

2023 CAP Implementation Workshop

Speakers

(Updated as of 22 October 2023)

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](#)

Training – Welcome from USAID

3.13 [USAID and CAP](#)



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 hydrometeorological 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.

Training - [Overview of CAP](#)

Training - [A Free, Cloud-based Tool for Creating and Publishing CAP Alerts](#)

Training - [Common Policies and Practices of CAP Services](#)

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 also retired from the United States Geological Survey (USGS) where for many years he helped lead broad programs for environmental data sharing. Eliot is also CEO of the non-profit Alert-Hub.Org CIC (Community Interest Company).

Training - [IFRC CAP Editor: Design Preview](#)



Paola Yela is the Information Management and Data Science Officer at the International Federation of the Red Cross and Red Crescent Societies (IFRC) in Geneva. She holds a bachelor's degree in Management Engineering from the National University in Colombia and a master's in Digital Humanities from the EPFL in Switzerland. She worked for the Emergency Social Safety Net (ESSN) program in Turkey, supporting Information Management processes for delivering cash to more than 1.7 million refugees. Currently, she is working on the implementation of the IFRC AlertHub Initiative, ideating solutions to effectively advocate for the use of the Common Alerting Protocol, and in the proposal of a roadmap for using Machine Learning at IFRC, collaborating in Red Cross Movement-wide initiatives like the Data Playbook and GO. Her professional vision is to become a bridge-builder between the data-science field and the humanitarian sector.

Training - [IFRC Activities Supporting CAP in Africa](#)



Eddie Wasswa Jjemba is a Senior Urban Resilience Advisor at the Red Cross Red Crescent Climate Centre. Over the last 14 years, Eddie has been supporting various resilience building projects focusing on Eastern and Southern Africa. Eddie's work is informed by a Master's degree from Columbia University that grounded him in climate science. At the Red Cross Climate Centre, Eddie coordinates projects that enhance disaster preparedness including setting up Anticipatory Action systems at national and sub-national levels. Recently, Eddie has been coordinating the implementation of IFRC's Alert Hub initiative seeking to promote CAP and contextualized Public Awareness and Public Education for disaster preparedness in seven African countries.

Training - [CAP Over Mobile Networks](#)

1.3 Welcome from OASIS (standards organization)

3.16 [OASIS Emergency Management Technical Committee](#)



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 Telecommunication 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.

Training - [CAP Over Mobile Networks](#)



Thomas Wood has expert knowledge of IT networking systems and administration, and in Cell Broadcast technology. He is a member of the OASIS Emergency Management Technical Committee, and a voting member and contributor on the CAP subcommittee. Tom is also a member of the DRCF (Disaster Relief Communication Foundation).

Training - [CAP Over Mobile Networks](#)



Mark Wood Mark Wood serves as a Lecturer in Instrumentation and Control at the Gen2 Technical training center in Cumbria. He has a BSc degree in IT and an MSc in Advanced Networking. He has spent over 45 years in Telecom and Emergency/ Disaster relief, with half of that time as a Lecturer or trainer. Mark was twice honoured for his work on Humanitarian Telecommunications projects and has previously served the UN office for the Co-Ordination of Humanitarian Affairs as an Expert advisor and as Disaster Coordinator, and the ITU as convener of Cell Broadcast harmonization. Mark is active in the areas of Public Safety communications. Representing his non-profit organization Disaster Relief Communications Foundation (DRCF), Mark is a member of OASIS and the CAP Subcommittee. He works with the committee to develop and edit an OASIS Committee Note for the purpose of documenting Mobile Alerting Practices (MAP) around the world.

Training - [CAP Over Mobile Networks](#)



Mike Gerber is a Meteorologist for the National Oceanic and Atmospheric Administration's (NOAA) National Weather Service (NWS) in Silver Spring, MD. He joined the NWS in 1992. Mr. Gerber is the NWS lead for Wireless Emergency Alerts and related efforts with Common Alerting Protocol (CAP). He works to foster the integration of NWS alert information across a wide range of warning systems and consumer electronic devices in order to better save lives, protect property, and enhance the national economy. Mr. Gerber was a finalist for the 2015 Samuel J. Heyman Service to America Medal, a recipient of the U.S. Department of Commerce Gold Medal, and a finalist for the 2013 NextGov Bold Awards for his life-saving achievements in mobile alerting. He is a Senior Fellow of the Council for Excellence in Government. Mr. Gerber earned a Bachelor Degree in Atmospheric Science from the University of Arizona.

