



ITALIAN METEOROLOGICAL SERVICE General Office for Air Space and Meteorology (USAM)



Training Workshop on MHEWS

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Legislative Framework

Italian Prime Minister Directive (27 Feb. 2004) concerning the:

"Operational Guidelines for the organizational and functional handling of the national and regional warning system on the hydro-geological and hydraulic risk for the purposes of the Civil Protection". It defines:

• The structure (a distributed network of Centres for Forecasting and Surveillance of Effects –CFSE) and the decision making process of the Multihazard Early Warning System in Italy;

• The National Centre for Aeronautical Meteorology and Climatology (CNMCA) of the National Met Service as a Centre for Technology and Scientific Services.





Legal Framework

In the Civil Protection Department is located the central CFSE, that includes a permanent met unit (a maximum of 6 Weather Forecasters but 5 actually) provided by the National Met Service in the framework of the Ministry of Defence/Air Force support to the Civil Protection activities. The unit is active 24 hours/365 day per year.





Legal Framework

"Memorandum of Understanding (24 Nov. 2004)

between the Department of Civil Protection belonging to the Presidency of the Council of Ministers and the Italian Air Force (which the Italian Met Service belongs to) for the implementation of the Directive above mentioned.

It defines the:

• different areas of meteorological support and cooperation;

• establishment of a **Coordination Group** for the implementation and improvement of the cooperation.





Legal Framework

Implementation Agreements ("Convenzioni")

They define the specific and detailed type of support provided by the National Met Service to the Civil Protection Department:

• real time data/products provision and synoptic support to the forecasting activity of the Department;

• direct access to the EUMETSAT broadcast by the network of CFSE + the National Environmental Institute (ISPRA ex APAT);

• joint operation of an high resolution numerical model called COSMO I7 (ex LAMI) together with Emilia Romagna and Piemonte Regional Environmental Agencies/Met Services



The Italian Early Warning System is structured in a:



''forecasting phase'' that includes the support of a numerical weather model;

 "monitoring phase" that includes the support of meteorological observations;

"very short range forecasting phase" that includes the support of meteorological nowcasting tools.





The Italian Met Service will guarantee the relationship with the European Meteorological Agencies and in particular will:

- be responsible of the distribution of the WMO, ECMWF and EUMETSAT data and products;
- provide meteorological fields at the synoptic scale and, if needed, at the local one both in numerical and graphical form;
- participate to the activities for the national radar mosaic;
- represent the country in the meteorological initiatives of the UE involving the Civilian Protection;
- access the hydrological data collected at Regional level and available for the Civilian Protection;
- receive a compensation for the effort in support of the Civil Protection.





Weather forecasts for the purpose of civil protection

A "Technical Group", coordinated by the Office for risk planning, assessment and prevention of the Department of Civil Protection, is established with the task of:

> preparing and formally informing, every day before 12.00, the Head of the Civil Protection Department of the synoptic forecasts for the purposes of civil protection at 24, 48 and 72 forecast ranges, in order to allow the Department to issue on a daily basis a "Bollettino di vigilanza meteo" for the purposes of civil protection;

•allowing the Regional Met Services or met components of the "Centri Funzionali" to issue for the area of responsibility, if needed and according to their procedure, local and mesoscale forecasts.





Weather forecasts for the purpose of civil protection

the "Technical Group", coordinated by the Office for risk planning, assessment and prevention of the Department of Civil Protection, is made of:

• a shift forecaster of the Met Service of the Department (met personnel detached from the National Met Service);

• a shift forecaster of the National Meteorological Service(CNMCA);

• a shift forecaster of selected Regional Meteorological Services.





Updated Legal Framework

"The renewal of the Memorandum of Understanding includes:

• the participation of Civil Protection Department experts to the EUMETNET/EIG METEOALARM Program activities in the framework of the purposes of the Directive;

• the synoptic support through a daily teleconference with the National Forecasting Room of the CNMCA.





Updated Legal Framework

"The renewal of the Implementation Agreement includes:

• the availability of National Met Service sites for the installation of meteorological radar of the Civil Protection;

• CFSE access to the **PROMETEO graphic system** developed by the Italian Met Service, defined by the Department as the standard platform in the network of "Centri Funzionali", for distribution and interactive support of met data/products;

•the confirmation of the level of compensation.





Other Cooperations

between the National Met Service and the Civil Protection Dpt

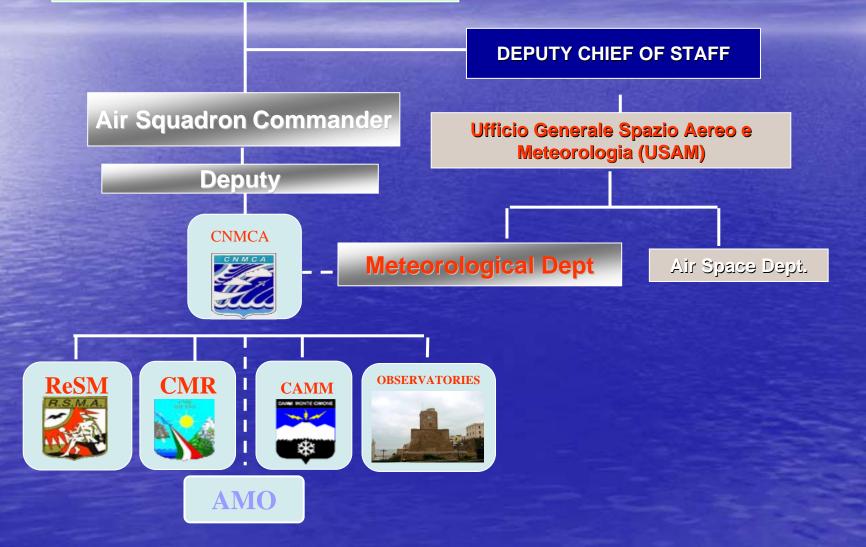
•<u>H_SAF: EUMETSAT Software Application Facility</u> for <u>Hydrology</u>, a joint initiative both at national and international level;

 deployment of the Met Mobile Unit (UMM) in case of emergency and/or major event(for example G8).



Organization chart

Air Force Chief of Staff







24 hour around a clock production





The Met Service for the Emergency Services





Questions?

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