## Workshop on "Broadcasting in times of crisis"

9 March 2023 from 14:00 to 17:00 hours (CET)

## Transcript extracted from Zoom

1 00:00:38.220 --> 00:00:38.980 Floor: Yes. 2 00:03:17.310 --> 00:03:18.340 Floor: so 3 00:03:23.740 --> 00:03:26.630 Floor: so I think I can start there as a workshop now 4 00:03:32.380 --> 00:03:39.020 Floor: on about from now Western Ms. The 5 00:03:41.060 --> 00:03:46.140 Floor: wanted to sam me, and and request. ladies and gentlemen 6 00:03:46.400 --> 00:03:51.300 Floor: on behalf of all for Mr. Buonomo. 7 00:03:51.500 --> 00:04:03.000 Floor: the chief, all for a trust that the group department. who is unfortunately unable to a manager to about on a meeting. Welcome to all of you.

8 00:04:03.240 --> 00:04:16.360 Floor: This workshop was gently organized by a. To us to go 6, and the European broadcasting unit expos from different organizations and the entities.

9

00:04:16.440 --> 00:04:21.290

Floor: as we united to emphasize an important view of a broadcasting

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00:04:21.420 --> 00:04:28.580

Floor: in times of crisis through real life examples available technologies.

11

00:04:29.000 --> 00:04:46.070

Floor: and to to identify high level requirement to improve the performance and broadcasting. In this context this workshop is open to all interest to audiences. You could access link, Publish the in at you public virtual.

12

00:04:46.120 --> 00:04:56.960

Floor: You've got to. and the place also be you formed. The records of this workshop will be available shortly after this event.

13

 $00:04:57.480 \longrightarrow 00:05:03.270$ 

Floor: Yeah. Addition to the organization we have as our 4 sessions

14

00:05:03.370 --> 00:05:06.040

Floor: during the meeting you could.

15

00:05:06.230 --> 00:05:10.330

Floor: You are invited to the to res your questions or comments

16

00:05:13.070 --> 00:05:24.560

Floor: platform, particularly for those with the participants in the panel discussion. The Moderator will pick up them to make your response as proper it.

17

00:05:25.200 --> 00:05:32.330

Floor: In this opening session you we are so happy to have for Ms. Jonah Wilson, deputy director of at your

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 $00:05:32.980 \longrightarrow 00:05:34.700$ 

Floor: video Communication Bureau.

19

00:05:34.840 --> 00:05:42.290

Floor: Ms: the.

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00:05:42.450 --> 00:05:43.950

Floor: And then I should that some

21

00:05:44.010 --> 00:05:47.340

Floor: The

22

00:05:47.740 --> 00:05:56.680

Floor: Now let's start by inviting Ms. Johnson what? Jonah Watson to deliver her open his speech. What's in us? You have? Fl.

23

00:05:57.360 --> 00:05:58.050

Yeah.

24

00:05:58.080 --> 00:06:02.620

Floor: Thank you very much. I, Mr. Chairman.

00:06:02.860 --> 00:06:05.650

Floor: their friends and colleagues.

26

00:06:06.820 --> 00:06:15.360

Floor: Good morning for those who are brought coming from before. Good afternoon and good evening for others. To you all.

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00:06:15.370 --> 00:06:22.170

Floor: It is a real pleasure on behalf of the Director Menu, Director Manual, Mario Manuits.

28

00:06:22.230 --> 00:06:24.550

Floor: to welcome you all to this workshop.

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00:06:25.010 --> 00:06:32.720

Floor: The director is currently on mission, and is unable to be here with you today. He sends his regrets. and

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00:06:32.940 --> 00:06:35.780

Floor: for having for having to be away

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00:06:35.940 --> 00:06:39.140

Floor: and and well wishes for a stimulating workshop.

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00:06:40.010 --> 00:06:59.060

Floor: Let me start by thanking you the co-chairs of the workshop, Mr. Wally Sami and Mr. Andy, Quest, said the chairman of Study Group 6 mystery you could hero Nishida, the Ebu Director of Technology and innovation, Mr. Antonio, our city a Cono.

00:06:59.190 --> 00:07:04.390

Floor: as well as other colleagues, for all of the work you've done in preparing for this workshop.

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 $00:07:04.600 \longrightarrow 00:07:08.970$ 

Floor: This workshop aims at showing in the particular role

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00:07:09.050 --> 00:07:17.490

Floor: of the terrestrial broadcasting platform in times of crisis. their synergy and complementarity with other radio communication systems.

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00:07:17.730 --> 00:07:27.730

Floor: and to identify high-level requirements to improve the role of broadcasting in this context. We are fully aware of the significance of this workshop

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00:07:28.060 --> 00:07:32.710

Floor: as well known. Extreme weather events compounded with climate changes.

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 $00:07:32.750 \longrightarrow 00:07:41.270$ 

Floor: earthquakes, tsunamis, as well as pandemics and other hazards, pose continuing challenges to countries and communities.

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 $00:07:41.620 \longrightarrow 00:07:51.700$ 

Floor: Itr plays an important role in emphasizing the critical function of radio communications in disaster, risk reduction and management and supporting its Member States.

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00:07:51.960 --> 00:08:03.520

Floor: Holding this workshop jointly with the Ebu Itr is also paying tribute to the vital role of broadcasting and disseminating life, saving information during crises.

41

00:08:03.930 --> 00:08:09.210

Floor: thanks to its outstanding performance, high quality universally available

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00:08:09.280 --> 00:08:12.460

Floor: ultra high resilience and cost efficiency.

43

00:08:12.690 --> 00:08:25.770

Floor: Since its inception, radio and terrestrial TV broadcasting has been one of the most powerful and effective ways of delivering early warnings and alerting the public during emergencies

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00:08:25.810 --> 00:08:28.500

Floor: and times of crisis and disaster.

45

00:08:28.680 --> 00:08:36.030

Floor: Timely, relevant and practical information supports effective response measures and saves lives

46

00:08:36.230 --> 00:08:45.970

Floor: for people directly affected. It comes as a vital form of humanitarian assistance. It is also well known for many years. When emergencies occur.

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00:08:46.190 --> 00:08:57.900

Floor: the general public expects, and is naturally prepared to receive information from broadcast radio services using small battery-powered am. And FM. Radio receivers.

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00:08:57.970 --> 00:08:59.000

Floor: Receivers.

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00:08:59.770 --> 00:09:04.010

Floor: Radio Broadcasting is considered by the general public

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00:09:04.080 --> 00:09:14.070

Floor: as the most reliable means of access, reliable means to access reliable high quality information every time everywhere

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00:09:14.360 --> 00:09:23.390

Floor: the resilience of distribution and delivery networks which are less susceptible than other communication systems to failure at a single distribution point.

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00:09:23.420 --> 00:09:31.170

Floor: especially as they are comprised of high-power, radio and terrestrial TV broadcasting transmitters with large coverage areas

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00:09:31.400 --> 00:09:41.860

Floor: terrestrial TV and radio broadcast infrastructure is highly robust and regularly remains operational. Even when other communications technologies fail

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00:09:41.930 --> 00:09:54.100

Floor: through emergency plans and facilities that broadcasters have to keep their signal on the air. and their news gathering and studio environments powered and operational in disaster situations.

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00:09:54.270 --> 00:10:00.800

Floor: examples, and experiences shared in today's workshop on disaster, planning preparedness and relief

00:10:00.960 --> 00:10:14.730

Floor: from the broadcasting industry around the world manifest how broadcast television and radio transmission infrastructure can support first responders, governments and the public at and the public at large.

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00:10:14.820 --> 00:10:16.520

Floor: In times of crisis

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00:10:17.090 --> 00:10:29.710

Floor: we are delighted to see new digital broadcasting technologies and systems, such as DAB and DAB, plus drm and ews, which some speakers will present at this workshop

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00:10:29.850 --> 00:10:35.370

Floor: to allow the integration of radio distribution chains into the public alerts plan.

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00:10:35.870 --> 00:10:36.820

Floor: or

61

00:10:37.410 --> 00:10:38.030

it's great

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00:10:42.400 --> 00:10:48.990

Floor: or enhance universal availability of the broadcasting systems in times of crisis. Meanwhile.

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00:10:49.080 --> 00:10:51.930

Floor: even older technologies are still useful.

00:10:52.100 --> 00:10:57.280

Floor: For example, international radio for disaster, relief irr

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00:10:57.360 --> 00:10:58.890

Floor: in the Atf Ban

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00:10:59.140 --> 00:11:12.530

Floor: I. Rdr uses unique propagation conditions and shortwave transmission that allows the dissemination of radio broadcast to areas very far hundreds or even thousands of kilometers from the broadcasting station.

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00:11:12.840 --> 00:11:21.970

Floor: It our just approved the revision of recommendation. It Our Vs. Dash 2,107, based on the radio regulations.

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00:11:22.440 --> 00:11:32.950

Floor: It recommends that it by irr frequencies between 6, and 26 megahertz, listed in this recommendation should be reserved for 24 h per day.

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00:11:33.320 --> 00:11:37.960

Floor: 35 365 days per year for emergency broadcasts.

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00:11:38.110 --> 00:11:39.750

Floor: We have also noted

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00:11:39.800 --> 00:11:57.040

Floor: that broadcasters are looking for new technical solutions without compromising on key principles enshrined by public broadcasters and authorities at the end of 2,022, I to our successfully approved, and a revised I to our recommendation

72

00:11:57.090 --> 00:12:08.520

Floor: with the addition of 2 fiveg broadcasting systems fiveg broadcasting could provide critical early warning, disaster, preparedness and response. Information

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00:12:08.620 --> 00:12:19.470

Floor: disseminated securely. The ubiquitous I and T. Receiving terminals, regardless of whether imt infrastructure cell towers for example are intact

74

00:12:19.880 --> 00:12:28.940

Floor: the application and development of global broadcasting hinges on the availability of sufficient spectrum and global standardization.

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00:12:29.270 --> 00:12:39.390

Floor: Itr offers a tried and tested forum to enable cooperation, the key ingredient to establishing trusted, globally recognized standards.

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00:12:39.790 --> 00:12:48.400

Floor: It ours, rules and procedures promote openness and transparency. bringing all members of the organization to engage in broadcasting standards development

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00:12:48.780 --> 00:12:59.440

Floor: it. Our study Group 6 and its predecessors were tasked with devising international standards. also known as I to our recommendations for end to end Broadcasting

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00:12:59.660 --> 00:13:08.290

Floor: these standards lay the foundation for technical trust in the quality, safety and compatibility of radio and television broadcasting systems

00:13:08.330 --> 00:13:13.340

Floor: which in turn support inclusive, sustainable development for people and the planet.

80

00:13:13.570 --> 00:13:26.790

Floor: together with it radio regulations and various regional agreements. I to our recommendations for broadcasting systems also enable the transmission of radio and TV programs with high spectrum efficiency.

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00:13:27.640 --> 00:13:39.290

Floor: the upcoming World Radio Communications Conference taking place in Dubai United Arab Emirates. Later this year we'll consider fixed mobile and broadcasting issues in the UHF Dan.

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00:13:39.720 --> 00:13:44.550

Floor: with the view to reviewing spectrum use and the needs of existing services.

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00:13:44.800 --> 00:13:58.040

Floor: those discussions will encompass broadcasting in the 470 to 960 Megahertz frequency band in it. Region one. and you are encouraged and welcome to participate in that discussion.

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00:13:58.220 --> 00:13:59.970

Floor: So with this, Mr. Chairman.

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00:14:00.160 --> 00:14:06.670

Floor: let me conclude by wishing you all a very successful meeting, and thank you for your attention. Thank you.

86

00:14:11.530 --> 00:14:14.720

Floor: Yeah, Thank you so much. It seems difficult for me

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00:14:14.790 --> 00:14:23.140

Floor: to make a summary of, because speech. How they like to express our many thanks to for us in the guidance

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00:14:24.050 --> 00:14:28.690

Floor: A. Her speech will be available in the workshop

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00:14:29.000 --> 00:14:30.840

Floor: a page shortly.

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00:14:31.160 --> 00:14:36.930

Floor: Now let's move on to our nice to speak. Mr.

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00:14:37.520 --> 00:14:40.120

Floor: So you have a

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00:14:40.590 --> 00:14:57.460

Floor: erez agmoni. Thank you very much, Mr. Chairman, Thank you to Mrs. Wilson, and thank you to all of you colleagues here, and also connected. Good afternoon is a real pleasure and honor to be here to represent Ivu to this event 150.

93

00:14:57.470 --> 00:15:05.990

Floor: The communication and broadcasting in times of crisis is something which is very important for our societies 150,

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00:15:06.040 --> 00:15:17.390

Floor: and this event is happening 10 years after another similar event that happened here at Itu in 2,013, and

95

 $00:15:17.720 \longrightarrow 00:15:37.370$ 

Floor: Erez Agmoni. In fact, we discussing with it you as if you we decided to have a new one Also, in view of the critical situation of a conflict that we are, say, living not far from our territories here 150,

96

00:15:37.370 --> 00:15:47.520

Floor: E. C.

97

00:15:47.670 --> 00:15:58.600

Floor: The extreme situation in Mariupol, for example, of people isolated there, the chaos that was created, and the difficulty for them to receive information

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00:15:58.620 --> 00:16:03.230

Floor: became key for them to know what their destiny was.

99

 $00:16:03.320 \longrightarrow 00:16:17.710$ 

Floor: and also the fact that the information was not reaching was also part of the say strategy in the conflict which was there. So information is, and became the fundamental one

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00:16:17.750 --> 00:16:35.980

Floor: a element that needed to be delivered, and we have been using virtually all the available technologies to reach these populations in that we have invented in the last 100 years of radio broadcasting, starting from short waves, for example, which we're revamped 250

101

00:16:35.980 --> 00:16:46.440

Floor: mit ctl, and and which demonstrated once again that this was an interesting solution, but going to the FM. Broadcasting, going to Dtt. Going to to 101

00:16:46.440 --> 00:16:59.720

Floor: and all possible ways. FM: of course, to to reach the population and satellite, which is another solution that will allow to reach populations when they are in this situation.

103

00:16:59.780 --> 00:17:10.910

Floor: But then, of course, this, you would say, is the extreme situation, and this is sort of magnifying lens that shows you how important it is to have communication in normal crisis

104

00:17:11.130 --> 00:17:27.180

Floor: erez agmoni. But crises are happening much more often that we could will, and, in fact imagine. And I will just keep 2 examples as a reference. One is the floods that in 2,021 up, and in Germany in August that demonstrated that 150

105

00:17:27.200 --> 00:17:37.700

Floor: events of that could happen any moment, can put in this total disruption a large part of the infrastructures, and only

106

00:17:37.700 --> 00:17:57.020

Floor: the broadcast infrastructures. We are there to reach the population for several hours, because the power supply system went down the batteries of the cellular network square, not enough for sustaining the functionalities of the cellular network, and all this, and then immediate impact on the fact that the population could not be reached with information.

107

00:17:57.200 --> 00:18:13.360

Floor: And likewise, if we look at much more recent event in Turkey and our colleague from T at International will present this in a moment more in depth. Only the FM. Radios stayed on all the dime during the events

108

00:18:13.380 --> 00:18:14.250

Floor: and

00:18:14.260 --> 00:18:36.270

Floor: the broadcast. The TV broadcasting. 30 min after the big first big event of the earthquake, we're back into function, and this was very important for the population to understand what was going on, because these highly disruptive events are really creating the confusion really creating the the difficulties for the old population to be

110

00:18:36.570 --> 00:18:52.600

Floor: erez agmoni reachable. So For all these reasons we decided to issue an Ebu recommendation, the recommendation 156 which is trying to summarize all the needs around the broadcasting in times of crisis 150,

111

00:18:52.600 --> 00:19:02.220

Floor: and the importance of having multiple media distribution infrastructures that can ensure continuity and resilience

112

 $00:19:02.240 \longrightarrow 00:19:03.840$ 

Floor: in these situations.

113

00:19:03.890 --> 00:19:12.610

Floor: So I would like to insist on the multiplicative infrastructures in any security system. One single solution is never good.

114

00:19:12.690 --> 00:19:37.330

Floor: because he's exactly that solution that will go into the troubles when you need it more. And so the multi-layer solution is what is important, and in fact, the more we go and we modernize our infrastructure. This convergence and this possibility of using broadcast infrastructures and broadband infrastructure in in a combined integrated way, represents a real opportunity for us not only

115

00:19:37.330 --> 00:19:52.250

Floor: during crisis, but in general, and then, when the infrastructures are built in such a way that the 2 infrastructures are ready there to go, and the broadcast part is available all the time, and the broadband one is also. Then, when the crisis happened, 101,

116

00:19:52.250 --> 00:19:58.420

Floor: we have an infrastructure at our disposal, which is receiving that it can be used by the old population.

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00:19:58.540 --> 00:19:59.330

Floor: So

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00:19:59.870 --> 00:20:04.720

Floor: the keys are the combination of the 2

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00:20:04.930 --> 00:20:20.130

Floor: for the resilience in the in the reliability, and the fact that these infrastructure should be used every day to inform, to educate, to entertain people, so that the moment the thing is, it is necessary, would be there, and will be working.

120

00:20:22.400 --> 00:20:41.600

Floor: I will touch upon another point that you on just you mentioned is about fiveg broadcasting. This is a very interesting example, where this converges is absolutely possible, and where, by definition, using the 3 Gpp specifications, the infrastructures are, say.

121

00:20:42.860 --> 00:20:51.590

Floor: you can combine infrastructures, and each and every citizen can have in his pocket a mobile phone that will be receiving

122

 $00:20:51.620 \longrightarrow 00:20:54.170$ 

Floor: information in the moment of crisis.

00:20:54.230 --> 00:21:02.170

Floor: maybe increasing the coding in the system so that you can be reached in any situation, while on an everyday life you

124

00:21:02.170 --> 00:21:18.720

Floor: you will receive information from the broadcast part, and from the unique as part from the seller one it. You can even combine the 2. So if you are losing packets on the broadcast one, for any reason, you can use the packet of the Unicas one to to correct those packets, and that the best of both words, so every resilience

125

00:21:18.720 --> 00:21:28.860

Floor: have reliability, and that sustainability, because you are using the low physics where they work best, and by combining them you obtain the best result

126

00:21:30.500 --> 00:21:37.450

Floor: all. For all these reasons it is very, very important that there should be a stable regulatory framework.

127

00:21:37.660 --> 00:21:44.250

Floor: that the land on which we are building the wireless infrastructures, our broadcast infrastructures

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00:21:44.440 --> 00:21:50.770

Floor: are stable and are available with a long-term certainty

129

00:21:51.200 --> 00:22:00.400

Floor: emergencies will not call us and say, it's going to happen. So we need to be there. All the time We need to have sufficient resources.

00:22:00.440 --> 00:22:06.710

Floor: and we need to support a continuous development on new application, technologies and networks.

131

00:22:07.090 --> 00:22:14.690

Floor: The critical infrastructures are well known in for broadcasting to have 4 strengths. Robustness

132

00:22:14.870 --> 00:22:22.010

Floor: their ability to reach large audiences independently from the number of users, so there is no saturation effect.

133

00:22:22.520 --> 00:22:29.500

Floor: with no risk of congestion of delays. and being resilient, using towers

134

00:22:29.540 --> 00:22:43.130

Floor: and the energy supply systems that are reliable and able to deliver the service. So I will stop here, and I will be listening to all the other presentation for this very interesting conference today. And thank you very much.

135

00:22:47.840 --> 00:23:01.150

Floor: Yeah. So many thanks. This is so the informative for presentation. We saw. It's what you include the this 153 50 56. This is so so good.

136

00:23:01.150 --> 00:23:08.270

So if you agree we will also leave your this presentation, and the prostitute is in the workshop for Web Page.

137

00:23:08.950 --> 00:23:14.950

Floor: That's okay. Thank you so much. No welcome, municipal. It's that you have flow.

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00:23:19.830 --> 00:23:22.660

Floor: Thank you, Mr. Chan, for the introduction.

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00:23:22.670 --> 00:23:29.040

Floor: and with the afternoon, everyone and good day to those in different parts of the world joining demotry.

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00:23:29.510 --> 00:23:34.740

Floor: And first of all, I like to thank the Itu graduate communication Bureau

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00:23:34.820 --> 00:23:45.850

Floor: and Ebu for having jointly organized this workshop. I also like to thank the program committee of the workshop that by

142

00:23:46.080 --> 00:23:49.090

Floor: or having planned the box of sessions.

143

 $00:23:49.700 \longrightarrow 00:23:59.490$ 

Floor: The theme of the workshop forecasting in times of crisis is timely and highly relevant to the current situation around the world.