Training - [Esri CAP Connector: Making GIS Features from CAP Alerts](#)



Ian 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 is Chief Technical Officer of Alert-Hub.Org CIC, where he is the principal designer and developer on the Filtered Alert Hub initiative, originally part of the NOAA Big Data Project. This cloud-based, free resource uses Rabbit Message Queue as its base technology and serves as a global-scale aggregator of Internet news feeds that link to emergency alerts in the CAP standard format. This Alert Hub currently aggregates 227 CAP alert feeds at national scale, published by 148 countries/territories and other sources, and it is growing steadily.

1.1 Welcome from the United States



Julie Jolles, Environment, Science, and Technology Counsellor, is a career Foreign Service Officer with the United States Department of State. She arrived at the U.S. Mission in Geneva in July 2021 from Washington, DC where she served in the Office of Development Finance in the Department of State's Bureau of Economic Affairs. In that role, she covered G20 Development Working Group negotiations. Ms. Jolles has extensive experience in multilateral affairs. She was detailed to the World Bank in from 2018-2019 and was a U.S. delegate to the UN Security Council from 2015 until 2018. In that role she negotiated UN peacekeeping resolutions and led the UN Security Council's trip to Burundi in 2016. She previously served in Jerusalem as the Gaza Economic Watcher from 2010-2015. Earlier postings include Washington, Paris, and Bogota.

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



Beth Armstrong is Executive Director of IAEM, a non-profit educational organization dedicated to promoting the goals of saving lives and protecting property during emergencies and disasters. Beth is a recognized leader in the United States representing local emergency management programs in national policy discussions. She developed and is responsible for supervising the Certified Emergency Manager Program. Her education includes a Bachelor of Business Administration, Marketing, from The College of William and Mary, and a Master of Association Management from George Washington University. She has expertise with federal grants procurement and management, certification program development and administration, non-profit governance issues, and the entire scope of successful non-profit operations.



3.1 [The Use of Artificial Intelligence \(Chatbot\) for Emergency Warning](#)

Jumanah Al Awfi is a Software Engineer Trainee at Everbridge in the Netherlands, studies software engineering at Saxion University of applied sciences, she worked on two CAP projects, namely an Alert Publishing Website for the government of Spain and an Everbridge Public Warning Chatbot under the EU HORIZON ENGAGE project. She previously worked as a professional horse rider for the Royal Oman Equestrian and as a Project Manager Assistant at KONE.

3.3 [Use of CAP Tools in Timor-Leste](#)



Angelina Freitas is a Meteorologist in Timor-Leste, also working as Coordinator of Forecast to the Public, at the National Directorate of Meteorology and Geophysics under the Ministry of Transport and Communication. Her role is to prepare weather and climate information for dissemination to the public through national television, social media and the WMO CAP Alert Hub. She is also responsible for preparing Bulletins for key stakeholders such as Disaster Risk Management, Agriculture, and Hydrology when there is the possibility of disastrous impacts of a hydrometeorology nature in Timor-Leste, such as flooding, landslides, strong winds, etc. This helps stakeholders make their contingency plans and take anticipatory actions before a disaster can happen.

3.4 [R&D of the Comprehensive ICT systems for Disaster Management](#)



Takuya Iritani is a Senior ICT Consultant at Japan Telecommunications Engineering and Consulting Service (JTEC) Foundation, a leading ICT and digital consulting organization for international cooperation in Tokyo, Japan. His work involves supporting countries across Africa, Asia, and Latin America for the implementation/utilization of digital technologies, particularly in the areas of disaster management, smart cities, and e-government initiatives, usually in association with the Ministry of Internal Affairs and Communications (MIC) of the Japanese Government, Japan International Cooperation Agency (JICA), and other international organizations. He was recently invited as a guest lecturer at an ASEAN disaster management workshop to introduce a new technology that uses broadcasting signals as a digital communication channel for CAP transmission. He received a master's degree in business from Columbia University in the US with a focus on applying technologies to social causes in a sustainable manner.

3.5 [IFRC Early Warning and Early Action](#)



Karin Metz serves as the project management consultant for the IFRC in support of the IFRC Alert Hub Initiative to strengthen early warning and emergency alerting by promoting CAP. Previously, Karin worked for both the Global Disaster Preparedness Center (GDPC)/American Red Cross and IFRC Asia regional office as Knowledge Management and Research Officer. Karin holds a Master Degree in Geography from the Humboldt University in Berlin, Germany and Universidad de Oviedo, Spain.

