. MORAN: No. T. J. Lyon?

20 MR. LYON: Good morning. T. J. Lyon,
21 International Association of Fire Chiefs.

22 MR. MORAN: Okay, thank you. So I think we
23 know who is here before us.

24 Now, I believe that before each of you at
25 the table we have a package of papers here which show

1 the agenda. I believe the first one is the agenda.
2 And then we have a presentation that we're going to
3 have here shortly from Purple Tree, and then we have
4 the presentations for each of the working groups. So
5 I hope you have a full complement of that. And if
6 not, let me know.

7 I believe we've also e-mailed all this
8 information on Friday, so the people on the conference
9 call ought to be able to see that information, also.

10 So before we begin our working group update
11 reports, Dr. Maurice Karl is here with us this
12 morning, and he will make a presentation regarding
13 Purple Tree's alerting technologies.

14 Dr. Karl?

15 MR. KARL: Thank you. Good morning. I
16 appreciate this opportunity to talk to this group, and
17 to explain the technology we've been working on for
18 several years right now with Purple Tree Technologies.

19 We're a small company out of Missouri, and
20 we have started this company a number of years ago.
21 We're actually assembling various groups, larger
22 corporations, to help us out in this process.

23 We will start, basically go through the
24 slides. The first part, we're going to explain how we
25 approach the problem. We looked at this problem a

1 number of years ago and started doing some research,
2 the same kind of research you guys are doing today.
3 We've kind of gone through that. We continued to
4 learn this whole process, and how to make things work
5 in the right manner.

6 We'll talk a little bit about the
7 architecture of how we're approaching this problem,
8 and the basic structure of our system. We'll also
9 talk about our solutions and some of our partnerships.

10 The vast majority of EAS messages that go
11 out today are national weather related. Everybody
12 knows that. Seventy to 80 percent depend on which
13 papers you look at will clearly demonstrate the
14 National Weather Service by far hands out, most of the
15 alerts out there. And with the all-hazard alerts now
16 being included, that number I would expect would
17 increase.

18 Some of the codes that are available today,
19 this is a handful of them. There's over 200 of them,
20 I believe. You have a tornado warning. You have a
21 child abduction emergency, Amber alerts. Hazard
22 material warnings: a train tips over, releases a
23 toxic waste of some kind.

24 You have flash flooding. Of course, that's
25 in low-lying areas. We live over by the Missouri

1 River, so that's a really big area, but not that, you
2 know, we've learned how to handle that. And the
3 nuclear power plant warnings.

4 Tornadoes, I just want to go through
5 tornadoes, because I live in Tornado Alley. I don't
6 know how many people here live in Tornado Alley, but
7 I've experienced two of them in my life and had to
8 repair the barn twice. So we're keenly aware of how
9 vital it is to gain the information in a timely
10 manner.

11 Actually, a neat story is back when I was a
12 child, my father was an electrical engineer; worked in
13 the Navy, telecommunications. And he had this idea
14 that if you turned the TV dark -- this was when we
15 only had three stations in the area -- turned it dark
16 on channel 2 and wait until it brightens up, you hit
17 the deck. Well, we did that, and sure enough, the
18 barn was gone. But we found it in the next field, and
19 rebuilt it.

20 Tornadoes, 88 percent of all tornados are
21 considered weak. They cause five percent of the
22 deaths, and are on the ground for less than 10
23 minutes, sustain winds of 110 miles an hour.

24 Strong tornados, 11 percent of the time.
25 And of course, as it increases in strength, the

1 occurrence decreases. But they cause 25 percent of
2 the deaths, and they could be on the ground for 20
3 minutes. Winds up to 205 miles an hour.

4 The violent tornados, the really big ones,
5 occur less than one percent of the time, but they
6 cause the majority of the deaths, and can be on the
7 ground as long as an hour, okay. And I think this is
8 important for you to understand, that we live with
9 this every day in the Midwest: Texas, Kansas,
10 Oklahoma, Missouri, Indiana, Illinois. We understand
11 it.

12 The tornadoes on average travel 30 miles an
13 hour. The speed can vary, can become stagnant, stay
14 at zero, or it can go as high as 70 miles an hour, but
15 for a short duration.

16 Tornadoes, typically if you look at the
17 affected area, they're traveling 30 miles an hour,
18 they're on the ground for less than 10 minutes; 88
19 percent of the times they're going to travel less than
20 five miles. So it's a very localized kind of alert
21 system.

22 Now, most of the alerts that you find on the
23 TV, they see a hook in the radar, and that's when they
24 set off the alarms. We're used to that. In fact,
25 thank you for the National Weather Service doing that.

1 Where I live is in Boone County. It's in
2 the middle of the city, or in the middle of Columbia,
3 Missouri, in the middle of Boone. We have the
4 National Weather Service, on average the towers
5 transmit 40 miles. That's 5,000 square miles that are
6 being alerted for a relatively small area of a
7 tornado.

8 And if you were to, if we were able to
9 activate one tower or a few towers, we could go down
10 to 75 square miles, because this is a line-of-sight
11 communication system. We want to create a geo-
12 specific alert.

13 And one of the reasons I'm bringing up how
14 most alerts are local in nature is that I honestly
15 believe that you have to create the ability to handle
16 the local alerts and have the ability to go national,
17 as opposed to creating a national alert and going
18 local. That's because 45,000 times a year, the
19 National Weather Service gives severe thunderstorm
20 warnings. What a way to practice your system, over
21 and over and over again.

22 The President of the United States has never
23 activated the system. So why wouldn't you exercise
24 our local bases and have the ability to expand? Okay,
25 let's see.

1 Line-of-sight communication. If you're
2 within the sight of that tower, you can activate it.
3 Most cell towers are three to seven miles. Now
4 they're putting them in subway stations. Of course,
5 in the city it's a different story. Wireless
6 providers around here understand all that.

7 Reduce the area to about 75 miles, assuming
8 it was a five-mile-radius transmission. Reduce the
9 complacency. A lot of people in the Midwest, they
10 understand tornadoes, they see them coming, but they
11 still become complacent because it hasn't hit their
12 barn yet. So by reducing the actual area that's
13 notified, you reduce complacency, because if the
14 people see the alert going off, they will react.

15 One time I was traveling through Iowa and
16 there was a tornado warning. And I didn't know what
17 county I was in, so I just kept driving. This system
18 will allow you to know that you're at least within
19 five miles or seven miles of a tornado.

20 And then of course we want to minimize the
21 number of alerts going off on a cell tower, because we
22 don't want to overload the system. And we're working
23 on some issues there to address those.

24 This is kind of what we're looking at doing.
25 We have two devices. One is just a normal cell

1 phone. We believe that the alert should come off and
2 be simple and to the point. We want to be able to
3 display a radio station. We talked to some emergency
4 management representatives, and they said they really
5 want to be able to get people to turn on their TVs and
6 radios and take a look at what's actually happening.
7 So we want to tell the people in that local area what
8 radio station they might want to turn to, and what
9 television station they might want to turn to.

10 On 9/11, 78 percent of the people turned on
11 their televisions for further information. I was
12 actually working in a manufacturing facility at the
13 time, and they basically shut down production because
14 everyone wanted to turn on and watch the TV, okay?
15 That's how important that event was to everybody in
16 this room.

17 The radio stations, we believe that if
18 you're in a car you need to have that information, as
19 well.

20 Let me go back one if I can here. It's not
21 coming up, the graphics aren't coming up. But we
22 actually have in the process of developing and working
23 right now a key-size remote system that will be able
24 to be affordable to everybody. If you create a large
25 enough volume, everyone here knows that the cost of

1 manufacturing goes down, and you can sell at a lower
2 price.

3 We believe that there's, what, 28 million
4 people in this country who do not have cell phones, or
5 cannot afford them. So we wanted to create a system
6 that was affordable to everyone.