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00:23:59.620 --> 00:24:10.190

Floor: We are. We are frequently encountering natural disasters. catastrophic events, infectious diseases. conflicts, and so on.

145

00:24:10.890 --> 00:24:13.820

Floor: As you may know, I'm. From Japan.

146

00:24:13.890 --> 00:24:23.030

Floor: which is prone to earthquakes and natural disasters. I often see fresh news reports of earthquakes by watching television.

147

00:24:23.250 --> 00:24:27.100

Floor: and also in preparation for emergency.

148

00:24:27.110 --> 00:24:38.350

Floor: We have a monthly forecast trial of the emergency warning signal transmission. So I think people in Japan may be more familiar with emergency, forecasting

149

00:24:39.920 --> 00:24:50.780

Floor: according to the definition of broadcasting service. By the Itu Constitution. the most important element is that the transmissions are intended

150

 $00:24:50.800 \longrightarrow 00:24:54.360$ 

Floor: for direct reception by the general public.

151

00:24:54.790 --> 00:25:02.960

Floor: and this is the phrase in an Ito resolution that broadcasting makes you so point to every. You are information everybody

152

00:25:02.970 --> 00:25:06.420

Floor: so widely available consumer receivers.

153

00:25:07.080 --> 00:25:10.310

Floor: Why, these are the technical definitions.

154

00:25:10.330 --> 00:25:24.720

Floor: Broadcasting also plays a fundamental role in the delivery of information, including emergency information and public safety advice, as well as education, culture, and entertainment

155

00:25:25.010 --> 00:25:29.660

Floor: to Raj audiences in the most effective and trusted way.

156

00:25:30.690 --> 00:25:40.730

Floor: When daily life is running seriously. It is important that people be educated about what to do in times of emergency.

157

00:25:41.520 --> 00:25:47.830

Floor: We can achieve this fairly easily by broadcasting educational content. Oh, where about

158

 $00:25:47.930 \longrightarrow 00:25:52.040$ 

Floor: we may fall into unexpected circumstances

159

00:25:52.250 --> 00:25:55.890

Floor: in emergency situations. 04.

160

00:25:56.090 --> 00:26:09.550

Floor: It is of paramount importance that what accurate, necessary, and comprehensive information is from 3 30, but to all people in real time during emergency situations.

161

00:26:10.930 --> 00:26:14.800

Floor: In delivering such critically important information.

162

00:26:14.850 --> 00:26:19.180

Floor: we also need to recognize the variety of audiences.

163

00:26:19.430 --> 00:26:26.480

Floor: For example, some people may have disabilities related to visual vision or hearing

164

00:26:27.170 --> 00:26:32.140

Floor: by us us. May not native speakers of the language, using the

165

 $00:26:32.660 \longrightarrow 00:26:37.370$ 

Floor: with us need universal and accessible broadcasting services.

166

00:26:37.650 --> 00:26:45.910

Floor: and the portable reception or broadcasting is also highly desirable when people have to evacuate from an emergency zone

167

00:26:46.020 --> 00:26:50.640

Floor: or for an electric power surprises and a bit unavailable.

168

00:26:52.200 --> 00:26:59.500

Floor: I'm proud that I to our 36, has developed a number of recommendations, reports, and handbooks

169

00:26:59.550 --> 00:27:07.370

Floor: addressing various technologies for broadcasting services that can be effectively used in times of crisis.

00:27:07.900 --> 00:27:10.640

Floor: and, thanks to gist, I to our techist.

171

00:27:10.810 --> 00:27:14.310

Floor: we can make the best use of a wide, a better.

172

00:27:14.400 --> 00:27:32.390

Floor: wide variety of broadcasting services, including radio television and multimedia services, to deliver and read about the information in a timely manner and in the most appropriate appropriate forms with accessible solutions to support different types of reception.

173

 $00:27:33.520 \longrightarrow 00:27:34.670$ 

Floor: And finally.

174

00:27:34.880 --> 00:27:42.130

Floor: I believe that this workshop will be a variable opportunity for us to explore future

175

00:27:42.200 --> 00:27:52.640

Floor: avenues for broadcasting and experiences in times of emergency, as well as technical solutions for emergency warning.

176

 $00:27:52.730 \longrightarrow 00:28:00.910$ 

Floor: and ultimately to be acknowledged. The pro or we tabletel road we're broadcasting in these times.

177

00:28:01.200 --> 00:28:05.790

Floor: So with that I wish you a successful workshop. Thank you very much.

00:28:08.930 --> 00:28:18.870

Floor: Thank you. We'll be Also, we'll be also. We'll be also post it, as in the web web page dedicated to this workshop.

179

00:28:19.160 --> 00:28:32.870

Floor: We that we're approaching. To conclude the organization. No. I'm. About to hand over the microphone to to Mr. And requested the moderator of for the session. One Andy, please go ahead

180

 $00:28:33.440 \longrightarrow 00:28:42.770$ 

Floor: mit Ctl. And thank you, rooting and welcome everybody. I have 2 speakers with me from 2 UN organizations who are greatly involved in the human side of what we're talking about here, 101.

181

00:28:42.860 --> 00:29:03.820

Floor: So we've got the United Nations. It's asked a risk reduction organization and and Unesco and from there which educational, scientific, and cultural. So i'm not going to. I'm going to let them introduce themselves because we have one. It has told me we have very little time, and I want to give my speakers as much time as possible. So first of all, I will hand over to Jeanette Ellsworth, you know.

182

 $00:29:04.340 \longrightarrow 00:29:23.700$ 

Floor: mit Ctl. And thanks very much. Thank you to the chair, and to all the other speakers here today, and thank you all for joining. So my name is Janet Ellsworth. I'm. The chief of communications, advocacy, knowledge, management, and it at U. N. Drr. And by way of a short introduction, because you and Yourr is maybe not one of the better known organizations, one

183

00:29:23.700 --> 00:29:38.630

Floor: Mit. Ctl. And we are the United Nations office that coordinates disaster, risk reduction in the UN. System. We are looking after the implementation of the send by framework for disaster risk reduction, which is one of the 2,031

00:29:38.630 --> 00:29:53.350

Floor: mit ctl. And agendas that came out with the Sdgs. So we're very tied very closely connected to the overall development agenda, and it's associated processes, such as the new urban agenda, the Paris climate agreement, etc. So one

185

 $00:29:53.350 \longrightarrow 00:30:07.410$ 

Floor: what Youndr does is we try to put a focus on disaster, risk, reduction and prevention. So that is acting before a hazard happens, and trying to prevent it from turning into a disaster.

186

00:30:07.420 --> 00:30:25.160

Floor: And this really means a shift in mindset. So a shift from away from managing disasters to managing risk, and that means looking at the risk helping countries to understand our risk, and then to advise how we can, how we can help to mitigate one.

187

00:30:25.160 --> 00:30:29.740

Floor: to prevent risk, and to to act before a disaster happens.

188

 $00:30:29.770 \longrightarrow 00:30:46.220$ 

Floor: So why is this so important? Well, we know that Dr. Makes good economic sense for every dollar that's invested in disaster risk reduction it can save. There's many different calculations, but it's roughly up to around \$15 in post disaster, recovery.

189

00:30:46.430 --> 00:31:01.730

Floor: and at the at the same time roughly, only 4% of development investment is actually invested in Dr. So we've got. We see that this it makes financial sense, but it's actually very challenging to Channel investment in that in that way.

190

00:31:01.950 --> 00:31:23.050

Floor: And then simultaneously, we have the challenge that our disasters, our exposure, and our risk to disasters is actually increasing. That's partly to do with climate change which is contributing to many extreme weather events around the world, and I know that we we heard a a couple earlier, and we'll hear about some some of those later 2.

00:31:23.050 --> 00:31:42.540

Floor: This means that by 2,030 we I expected to face roughly more than 500 medium to large scale disasters a year. That's 1.5 a day on average medium to large scale, and that means that this is giving. It's a growing problem for institutions, for investment

192

00:31:42.540 --> 00:31:50.050

Floor: and for what we need to do to protect the investments that we make in sustainable development to protect them from being impacted by disasters, one

193

00:31:50.080 --> 00:31:58.350

Floor: mit

194

 $00:31:58.370 \longrightarrow 00:32:17.850$ 

Floor: mit ctl. And as a stakeholder, so not just a delivery system for information, but a more complex role than that. So, of course, one of the roles would be to report on disasters, but the media is also expected to hold governments to account on their commitments, and to look at what's happening in between disasters one

195

00:32:17.850 --> 00:32:30.000

Floor: and then we also have the role that they play to disseminate trustworthy, reliable information at the moment of a disaster, and that includes the delivery of early warning system. 150

196

00:32:30.000 --> 00:32:44.820

Floor: mit

197

 $00:32:44.820 \longrightarrow 00:33:02.130$ 

Floor: mit ctl, and and they themselves can, of course, be affected by disasters, and that is the work that many of the organisations here are trying to do is to to prevent that from happening, and to ensure that the media can continue to operate in the case of a disaster event, 150.

00:33:02.250 --> 00:33:25.120

Floor: So some of the things that you and Deer are is working on. We have a big project that we work on with the world broadcasting union it use also involved, and Unesco have been involved in that. It's around media capacity, building and training. So we work with media institutions around the world to date. We've trained about 600 journalists from 60 countries in how to report on disasters, one

199

00:33:25.120 --> 00:33:41.680

Floor: mit ctl. And the language they they need to use, the type of giving them access to tools and resources that that might be useful, but also to work with them, to build up their own resilience, so to implement disaster and risk reduction strategies within the broadcasting institutions themselves 150

200

 $00:33:41.680 \longrightarrow 00:33:49.910$ 

Floor: mit.

201

00:33:49.980 --> 00:34:02.400

Floor: Another aspect of that program is now very closely linked to the early warning for all initiative which hopefully you've heard about, which is the a new initiative that the Secretary General has announced.

202

 $00:34:02.400 \longrightarrow 00:34:21.340$ 

Floor: with the AIM to help countries deliver universal coverage of early warning systems for everyone by the year 2,027. So a very short timeframe. And we are currently around 50% of the country of the world is covered by an effective early warning system.

203

00:34:21.340 --> 00:34:30.190

Floor: early warning systems, one of the key Dr. And mitigation strategies, because it can actually be the countries with early warning systems, and

204

00:34:30.190 --> 00:34:45.580

Floor: have at about 8 times less mortality than those, but do not have them in place. So this is all a part and parcel of the the critical role that broadcast media can play and then work that the UN system is doing together to help them to play that role.

205

00:34:45.860 --> 00:35:00.970

Floor: I wanted to flag one really important element which a couple of the the opening session speakers mentioned. And that's the role, the human element of the role or the the community part, and really making sure that we're delivering

206

00:35:01.030 --> 00:35:03.130

Floor: solutions that are

207

 $00:35:03.130 \longrightarrow 00:35:28.400$ 

Floor: useful and used by communities. So it's important that that we, the technology can answer a lot of questions. But we do need to meet people where they are accessing their information. So that's one part. One thing that you and Dirar is working very closely on this idea of making sure that the most at risk communities have access to information and know what to do with that information in a way that they're comfortable accessing.

208

00:35:28.800 --> 00:35:37.430

Floor: So i'm nearly at the end. I'm just going to summarize by by saying overall that

209

00:35:37.430 --> 00:36:01.870

Floor: the important role that the media plays before during and after, and a disaster means that we really need to prioritize access to resilient and community driven media infrastructure to all, and make sure that people know what to do with that information when a disaster event occurs. And this is one of the fundamental things that we can do to save lives and protect livelihoods. Thanks very much.

210

00:36:06.870 --> 00:36:14.860

Floor: Thank you. Thank you very much for that. And that's very timely. And some of the work we're doing in this in this group, and especially around personalization and localization. So.

00:36:14.860 --> 00:36:29.240

Floor: But straightaway I want to hand over to our next speaker, Unesco. Obviously lots of me more, but lots of people have heard of Unesco, and and not that we haven't heard of you, but lots of more have heard of Venezuela and the work you do, so i'll pass. I with your second speaker, Nietzsche. Thank you.

212

 $00:36:29.490 \longrightarrow 00:36:33.710$ 

Floor: Hello, everybody, and thank you for inviting me. Let's go to this workshop.

213

00:36:33.970 --> 00:36:46.320

Floor: Well, we have a lot to say, because we are the only UN agency that has the free flow of ideas through word and image in its mandate, and that is a media development per se.

214

00:36:46.480 --> 00:36:47.790

Floor: And

215

00:36:48.310 --> 00:36:58.050

Floor: today. I would like to invite you to think. Let's think together about broadcasting in times of crisis.

216

00:36:58.140 --> 00:37:12.240

Floor: from an angle which is very much you and angle which is the universal declaration of human rights that we crafted and adopted, and most countries have ratified

217

00:37:14.370 --> 00:37:15.810

Floor: in particular

218

00:37:15.910 --> 00:37:20.020

Floor: access to information and freedom of expression.

219

 $00:37:20.340 \longrightarrow 00:37:34.200$ 

Floor: Mit. Ctl. And people have a right to information. And in the context of emergencies we could say that, apart from all the material age and the resources that populations need 150.

220

00:37:34.660 --> 00:37:45.830

Floor: Information is as crucial as a form of aid as any other one, as shelter as water, as food

221

00:37:46.090 --> 00:37:49.960

Floor: or dangerous areas with landmines.

222

00:37:52.070 --> 00:37:54.090

Floor: but for this information

223

 $00:37:54.480 \longrightarrow 00:37:57.740$ 

Floor: to be available to them

224

00:37:57.800 --> 00:38:16.360

Floor: Erez Agmoni, the journalists, the reporters need to have access as well to that information. They need to have access to certain locations. They need to move freely, to be able to report freely and to be safe and not be

225

00:38:16.600 --> 00:38:23.390

Floor: shot in the injured or intimidated. And this is

226

00:38:23.440 --> 00:38:32.840

Floor: the agenda that Unesco is trying to to put forward in terms of crisis of emergency. It's the right to information

227

00:38:33.100 --> 00:38:39.740

Floor: and the safety of journalists and the working conditions of journalists and media

228

00:38:39.760 --> 00:38:45.320

Floor: as a prerequisite to information. The information that then will

229

00:38:45.520 --> 00:38:49.860

Floor: go through the broadcasting systems and infrastructure.

230

00:38:51.820 --> 00:38:54.340

Floor: as as you know. Sometimes.

231

00:38:54.400 --> 00:39:13.460

Floor: I would say, often in situations of emergency and risks. Broadcasting is not the first thought it's. It's not the first area that authorities think of safeguarding, and sometimes

232

00:39:13.460 --> 00:39:16.260

Floor: it's an area. And let's say

233

00:39:16.440 --> 00:39:30.580

Floor: E. C.

234

00:39:31.140 --> 00:39:49.230

Floor: A. Gravity even more, the crisis an emergency, I'm thinking, for example, in 2,014, 2,015, and the able a crisis and all. I don't know if some of you remember the situation of journalists not being able to access some sites, and not being accredited

235

 $00:39:49.230 \longrightarrow 00:40:02.240$ 

Floor: to broadcast information, and media being sometimes happens, obliged to just circulate public information

236

00:40:03.040 --> 00:40:12.330

Floor: mit ctl, and the information is important entertainment in situations of crisis. War emergency is also important, and i'm thinking, for example, 150.

237

00:40:12.660 --> 00:40:16.450

Floor: That's that that time stories for children.

238

00:40:16.580 --> 00:40:25.440

Floor: or sometimes poetry and other types of programs that allow

239

 $00:40:25.450 \longrightarrow 00:40:27.700$ 

Floor: for people to

240

00:40:27.740 --> 00:40:32.320

Floor: How about break? Let's say here from the from the emergency they are living in.

241

00:40:33.500 --> 00:40:50.430

Floor: As for freedom of expression, I would like to to highlight that it's equally important to listen to the to the audience, to have interaction with the audience, and to to provide them some sort of dignity.

242

00:40:50.460 --> 00:41:03.960

Floor: to be able to say what is happening to them, or what they fear, and and in a way to empower them in power than with confidence. Because that is the way where we

243

00:41:03.960 --> 00:41:10.750

Floor: turn, let's say, yeah, a passive victim into an active survivor that will want to help

244

00:41:10.800 --> 00:41:16.280

Floor: remember that in in that situation

245

00:41:16.370 --> 00:41:34.160

Floor: we also need the people to have confidence in the media they want. We want them to trust what the media is saying. They that they will be confident that the news they are hearing are impartial news.

246

00:41:34.160 --> 00:41:38.920

Floor: because otherwise it is mistrust and maybe cultural beliefs

247

 $00:41:38.980 \longrightarrow 00:41:45.370$ 

Floor: that will take over a room or and and this may

248

00:41:45.410 --> 00:41:51.790

Floor: my backlash or my boy, go against the the work of authorities and humanitarians.

249

00:41:52.510 --> 00:41:56.600

Floor: So we have in these situations a confluence of.

250

00:41:56.780 --> 00:42:06.390

Floor: let's say, different logics. The logics with which media works, the logic with which humanitarians and rescues

251

00:42:06.660 --> 00:42:23.330

Floor: work, and the logic of authorities, and the UN. And all all of us, let's say, from the Government, more or less governmental side. and it is in the respect of each other's logic that we can perhaps together

252

00:42:24.710 --> 00:42:27.980

Floor: the different conflicts.

253

00:42:28.060 --> 00:42:36.610

Floor: What I mean is that in this situation it's important to differentiate between

254

00:42:36.660 --> 00:42:38.880

Floor: independent journalism

255

 $00:42:39.390 \longrightarrow 00:42:43.950$ 

Floor: and the persuasive of strategic communications

256

00:42:44.320 --> 00:42:51.060

Floor: differentiate between verifiable information information that is, in the public interest

257

00:42:51.330 --> 00:43:04.060

Floor: and information which is for behavioral change. For example, if equation gestures or vaccination or prophylaxis is 2 different types of beasts. Let's say.

258

00:43:04.070 --> 00:43:07.940

Floor: one thing is what the population

259

 $00:43:07.980 \longrightarrow 00:43:11.040$ 

Floor: have the right to know.

260

00:43:11.120 --> 00:43:17.000

Floor: and the other would be what the population should learn to save their lives.

261

00:43:20.060 --> 00:43:29.520

Floor: and in this sense I don't think I have much more time. I I would like to to stress that the

262

00:43:29.850 --> 00:43:39.980

Floor: right to information, and the freedom of expression with its corollary, which is press. Freedom of media, freedom is important.

263

00:43:39.980 --> 00:43:53.300

Floor: E. C.

264

00:43:53.300 --> 00:44:05.850

Floor: When it comes to community media, for example, that community video will be recognized will be legal. We'll have a access fair access to frequency and licenses

265

00:44:05.870 --> 00:44:20.240

Floor: licenses, because we know also that when crisis appear, the the first ones to react are the ones in the community. It's the community helping themselves.

266

00:44:20.480 --> 00:44:38.460

Floor: And as one of the experts said, the community sometimes speaks other languages and the official language of the country. And usually community media is in a rural areas, or it's far to reach the area. Some populations who speaks

267

 $00:44:38.460 \longrightarrow 00:44:41.760$ 

Floor: to speak other language than the official one.

268

00:44:44.520 --> 00:44:47.560

Floor: So summing up.

269

00:44:47.880 --> 00:44:53.360

Floor: we need to build infrastructure. But we also need to build this enabling environment

270

00:44:53.790 --> 00:45:10.700

Floor: for Media to be able to work, and for the populations to enjoy the right to information and freedom of expression. And last, but not least, that would be the issue of preserving the emergency frequencies and having a plan to protect 150.

271

 $00:45:10.700 \longrightarrow 00:45:19.440$ 

Floor: The the emergency frequencies as tempting as it may be to commercialize them, but they have to remain in case of one

272

 $00:45:19.570 \longrightarrow 00:45:22.510$ 

Floor: of crisis. So thank you for listening.

273

00:45:26.470 --> 00:45:40.740

Floor: so can I. Just thank again out to UN speakers keynote speakers. I'm sure you'll and your you don't mind your presentations being available on the website is routing is suggested, and and i'm sure people here will have questions for you later.

 $00:45:40.740 \longrightarrow 00:45:59.120$ 

Floor: But thank you. And I think what just summing up what I heard from you, I think, and I all know is from coming from a about it's public service Broadcast the organization that with privilege comes responsibility. And with that responsibility you develop trust. And that's exactly what you've been talking about. So thank you again. What a round of applause for our 2 keynote speakers, please.

275

00:46:00.930 --> 00:46:03.690

Floor: I believe By

276

00:46:06.040 --> 00:46:14.690

Floor: No, actually, that's that's that's the way we are going through this session to before session. I think we have what time to to have a rest.

