













# Workshop - Seismic Risk Preparedness and Mitigation of Archaeological and Historical Sites Tower of David Museum, Jerusalem, 19-20 January 2014

# 1st. day Seismic Risk Preparedness of Archaeological and Historical Sites

## **9.00** Gathering

### 9.30 Greetings

- Ministry of Home Front Defense
- Dr. A. Shapira, Chair of the National Steering Committee for Earthquake Preparedness
- Dr. U. Dahari, Deputy director, Israel Antiquities Authority
- Mrs. E. Lieber, Director, Tower of David Museum

## 10.00 - 11.15 First Session - Administrative and Legal Issues

Chair: Mr. O. Shalmon, Gen. Director, Society of Preservation of Israel Heritage Sites

- Dr. F. Carapezza and Eng. C. Rubino, Gen. Secretariat of the Italian Ministry of Cultural Heritage Risk preparedness & management of the post-earthquake emergencies in Italy: Lessons learned from past experiences
- Prof. M. Dolce, DPC Department of Civil Protection DPC&CH-Seismic risk and Civil Protection in Italy
- ADV. G. Koren, Legal Advisor to the SPIS, ICOMOS International Vice President Legal obligation to risk preparedness

#### Coffee

#### 11.45 - 13.00 Second Session

**Chair**: Prof. M. Dolce, DPC – Department of Civil Protection

- Eng. Luca Ponticelli, the Italian National Firefighters Agency Corpo Nazionale dei Vigili del Fuoco Organization of the Firefighters Agency in Emergency
- Prof. C. Modena, University of Padova, Dpt of Civil Engineering State of the art of research on methods and models for Seismic Risk Assessment of CH constructions and sites
- Prof. D. Fiorani, University of Roma "La Sapienza"
  Seismic issues in historical constructions and sites: the conservative aspects
- Prof. F. da Porto, University of Padova, Dpt of Civil Engineering Cooperation between University and CH Ministry: emergency activities and reconstruction plans

# 13.00-14.00 Lunch

# 14.00 - 15.30 Third Session

**Chair:** Eng. Y. Schaffer,

- Mr. M. Cohen, Israel Antiquities Authority Risk maps of Archeological sites in Israel
- Prof. M. Dolce (DPC Dpt of Civil Protection)
  Seismic risk prevention of architectural heritage promoted by the Italian Civil Protection
- Eng. C. Marson and Eng. S. Taffarel, University of Padova, Dpt of Civil Engineering Preparatory phase to the elaboration of seismic risk maps at urban level: case studies in Israel
- Prof. F. da Porto and Prof. C. Modena, University of Padova, Dpt of Civil Engineering Vulnerability assessment of archeological remains: seismic analyses and simplified evaluation forms

### Coffee

## 15.45 - 17.00 Forth Session

**Chair:** Prof. C. Modena, University of Padova, Dpt of Civil Engineering

- Eng. F. Lorenzoni, University of Padova, Dpt of Civil Engineering Investigation techniques – Monitoring: the case of the David Tower
- Visit to the monitoring system
- Round table Discussion

# **2nd Day. Seismic Risk Mitigation of Archaeological sites and of Historical centers** (Engineering part)

## **9.00** Gathering

#### 9.30 - 11.00 First Session

Chair: Eng. C. Rubino, Gen. Secretariat of the Italian Ministry of Cultural Heritage

- ADV. Y. Barsela, Legal Advisor to the IAA.
  - Legal aspects of Conservation
- Prof. C. Modena, University of Padova, Dpt of Civil Engineering Methods and objectives of the structural assessment of historic constructions: general aspects and case studies
- Prof. F. da Porto, University of Padova, Dpt of Civil Engineering Niker Project: main objectives, achievements, and Data Base of interventions
- Ass. Prof. Oren Lavan, Technion Israel Institute of Technology Seismic retrofitting of buildings using energy dissipation devices

#### Coffee

#### 11.30 - 12.45 Second Session

Chair: Prof. D. Fiorani, University of Roma "La Sapienza"

- Eng. Luca Ponticelli, the Italian National Firefighters Agency Corpo Nazionale dei Vigili del Fuoco Post-earthquake emergency interventions for the safeguard of CH
- Eng. C. Marson and Eng. S.Taffarel, University of Padova, Dpt of Civil Engineering Reconstruction plans: Case studies in Italy
- Prof. F. da Porto, University of Padova, Dpt of Civil Engineering Analysis and intervention on aggregates of historical centers: a case study in L'Aquila
- Eng. F. Lorenzoni, University of Padova, Dpt of Civil Engineering
  Case study of analysis and intervention: The Tomb of David in Jerusalem

#### 13.00-14.00 Lunch

## 13.45 - 15.00 Third Session - Case studies in Israel

**Chair:** Prof. F. da Porto, University of Padova, Dpt of Civil Engineering

- Prof. Y. Hatzor and Dr. Ronnie Kamai Ben Gurion University, Beer Sheva Assessment of historic earthquakes from back analysis of old masonry structures
- Eng. Y. Schaffer
  - Dynamic Analyzes in Historical Buildings Varies Case study
- Eng. O. Cohen
  - Case study, The Western Wall Tunnels, Jerusalem
- Eng. L. Sukhanov Case study Caesarea

## Coffee

# 15.45 - 17.00 Forth Session

**Chair:** Prof. C. Modena, University of Padova, Dpt of Civil Engineering

Round table – Final Discussion

# 18.30 The Night Spectacular, Tower of David Museum

<sup>\*</sup>depends on the weather