2021 CAP Implementation Workshop
Speakers

(Updated as of 25 October 2021)

The set of available presentations can be downloaded from here.
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 Association of Emergency Managers (IAEM)

Judson Freed currently serves as President of IAEM-USA and as a member of the Board of Directors of IAEM-Global. He has more than 30 years of experience in Emergency Management, Homeland Security, risk, resilience, and continuity. Since 2003, Judd has served as Director of Emergency Management and Homeland Security for one of the nation's most densely populated, large urban counties. A frequent presenter and lecturer on issues surrounding Emergency Management, homeland security, risk and ethics in an age of terrorism, Judd is an Adjunct Professor in Emergency Management at Idaho State University and is a member of the National Academies of Science, Medicine, and Engineering Resilient America Roundtable. Judd is active in government affairs issues pertaining to the implications and impact of emergency management on local communities and government. He has provided expert testimony before the United States Congress on several occasions, and to federal commissions as well as the Minnesota State Legislature.

1.2 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.

1.3 Welcome from the International Telecommunication Union (ITU)

3.10 ITU Emergency Telecommunications and CAP

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.

1.4 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)

Cyrille Honoré is the Director of the Disaster Risk Reduction and Public Services Branch within the Services Department of the World Meteorological Organization, based in Geneva. Mr Honoré has a background in atmospheric sciences and meteorology and graduated from the French "Ecole Nationale de la Météorologie", Toulouse, in 1986. His career developed with a strong user focus in operational meteorology, competency development, regional and international cooperation including as an Advisory Board Member of Eumetnet/Meteoalarm program, bringing him to join the WMO secretariat in 2018.

2 Organization of the Workshop

Eliot Christian is a *pro bono* consultant to various organizations. He leads the Filtered Alert Hub initiative on behalf of the U.S. NOAA. He consults on CAP and conducts CAP training for IFRC, ITU, UNDRR 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. Eliot is also CEO of the non-profit Alert-Hub.Org CIC (Community Interest Organization).

3.1 IFRC Alert Hub

Justin Ginetti is IFRC's Senior Officer for Information Management and Risk Analysis. Prior to joining IFRC, he was Head of Data and Analysis at the Internal Displacement Monitoring Centre and a programme officer on the Global Assessment Report team at UNISDR (now UNDRR). At IFRC, his work focuses on scaling up the use of risk and hazard-impact models to inform decision-making and operations.

3.2 CAP and Wireless Public Alerting Canada

Norm Paulsen is a senior meteorologist with Environment Canada and one of the principle architects of the CAP Canadian Profile. He has over 25 years of experience in alert information modelling and alerting systems design. During this time, Norm has contributed to the advancement of CAP - both in Canada and the WMO - is an active participant in OASIS CAP sub-committee working groups, and is currently the chair of the CAP Canadian Profile Standards Working Group. His current position involves the strategic planning of the Environment Canada alerting Program and how that Program interfaces with radio, television, and wireless public alerting. Norm is also a consultant to many Federal Government departments engaged in Public Alerting in Canada.

3.3 China's National Early Warning Release System

Cao Zhiyu is Director of the Warning Division at the National Early Warning Center, China. Mr. Cao has more than 10 years of experience as an expert in issuing early warnings, since construction of China's National Early Warning Release System started. He graduated from the Mathematics Department of Harbin Institute of Technology, and subsequently worked at product and system development in the National Meteorological Center, part of China Meteorological Administration. In 2007 he was one of the founders of Weather China, the top-ranked Chinese web site for weather, where he focused on database development, and on web operation and maintenance. He transferred to CMA Public Meteorological Service Center in 2008. He is currently doing research on early warning systems and comprehensive capabilities of disaster prevention and reduction.

3.4 CAP Implementation in India

Sabyasachi Majumdar is Senior Research Engineer for C-DOT Delhi, a premier telecom research centre of the Government of India. He received a Bachelor degree in Computer Science & Engineering from Jadavpur University, Kolkata, in 2012. He is experienced in designing, architecting and development of large-scale software solutions with deep understanding of telecom software, data communications, and geo-intelligent technologies. He helped develop various C-DOT products, including TelePlanNet for optical network planning, a fiber fault localization system, and an IoT platform and devices, among others. He helped develop the Early Warning Platform, a CAP-based integrated system of national importance for disaster management. His research interests include geo-intelligence algorithm development, telecommunication network planning, machine to machine communication, and software solutions to make the country more disaster resilient. He published 10+ international research papers and was awarded multiple international and Indian patents.