277

00:46:15.950 --> 00:46:27.670

Floor: Yeah, yeah, I think a nice to from that. That's the association will from 1450, so we'll have for 5 min for a coffee break. Thank you so much.

278

00:54:25.780 --> 00:54:27.360

Floor: Yeah, welcome back everybody.

279

00:54:28.920 --> 00:54:34.820

Floor: and welcome back to our second session of this afternoon.

280

00:54:35.310 --> 00:54:42.790

Floor: And this focuses on on how broadcasting was used in times of crisis.

281

00:54:43.190 --> 00:54:50.010

Floor: and and we'll have examples of different applications, and from different parts of the world

282

00:54:50.840 --> 00:54:55.910

Floor: at the speakers, will have a relatively short period of time to speak to you.

283

00:54:56.330 --> 00:55:04.440

Floor: but the presentations that will be provided for you online and after the event.

284

00:55:04.650 --> 00:55:14.830

Floor: And our first presentation is from who's living from the who is Vice President of spectrum, engineering and strategy, the Sinclair Broadcast group.

285

 $00:55:15.210 \longrightarrow 00:55:24.730$ 

Floor: and he's going to talk to you about the United States case. Thank you, Mr. Chairman. Thank you. I it you are. Thank you, Ebu.

286

00:55:25.000 --> 00:55:46.980

Floor: We're organizing this. I think this is extremely valuable. But 2 weeks ago in California. in San Bernardino, California, which is some mountain villages, there was an unexpected freak snowstorm. They don't usually get snowstorms over there, and they received 203 cm of snow. It's 2. It's about 2 and a half weeks ago. They're still digging out.

287

00:55:47.000 --> 00:56:02.640

Floor: There was no there was no way for them to prepare for this. You can imagine there's no food, energy, medicine, and things. So they're They're suffering like that. So what failed? What failed was an inadequate emergency alerting, tied to weather, forecasting

288

 $00:56:02.720 \longrightarrow 00:56:11.760$ 

Floor: the drifts by the way, are 4 meters high, so there is no equipment that can that can dig them out. So everything. So in in summary

00:56:12.410 --> 00:56:24.540

Floor: TV has the reach. No question about it now in in the United States. The information that we send now is essentially a very short Twitter message, very short Twitter message

290

00:56:24.790 --> 00:56:26.430

Floor: right across the screen.

291

00:56:26.840 --> 00:56:33.830

Floor: The next step that we have is now reaching more people with the most relevant targeted information. So we

292

00:56:34.270 --> 00:56:37.090

Floor: we will discuss. I will discuss now

293

00:56:37.630 --> 00:56:46.960

Floor: the crises, the scope in the Us. And most importantly, what to look forward to with the new system that we've developed, and is now

294

00:56:46.990 --> 00:56:58.070

Floor: in in the process of being implemented. So what we call disasters in the in the Us. Is not different than any place else. They're divided into categories here, and you can see them is.

295

00:56:59.350 --> 00:57:07.980

Floor: There's whether this all the ones associated with, whether there's the health. We just went through. Geological earthquake, tsunamis, volcanoes.

296

00:57:08.140 --> 00:57:15.230

Floor: accidents, transportation terrorist attacks, chemical biological you know, accidents transportation. We've had 2 major

297

 $00:57:15.290 \longrightarrow 00:57:22.290$ 

Floor: train derailments in the past 2 weeks, which caused an enormous amount of chemicals to be emitted by

298

 $00:57:23.380 \longrightarrow 00:57:43.170$ 

Floor: just to show you some frequency. You can see the numbers here tornado frequencies. We have 1,250 a year wildfires. I'll talk more about that. But 75,000 a year, damaging earthquakes as many earthquakes in the United States a year but a 120 a year are ones that actually cause death. So, unfortunately there's no shortage of disasters.

299

00:57:43.170 --> 00:57:44.500

Floor: New York City.

300

00:57:44.520 --> 00:57:52.330

Floor: You can. You can imagine we had a hurricane that was actually called Super Storm Sandy and the

301

00:57:52.440 --> 00:58:05.890

Floor: the radio audience skyrocketed by 370 along the areas that were impacted disasters in the Us. Cost approximately 78 billiondollars a year for recovery.

302

00:58:05.990 --> 00:58:23.960

Floor: We actually the again. One of the headlines is: we tested this system that we're going to talk about. Now we test it. Last summer during our Independence Day successfully in Washington, DC. And it was a success tested with the emergency managers and the government agencies.

303

00:58:23.980 --> 00:58:25.660

Floor: So

304

 $00:58:26.950 \longrightarrow 00:58:37.570$ 

Floor: what do we have today? Today we have this Eas: I'm. Going to call it as is the emergency alert system, which is essentially it's a text message. It's a text message on your screen. That basically says

305

00:58:38.320 --> 00:58:43.860

Floor: this is an emergency tuned to your local television or radio station. So it's telling you

306

00:58:44.050 --> 00:58:57.600

Floor: mit ctl, and you don't have enough information here, but now tune in. So you learn more. So remember that because that's very, very important. So while the alerts are very short, and then they urge you to tune and broadcast is, you have to bear in mind 250

307

00:58:57.660 --> 00:59:04.750

Floor: cover emergencies before during and after, as we just spoke about, and they they cover them with experts. So

308

00:59:04.930 --> 00:59:16.300

Floor: I have Atsc. 3. That's the new system, and it adds information, which is, you can see in this picture. Well in. You saw it had Doppler radar, and it gives other hyper localized.

309

00:59:16.330 --> 00:59:20.390

Floor: I'm. Just moving to the next, which is the title is Emergency

310

00:59:21.060 --> 00:59:29.740

Floor: Advanced emergency informing, and this really takes advantage of the attributes of the local broadcast television. It's long form

 $00:59:29.870 \longrightarrow 00:59:42.380$ 

Floor: to local television, continuous local TV coverage which goes on over hours or days. It's practice practical. It's very actionable. Tells you what to do for viewers, listeners.

312

00:59:42.410 --> 00:59:58.520

Floor: professionals with credibility and local area knowledge, and that's what we're doing here. So it's about the presentation, the emergency information, the new system we have. It is a voluntary app, but it's based on the same emergency alert. It combines it with new multimedia information.

313

00:59:59.570 --> 01:00:16.180

Floor: There it is. You can see what it would look like on the bottom, and this is for a missing child which goes out over locally and with this system, if you know approximately the re, the geographic region, then you know, then that will show you where it is so, then the next we have.

314

01:00:16.280 --> 01:00:30.270

Floor: We're combining the news and information we're combining. You could click through a couple of these, these, combined with the emergency alert systems. And this integrated data in the IP gives you the information that you need.

315

 $01:00:30.290 \longrightarrow 01:00:49.940$ 

Floor: and it gets transmitted to the right people. So within the signal. We have the beginning of the signal. We'll call it the preamble. Within the preamble we have the a bootstrap signal no more technical than that. The bootstrap signal contains the wake up bits. That means that the television that's in your house, or even that you're carrying around with a mobile.

316

01:00:50.510 --> 01:00:51.840

Floor: a mobile device.

317

01:00:51.940 --> 01:00:59.230

Floor: The television in your house is off, let's say, 20 h a day. Well, this now contains a wake up bit.

318

01:00:59.240 --> 01:01:05.540

Floor: so it will wake up your television and tell you a disaster is on the way. Whatever it is, it could be a hurricane, a tornado.

319

01:01:05.620 --> 01:01:14.340

Floor: and it will now give you more information than that text message. It will tell you, and it will even include things like road closures which i'll show you in a second.

320

01:01:15.320 --> 01:01:23.030

Floor: So the this is how it's really combined. So we're combining very, very simply. We're combining on the bottom with the

321

01:01:23.550 --> 01:01:32.370

Floor: If you switch, we're combining with the eas and the atsc receiver, and you're now effectively getting

322

01:01:32.740 --> 01:01:42.870

Floor: visual assets. You're getting maps with contextual views and information. You're getting on Scene: video. And it's really a distillation of graphical information.

323

01:01:45.130 --> 01:01:45.970

Floor: So

324

01:01:47.530 --> 01:01:49.980

Floor: the common alerting protocol, the cap.

01:01:50.530 --> 01:01:54.540

Floor: all that does is, it combines the the information

326

01:01:54.650 --> 01:02:11.410

Floor: from the Eis, and from all of this new information that we have seamlessly it combines it. So. Who benefits from this? Well, as we've just shown the emergency management professionals benefit police fire ems. They've asked whether they can put these receivers

327

01:02:11.410 --> 01:02:21.000

Floor: in their headquarters in police fire and the emergency medical stations, hospitals, public shelters. Actually, you could put them wherever you want. You can put them in the

328

01:02:21.490 --> 01:02:26.410

Floor: where you might think by the beaches, where you might expect there could be a

329

01:02:26.830 --> 01:02:35.700

Floor: giant storm with tsunami as as a another. So the bottom shows you an evacuation order. The evacuation orders will

330

01:02:35.850 --> 01:02:46.030

Floor: be smart, so they don't tell everybody just evacuate, and then you're causing the massive traffic jams and collateral deaths. They will be targeting different

331

01:02:46.120 --> 01:02:48.900

Floor: regions to go in different directions.

332

01:02:50.290 --> 01:03:00.260

Floor: So the Atsc. 3 is broadcast Internet so it is an IP-based system. So now i'll just talk about the cost of the public is 0.

01:03:00.530 --> 01:03:11.800

Floor: Broadcast is a funding all the emergency coverage. So there's there's no government taxpayer Again, free to the public really means that it's a public service commitment from the local broadcasters

334

 $01:03:12.390 \longrightarrow 01:03:17.660$ 

Floor: in exchange for getting the the license that we have. It's mobile with the proper chipset

335

01:03:17.710 --> 01:03:26.050

Floor: and preserving local spectrum is essential to preserving this public service in times of crisis. And, by the way, this is proof

336

01:03:26.400 --> 01:03:30.880

Floor: to our Fcc. And to the it that we need our UHF spectrum.

337

01:03:30.990 --> 01:03:37.740

Floor: So this is now I'm. Showing. The the next is the is how the emergency alert would be displayed.

338

 $01:03:38.320 \longrightarrow 01:03:57.470$ 

Floor: One more please. So the emergency we're finalizing on this new voluntary standard. It's called visually integrated display symbology. And essentially this is about inclusiveness. We want to ensure that it works for all audiences, regardless of visual media, language, ability, or culture. And this is also associated with the

339

01:03:57.530 --> 01:04:01.900

Floor: groups. So group you'll get different group warnings. A group, one and 2 means

340

01:04:02.000 --> 01:04:03.930

Floor: most of your category group

341

 $01:04:04.000 \longrightarrow 01:04:09.930$ 

Floor: 3 is less is less critical group. 4 is information, and a group. 5 is for our testing

342

01:04:12.420 --> 01:04:32.070

Floor: emergency learning in the Us. The bottom one over here is the most important, extremely robust, resilient, and reliable Mobile to in Buffalo. Less 2 weeks ago Mobile would have helped these people. So for the viewers it's about being always available. You can wake up whenever life and property is in danger.

343

01:04:32.520 --> 01:04:36.340

Floor: and you can see here that the cells don't always survive.

344

01:04:36.410 --> 01:04:44.630

Floor: and broadcast, has more backup provisions than the 2 that you see there for the broadcasters. If you can.

345

 $01:04:45.270 \longrightarrow 01:04:47.750$ 

Floor: you can move over for the broadcasters.

346

01:04:47.780 --> 01:05:06.080

Floor: You don't have to interrupt programs. You, don't have to decide whether to interrupt programs. This can also be expanded to other things, such as school clothing be on TV. It's about it's about mobile that's what it's about. It maintains the broadcast of social contract. And again for the broadcasters they now are able to provide. All this information.

347

01:05:06.080 --> 01:05:23.780

Floor: On the right is evacuation. On the left you see a hurricane, and that's all. So case studies wildfire. Wildfire consumes 8 million acres a year. In the Us. 8 million acres is the

equivalent of the landmass of of the country of Luxembourg times 13, and they move very, very quickly.

348

 $01:05:23.800 \longrightarrow 01:05:25.150$ 

Floor: Tornadoes.

349

01:05:25.770 --> 01:05:30.110

Floor: tornadoes in the in the Us. We have 1,250 a year.

350

01:05:30.170 --> 01:05:48.460

Floor: If we have now alerting with precision combined with precision, weather forecasting. Wow! There's a lot of lives that could be saved, and this is just another storm that has a special name. It's called the D Retro. We never heard of it before. It traveled 600 miles and 10 h, but what's more important about this is that it knocked out so many cell

351

01:05:48.770 --> 01:05:56.120

Floor: sell not just towers, but the landline connections as well. So my bottom line here is that

352

01:05:56.160 --> 01:06:08.890

Floor: numerous interconnected telecom network assets distributed geographically are inherently difficult to make reliable. Local broadcast television and radio architectures stand in stark contrast

353

01:06:09.210 --> 01:06:17.370

Floor: broadcasts can mitigate the impact of telecom emergency difficulties, and we look forward to nationwide rollout of this new system.

354

01:06:17.420 --> 01:06:21.960

Floor: Thank you all so much. Thanks very much, and yes, thank you very much indeed.

01:06:23.400 --> 01:06:43.070

Floor: and we will move straight away to our second presentation, which is a broadcast broadcasting technologies, rules during the Oman natural crisis, and it is going to be given to us by Dr. Abdullah Al Aimi, who is the project manager.

356

01:06:43.080 --> 01:06:45.980

Floor: or DVD. 2 in Oman.

357

01:06:54.130 --> 01:07:01.760

Abdullah Alaraimi-Oman: Do you hear me? Yes, we do thank you very much indeed.

358

01:07:01.840 --> 01:07:08.200

Abdullah Alaraimi-Oman: And actually I want to talk. I want to talk about the broadcasting to Gloria's rule during that natural crisis.

359

01:07:11.210 --> 01:07:17.910

Abdullah Alaraimi-Oman: these next and this again, that I have 5 points, of course.

360

 $01:07:17.940 \longrightarrow 01:07:32.150$ 

Abdullah Alaraimi-Oman: First, we will talk about the introduction of the video clip and the typhoon effect in Oman, and I want to talk also about the engineering sector with in my ministry.

361

01:07:32.150 --> 01:07:50.750

Abdullah Alaraimi-Oman: and the broadcasting to normally. That's help us actually during the typhoon, which head oman, and finally, of course, I will talk briefly about the emergency plan in the satellite. If we can see Oman is located at the eastern part of the Arabian Peninsula.

01:07:50.750 --> 01:07:53.650

Abdullah Alaraimi-Oman: This actually

363

01:07:53.680 --> 01:08:00.090

Abdullah Alaraimi-Oman: in recent years. Many typhoons actually hit over

364

01:08:00.110 --> 01:08:06.860

Abdullah Alaraimi-Oman: because it's open through the Indian Ocean. Next, please

365

01:08:26.319 --> 01:08:37.830

the the

366

01:08:43.390 --> 01:08:54.080

the

367

01:09:49.870 --> 01:09:55.210

the

368

01:10:10.100 --> 01:10:24.880

I a the

369

01:10:26.410 --> 01:10:44.910

the

370

01:11:14.740 --> 01:11:16.600

Floor: hey? Dr. Abdul, are you with us?

01:11:24.950 --> 01:11:29.110

Floor: And we can see a satellite moving around.

372

01:11:31.930 --> 01:11:33.620

Floor: Nope, it's stopped.

373

01:12:03.260 --> 01:12:10.420

Floor: Okay. And if this, if this doesn't resume, we we that the presentation slides.

374

01:12:10.540 --> 01:12:16.430

Floor: including the video, will be available on the on the Conference website.

375

01:12:17.430 --> 01:12:22.380

Floor: And maybe, if you agree, we'll move on to our next presentation, if we can.

376

01:12:22.620 --> 01:12:30.420

Floor: on the basis that if we can get Dr. Abdullah back we I am back. Sorry. I'm: right. Okay, Good.

377

01:12:30.610 --> 01:12:38.510

Floor: And we have another 3 min. Are there any key points you'd like to mention.

378

01:12:40.100 --> 01:12:51.510

Abdullah Alaraimi-Oman: This is the the some of iphones that had the satellite since 2,007 to 2,021 and next, please.

379

01:12:55.840 --> 01:12:58.500

Abdullah Alaraimi-Oman: here and

380

01:12:58.590 --> 01:13:03.760

Abdullah Alaraimi-Oman: typhoons effects, as we can see here from left-hand side. You can see

381

01:13:03.830 --> 01:13:21.990

Abdullah Alaraimi-Oman: the whole studio TV studio. It's it's full of water and the right hand side. You can see also our trust, one of the transmitter side. and our FM. And DVD. Transmitters all being broken.

382

01:13:22.050 --> 01:13:23.060

Abdullah Alaraimi-Oman: How are you

383

01:13:24.600 --> 01:13:26.030

Abdullah Alaraimi-Oman: next, please.

384

01:13:27.980 --> 01:13:39.340

Abdullah Alaraimi-Oman: Also, here we have, and our ministry. We have a department for engineering sector, and this

385

01:13:39.340 --> 01:13:48.610

Abdullah Alaraimi-Oman: hey departments. Of course we can see them here from the studio and radio, 1 one TV till the it department.

386

01:13:50.740 --> 01:13:51.730

These.

387

01:13:54.070 --> 01:14:10.420

Abdullah Alaraimi-Oman: of course, in the crisis, mainly the audience received that information from the the studio, either TV and television TV on radio.

388

01:14:10.420 --> 01:14:20.040

Abdullah Alaraimi-Oman: Of course, we have. FM: we have a media wave. We have a TV, but also in the same time

389

01:14:20.250 --> 01:14:36.120

Abdullah Alaraimi-Oman: to reach those 3 stations through our main studio. Of course we have. The Earth station has satellite and fiber, and the new

390

01:14:36.120 --> 01:14:43.330

Abdullah Alaraimi-Oman: technology that for 45 G Mobile networks and application, Of course, with the Internet services.

391

01:14:46.250 --> 01:14:56.290

Abdullah Alaraimi-Oman: This is one of the 45 G Mobile network, and it help us actually, during the crisis.

392

01:15:00.220 --> 01:15:01.310

Abdullah Alaraimi-Oman: he's next

393

01:15:01.810 --> 01:15:10.120

Abdullah Alaraimi-Oman: this program. Actually, this is TV program. It's live. And in this TV program during the COVID-19 pandemic.

394

01:15:10.350 --> 01:15:19.100

Abdullah Alaraimi-Oman: And all this actually it happens with that new new technologies that we have it in our days.

01:15:22.770 --> 01:15:28.110

Abdullah Alaraimi-Oman: This is another example for the 45 G Mobile network

396

01:15:31.930 --> 01:15:37.580

Abdullah Alaraimi-Oman: and the mobile applications plus the mobile network

397

01:15:37.810 --> 01:15:49.390

Abdullah Alaraimi-Oman: plus the Internet services availability. It helped us actually to send our message to the audience or whatever in the

398

01:15:53.050 --> 01:15:53.760

Yeah.

399

01:15:56.770 --> 01:15:58.460

Abdullah Alaraimi-Oman: please. Next.

400

01:15:58.740 --> 01:16:02.240

Abdullah Alaraimi-Oman: this is also a radio program from

401

01:16:02.560 --> 01:16:04.890

by using 45 to mobile network.

402

01:16:07.830 --> 01:16:15.770

Abdullah Alaraimi-Oman: and this one same during the pandemic in the COVID-19 days.

403

01:16:18.950 --> 01:16:20.500

Abdullah Alaraimi-Oman: And I guess you

404

01:16:20.660 --> 01:16:39.290

Abdullah Alaraimi-Oman: Yeah, Of course we have at least once a year. We have a legacy plan and the country for all the unsafe association. Of course the broadcasting is there in this emergency plan and in the

405

01:16:39.290 --> 01:16:41.080

Abdullah Alaraimi-Oman: and this is the

406

01:16:41.110 --> 01:16:43.020

last

407

01:16:43.140 --> 01:16:48.460

Abdullah Alaraimi-Oman: slide, and sorry for inconvenience.

408

01:16:49.490 --> 01:17:07.960

Floor: No problem, thank you very much indeed for your presentation, and thank you also for respecting the others and keeping to time. That was very good. And we're going to pass on to our next presentation, which is the third one in the series, which is the D. A. B plus case.

409

01:17:07.970 --> 01:17:25.700

Floor: which is emergency warning with the a. B. And it's going to be given by Dr. Vitt Ordish Leger, who is the head of Technology, and in the media Management and Public Relations Department of Blm.