7 This device will also have sound capability,
8 and it will vibrate, depending on the level of alert.
9 We came up with a red-light configuration because we
10 wanted to make sure it was international. Because if
11 everywhere you look, if it's red you stop, you listen.
12 You go through the process of trying to find out
13 what's going on to protect yourself.

14 If it's yellow, it's a child being
15 kidnapped. And there's 200 alerts, I believe, a year,
16 over 200 alerts a year where a child is being
17 kidnapped by a stranger, an Amber alert. And that's a
18 very serious situation, especially for that child.

19 And if we can get seven out of 10 people in
20 this country, when a child is being kidnapped, looking
21 at their cell phones or turning on their radios and
22 TVs, I would hope that would diminish the number of
23 children being kidnapped. I have twin daughters who
24 are 20, and thank God they are healthy and happy; at
25 least they tell me they are.

1 While we want to make this inexpensive
2 device, we believe that we can manufacture this at a
3 high enough volume we can drive the price down between
4 \$10 and \$15 a unit, I believe. I look over there to
5 my marketing person to see if I said the right thing.

6 The overall system is simple in nature, but
7 complex to actually implement. And we're working on
8 those issues. We take the EAS system, and we format
9 it for going through the cell system, and we go
10 through geo-specific targeting of what towers you
11 would actually activate. And then of course we send
12 it out to the various wireless providers. We must
13 have the wireless providers involved. Wireless
14 providers need to be able to trust the people actually
15 implementing this system. Okay.

16 This is just another way of representing the
17 same technology. We're feeding systems in from WEN
18 and from the EAS, and we're targeting what towers need
19 to be actually targeted. And then we hook right up to
20 the wireless providers. Our goal with our company is
21 to be able to give them that feed without any work on
22 their part, or at least minimize the work on their
23 part. And then we send it to the towers, activating
24 cell phones and E-FOBs.

25 Purple Tree's solution is to alert only the

1 affected area. If you go too large, you run a risk of
2 people overloading the system. We are actually
3 working on a methodology for throttling the number of
4 towers being activated. You want to do that based on
5 threat level and geographic area, relationship to.

6 We want to avoid complacency. Again, we
7 want to address the concerns of overloading, because
8 the very people that send it out are the people we
9 need to protect.

10 Use existing technology. We're not trying
11 to recreate the wheel, we're just trying to figure out
12 how to put it on a different wagon. And that's been
13 the philosophy from day one.

14 We want to use the EAS system. It's a
15 system that exists today, and that will exist in the
16 future. You need to be able to get both CDMA and geo-
17 specific technology on board. Half the people have
18 GSM, the other half CDMA.

19 You want to create a win-win situation.
20 This technology, being an engineer, is about making
21 things happen. And so I realized early in this
22 process that you have to make it a win situation for
23 everyone involved: federal, state, and local.

24 And revenue sharing. I was told not to
25 bring it up, but I'm going to bring it up anyway. I

1 believe a no-cost system may or may not sustain itself
2 over a long period of time. I think you need to look
3 at some kind of funding that's always in place, that
4 allows people to sustain this system, and allow it to
5 continue from not just next year, but the year after,
6 the year after.

7 We want to make sure it's at reach to the
8 economically challenged. Just because you're a mother
9 of three doesn't mean you don't have a right to
10 protect your children and your life, and that's why we
11 want to be able to create this E-FOB at a low enough
12 cost that with any hope we can just give it to the
13 people that can't afford it, or the government can buy
14 it and then hand them out, just like you do gun locks
15 at a gun show.

16 We want to make sure that we meet the
17 requirements of the disabled. The E-FOB is
18 specifically designed for vibration and lights. The
19 level of alert will indicate that for your
20 disabilities that if you can't see the light, at least
21 you would know from the sound and the vibration that
22 that's an issue.

23 We also want to make sure in order to
24 implement this process, because each wireless provider
25 has their own IP that they want to protect, each one

1 has a slightly different system, and all that needs to
2 be addressed. So you need to create a partnership
3 with the bandwidth to handle it, the band width
4 meaning capability.

5 You need a deployment infrastructure company
6 that can step in and help with the networking. And
7 you can probably take a guess who that might be, but
8 I'm not going to mention names here.

9 You need a handheld device manufacturer,
10 someone who is actually designing and developing the
11 E-FOB. The beauty behind the E-FOB also is that it's
12 something that you can deploy immediately, it's
13 something that can be tested over time. And if
14 wireless manufacturer, device manufacturers of cell
15 phones decide to implement it, we'll have the data to
16 prove that the system works. So it minimizes any
17 risks associated with Motorola or Nokia, or any of
18 these other people trying to integrate this into their
19 system.

20 Now, what's important is a lot of self-
21 owned today have the capability to receive
22 broadcasts. Some may not; I'm not here to testify
23 whether they are all capable or not. What I'm saying
24 is that there are some that already exist. There's no
25 reason why this can't be rolled out over time.

1 We have geographic mapping capability. You
2 need a company that can come in and make sure that the
3 mapping is done properly, and to a level that can
4 actually satisfy the needs of this system.

5 You need a telecommunication infrastructure
6 technology company, a company that understands the
7 switches and the base stations and the other
8 technology required to pull this off. And then of
9 course you need cell providers.

10 We're fortunate, just last week we found out
11 we have several providers that are signing on board
12 that have both CDMA and GSM capability, and they
13 welcomed the opportunity to work with us. And we
14 welcome that opportunity as well. And we will have
15 some testing capability in the middle of May, right?
16 Yes. We're actually planning on the final testing in
17 June. So if you guys would like to discuss those
18 exercises or see it actually occur, we can do that.

19 I believe that is it. Any questions? No
20 questions? I can't believe I did that well.

21 MR. PITTS: Thank you for your presentation.
22 There is a competitor, I think, privately held in
23 Houston called Cellcast. And they allegedly can do
24 wave files as well with this. Can you do wave files?
25 And what's the limit to the number of characters that

1 you'd be sending?

2 MR. KARL: Well, I know about the
3 competitor. They're actually a British-based company,
4 if you actually do the research. And their system
5 actually relies on using the internet, which I
6 specifically avoided that, because I feel it's a very
7 fragile system. Actually, a guy from the university,
8 Penn State University, Patrick Daniels did some
9 research on SMS, terrorism attacks. And he
10 specifically stated anything on the internet is
11 considered compromised.

12 About what we're capable of doing, I
13 hesitate to say anything because of confidential
14 agreements we have right now with other companies.
15 We're working on it. We'll be able to roll it out
16 completely in May.

17 MR. PITTS: Can you give us a range in the
18 number of word characters for printed text?

19 MR. KARL: Oh, if you'd look at -- I'll tell
20 you what. Text messaging and GSM right now has the
21 ability to do I think 15 pages of text. That's
22 actually out on some websites that I found about a
23 year ago.

24 So I mean, it's out there. You can do a lot
25 of texts. You can do up to several pages. But my

1 question is why would you want to do that. You would
2 want to make sure you minimize the amount of messaging
3 going across. You want to turn people to the
4 information they're used to obtaining.

5 I mean, I wish I could give you more
6 information. Troy, we really can't talk about that
7 right now.

8 MR. MORAN: Okay. Thanks, Dr. Karl. If you
9 have further questions, you could perhaps see Dr. Karl
10 after the meeting.

11 Let's go to the presentations of the
12 Advisory Committee informal working groups. We'll
13 begin with David Webb from FEMA, who will have a
14 report on the Alerting Interface Working Group.
15 David?

16 And as we have questions for David and
17 others, please introduce yourselves before you speak
18 so the people on the conference bridge will know who
19 you are, and also the people who are doing the
20 recording for us.

21 David?

22 MR. WEBB: Good morning. Thank you for
23 allowing me to present the outcome so far that the
24 Alert Interface group has worked up.

25 The AIG has been meeting regularly, and we

1 are pleased to report a few findings that we have come
2 up with. Just to refresh everyone's memory, the
3 primary mission of the AIG is to recommend specific
4 public alert and warning systems for inclusion into
5 the commercial mobile services' alerting capability
6 that the carriers can voluntarily elect to carry. We
7 were given several specific things to look at, and
8 we've started down that process.

