2020 CAP Implementation Workshop Speakers

(Updated as of 30 September 2020)

For the provisional Programme, see Programme
For the provisional list of participants, see Participants
For details about the venue and logistics, see Information Note

1.1 Welcome from the International Telecommunication Union (ITU)



Vanessa Gray heads the ITU Development Sector (ITU-D) Environment and Emergency Telecommunications Division. In this role, she is responsible for studying needs, developing specific programs of assistance, and identifying ICT for Development opportunities. She also coordinates emergency telecommunications, developing ICT projects that provide assistance for disaster prevention, preparedness, mitigation, response, and recovery. Her Division is responsible as well for ITU-D programs on e-waste and climate change adaptation. Prior to this position, Vanessa was in the ITU ICT Data and Statistics Division where she contributed to analytical publications, organized ICT-related meetings, and delivered national and regional training on ICT statistics. Vanessa holds a Master's degree in Political Science and Economics from the Graduate Institute of International and Development Studies in Geneva, Switzerland.

1.2 Welcome from the International Association of Emergency Managers (IAEM)



Robie Robinson is currently serving as the Global President for the IAEM, is a Past President of the IAEM-USA Council and the Emergency Management Accreditation Program (EMAP). Mr. Robinson has served as the emergency manager for three Texas counties that span the spectrum from a rural, small population to the ninth most populous county in the United States. He also has extensive experience with higher education institutions. He has served as the Emergency Management Director for Tarrant County College with five campuses serving 60,000 students. In his current position with The University of Tennessee at Chattanooga, he is responsible for all aspects of the police department, campus and workplace safety, risk management, environmental compliance, and emergency management for a thriving metropolitan university. Mr. Robinson is a Certified Emergency Manager®.

1.3 Welcome from the International Federation of Red Cross and Red Crescent Societies (IFRC)





Jessica Ports Robbins is the Technical Advisor, Preparedness ICTs for the Global Disaster Preparedness Center (GDPC). She has worked with the American Red Cross since 2001. In her role with GDPC she manages the Center's digital tools, including the Universal App Program, the WhatNow Service, and Atlas: Ready for Business preparedness app, and she provides technical guidance to partner Red Cross and Red Crescent National Societies. Her education includes a BA in History from Elon College, an MS in History & Sociology of Technology & Science from Georgia Institute of Technology, and a Ph.D. in international development, also from Tulane. Areas of expertise include information and communication technology for development (ICT4D), mobiles for development (M4D), disaster risk reduction, shelter operations, pet evacuation and sheltering, volunteer management, international humanitarian law, and community disaster preparedness.



1.4 Welcome from OASIS (standards organization)

Guy Martin is OASIS Executive Director, responsible for overall operation and helping define strategies and policies to deliver the best value to OASIS members. He works closely with OASIS staff and the Board of Directors to help the organization leverage the best of open standards and open source communities. Guy has a unique blend of 25+ years' experience as software engineer and open source strategist. He has built open source programs for companies like Red Hat, Samsung and Autodesk and was instrumental in founding the Academy Software Foundation while Director of the Open Source Office at Autodesk. He served for over 10 years as a volunteer with Cal Fire, California's State Fire Department, leading a team providing mobile command post and communications in support of multi-agency wildland fire responses. He is a passionate believer in open source and standards in service of emergency management and the greater public good.



1.5 Welcome from the World Meteorological Organization (WMO)

3.13 WMO Role in CAP Implementation

Miriam Andrioli is Chief of the Service Delivery Division in the Weather and Disaster Risk Reduction Services Department of the World Meteorological Organisation. She graduated in Meteorology at the University of Buenos Aires, Argentina, and joined the National Meteorological Service. There she held management positions in Marine Meteorology, International Affairs, and in Public Relations and Communications Media. She was President of the Marine Meteorology Capacity Building Group of the World Meteorological Organisation and the Intergovernmental Oceanographic Commission and member of the International Airways Volcanic Watch Operations Group of the International Civil Aviation Organization. She has also been a weather journalist, presenter and producer at a leading television and radio national network in Argentina.



2 Organization of the Workshop

Eliot Christian is a *pro bono* consultant to various organizations. He leads the Filtered Alert Hub initiative, part of the U.S. NOAA Big Data Project, and he conducts CAP training for ITU and the US Agency for International Development. He is also a pro bono consultant to, and retired from, WMO. He was a chief architect of the WMO Information System and the Global Earth Observations System of Systems. Eliot is retired from the United States Geological Survey (USGS) where for many years he helped lead broad programs for environmental data sharing. Since 2001, he has been active in developing and promoting CAP, especially internationally.