3.4 CAP Implementation in India

Sankar Nath is a senior scientist of the India Meteorological Department, India. He is responsible for development, operation and maintenance of early warning dissemination system for weather information and warnings. This includes CAP warning delivery from forecasters to end users through various channels including websites, mobile apps and social media platforms. He led his team to develop a Decision Support System (DSS) for forecaster, different types of products, APIs, crowd sourcing module etc. He also is looking after the RTH New Delhi for GTS communications. He has implemented WIS in India. He is the National Focal Point for OSCAR/Surface and for code and data representation matters (FP CDRM) and CAP (Common Alerting Protocol). He has 14 Research Publications to his credit.

3.5 CAP in Italy and the STRATEGY EU Action

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.

3.6 AccuWeather and CAP

Eric Michielli is currently serving as the Senior Director of Data and Weather Technology 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 also 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, Database Administrator, and Director of Data Management prior to his current role.

3.7 CAP in the U.S. Integrated Public Alert and Warning System

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.

3.8 CAP promotion from the USAID perspective

Sezin Tokar is the Senior Hydrometeorological Hazard Advisor at USAID's Bureau for Humanitarian Assistance (BHA) , the lead federal office responsible for coordinating the U.S. government's response to international disasters. She oversees BHA's programs on hydrometeorological early warning systems, such as drought and cyclone monitoring, flood forecasting, and community-based preparedness. She developed and has overseen the implementation of Global Flash Flood Guidance initiative and many other initiatives to improve capacity on hydrometeorlogical early warning, globally. She also serves as BHA's technical lead on disaster risk reduction (DRR) and has represented the U.S. government in various global platforms and high-level working groups. Sezin was the principal negotiator for the Sendai Framework on behalf of the US government and she serves on the World Bank's Global Facility for Disaster Response and Recovery. Prior to joining BHA, she was a hydrological advisor to the National Weather Service, National Oceanic and Atmospheric Administration.

3.9 Update of the Severe Weather Information Center

Armstrong Cheng is a senior scientific officer of the Service Delivery Division in Hong Kong Observatory (HKO), responsible for weather information dissemination, weather information services development, weather observation and reporting, and automation of operations. He led his team to develop a fully automatic dissemination system, allowing weather information including CAP warnings to deliver from forecasters directly to end users through various channels including mobile apps and social media platforms. The highly popular weather app MyObservatory, staying as the most popular app under weather category in app stores, also won at WMO's first international weather apps competition. He also led a team to develop the first weather-specific chatbot specialized in answering questions about Hong Kong weather. He has been the coordinator of WMO projects Severe Weather Information Centre and World Weather Information Service since 2012. He now serves as the vice-chairperson of the WMO's Expert Team of Global Multi-hazard Alert System.

3.11 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.

3.12 PDC Accelerates DisasterAWARE Hazards Coverage via 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**.**

3.13 CAP implementation with Sahana software

Nuwan Waidyanatha.– with more than 17 years of experience in designing, building, implementing, and evaluating ICT-enable community-based and national emergency communication and telecom resiliency, is an operations research analyst and computer engineer with deep credentials in emergency communication. He is a Sahana Software Foundation Board Director, LIRNEasia Senior Research Fellow, and heads the RezGateway Data Analytic team. Since 2005, Nuwan has been conducting CAP-related action research, pilot projects, and led national level CAP and Sahana implementations in Asia, Africa, and Oceania. He has published several book chapters and peer-reviewed articles and has contributed to International Organization and UN Agency technical committees and forums. Current interests are in Industry Revolution 4.0 technologies; especially, the Internet of Things, Blockchain, and Artificial Intelligence.