9 The participants in the group: Myself as
10 the group leader, Art Botterell is the Deputy Group
11 leader, and then we have the rest of the -- I don't
12 believe we've left anyone out of the membership.

13 Our first task was to define the
14 requirements of what we thought we needed to proceed
15 with, and how we needed to proceed, and what we wanted
16 to come up with. We defined 16 requirements, and we
17 reported those to the Project Management Group.
18 Fifteen of those were accepted, and they were
19 incorporated into the PMG requirements document.

20 The primary recommendation of the group
21 early on was that we should use OASIS CAP, the common
22 alerting protocol format. That seems to be the most
23 useful and ubiquitous method of transmitting alerts at
24 this time.

25 The next steps, we want to consider which

1 fields are most applicable to the commercial mobile
2 services industry. We know we can't put everything on
3 the page. Which fields do we extract to make the
4 message most useful? How can we prioritize those
5 messages, and then how can we put forth a trust model
6 that the carriers will accept, that they know that the
7 authorization of the message is there, it's authentic,
8 it hasn't been tampered with? It is a valid alert.

9 So our working assumption is that we will
10 proceed with CAP, and we will develop our standards
11 around the common learning protocol.

12 In the next few months we're going to work
13 on prioritization. We will comment on the scope and
14 the definition of wireless alerts. One of our
15 requirements was to give a refined list of a sample of
16 systems that are available today that can produce
17 alerts, and then the trust model.

18 Later on this summer we're going to look at
19 geo-targeting, what the specifics are, how wide of an
20 area, do we take a whole county, is it by state, is it
21 by subcounty? How geo-specific do we want to get?

22 CAP message limits. We've been working with
23 the Communications Technology Group to define what
24 they can accept. And this mostly comes from a system
25 limit and from handsets, so we've got some user needs

1 group coordination going on there, also.

2 And then we will present in August our final
3 recommendations to the PMG.

4 MR. MORAN: Thank you, David. Does anyone
5 have any questions for David on his report? Okay, no
6 questions. I appreciate it, David.

7 Next we have Edward Salas from Verizon
8 Wireless to report on the Alerting Gateway Working
9 Group.

10 MR. SALAS: Good morning, and thank you for
11 the opportunity to come and provide status on the AGG.

12 We'll jump into the mission statement again,
13 as a refresher. We're charged with drafting
14 requirements for interface into the alerting systems,
15 as recommended by the AIG. We're to recommend methods
16 by which alerts received from the target systems are
17 processed, and these alerts will depend on many
18 attributes, things like user-specific data, where the
19 users opt in, opt out.

20 We certainly want to meet all statutory
21 requirements. Geo-targeting methods will be
22 accommodated. We'll work procedures required for
23 maintenance of the data that we're processing. And
24 the handling of alert priorities, as well.

25 We're to draft recommendations to address

1 possible unique interfaces associated with unique CMS
2 implementations of technology, and then generally make
3 any other recommendations that emerge as important
4 with regard to transactions between the CMS entities
5 and the alerting originators.

6 AGG participation. Verizon Wireless, CTIA,
7 ATIS, Cingular, DHS, Intrado, Motorola, Sprint/NexTel,
8 Syniverse, TIA, and VeriSign. We've had active
9 participation by all members, and I want to thank all
10 the participants for a lot of work and time
11 commitment.

12 AGG status. To date we have held two formal
13 meetings in Washington, D.C., in January as well as
14 February. We've adopted working procedures for the
15 informal working group, again leveraging the good work
16 of Brian Daly and the CTG. We've developed schedules
17 for monthly face-to-face sessions. We've defined a
18 project plan. And the current status is we're on
19 schedule.

20 We have formed a technical subgroup for in-
21 depth and specific dialogue with regard to the charges
22 that we have. This group has scheduled biweekly
23 sessions, so they're very busy. We've discussed
24 system requirements and defined an outline, and we've
25 assigned working items not only to the team members,

1 but other subject matter experts.

2 We've discussed the network architecture,
3 and determined that a single alerting aggregator to
4 distribute alerts to the carriers' networks is
5 required. We're in the process of analyzing CAP
6 parameters to be mapped into the alert service profile
7 that has been defined by the CTG.

8 We've defined some working group working
9 assumptions in support of multiple protocols:
10 protocol mapping, as well as an evolution of
11 protocols. We've identified and listed key
12 deliverables, gateway system requirements, interfaces
13 to the alerting authorities, interfaces to the
14 carriers' networks. We've addressed system
15 reliability and redundancy requirements, as well as
16 security requirements.

17 Working assumptions. And again, I want to
18 preface the working assumptions and have the group
19 understand that these are working assumptions intended
20 for use of the working group itself, and really don't
21 rise to the level of the PMG working assumptions,
22 which will be outlined I think in a subsequent report.
23 So this is a set of assumptions that allow us to
24 function internally.

25 First, to deal with inputs to the gateway,

1 outputs from the gateway. We're basically asserting
2 that we want to support multiple media profiles:
3 text, audio, video, and multimedia.

4 We want to support in the gateway protocol
5 mapping from the input to the output protocols. The
6 gateways need to format messages properly so the
7 carriers should not be required to modify or edit the
8 alert message content. We want carriers to do what
9 they do best, which is to address distribution of
10 messages, as opposed to the treatment of the content
11 of those messages.

12 The gateway will support geo-targeting
13 requirements, and we will have an architecture that
14 will support redundancy and reliability. We list a
15 number of points. Bottom line, we do not want to have
16 a single point of failure within the architecture of
17 the system.

18 All gateways will use the same format and
19 same message identifier when sending the same message
20 to carriers' networks.

21 Here we have a project timeline. This is
22 very high level. This identifies key milestones that
23 we will need to achieve in order to meet the larger
24 committee objectives from a timeline standpoint.

25 This chart doesn't reflect all of the

1 interdependent activity that goes on between and among
2 all of the various working groups, so there's a whole
3 other level of specificity that kind of underpins
4 this.

5 And with that, Mr. Chairman, I'm done.

6 MR. MORAN: Thank you. I appreciate it.

7 Any questions for Mr. Salas? Okay, great. Thank you.

8 Next we're going to have a report from Brian
9 Daly on the Communications Technology Working Group.
10 Mr. Daly, of course, is from Cingular.

11 Jeff, I guess they're holding all their
12 questions for you at the end.

13 MR. DALY: Thank you, Mr. Chairman, members
14 of the Advisory Committee. It is my pleasure to be
15 here this morning to give an update on the status of
16 the Communication Technology group.

17 Again, my name is Brian Daly of Cingular
18 Wireless, now part of the new AT&T. I am the leader
19 of the CTG. My deputy leader is Jay Pabley of
20 Sprint/Nextel.

21 Today I would like to present an update of
22 the CTG activity since the formation of the working
23 group at the December 12 Advisory Committee meeting.

24 This slide was presented at the December 12
25 meeting, and highlights the mission of this

1 Communication Technology Group. Our primary mission
2 is to develop and submit recommendations for the
3 relevant technical standards for devices and
4 equipment, and technologies used by electing
5 commercial mobile service providers to transmit
6 wireless alerts to subscribers.

7 Since the technology's availability will
8 vary as operators' business need meets subscriber
9 expectation, the WARN Act also defines the need to
10 define recommendations when not all of the devices or
11 equipment used by such providers are capable of
12 receiving alerts, or the provider cannot offer alerts
13 throughout the entirety of the service area.

14 Technologies, devices, and equipment are not
15 widely deployed today. That will support wireless
16 alerts. Therefore, the deployment of those
17 technologies will be dependent upon a wireless
18 operator's commercial business deployments, and will
19 vary greatly. So there are a number of scenarios
20 where devices will only be in portions of the network
21 or portions of the devices.

