"The UN-SPIDER SpaceAid Framework"

12 October 2010

How can we ensure every disaster receives all available support ?

Universal access to space-based information

Building upon local expertise and knowledge

Providing value-added products

Involving available expertise and informal networks

Directly supporting end users: making a difference

Increasing availability

Direct Access

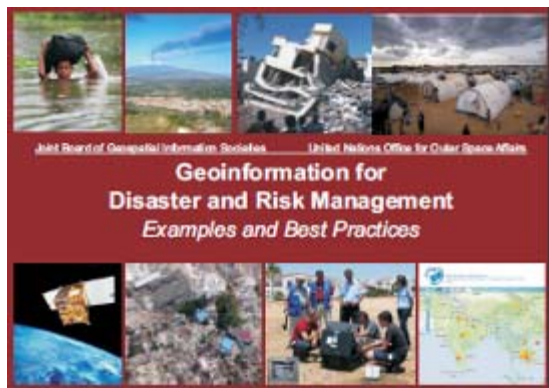**Existing international mechanisms (providing value added products)**

Services being set-up by companies

Who can access space-based information ?


Joint Board of Geospatial Information Societies   United Nations Office for Outer Space Affairs
Geoinformation for
Disaster and Risk Management
Examples and Best Practices

Wenchuan Earthquake Relief
12 May 2008

NDRCC led effort

Satellite	Nation/Region	Pre-event images	Post-event images	Total images
RS-1	CHINA	9	246	255
FORMOSAT-2	CHINA(TAIWAN)	3	146	149
CBERS-02B	CHINA	400	25	425
ZY-2	CHINA	7	16	23
BJ-1	CHINA	2	14	16
COSMO-SkyMed	ITALY	0	10	10
QuickBird	USA.	9	28	37
TERRA ASTER	USA.	0	14	14
Landsat-7	USA.	10	4	14
WorldView	USA.	12	0	12
IKONOS	USA.	3	0	3
ALOS	JAPAN	19	21	40
IRS-P5	INDIA	6	27	33
IRS-P6	INDIA	18	0	18
ENVISAT ASAR	ESA	0	16	16
SPOT 5 4 2	FRANCE	122	23	145
TerraX-SAR	GERMANY	0	11	11
EROS-B	ISRAEL	0	10	10
RadarSat-1	CANADA	2	11	13
TOPSAT	UK	0	2	2
UK-DMC	UK	0	4	4
DMG Nigeriasat-1	NIGERIA	0	7	7
Total		622	635	1257
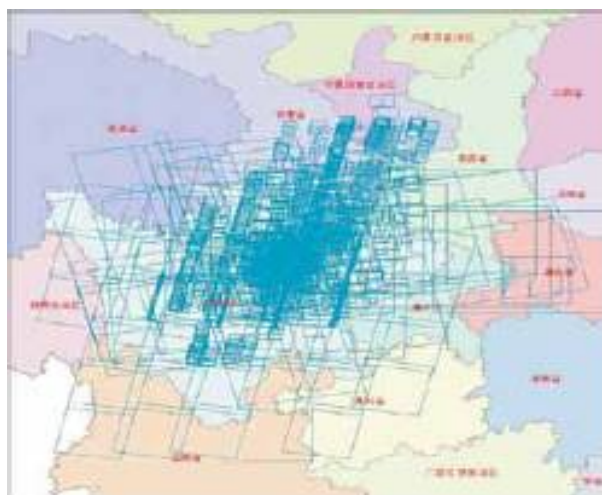
Space Technologies for Disaster Risk Management

Images from <u>earth observing satellites</u> help assess the damage caused by disasters like earthquakes, volcano eruptions, oil spills and floods.

<u>Satellite communications</u> help warn people who are at risk, especially in remote areas. They help connect a disaster zone to the outside world

<u>Global navigation satellite systems</u> enable us to obtain positional information on events that have to be mapped

Network

- UN-SPIDER Team

- Network of Regional Support Offices (RSOs) (10 + 5)

