

IGOS and CEOS W G C V

A review by Gordon Keyte, Space Department, QinetiQ

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The QinetiQ logo is located in the bottom right corner of the slide. It consists of a blue, curved shape resembling a stylized 'Q' or a wave, with the word 'QinetiQ' written in white, sans-serif font inside it.

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Background

- Increasingly, sponsors require that EO systems are application oriented.
 - Support for Calibration and Validation will depend on links to application programmes, especially to IGOS
- CEOS Plenary has directed Working Groups to support IGOS activities

- In UK, BNSC is interested in the links between WGCV and IGOS-P Themes (BNSC developed the initial CEOS data base of satellite EO activities in 1992)
 - BNSC Workshop to be held in December 2003 to review International Collaboration Programmes

Evolution of IGOS

- CEOS Strategic Implementation Team (SIT) created in 1996 to develop IGOS
- SIT identified six key projects as a means of demonstrating IGOS concept
- The initial projects were:
 - Disaster Management Support
 - Upper Air Measurements
 - Global Observation of Forest Cover (GOFC)
 - Global Ocean Data Assimilation Experiment (GODAE)
 - Long Term Continuity of Ozone Measurements
 - Ocean biology
- Projects focussed on specific observation issues and required to deliver products to demonstrate integrated approach.
- Subsequent meetings of SIT led to formation of IGOS-P, with specific partners

IGOS-P: Integrated Global Observation Strategy- Partners Group

- Formed - in 1997 to establish a framework for harmonizing the common interests of space based and in-situ observation systems.
 - Aim: to develop a strategy for implementing Global Observing Systems
 - Generally no exchange of funds - a best efforts basis.
- Partners include:
 - Sponsors of Global Observation Systems (ICSU, FAO, UNESCO, UNEP, IOC/UNESCO, WMO)
 - Global Observing Systems (GCOS, GOOS, GTOS Programme Offices, GOS/GAW)
 - CEOS
 - IGFA
 - Programme offices of IGBP, WRC P

IGOS-P activities:

- Establishment of a Theme approach to defining the IGOS, including definition of the Theme Process
 - Discussion and approval of IGOS-P Themes
 - Receives reports from Theme leaders
 - Production of IGOS promotional material
 - Meets annually from 1998
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- Note: Original 'IGOS' demonstration projects continue but under sponsorship of individual agencies (eg, GOFc).

Current Role of CEOS SIT:

- Value assessment of IGOS-P Themes
- Recommended scope for improvement of Theme Process (eg, broader involvement by IGOS Partners)
- Led to establishment of IGOS-P Implementation Taskforce to 'develop a consensus on the role of IGOS-P in implementation of IGOS-P Themes'

IGOS-P Themes

- Current IGOS-P themes:
 - Ocean
 - Integrated Carbon Cycle (IGCO)
 - Global Water Cycle
 - Global Atmospheric Chemistry (IGACO)
 - Geohazards
 - Coastal Theme (possibly including a Coral Reefs Theme)
- Themes selected according to criteria set by IGOS-P. Require reports at IGOS-P meetings
- Implementation is responsibility of individual partners
- Current emphasis is on implementation of existing themes

IGOS-P Theme current status (1)

- Ocean
 - Co-leaders: Eric Lindstrom (NASA), Colin Summerhayes (GOOS)
 - First IGOS-P Theme
- Global Carbon (IGCO)
 - Co-leaders: Phillipe Ciais (CES), Jeff Tschirley (GTOS), Colin Summerhayes (GOOS)
 - Draft report planned for end 2002
- Global Water Cycle (IGWCO)
 - Co-leaders: David Carson (WMO), Richard Lawford (GCIP)
 - Report team and advisory group established
 - Report in preparation, complete in September 2003

