### CAP Implementation Workshop 2017 Speakers

(Updated as of 14 September 2017)

For details about the venue and logistics, see Information Note

For the provisional Programme, see Programme

For the provisional list of participants, see Participants



- 1.1 Welcome from Fire Corps Academy, Istituto Superiore Antincendi (ISA)
- 3.13 Can CAP help persons with disabilities calling for rescue or receiving public alerts?

**Stefano Marsella** currently leads the Italian National Fire Academy (ISA). He has served since 1988 in the National Fire Corps (CNVVF), wherein he held different positions in the provincial fire services of Florence, Venice and Treviso. He has also directed the fire and rescue services of Arezzo and Perugia. In the central offices of the CNVVF, he has been working in the activity of standardization and fire prevention, and for several years he directed the information technology sector. Mr. Marsella has published numerous articles and books on fire prevention, fire safety engineering, fire prevention and the application of ICT to the rescue services. He has been member of the NFPA Committee 914 Code for protection of Historic Structures and contributes to the Committee 1616 Standard on Mass Evacuation, Sheltering, and Re-entry Programs. He coordinates the CNVVF participation to the R&D projects co-financed by the European Commission.



### 1.2 Welcome from Italian Department for Meteorology

Silvio Cau is Head of the Department for Meteorology at Operational Forces Command of the Italian Air Force. In 1985 he was appointed Lieutenant in the Italian Air Force, Aeronautical Engineering Corps. Colonel Cau then served in the Regional Meteorological Centre of Milan Linate, the 5th Allied Tactical Air Force in Vicenza, the Inspectorate for Telecommunications and Flight Assistance in the Plans and Programs Bureau, and in 1999 served at Operational Activities Bureau. From 2001 to 2007 he held various important positions in the Italian Joint Operational Headquarters, including Representative of the HQ in the Space Defence Programs Committee. In 2004 he earned the degrees of "Master in International Studies and Military Strategy" and Master in "Defence against Chemical and Biological Weapons". From 2007 through 2015 he held senior management positions in telecommunication satellite systems and satellite remote sensing. Colonel Cau was born 1959 in Pisa. He is married and has 2 sons.



### 1.3 Welcome from the International Association of Emergency Managers (IAEM)

Ellis Stanley is Managing Partner of Ellis Stanley Partners, LLC. After 32 years as an Emergency Manager that included North Carolina, Atlanta-Fulton County Georgia, and the City of Los Angeles California, he worked in the private sector with Dewberry, LLC and Hammerman & Gainer International, Inc. Ellis is currently Chair of the Global Board of Directors of the International Association of Emergency Managers. He is also on the Advisory Board Coastal Hazards Center of Excellence; Board of Directors National Disaster Resiliency Center; and the Hope Coalition America Advisory Board. He is a former Board Member of Atlanta and Los Angeles Red Cross Chapters; Disaster Recovery Institute International; and a former Chair of the Emergency Management Accreditation Program. Ellis serves as an adjunct professor at American University teaching Senior Crisis Management, and at Harvard University teaching Meta-Leadership.





3.17 IFRC 'What Now' Service in Collaboration with Google

Omar Abou-Samra is acting Director of the IFRC Global Disaster Preparedness Center (GDPC), hosted by the American Red Cross in Washington, DC. Prior to this, he focused on grants from and partnerships with government, private and non-profit organizations; and innovative programs at a global scale to promote disaster preparedness. Omar has over fifteen years of experience working in non-profit, disaster and technical fields, with specialization in mass care including emergency feeding, relief distribution and shelter. He is also an experienced responder to complex emergencies, within the U.S. and internationally.



- 1.5 Welcome from the International Telecommunication Union, Development Sector (ITU-D)
- 3.6 CAP implementation and measurement the role of ITU

Vanessa Gray heads the ITU-D Division for Least Developed Countries, Small Island Developing States, and Emergency Telecommunications. 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.



