

UNITED NATIONS OFFICE FOR OUTER SPACE AFFAIRS
GOVERNMENT OF ROMANIA – ROMANIAN SPACE AGENCY

**United Nations/Romania Regional Workshop on the Use of
Space Technology for Disaster Management for Europe**

19-23 May 2003
Poiana-Brasov, Romania

FINAL WORKSHOP PROGRAMME

19 May 2003, Monday

- 0800-0900 **Registration of Participants**
- 0900-1000 **Opening Ceremony**
- Opening Statement by ROSA – Dumitru Dorin PRUNARIU
 - Statement by UNOOSA – David STEVENS
 - Statement by ESA – Giuseppe GIAMPALMO
 - Statement by CNES – Jean-Luc BESSIS
 - Opening Address - Marius-Ioan PISO (Romanian Space Agency, Romania) - Risk Management Monitoring in the Danube Region
- 1000-1020 Coffee Break
- 1020-1200 **Key Presentations**
- Chairperson: Marius-Ioan PISO (Romanian Space Agency, Romania)
- Rapporteur: Ljudmila MILENOVA (Bulgarian Aerospace Agency, Bulgaria)
- Francesco SARTI (ESA) – The Contribution of ESA Earth Observation Programmes to Disaster Management
 - Francesco PISANO (UNISDR) - The International Strategy for Disaster Reduction (ISDR) and the role of the United Nations in Disaster Reduction
 - David STEVENS (UNOOSA) - Space Technology and Disaster Management – Fostering Partnerships
 - Jean-Luc BESSIS (CNES, France) - UNISPACE-III Action Team 7 – Toward a Global Disaster Management System
- 1200 –1330 Lunch Break
- 1330 –1530 **Presentation Session 1 – *Setting the Tone: Space Technology and Disaster Management***
- Chairperson: Francesco PISANO (UNISDR)
- Rapporteur: Asli Süha DÖNERTAS (TUBITAK, Turkey)
- Tobias FUCHS (European Commission) - EU Research on Disasters and the GMES Initiative
 - Dumitru Dorin PRUNARIU (Romanian Space Agency, Romania) – Space Technology Impact on Security and Crime
 - Tim LYNHAM (Canadian Forest Service, Canada) – Fire Detection and Mapping Using Satellite Remote Sensing: Sensors, Systems and Solutions
 - Robert BRAKENRIDGE (Dartmouth Flood Observatory, USA) - Using MODIS for Rapid Response Flood Mapping and Measurement

- 1530-1600 Coffee Break
- 1600-1730 **Discussion Panel 1 – *Space Technology and Disaster Management – A Vision for Europe***
Moderator: Marius-Ioan PISO (Romanian Space Agency)
Rapporteur: Oleksandr KOLODYAZHNYI (Space Research Institute, National Space Agency of Ukraine)
 Giuseppe GIAMPALMO (European Space Agency)
 Dumitru Dorin PRUNARIU (Romanian Space Agency)
 Béla MAGYARI (Hungarian Space Office)
 Plamon ANGELOV (Bulgarian Academy of Sciences – Space Research Institute)