3.1 CAP from an ITU Perspective

Maritza Delgado is a Program Officer of the Environment and Emergency Telecommunications Division within the International Telecommunication Union's (ITU) Telecommunications Development Bureau (BDT). Maritza is responsible in the context of emergency telecommunications for developing ICT projects for early warning, disaster management and risk reduction, and for providing assistance for disaster mitigation, prevention, response and recovery. She holds a University degree in Electronic Engineering and Telecommunications and has over 13 years of experience in the field of disaster management. Her recent focus is on encouraging countries: to develop their own emergency telecommunication plan, integrated with the national emergency plan; to design an early warning system addressing hazard threats that affect the region; and, to include ICTs in their early warning systems.



3.2 Open Source CAP for Radio and Television

Rob Hopkins comes from a pioneering family of Canadian inventors. He started in the arctic communications industry in 1992 by building a private mountain top wireless link connecting Tagish and Whitehorse (120kms away) to communicate purchase order faxes with East Asia. This was followed by an "under regulated" broadcast radio station in 1997 from his home in Tagish. While struggling to make his station accessible to the local populace while providing community access programming and public alerting, he began to envision a web based "radio station in a box" prototype with unattended CAP Emergency Broadcasting at its core. His group has since released an open source Media Asset Management (MAM) system supporting CAP images with video and audio messaging. This is being used throughout all broadcast sectors in Canada, including commercial, community, campus, indigenous, development, and tourist information for radio, along with TV, scrolling LED, and digital signage systems.



3.3 CAP in AccuWeather

Eric Michielli is currently serving as the Director of Data Management within the Information Technology department at AccuWeather. Working closely with the Core Weather Content team, Eric's team is responsible for integrating new data into our enterprise systems, with an emphasis on weather alerts and observations. In addition, the Data Management team is responsible for maintaining our centralized locations database and relating those locations to the correct weather content. Our team's primary goal is to ensure that our users get the right information as quickly as possible. Eric has been with AccuWeather since August of 2005. After graduating from Pennsylvania State University with a BS in Meteorology and a minor in Information Science and Technology in 2004, Eric served as a programmer on the meteorological data integration team. Eric also served as a Database Developer and Database Administrator prior to his current role as Director of Data Management.



3.4 Google and CAP

Adi Mano has been working at Google for over twelve years, leading the PublicAlerts Engineering team for the last two. The PublicAlerts team is making critical information more accessible in times of disaster through Google Search and other products. Adi has an MBA and a Masters in Computer Science from Israel Institute of Technology. Areas of expertise include crisis alerting technologies, and community disaster preparedness.



3.4 Google and CAP

Nofar Peled Levi leads the crisis response product portfolio at Google Search, making critical information accessible globally in times of disaster through Google Search and other products. Most recently she led Google's response to Covid-19 while providing hyper local statistics and information, making real time pandemic data available worldwide.

Nofar has 10+ years of experience developing key user products and leading product teams. She is also the founder of the largest sustainability community in Israel making schools across the country greener while involving progressive education methods.



3.5 CAP in ICL Multi-Hazard Early Warning

Tun Wang China. the director of Institute of Care-life (ICL) in Chengdu, China, focused on Earthquake Early Warning (EEW) technology and its application since the 2008 Wenchuan earthquake. After eleven years of work, ICL have developed cutting-edge EEW technology with fast response time and no false alerts. ICL EEW technology has been tested publicly by 56 destructive quakes, saving lives and reducing losses. Currently, ICL EEWS has served schools, lifeline projects, such as high-speed railway, subway, gas lines, chemistry factories and nuclear stations, and XiChang satellite launch center. For the public, ICL EEW messages are available with smartphones, TV, microblog and special receivers. ICL EEW technology has also been used in Nepal and Indonesia. ICL has applied CAP to some EEW projects from the year 2015 and got some experience on CAP in the field of EEW.



3.7 CAP in India

Saurabh Basu is a Senior Research Engineer at India's Centre for Development of Telematics (C-DOT) in New Delhi. His primary expertise is end-to-end development of telecom products. His responsibilities include brainstorming with stakeholders to frame and prioritise requirements for products, and the design and implementation of telecom solutions. Saurabh was the solution architect for various Geo-Intelligence projects of C-DOT, such as the Optical Network planning for NOFN, Fiber Fault Localization System, and more recently the geo-spatial service for a critical project with extreme national importance: Centralised Monitoring System. He actively participates in and contributes to OneM2M, the international standardisation body on M2M (machine-to-machine communications). In 2016 his C-DOT Team received the Aegis Graham Bell award for "Innovative Managed Services".