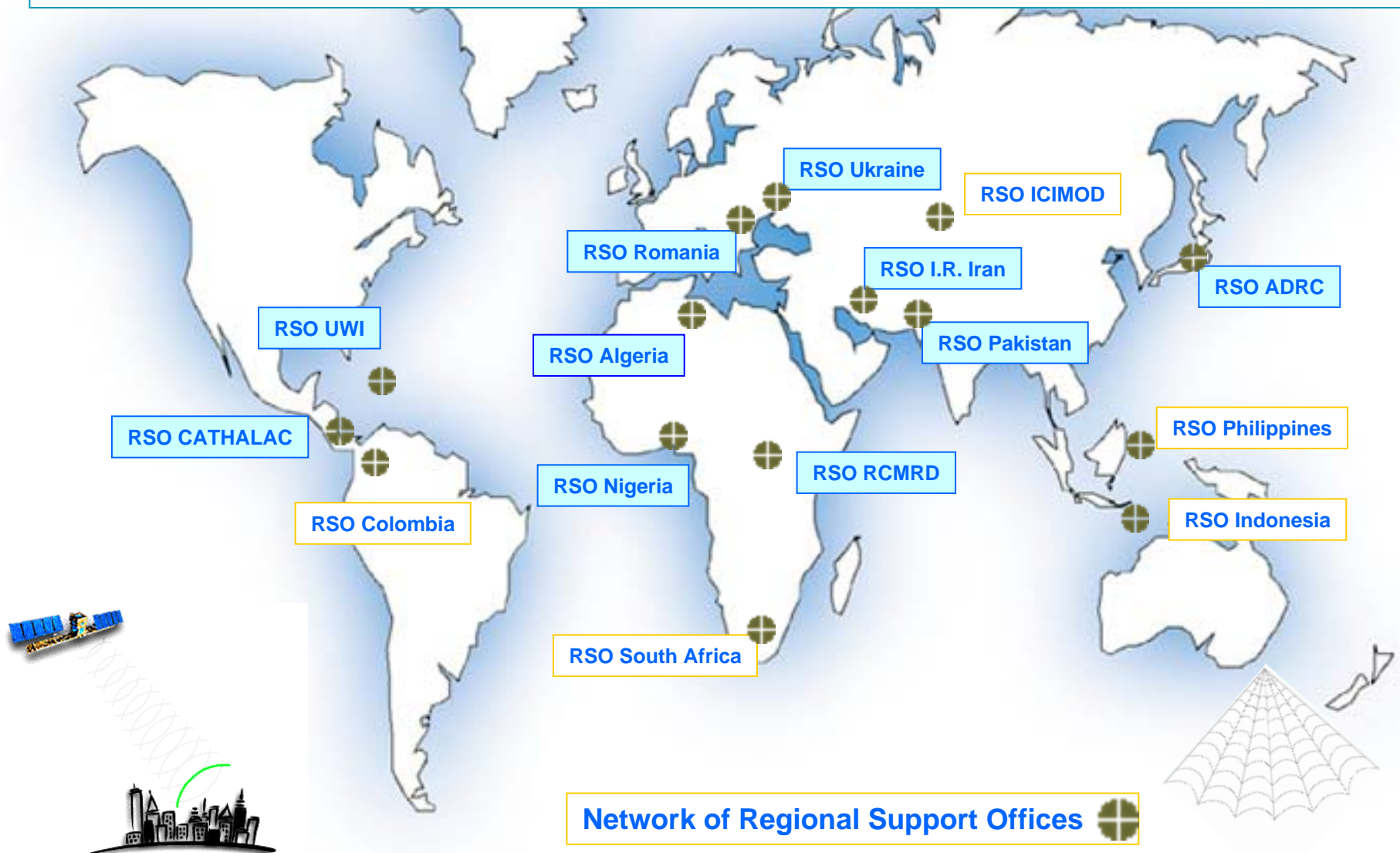- National Focal Points (41)

UN-SPIDER TEAM

UN-SPIDER in Vienna

UN-SPIDER Beijing Office

UN-SPIDER Bonn Office

UN-SPIDER Regional Support Offices

RSO Ukraine

RSO ICIMOD

RSO Romania

RSO I.R. Iran

RSO ADRC

RSO UWI

RSO Algeria

RSO Pakistan

RSO CATHALAC

RSO Nigeria

RSO RCMRD

RSO Philippines

RSO Colombia

RSO Indonesia

RSO South Africa

Network of Regional Support Offices

United Nations Platform for Space-based Information for Disaster Management and Emergency Response (UN-SPIDER)

The SpaceAid Framework

Ready to support emergency response

§ **The SpaceAid Framework** – A framework that ensures all countries and international and regional organisations are able to access and use all types of space-based information for humanitarian and emergency response.