1830-2030 **Ice-Breaker Cocktail**

20 May 2003, Tuesday

- 0830-1010 **Presentation Session 2 – *Understanding User Needs - Examples of Using Space Technology for Disaster Management***
Chairperson: Eugen VASILESCU (Georgetown University, USA)
Rapporteur: Cagil KOLAT (Middle East Technical University, Turkey)
 Sylvia THOMPSON (Katholieke Universiteit Leuven – Satellite Application Division, Belgium) – The FAME Project (Flood Risk and Damage Assessment Using Modelling and Earth Observation Techniques)
 Vlad VALEANU (Centre of Excellence for Space Telemedicine, Bucharest, Romania) – Space Applications for Human Life Protection in Hazardous Circumstances
 Ljudmila MILENOVA (Bulgarian Aerospace Agency) - Integrated System for Information and Management of Forest Fires in Bulgaria – A National Concept
 Boris BALTER (Space Research Institute, Russia) - Space Data Processing for Forest Fires and Human Health Impact
- 1010-1030 Coffee Break
- 1030-1200 **Discussion Session 1 – *Hazards in Europe – 5 minute contributions followed by Open Discussion***
Moderator: Jean-Luc BESSIS (CNES, France)
Rapporteur: George STANCALIE (National Institute of Meteorology and Hydrology, Romania)
 Liviu NEMES (National Civil Protection Authority, Romania)
 Arshavir AVAGYAN (Emergency Management Administration, Armenia)
 Ioannis AVLONITIS (Ministry of Interior, Cyprus)
 Jovan NEDELJKOVIC (Ministry of Defence, Serbia and Montenegro)
 Asli Süha DÖNERTAS (Scientific and Technical Research Council, Turkey)
 Arif MEKHTIEV (Azerbaijan National Academy of Sciences)
- 1200-1330 Lunch Break
- 1330-1530 **Presentation Session 3 – *Building Upon What is Available***
Chairperson: Brenda JONES (USGS EROS Data Center, USA)
Rapporteur: Plamon ANGELOV (Space Research Institute - Bulgarian Academy of Sciences)
 Jean-Luc BESSIS (CNES, France) - International Charter Space and Major Disasters
 Paul STEPHENS (SSTL, UK) - The Disaster Monitoring Constellation – First Results
 Livio ROSSI (Eurimage – Italy) - High Resolution from Satellite: the Possible Risk Management Answer
 Simon CHESTWORTH (Radarsat, UK) Radarsat Mission – Status and Applications for Disaster

Management

Rustam RUSTAMOV (Azerbaijan National Aerospace Agency, Azerbaijan) – The Contribution of a Regional Euro Asia Aerospace Agency to Space Technology and Disaster Management

Dan LUNGU (University of Civil Engineering, Bucharest, Romania) Space Applications for Seismic Monitoring

1530-1600 Coffee Break

1600-1730 **Discussion Session 2 – Meeting User Needs Taking Advantage of the Current Availability of Space-based Information and Technology – 5 minute contributions followed by Open Discussion**

Moderator: David STEVENS (UNOOSA)

Rapporteur: Dusan SAKULSKI (National Disaster Management Centre, South Africa)

Robert BRAKENRIDGE (Dartmouth College – Dartmouth Flood Observatory, USA)

Georghe STANCALIE (National Institute of Meteorology and Hydrology, Romania)

Oleksandr KOLODYAZHNYI (Space Research Institute – National Space Agency of Ukraine)

Simon CHESTWORTH (Radarsat International, UK)

Elena CRISTEA (Austrian Academy of Sciences, Austria)

Yaroslav PARKHISENKO (Ukrainian Land and Resource Management Center, Ukraine)

Livio ROSSI (Eurimage, Italy)

21 May 2003, Wednesday

0830-1010 **Open Session - Presentation by Workshop Participants**

Chairperson: Moutaz DALATI (GORS, Syria)

Rapporteur: Jan RILEY (Caribbean Disaster Emergency Response Agency – CDERA, Barbados)

Hussain SALEH (Université Libre de Bruxelles – Institut de Recherches Interdisciplinaires et de Developpements) - "Optimising Space Technology using Artificial Intelligence for Efficient and Effective Disaster Monitoring and Management"

Octavian CRISTEA (Bitnet Research Centre on Sensors and Systems, Romania) – “The eSITES pilot project”

Plamon ANGELOV (Bulgarian Academy of Sciences – Space Research Institute) – “Seismic Activity Satellite Monitoring System”

Dusan SAKULSKI (National Disaster Management Centre – NDMC – of South Africa) – “ATLAS – Hazard, Vulnerability and Risk Management Tools”

Vladimir GERSHENZON (R&D Center ScanEx, Russian Federation) – “IT by ScanEx for Disaster Management from space”

Eugen VASILESCU (Georgetown University, USA) - "Remotely Sensed Epidemic Surveillance of West Nile Virus"

Florin SERBAN (Romanian Space Agency) – “Educational Tools for Space Data Processing Towards Disaster Management”

Rob POSTMA (European Space Imaging) – “High Resolution Imagery and Disaster Management”

Yaroslav PARKHISENKO (Ukrainian Land and Resource Management Center – ULRMC) – “Space Technology and Disaster Management: The Ukrainian Perspective”

Serban VELICIU (Geological Survey of Romania) – “Monitoring Geo-Hazards in Romania by Use of Remote Sensing”

Ruben STEPANYAN (National Survey for Seismic Protection, Armenia) “Earthquake Research Using Space Technologies”

Simion DASCALU (Romania)- ‘Low Altitude Electromagnetic Turbulence – Special Behaviour Over the Earthquake Areas’