1.6 Welcome from OASIS (standards organization)

3.26 Update on OASIS EM TC Work

**Elysa Jones** is an internationally recognized expert in Emergency Interoperability Communications via Data Messaging. Elysa is Chair of the OASIS Emergency Management Technical Committee since 2004. Her Committee developed and maintains the Common Alerting Protocol (CAP) Standard, which is also ITU recommendation X.1303. Additional standards for message distribution, resource messaging, hospital availability and tracking of emergency patients are products of her Committee.



1.7 Welcome from the World Meteorological Organization (WMO) 3.12 CAP in WMO (part 1)

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

#### 3.23 Update on Filtered Alert Hub

**Eliot Christian** is a consultant to and retired from the World Meteorological Organization (WMO). He was a chief architect of the WMO Information System and the Global Earth Observations System of Systems. Eliot is also retired from, but remains a volunteer to, the United States Geological Survey (USGS) where he helped lead broad programs for environmental data sharing. Since 2001, he has been active in developing and promoting CAP, especially internationally.



# 3.1 Adopting CAP on Nation-wide Rescue Services: Lesson Learnt by the Italian case

Marcello Marzoli, Fire Captain, degree in Aerospace Engineering, since 1990 he has been working for the Italian Ministry of Interior, Department of Fire Corps, Civil Defence and Public Rescue. In 1997 he was at the Rome HQ Control Centre, in 1998 he moved to the National Control Centre, then to the Air Service and the National IT Office, to come back in 2005 to the Rome HQ. Since 2001 he has been working on European and National R&D projects: namely, ITALSCAR (ESA 2001) and the EU projects LOCCATEC (2000), INStANT (2001), LIAISON (2003), PETRA-NET (2005), REACT (2005), SAVE-ME (2008), IDIRA (2010), REFIRE (2010), HELI4Rescue (2011) and AF3 (2014). Since 2002 he has been appointed as expert evaluator by the EC in the Space, IST, NMP and Security R&D activities. He is inventor and assignee of a couple of Italian Patents in the medical apparatus domain. He has published several papers.



# 3.1 Adopting CAP on nation-wide rescue services: lesson learnt by the Italian case

**Davide Pozzi** is an officer engineer in duty in the Italian National Fire Corps (CNVVF) since 2002, within the Ministry of the Interior. He works at Central Directorate for Logistic and Instrumental Resources - IT Coordination Services (since 2006), and he is involved in projects relating to technological innovation and implementation management information systems, and for operational activities of the National Fire Corps. He worked on development of the Italian profile of CAP, and implementation of the software CAP-ITEM in control rooms of the Italian National Fire Corps. (CAP-ITEM, "Interoperable Tools Emergency Management", is a system for exchanging public warnings and emergencies among emergency response services). He took part in rescue missions in Italy: Abruzzo (2009), Emilia Romagna (2012), and Central Italy (2016). In the earthquake affected areas, his work included assessment of building damage, realization of temporary repairs to damaged buildings, and preservation of historic buildings.



#### 3.2 CAP and AccuWeather

Jonathan Porter is Vice President of Innovation and Development for AccuWeather, a global media company providing high quality weather information for over a billion people around the world every day! Jon's group is responsible for acquiring detailed and cutting-edge weather content from all over the world and integrating it into AccuWeather's consumer-facing and business-to-business products. Jon has expertise in global weather data formats and weather information exchange, having worked in this area for many years. He frequently provides input to National Meteorological Services on best practices in delivering actionable information to users quickly and reliably in today's digital world. He has been invited to visit and collaborate with many agencies all over the world and recently participated in the WMO Congress in Geneva, Switzerland. Jon is a graduate of Penn State University with a degree in meteorology and minor in information technology. He has been with AccuWeather since 2004.