410

01:17:26.100 --> 01:17:30.220

Floor: And so which is a regulator of the southern part of Germany.

01:17:30.350 --> 01:17:33.780

Floor: and I pass over to Mr. Holy Schleger.

412

01:17:35.020 --> 01:17:41.510

Veit Olischläger: Yeah, thanks, Peter. Hope you can hear me warm. Welcome to everybody from Munich, Germany.

413

01:17:41.680 --> 01:17:58.410

Veit Olischläger: I am pleased to give you a short update regarding warning options with the a B plus the next slide, please. as we heard before we had this flooding disaster in 2,021 heavy flooding. Several parts of Germany. Midwest was hit, the hardest

414

01:17:58.410 --> 01:18:12.330

Veit Olischläger: All cell phone networks were destroyed. There was no warning and no communication possible. And that's the reason why Germany things about the new ideas, new warning mix next slide, please.

415

01:18:13.530 --> 01:18:20.960

Veit Olischläger: One important thing is that broadcasting helped already, and can even help better in the future. Why is that

416

01:18:22.290 --> 01:18:26.350

Veit Olischläger: the broadcasting is using ex post sides.

417

01:18:26.440 --> 01:18:35.530

Veit Olischläger: Often they have additional power supply. Broadcasting, as you all know, is one too many communication and one to one. and there is no overload.

418

01:18:36.410 --> 01:18:44.010

Veit Olischläger: There are widely spread devices for receiving broadcast signals, and a regional demarcation is possible.

419

01:18:44.040 --> 01:19:01.540

Veit Olischläger: And now let's switch to a digital. Especially daa plus is growing in Germany. More than 30% of the German households and more than 30% of the Bavarian households are equipped with at least one DAB plus receiver, and next slide, please

420

01:19:03.070 --> 01:19:06.220

Veit Olischläger: the Ib plus the standard. It's Etsy norm

421

01:19:07.390 --> 01:19:22.410

Veit Olischläger: defines an alarm announcement. This is an alarm function which is working for every program in the multiplex. You only press the button once and then all the programs typically 16 in Germany

422

01:19:22.410 --> 01:19:33.020

Veit Olischläger: are interrupted by this information. The information is given by speech or by text in the display, and so on, and there is even the option to

423

01:19:34.130 --> 01:19:43.110

Veit Olischläger: link other multiplexes to the linked, alarming multiplex. So we can spread the information all over the network

424

01:19:43.330 --> 01:19:59.470

Veit Olischläger: Nowadays, since several months new receivers are available. You see them on the right side. They are able to receive this alarm announcement properly as defined in the Standard and Dod Association in Germany.

425

01:19:59.470 --> 01:20:14.280

Veit Olischläger: forms a purpose proposal to world that to bring minimum requirements to an international standard, and in addition to the minimum requirements, they are advanced functionalities also available.

426

01:20:14.470 --> 01:20:19.060

Veit Olischläger: The the top feature of the Ib plus is the

427

01:20:19.100 --> 01:20:20.520

Veit Olischläger: possibility

428

01:20:20.540 --> 01:20:35.140

Veit Olischläger: to the wake up function. So all the radios can be waked up, even when they are in the stand by mode, and this is pretty important for the warning mix for all institutions

429

01:20:35.140 --> 01:20:41.530

Veit Olischläger: in Germany, because we are sure that we need more than one way to inform people

430

01:20:41.590 --> 01:20:43.970

Veit Olischläger: about any problem.

431

01:20:44.070 --> 01:20:54.330

Veit Olischläger: The a B. To go go further on is barrier free, and, for example, it's multi-language based. You can have it on the display, and so on.

432

01:20:54.360 --> 01:20:57.580

Veit Olischläger: And one last slide switch over, please.

433

01:20:58.950 --> 01:21:07.430

Veit Olischläger: We have a local test bed in Bavaria, but we can spread it easily to a nationwide network. We have test alarms twice a day.

434

01:21:08.570 --> 01:21:22.610

Veit Olischläger: There we do testing of devices in network operation, and we try to get an automatic automation connection to the central warning unit. This is a cap based national warning program called Mobile.

435

 $01:21:22.700 \longrightarrow 01:21:37.420$ 

Veit Olischläger: You can find a demo in the Youtube link if you want to see how it works, and we hope to get this warning function on air within the next a month or some years. Thank you very much. So far from Germany.

436

01:21:40.120 --> 01:21:54.180

Floor: Thank you very much indeed, Mr. Ruddish Layer, and thanks very much indeed for giving us that explanation that, as I said, the slides will be online. And there is a video that you can link to as well about how this system works.

437

01:21:54.290 --> 01:21:58.140

Floor: And we're going to move from Germany now to Turkey, in Syria.

438

01:21:58.470 --> 01:22:14.010

Floor: where we have a a recent addition to the program from Trt. Who is Mr. Fairhart? You sucked us. who is going to give us an update on a very recent app situation that has taken place there.

439

01:22:14.040 --> 01:22:18.260

Floor: And and I hope you're okay. Can you hear us?

440

01:22:19.210 --> 01:22:23.940

Ferhat Uzaktas: Okay. The

01:22:25.920 --> 01:22:34.110

Ferhat Uzaktas: we have faced a bit desested on a 65 there at 40'clock am. In the South, as of

442

01:22:34.480 --> 01:22:37.450

Ferhat Uzaktas: it has also affected not soia.

443

01:22:37.460 --> 01:22:44.630

Ferhat Uzaktas: According to a scientist, it was the biggest earthquake for the to Kia in the last century.

444

01:22:45.880 --> 01:22:47.060

Ferhat Uzaktas: Second.

445

01:22:49.750 --> 01:22:54.430

Ferhat Uzaktas: our disaster agency says that in this case

446

01:22:54.520 --> 01:23:01.800

Ferhat Uzaktas: 4 to 6,000 people passed away. Approximately 100,000 people injured.

447

01:23:01.980 --> 01:23:11.960

Ferhat Uzaktas: 230,000 buildings collapsed, or the heavily damaged. approximately 80,000 people. This under the level

448

01:23:13.440 --> 01:23:14.730

Ferhat Uzaktas: next, please.

01:23:15.970 --> 01:23:21.670

Ferhat Uzaktas: In this earthquake a there they were 11 cities.

450

01:23:21.910 --> 01:23:28.380

Ferhat Uzaktas: and almost 14 million people affected this earthquake.

451

01:23:28.510 --> 01:23:39.590

Ferhat Uzaktas: Approximately 3.5 million people had to move, and other cities people who had to stay in this area, now live in

452

01:23:39.670 --> 01:23:44.310

Ferhat Uzaktas: tent and fabricated a container.

453

01:23:46.240 --> 01:23:48.300

Ferhat Uzaktas: In this period

454

01:23:49.460 --> 01:23:54.740

Ferhat Uzaktas: 90 countries have helped to and to share our pain.

455

01:23:54.880 --> 01:24:05.080

Ferhat Uzaktas: Some of them have sent a first aid person with a fully equipped. Some of them is sent a lot of foods and goods.

456

01:24:05.300 --> 01:24:13.460

Ferhat Uzaktas: Some countries have made immediately field hospital for the people who are injured, the disasters

457

01:24:13.820 --> 01:24:19.990

Ferhat Uzaktas: many times, all of them many tanks, all of them the other very

458

01:24:25.520 --> 01:24:29.740

Ferhat Uzaktas: after the general information of the earthquake.

459

01:24:29.810 --> 01:24:32.530

Ferhat Uzaktas: And now I can

460

01:24:32.580 --> 01:24:35.400

Ferhat Uzaktas: broadcasting site.

461

01:24:35.870 --> 01:24:40.950

Ferhat Uzaktas: The str we have for local office. In this idea.

462

01:24:41.340 --> 01:24:49.930

Ferhat Uzaktas: These offices are contains a few regular station and one TV protection studios for the production.

463

01:24:50.860 --> 01:24:55.010

Ferhat Uzaktas: Now they are using all of them

464

01:24:55.280 --> 01:25:02.720

Ferhat Uzaktas: for distribution site. We have a 90 that is still transmitted station in this area.

465

01:25:03.200 --> 01:25:08.990

Ferhat Uzaktas: and 250.

01:25:09.350 --> 01:25:15.010

Ferhat Uzaktas: Thank God, that is

467

01:25:20.330 --> 01:25:27.090

Ferhat Uzaktas: additionally, there are 2 maintenance office for also in this area.

468

01:25:29.050 --> 01:25:40.420

Ferhat Uzaktas: After that quick, we have seen that one transmitted station has a totally collapsed. Those certifications were heavily damaged.

469

01:25:40.960 --> 01:25:44.890

Ferhat Uzaktas: 28 stations, about moderately damaged

470

01:25:45.330 --> 01:25:49.830

Ferhat Uzaktas: the 57 cations have more damage.

471

01:25:55.290 --> 01:26:06.460

Ferhat Uzaktas: except a follow the 5 stations we managed to continue FM. Broadcasting this, if i'm transmit to to to it. In this period

472

01:26:06.610 --> 01:26:12.690

Ferhat Uzaktas: you broadcast a generally, and also of disaster as an existed agency.

473

01:26:12.890 --> 01:26:24.600

Ferhat Uzaktas: and also the people can listen cause of the TV watching TV in this area. At that time

01:26:24.620 --> 01:26:26.720

Ferhat Uzaktas: it is not so possible

475

01:26:31.370 --> 01:26:40.730

Ferhat Uzaktas: due to electricity has a. We have used mostly generators

476

01:26:40.900 --> 01:26:53.720

Ferhat Uzaktas: after the earthquake. We have tried to add oil for generator immediately who or 3 days later the electricity problem was solved mostly.

477

01:26:53.820 --> 01:27:02.380

Ferhat Uzaktas: but in this schedule we use a generally generated for, especially at Pm. Transmitters.

478

01:27:05.260 --> 01:27:09.640

Ferhat Uzaktas: As soon as we get a news about the earthquake.

479

01:27:09.690 --> 01:27:21.990

Ferhat Uzaktas: all the regular channels started to join broadcasting with radio one. They they changed all broadcasting

480

01:27:22.060 --> 01:27:24.250

Ferhat Uzaktas: in 13 min.

481

01:27:24.390 --> 01:27:33.370

Ferhat Uzaktas: and then at the beginning they sound of the 10 news TV channel.

482

01:27:33.420 --> 01:27:37.340

Ferhat Uzaktas: Later it has started its own program.

483

01:27:41.920 --> 01:27:43.730

Ferhat Uzaktas: TV site.

484

01:27:43.870 --> 01:27:48.640

Ferhat Uzaktas: same system have been implemented on TV sites.

485

01:27:50.070 --> 01:27:53.130

Ferhat Uzaktas: Most of the TV channels

486

01:27:54.110 --> 01:28:04.490

Ferhat Uzaktas: make together and a joint broad testing for the T. It news almost in 13 min.

487

01:28:04.520 --> 01:28:20.640

Ferhat Uzaktas: But the T. Rt. Kids and some other channels didn't involve this joint broadcast. because it might be a harmful for children to see a disaster picture and see

488

01:28:24.360 --> 01:28:25.430

Ferhat Uzaktas: next slide

489

01:28:28.030 --> 01:28:37.040

Ferhat Uzaktas: in in. Took care maybe some of them, you know, satellite broadcasting quite come almost

490

01:28:37.520 --> 01:28:50.000

Ferhat Uzaktas: almost 95% of people watch TV via satellite receive it. It doesn't use so common

01:28:50.020 --> 01:28:54.340

Ferhat Uzaktas: they haven't got the Dvt. And the Iv network.

492

01:28:54.610 --> 01:29:03.130

Ferhat Uzaktas: and our satellite head end and control centered in Ankara. and a bake up is in Istanbul.

493

01:29:03.150 --> 01:29:18.000

Ferhat Uzaktas: So we haven't got any problem and interaction for satellite side. Do you have all TV and right. Your broadcast continues on a satellite site

494

01:29:21.270 --> 01:29:33.520

Ferhat Uzaktas: in the disaster situation. We have also used a satellite for all the one, and uplink in the disaster are there

495

01:29:33.920 --> 01:29:40.570

Ferhat Uzaktas: at the beginning. We have some problems with the Gsm networks

496

01:29:40.640 --> 01:29:52.580

Ferhat Uzaktas: because some Gsm. Station collapsed and too many people want to use a mobile phone. So G: Some network have developed.

497

01:29:52.690 --> 01:30:10.260

Ferhat Uzaktas: But in the meanwhile, do you manage to use 5G. Ipv. Just security equipment for the news broadcasting, and also we use it.

498

01:30:12.490 --> 01:30:20.530

Ferhat Uzaktas: How I would be generally used. 5 Point G IP: Video: Cdm: Equipment for live broadcast

499

01:30:20.600 --> 01:30:23.900

Ferhat Uzaktas: from the quick idea. It

500

01:30:24.480 --> 01:30:32.940

Ferhat Uzaktas: But Gsm. Networks have also imported to all for the management issue.

501

01:30:37.160 --> 01:30:41.130

Ferhat Uzaktas: If I summarize, I can say that

502

01:30:41.220 --> 01:30:44.800

Ferhat Uzaktas: in any case of any disaster situation.

503

01:30:44.930 --> 01:30:48.500

Ferhat Uzaktas: satellite blow testing must be alive

504

01:30:48.690 --> 01:31:02.350

Ferhat Uzaktas: because it is too difficult to to affect any the rest of a disaster. If you have a satellite center and satellite uplink department.

505

01:31:02.490 --> 01:31:10.580

Ferhat Uzaktas: put you can each. I look every part of account. This from using satellite.

506

01:31:11.370 --> 01:31:22.200

Ferhat Uzaktas: Gsm. Networks also must be allied. It is necessary, both broadcasters and other people who manage the disaster

01:31:22.250 --> 01:31:36.620

Ferhat Uzaktas: and to communicate each other. It's very important. and it's it's the seeing that FM. Cetaceans must be alive.

508

01:31:36.650 --> 01:31:46.020

Ferhat Uzaktas: and we use a very effect if you our

509

01:31:47.220 --> 01:31:50.110

Ferhat Uzaktas: thank you very much. All your attention.

510

01:31:50.650 --> 01:32:01.320

Floor: Thank you very much indeed, fair hot, and we wish you the best of luck with the continuing rebuilding operation that has taken place after that very difficult situation

511

01:32:01.330 --> 01:32:10.100

Floor: and our final presentation and the in this session will be from my colleague. What did Sami.

512

 $01:32:10.360 \longrightarrow 01:32:25.730$ 

Floor: Well, yeah, it is from my colleague, Walid Sami, and he's going to cover. You know. I give you the title of the presentation. The security related crises, and how broadcasting can help in that context.

513

01:32:25.940 --> 01:32:44.520

Floor: What are you doing? Thank you. Thank you, Peter. Yes, just to mention that this presentation has kindly been provided to me by colleagues from broadcast network operators who have the experience in in such cases. The subject here is that how we can

01:32:44.520 --> 01:33:02.550

Floor: provide broadcasting service when the sites are destroyed, either by natural disasters or by man-made disaster. And and this is the case here we are talking about man-made disasters, which means conflicts. So in this in this slide here

515

01:33:02.550 --> 01:33:21.970

Floor: the the first, the first, I mean. Unfortunately, in terms of of of crisis in conflicts the sites are are targeted, and they they can. They can be damaged quickly and into to a large extent.

516

01:33:22.300 --> 01:33:36.030

Floor: But it's important that the authorities can still reach people, and in affected areas and keep them informed. And on the reception side the if the power is is out television, whether to rescue or satellite

517

01:33:36.030 --> 01:33:42.650

Floor: along with wild and fiber cables and a fiber Internet. The connections won't work.

518

01:33:42.660 --> 01:33:53.050

Floor: Mobile phones. however, typically can last for one or 2 days before the battery discharged on this transmitted transmission side

519

01:33:53.120 --> 01:34:04.470

Floor: without power. The mobile base stations which rarely have generated back up, will shut down after a few hours. The larger broadcast sites typically have generated back up.

520

01:34:04.700 --> 01:34:15.100

Floor: though these sites probably only have a fuel supplies for for one week operation or something like this. So even no, no, stay, please. On the on the same

521

01:34:15.400 --> 01:34:22.590

Floor: previous one. Yes, thank you. So, even if the power is important. But the infrastructure itself can can be destroyed

522

 $01:34:22.960 \longrightarrow 01:34:42.100$ 

Floor: and is is vulnerable. So with with massive loss of of of infrastructure, as we can see. Unfortunately, in conflicts, there is, there is a fall back trend to more basic and easily deployable means of communication with

523

01:34:42.720 --> 01:34:45.790

Floor: broadcast radio mainly the next side, please.

524

01:34:46.520 --> 01:34:50.250

Floor: We have an example on the next side next slide, please.

525

01:34:50.810 --> 01:35:04.260

Floor: Thank you. So radio a am. Radio can cover large areas, but they require significant infrastructure, and even if they exist they may have been damaged

526

01:35:04.300 --> 01:35:12.910

Floor: and and they would be difficult to re-establish. So I will come back to this photo afterwards. But mentioning that

527

01:35:12.940 --> 01:35:28.000

Floor: radio radio systems like DAB they, they they don't doesn't have the the required structure as am. But the receivers are not widely available, unfortunately yet.

528

01:35:28.030 --> 01:35:34.870

Floor: and and they are more power hungry than VHF. And and well VHF. FM.

01:35:35.930 --> 01:35:39.990

Floor: Coming to the FM. System.

530

01:35:40.020 --> 01:35:41.650

Floor: Of course it doesn't cover

531

01:35:41.670 --> 01:35:44.860

Floor: as much as am.

532

01:35:44.880 --> 01:35:56.250

Floor: but the antenna supporting structure. Trust me, the size and power requirements are such that low and medium power FM. Stations is is easily to to deploy.

533

01:35:56.440 --> 01:36:03.380

Floor: For example, 1010 stations of for 2 kilowatts erp can serve an area of 800 to

534

01:36:03.490 --> 01:36:10.150

Floor: 1,800 to 1,000 kilometers in length, and 80 to 100 kilometers in in with

535

01:36:11.210 --> 01:36:17.660

Floor: and FM receivers are mostly universally in almost university available.

536

01:36:17.730 --> 01:36:24.310

Floor: So pretty. Every every every car has a an FM receiver.

537

01:36:25.380 --> 01:36:33.190

Floor: and of course it's battery-powered, and and this is a a big advantage. Now, on this photo.

01:36:33.310 --> 01:36:38.210

Floor: despite the the problem of let's say am

539

01:36:38.260 --> 01:36:56.600

Floor: re-establishment. This is an example where around the crisis. In the former Yoslavia Yoslavia between 1,993 and 1,994 radio service was provided to much of the country using a medium wave fastener mounted on on a ship called the

540

01:36:59.560 --> 01:37:17.620

Floor: Now this this works from a maritime, let's say position. But for for different reasons at that time now nowadays, while while we revolve around mobile net mobile phones and and the Internet when systems collapse.

541

01:37:17.620 --> 01:37:28.320

Floor: basic information services are best provided by broadcast radio. as we can see in in several situations. We have seen some examples earlier. And

542

01:37:29.990 --> 01:37:45.040

Floor: so so yeah, and and this is also a link to the fact that power can be available. So the beauty of radio, especially analog radio is that receivers are widely available, and we'll run on batteries for days or or weeks. Next slide, please.

543

01:37:46.000 --> 01:37:48.510

Floor: This is the next slide is another example

544

01:37:48.620 --> 01:37:53.210

Floor: where UN transmitters were sent to support you and operations in Rwanda

01:37:53.350 --> 01:38:00.220

Floor: the system was designed as a main 2 kilowatt transmitter feeding up to 6 other, one kilowatt transmitters.

546

01:38:00.400 --> 01:38:05.630

Floor: and each container ha housed a generator Diesel tank and transmitter

547

01:38:05.730 --> 01:38:18.910

Floor: erez agmoni and for transport and lettuce mast. The antenna and feeder were stored within the container, so when deployed, the mast was attached to the to the side of the container, and depending on the deployed height. 101

548

01:38:19.300 --> 01:38:22.440

Floor: stays may or may not be.

549

01:38:22.870 --> 01:38:25.800

Floor: Yeah, that might, might, might not be required.

550

01:38:27.040 --> 01:38:34.820

Floor: The next slide is another example. I will not stop on it, but it's another example in in other conflict world. Now slide 6 the last slide.