3.8 CAP in Italy

Marcello Marzoli, Fire Captain, master's degree in aerospace engineering, since 1990 he has been working for the Italian Ministry of interior, Department of Fire corps. He has been working at the National control centre, Air service, IT office and now at the National fire academy. Since 2001 he has been working on several European and National R&D projects focussed on satellites, indoor location, control centres' interoperability and mass evacuation. He has been appointed as EC expert evaluator and to serve on the NFPA Committee on Mass Evacuation and Sheltering. Inventor and assignee of Italian patents, he has published several papers.



3.9 CAP in Mexico

Mario Alvaro Ruiz Velazquez is an advisor to the Mexico, Institute of Research and Studies on Alerts and Risks A.C. and a specialist in Emergency Alert Systems. He holds a Master's Degree in Computing Systems and his Ph.D. studies focus on Emergency Alert Systems and Crises Leadership. An information technology advisor in Safety and Warning Systems to various levels of government in Mexico, he participates in design, development and installation of the Mexican Earthquake Alert System (SASMEX) using EAS-SAME and CAP. He also works with academic, specialist and civil protection authorities in developing the Earthquake Warning System in California, USA.



3.10 CAP in the Weather Company

Michael Grogan is an essential data engineering manager at The Weather Company, an BM business. Mike has 20+ years of experience leading technology teams, creating key data products, and designing & operating data systems for broad positive impacts on society, especially in the weather & emergency alerting fields.



3.12 China's National Early Warning Release System

Minghui Lyu is a senior research engineer with the Public Meteorological Service Centre of the China Meteorological Administration. Her education includes a BA and a MS in Physical Geography from Shandong Normal University, and a PhD from Peking University. She has worked with the Public Meteorological Service Centre since 2009 and in her role with National Early Warning Centre since 2017. She has expertise in socio-economic benefits assessment of public weather services, communicational effective evaluation about public alerting. She has vast knowledge and experience as expert evaluator of assessing technology R&D, data analyst, and project management.



3.13 WMO Role in CAP Implementation

Samuel Muchemi is the Scientific Officer, Public Weather Services at WMO since 2006. He joined the Kenya Meteorological Department (KMD) in 1980 as a weather forecaster and later as a weather presenter on television for the Kenya Broadcasting Corporation (KBC). He was also in charge of the Public Weather Services Division of KMD.



3.14 Everbridge and CAP

Scott Benoit is Senior Director of Product Management at Everbridge. His background is primarily User Experience Design and Creative Direction. Prior to Everbridge, Scott was the Vice President of Product Management at Nixle, LLC, which was acquired by Everbridge in 2014. Working at Trailer Park, the largest marketing and content agency in Hollywood, he acted as the Senior Interactive Designer and Art Director on a wide array of projects including websites, banner ads & rich-media campaigns for major entertainment properties. Scott is the Founder & Creative Director of Benoit Design and has been contracted to provide Design and Creative Direction services for clients such as Sling Media, International Documentary Association, Digital Hollywood, International Fund for Animal Welfare (IFAW) and Kaiser Permanente.



3.15 Filtered Alert Hub Update

lan Ibbotson is owner and Director of Knowledge Integration Limited, a company in Sheffield, United Kingdom, primarily specializing in distributed information indexing and retrieval architectures. Ian also volunteers as principal designer and developer on the Filtered Alert Hub initiative, part of the NOAA Big Data Project. This cloud-based, free resource is a global-scale aggregator of Internet news feeds that link to emergency alerts in the CAP standard format. This Alert Hub aggregates about 80 national-scale CAP news feeds from 66 countries and it is growing steadily. Ian migrated the Filtered Alert Hub to use Rabbit Message Queue as its base technology.

3.16 Flash Flood Guidance and CAP



Konstantine Georgakakos is the Managing Director of the Hydrologic Research Center in San Diego, California. He is also an Adjunct Professor with the Scripps Institution of Oceanography of the University of California, San Diego, and with the Department of Civil and Environmental Engineering of The University of Iowa. Kosta has authored or co-authored more than 110 refereed journal publications, 10 book contributions and more than 150 technical reports regarding various areas of Hydrology, Hydrometeorology, and Hydroclimatology. He is the primary author of several software packages pertaining to real time flow prediction for operational use by Agencies such as the U.S. Army Corps of Engineers and the U.S. National Weather Service. He served as an Editor-in-Chief of the Journal of Hydrology (2008-2017). He serves as US Expert in Hydrologic Modelling for the World Meteorological Organization Commission for Hydrology (1997-present). He has supervised several large-scale international science cooperation and technology transfer projects.