22 Furthermore, the CTG will look at
23 technologies for the priority transmission of alerts
24 by the electing providers, as well as the development
25 of recommendations to transmit emergency alerts in

1 languages in addition to English to the extent
2 practical and feasible.

3 Some of the issues we've been given to
4 address are listed on this slide, which again was
5 presented at the December 12 meeting. We are to come
6 up with recommendations for the technologies and
7 methods permitting the efficient transmission of
8 messages to potentially an entire subscriber base of
9 operators.

10 We also need to associate appropriate
11 priorities on those alert messages, and target the
12 alert messages to specific geographic regions or
13 locales, enabling the use of the important emergency
14 service by other alerting authorities, including state
15 and local governments.

16 We need to come up with recommendations on
17 handset and device technologies, which are appropriate
18 for alerting services; take into account the needs of
19 non-English subscribers, as well as people with
20 special needs, including people with disabilities and
21 the elderly; and also to ensure the critical emergency
22 services continues to evolve with technology
23 supporting it. What's available and deployable in the
24 near term may be different from the longer-term
25 technologies that will be available.

1 And then finally, we want to make sure we
2 align the technologies with the relevant standards
3 organizations that are focusing on the evolution of
4 the various technologies.

5 I am fortunate to have a very capable,
6 dedicated team in the CTG. The representatives from
7 companies listed on this slide have provided
8 significant expertise on the technologies. I am
9 confident that this team will be successful in
10 developing recommendations that the industry will
11 embrace. And those companies are Cingular,
12 Spring/NexTel, Alltel, the American Association of
13 Paging Carriers, the Rural Cellular Association, T-
14 Mobile, Verizon Wireless, Ericsson, Motorola, Nokia,
15 NorTel, Qualcomm, and the Telecommunications Industry
16 Association.

17 I should also point out we do have
18 representatives of the FCC on the CTG that are also
19 very active contributing members to the process.

20 As far as the status summary, the CTG has
21 developed a set of working procedures and assumptions
22 for the informal working group. These working
23 procedures help us guide the work efficiently and
24 fairly to maximize the successful completion of our
25 mission.

1 We've been holding monthly face-to-face
2 meetings with interim conference calls, and as of
3 February 15 we have held three face-to-face meetings
4 and two conference calls. The face-to-face meetings
5 have been here in Washington, D.C.

6 We formed a number of ad hoc groups to
7 specifically investigate specific issues that have
8 come up. Battery life, security, and devices are just
9 three of the issues that we've formed ad hoc groups
10 on.

11 We are coordinating with the other informal
12 working groups, with liaisons being sent over as
13 necessary in order to get information shared between
14 each of the working groups.

15 And then finally, we are on track for making
16 recommendations to the Project Management Group per
17 the project schedule and assignment of
18 responsibilities.

19 The CTG has also come up with a number of
20 working assumptions -- and again, these are the
21 informal working group assumptions -- some of which
22 have been submitted to the Project Management Group,
23 which we'll hear about a little bit later.

24 The first is, we're in the process of
25 defining what we're calling service profiles. Service

1 profile defines the underlying delivery attributes,
2 such as text, audio, video, and multimedia. The goal
3 is to define service profiles, and not specific
4 delivery technologies. The reason for that is
5 multiple technologies are available for each service
6 profile, and the operator will have options to use any
7 available technology that supports a given profile if
8 they do elect to transmit alerts. And what technology
9 and operator picks will be based on operator business
10 needs and technology availability.

11 Text is viewed as the universal service
12 profile. That is, it's the minimum capability that
13 must be supported by an operator that elects to
14 transmit alerts. Text is available across delivery
15 technologies, and also across different mobile
16 devices.

17 We have to take into account various classes
18 of mobile devices, from the low-end all the way up to
19 the high-end devices. And with that, there are
20 economic factors that come into play, as well. We
21 can't rely on a technology that will require a
22 subscriber to buy a high-end device, a very expensive
23 device. We have to take into account the low-end
24 devices for those that can't afford those high-end
25 devices or premium service plans.

1 Additional profiles can be supported as
2 technology advances and operators commercially deploy
3 those technologies. But again, defining generic
4 service profiles will take into account some of the
5 evolving technologies of the future.

6 I recall in the CTG mission statement we
7 were asked to develop recommendations for electing
8 operators that may transmit in whole or in part. With
9 that we have come up with a number of deployment
10 scenarios to define what whole or part is. A whole or
11 part is not a simple yes-or-no answer, because
12 technology availability and operators' commercial
13 rollouts are going to be very dependent upon the
14 operators' business plans.

15 The technology scenarios, deployment
16 scenarios will be based on multiple technologies, the
17 mobile device capabilities, product availability,
18 implementation phases, as well as wireless operator
19 elections that support wireless alerts. These
20 scenarios will be used to develop the process under
21 which the providers can elect to transmit alerts for
22 each scenario.

23 If an operator transmits an alert to a
24 wireless device, one of the concerns we have is they
25 are going to have that mobile device in their hand

1 when they receive that alert. Immediately we're
2 concerned that they are going to turn around to use
3 that device to either call family or friends, or try
4 to get some more information about the alert in one
5 manner or another.

6 During emergencies, we believe the need for
7 support of national security emergency personnel and
8 911 calls is important. Therefore, we are looking for
9 ways to minimize the potential for wireless alerts
10 resulting in severe network congestion that will
11 inhibit critical communications. And again, having
12 that device in hand will encourage subscribers to use
13 that device when they receive the alert in order to
14 make a phone call.

15 Even more disruptive is if they make that
16 phone call to 911 services just for general
17 information instead of emergency calls, or even to a
18 wireless operator's customer care, where we may not
19 even have the information on what the problem is to
20 give them.

21 So the CTG is working on the assumption that
22 any point-to-point or unicast delivery technology,
23 such as SMS point to point or MMS, are not feasible or
24 practical for the support of wireless alerts,
25 especially when you look on a nationwide, or even a

1 large-city or even a smaller-city scale.

2 Point-to-point technologies will quickly
3 congest the network, resulting in message delays,
4 messages not delivered, as well as the potential for
5 denying voice service capabilities for those critical
6 calls that need to get through.

7 We are also assuming that the distribution
8 of the alerts from the wireless subscribers will be
9 uni-directional. That is, there will be no
10 acknowledgement coming back from the device or from
11 the subscribers that the message was received. Having
12 a confirmation message again would put added traffic
13 on the network, which will again congest the network
14 and prevent calls that may be essential.

15 In the handheld device technology area, the
16 CTG has made an assumption that only alerts that are
17 immediate, severe, or likely threat to life, health,
18 or property will be delivered to the mobile device.
19 We want to minimize the cry-wolf syndrome; that is, we
20 don't want to send too many alerts to the mobile
21 devices because people will start ignoring them, much
22 the way they start ignoring SMSs when you're in
23 meetings and so forth. So we want to make sure that
24 the alerts that are sent to mobile devices are those
25 critical alerts that we really need to get the message

1 through to them.

2 And based on that, we also have to realize
3 that the mobile devices themselves will have limited
4 capabilities: number of characters available on the
5 screen. The screen size itself could be a limiting
6 factor in many cases, as well.

7 So these are some of the issues that are
8 currently being investigated and evaluated by the CTG
9 as far as device technologies.

10 It's desirable to have a common experience
11 across all carriers and technologies. An example of
12 that would be a standardized alerting tone for the
13 notification of an emergency alert. Having a
14 standardized tone across carriers would be beneficial
15 to subscribers' education so that they are aware that
16 that tone means that an alert has been issued.

17 And it is also anticipated that new mobile
18 devices are required, that will be replaced by normal
19 subscriber device life cycles. Some devices, such as
20 pagers, may support some of the service profiles with
21 over-the-air programming or changes.

22 Devices that are in the hands of subscribers
23 today, they don't support wireless alerts. That's
24 because there is, at least the minimum, a need for a
25 client to process and present the alert to the

1 subscriber. As we just talked about, a common
2 alerting tone may be one of those presentation
3 methods.