551

01:38:35.010 --> 01:38:46.860

Floor: just to to to summarize. In fact. So nowadays, solutions being deployed, particularly where where conflict is ongoing or moving towards lighter, more portable and mobile

552

01:38:46.950 --> 01:38:49.870

Floor: systems. self contained

01:38:49.880 --> 01:39:07.890

Floor: power, transmitter, and mass mobile solutions, using vehicles, either Van or for by for Suv. Or used, such solutions can be quickly and easily moved to areas where a service is required, and can, if the situation requires, be quickly recited.

554

01:39:08.070 --> 01:39:21.240

Floor: So these the FM. On on the on, the on this photo you can see the transmitter case for an Vh. F FM. Transmitter alongside a play out center case.

555

01:39:21.240 --> 01:39:33.760

Floor: The the power can be provided by a wind turbine or by a photo cellular panels, and it can be fed by by satellite in order to ensure the the content.

556

01:39:33.970 --> 01:39:35.030

Floor: Thank you very much.

557

01:39:36.520 --> 01:39:38.640

Floor: Thank you.

558

01:39:40.510 --> 01:39:55.910

Floor: So that brings to the end our whistle stop tour. If I could use that phrase of the various different countries, and and the use of broadcasting in times of crises

559

01:39:56.040 --> 01:40:06.920

Floor: and and examples of what those crises are. and we're gonna go on a short coffee break now with a can. I have you all back here, please, at 1,545

560

01:40:06.970 --> 01:40:26.920

Floor: for our next session, which will be broadcasting and recommend and radio communication systems and technology warning in times of crisis which will be moderated

by Louis file still from TV. Global. So back at 1,545, please. Thank you. Very much. And thanks particularly to our speakers.

561

01:49:30.940 --> 01:49:34.060

Floor: So. Hello! Good afternoon. everyone.

562

01:49:34.620 --> 01:49:39.280

Floor: So this is the first, the third session

563

01:49:39.370 --> 01:49:40.740

Floor: of this workshop.

564

01:49:41.170 --> 01:49:46.570

Floor: This deals with broadcasting and radio communication systems and technologies

565

01:49:46.700 --> 01:49:49.610

Floor: for warning in times of crisis crisis.

566

01:49:50.040 --> 01:49:52.950

Floor: My name is Louis Falst I'm. From Brazil.

567

01:49:53.310 --> 01:50:02.380

Floor: We have 5 presenters today. The one of them is online. The others here with me in Geneva.

568

01:50:02.890 --> 01:50:06.100

Floor: So the first one from

01:50:06.250 --> 01:50:10.250

Floor: Srg. SSR. Is Mr. Roberto.

570

01:50:10.350 --> 01:50:22.940

Floor: Who is this strategic services manager broadcasts, technology, innovation and projects, and he will present for us with emergency warning and broadcasting. So, Mr. Morrow, the floor is yours.

571

01:50:23.610 --> 01:50:25.110

Floor: Thank you very much.

572

01:50:25.330 --> 01:50:29.650

Floor: Thank you for having me here. It I you at it

573

01:50:30.150 --> 01:50:32.240

Floor: and welcome to

574

01:50:32.820 --> 01:50:38.290

Floor: to Geneva. Welcome to Swiss emergency morning and broadcasting.

575

01:50:39.760 --> 01:50:46.210

Floor: So this emergency, warning and broadcasting is. is here to one

576

01:50:46.980 --> 01:50:52.400

Floor: citizens in case of of instance. Next slide, please.

577

01:50:56.890 --> 01:51:02.830

Floor: So we have a similar emergency incidents as a potential.

578

01:51:03.260 --> 01:51:10.450

Floor: Then we I've already heard about in the previous presentations. Next slide, please.

579

01:51:13.710 --> 01:51:27.340

Floor: The Space National Emergency Operation Center called is then in an emergency. gathering the information and producing a message which is

580

01:51:27.890 --> 01:51:34.520

Floor: provide it by pro- today, FM and digital

581

01:51:34.600 --> 01:51:43.450

Floor: radio, the a B plus to the citizens. It is the way of the highest resilience we have already heard in the previous sessions.

582

01:51:43.750 --> 01:51:50.040

Floor: In addition to that the information is provided by the app.

583

01:51:50.530 --> 01:51:54.460

Floor: It is, it is the way with the lowest latency.

584

01:51:54.520 --> 01:52:02.720

Floor: and in addition to that, the message is multiplicated by other apps and other channels as well.

585

01:52:04.250 --> 01:52:05.780

Floor: Next slide, please.

01:52:15.780 --> 01:52:25.340

Floor: Okay. The broadcast system is called. provided by the Swiss pro.

587

01:52:25.380 --> 01:52:33.750

Floor: and is dedicated on radio channels, not TV. It's. It's the radio channel that is

588

01:52:34.160 --> 01:52:36.670

Floor: transporting the message next slide.

589

01:52:37.680 --> 01:52:48.600

Floor: Well, that's it for the for the system. And now I would like to answer the question how to provide this resilient pro costing. Next slide, please.

590

01:52:51.700 --> 01:52:54.860

Floor: On that slide You'll see all the offerings

591

01:52:55.020 --> 01:53:06.890

Floor: in Switzerland from S. Of G left radio which is maintained during a crisis. For example, a blackout. Then you can see in the middle TV services

592

01:53:07.210 --> 01:53:13.060

Floor: in TV it will be not possible to produce new content. All the to

593

01:53:13.080 --> 01:53:19.050

Floor: transmit existing content and online is more difficult. It needs for the investigations

594

01:53:19.340 --> 01:53:24.060

Floor: to maintain online and pro. And in a crisis next slide.

595

01:53:27.570 --> 01:53:33.750

Floor: What is very important to understand the global chain and to have a simple global chain

596

01:53:33.950 --> 01:53:44.220

Floor: from studio corporate network to the play out center on to the satellite and the terrestrial network which is in Switzerland, FM. And T. I. V plus

597

01:53:44.630 --> 01:53:45.900

Floor: next slide.

598

01:53:49.720 --> 01:54:04.200

Floor: This is my key message. If you want to achieve really resilient broadcasting. And you want to warn citizens. You have to achieve an excellent technical coverage.

599

01:54:05.000 --> 01:54:12.100

Floor: If I did that in the past very well valid, explained it under an example of a

600

01:54:12.310 --> 01:54:21.960

Floor: but also you have to reach devices, and you have to have an excellent usage. Figure, If only one of these parameters is not excellent.

601

01:54:21.980 --> 01:54:31.210

Floor: You will not reach the population. and that's why E. Your recommendation, 156 comes into force

602

01:54:32.900 --> 01:54:37.120

Floor: to say that you should maintain a multi-platform strategy.

603

01:54:37.220 --> 01:54:37.810

Thank you.

604

01:54:37.910 --> 01:54:39.500

Floor: Next slide, please.

605

01:54:42.660 --> 01:54:49.850

Floor: If it comes to terrestrial network it is really key to

606

01:54:50.060 --> 01:54:56.240

Floor: to have a performing technology like we do in in Switzerland with the a B plus.

607

01:54:56.490 --> 01:55:00.090

Floor: You have to provide a decent indoor and deep into coverage.

608

01:55:00.200 --> 01:55:07.900

Floor: and then, of course, you have to. You have to do a small selection of resilient, very high power, and have very high tower sides.

609

01:55:08.250 --> 01:55:10.410

Floor: For example, with Diesel power.

610

01:55:10.650 --> 01:55:23.130

Floor: the usage rate has to be excellent. The awareness of the population to to handle this system has to be excellent, and also the easiness of use has to be there.

01:55:25.340 --> 01:55:32.790

Floor: as I have set resilience. A residency of each element of the global chain is important.

612

01:55:32.880 --> 01:55:37.780

Floor: And in Switzerland we have even an ultra resilient terrestrial

613

01:55:37.840 --> 01:55:48.300

Floor: emergency network operated by the Federal office of civil protection to ensure reliable operation, even in the most demanding situations.

614

01:55:48.400 --> 01:55:50.010

Floor: Next slide, please.

615

01:55:53.410 --> 01:56:03.550

Floor: So my conclusion for today is emergency. Warning needs a holistic approach. Emergency warning follows a multi channel strategy, emergency warning.

616

01:56:03.620 --> 01:56:11.510

Floor: as many stakeholders involved and radio broadcast is, as we have already heard, the most resilient channel, technical, wise.

617

01:56:11.560 --> 01:56:18.880

Floor: but it is also the most trusted channel Content, wise. It is free to air, easy to use

618

01:56:19.070 --> 01:56:26.450

Floor: and not to forget. It needs a resilient reception to, for example, stock of batteries

01:56:26.780 --> 01:56:33.770

Floor: at home, of people. and at the end of the day it is important to investigate

620

01:56:34.080 --> 01:56:38.770

Floor: also in prop and online services for the future.

621

01:56:38.860 --> 01:56:39.590

Floor: Thank you.

622

01:56:45.120 --> 01:56:57.570

Floor: Thank you very much, Mr. Morrow, and thank you for doing your presentation so timely. So the next presenter is with us online on on Zoom. It's

623

01:56:58.050 --> 01:57:01.530

Floor: Professor Dr. Laying me from

624

01:57:02.340 --> 01:57:11.350

Floor: the Academy of Broadcasting, planning, and Rt. In, and will present the emergency broadcasting system in China.

625

01:57:11.660 --> 01:57:16.550

Floor: So, Dr. Leila Lee, are you with us?

626

01:57:17.460 --> 01:57:18.490

China, Mr. Leilei Li: Can you hear me?

627

01:57:18.750 --> 01:57:21.590

Floor: Yes, please. You have the floor.

628

01:57:22.120 --> 01:57:25.870

China, Mr. Leilei Li: Thank you. and good morning. Good afternoon. Good evening, everyone.

629

01:57:25.880 --> 01:57:31.350

China, Mr. Leilei Li: My name is La Li, from the Academy, broadcasting, planning an art here in China.

630

01:57:31.610 --> 01:57:37.720

China, Mr. Leilei Li: It is my pleasure to have this opportunity to introduce emergency for casting system in China

631

01:57:37.960 --> 01:57:39.570

China, Mr. Leilei Li: next slide, please.

632

01:57:42.200 --> 01:57:47.460

China, Mr. Leilei Li: Firstly, i'd like to talk about the China's requirements of emergency broadcasting.

633

01:57:47.470 --> 01:58:01.750

China, Mr. Leilei Li: I said. We all know China is a large country, and the economic loss is the cost of by nature disasters in recent years is all over 100 billionUN annually. It's about the 14 billiondollars.

634

01:58:01.950 --> 01:58:10.170

China, Mr. Leilei Li: At the same time the general public demand and the government demands for the emergency information are growing

01:58:10.540 --> 01:58:20.420

China, Mr. Leilei Li: because because of the advantages broadcasting has become a common method of emerging information dissemination in the countries around the world.

636

01:58:21.110 --> 01:58:22.520

China, Mr. Leilei Li: Next slide, please.

637

01:58:25.500 --> 01:58:29.940

China, Mr. Leilei Li: Secondly, it's about the solid, broadcasting foundation in China.

638

01:58:30.310 --> 01:58:37.100

China, Mr. Leilei Li: China has built a national, wide, broadcasting radio and a television production and

639

01:58:37.150 --> 01:58:39.930

China, Mr. Leilei Li: and broadcasting coverage network.

640

01:58:40.720 --> 01:58:49.900

China, Mr. Leilei Li: More than 2,005 5 hundredable customers have been established, operating more than 4,000 radio and activity programs.

641

01:58:50.030 --> 01:58:55.640

China, Mr. Leilei Li: The cable TV network, which is more than 4 million kilometers, and the actual

642

01:58:55.810 --> 01:59:00.990

China, Mr. Leilei Li: number of the cable TV subscribers is over 200 million

01:59:01.220 --> 01:59:07.770

China, Mr. Leilei Li: more than 3 and 100 cities have operated at digital TV

644

01:59:07.980 --> 01:59:22.310

China, Mr. Leilei Li: and directly broadcasting satellite has more than 7 and standard definition TV programs, and more than 50 radio radio programs, and the user is over 130 million

645

01:59:22.650 --> 01:59:28.920

China, Mr. Leilei Li: video receivers, 6 600 meeting and TV says 500 million

646

01:59:29.040 --> 01:59:34.690

China, Mr. Leilei Li: The national population coverage rate for the broadcasting service is over

647

01:59:35.100 --> 01:59:38.720

China, Mr. Leilei Li: 90 98 percentage. Next slide, please.

648

 $01:59:42.830 \longrightarrow 01:59:50.470$ 

China, Mr. Leilei Li: Okay. And china's emergency broadcasting system, technical architecture is shown in this figure.

649

01:59:50.900 --> 01:59:57.160

China, Mr. Leilei Li: and the national emergency forecasting system consists of a 5 parts.

650

01:59:57.430 --> 02:00:00.840

China, Mr. Leilei Li: The first part is the emergency forecasting platform.

02:00:01.120 --> 02:00:10.420

China, Mr. Leilei Li: The platform in includes 4 levels. National Level provincial, level, municipal level and the county level.

652

02:00:10.480 --> 02:00:21.710

China, Mr. Leilei Li: The platform receives emergency information, generates emergency broadcasting messages and then send them to the transition trans transmission coverage network.

653

02:00:22.140 --> 02:00:25.310

China, Mr. Leilei Li: The second part is the transmission coverage network.

654

02:00:25.590 --> 02:00:40.560

China, Mr. Leilei Li: The network includes a media wave shuttle with: I am to rest your digital TV on cable digital TV satellite, Ib: TV, Internet, TV broadcasting and so on, a lot of speaker and system, and so on.

655

02:00:40.840 --> 02:00:49.000

China, Mr. Leilei Li: The network is responsible for adapting the emergency broadcasting messages into the audio and video content

656

02:00:49.040 --> 02:00:56.670

China, Mr. Leilei Li: suitable for the different transmission for mask and the transmitting them to the emergency broadcasting terminal.

657

02:00:58.470 --> 02:01:02.000

China, Mr. Leilei Li: The third part is a donated line on

658

02:01:02.360 --> 02:01:05.420

China, Mr. Leilei Li: it's a faster transmission channel.

659

02:01:05.610 --> 02:01:11.850

China, Mr. Leilei Li: This channel is a fasting processing system based on the transmission coverage network

660

02:01:12.070 --> 02:01:16.170

China, Mr. Leilei Li: mainly used to transmit urgent emergency information.

661

02:01:16.490 --> 02:01:27.680

China, Mr. Leilei Li: The national faster. Transmission channel uses the director broadcasting satellite. The first part is the emergency broadcasting terminal

662

02:01:28.090 --> 02:01:40.430

China, Mr. Leilei Li: mainly includes the radio tab TV tab set of box tab and display screen tab, although audio visual carrier, tab mobile, receiving and tab, and the lowest week tab

663

02:01:41.110 --> 02:01:42.250

China, Mr. Leilei Li: on the

664

02:01:42.370 --> 02:01:49.590

China, Mr. Leilei Li: terminal is the responsible for presenting the emergency in content according to the instruction requirements.

665

02:01:50.290 --> 02:01:54.910

China, Mr. Leilei Li: The last part is the effect and monetary, and the evaluation system.

666

02:01:55.210 --> 02:02:10.650

China, Mr. Leilei Li: The and this system is responsible for the take a summary of the system, response and the release situation and the comprehensive evaluation of the network of the work status and the release effect.

667

02:02:11.150 --> 02:02:12.660

China, Mr. Leilei Li: Next slide, please.

668

02:02:16.890 --> 02:02:22.650

China, Mr. Leilei Li: At At present China has built a national automatic adaptation system

669

02:02:22.700 --> 02:02:27.180

China, Mr. Leilei Li: more than about the 10 provincial emergency broadcasting platforms.

670

02:02:27.210 --> 02:02:38.130

China, Mr. Leilei Li: about a 70 municipal emerging emergency broadcasting platforms more than 1,000, the country level emergency forecasting platforms.

671

 $02:02:38.170 \longrightarrow 02:02:47.120$ 

China, Mr. Leilei Li: more than 20,000 tongue shape level on front, and sales more than 170,000 the village level front, and

672

02:02:47.270 --> 02:02:58.970

China, Mr. Leilei Li: covering up about 30 35 millionemergency forecasting terminals, including nearly 2 million logs, to be consist system terminals

673

02:02:59.060 --> 02:03:00.590

China, Mr. Leilei Li: covering more than

674

02:03:00.680 --> 02:03:08.880

China, Mr. Leilei Li: on 26 million cable TV set top boxes carrying nearly 5 million director, or casting such like the terminals

675

02:03:08.970 --> 02:03:13.040

China, Mr. Leilei Li: and they carry nearly 5 million new meteor set of boxes

676

02:03:13.540 --> 02:03:15.040

China, Mr. Leilei Li: next slide please

677

02:03:27.500 --> 02:03:45.180

China, Mr. Leilei Li: the role of an emergency broadcasting system, including publicizing information and warning of the crisis. The system can tamely and effectively publicize the government, the policies support the news and the agricultural knowledge to enrich the cultural life of the people.

678

02:03:45.470 --> 02:03:56.430

China, Mr. Leilei Li: The system can also deliver timely information to the people, create the role of information, dissemination, risk, warning, and the social mobilization

679

02:03:56.890 --> 02:04:01.990

China, Mr. Leilei Li: to protect the people's life and the property safety Next slide, please.

680

 $02:04:05.990 \longrightarrow 02:04:17.050$ 

China, Mr. Leilei Li: Next, I will give some cases of emergency broadcasting system, usually in China. The first 2 cases, and from Gongsi are used for the risk warning.

681

02:04:17.520 --> 02:04:26.740

China, Mr. Leilei Li: In the July 2,021 typhoon. It's the Radio Island tourist zoom out of the bay by high city

02:04:27.030 --> 02:04:38.520

China, Mr. Leilei Li: with the timely information provided by the emergency forecasting system. the safety of the 23,000 the tourist lives and the properties is guaranteed.

683

02:04:38.850 --> 02:04:42.400

China, Mr. Leilei Li: The second example is for the earthquake warning

684

02:04:42.430 --> 02:04:49.960

China, Mr. Leilei Li: on the August, the fourth, 2,021 a magnitude of the 4.8 earthquake, Draco, Sudrak.

685

02:04:50.110 --> 02:04:53.930

China, Mr. Leilei Li: to up our county by the city.

686

02:04:54.110 --> 02:05:04.350

China, Mr. Leilei Li: The local emergency broadcasting system immediately issued an earthquake warning to the public, quickly reminding people to keep themselves safe.

687

 $02:05:04.690 \longrightarrow 02:05:06.140$ 

China, Mr. Leilei Li: Next slide, please.

688

02:05:10.000 --> 02:05:15.960

China, Mr. Leilei Li: There are also some other cases. I use the forecasting emergency broadcasting system in China.

689

02:05:16.080 --> 02:05:24.850

China, Mr. Leilei Li: The next one is usually in such one. From the night of August, 7 to the early morning of the August eighth, 2,021,

02:05:25.060 --> 02:05:33.320

China, Mr. Leilei Li: and the township of the Ninja in the ancient country was killed by once in a century. Extraordinary heavy room for.

691

02:05:33.450 --> 02:05:37.940

China, Mr. Leilei Li: and the township platform was the first to release information

692

02:05:38.090 --> 02:05:38.960

China, Mr. Leilei Li: and

693

02:05:39.110 --> 02:05:47.970

China, Mr. Leilei Li: successfully transform and evacuate. About the 2,000 people. Minimize the loss of the people's life, and the

694

02:05:48.500 --> 02:05:52.940

China, Mr. Leilei Li: another case is used in jiangsu it for the

695

02:05:53.060 --> 02:05:56.880

China, Mr. Leilei Li: nuclei. Can I asset the test notification.

696

02:05:57.000 --> 02:06:04.930

China, Mr. Leilei Li: and the last case is usually in in June, the twentieth 21 in response to the elephants moving north to

697

02:06:05.220 --> 02:06:17.020

China, Mr. Leilei Li: and the department broadcast. A template alerts through the emergency for cutting system, effectively reduce the losses of the life and the property of the people.

02:06:18.580 --> 02:06:20.760

China, Mr. Leilei Li: Yes. next, please.

699

02:06:23.880 --> 02:06:28.360

China, Mr. Leilei Li: This is my message, my speech. Thank you for your listening.

700

02:06:30.400 --> 02:06:31.280

Floor: Thank you.

701

02:06:35.200 --> 02:06:40.000

Floor: Thank you very much, Dr. Lee Lily. So the next speaker

702

02:06:40.230 --> 02:06:52.410

Floor: we have is from from offer Iis. It's a the Alexander Zinc, his chief business development manager, digital radio broadcast application group.

703

02:06:53.090 --> 02:06:55.890

Floor: He will present

704

02:06:56.480 --> 02:07:06.850

Floor: drm digital radio, social emergency warning functionality. Ewf. So, Mrs. Zinc, you have the floor. Thanks a lot.