3.5 [IFRC Early Warning and Early Action](#)



Nathan Cooper is an IFRC expert on disaster preparedness and innovation. He is a member of the Global Disaster Preparedness Center. Nathan is the IFRC focal point for Pillar 3 of the Early Warning for All initiative. In this regard, he supports IFRC Red Cross and Red Crescent Societies and their government partners to develop actionable public messages that can be distributed together with CAP hazard alerts. He is especially interested in ensuring that alerts reach people facing hazardous events and allow them to take lifesaving action.

3.6 [Prioritising Emergency Messaging Needs for Women Farming Communities](#)



Lizzy Nneka Igbine was born 1963 in Onitsha, Anambra State, Nigeria. She attended primary and secondary schools in Onitsha and earned a BA in Business Administration and Professional Studies at the Association of Business Executives in London. She is a Fellow at the Institute of Management Consultants, Nigeria. She worked with a bank before joining Lagos Agriculture Development Authority as a business development officer. She is a climate smart food producer. She has good experience working with UNDP writing for water, and participated in writing Nigeria agriculture policy documents. She was a member of Nigerian Vision 20:2020 (2009), Nigerian River Basin Master Plan (2010), National Integrated Infrastructure Master Plan (2012), and Economic Reconstruction and Growth Plan LAB (2018). She is a member of Civil Society Scaling Up Nutrition in Nigeria, supporting communities during Covid-19 vaccine uptake. She is the current National President and Steering Committee Chair in the Nigerian Women Agro Allied Farmers Association.

3.6 Prioritising Emergency Messaging Needs for Women Farming Communities



James Ali Ijampy Adamu is the Chief Agricultural Meteorologist of the Nigerian Meteorological Agency. He is the team Lead of the Seasonal Climate Prediction also the Focal Point for the WMO METAGRI project in Nigeria. He is engaged in the integration of Climate Services to agricultural activity, Climate change adaptation in Agriculture and the down scaling of Seasonal Climate Outlook to rural communities. In striving to improve relationships and connections between meteorologist, users and decision-makers, Mr. Adamu is also part of the Multi-disciplinary Working Group (MWG) in Nigeria, a core member of the Food Security Cluster of Nigeria and the West Africa Seasonal Climate Outlook PRESASS and PRESAGG. He has trained over 75,000 rural farmers and agricultural extension agents in his career in Nigeria, mainly in areas of the application of weather and climate information in climate risk management in agriculture.

3.7 [NCDR Alert Platform: One-Stop Alert Information Services](#)



Mei-Chun Kuo holds a degree in Civil Engineering. Her expertise lies in Geographic Information Systems (GIS), and her roles include GIS Spatial Analyst, Alert Warning Information System Analyst, Designer, and Project Manager. She is a senior research assistant and serves as the main coordinator of the team responsible for developing and maintaining the CAP Warning System. She integrates various types of CAP data, such as weather, hydrology, transportation, and civilian information, totalling 60 categories. She also promotes the application of alert data across various sectors, including industry, government, and academia, with nearly 2,000 users benefiting from the system.

3.8 [SWIC Alert Hub and the Common Policies and Practices document](#)



Joey Shum Yik Lam is a 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. She is responsible for the operation of 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. She is also a team member to support and coordinate the operations of WMO projects - Severe Weather Information Centre and World Weather Information Service.

3.9 [CAP and Environment Canada](#)



Pongsakorn (Focus) Rahman is an Alerting Systems Analyst with Environment and Climate Change Canada and one of the main Subject Matter Experts of the Environment Canada Alerting system and CAP Canadian Profile. He has years of experience with modelling, designing, and maintenance of the Environment Canada alerting system to ensure its continuous performance. Over the last 5 years, Focus was involved in the implementation of the UpdateX Service improvement to the Environment Canada Emergency Alert System, where the use of the Canadian UpdateX cell broadcasting feature has significantly reduced the number of repeat emergency alert messages received by cellular device users. Focus will also help with further Service improvements that will involve the use of threat based polygons, instead of county based polygons, thereby helping to reduce the areal over-reach of emergency alert signals.

3.9 [CAP and Environment 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.