4 Finally, I'd like to present the CTG
5 timelines and milestones. Over the next three months
6 we will complete the development of service profiles,
7 address multi-language feasibility, address geo-
8 targeting, look more into the architecture and
9 interfaces, and especially working very closely with
10 the AGG, making sure that the information that is sent
11 from the gateway to the wireless operator's network is
12 consistent with what needs to be processed by the
13 network. Also address special needs requirements, and
14 continue with our ad hoc activities.

15 Throughout this summer we'll be drafting our
16 recommendations, have several drafts of that. And as
17 mentioned earlier, I believe that we are on target for
18 the final CTG recommendations to be completed on time.

19 Again, Mr. Chairman, I thank you for this
20 opportunity to present the CTG status. I look forward
21 to our continued progress in line with our mission.

22 MR. MORAN: Thank you. Thank you, Brian.

23 Next we have Gary Jones from T-Mobile, on
24 behalf of Jonathan Werbell, from the City of New York.
25 And Jeff, I guess you're going to man the computer

1 there.

2 MR. GOLDTHORP: Yes, I am. Gary, can you
3 hear me?

4 MR. JONES: Yes, I can. Thank you.

5 MR. GOLDTHORP: Gary is joining us from
6 about as far away as you can get. He's in Cyprus.
7 And if you think you had a hard time with Daylight
8 Savings Time change this weekend, he's probably got it
9 a little bit harder today.

10 Anyway, he's there. He's ready to go. I'm
11 going to just advance the slides. Gary, if you would
12 just cue me to go. Let me just get your slides up
13 first, and I'll tell you when we're ready here.

14 MR. JONES: I apologize for not being able
15 to be there in person, but I had a commitment I could
16 not get out of, so I'm calling in.

17 MR. GOLDTHORP: Well, we're glad you could
18 make it, and we're ready to go now. So I'm on your
19 opening slide, your title slide. You tell me when to
20 go.

21 MR. JONES: Okay, thank you. As Jeff said,
22 I'm making the report on behalf of our Chairman, as
23 the Deputy Chair. If you'll go to the second slide.

24 You see, our mission, as given to us by the
25 FCC, is to address the needs of the commercial mobile

1 service. And we had some things that were
2 particularly culled out, particularly non-English-
3 speaking customers and customers with special needs,
4 such as people with disabilities or the elderly.

5 We began to look at this. We've had several
6 conference calls and one face-to-face meeting. And I
7 understand that we are supposed to develop
8 recommendations under which the electing CNS providers
9 can offer subscribers with some disabilities, and also
10 provide ways, capabilities for preventing subscriber
11 devices from receiving emergency calls.

12 We have been working with proposals from the
13 other informal working groups, as you'll see in just a
14 minute. Okay, Jeff, let's go to the next slide.

15 This slide, our mission. One of the things
16 we looked at early was defining emergency message
17 formats for special-need users. What we found with
18 some information that was contributed to us, that
19 special-needs users really don't react any differently
20 from emergency messages than do people without
21 disabilities. They just have, they may have needs for
22 special types of alerting to tell them that they have
23 a message, but the message formats don't necessarily
24 have to be any different.

25 We're also looking at making recommendations

1 for a common look and feel for alerts, as you heard
2 from Brian just earlier. And it's also up to us to
3 draft a consumer notification that will be issued by
4 non-electing service providers -- and we hope there
5 are not many of those -- providers that elect to
6 partially provide this service. Okay, Jeff, let's go
7 to the next one.

8 As you can see, we have a wide variety of
9 participants, and members of the group include a
10 variety of industries, disciplines, and of advocates.
11 We have several folks from the broadcast industry in
12 our group, and I think that's very useful, because
13 they already have experience in delivering alerts to a
14 subscriber base. And their insights have already been
15 helpful to us.

16 I won't go down the list. You can just read
17 that, the participants. And pretty much we've had
18 good participation from most everybody, and look
19 forward to continuing that.

20 All right, Jeff, let's go to the next one.

21 MR. GOLDTHORP: Okay.

22 MR. JONES: Our current status. Our group
23 got a little bit of a late start in really getting
24 active, but that was probably a good thing. Because
25 we really needed to get input from some of the other

1 informal groups, and particularly the Communications
2 Technology Group. We needed some baseline, if you
3 will, for what the technologies might do, what the
4 technology limitations might be, and that's been very
5 helpful to us.

6 We have now evaluated many of the draft
7 positions and working assumptions from the CTG. And
8 as I say, they have been particularly helpful in
9 guiding us and giving us a grounding point. All
10 right, Jeff, go to the next one.

11 Our status. We've weighed the available
12 research from a document that was contributed to us
13 called "The Access to Emergency Alerts for People with
14 Disabilities." We're also going to get some input
15 from those folks on some potential use of the
16 scenarios that Brian discussed, and a way of
17 classifying emergency alerts.

18 We've considered and agreed to most of the
19 CTG working assumptions. We agreed, and we looked
20 over and agreed with the project management working
21 assumptions. And that, as I say, has given us a very
22 good grounding to start our work on the particular
23 needs of the users. Now we're working to develop
24 recommendations that will go to the PMG, and working
25 to develop those use cases and possible alert

1 categories.

2 Our next meeting, our next face-to-face
3 meeting will be March 21 at the FCC. And I'll stop
4 here for any questions.

5 MR. MORAN: Any questions for Gary? Okay.

6 Next, Jeff Goldthorp of the Commission will
7 present the Project Management Working Group report.

8 MR. GOLDTHORP: Thank you, Mr. Chairman.
9 And let me spend a few minutes with you today and
10 bring you up to speed on what's been happening with
11 the Project Management Group of this committee.

12 When we met in December, we talked about the
13 mission of the Project Management group as providing
14 oversight to the various informal working groups to
15 work issues of coordination between the informal
16 working groups, to maintain a schedule. At that time,
17 we presented a very sketchy schedule of milestones.

18 Since then we've got a much more detailed
19 schedule that includes all of the interdependencies
20 that we are aware of today between the different
21 working groups. And of course, that's very important,
22 because every time you identify a new connection
23 between a working group, it tends to push things out
24 in time. It never pulls things in.

25 So we're trying to identify as many of those

1 things as we can early, and the communication amongst
2 the working groups is helping to do that. I think
3 we've got a very sound schedule to work from now.

4 I can say confidently today that we are on
5 target to meet our deliverable date in October.

6 We've also got quite a bit of work done.
7 I'll talk later about a set of draft conclusions that
8 the Project Management Group has come to based on
9 recommendations from some of the different working
10 groups. You've heard some of these things already,
11 and the Project Management Group is functioning as a
12 body where these things are coming together and being
13 sort of vetted and agreed upon as a unit. And I'll
14 talk in a moment about how we're using that to build a
15 set of end-to-end requirements, system requirements
16 for the architecture.

17 And finally, we will be assembling the final
18 work product, but of course that work is in front of
19 us.

20 Participants in the Project Management Group
21 include all of the leaders and the deputies of the
22 informal working groups. You've heard from a number
23 of them already today. So those folks are all members
24 of the Project Management Group, and they're listed
25 here.

1 Our status. Like the other groups, we've
2 had a number of meetings since December. We've had
3 two face-to-face meetings here in D.C. The most
4 substantive meeting was the one we just had in
5 February, on February 15. And it was at that meeting
6 where we talked in quite a bit of detail -- I mean, we
7 literally spent about three hours with our sleeves
8 rolled up -- dealing with end-to-end requirements for
9 the architecture, dealing with architectural issues.

10 What we're trying to do as the Project
11 Management Group is to define a vision of that
12 architecture that could then be used by the working
13 groups in their more detailed technical work. So as
14 the working groups kind of work bottom up on technical
15 issues, the Project Management Group is coming to
16 conclusions top down. And we'll go through a list of
17 draft conclusions that we've arrived at already in the
18 next slide.