- 24/7 Hotline for NFPs and UN (telephone, email or fax)

The SpaceAid Framework
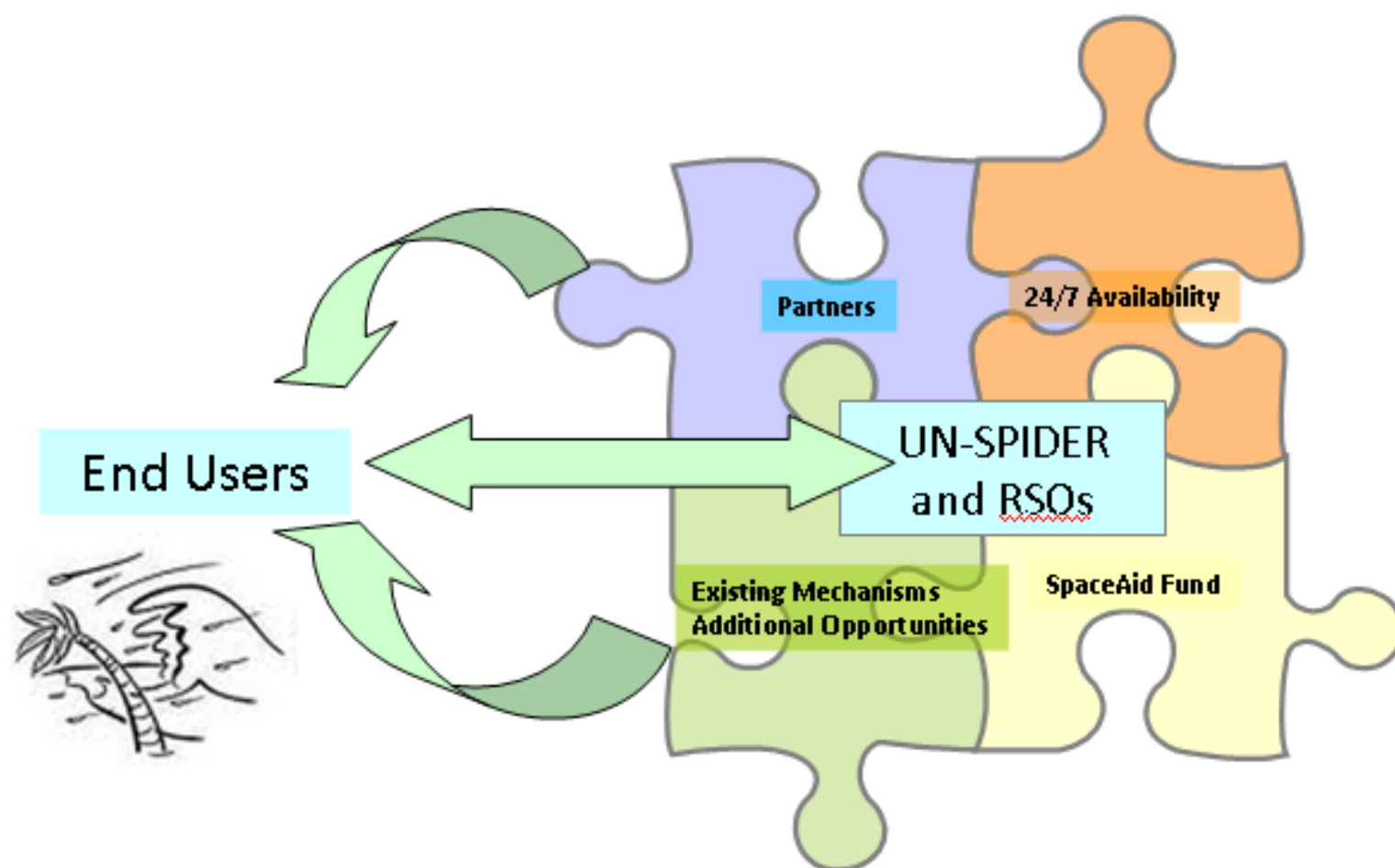
SpaceAid – Events Supported in 2010 (25 until October)

2010

Benin

Burkina Faso

Chile

China

Cook Islands

Gaza oPt

Guatemala

Haiti

Kazakhstan

Kenya

Madagascar

2010 (cont.)

Moldova

Pakistan (3x)

Senegal

Solomon Islands

Sri Lanka

Sudan

Tajikistan

Tonga

Turkey

Uganda

Ukraine (2x)

SpaceAid – Haiti Earthquake 12 January 2010

Haiti's presidential palace after the earthquake Photo: Pictometry ©

UN Mission HQ in Haiti

Example Haiti: response to earthquake on 12 January 2010

Earthquake hit 22:53 UTC time – UNOOSA/UN-SPIDER activated the International Charter and other mechanisms at 00:38 UTC time in coordination with other UN agencies > exactly 1 hour and 45 minutes after the earthquake struck. UN-SPIDER ensured UN agencies had access to the imagery and data made available and carried out a technical advisory mission meeting with UN, government and non-government institutions. UN-SPIDER is now supporting the Haitian Civil Protection Agency in rebuilding its capacity

SpaceAid – Chile Earthquake 27 February 2010

Example Chile: response to earthquake on 27 February 2010

Earthquake hit 06:34 UTC time – UNOOSA activated the International Charter and other mechanisms activated at 13:23 UTC time in coordination with other UN agencies and CONAE (Argentinean Space Agency). RapidEye covered the tsunami affected area on the same day. Imagery was sent to ONEMI through UN-SPIDER and was the basis of the initial impact assessment. UN-SPIDER carried out a technical advisory mission at the request of he Chilean Government.