705

02:07:12.190 --> 02:07:18.390

Floor: Miss Alexandra Appreci. I'm replacing her. She unfortunately couldn't make it for today's event, you to flight issues.

706

02:07:19.950 --> 02:07:30.730

Floor: So looking at Drm digital radio, Mondell, that's one of the itu endorse digital radio standards in the world, the one that covers all the broadcasting bands and coverage scenarios.

707

02:07:31.100 --> 02:07:35.100

Floor: This is the standard to dB plus next slide

708

02:07:39.000 --> 02:08:01.800

Floor: in the past, as you know, radio was always seen as one of the key benefits and the key assets for dissemination of warnings, and in times of crisis, and for keeping people informed with all the known benefits. We've heard them in the morning or earlier today. Already the great coverage reliable information source in terms of content. Trusted information source.

709

02:08:01.830 --> 02:08:09.400

Floor: The robust transmission infrastructure is serving areas from outside, and the receivers being euphemously available

710

02:08:09.670 --> 02:08:12.910

Floor: with everybody in all living situations.

711

02:08:12.920 --> 02:08:24.800

Floor: All of that applies to analog radio as much as digital radio. Now, where's the difference? And what difference can digital radio make drm in the context of emergency warning functionality next one

712

02:08:29.010 --> 02:08:29.790

Floor: next one.

713

02:08:31.360 --> 02:08:37.040

Floor: In this context, drm is previous

02:08:42.180 --> 02:08:54.400

Floor: right in this context digital radio Drm adds to the benefits and the the great assets of analog radio. The ability to wake up receivers to make them retune to that emergency program.

715

02:08:54.790 --> 02:09:10.080

Floor: It provides, in addition to the pure audio content, multilingual text information and detailed instructions reaching people that are not native to the place and reaching people that would otherwise not be able to hear the audio hearing impaired.

716

02:09:10.250 --> 02:09:15.890

Floor: and finally providing detail a level of detail that otherwise could never be announced over the year

717

02:09:16.140 --> 02:09:18.500

Floor: Next one. with this set of

718

02:09:18.580 --> 02:09:31.880

Floor: features, digital radio can really help along all the stages of a disaster and crisis from the early education all the way to post disaster services, but in particular, and this is the focus for today.

719

02:09:32.070 --> 02:09:34.200

Floor: It can help with

720

02:09:34.410 --> 02:09:44.540

Floor: getting the information out in terms, or at the moment when a disaster is detected, to alert the people and alert the audience as quickly as possible.

02:09:44.590 --> 02:09:45.340

Floor: Next one.

722

02:09:50.060 --> 02:10:00.910

Floor: The functionality that summarizes what Drm can do in this context is called emergency warning functionality. Ew: If that's the feature of drm digital radio that we are talking about.

723

02:10:01.000 --> 02:10:13.910

Floor: All the elements are part of the Drm. Standard, and are also used in other contexts. But in this kind of packaging they're useful in for disseminating this kind of warning information.

724

02:10:14.510 --> 02:10:34.410

Floor: and to quote from the jail of Study group, 6 digital radium on the I Drm. Natively supports emergency alerts signaling Ewf: the around receivers are triggered to retune automatically to an emergency transmission, including optional auto switch on while flashing the screen and increasing the audio volume that summarizes what the

725

02:10:34.410 --> 02:10:36.670

Floor: listen experiences next one.

726

02:10:41.350 --> 02:10:58.790

Floor: and this visualizes the the overall structure and functionality in a single slide, or tries to summarize it. Here we have the affected area. That's the light green one where the local infrastructure may be available, or maybe down so broadcast, for example, may be down if it's a flat, and the the power

727

02:10:58.870 --> 02:11:05.250

Floor: is no longer available. Some of the receiving devices, like TV sets may be out of service already.

02:11:05.510 --> 02:11:19.390

Floor: but in even in those cases with radio we can receive and and reach the people there from transmit. As well secure transmitters from outside one of the assets, and we have a battery power to wind up radio sets as a possibility.

729

02:11:20.060 --> 02:11:23.870

Floor: Once the receiver then receives the alarm trigger.

730

02:11:23.890 --> 02:11:31.310

Floor: it will switch on or switch over and on the screen of the radio automatically shows up that text information. Next one.

731

02:11:31.590 --> 02:11:49.580

Floor: The journal Line based Information Journal on is the advanced text information of the Drm digital radio, where, For example, we can provide multiple languages for the user to select from then what he's currently interested in, and then provide the detailed information and instructions, all of that

732

02:11:49.580 --> 02:11:55.010

Floor: over broadcast. There is no need for Internet connectivity at that moment. Next slide

733

02:11:59.800 --> 02:12:05.920

Floor: to visualize and explain what how all this

734

02:12:06.000 --> 02:12:09.090

Floor: is useful from a listener's perspective, and how it can help

735

02:12:09.270 --> 02:12:15.920

Floor: to reach the listeners out in the field. We have prepared a little video which I now invite you to share with me

736

 $02:12:20.110 \longrightarrow 02:12:29.730$ 

Floor: next morning. Integria is ready to celebrate the national festival of Light When many people travel long distances to see their families

737

02:12:29.750 --> 02:12:41.610

Today Arnett Rose and Iris are going to visit Rose's brother Wren, who lives on the other side of the great forest car journey for several hours.

738

02:12:52.460 --> 02:12:54.890

You

739

02:12:56.470 --> 02:13:16.320

This is an emergency warning. There has been an incident at the chemical plant in Chelago. Please check your screens for more information. Thankfully, Drm: digital radio also provides the emergency warning functionality with audio text and images also available on the receiver screen.

740

02:13:16.520 --> 02:13:31.200

Wren greets the family and asks about the journey. He was not alerted that there had been an incident at the chemical plant because the Drm emergency warning was only broadcast locally to receivers in the affected area.

741

02:13:35.570 --> 02:13:37.400

Floor: Thank you. And next slide.

742

02:13:41.270 --> 02:13:47.770

Floor: in addition to reaching out to the actual radio sets, whether they are built into mobile phones, cars, or

02:13:47.780 --> 02:14:05.600

Floor: our standalone radio sets. We found throughout the world that Another very useful application is to have public signage services or public screens which show a rotation of journal and information throughout the day with relevant information. News updates whatever for the public.

744

02:14:05.980 --> 02:14:16.990

Floor: But those screens can then be used at times of crisis to be switched over with the emergency transmission. The Ewf activation on the Rm. They will activate the audio output.

745

02:14:17.010 --> 02:14:29.900

Floor: and they will present on screen again in multiple languages as a as a sequence of of slides. What's going on on what people are supposed to do, and how they are supposed to behave and respond to that catastrophe

746

02:14:30.330 --> 02:14:35.780

Floor: just to give you the big picture. Now you understand hopefully how

747

02:14:35.930 --> 02:14:42.780

Floor: the idea works of emergency warning functionality in Drm. From a listener's perspective, from a broadcast as integration.

748

02:14:43.480 --> 02:14:49.550

Floor: and in the in the big picture of emergency, detection

749

02:14:49.640 --> 02:14:51.130

Floor: and dissemination.

750

02:14:51.200 --> 02:15:04.170

Floor: Drm. Would be one of the output boxes, for example, of a cap based information system, or what we saw earlier in the presentation from the colleague from China, one of the output boxes specifically for ditch to radio Drm.

751

02:15:04.360 --> 02:15:11.990

Floor: This is where you take that collected information. Format it in the appropriate way for digital radio and make it available there

752

02:15:13.190 --> 02:15:14.030

Floor: next night.

753

02:15:25.830 --> 02:15:36.580

Floor: Additional resources, If you're interested to learn more about what the can do in this context are available under ewf dot drm.org. There is a document that explains

754

02:15:36.790 --> 02:15:44.680

Floor: how these default features of the Drm. Standard are combined and are used in the context of emergency warning. Next slide.

755

02:15:45.420 --> 02:15:59.510

Floor: There's also additional information available in the Free to download the Rm. Handbook Question 5 is the current one which you can get from handbook.drm.org, and all these handy links are available under pocket.drm.org next slide.

756

02:16:00.630 --> 02:16:04.050

Floor: If you want to find out more. Get in contact, please

757

02:16:04.140 --> 02:16:12.620

Floor: reach out. There is the possibility to subscribe to the Newsletter, and you can always write to Project office@drm.org.

758

02:16:12.920 --> 02:16:13.790

Floor: Thanks a lot.

759

02:16:17.330 --> 02:16:22.420

Floor: Thank you. Thank you very much, Mrs. Zinc. So our next speaker.

760

02:16:22.780 --> 02:16:26.840

Floor: it's Mr.

761

02:16:27.050 --> 02:16:39.790

Floor: So we naga he's an engineer in Nhk, and he will present the emergency warning, broadcasting system Ewbs. So, Mrs. You have the floor.

762

02:16:46.690 --> 02:16:57.870

Floor: Oh, thank you for your introduction, and I like also, thanks to this organizer for giving me this opportunity to speaking to speak here

763

02:16:57.889 --> 02:16:58.780

Floor: today.

764

02:16:59.910 --> 02:17:04.860

Floor: Today. I'd like to talk to you about

765

02:17:11.320 --> 02:17:18.629

Floor: fast. I would like to explain. Either. V is Ews is a broadcasting system

02:17:18.799 --> 02:17:24.700

Floor: which remotely activate radio and television receivers when it is needed.

767

02:17:25.799 --> 02:17:27.950

Floor: Oh, a a a him radio!

768

02:17:32.670 --> 02:17:35.150

Floor: Oh, these are TV broadcasting

769

02:17:35.290 --> 02:17:39.510

Floor: either, we guess. Start flag is used for the system

770

02:17:40.990 --> 02:17:46.559

Floor: you can't. Component of is Dbt.

771

02:17:48.350 --> 02:17:56.730

Floor: In Japan. either. We, yes, has been operated since September. 1,985 on the

772

02:17:56.990 --> 02:18:02.040

Floor: on. Isdpt has been operated since December the 20

773

02:18:07.209 --> 02:18:11.000

Floor: either we test you know a monthly broadcast in Japan.

774

02:18:19.000 --> 02:18:26.520

Floor: This space show you when it's broadcast. In Japan they are 3 cases.

775

02:18:27.299 --> 02:18:31.900

Floor: One is a precaution declaration of the large-scale earthquake.

776

02:18:35.950 --> 02:18:40.430

Floor: This case is the most holy grain. in Japan.

777

02:18:42.209 --> 02:18:46.230

Floor: and that is the request

778

02:18:53.440 --> 02:18:55.690

Floor: we can see in the picture

779

02:18:55.700 --> 02:18:59.870

Floor: in Japan.

780

02:19:01.059 --> 02:19:04.580

Floor: in Japan, Japan.

781

02:19:04.610 --> 02:19:08.020

Floor: superb buys desktop prevention.

782

02:19:08.860 --> 02:19:16.980

Floor: It sends the information through a private network to broadcasting station in Japan and broadcast

02:19:17.700 --> 02:19:21.120

Floor: broadcast.

784

02:19:26.889 --> 02:19:34.990

Floor: I will explain about case of the great East Japan earthquake. It was about 30 years ago.

785

02:19:40.500 --> 02:19:43.920

Floor: We in both operation

786

02:19:45.070 --> 02:19:49.590

Floor: in about 2 min. breaking the

787

02:19:51.090 --> 02:19:55.930

Floor: in about 4 min we received a rat of 9,

788

02:19:56.290 --> 02:20:01.880

Floor: and we operate it either up and broadcast information on the tsunami.

789

02:20:09.660 --> 02:20:12.690

Floor: Now let me show you a short video.

790

02:20:12.790 --> 02:20:13.990

Floor: This creep

791

02:20:14.020 --> 02:20:17.930

Floor: will give you a good understanding of what I explained

02:20:33.880 --> 02:20:37.010

the you

793

02:21:08.190 --> 02:21:15.450

in the

794

02:21:26.730 --> 02:21:37.120

the I. I. You think I could imagine that

795

02:21:40.440 --> 02:21:45.320

the

796

02:22:34.640 --> 02:22:42.100

the

797

02:22:43.600 --> 02:22:49.260

to the you didn't go on somebody. My dad.

798

02:23:38.550 --> 02:23:48.570

this is an emergency tsunami warning the meteorological agency is warning that very high tsunami are expected in the following areas.

799

02:24:07.880 --> 02:24:18.230

Floor: That's not me. came to Japan in 30 min or more of the earthquake or God. It's not me waves about 10 meters.

800

02:24:18.730 --> 02:24:24.170

Floor: and the maximum run up height of that was 40 meters.

801

02:24:31.020 --> 02:24:36.860

Floor: This is example.

802

02:24:37.870 --> 02:24:41.280

Floor: They are either be a signal generator and

803

02:24:41.410 --> 02:24:44.040

Floor: control that in broadcasting station

804

02:24:46.290 --> 02:24:49.900

Floor: the generator received a tsunami Arad.

805

02:24:50.180 --> 02:24:53.270

Floor: and make either Vx signals

806

02:24:56.340 --> 02:24:59.620

Floor: much breaks. It is for the cast.

807

02:25:07.460 --> 02:25:12.860

Floor: This picture

808

02:25:13.850 --> 02:25:18.980

Floor: emergency information descriptor is edited at much brexit and

02:25:19.020 --> 02:25:22.980

Floor: activational signal is edit in.

810

02:25:24.040 --> 02:25:30.280

Floor: If you are interested in this part you can get more information from it or recommendation.

811

02:25:37.330 --> 02:25:41.040

Floor: This space show about 1 6 savvy

812

02:25:41.110 --> 02:25:48.310

Floor: plastic service is for mobile. One Sec. Is also capable of transmitting. It rbs.

813

02:25:49.670 --> 02:25:53.740

Floor: People can get just the information quickly anywhere

814

02:25:53.840 --> 02:25:55.460

Floor: you think either be. If

815

02:26:00.940 --> 02:26:08.160

Floor: and this page shows example of their body of warning, warning, using either vs

816

02:26:10.090 --> 02:26:15.280

Floor: through without the speakers like this or a digital signage.

817

02:26:15.540 --> 02:26:19.520

Floor: We can 1, 2 people that receive us in the field.

818

02:26:23.050 --> 02:26:25.610

Floor: I finish my presentation. Thank you very much.

819

02:26:40.640 --> 02:26:48.650

Brazil - Luiz Fausto: Well, it it looks. My local microphone stops working so so i'll try this one.

820

02:26:51.450 --> 02:26:53.740

Brazil - Luiz Fausto: Well, then, our next speaker

821

02:26:53.890 --> 02:27:02.000

Brazil - Luiz Fausto: is Mr. Thomas Stockhammer. He's senior director of technical standards for welcome.

822

02:27:02.710 --> 02:27:05.730

Brazil - Luiz Fausto: and Mr. Tokama, you have the floor.

823

 $02:27:19.770 \longrightarrow 02:27:22.330$ 

Brazil - Luiz Fausto: Mr. Stockhammer. Are you with us?

824

02:28:02.530 --> 02:28:06.690

Brazil - Luiz Fausto: Okay, Mr. We cannot hear you.

825

02:28:08.150 --> 02:28:09.730

Brazil - Luiz Fausto: Can you hear us?

02:28:12.950 --> 02:28:19.220

Brazil - Luiz Fausto: We see You're connected in. You have your microphone unmuted. But we cannot hear you.

827

02:28:35.100 --> 02:28:36.620

Brazil - Luiz Fausto: Yeah.

828

02:28:41.780 --> 02:28:45.730

Brazil - Luiz Fausto: okay, he he's switching to his cell phone. Let's wait it

829

02:28:46.520 --> 02:28:48.100

Brazil - Luiz Fausto: 1 min, please.

830

02:29:28.880 --> 02:29:32.850

Thomas Stockhammer: Okay. So this is almost I'm: sorry this is working out.

831

02:29:33.410 --> 02:29:39.490

Floor: Okay. And now we can hear you. So that seems to be something wrong with that

832

02:29:39.560 --> 02:29:40.560

on my computer.

833

02:29:40.610 --> 02:29:52.930

Thomas Stockhammer: Thank you for the invitation. This is a presentation about technologies for morning services. There is a particular focus to fight to broadcast. So if you would move to the next slide.

834

02:29:59.220 --> 02:29:59.920

right.

835

02:30:00.030 --> 02:30:01.200

Thomas Stockhammer: Send it from here.

836

02:30:06.260 --> 02:30:15.720

Thomas Stockhammer: Okay, so quick, overview. What is 5G. Broadcast where we stand standards? And then basically focus a bit how it's used for emergency alerts, public warning services.

837

02:30:15.840 --> 02:30:20.460

and next steps that i'm not going to talk about myself. But you find some details here.

838

02:30:20.490 --> 02:30:24.830

Thomas Stockhammer: I'm involved in this kind of context. So if you move to the next slide, then

839

02:30:26.380 --> 02:30:34.930

Thomas Stockhammer: so just give him a introduction. What is fright? Chi broadcas, where it's rich? Vt: I mean Fiveg. Broadcast was defined in 3 Cp. Actually and released 16 currently

840

02:30:35.010 --> 02:30:37.320

Release 18 is on the board.

841

02:30:37.600 --> 02:30:52.290

Thomas Stockhammer: And so Gp is basically a responsive, defining global salad standards. But there is this expansion to verticals. one of these vertices that has been addressed that a lot of broadcasters came to Cgp and asked the Gp.

02:30:52.360 --> 02:30:53.920

Thomas Stockhammer: Basically a

843

02:30:53.940 --> 02:30:58.960

Thomas Stockhammer: their need. That broadcast operator can operate in a broad broadcast spectrum.

844

02:30:59.070 --> 02:31:03.330

but can directly access mobile devices from their infrastructure.

845

02:31:04.080 --> 02:31:06.440

Thomas Stockhammer: and that was basically

846

02:31:06.480 --> 02:31:11.370

acknowledges it was then designed, in order to attract the requirements from the broadcasters.

847

02:31:11.530 --> 02:31:22.250

Thomas Stockhammer: with the efforts to keep the technology as close as possible to existing cellular modems. to make the step to integrate the receivers into the cellar modems as small as possible. So

848

02:31:22.270 --> 02:31:34.190

Thomas Stockhammer: we basically have now a solution in place that is hardly compatible with cellular modems. It's just a matter of now doing all of the front-end aspect, all of the spectrum and frequency bands, and so on. But

849

02:31:34.280 --> 02:31:36.580

Thomas Stockhammer: it's basically fully aligned. And so

02:31:36.740 --> 02:31:52.560

Thomas Stockhammer: it it's not nothing about that. Basically, this is an to make. So operate this taking over from broadcast. This is about providing a 3 Gp technology for broadcast in order to get direct access to mobile device. So if you move to the next slide.

851

 $02:31:56.650 \longrightarrow 02:32:17.630$ 

Thomas Stockhammer: Okay, so these are a couple of the features that are supported for multiple use cases, and one of the core aspects is that you don't need a SIM card in receiving a service. So the the architecture for distribution is simplified. All of the aspects that are related to authentication. SIM, are removed that that allows you to receive only and prepare services.

852

 $02:32:17.890 \longrightarrow 02:32:24.610$ 

Thomas Stockhammer: and you can operate that technology in different spectrum in the Ahs spectrum. You can go into this supplemental down link.

853

02:32:24.650 --> 02:32:32.530

and you can also do Sfn and Msn. There's different deployment possibilities. They can be run by a broadcast network operator by an and No.

854

 $02:32:32.830 \longrightarrow 02:32:54.520$ 

Thomas Stockhammer: You have basic the ability by the technologies variations of rank. It's on a high-power itale and medium-power medium-s are low power, low tower. and you also have different flexibility and velocities up to 250 kilometers per One of the actually very nice features is that all of this comes combined with existing 40 and 5G. Features such as

855

02:32:54.590 --> 02:32:58.440

combination is unicast public warning services, and basically

856

02:32:58.510 --> 02:33:05.120

Thomas Stockhammer: the latter is something that was leveraged. Now, in moving this forward, how we can basically get this into the broadcast

02:33:05.850 --> 02:33:07.560

Thomas Stockhammer: if you move to the next site.

858

02:33:11.030 --> 02:33:16.940

Thomas Stockhammer: Yeah, so and this is animated, so maybe just can click on this. This we go.

859

02:33:28.710 --> 02:33:45.690

Thomas Stockhammer: Yeah, so just it it comes in. So basically it's a significant interest. And what is really the the interesting part, it's really global, because is a global technology. And that's basically makes it interesting throughout all reaches of the world, and there's a trials.