Johannes NEUNER (Technical University of Civil Engineering Bucharest, Romania) – ‘GNSS Applications in Technological and Natural Hazard Areas’

Simona OANCEA (National Institute of Meteorology and Hydrology, Romania) – ‘Monitoring of the Snow melting Rate on the Territory of Romania Using NOAA/AVHRR Satellite Data’

- 1010-1030 Coffee Break
- 1030-1200 **Discussion Panel 2 - Current Trends in the Development of Space Technology and the Importance for Disaster Management**
Moderator: Klaus BRIESS (German Aerospace Center – DLR, Germany)
Rapporteur: Elena CRISTEA (Austrian Academy of Sciences, Austria)
 Octavian BALOTA (INTERGIS srl, Romania)
 Vlad VALEANU (Centre of Excellence for Space Telemedicine, Romania)
 Bill RANEY (Lyman Brothers, USA)
 Paul STEPHENS (SSTL, UK)
 Vladimir GERSHENZON (Research and Development Center ScanEx, Russian Federation)
 Rob POSTMA (European Space Imaging, Germany)
- 1200-1330 Lunch Break
- 1330-1530 **Presentation Session 4 - Innovative Developments and Initiatives**
Chairperson: Rustam RUSTAMOV (Azerbaijan National Aerospace Agency)
Rapporteur: Anders ROGNES (Norwegian Computer Center, Norway)
 Gheorghe STANCALIE (Inst. Meteorology, Romania) - Monitoring of Meteorological Hazardous Phenomena and Environmental Changes Using EOS data
 Elena CRISTEA (Austrian Academy of Sciences, Austria) - Use of GPS Permanent Networks in Geodynamics and Disaster Reduction
 Alexandru BADEA (Romanian Space Agency, Romania) - Monitoring the Agricultural Risks (Drought) and Deforestation
 Bill RANEY (Lyman Brothers, USA) - Portable Satellite Telecommunications for the First Disaster Responder Team
 Klaus BRIESS (German Aerospace Center – DLR, Germany) – The BIRD Mission
 Caroline FOSTER (European Commission) – Galileo – European Space Technology for Navigation – Assisting Disaster Management
- 1530-1600 Coffee Break
- 1600-1730 **Discussion Session 3 – Building a Framework to Take Advantage of the Benefits of Space Technology – Discussion in Groups**
- 1900 – 2130 **Reception**

22 May 2003, Thursday

- 0830-1010 **Presentation Session 5 – Extending the Use of Space-based Technologies**
Chairperson: Boris_BALTER (Space Research Institute, Russian Academy of Sciences)
Rapporteur: Jakub RYZENKO (Space Research Centre, Poland)
 Moutaz DALATI (GORS, Syria AR) – The Role of Remote Sensing in Disaster Management - Case Study: Main Disaster Concerns in Syria and Succinct Description of the Types of Information that is Needed for Disaster Mitigation or Relief Action
 Oleksandr KOLODYAZHNYIY (Space Research Institute, Ukraine) – Investigation and Publication of the Forestry Changes According to Natural Hazards in the Carpathian Region of Ukraine
 Jean-Claude FAVARD (CNES, France) – Spot 5 Applications – 3D Brasov Examples
- 1010-1030 Coffee Break
- 1030-1200 **Discussion Panel 3 – Strengthening the Institutional Aspects of Space Technology and Disaster Management**

Moderator: Paul STEPHENS (SSTL, UK)

Rapporteur: Alexandr Ioffe (Geological Institute, Russian Federation)

Florin SERBAN (Romanian Space Agency, Romania)

Brenda JONES (USGS EROS Data Center, USA)

Boris BALTER (Space Research Institute – Russian Academy of Sciences)

Liz RILEY (CDERA, Barbados)

Dusan SAKULSKI (National Disaster Management Centre, South Africa)

1200 -1330 Lunch Break

1330 –1500 **Discussion Session 4 – *Defining a Plan-of-Action and Building Partnerships***

1500-1530 Coffee Break

1530-1700 **Wrap-up Session**

- Synthesis of Presentations, Open Sessions and Discussion Panels (Reports given by each Rapporteur)
- Presentation of the proposals and recommendations for the implementation of a Regional Network and Plan-of-Action.

Closing Remarks

- UNOOSA
- ROSA

23 May 2003, Friday

0800-1200 **Technical Tour** - Technical Visit