SpaceAid – Ensuring the information is accessible and used ….
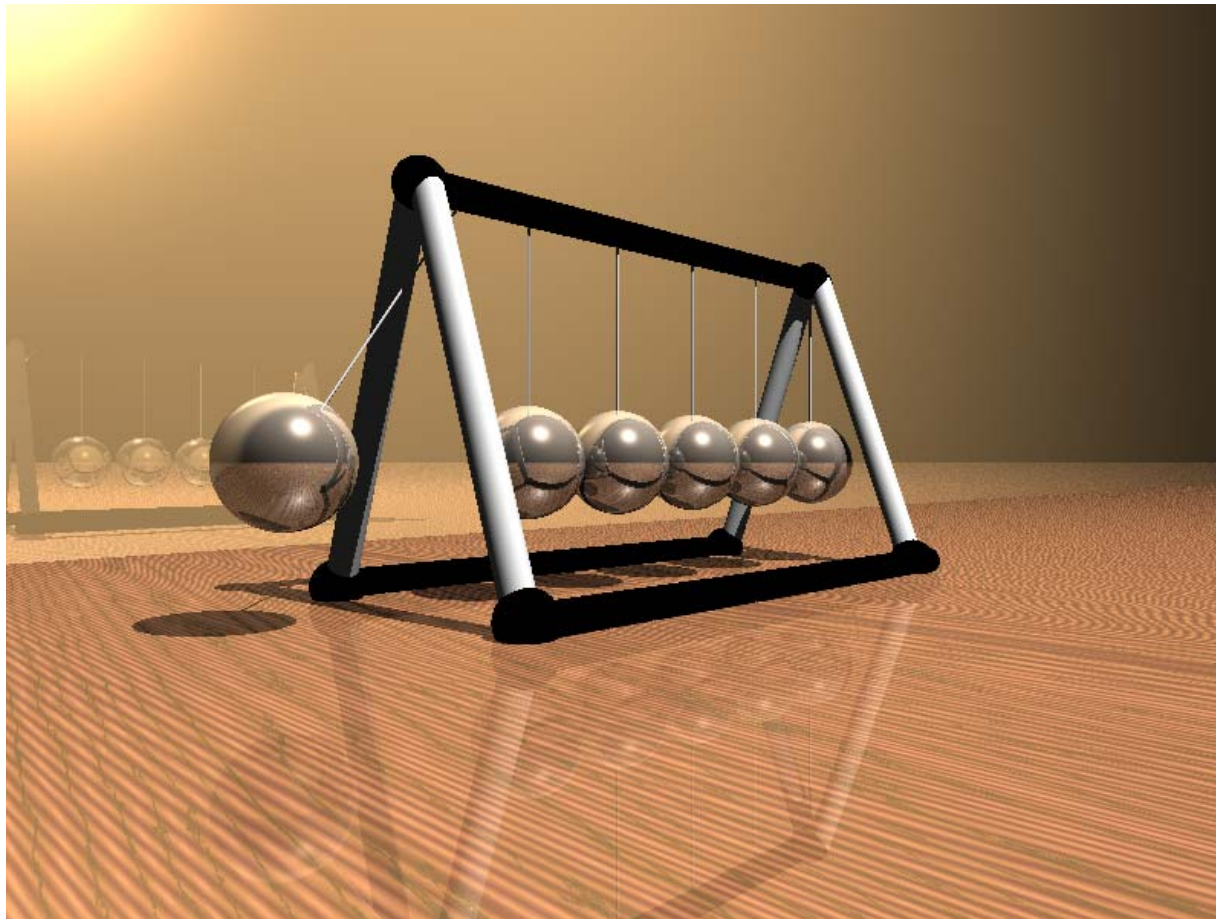
Knowledge Portal

A web portal for information, communication, and process support. A platform which supports knowledge management, capacity building, technical advisory support and SpaceAid.

How can we ensure every disaster receives all available support ?

"The only tools you will use in a crisis are the ones you have been using already"

Technical Advisory Support

Afghanistan

Dominican Republic

Jamaica

Burkina Faso

Ghana

Guatemala

Haiti

Cameroon

Sri Lanka

Samoa

Togo

Kenya

Tonga

Maldives

Philippines

Ecuador

Namibia

Fiji

Countries Receiving Technical Advisory Support

United Nations Platform for Space-based Information for Disaster Management and Emergency Response (UN-SPIDER)

THANK-YOU

UN-SPIDER