860

02:33:45.690 --> 02:33:49.490

Thomas Stockhammer: operations by local standardisation authorities, and so on.

861

02:33:49.570 --> 02:34:07.510

throughout all of all all over the world, and that is continuously growing. So i'm not going to go to the deepest light, so be available. But you can find a bit of a background. What has happened, and I said so. There's Europe, Asia, us South America. There's also efforts

862

02:34:07.740 --> 02:34:11.930

starting in in Africa which you would see here, alteria, and so on, and so on.

863

 $02:34:12.170 \longrightarrow 02:34:21.410$ 

Thomas Stockhammer: So if you can move on to the next slide. So one of the trials was a European song contest that had a larger trial and effort in multiple states throughout Europe

864

 $02:34:21.780 \longrightarrow 02:34:27.460$ 

to show a bit of feasibility. This is not about emergency wearing transition, just about the feasibility of the technology.

865

 $02:34:27.760 \longrightarrow 02:34:41.980$ 

Thomas Stockhammer: And there's a prototype of that that they're allowed to go directly to mobile devices. I skip the details here. I refer to the distributed sites. but there is another slide on trials. Maybe you go to the next one as well.

866

02:34:43.310 --> 02:34:50.460

Thomas Stockhammer: So there's other demos and trials that are now really making this available to people globally.

867

 $02:34:50.480 \longrightarrow 02:35:03.530$ 

together with the event that Stuttgart Hwr. Had a test Stripes being done in France. Tower costs the reason. Mobile World Congress and significant efforts to demonstrate the capabilities.

868

02:35:03.570 --> 02:35:15.230

Thomas Stockhammer: The Bs in India just recently had an an explanation. The video open tennis championship was distributed through 5 T broadcasts.

869

02:35:15.330 --> 02:35:23.310

Thomas Stockhammer: all on trial phases, but basically, showing the the global interest. Okay. So moving forward to the next flight.

870

02:35:24.720 --> 02:35:40.520

Thomas Stockhammer: So there's a a significant amount of technology and standards evolution to be done so. The plan is evolved into. Gp. Had then been moved into the Itu is a worldwide standard that's part of the working pack party 6, 8,

871

02:35:40.760 --> 02:35:52.070

Thomas Stockhammer: and then there were some extensions being done in really 16 predominantly to address a high-power high tower rooftop perception, abilities up to 250 kilometers, per hour.

872

 $02:35:52.140 \longrightarrow 02:35:57.730$ 

And what was then basically created is an Epsy standard that is a profile.

873

02:35:57.900 --> 02:36:14.460

Thomas Stockhammer: two-fight cheap roll to the 3 cp application. It summarizes basically how you use Rtp. Specifications to run a fiveg broadcast service available at 103, 7, 20, and that has been extended to now addressed. Also, for example, the typical band with 6 7 8, Megahertz.

874

02:36:14.740 --> 02:36:22.130

Thomas Stockhammer: And then there is a second version on the development now through 5 Kmak and Eps that will be ready by mid of this year.

875

02:36:22.270 --> 02:36:36.020

and then there's another work in 3 Tp. To address all of the requirements for youhf handling, and so on, and so on busy an attempt to have something ready for the Wc. 23. So if you just move forward one more time.

876

02:36:37.390 --> 02:36:40.030

Thomas Stockhammer: so this new AD version

877

02:36:40.090 --> 02:36:48.980

Thomas Stockhammer: basically adds not the functionality of public warning system and emergency alerts, and this is available at the members that should be public in in a few weeks.

878

02:36:48.990 --> 02:37:02.530

Thomas Stockhammer: and you can read, then all the details, but it leverages and makes use of the switch Vp technologies. There's a couple of other extensions that are listed here that are added to this new version. But one of the aspects that is the subject of this

879

 $02:37:02.540 \longrightarrow 02:37:10.750$ 

talk today is about the emergency alert. So if you can move to the next slide. Then I just want to introduce a bit what's happening here? And

880

 $02:37:11.320 \longrightarrow 02:37:24.780$ 

Thomas Stockhammer: so on emergency alert. So basically 5G broadcasts inherit from 5 T. The public warning system capabilities. So in threegp it release 12. There was a significant effort to define what it's referred to as sell broadcast service.

881

 $02:37:26.490 \longrightarrow 02:37:44.580$ 

Thomas Stockhammer: and this service does not require authentication with the public public land, mobile network. and hence it's fully compatible to a ROM network at something that is run. What the sportscast network is doing. So you can go to these 3 P. Specs since 3 0 4, one on Cbs.

882

02:37:44.810 --> 02:37:46.020

Thomas Stockhammer: And you would find it.

883

02:37:47.290 --> 02:37:55.930

Thomas Stockhammer: And so basically. This commercial, mobile, alert system is available in commercial devices, and we basically used commercial devices which have been

884

02:37:55.950 --> 02:38:05.080

Thomas Stockhammer: just a a software, modified in order to be 5 Gibraltar capable, and you could immediately run from the high power, high power, infrastructure.

885

02:38:05.120 --> 02:38:10.620

Thomas Stockhammer: emergency warning to the devices, and that was shown in a trial just

886

02:38:10.650 --> 02:38:19.430

like a half a year ago from rodent trials providing the transmitter using qualcomm. a research device or reference design devices.

887

02:38:19.540 --> 02:38:26.370

Thomas Stockhammer: But basically this reference design are implementing a commercial chipset on our commercial devices, and we have by now also showing it

888

02:38:26.410 --> 02:38:32.570

on more modified commercial devices to get emergency alerts directly from a broadcast infrastructure

889

02:38:32.920 --> 02:38:45.320

Thomas Stockhammer: and and the whole switch Gp emergency alert system which i'm. Not going to go into the details. It's heavily deployed at cell broadcast throughout Europe and in different parts of the world. And you get the digital capabilities with this

890

02:38:45.420 --> 02:38:48.280

Thomas Stockhammer: tube fencing uses in a given area.

891

02:38:48.340 --> 02:38:57.060

And one other aspect is, basically you can link it with an emergency media service. So if you go to the next slide, there is basically just a presentation of the use case.

892

02:38:57.480 --> 02:39:04.830

Thomas Stockhammer: So the basic idea is that you have a broadcast service provider, an emergency service provider that might have a service, a media service as well.

02:39:05.190 --> 02:39:10.620

Thomas Stockhammer: And you can now basically send emergency messages directly to mobile handsets.

894

02:39:10.890 --> 02:39:19.820

And there's a couple of scenarios. So one is when the Ue is consuming a type cheap broadcast media service, then your camp to this network. So you receive it from this one.

895

02:39:20.290 --> 02:39:31.680

Thomas Stockhammer: There could be a cellular damage. Then basically. Device is automatically moved to the receive only broadcast network. That is something that happened in Germany 2021. We saw this before.

896

02:39:31.920 --> 02:39:42.650

Thomas Stockhammer: The third aspect is, if the Ue is out of cellular coverage. So if you have a broadcast reception, you automatically camp to this one, and that is not that you need a subscription. That is all happening because we are

897

 $02:39:42.700 \longrightarrow 02:39:57.390$ 

Thomas Stockhammer: stimulus and subscriptionists. and if the last one is, if the device doesn't have a cellar recept, you can still have an integration of a receiver that would camp to this. So we don't use back to broadcast as a replacement of cellular. It's really a resilient layer.

898

02:39:57.500 --> 02:40:04.350

Thomas Stockhammer: So this and it's complementary to what exists today in case of disasters and other cases very out of coverage.

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02:40:04.600 --> 02:40:18.770

Thomas Stockhammer: The last point is that you can also combine this with media service. So basically you can provide. Yeah, Urls directly in the messages that then allows you to basically launch an emergency media service that points you to these types of things, and there has also been Demos.

02:40:18.860 --> 02:40:22.550

Thomas Stockhammer: If you go to the next lied on that topic

901

02:40:23.830 --> 02:40:35.260

Thomas Stockhammer: that was shown by our colleagues in in China. And if you would play the video, I don't know. If you have time, then you could basically see exactly that's happening. If you click just on the video.

902

02:40:35.450 --> 02:40:37.420

Thomas Stockhammer: So that's a regular

903

02:40:38.580 --> 02:40:45.270

Thomas Stockhammer: Yeah, Exactly. So that that's a regular cell phone. And then you get an emergency alert. And then there is a URL included here

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02:40:45.370 --> 02:40:53.010

that basically now allows you to to an emergency service automatically being Uber.

905

02:40:58.600 --> 02:41:09.660

Thomas Stockhammer: Okay, so. And I mean the the really interesting piece. You see, this is handsets so regular form practice no strings attached to all the modem, all the capabilities of parse.

906

 $02:41:09.900 \longrightarrow 02:41:17.230$ 

of commercial phones nowadays, and that's probably the biggest opportunity, because you can immediately reach billions of devices

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02:41:17.320 --> 02:41:20.360

Thomas Stockhammer: that basically integrate this fever

908

02:41:20.420 --> 02:41:22.770

with the high power high tower infrastructure.

909

02:41:24.000 --> 02:41:36.580

Thomas Stockhammer: Okay, thank you. Just moving to the very end. I mean what's Basically, happening with 5. T is this platform for broadcast and content providers, including many features slightly broadcast public warning and many others.

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02:41:36.880 --> 02:41:45.370

And it's basically addressing this billions of devices from smartphones. But you go to vert, because also you get to automotive, IoT, and so on, and so on. We as welcome

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02:41:45.470 --> 02:41:48.250

Thomas Stockhammer: contribute to this. And there is a lot of work also

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02:41:48.270 --> 02:41:48.880

in

913

02:41:49.020 --> 02:42:00.040

Thomas Stockhammer: enhancing the standards and also creating reference tools. And as an example, I mentioned vice, Chief Mac. This is our partner on developing fivet broadcasts, which is a reference to these projects, where

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02:42:00.090 --> 02:42:07.890

the emergency boarding is also part of the roadmap to make it available for test and trial, so that it thank you. Sorry for the hiccup at the beginning.

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 $02:42:09.420 \longrightarrow 02:42:11.310$ 

Floor: Me, too. Thank you very much.

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02:42:12.800 --> 02:42:21.960

Floor: So i'm sorry we're almost 10 min over time, so pass directly to Mr. Wallet. Semi will moderate our last session.

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02:42:22.040 --> 02:42:34.910

Floor: Thank you very much. Thank you to all, while I I will summarize in, I hope, less than 5 min or so the my takeaways of the different presentations. I would invite the

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02:42:35.300 --> 02:42:39.650

Floor: speakers who are still present in the room to join. Please again

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02:42:39.660 --> 02:42:50.530

Floor: this side of the room, because I will have 2 questions to to ask. So while while they are joining my takeaways.

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02:42:50.860 --> 02:42:57.300

Floor: I noted a confirmed role of of broadcasting in times of crisis although

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02:42:57.310 --> 02:43:01.980

Floor: it it needs to be part of a multi-layer and multi-ystem structure

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02:43:02.520 --> 02:43:14.290

Floor: which includes both broadcasting and radio communication. And we have seen this in the examples given by Turkey and by Switzerland and by Oman.

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02:43:15.270 --> 02:43:20.680

Floor: Second takeaway radio has got a pivotal role

924

02:43:21.220 --> 02:43:28.960

Floor: when it comes to informing people during and after the disasters in the area in the affected areas.

925

02:43:29.330 --> 02:43:36.030

Floor: We saw this in the presentation on the floods in in Germany, and the examples of conflict areas

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02:43:36.100 --> 02:43:42.390

Floor: where it where FM. Was also quite quite advantages.

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02:43:42.550 --> 02:43:51.350

Floor: Now, while FM. As analog radio offers really advantages of simplicity, and why the reach

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 $02:43:51.440 \longrightarrow 02:44:04.270$ 

Floor: digital radio, and we have seen the examples of Drm. Of DAB, and and certainly others. They offer more elaborated emergency warning features than the FM.

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02:44:05.990 --> 02:44:24.600

Floor: The next takeaway is that the fiveg broadcast system that we have just seen seems to offer a a mixture of the advantage of broadcasting on one side on the road, on on the transmission side, and the advantage of the ubiquitous receivers.

930

02:44:24.600 --> 02:44:28.320

Floor: if if it really takes takes off because

02:44:28.340 --> 02:44:34.660

Floor: because it is included in the smartphones, and and this offers the the wide. The wide reach.

932

02:44:34.850 --> 02:44:38.060

Floor: Next takeaway is that television

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02:44:38.160 --> 02:44:57.960

Floor: is efficient. We we have seen the examples of of Japan. It's impressive, really how television was in in real time resilient and and providing. Really the the information is efficient to inform the the affected population

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02:44:58.550 --> 02:45:16.220

Floor: well before during or after, but but it it has the disadvantage of not being mobile on the receiver side. So if there is really a problem, and it is it is electricity dependent. So it is not battery powered. So how, however.

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02:45:16.220 --> 02:45:29.190

Floor: several TV systems in the world have got already their emergency, emergency warning, feature included, and we have seen the examples for Isdbt, and at the

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02:45:29.730 --> 02:45:37.430

Floor: now the last takeaway, I I would, I would say, is that being terrestrial.

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02:45:37.460 --> 02:45:42.000

Floor: these these broadcasting systems, they all require spectrum.

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02:45:42.220 --> 02:45:44.890

Floor: and they all require stable and

02:45:44.950 --> 02:46:01.470

Floor: a sustainable access to spectrum in order to operate and evolve and continue to offer the features, including the emergency warning. I think these are the takeaways. I I noted from the different presentations now coming back to the panel discussion.

940

02:46:03.170 --> 02:46:11.470

Floor: I already warned my the speakers that I will ask a few questions, but it's future looking.

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02:46:11.660 --> 02:46:19.160

Floor: I looked to the to the publications of of study Group 6

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02:46:19.800 --> 02:46:23.500

Floor: related to to to warning. I found very few.

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02:46:23.580 --> 02:46:32.330

Floor: I I should say. Let me let me tell you what I found on the radio side. The Bs series, I find found only one recommendation.

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 $02:46:32.460 \longrightarrow 02:46:43.990$ 

Floor: It's called a. Bs. 2,107, and the title is Use of International Radio for disaster relief, I or Dr. Frequencies for emergency broadcast and Hf. Band.

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02:46:44.190 --> 02:46:47.500

Floor: So I don't think that this is one of the most.

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02:46:47.510 --> 02:46:54.100

Floor: let's say, used, or okay. In the Bt series I found 2

02:46:54.830 --> 02:46:55.840

Floor: publications

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02:46:56.010 --> 02:47:09.030

Floor: Bt: 1,774. Its use of satellite and terrestrial broadcast infrastructure for public warning disaster, mitigation, and relief. and mainly it. It includes 2 systems.

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02:47:09.050 --> 02:47:12.850

Floor: one for is Dbt. The ews.

950

02:47:13.010 --> 02:47:14.730

Floor: and one for

951

 $02:47:14.740 \longrightarrow 02:47:25.110$ 

Floor: FM. Analog road testing, which is strange because it's a Bt recommendation, but it has half of it really. Talking about FM. Analog broadcast.

952

02:47:26.860 --> 02:47:33.680

Floor: and the other Bt document is 20 to 99, which is well known and quite

953

 $02:47:33.870 \longrightarrow 02:47:50.550$ 

Floor: quite important is the broadcasting for public warning, disaster, mitigation, and relief, which includes really all the available information on the systems and on cases of interference or of of disaster, and and also, I think that the content of this workshop might help to update

954

02:47:50.550 --> 02:47:54.010

Floor: this at some point of time, and depending on the contributions.

02:47:54.190 --> 02:47:57.670

Floor: I found an itut document.

956

02:47:57.820 --> 02:48:00.600

Floor: It's it's Recommendation X. 13 0 3

957

02:48:00.680 --> 02:48:06.830

Floor: of 2,007, and it is about the common alerting protocol, the cap

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02:48:07.290 --> 02:48:15.040

Floor: and cap. I I heard it from Lewis, I think, who talked about the cap as being included

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 $02:48:15.050 \longrightarrow 02:48:26.240$ 

Floor: or or or managed by also the ews in in at the, and it is a protocol that allows a harmonized way of informing

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02:48:26.300 --> 02:48:27.430

Floor: everybody

961

02:48:27.530 --> 02:48:44.560

Floor: about a disaster with all the characteristics of the disaster, etc., and being harmonized it, it can be then quickly deployed, and and by by every institution that will deal with the with the emergency.

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02:48:45.050 --> 02:48:56.930

Floor: But this cap is mentioned or recommended in an itut recommendation, but not mentioned at all in it, or in any it, or

02:48:57.360 --> 02:49:06.390

Floor: possibly in the possibly in the report 2,299. So having said this, my questions to the speakers first question.

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02:49:07.000 --> 02:49:09.060

Floor: What actions could

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02:49:09.250 --> 02:49:22.820

Floor: should study group 6 for it you t of it, or which deal with these with broadcasting do to support the global actions in relation to emergency one.

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02:49:23.460 --> 02:49:24.920

Floor: This is my first action

967

 $02:49:25.240 \longrightarrow 02:49:39.910$ 

Floor: erez agmoni. Before giving the floor to anyone who wants to answer this, I will give my second action. So the second question, so the others can could also reflect about it, is what actions could or should every broadcasting system proponent 250

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 $02:49:40.200 \longrightarrow 02:49:50.950$ 

Floor: right or standardization, body, or whatever, do to support the emergency warning requirements. Right? So these are my 2 questions. If we can get

969

02:49:51.290 --> 02:49:52.010

Floor: to.

970

02:49:52.260 --> 02:50:08.120

Floor: or 3 proposals out of these questions and of this workshop, it will be a very, very useful outcome that we can inform the study of 6 about, and the standardization organization about so they can progress.

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02:50:08.440 --> 02:50:11.080

Floor: Who would like to mention, Louis, please

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02:50:12.290 --> 02:50:13.090

so much.

973

02:50:15.380 --> 02:50:34.100

Floor: Thank you so much, Mr. Chairman. I have 3 very short ones, but the first one is to do exactly as you've done. Which is it? Our Study Group 6 should support a yearly forum to discuss best practices with demonstrated use cases. That's the first. The second is that

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02:50:34.100 --> 02:50:46.240

Floor: study group. 6 should endorse technologies that seek to ameliorate challenges within existing systems and support for emergency. Warning distribution should not be

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02:50:46.570 --> 02:50:55.280

Floor: confined to only existing silos. So it could be outside as well, and the last is the Study group. 6 should be encouraging inclusion

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02:50:55.430 --> 02:50:59.860

Floor: of reception capabilities in all received devices

977

02:50:59.890 --> 02:51:04.670

Floor: to accept emergency. Information from all transmission sources. Thank you.

978

02:51:05.850 --> 02:51:12.540

Floor: Thank you very much. This is very concrete. A yearly forum of best practices on paid cases.

979

02:51:12.640 --> 02:51:21.970

Floor: So something like this one, but on a yearly basis. Correct? Whoa! That's a the job. Second to endorse

980

02:51:22.870 --> 02:51:24.220

Floor: technologies.

981

02:51:25.600 --> 02:51:40.190

Floor: Can you repeat the second one? I I couldn't take all the you had endorsed technologies that that seek to ameliorate the challenges within the existing system. So the systems that are incapable now should be capable.

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02:51:41.170 --> 02:51:41.980

Floor: and

983

02:51:42.830 --> 02:51:53.200

Floor: the support for the emergency. Warning distribution should not be confined to what we have today like, we should think, outside the boxes.

984

02:51:53.250 --> 02:51:54.620

Floor: Okay, thank you.

985

02:51:54.630 --> 02:52:01.810

Floor: And the third one is to encourage or to recommend inclusion of reception capabilities in all types

02:52:02.630 --> 02:52:04.800

Floor: of receivers.

987

02:52:05.280 --> 02:52:15.730

Floor: I I see, I see in the first one just to react, and I I hope that others will also propose other things; that the first proposal is concrete, and in the

988

02:52:15.750 --> 02:52:20.890

Floor: scope of the institution, because if they decide to do a yearly

989

02:52:21.240 --> 02:52:41.050

Floor: event they can in those technologies that seek to ameliorate the challenges. I think we need the contribution for myself to to explain a bit more, and then inclusion of of reception, capabilities, and all types of receivers. I think this is a an old see. See Snake, as we say in the in, in, in, French.

990

02:52:41.050 --> 02:52:46.010

Floor: on mail, is that this is a a wishful thinking.

991

02:52:46.380 --> 02:52:47.430

Floor: Of course

992

02:52:47.490 --> 02:52:55.590

Floor: it would be ideal and perfect. It can be recommended while it can be implemented really is another thing.

993

02:52:55.670 --> 02:52:59.280

Floor: But thank you very much for for the proposals. Antonio, please.