3.10 [Zimbabwe Experience with CAP](#)



James Ngoma Jr. is Head of Public Weather Services within the Meteorological Services Department of Zimbabwe; Focal Point Person for Disaster Risk Management within the National Framework for Climate Services; and Secretary of the RA1 Working Group on Improved Weather Forecasting, Natural Disaster Risk Reduction, Service Delivery and Communication. He has produced and disseminated early warnings, climate information and weather forecasts for use in disaster preparedness, agriculture, health, media, the general public as well as the Zimbabwean Cabinet of Ministers. He has worked with development partners, civic society, school children, under-privileged and vulnerable group in society, such as the youth, people living in remote areas, women, person's with disabilities, raising awareness on weather, climate, climate change issues and extreme weather events. In the face of Tropical Cyclone Idai disaster, he instituted the country's first ever colour-coded warning and this has evolved to 6W&H, meeting international standards and in-line with CAP.

3.12 [How to Build a Solid Infosec Security Awareness for the Community](#)



Maged Roshdy is an experienced professional with a background in Digital Transformation, IT, and InfoSec consultancy. Currently serving as the Manager of Information and Technology Security Management at the American University in Cairo, he also holds critical roles as a DT & IT Consultant/Advisor at the Egyptian Red Crescent/IFRC and a UN-DP IT/DT Consultant. As a dedicated ISACA Cairo Chapter's Board of Directors member, Maged Roshdy brings expertise in various domains, including CISA, CISM, ITIL, PRINCE2/Agile, and CIW certifications. Beyond his business focus, he is committed to influencing InfoSec awareness for the safety and security of humanity.

3.14 [The Role of Media in Early Warnings](#)



Natalia Ilieva brings over two decades of diverse media experience, spanning journalism, reporting, production, presentation, and management in print and electronic media, including a decade at the BBC. In 2010, Natalia joined the Asia-Pacific Broadcasting Union (ABU) as Head of the Secretary-General's Office. Here, she initiated innovative outreach campaigns, such as "Media Saving Lives: Building Resilient Communities" and "Broadcasting for All: Diversity and Inclusion in the Media." One of her significant achievements was launching the ABU annual Media Summit on Climate Action and Disaster Prevention. She was instrumental establishing the UNDRR/WBU Media Saving Lives initiative in 2019, which she continues to manage as a Global Project Manager and Coordinator for the Asia-Pacific region. She holds a BSc in Microeconomics from Sofia University of National and World Economy and a joint MBA from the University of Ottawa in Canada and the Canterbury Business School in the UK.

3.15 [Alerting travellers with TPEG2-Emergency Alerts and Warnings \(EAW\)](#)



Stéphanie Chaufon has a degree in international business, Trade and Commerce from the University of Orléans, France. Before joining Traveller Information Services Association (TISA,) she gained experience in the coordination and implementation of projects in the field of Intelligent Transport Solutions, as well as in communication and events organisation at the pan-European organisation ERTICO-ITS Europe. She has more than 10 years of experience in leading and coordinating all activities for the international public-private-membership association TISA and currently holds the position of TISA's Senior Coordinator.

3.17 [The Humanitarian Connectivity Charter: Engaging the mobile industry in disaster resilience](#) (Bryce Hartley)



Bryce Hartley is a Senior Strategic Partnerships Manager in the GSMA's Mobile for Humanitarian Innovation (M4H) programme. He leads the M4H strategic partnerships team's work on the Humanitarian Connectivity Charter (HCC) and the UN's Early Warning for All (EW4A) initiative. Previously, Bryce worked on the Mobile Coverage Maps and the Mobile Internet Skills Training Toolkit (MISTT) in the GSMA's Connect Society and Connected Women programmes. Before joining the GSMA, Bryce spent a decade in the Asia-Pacific region working in both the public and private sector. He has an academic background in machine learning and international relations.

3.18 [China's National Early Warning Releasing System \(NEWRES\)](#)



Zhiyu Cao who's graduated from Harbin Institute of Technology, Service Chief of China National Early Warning Center (NEWC), core member of Early Warning Service Expert Team (ET-EWS) in World Meteorological Organization (WMO), Member of the China Meteorological Basic Information Standards Committee; compiled several patents, national standards and industrial standards in the field of early warning release; solved barriers in warning release coverage rate algorithm, signal quality control, and release strategy, etc.

3.19 [Update on CAP and ITU](#)



Vanessa Gray is responsible for developing and overseeing projects and technical assistance on disaster preparedness, mitigation, response, and recovery. This includes the development of national emergency telecommunication plans (NETPs), the organization of regional and national workshops, and capacity building exercises for disaster management. Vanessa oversees the work on the Disaster Connectivity Maps (DCM) and the deployment of emergency telecommunication equipment to countries hit by disasters. She is the ITU focal point for the UN's Early Warning for All (EW4all) initiative and coordinates the initiative's pillar on *Warning Dissemination and Communication*, to ensure that alerts reach people at risk. She is responsible for the organization of the Global Forum on Emergency Telecommunication (GET) and for specific ICT-for-disaster-management tools and publications, for example in the area of disruptive technologies, gender, and ICT simulation exercises. She holds a master's degree in political science and economics from the Graduate Institute of International and Development Studies.

