

Earth Science/Natural Resources Working Group Meeting - A Working Group of the US-Italy Science and Technology Joint Commission Meeting

VENUE: Embassy of Italy 3000 Whitehaven St. NW, Washington, DC 20008

December 5th and 6th, 2017

DRAFT Agenda

Background

The Italy-USA Working Group (WG) on Earth Science (ES) that was created in 2013 under the US-Italy Science and Technology Agreement includes a large number of participants representing numerous universities, government entities, NGOs and industry. During previous bilateral meetings several topics for strategic cooperation were identified in order to enhance scientific and technological cooperation. These topics include natural hazards, land and marine environment, climate, energy, and earth observations. The WG has been very successful through implementation of scientific endeavors, exchange of innovative technological know-how, and specific actions including bilateral agreements.

The upcoming ES WG meeting on December 5-6, 2017, hosted by the Italian Embassy in Washington DC, will provide an excellent opportunity to review and update of WG action plan in order to strengthen and enhance existing bilateral activities. This information will feed into the 2018 Italy-US Joint Commission Meeting slated for December 2018 in Washington DC.

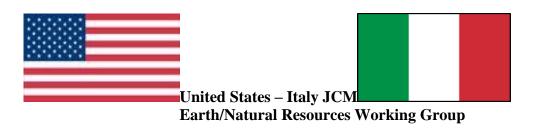
Among the WG ES topics, natural disaster reduction has been proposed as a cross-cutting theme. This topic is of great interest considering the impact of climate change, increasing impact of geohazards, potential for space weather, and population growth, affecting coastal areas in both countries. Impacts of natural disasters can be reduced through an improved understanding of our environment and the fundamental forces that shape it. Moreover earth-observing satellites provide vital information to better prepare for disasters and reduce their impact on people and property.

The Italian Delegation will include members from: Italian Embassy, ISPRA (4), INGV (3) INFN (1), ENEA (1), CNR (2), SOTECARBO (3), E-GEOS (1), CIVIL PROTECTION (1)

US Delegation will include members from: State Department, USGS, NOAA, DOE, NASA, NSF, and Universities.

Objectives of the meeting:

- 1. Highlight outcomes of past collaboration
- 2. Identify new targeted projects or programs for cooperation for 2019-2022 to be adopted under the JCM in December 2018
- 3. Recommend projects/activities for (co-)funding
- 4. Identify obstacles other than funding



GENERAL AGENDA

DAY 1 December 5, Detailed discussions on bilateral cooperation in Earth Sciences

9:00 Welcome

Italian Embassy, US State Department, Dr. Stefano Laporta, Dr. M. Fabrizia Buongiorno, Dr. Ingrid M. Verstraeten

9: 30 Introductions- All

9: 45 Funding opportunities – Mr. Giulio Busulini, NASA, NSF, DOE (TBC)

10:00 - 16:00 Sessions

10:00-16:00 Detailed Discussions and preparation for Day 2-

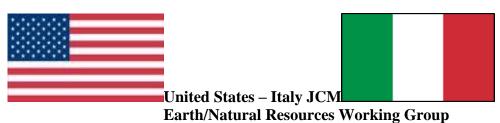
Discussion guidelines and format:

- o In order to stimulate the discussion a DRAFT PowerPoint slides will be provided for each session several days ahead of time.
- o For the discussion we discourage presenting PPT slides about your project; if needed they should be limited to 2 or maximum 3 slides.
- Topics under consideration for discussion are included under each session, others can be considered.
- A rapporteur (lead) for each session needs to be identified who will report back on December 6.
- o Ingrid and Fabrizia will act as facilitators.
- o Participants can participate in person or by teleconference organized by Italian Embassy.
- o Discussion format for each session:
 - i. Highlights of past cooperation
 - ii. Identify potential new projects or activities for 2019-2022 timeframe
 - iii. Recommend specific activities for funding and identify potential obstacles

SESSIONS:

1. Session 1: Natural Hazards including Earthquake and Volcano Hazards (60 minutes)

- Sharing common data policies
- Sharing of real-time data, analytical methods and products and collaborations
- Coordination with Civil Protection and Scientific community: best practices to support risk management
- Natural Hazard Communication
- Seismological Processes & Hazards, Operational Earthquake Forecasting,
- Tsunami Hazard Assessment Hazard analysis at regional/sub-regional scale for landslide-induced tsunami



- *Induced seismicity hazard*,
- Earthquake geology, active tectonics & paleoseismology

2. Session 2: Space data for Earth Observation including Space Weather (60 minutes)

- Rapid collection and access to relevant EO from USA and Italy to support interdisciplinary studies and EO services
- Georeferencing, space segment and ground segments
- Space Weather joint and collaborative actions
- LANDSAT CAL/VAL activities on volcanic areas
- InSAR data processing and geophysical modelling
- Collaboration on future ASI-PRISMA hyperspectral mission
- Yellowstone RS workshop

3. Session 3: Oceanography and Climatology (30 minutes)

- Summary overview of NOAA cooperation with Italy
- Development of climate models and investigation of natural and anthropogenic climate variability

4. Session 4: Energy including Geothermal Research (30 minutes)

- Advanced combustion and gasification technologies with carbon dioxide capture and storage SOTACARBO-DOE
- Geology and Geothermal research

5. Session 5: Environment (30 minutes)

- Wetland
- Climate change impacts on biodiversity and species distribution
- Coastal hydrodynamics & flooding
- Fire science
- Sea-level change including during past global warmth

6. Session 6: Collaboration with Third Countries (15 minutes)

- Volcano observatories
- 7. Session 7: Additional discussions and preparation of summary presentations for next day by session rapporteurs.



DAY 2, December 6,

<u>Earth Science WG Summary by session leads highlighting past cooperation and future actions</u> (Participation in teleconference (listening only) or in person)

AGENDA:

9:00 Welcome and Introductions (15 minutes)

9:15 General remarks by ISRPA and USGS

9:30 Objectives of the meeting – Drs. Fabrizia Buongiorno and Ingrid Verstraeten

9:40-11:40 – Summaries by Session by Rapporteurs (3 slides per person if applicable)

- Natural Hazards
- Space data for Earth Observation including Space Weather
- Energy including Geothermal Research

10:45 BREAK (15 minutes)

- Oceanography and Climatology
- Environment
- Collaboration with third countries

11:30 Identification of next steps - Discussion

12:20 Closing remarks

12:30 Close of meeting

December 6: PM: 2:30 - 5:30 Bilateral discussions among agencies as needed at Italian Embassy.

2:30 – USGS –ISPRA meeting at USGS HQ

Continued discussions as needed at Italian Embassy.