02:53:00.340 --> 02:53:14.820

Floor: Maybe just continuing along the lines that have been traced. I mean this idea of the c snake I mean the I would try to revert the problem in a different way. I think we should try to identify.

995

02:53:14.830 --> 02:53:18.080

Floor: What are the families of solutions

996

02:53:18.250 --> 02:53:25.960

Floor: that sit in the largest number of homes in the largest number of pockets of people.

997

02:53:26.090 --> 02:53:32.570

Floor: And there. I'm. Referring to things that have been existing for a long, long time like that. They've fulfilled

998

02:53:32.710 --> 02:53:43.760

Floor: the the role of alerts like a fem broadcasting for example, but up to what Thomas Socombe was presenting with the fiveg broadcast

999

 $02:53:43.830 \longrightarrow 02:53:49.480$ 

Floor: combined in all mobile phones. But at the end of the day these are devices that we are

1000

02:53:49.550 --> 02:53:53.320

Floor: bringing with us all over the places every day.

1001

02:53:53.500 --> 02:54:01.110

Floor: so identify what are the elements that are present already in our life?

02:54:01.650 --> 02:54:06.140

Floor: And if 2 main characteristics, one, they are

1003

 $02:54:06.830 \longrightarrow 02:54:13.120$ 

Floor: able to have a low consumption, so that they can survive on batteries for a relatively long period of time.

1004

02:54:13.370 --> 02:54:26.930

Floor: because this is one of the other elements which is important. I mean you. If you have an emergency, and then, after 1 h, your device is off, then it's not really interesting. and 2 is the fact that

1005

02:54:27.850 --> 02:54:31.930

Floor: we cannot imagine to have a single system for everything.

1006

02:54:32.170 --> 02:54:45.560

Floor: So it will always be a combination. So this could be the rest of the broadcasting of television. This could be the rest of the casting of radio. This could be a 5G. Broadcast. As it has been said this could be satellite.

1007

02:54:45.600 --> 02:54:58.670

Floor: I mean, if you've been the last week at the Mobile World Congress, the simple fact that apple has launched a messaging system on a 25 years old. The the satellite system, like lobster.

1008

02:54:58.700 --> 02:54:59.530

Floor: is

1009

02:54:59.630 --> 02:55:11.860

Floor: kicked off a an enormous number of companies that they're showing up and saying, i'm going to do messaging emergency messaging by satellite. So there is another way of possibilities there, but

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02:55:11.910 --> 02:55:17.000

Floor: it's a little bit, maybe, out of the scope of the discussion of today. But

1011

02:55:17.190 --> 02:55:19.010

Floor: the basic rules is

1012

02:55:19.610 --> 02:55:25.090

Floor: common devices that the majority of people have with them in their homes or in their pockets.

1013

02:55:25.200 --> 02:55:28.590

Floor: and if possibly a common

1014

02:55:28.710 --> 02:55:41.880

Floor: other system. As you were saying, the cap standard, for example, is a format that could be deployed all over different physical infrastructures. Thank you. Thank you very much. This this seems complete as well.

1015

02:55:43.820 --> 02:55:45.730

Floor: would any?

1016

02:55:45.840 --> 02:55:48.190

Floor: Yes. you the same.

1017

02:55:50.260 --> 02:55:56.660

Floor: Thank you all right. Well, I have no different views from the previous speakers.

1018

02:55:56.740 --> 02:56:08.720

Floor: but I had to add some same since I 2,006, is a technical group. so we can normally provide technical solutions and guidance to the April gas industry.

1019

02:56:09.840 --> 02:56:14.740

Floor: But yeah, and that should be a precaution internationally.

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02:56:17.190 --> 02:56:22.730

Floor: But to do so we should fast understand the needs and requirements.

1021

02:56:23.890 --> 02:56:27.540

Floor: all broadcasters and the end users.

1022

02:56:28.370 --> 02:56:33.640

Floor: and then we can develop a technical solution that will feel the requirements.

1023

02:56:34.650 --> 02:56:40.070

Floor: And one additional remark, I right to say is that in

1024

02:56:40.140 --> 02:56:48.190

Floor: addition to the day, any delivery means. We should also consider that our technology

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02:56:48.860 --> 02:56:54.780

Floor: or our service should be universal and as accessible to all the people.

02:56:55.030 --> 02:57:02.750

Floor: as I mentioned at the opening fashion. That is a very important or broadcast that to consider

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02:57:03.410 --> 02:57:06.520

Floor: well study 6 to consider. Thank you.

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02:57:06.910 --> 02:57:13.500

Floor: Okay, Thank you. Thank you. Chairman of the group. 6. Thank you for your thoughts. I noted.

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02:57:14.330 --> 02:57:26.550

Floor: based on requirements, as if you are seeking contributions on the requirements with regard to emergency. So a before developing.

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02:57:26.650 --> 02:57:28.070

Floor: let's say solutions

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02:57:28.130 --> 02:57:32.590

Floor: is this: is this a call for contributions?

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02:57:33.460 --> 02:57:36.600

Floor: Well, I mean that yeah, we are

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02:57:37.440 --> 02:57:40.370

Floor: usually a technical centric.

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 $02:57:40.770 \longrightarrow 02:57:48.160$ 

Floor: But we should also consider that requirement. Our technology should meets the requirement. That is my point, right?

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02:57:48.180 --> 02:57:48.890

Floor: Okay.

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02:57:48.980 --> 02:57:53.890

Floor: Thank you. And I noted the universality and the accessibility.

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02:57:54.700 --> 02:57:55.810

Floor: the requirements.

1038

02:57:55.850 --> 02:58:01.340

Floor: Good. I'm: yeah, please, Alexander.

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02:58:02.050 --> 02:58:13.570

Floor: we are currently with my daily work. I'm: we are currently involved in digital radio integration into cap based alum systems both in Europe and in Asia Pacific.

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02:58:13.880 --> 02:58:25.650

Floor: And one lesson we learned from this practical application is that you have to think along the whole chain. and include all the partners that are relevant for the project to be successful at the end of the day.

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02:58:26.140 --> 02:58:38.840

Floor: One example from Europe is that from day one, when you start to define the features of emergency warning support on digital radio. You have to include the views, the requirements, 150

02:58:38.850 --> 02:58:46.200

Floor: of the authorities and the broadcasters what they can do, what their limits are, what their requirements are, and make sure that this is all

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02:58:46.520 --> 02:59:09.280

Floor: reflected on the technical specification that's currently going on in Europe. In Asia Pacific. We use the Drm. Stand up for digital radio which has Ewf. Defined. Here we are in the process of working with the authorities to implement it and integrate that outlet. Drm digit the radio into the existing cap infrastructure, where Drm obviously is only one of the many outlets.

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 $02:59:09.290 \longrightarrow 02:59:20.020$ 

Floor: And the lesson learned here is that sometimes the mindset is missing. That radio and digital radio in particular has different capabilities than what those 2

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02:59:20.410 --> 02:59:22.150

Floor: authorities started with

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02:59:22.610 --> 02:59:34.070

Floor: very practical example, they started with sending out SMS messages. So from that perspective any incident is a one-off event. You send out the message, and you're done until there's an update

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02:59:34.240 --> 02:59:46.350

Floor: similar with analog FM. And am. Transmissions where you would interrupt the program ideally of all the transmissions simultaneously. You give out the message, and then at some point you have to return to the original programming

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02:59:46.710 --> 03:00:00.720

Floor: in digital radio. We can do all that in the background. We don't have to interrupt the program. We can provide the content in parallel. and we can keep the analog, the the alarm signal on air all the time while the incident lasts, including updates, and so on.

03:00:00.770 --> 03:00:14.310

Floor: So there's a new model or a different model that that broadcasters and authorities need to be aware of, and maybe just pointing out the these practical differences between the different outlets and standards.

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03:00:14.570 --> 03:00:33.380

Floor: When you try to set up a for example, Cap based infrastructure just to put that information together, collect it all, and make it available in a very easy to digest form that would be highly useful for all the countries currently installing this kind of, and and establishing this kind of infrastructure, is my view

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03:00:34.110 --> 03:00:45.550

Floor: very, very useful, Really, Alexander, I see one of the roles of it you is to make the knowledge available to

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03:00:45.830 --> 03:00:51.740

Floor: the really, the the global community. And and this is why

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03:00:52.230 --> 03:01:10.770

Floor: the administrations in in in less developing countries. They they really benefit from the developments made by more developed countries and reflected in the recommendations and the reports. And what you say is exactly this: if we, if we bring into the one

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03:01:10.820 --> 03:01:12.470

Floor: it you or

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03:01:12.490 --> 03:01:18.250

Floor: document publications, what are the capabilities of these

03:01:18.390 --> 03:01:37.830

Floor: of these emergency warning systems? Would this would benefit to to the, to the whole, to the whole community. That's that's very. That's very useful, and and the you confirm that the cap is taken into account in in the in the reflection. But how? How

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 $03:01:37.830 \longrightarrow 03:01:56.150$ 

Floor: to use the Ew feature? Yes, to to to apply the cap, let's say, yeah, right? Yeah. So Cap or cap is basically that that central focal point that summarizes the incident, the type, the severity, the the description. Out of that

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03:01:56.270 --> 03:02:02.870

Floor: you have a whole set of of collection points where the decision is taken. Whether or not that is a serious incident.

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03:02:02.910 --> 03:02:15.750

Floor: Then you have the central focal point, and then you have all these different outlets, Fiveg: broadcasting TV services stitched to radio analog radio SMS: so broadcasting. All of these outlets and all of them are useful and are important.

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03:02:15.770 --> 03:02:19.800

Floor: but every form of outlet has a certain feature set

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03:02:19.890 --> 03:02:38.900

Floor: that then this cup information needs to be transformed into, to be ideally presented on that output platform and just making an overview available of what the different features that are of all these different outlets that could be 1 one great piece of information. Yep, very good. So we are reaching the the end 130.

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03:02:38.900 --> 03:02:47.760

Floor: So what I would I would suggest is that those proponents of systems that were present here.

03:02:47.890 --> 03:02:50.820

Floor: You know now that there is a lack

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03:02:51.000 --> 03:02:53.790

Floor: of information in the

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03:02:53.940 --> 03:02:57.210

Floor: it publications on on your own systems.

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03:02:57.240 --> 03:03:05.220

Floor: and you the features related to emergency of your own systems. For example, in recommendation Bt: 1,774. I don't see the Rm.

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03:03:05.460 --> 03:03:17.240

Floor: I don't see the a. B. A I I don't see I I I see I is DVD. I don't see atsc 3 0. This is missing information, because this

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03:03:17.290 --> 03:03:21.560

Floor: the recommendation is seen by all the administrations.

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03:03:21.690 --> 03:03:40.020

Floor: So it needs it needs contributions. That's for sure. I would mention also that because this cap seems to be something that is promoted as harmonized and global way of informing

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03:03:40.590 --> 03:03:45.680

Floor: about disasters. It it could have also its place in

03:03:45.750 --> 03:03:48.830

Floor: the it, or

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03:03:49.010 --> 03:03:50.530

recommendations.

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03:03:50.710 --> 03:03:54.790

Floor: so on. So the call call for contributions.

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03:03:54.970 --> 03:04:06.470

Floor: Please contribute to it or study Group 6 to develop further the recommendations and reports related to emergency warning.

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03:04:07.130 --> 03:04:18.820

Floor: Thank you very much. Are there any last last last words from the speakers here or on the who online. Let me let me see who is asking.

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03:04:20.440 --> 03:04:26.590

Floor: Okay, I see Jacqueline, and then Thomas, and then Alexander. So, Jacob W. First, please.

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 $03:04:27.230 \longrightarrow 03:04:56.370$ 

Giacomo Mazzone: Yes, thank you for the floor. I put my suggestion in in the chat, too, so I think that will be very useful to if the study group make his expertise available and liaise with the Wmo. Because because Wmo is leading the effort for the UN. Of the early warning system. And in all this efforts of early warning system, what is missing is the link to the houses and to the citizens.

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03:04:56.370 --> 03:05:13.280

Giacomo Mazzone: and I think that this is. This is an essential part. For the moment the Wmo is focusing only on reaching the central, where the information are available and reach the national authorities. But how the national authorities reach this Isn't.

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 $03:05:13.280 \longrightarrow 03:05:17.010$ 

Giacomo Mazzone: This is not included in the plan, and I think that will be important.

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03:05:17.050 --> 03:05:28.180

Giacomo Mazzone: The last point last suggestion is about sense, and I like is releasing now a a guidelines for early warning.

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03:05:28.200 --> 03:05:31.390

Giacomo Mazzone: alert through mobiles and social media.

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03:05:31.470 --> 03:05:43.150

Giacomo Mazzone: There is a draft that is circulating. I think that would be very good to profit of your expertise and give to this draft some suggestion. I will put in the chat the link.

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 $03:05:43.890 \longrightarrow 03:05:52.460$ 

Floor: Thank you very much, Jacqueline. Thank you for for your contribution. The second, I think, is Thomas Schlachamer. Please, Thomas.

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 $03:05:53.210 \longrightarrow 03:05:59.900$ 

Thomas Stockhammer: Yeah, I I I really believe what is important is to understand, and I put in the chat as well that

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03:05:59.960 --> 03:06:05.110

Thomas Stockhammer: there is a a massive amount of efforts to roll out a cellular base

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03:06:05.510 --> 03:06:17.080

Thomas Stockhammer: emergency warning system. And what is really important in all of this, that broadcast is viewed complementary to cellular broadcast and not competitive. I believe this is for everyone's tennis it.

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 $03:06:17.410 \longrightarrow 03:06:25.440$ 

Thomas Stockhammer: So if a report would be done it, it really is important to probably integrate not only the broadcast technologies, but also understand

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03:06:25.610 --> 03:06:28.640

what cellular can do, etc., is also based on

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03:06:28.800 --> 03:06:37.930

Thomas Stockhammer: back end Cap v. One dot, 2, and and everything like this is in place. and the difference what broadcast springs compared to seller, there

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03:06:37.970 --> 03:06:43.050

is the sure it's different. Right? So you can reach base. You can.

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03:06:43.090 --> 03:06:56.830

Thomas Stockhammer: maybe, a different robustness or a a redundancy of infrastructure, and and that probably is very important where broadcast springs and that, and then even getting broadcast to cellular devices, is probably

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03:06:56.900 --> 03:07:00.160

Thomas Stockhammer: a unique pitching point for broadcast itself.

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03:07:00.310 --> 03:07:14.300

but generally please always include the cellular as well. Because all of this is complementary. We want to use as many ways as possible to warn people, and not make this a competition across broadcast intelligence. Thank you.

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 $03:07:14.810 \longrightarrow 03:07:27.290$ 

Floor: Yes, thank you. This is quite wise, and I I think I think, in my takeaways. I I mentioned that the it should be part of a multi-layer multi system structure. It cannot be alone

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03:07:27.420 --> 03:07:30.490

Floor: that's for sure Thank you and Roxandra. Please welcome.

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 $03:07:33.140 \longrightarrow 03:07:56.210$ 

Ruxandra Obreja (DRM): Thank you very much, and apologies for not being with you. It was a result of a of an emergency, so to speak, very interesting session. Thank you very much. I mean, I am supporting the idea of having. I don't know if if the workshop but definitely a work stream that addresses emergency warning. I

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03:07:56.210 --> 03:08:00.320

Ruxandra Obreja (DRM): listened with great interest to to all the proposals. May

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03:08:00.370 --> 03:08:08.050

Ruxandra Obreja (DRM): and I would just say one thing: Thomas was talking about cellular being complementary to broadcasting.

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03:08:08.060 --> 03:08:27.420

Ruxandra Obreja (DRM): I still think that hierarchy, if I started, if I was a Prime Minister and I started an emergency wanting system, and somebody explain app to me, and all all the multi layered possibilities. I would still want to know what is the last resistance point.

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03:08:27.420 --> 03:08:51.680

Ruxandra Obreja (DRM): A lot of the people most of the people in the world have a mobile in their phones. However, most of the hours mobile powers and television towers are probably in a big, big disaster, like what we saw in Turkey or man, or even Japan, are going to fall down. So I i'm making a plea for broadcasting, for multi layer

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03:08:51.680 --> 03:09:06.060

Ruxandra Obreja (DRM): for complementarity, and not for for computation, as I said, but i'm making a big case for broadcasting and digital broadcasting, and I think that it you documents to really include

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03:09:06.120 --> 03:09:10.100

Ruxandra Obreja (DRM): all the elements about analog expanding what, Steve.

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03:09:10.100 --> 03:09:33.210

Ruxandra Obreja (DRM): it's probably going to say straight away at 2,017. It you document, but also give an understanding of what digital radio, and how it can work together in this multi platform multi-layered solutions. I think countries will go different ways. They have different understandings and go different ways. And why do you should give a

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03:09:33.210 --> 03:09:51.020

Ruxandra Obreja (DRM): absolute guidance, and tell people what is a hierarchy, how they complement each other, how they can work, what is the central point, and how they can, and go then from authority to brought us the

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 $03:09:51.770 \longrightarrow 03:09:54.710$ 

Ruxandra Obreja (DRM): point central point to the listener.

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03:09:54.860 --> 03:09:58.890

Ruxandra Obreja (DRM): Thank you very much

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03:09:58.940 --> 03:10:05.550

Floor: for an intervention. I see Steve, and I think this will be the last intervention.

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 $03:10:05.620 \longrightarrow 03:10:10.240$ 

Floor: because we have. We are exceeding our time. So, Steve, please.

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03:10:11.440 --> 03:10:16.620

Floor: Yes, thank you. I I can remember going back to 2,017,

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03:10:17.120 --> 03:10:29.550

Floor: and we were going through exactly the same discussion. although the focus was very much on the an FM. Receiver if you actually open up the rarely looked at opinions of study Group 6,

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03:10:29.650 --> 03:10:40.420

Floor: look at opinion number a 103, and guess what the title is the activation of radio broadcasting receivers in smart stroke, mobile telephones and tablets.

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03:10:41.140 --> 03:10:51.030

Floor: And yes, we've been there before. But what has happened? And with that I will finish and say, Yes, we need more awareness need the way the awareness worldwide.

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03:10:51.150 --> 03:10:56.160

Floor: But we also need cooperation between all of those in this chain.

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03:10:56.340 --> 03:10:59.920

Floor: You can provide an independent piece of the jigsaw puzzle

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03:10:59.980 --> 03:11:03.220

Floor: that we do need as many open paths as possible.

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03:11:03.420 --> 03:11:12.350

Floor: because in an emergency it's every path might help. Thank you. Thank you, Steve. So like like for Sandra, you you you talk about complementarity.

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03:11:12.360 --> 03:11:16.420

Floor: This is this is the word that is repeated

1118

03:11:16.620 --> 03:11:27.180

Floor: last last act. Last intervention, Roger, please, and we will. We will wrap up. Yes, thank you, Wallard, Roger. A bunch from Australia, a country which has more than its own

1119

03:11:27.330 --> 03:11:36.700

Floor: number of disasters on an annual scale. I just want to thank you all for a magnificent presentation.

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03:11:37.140 --> 03:11:42.880

Floor: and I want to give you a little bit of hope. Resolution 6 4 6

1121

03:11:44.750 --> 03:11:47.940

Floor: Ppdr Public

1122

03:11:48.090 --> 03:11:50.700

Floor: protection, disaster, Relief

1123

03:11:51.080 --> 03:11:56.640

Floor: resolves to to encourage administrations to use

03:11:56.730 --> 03:12:01.010

Floor: harmonized frequency ranges for ppdr

1125

03:12:01.570 --> 03:12:04.790

Floor: to encourage administrations to consider

1126

03:12:04.830 --> 03:12:11.120

Floor: parts of the frequency band 6 9 4, 2 8 9 4.

1127

03:12:11.330 --> 03:12:12.220

Floor: Thank you.

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 $03:12:13.470 \longrightarrow 03:12:22.760$ 

Floor: Thank you. So I I take this as the invitation that we get another resolution that says similar thing for broadcasting.

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03:12:23.340 --> 03:12:41.300

Floor: Thank you very much. I think we can close the the the workshop here. Thank you very much to all the speakers. Thank you very much to all the audience, all the remote and the present audience, and maybe maybe talk to you in an in a future workshop on the same subject.

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03:12:41.340 --> 03:12:50.180

Floor: I hope that this house will will not happen anymore, so we don't need the workshop, but unfortunately this will not happen, and there will still be disaster.

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03:12:50.230 --> 03:12:53.990

Floor: Thank you very much. The workshop is closed.

03:12:54.150 --> 03:12:55.580

Floor: Thank you.