### 3.3 CAP and Related Activities in Zimbabwe

Freedom Mukanga is External Relations Officer at the Meteorological Services Department (MSD) of Zimbabwe. He joined MSD in 2009 as a meteorological technician and later became website administrator. He is in charge of the Department's communications with a focus on website, social media, short message applications and platforms. Freedom is Zimbabwe's alternate focal point for the World Meteorological Organisation Information System (WIS). His education includes a Diploma in Development and Disaster Management and a Bachelor of Commerce Degree in Management, both from the National University of Science and Technology (Zimbabwe). He is currently studying towards a Masters Degree in Business Administration at the University of Zimbabwe.



#### 3.4 CAP and Satellite-based Fire Detection

Giovanni Laneve is an associate professor at the Aerospace Engineering School of the Sapienza University of Rome. Since 1998 he has been teaching the course "Aerospace Systems for Remote Sensing". He was responsible for satellite remote sensing activities of the San Marco Project ground station in Kenya up to 2013. Now he is responsible for remote sensing activities at the Aerospace Engineering School. Through his Earth Observation Satellite Images Application Laboratory (eosial.psm.uniroma1.it), he is carrying out research concerning the use of remote sensing for environmental applications and the development of automatic procedures for image processing. In the framework of national and international projects, he works on the exploitation of remote observation for retrieving biochemical-biophysical parameters and for land use/land cover mapping and monitoring. In the field of forest fire management, he is working on development of methods for fire hazard prevision, fire detection and damage assessment.



#### 3.5 CAP at the Deutscher Wetterdienst

**Eduard Rosert** joined the weather forecasting unit (WV) of the German Meteorological Office (DWD) in 2015. He has a degree in computer science and is working as a software engineer on the System for the Production and Dissemination of Warnings (PVW). His field of work includes the standardization and further development of the DWD CAP profile.



#### 3.7 CAP Implementation in the Democratic Republic of the Congo

**Donatien Kamunga Musungayi** is an engineer meteorologist, specializing in weather forecasting and environment. He is also a Computer scientist, programmer analyst, with an advanced degree in theology. Donatien is currently Head of Division at METTELSAT "National Agency of Meteorology and Remote Sensing by Satellite", where he is in charge of the forecasting of extreme weather. One aim is evaluation of the different models of numerical prediction in order to determine the margin of correction applied. He also deals with those meteorological systems that are most prominent factors in violent weather in the Democratic Republic of the Congo, e.g., cyclones in the Indian Ocean. Donatien acts as focal point of METTELSAT for the member countries of the Economic Community of Southern African States (SADC). Previously, he also worked as a weather media announcer.



#### 3.8 CAP in Mexico

Mario Alvaro Ruiz Velazquez is an advisor to the Centro de Instrumentación y Registro Sísmico 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.

# Picture not yet received

3.9 CAP in National Civil Protection of Italy **TBD** 



#### 3.10 Experiences with CAP at the German Aerospace Center (DLR)

Monika Friedemann has a degree in Media Informatics. She joined the Remote Sensing Center (DFD) of the German Aerospace Center (DLR) in 2007 working as a software engineer on the development of the operational Decision Support System of the Indonesian Tsunami Early Warning System, InaTEWS. Since 2012, she has been in involved in the conception and establishment of a software framework for Environmental and Crisis Information Systems used by many DLR-DFD projects. From 2013 until 2016 she developed and implemented situation assessment and decision support services including interoperable exchange of common operational picture information in disaster management for the EU project PHAROS. Since 2017 she has been coordinating the follow-up research and development work performed by DLR-DFD within the EU project HEIMDALL on a Multi-Hazard Cooperative Management Tool for Data Exchange, Response Planning and Scenario Building. Mrs. Friedemann has published various papers and holds several patents.



#### 3.10 Experiences with CAP at the German Aerospace Center (DLR)

Benjamin Barth graduated in Electrical Engineering at the Technical University Berlin (TUB) in 2014. He was a working student at Fraunhofer Heinrich Hertz Institute (HHI) where he wrote his Master's Thesis connected to the EU project BATS. Since 2015 he has been with DLR's Institute for Communication and Navigation working on EU projects (e.g. HEIMDALL, PHAROS) and projects of the European Space Agency. His research activity deals with networking and integration of satellite and terrestrial networks, resource management for satellite communications systems and system engineering for mobile and broadband satellite communications, hybrid systems and communications for public protection and disaster management.