19 We have started that work. We have also, in
20 addition to the draft conclusions you will hear about
21 today, we've identified a long set of technical
22 questions that will be passed, or have been passed, to
23 different working groups for more detailed work.

24 All of the work that's being done at the
25 Project Management Group I should say is being done

1 based on contributions from the working groups. So
2 two in particular, we got detailed requirements from
3 the Alerting Interface Group. A lot of the perhaps
4 conclusions you'll hear in a moment were based on
5 those recommendations. And we had a long list of
6 questions, technical questions from the Communications
7 Technology Group that we worked from to get those
8 answered. And those were not just questions for the
9 Communications Technology Group; it turns out those
10 are questions for a number of the other groups, as
11 well.

12 Now, what I'll go through now is the set of
13 draft conclusions I mentioned before. There are 16 of
14 them. I'm not going to go through each one of them
15 point by point. They're all listed here, and there
16 will be time at the end of the meeting, after we're
17 finished here, for some discussion.

18 I'll also say that if anybody after this
19 meeting has any concerns or issues, I invite you to
20 send me e-mail by the end of the week, but please no
21 later than Friday, and we can work to get those
22 resolved.

23 But everything that you're going to see now
24 has been discussed in detail in each working group,
25 and at the Project Management Group. So there

1 shouldn't be anything here that will be a surprise to
2 you.

3 And also, before I start, let me just
4 mention there's a term that you're going to see here,
5 an acronym, CMAS, commercial mobile alerting system.
6 And one important point to make about that is I'm not
7 talking about any particular part of the system; I'm
8 not talking about the wireless distribution system,
9 I'm not talking about the alerting origination, I'm
10 talking about the end-to-end system. And that is the
11 view that these conclusions take.

12 First of all, one of the most important
13 early decisions or draft conclusions that the Project
14 Management Group came to was that there is a need in
15 the architecture for an aggregation function, for a
16 single function in the architecture that is the
17 recipient of alerts from various sources, whether they
18 be local, state, federal; and to process those alerts,
19 to prioritize those alerts, and then to present them
20 on an integrated interface to wireless distribution
21 systems.

22 It was also agreed upon that that
23 aggregation function should be administered by a
24 federal authority.

25 The second point has to do with the

1 definition of alert. In other words, there are lots
2 of different views of what constitutes an alert. You
3 can sign up for lots of different kinds of alerts
4 today. But what we agreed to at the Project
5 Management Group is that for the purposes of the
6 commercial mobile alerting system -- and I'll read the
7 language here -- "it would only be used to disseminate
8 public alerts regarding immediate, serious, and likely
9 threats to life, health, or property; and for updates
10 and amendments to those alerts." So these are very
11 serious events. We're not talking about things that
12 happen routinely. We're trying to avoid the condition
13 I think that was alluded to earlier, which is sort of
14 alert -- the condition where you start to ignore
15 alerts when you get so many of them.

16 The third one I'll mention on this slide is
17 that the system, the commercial mobile alerting
18 system, has to support a method for authentication of
19 originators, so that carriers, wireless service
20 providers know when they get the alert that they're
21 getting an alert that is from an authenticated source.
22 This is to avoid spoofing and false alerts, false
23 alarms.

24 There's three other draft conclusions on
25 this slide. I'm not going to talk about each of these

1 three in any detail, but they are here. And as I
2 said, if you've got questions or comments, please
3 either bring them up today or send me a note later.

4 Moving on then to this slide. We decided at
5 the Project Management Group that the content,
6 accuracy and completeness and so forth for content,
7 that function would rest with the originating agency,
8 as opposed to the distribution platform. So as it
9 relates to content, the wireless distribution system
10 would function sort of as a dumb pipe. And I know
11 there's a lot of folks that probably don't want to
12 hear about their platforms being referred to in that
13 context maybe, except in this particular manner. So
14 when it comes to alerts, that's how the distribution
15 platform would be thought about.

16 Geo-targeting is probably one of the most
17 difficult technical issues that's in front of us, but
18 we agree at the Project Management Group, at least in
19 principle, that the system needs to restrict the alert
20 delivery to recipients located in the geographic area
21 that is at risk. So how that's done is yet to be
22 determined, but we have agreed that that is something
23 that is to be done. And then there's three others
24 here that I will not go into in as much detail.

25 And finally, I think David mentioned already

1 that the Alerting Interface Group had recommended that
2 CAP would be the protocol used to format alerts for
3 distribution, and that has also become now a draft
4 conclusion of the Project Management Group. And also
5 that the architecture must provide a level of
6 redundancy that would avoid a single point of failure
7 that would expose the architecture to a catastrophic
8 outage and the inability to deliver alerts in an
9 important time.

10 Then there's three other points on this
11 slide that I won't go into in as much detail. But I
12 think what I've tried to do with the ones that I've
13 talked about specifically is give you a sense for the
14 kinds of things, at this point in time, that, at the
15 Project Management Group, we are agreeing to. This is
16 the level of agreements that are taking place. It's
17 high level still. We're agreeing on points in
18 principle that are going to get drilled down on in the
19 different working groups. But I think it's important
20 to put this before you.

21 I also want to make it clear that this list
22 is not complete. We've got 16 things on this list
23 right now. We're going to have quite a bit more than
24 16 things on this list when we're done. But this is
25 where we're starting, and we wanted to present this to

1 you at this meeting because it represents kind of the
2 state of where we are.

3 And I think at the end of the meeting, we'll
4 talk a little bit more about next steps. But that
5 concludes my prepared remarks, Mr. Chairman. Thank
6 you.

7 MR. MORAN: Thank you. Thank you, Jeff.

8 I have to say the work of the advisory
9 committee and the working groups thus far has been
10 very impressive. I think these reports show that a
11 lot of work has been done, and all the work that's
12 needed to get to where we need to get this report to
13 the Commission and beyond.

14 We trust that all the working groups will
15 continue their work at the pace that they're doing, if
16 not even more. And I basically, I would have to
17 congratulate you for all that you've done so far.

18 I do have a question. I would like to get a
19 sense, if you would, Jeff mentioned his draft
20 conclusions, and I think many of those points were
21 mentioned in the earlier reports. Could anyone
22 describe, how comfortable are you with these draft
23 conclusions? Does anyone have any thoughts or
24 comments about that? Are you pretty happy with them?

25 MS. ARNOLD: This is Ann Arnold, and I have

1 a question about one of the points that was made in
2 the last presentation.

3 You said that one of the agreements'
4 conclusions was that the alerting initiation platform
5 aggregation function should be administered by a
6 federal authority. But we've heard over and over
7 again that most emergencies are local in nature.

8 How will a federal authority administering
9 the delivery of these messages work to allow a state
10 or local government to use this whole system?

11 MR. GOLDTHORP: The idea of the aggregation
12 function, and it is that there would be a standard
13 interface defined for alerts to be originated from any
14 source, whether it be a state EOC, whether it be a
15 county-level emergency office. So that alerts that
16 are local in nature would simply be injected into the
17 commercial mobile alerting system by way of the
18 aggregation function.

19 So it's not a function that would make it
20 any more difficult to provide alerts that are local in
21 nature. It's just a function that would allow alerts
22 to be prioritized and presented to the wireless
23 distribution systems in a consistent way.

24 MR. PITTS: Does that mean that the EAS
25 through the television system now would go through

1 this federal government entity, as well?

2 MR. GOLDTHORP: I don't have any comment
3 about the EAS, or how --

4 MR. PITTS: This is only the wireless.

5 MR. GOLDTHORP: Right now, for the purpose
6 of this committee, we're just talking about the
7 wireless, or the commercial mobile alerting system.

8 MR. PITTS: So there could be a separate
9 going out through the normal EAS system through
10 television stations.

11 MR. GOLDTHORP: I don't have any comment on
12 that.

13 MR. PITTS: How would the good work of Mr.
14 Lawson and the public television stations fit into
15 this federal government system, as well? I mean,
16 they're relaying EAS? Is that what I'm understanding
17 the law will envision?