3.17 Integrated Public Alert and Warning System (IPAWS)

Mark Lucero is Engineering Branch Chief since 2009 for the United States Integrated Public Alert and Warning System (IPAWS). IPAWS provides timely alert and warning to American citizens in the preservation of life and property. He had been an Electronics Engineer with the Defense Information Systems Agency from 2004 to 2009. Prior to these positions, Mark was a Field Engineer for telecom equipment.



3.18 METCAP Plus Freeware

Kemal Dokuyucu is a statistician, meteorologist and computer programmer at the Turkish State Meteorological Service (TSMS). He has been working at TSMS since 1981. He graduated from the Statistics and Computing Department of Middle East Technical University, Ankara. He worked at the Murted Airbase near Ankara as Weather forecaster for eight years, and he started to work as a computer Programmer in 1989. As a graduate trainee 1994 - 1995, he worked at the European Centre for Medium-Range Weather Forecasts (ECMWF) in Reading, U.K. He was head of the Weather forecasting department at TSMS between 2003 and 2008. Kemal has been working on development of the Meteorological Communication and Visualization Package (METCAP, named as MetcapPlus in 2010) for more than 25 years. Metcap-CAP is a module of the package that generates CAP alerts.



3.19 Pacific Disaster Center and CAP



Joel Myhre has many years of experience in humanitarian and emergency response capacity building, interoperability strategy, and technology, as well as advanced degrees from UC Davis and the University of Hawaii. Joel now works at the Pacific Disaster Center (PDC), an applied research center managed by the University of Hawai. Since 1992, PDC has helped government agencies, nongovernmental organizations (NGOs), and humanitarian relief organizations to conduct baseline risk and national disaster preparedness assessments, create mitigation strategies, support training and exercises, and to implement the PDC DisasterAWARE® technology. DisasterAWARE provides global risk intelligence, early warning, and scientifically verified geospatial data and modelling tools for assessing risk and hazard impacts. PDC serves a global audience, helping to increase disaster management capacity and effective decisions, policies, and actions for a safer world.





Andreas Schaffhauser is a senior meteorologist at the Austrian National Meteorological Service (ZAMG). He received his master and doctoral degree in meteorology from Innsbruck University in Austria. Andreas worked as researcher in the field of remote sensing, alpine meteorology and snow and avalanches. He joined ZAMG in 2006. His responsibilities included radar meteorology, forecasting, application development and training. Since 2011 he is head of the ZAMGs customer service division. Andreas is responsible for ZAMGs public weather services, climate- and environmental services and is involved in Meteoalarm programme management. Meteoalarm (www.meteoalarm.eu) is an impact-orientated, common framework to aggregate, display and make available authoritative warning information for meteorological and hydrological hazards of EUMETNET members (37 NHMSs across the European domain). Meteoalarm is coordinated by ZAMG and uses CAP as the standard exchange format for warnings.

3.21 Italy's CAP Profile and EU-Alert System



Umberto Rosini works in Rome as a Technical Project Manager at Presidency of the Council of Ministers, Civil Protection Department. His remarks at this Workshop will focus on "IT-Alert", Italy's implementation of EU-Alert which is the European Public Warning Service based on Cell Broadcast technology. IT-Alert is also CAP-based, following the pattern of the U.S. Wireless Emergency Alert system. He will present, also, the Italian Profile of CAP, named CAP-IT.

3.22 Update on OASIS Emergency Management Technical Committee Work



Elysa Jones is an internationally recognized expert in Emergency Interoperability Communications via Data Messaging. She is Chair of the OASIS Emergency Management Technical Committee since 2004. Her Committee developed and maintains the Common Alerting Protocol (CAP) Standard, also known as ITU Recommendation x.1303. Additional Standards for message distribution, resource messaging, hospital availability, tracking of emergency patients and clients and situation reporting are products of her committee. She is an Emergency Communication Expert for the International Telecom Union (ITU), Chief Technology Officer and Advisor for various Companies, Organizations and Countries providing guidance on the development of systems that utilize data messaging standards. She holds a Baccalaureate Degree in Economics, and a Master's Degree in Computer Science from the University of Alabama in Huntsville. Elysa is a tireless advocate for the use of open standards in support of emergency communications.