#### 3.11 CAP in the Philippines (Lester Kim Lagrimas)

**Lester Kim M. Lagrimas** is a software engineer in Engineering and Technical Services Division of the Philippine Atmospheric, Geophysical and Astronomical Services Administration (PAGASA). He is the lead developer of PAGASA's Met-Hydro Decision Support Infosys (MDSI) and Common Alerting Protocol System since 2014. He is also assigned to manage sophisticated equipment of meteorological, telecommunication facilities and information systems.



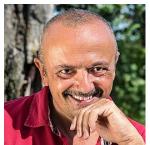
#### 3.12 CAP in WMO (part 2)

Federico Galati caught the Web fever in 1996 when studying for his Computer Systems degree in Geneva, near where the World Wide Web was born (CERN). He joined WMO in 2005, and there he specializes in Information Management. He developed the first Intranet of UNHCR in 1999, introduced electronic communication tools and processes in WMO, and was vice-chair of the Internet Society, Swiss chapter (2012-2014). As the WMO Web expert, he technically coordinates Web portals, co-leads Web projects developed by or in collaboration with Met offices, and is responsible for organizing the multimedia assets of WMO. He is passionate about new technologies, mainly how the Web can save lives and how it is shaping our future! When he is not busy with his twins or travelling the World, he volunteers to associations related to the Internet by providing professional advice and giving speaking on relevant topics of interest.



#### 3.14 CAP-based Alerting System via Commercial Radio

**Calogero Foti** is the Director General of the Regional Department of Civil Protection for Sicily. Since 2001 he held various positions at the Department of Civil Protection, including Regional Civil Protection for various Provinces, manager for regional seismic and other emergency studies, and manager in areas such as forecasting, prevention, monitoring and public works. He was born in Agrigento in 1955.



### 3.14 CAP-based Alerting System via Commercial Radio

Massimo Cristaldi, graduated in Geology and specialized in Geophysics, is currently Chief Technical Officer of IES Solutions and business partner of the company. He has worked in civil protection related projects focusing to natural and environmental risk management as a researcher for the Italian National Council of research. He led software development projects and has been the technical coordinator for all IES internal activities in relevant EU projects such as LOCCATEC, REACT, VIEWFINDER, REACH112 and RESCUER and IDIRA. Since 2006 Massimo contributed to the adoption of the Common Alerting Protocol in Italy as member of OASIS. IES has won many innovation awards for emergency services interoperability, and creates solutions related to several aspects of emergency management and 112 adoption in Europe and in Italy supporting the adoption of the CAP protocol by the Italian Fire Corps and by the Civil Protection of Sicily Region.



#### 3.15 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.



#### 3.16 Cloud Services and CAP-based Alerting

Jed Sundwall leads the global open data program at Amazon Web Services, which researches ways the AWS cloud can make data easier to discover, access, and use. The AWS open data program has democratized access to petabytes of data, including satellite imagery, genomic data, and data used for natural language processing. Throughout his career, he has used the Internet to improve the quality of governance around the world through work with NOAA, the World Bank, U.S. Department of State, NASA, European Space Agency, and the World Wildlife Fund. He has a master's degree in Public & International Affairs from the University of California in San Diego, where he was named a Schoepflin Fellow for his work with the Center for Digital Inclusion, a Brazilian nonprofit organization that uses technology to fight poverty and stimulate entrepreneurship.



#### 3.18 Met Norway and CAP

**Gjermund Haugen** is Deputy head of the Forecasting Department of Northern Norway, in Tromsø. For part of the time, he is a meteorological officer, which involves alerts, media and aviation. Polar weather includes polar lows, vessel icing and sea ice forecasting. The area of responsibility includes Metarea 19 and the Svalbard archipelago.