3.19 [Update on CAP and ITU](#)



Maritza Delgado is a Program Officer of the Environment and Emergency Telecommunications Division within the International Telecommunication Union's (ITU) Telecommunication Development Bureau (BDT). Maritza is responsible in the context of emergency telecommunications for supporting countries in the use of information and communication technologies for disaster management, the development of National Emergency Telecommunication Plans and their regulatory, policy and legal frameworks, in the design and implementation of early warning and alerting systems, as well as in the development of projects, guidelines and reports for the inclusion and use of digital technologies for disaster risk reduction. She holds a university degree in Electronic Engineering and Telecommunications and has over 15 years of experience in the field of disaster management.

3.20 [Update on CAP and WMO](#)



Adanna Roberston-Quimby is a Programme Officer at the Disaster Risk Reduction and Public Services Branch (DPS) at the World Meteorological Organization (WMO) Secretariat. Her work focuses on the Common Alerting Protocol (CAP), Impact-based Forecasting Warning Services (IBFWS) and public weather service delivery. She is an expert in aeronautical meteorology and forecasting focusing on early warning decision support for hydro-meteorological hazards. She is an experienced instructor who worked at the Caribbean Institute for Meteorology and Hydrology (CIMH), a WMO Centre of Excellence for Training and Regional Climate Centre.

3.21 [CAP in India: SACHET System](#)



Smriti Sachdev is a solution architect and Team Lead for India's Integrated CAP-compliant Emergency Alert Dissemination Platform for Disaster Management at Centre for Development of Telematics (C-DOT), New Delhi. C-DOT is a premier telecom research Centre of Ministry of Communications, Government of India. She has been closely involved in design and development of India's integrated CAP platform for multi-hazard alert generation and multi-modal alert delivery to the citizens in vernacular languages. She is specialized in designing interworking solutions to integrate non-CAP/legacy systems with low impact on existing infrastructure. She is currently working towards CAP integration of several alert dissemination media and is responsible for implementing Cell Broadcast system in India. Smriti holds a Bachelor's degree in Engineering with Gold Medal from NSIT, Delhi University, India.

3.22 [CAP in India Meteorological Department](#)



Sunny Chug is a 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 involved in the 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 involved in the team to implement WIS in India. He also involved in various IT related projects in the India Meteorological Department that includes various communication channels, IT infrastructure and dissemination system.

3.23 [CAP Warning Dissemination in Germany](#)



Mandy Best has been directing the fortunes of mecom Medien-Kommunikations-Gesellschaft mbH in Hamburg (Germany) as a Co-Managing Director since 2022. mecom develops and operates the Modular Warning System (MoWaS) for the Federal Republic of Germany. This unique technical alerting infrastructure ensures that German citizens are warned about hazardous situations via different channels in due time. Prior to joining mecom, Mandy Best was in charge of IT and product management at Internationaler Medien Service GmbH & Co. KG. After the company was acquired by A. Stein'sche Mediengruppe GmbH, Best headed the product management of all subsidiaries of the media group. Before that, she was Chief Information Officer (CIO) at Safebridge GmbH in Berlin and Hamburg from 2007 to 2016. During this period, she served, among other positions, as a Speaker of the CIO and as a Senior Project Manager. Mandy Best studied Business Informatics at the Elmshorn University of Applied Sciences.

3.24 [CAP - Italian Profile and IT-alert](#)



Umberto Rossini works in Rome as Manager of the Information System Service of the Italian Civil Protection Department within the Presidency of the Council of Ministers. Among his activities, he coordinates the alert system for the population in emergency, "IT-Alert", the definition of the Italian profile of CAP, and the Italian Alert Message Hub. After years of experience in the private sector working as a developer, IT-architect and security, in 2009 he joined the Public Administration. From 2016, he worked at AgID, Agency for Digital Italy, holding the role of technical manager of the Public Digital Identity System "SPID" and other related projects, data and interoperability. He also worked as Technical Project Manager at the Civil Protection Department and, later, he worked at PagoPA S.p.A., a government company that deals with digital payments. He also works as an associate professor in master's degree on data and IT security.

3.24 [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.