

# **UNSDI NCO White Paper**

### **Background Information**

More than 30 UN Organizations, since 2000 organized in the UN Geographic Information Working Group (UNGIWG, ref. Annex 1), have joined forces in 2005 in the United Nations Spatial Data Infrastructure (UNSDI) initiative, aiming at increasing accessibility of geospatial information with and for each other. All parties involved consider geospatial information as essential and underlying the decision making processes in the context of their complementary and various mandate areas. This encompasses various fields, such as Agriculture, Food Security, Water Resources Management, Climate Change, Economic Development, Humanitarian Assistance, Human Health, Peace and Security, Environment and the realization of the Millennium Development Goals (MDGs). In all development processes a spatial and temporal (geo) component is involved: where is something taking place, how does it develop, and what are the (spatial) factors mutually influencing these processes.

Much of this thematic and supporting technical information is collected over time in one form or another and stored by various UN Organizations. But not only by the UN. Many other institutes have collected and stored geo-information, e.g. the member institutes of the Consultative Group on International Agricultural Research (CGIAR) and many national institutions, or they generate it in 'real time', as recently happened for Haiti.

Geo-information includes much more than only maps. It concerns for example also census data or thematic information such as on physical infrastructure, country, provincial and communal boundaries or information which has to be updated on a regular basis, such as for the monitoring of ecological processes (e.g. desertification or deforestation), where use is made of Earth observation data acquired by satellites. Also in Climate Change studies a large variety of integrated thematic geo-information is used.

Geo-information can be 'static' in nature, such as in geology, soils or country boundaries, or 'dynamic', where timely availability of the information proves its unique value, such as in case of natural disasters and humanitarian assistance.

The UNSDI initiative has been developed for increasing accessibility and making this information worldwide available. Through the UNSDI initiative, geo-information is not only made available for the UN Organizations involved, but also for the UN Member States and developing countries in particular. In 2008 the UNSDI Plan, developed during the previous three years, has been accepted by consensus by all 30+ UN agencies involved. The plan comprises harmonization activities for increasing data accessibility of the various types of geo-information, the specification of information and technology 'gaps' which have been identified as well as the information needs of the various types of users in the Organizations involved and relevant institutions in developing countries.

The UNGIWG-UNSDI initiative has so far been led by two-yearly Co-chair arrangements. Recently an 'institutional home' for UNSDI has been identified at the UN Secretariat in New

### United Nations Spatial Data Infrastructure Netherlands Coordination Office



York. The Assistant Secretary-General and Chief Information Technology Officer (CITO), Dr. Choi Soon-hong, has decided this on the basis of a resolution of the UN General Assembly. He intends to do this through the creation of a Centre of Excellence (CoE). The implementation plan for the CoE has in the meantime been completed and this includes also an 'UNSDI Project Proposal for Donor Funding'. The Assistant Secretary-General has indicated that he intends to invite the Government of The Netherlands soon to actively participate in this initiative. The requested financial support from the Netherlands Government is limited (approx. 10 M€), but this funding will be instrumental for properly starting the UNSDI development process. It will also be the first 'UN Delivering as One' initiative of the UN in the area of geo-information.

In the context of the UNSDI development, interfaces with UN member states are foreseen. To this end UNSDI National Coordinating Offices (NCOs) are envisaged (the role of the Netherlands NCO is summarized in Annex 2).

The fact that the Assistant Secretary-General Choi Soon-hong approaches The Netherlands as first, is a logical consequence of the active contribution which a variety of Dutch institutions have made during the past four years to the realisation of the UNSDI Plan. Our efforts include both contributions to the specification of UNSDI core geo-data sets, the capacity building requirements and an outline for a UNSDI communication strategy. The Netherlands NCO also already started with the implementation of part of the required infrastructure, such as the increasing accessibility of available geo-information through a GeoNetwork<sup>1</sup> portal. This portal is a kind of 'Yellow Pages' on internet, accessible to anybody worldwide and includes a link to the geo-datasets themselves. At present the portal contains more than 17.000 geospatial datasets of 23 UN Organizations and CGIAR Centres and has already been fruitfully accessed by users from 150 countries (website <a href="http://www.unsdi.nl">http://www.geonetwork.nl</a>).

A number of Dutch partners have also contributed substantially in the area of increasing accessibility of geo-information and capacity building, such as Wageningen University and Research Centre (WUR), the Faculty of Geo-Information Science and Earth Observation (ITC, University of Twente), and the Netherlands Environmental Assessment Agency (PBL). In addition, GeoNetwork is being further developed and supported by the Dutch firm GeoCat.