#### 3.18 Met Norway and CAP

Helen Korsmo has worked as a system developer at the Norwegian Meteorological Institute since 2000. The first project she joined at MET was the development of Diana, a Meteorological Workstation which is now Open Source and in use by Meteorological offices worldwide. She was involved in planning <a href="yr.no">yr.no</a>, a cooperation between MET Norway and the Norwegian Broadcasting Company, which is now the fifth most popular weather web site in the world. Currently, she is coordinating the technical work required to issue all warnings of dangerous weather as CAP at MET Norway. The CAP alerts will be displayed to all users of yr.no, as well as distributed through other channels. Helen has a PhD in Particle Physics from Oslo University/CERN.



## 3.19 Météo France and the WINTDO (What I Need To Do) Toolkit

**Michael Claudon** currently works inside Météo-France IT department as a developer and he is the CAP technical expert at Météo-France. He also works on web-services deployment via an enterprise service bus.



# 3.20 Promotion of Public Awareness on Natural Water Disasters including Floods

Alireza Salamat holds a Master of Science degree in Irrigation and Drainage from Tehran University, Iran. He is currently the Deputy Director of UNESCO Regional Centre on Urban Water Management-Tehran. Mr. Salamat has served UNESCO for more than 18 years, mainly working in the natural sciences section as a Hydrologist. He has been appointed as the Head of the International Engineering Affairs of Iran Water Resources Management Company, affiliated to the Ministry of Energy of Iran since 2014. Mr. Salamat has several scientific articles in the fields of water resources management, mitigating drought impacts, climate change and its impacts on water resources, training and capacity building, flash floods, etc. He is also editor of several technical publications in the Persian language.



# 3.20 Promotion of Public Awareness on Natural Water Disasters including Floods

**Mohammad Hajrasouliha** is the Managing Director of Iran Water Resources Management Company, as one of the holding entities affiliated to the Ministry of Energy, Iran, dealing with water issues mainly in the agricultural sector. He holds a Master of Science degree in Civil Engineering, Water Structures, from the Technical College of Tehran University. Mr. Hajrasouliha has been involved in the managerial sector of several water and wastewater projects, irrigation and drainage networks, dams and small hydropower plants for over 26 years. He has also been involved in promotion of public awareness in urban flash floods and river restoration projects during his tenure.



# 3.21 The Apulia Region "SINAPSI" System and the European FP7 "C2SENSE" Project

Marianna Cavone has a degree in Physics cum laude from University of Bari in 1990, discussing her dissertation on radiative recombination processes of the many body states in GalnAs/AllnAs Multi Quantum Wells. After a brief experience in laser lithography of optoelectronics devices at the Laser Center Consortium in Bari, in1991 she joined the Microelectronic Laboratory in Science Park of Tecnopolis CSATA in Bari where she spent several years working on failure analysis activities on electronic devices, including the component qualification for space applications, based on non-conventional microscopy techniques and on hot carrier reliability of bipolar transistor in BiCMOS technology. In 2005 she joined the ICT Division of Apulian Region Administration, working on Network Architectures. From 2012, she has been Project Leader for InnovaPuglia S.p.A., in-house company of Regione Puglia, leading industrial research projects in the field of cloud computing application for Public Administration (Emergency management, Public Health management). She published several papers.



### 3.22 Sahana Update on CAP Implementations

**Lutz Fromberger** is a freelancing researcher, consultant, and software developer. He holds a Ph.D. in computer science, with a large record in various areas such as Artificial Intelligence, Mobile Development, ICT Solutions for Development, and Geodata Provision. His current projects are predominantly on Disaster Management with mobile device support, with a special focus on developing countries. Lutz used to work at University of Bremen until 2015, where he was manager of the Capacity Lab. Since 2015, he has been working with Sahana Software Foundation on natural disaster related projects in South and Southeast Asia.