18 MR. GOLDTHORP: One way that they could fit
19 in -- I mean, you can imagine an aggregator as an
20 aggregator of all alerts, so that alerts could
21 originate from, either be transmitted into the
22 aggregator. Once the alert makes it way from the
23 source, whether it be a state, a local, whatever that
24 source might be, there are lots of different platforms
25 that it could be distributed on, whether that be

1 broadcast, whether that be wireless, whether that be
2 internet.

3 And so you can imagine the aggregator as
4 being a, almost an equalizer of sorts, something that
5 is independent of the distribution platform, but which
6 performs a vital function, which is to integrate the
7 alerts and to present them to the different
8 distribution platforms in a manner that they are most
9 accustomed to receiving.

10 Or, using a standard manner, so that
11 whatever gateway is at the front end of the different
12 distribution systems can take that standard interface
13 and convert it into a form that is appropriate for
14 delivery over that distribution system. It will be
15 one thing for broadcast; it might be something
16 entirely different for wireless distribution.

17 What we're talking about here in this
18 committee is commercial mobile delivery of alerts.
19 And the decision that was made at least tentatively at
20 the Project Management Group is that these alerts
21 should be aggregated using an aggregation function in
22 the architecture.

23 MR. PITTS: Right. Under the National
24 Response Plan, though, if there's an incident
25 declared, all telecommunications is supposed to be

1 managed locally. So this federal government interface
2 is down at the local level, able to work with the
3 local authorities.

4 MR. GOLDTHORP: Yes.

5 MR. PITTS: Thanks.

6 MR. BOTTERELL: Mr. Chairman?

7 MR. MORAN: Yes? Who is speaking?

8 MR. BOTTERELL: Art Botterell from
9 California. If I may suggest another way of looking
10 at this.

11 We've referred to this function as the
12 aggregation. But in many ways its primary
13 responsibility has to do with the authentication of
14 the local users. So yes, the local users, as you say
15 in the principles set forth by the PMG, will be solely
16 responsible for content. The role of the federal
17 system will simply be to provide a single point of
18 contact for the cellular carriers. At least that's my
19 understanding of the recommendation.

20 MR. MORAN: Okay, thank you. Chris.

21 MR. GUTTMAN-McCABE: The only thing I was
22 going to say is we have a model now that's working
23 that may help explain it. The National Center for
24 Missing and Exploited Children right now takes all the
25 Amber Alerts from the over 100 originating Amber

1 agencies, and consolidates them, and then feeds them
2 through a pipeline to the wireless carriers that are
3 participating in the Amber Alert effort. And over 15
4 wireless carriers are doing that.

5 So the idea is that the Amber message is
6 originated locally from one of the originating
7 entities. It is then passed to the national center,
8 and then two different aggregators sort of work on it
9 so that it can be formatted correctly and then sent,
10 via pipeline, to the wireless carriers.

11 It provides, as Art had said on the phone,
12 it provides a point, a single entry point to the
13 wireless carriers. It also provides consistency and
14 sort of a commonality of a message. And it's working
15 very well right now. And it happens -- and I know you
16 asked the question -- it happens almost
17 instantaneously. And that was the Department of
18 Justice identified the National Center for Missing and
19 Exploited Children as the entity that would act as the
20 integrator. And it's a model that works, works for
21 consumers, but also works for the carriers and is
22 something we want to I think replicate in this space.

23 MS. ARNOLD: Are we looking at a number of
24 different aggregators for different types of messages?

25 MR. GOLDTHORP: No, we're not looking at a

1 number of different aggregators for different types of
2 messages. There will be a set of alerts that are
3 deemed to be the ones that would be carried on the
4 system that's being defined by this committee. And
5 the aggregation function that we're talking about here
6 would be the aggregation function that would apply to
7 those alerts.

8 Now we're talking about logical functions of
9 an architecture. We're not talking about hardware and
10 software here. That time will come. And it may be
11 that when the time comes for folks to think about how
12 to implement this, that a logical way to implement it
13 might be to combine it with certain other aggregation
14 functions that are already out there for other alerts.

15 We are not far enough along in that process
16 for me to even speculate about that right now. But we
17 do believe that we're far enough along to make some
18 sort of abstract logical decisions about what sorts of
19 functions should exist in this architecture, without
20 worrying yet about precisely how they should be
21 implemented.

22 MR. MORAN: Mr. Rutkowski, you had a
23 thought?

24 MR. RUTKOWSKI: Thank you, Mr. Chairman.
25 Clearly there's, I think, some interest in that

1 particular bullet, and further dialogue is needed.

2 It's not clear at the outset what it means
3 to have a government agency administer, and that
4 clearly, I think, needs to be fleshed out and
5 considered.

6 Is this also creating a single-point failure
7 potential itself? And the terminology being used
8 here, alerting initiation platform and aggregation
9 doesn't quite match I think the AGG function. It's
10 sort of not clear how this function that's being
11 described relates to other pieces of the architecture.

12 And last, but not least, for those of us who
13 participate in NSTAC, the tensions here between this
14 function and the NSEP functions that would exist
15 possibly concurrent to any emergency I think need to
16 be somehow explicitly dealt with.

17 Thank you, Mr. Chairman.

18 MR. MORAN: Thank you. Any other thoughts,
19 questions, on this point? Any other thoughts on the
20 draft conclusions that Jeff presented?

21 Okay. I think we're moving along quickly
22 enough that we can probably conclude this before
23 lunch, as far as I can tell here.

24 I think next on the agenda is to review
25 schedule and action items. Jeff, what do you have

1 there?

2 MR. GOLDTHORP: Okay. Let me just say that
3 you've probably gotten the sense from all of the
4 working group leaders that you heard today that we've
5 got meetings scheduled. All the working groups have
6 meetings scheduled all the way out through the end of
7 the cycle, the end of the committee's term, which is
8 October. And so those meetings will occur. Almost
9 all of those meetings take place here in D.C.; they
10 are face-to-face meetings.

11 And of course, there are bridges set up so
12 folks can join by bridge. But the meetings themselves
13 are face to face.

14 There are also working groups -- or not
15 working groups, but subgroups in a number of the
16 working groups, working on some more detailed
17 technical issues.

18 So as far as next steps and action items for
19 us, we will continue to execute against the project
20 plan that we have. But more specifically, at the
21 February 15 Project Management Group meeting, we did
22 leave that meeting with a long list of technical
23 questions that are more detailed than the kinds of
24 things we talked about here.

25 I mean, a lot of the draft's conclusions

1 that I talked about are things that leave you with the
2 question, it's more the what, not the how. We just
3 talked about one that's like that: it's the what, not
4 the how.

5 So a lot of the technical questions that
6 peel that onion were discussed on the 15th, as well,
7 and were distributed to the different working groups
8 to work on in the remaining weeks in February and
9 March, early March.

10 We've got another Project Management Group
11 meeting coming up I think on the 22nd. I mean, I
12 could be a day off on that, but it's in that week.
13 And the objective for that meeting is for each of the
14 working group leaders to come back with as many
15 answers to these questions as they can.

16 Those answers will be arrived at by work
17 done in the working groups. So we've got these
18 meetings sort of timed so that the Project Management
19 Group meetings happen after the working groups meet.
20 So there will be working group meetings that take
21 place between February 15 and the next Project
22 Management Group meeting.

23 In those working group meetings, those
24 questions will be discussed. I'm sure other things
25 will be discussed, as well. And when we meet again at

1 the Project Management Group meeting, I expect that
2 we'll have some answers, hopefully a lot of answers.
3 In those cases where we don't have answers, what we
4 will have is project plan, or how the answers will be
5 arrived at, and when we'll have answers.

6 So at the end of March, we should have
7 additional draft conclusions that we'd be prepared to
8 share at our next meeting. Okay.