Further to the contributions to the development of the UNSDI Plan it has been determined that The Netherlands has unique expertise which can cover a variety of UNSDI requirements, especially those dealing with issues in developing countries.

On the basis of discussions with various Dutch partners (a list of actual Dutch UNSDI-NCO Partners can be found in Annex 3) it has been in principle decided to integrate the UNSDI-NCO in the Centre for Geo-Information (CGI) of Wageningen University and to coordinate the Dutch contributions to the UNSDI development from there.

<sup>1</sup> By FAO, WFP, UNEP and UN-OCHA developed open source metadata catalogue based on international industry

Jan Cees Venema Head, UNSDI-NCO

standards for geo-information

Tieau, ONSDI-NCC



#### ANNEX 1 – The 33 UNGIWG- UNSDI Initiative Subscribers

UN/DESA UN Department of Economic and Social Affairs

UN/DM UN Department of Management
UN/DPA UN Department of Political Affairs
UN/DPI UN Department of Public Information

UN/DPKO UN Department of Peacekeeping Operations
UN/OCHA Office for Coordination of Humanitarian Affairs
UNODC United Nations Office on Drugs and Crimes

UN/OLA UN Office of Legal Affairs

UN/OOSA United Nations Office for Outer Space Affairs

UN/UNOG United Nations Office at Geneva

ECA United Nations Economic Commission for Africa

ECE Economic Commission for Europe

ECLAC Economic Commission for Latin America and the Caribbean ESCAP Economic and Social Commission for Asia and the Pacific CTBTO Comprehensive Nuclear-Test-Ban Treaty Organization FAO Food and Agriculture Organization of the United Nations

IAEA International Atomic Energy Agency
ICAO International Civil Aviation Organization
UNAIDS Joint United Nations Programme on HIV/AIDS
UNDP United Nations Development Programme
UNEP United Nations Environment Programme

UNESCO United Nations Educational, Scientific and Cultural Organization

UNFPA United Nations Population Fund

UN-HABITAT United Nations Human Settlements Programme
UNHCR United Nations High Commissioner for Refugees

UNICEF United Nations Children's Fund

UNITAR United Nations Institute for Training and Research

UNOPS United Nations Office for Project Services

UNU United Nations University

WB World Bank

WFP United Nations World Food Programme

WHO World Health Organization

WMO World Meteorological Organization

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#### ANNEX 2 – The role of the Netherlands Coordination Office for UNSDI

The NCO (Netherlands Coordination Office) is the national link between the United Nations and Netherlands parties involved in the United Nations Spatial Data Infrastructure (UNSDI) programme. The NCO cooperates closely with the UN and in the Netherlands with relevant ministries, research and development institutes, universities, NGOs, SMEs and (multinational) enterprises.

The purpose of the NCO is to increase the accessibility of unique and high-quality geo-information, knowledge and capabilities from Netherlands parties to the international UNSDI community in order to contribute to Food Security, Agricultural Development, Water Management, Economic Development, Peace and Safety, Tropical Forest Monitoring, Humanitarian Response, Environmental Protection, the realization of the Millennium Development Goals, and to combat the impact of climate change. The NCO manages the national UNSDI-GeoNetwork portal, making information available from all linked UN bodies and national UNSDI geo-information suppliers.

The geo-information includes unique thematic information, among others derived from satellite images, to support policy development and sustainable management. The methods used, knowledge of the various application areas and the available education and training infrastructure all contribute to sustainable capacity development in partner countries while generating bi-lateral economic stimuli.



## **ANNEX 3 – Current Netherlands UNSDI-NCO partners**

Alterra, Wageningen University and Research Centre (WUR)

**ARGOSS** 

Faculty of Geo-Information Science and Earth Observation (ITC, University of Twente)

Faculty of Geosciences, Utrecht University

GeoCat

Geodan

Geomatics Business Park (GBP)

Geonovum

Global Green Communication

Institute for Environmental Security (IES)

**Kadaster International** 

National Aerospace Laboratory (NLR)

**National Court of Audit** 

Netherlands Environmental Assessment Agency (PBL)

P. Geerders Consultancy

Royal Netherlands Meteorological Institute (KNMI)

SarVision

Space for Geo-Information, RGI

TNT "Moving the World" (TNT)

Tropenbos International (TBI)

Vrije Universiteit Amsterdam, Institute for Environmental Studies (VU/IVM)