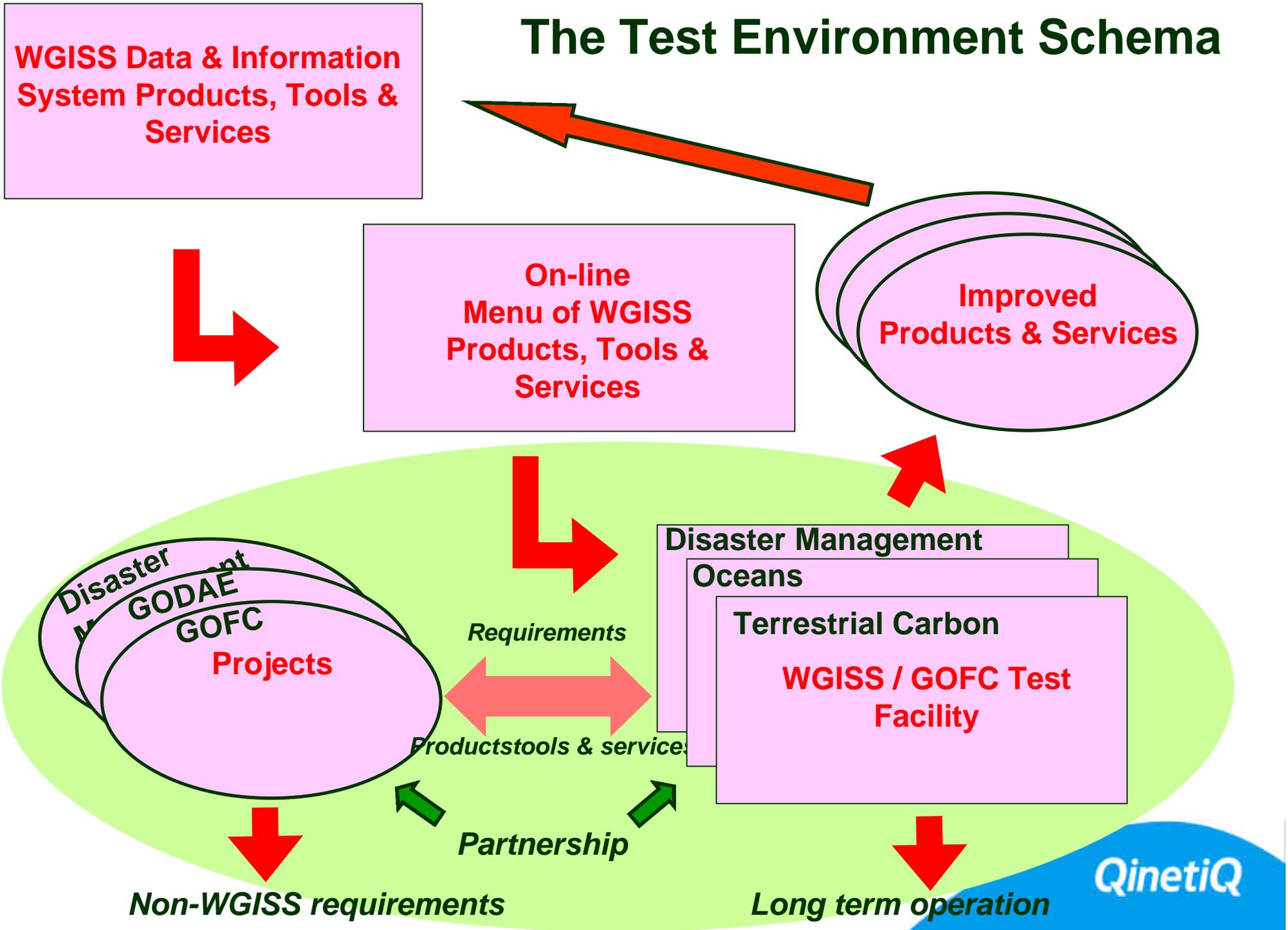
IGOS-P Theme current status (2)

- Atmospheric Chemistry
 - Co-leaders: Len Barrie (WMO), Joerg Langen (ESA), Guy Brasseur (CNRS)
- Geohazards
 - Co-leaders: Stuart Marsh (BGS), Marc Pagnini (ESA), Robert Missotten (UNESCO)
 - Report prepared for May 2003
- Coastal/Coral Reefs
 - Co-leaders: Arthur Dahl (UNEP), Alan Strong (NOAA)
 - Scope of theme (beyond Coral Reefs) to be reviewed in IGOS-P-10

CEOS WG activities in support of IGOS: (1) WG ISS

- Structure:
 - Technology and services subgroup
 - International Directory Network
 - CEOS Interoperable Catalog System
 - Data Services
 - Networks and Archive
 - EOGEO workshop
 - CEOS Grid
 - Projects and applications subgroup
 - Global Datasets
 - Global Mapping Book
 - WTF CEOP
 - WTF Core Sites (WGCV)
 - Pilot Ocean project
 - Developed concept of WG ISS Test Environment to provide a framework for working in partnership with other organisations

The Test Environment Schema



CEOS WG activities in support of IGOS: (2) WGC V

- WGC V Work Plan (v 3.1): no explicit tasking in relation to IGOS but recognises need to recommend techniques (eg, validation) to IGOS
- WGC V Subgroups
 - LPV : Ongoing definition of techniques and products in support of GOF C (Forest Cover) - one of the earlier IGOS Projects
 - Terrain Mapping: No formal links but could contribute to original IGOS projects, eg, GOF C and Disaster Monitoring projects.
 - Atmospheric Chemistry: New group but expect close liaison with IGAC O theme
 - SAR: Potential for involvement in Carbon Theme (IGCO) through biomass measurement and polarimetry. Largely technology driven.
 - IVOS: Currently focussed on broad technical issues, output is applicable to most IGOS-P themes
 - Microwave Sensors: As for IVOS.

Remarks:

- Sensor Calibration seems to be an issue for the space agencies whereas Validation is of increasing concern to the 'user' organisations, eg, comments from WCRP at 9th IGOS-P meeting,
- WGCV Subgroups LPV, TM and Atmospheric Chemistry have potential for supporting specific IGOS-Themes as they are essentially focussed on environment products,
- SAR, IVOS and Microwave Sensors are concerned with specific types of sensor - their work could be applied to a number of IGOS-P themes
- Sponsorship of WGCV Subgroup activity is (usually) through member organisation - this does not necessarily correlate with the sponsorship of IGOS-P Themes
- Implementation of IGOS-P themes is currently being addressed by the Implementation Task Force.

Suggestions... ..

- Within existing programmes, Subgroup reports could identify specific contributions to IGOS-P Themes and hence strengthen case for subgroup sponsorship
- In addition,
 - W G C V could establish correspondence between W G C V and IGOS-P Theme teams (and with IGOS-P Implementation Taskforce) to:
 - ensure that cal/val issues are adequately addressed within the Theme reports (reports could be circulated to subgroup chairs)
 - to determine Theme requirements for Calibration and Validation
 - to define possible demonstration projects to address issues of concern at the Theme level (implementation subject to subgroup sponsor agreement)
 - to identify new subgroups, or to broaden scope of existing groups to embrace IGOS requirements