9 MR. MORAN: Okay.

10 MS. ARNOLD: Chairman, if I could go ahead.

11 MR. MORAN: Yes.

12 MS. ARNOLD: If it would be possible to have
13 the questions that are being asked of the various
14 working groups disseminated in some fashion other than
15 just going to a chairman who may or may not pass them
16 on? Is there not some reason why we couldn't all see
17 what the questions were or at least all see what the
18 questions were for our working group?

19 MR. MORAN: No, there's no reason. I mean,
20 the list exists, and I'll make sure that it gets
21 distributed to each member of the working group. All
22 right?

23 MS. ARNOLD: I think it would be helpful for
24 the list to be available for people to see what's
25 being asked of all the working groups. Everyone may

1 not want to go to that extent, but I think it would be
2 helpful for it to be there.

3 MR. MORAN: Okay. Jeff, earlier you said
4 that there was some information that you wanted by the
5 end of the week. Could you clarify that, and just
6 repeat that?

7 MR. GOLDTHORP: Yes. What I had asked for
8 by the end of the week was, I went through all the
9 draft conclusions. I did not talk about each one of
10 them in detail, so there were some that we did not
11 talk about today.

12 If, after this meeting, you have a chance to
13 look at this closer and there's something in there
14 that you have a comment on, or even if it's one of the
15 ones we talked about that you want to comment on, get
16 in touch with me. Send me an e-mail or call me by the
17 end of the week, so that we can inject it into the
18 process in time for the next Project Management Group
19 meeting. Okay?

20 MR. MORAN: Yes, that works. Does everyone
21 have access to everybody's e-mail address?

22 MR. GOLDTHORP: It should be. If it's not
23 available, what we can do is put it up on the website,
24 if it's not there now, I mean. We can make that
25 available.

1 MR. MORAN: Okay. So I think we're to point
2 six on the agenda: other business. Does anyone have
3 any business to raise here regarding the work of the
4 group?

5 MR. WERTZ: Mr. Chairman, I do.

6 MR. MORAN: Yes, Mr. Wertz from Michigan.

7 MR. WERTZ: Thank you very much, yes. It's
8 not our purpose at this point, but since it came up in
9 the very first presentation, where, on the sixth
10 slide, the gentleman said as he was driving across
11 Iowa he didn't know what county he was in; so
12 therefore, he didn't know whether the alert was
13 relevant to him or not.

14 In our various working groups -- again,
15 we're not there yet, but at some point we're going to
16 need to be -- is the issue of training. Now, will
17 that be at some point built into this? Because what
18 he brought up was not a technical issue, it was a
19 training issue.

20 In our EAS summit last week -- and you were
21 there, and Lisa, you were there, and several others in
22 this room were there -- that is a continuing theme of
23 the single largest fault within the EAS system. It's
24 not the delivery; it's the training of personnel.

25 So at some point within the WARN Act or

1 within what we're doing, I hope that we're going to be
2 dedicating some time to the issue of implementing it
3 at the training stage.

4 MR. MORAN: I think I agree, Bill. I agree
5 that the training in any of these systems is
6 absolutely critical. I would defer -- Lisa, the
7 training, though, is not within the scope of what
8 we're doing with the standard setting right now?

9 MS. FOWLKES: The work of this advisory
10 committee is essentially, it's a technical standards,
11 technical protocol function. So I mean, off the top
12 of my head, I'd have to go back and look at the
13 statute to see if training is an issue that could be
14 handled by the advisory committee.

15 But if it turns out that we decide that it's
16 not something for this advisory committee to handle,
17 it may be something that could be addressed in some
18 other forum. For instance, keep in mind that once the
19 advisory committee makes its recommendations, the
20 Commission still has to do rulemaking proceedings to
21 adopt rule so on and so forth.

22 So, with that we can certainly look into
23 that issue further, in terms of what role this
24 advisory committee would have on the issue, and if
25 there's some other venue that the issue could be

1 addressed.

2 MR. WERTZ: Thank you.

3 MR. MORAN: Thanks, Lisa. Any other
4 comments? New business, whatever? Anyone from the
5 bridge? Oh, I'm sorry, Mr. Rutkowski.

6 MR. RUTKOWSKI: Mr. Chairman, only in
7 looking at the website as it's currently structured,
8 there isn't an awful lot of content. And perhaps
9 particularly the presentations at this meeting, for
10 example, could be placed on the website, as well as
11 perhaps the schedule, as well. We're all sort of busy
12 and lose track of this stuff. And going to the
13 website for a consistent common schedule that
14 highlights things we ought to be focusing on would be
15 useful. Thank you.

16 MR. MORAN: Thank you. Jeff, we can do
17 that, right?

18 MR. GOLDTHORP: We could certainly put the
19 presentations up there. I think we can put the
20 scheduled dates for various meetings that we're aware
21 of. Now, keeping in mind that that can change, those
22 dates can change, and I may not be always aware of all
23 the changes in some of the dates. But I think we can
24 go a long way to meet what you're describing.

25 MR. MORAN: Yes, Mr. Fritts.

1 MR. FRITTS: Just to get the word out to
2 everyone, do we have our own website? And what is it?

3 MR. GOLDTHORP: I don't know the URL
4 offhand, but what we will do -- we have all your e-
5 mail addresses. So we'll send out a bulk e-mail after
6 the meeting, and we'll get you the URL for the
7 website. We do have a website, by the way.

8 MR. MORAN: Okay.

9 MS. FOWLKES: Eddie, the address is
10 www.fcc.gov/pshs/cmsaac. So that's the address for
11 the committee's website.

12 MR. MORAN: You'd better give them the e-
13 mail, I think.

14 (Laughter.)

15 MR. FRITTS: I'm looking forward to the e-
16 mail.

17 (Laughter.)

18 MS. FOWLKES: Or the short version is if you
19 go to either the FCC's home page or the Public Safety
20 and Homeland Security's home page, both pages have a
21 link to this advisory committee's website. So if you
22 can't remember, because I said it at 50 words an hour,
23 that's the easier way to get there.

24 MR. FRITTS: Thanks.

25 MR. MORAN: Thank you. Any other thoughts,

1 comments, questions? Mr. Rutkowski.

2 MR. RUTKOWSKI: I couldn't avoid making the
3 suggestion. Actually, there's a bunch of us who are
4 working on identity management over at the ITU in
5 Geneva.

6 One of the things we recently put together
7 was a wiki. So I don't know whether that's feasible
8 with the Commission's IT department or any volunteer
9 help, but having an advisory committee wiki might be
10 actually kind of an interesting way for people to
11 collaborate. And particularly the work on common text
12 and work towards that consensus. Thank you.

13 MR. WEBB: What is a wiki?

14 MR. RUTKOWSKI: A wiki is basically a web-
15 based, it's web-based material in which people who
16 have the access authority, which can be either
17 anonymous or some subset of people who are actually
18 sort of empowered -- for example, all of the members
19 of this group -- to collaboratively access and edit
20 the text. And typically an audit trail is kept. So
21 it's a way of people to sort of work towards consensus
22 actually in real time with a textual, web-based
23 interface.

24 And of course, the classic these days, which
25 is even getting on the press, is Wikipedia, which is

1 totally open. But in a more closed collaborative
2 group, it can be fairly effective. Thank you.

3 MR. MORAN: Okay, thank you. Anything else?

4 Okay. Well, then, we are adjourned for the second
5 meeting. Thank you very much for participating.

6 (Whereupon, at 11:39 a.m., the meeting in
7 the above-entitled matter was adjourned.)

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REPORTER'S CERTIFICATE

DOCKET NO.: N/A
CASE TITLE: Commercial Mobile Service Alert
Advisory Committee Meeting
HEARING DATE: March 12, 2007
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I hereby certify that the proceedings and evidence are contained fully and accurately on the tapes and notes reported by me at the hearing in the above case before the United States Federal Communications Commission.

Date: March 12, 2007

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