3.14 CAP activities in WMO

Erica Allis is a Scientific Officer for Multi-Hazard Early Warning Services in the Disaster Risk Reduction and Public Services Branch, Services Department of the World Meteorological Organization (WMO). She represents WMO in the UN Disaster Risk Reduction Focal Points' Group and the ITU, WMO, UNEP Focus Group on AI for Natural Disaster Management. She is the WMO Secretariat focal point for the Global Multi-Hazard Alert System Framework, which aims to accelerate MHEWS capabilities in Members, and supports the work of the WMO Standing Committee on Disaster Risk Reduction and Public Services. Prior to joining WMO she was the Associate Director of the International Research Institute for Climate and Society at Columbia University. She has expertise in disaster risk reduction, climate change adaptation and extensive experience in the co-design of decision support services and impact-based forecasting methods. In her free time, she enjoys zazen, hiking, and reading.

3.6 Implementation status of CAP in Nepal

Anil Pokhrel is Chief Executive of the National Disaster Risk Reduction and Management Authority (NDRRMA) in Nepal. In a career spanning more than two decades, he gained extensive experience in disaster risk reduction, climate change adaptation and water management with Nepali and international NGOs, UN agencies, Asian Development Bank and the World Bank. Anil previously worked as Senior Risk and Adaptation Specialist at Plan8 Risk Consulting. Prior to that, he served as Disaster Risk Management Specialist at the Asian Development Bank and the World Bank, and as Research Associate at Overseas Development Institute and the Institute for Social and Environmental Transition. Born in 1973, he was trained as a civil engineer at Tribhuvan University and in environmental management - with a specialization in water science, policy and management - at Yale University under a Fulbright fellowship.

3.16 Everbridge supports global adoption of CAP

Menno Bot is Solution Architect at Everbridge in The Netherlands. Everbridge is the world's most trusted national public warning solution, helping to protect more than 800 million people across all five continents in more than 20 countries, big and small. Menno is responsible for the architecture of Everbridge Public Warning products and also participates in various internal and external research projects, several involving CAP. Menno has a Bachelor degree in computer science from the Amsterdam University of Applied Sciences and over 20 years of experience in Telecommunications in various countries, working previously with Comptel, Nokia and Group 2000.

3.16 Everbridge supports global adoption of CAP

Rachelle Gianfranchi is heading Government Affairs at Everbridge, in the Netherlands. In the last 20 years she built her experience working for the EU Commission, The World Bank's IBRD, setting up and managing a Brussels-based advisory firm. Her policy and regulatory expertise have been in telecom regulation and digital, including AI, climate. She has a Masters' degree from Johns Hopkins University and a degree in Political Science from Universita di Firenze. Mother of two, open-water swimmer, she is based in Amsterdam since 2015.

3.17 Google and CAP

Ruha Devanesan leads crisis response product partnerships at Google Search, making critical information more accessible in times of disaster through Google Search and other products. Ruha has a J.D. and Masters in International Relations from Boston University and is a former Fellow of the Berkman Center for Internet and Society at Harvard Law School. Areas of expertise include information and communication technology for development (ICT4D), mobiles for development (M4D), crisis alerting technologies, designing for equitable access, international human rights law, and community disaster preparedness.

3.18 CAP Alerting with Community Radio

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.

Vincent Maggard

3.18 CAP Alerting with Community Radio

Vincent Maggard has always loved technology of all things Linux and phone systems. He first got started in learning tech and coding at an early age around 7 and made some really cool weather alert processing software. When not programming python apps you can find him driving on a ATV in the mountains of eastern Kentucky, USA.

3.19 Example CAP implementations

Bapon Fakhruddin Dr Fakhruddin is an eminent hydro-meteorologist and disaster risk assessor with 19 years' global experience in water resources and climate resilience projects. His key areas of expertise are hazards forecasting, climate and multi-hazard risk assessments and coastal community resilience. His most high profile work is evidenced in the development of multi-hazard warning systems - including a tsunami warning system developed for Indian Ocean countries following the deadly 2004 Boxing Day tsunami.He has since designed and helped to implement climate change and disaster risk projects for more than 25 countries across Asia and the Pacific. Dr Fakhruddin has played a pivotal role in the design and implementation of multi-hazard early warning systems for floods, cyclones and tsunami, crucial to saving lives and livelihoods, while reducing property damage. Dr Fakhruddin is currently working as a Technical Director- disaster risk and climate resilience in Tonkin + Taylor International.