IVOA Beijing Interoperability meeting

Introductory talk

The VO endeavour (1)

- Emergence of the Virtual Observatory concept by 2000
- Concerns about the data avalanche, with in mind in particular very large surveys such as the SDSS, statistical analysis, search for diamonds in haystacks, …
- Based on solid grounds: widely used on-line data and services (observatory archives, data centres, journals)
- Standards (FITS et al.)

The VO endeavour (2)

- From networking to the astronomical Virtual Observatory (integration)

  Seamless and transparent query of data centres

  New analysis and visualisation tools

  A standard structure for data centres to publish their data and services

IVOA (1)

- Created in June 2002

- An alliance of the VO projects to define a common framework
  - High level goals
  - Roadmap and Milestones
  - Interoperability standards

The astronomical VO standards body
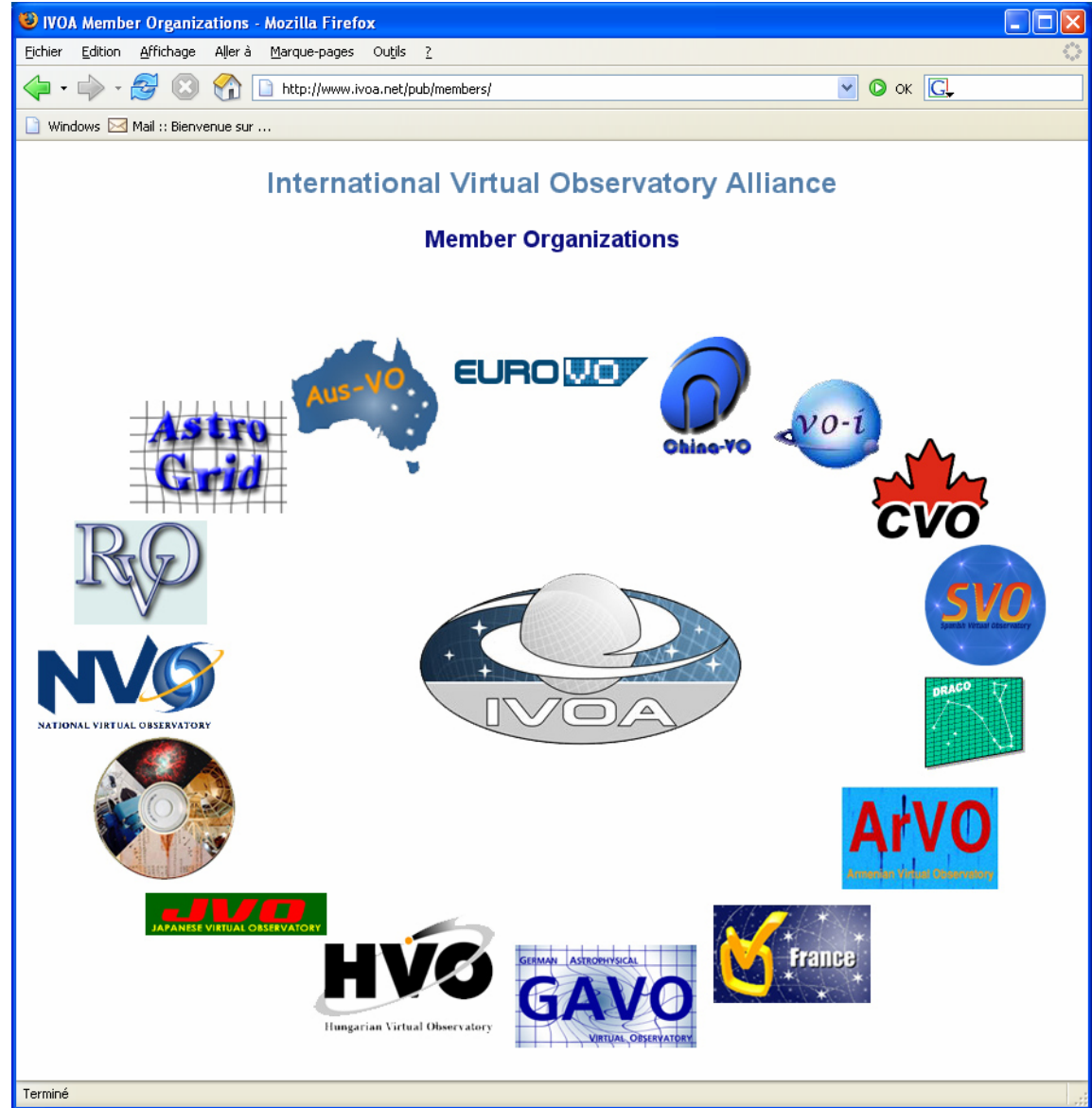
IVOA (2)

- IVOA mission

  To facilitate the international coordination and collaboration necessary for the development and deployment of the tools, systems and organizational structures necessary to enable the international utilization of astronomical archives as an integrated and interoperating Virtual Observatory

An International Alliance

- Rotating chair
- Each national VO project has its own goals
- Interoperability standards are the key
  - Working groups
  - Biannual international meetings
- Links with general IT standards: Astronomy group at OFG
- Science demos, reference implementations, feedback from implementation and usage: relevance and applicability of the standards

Europe
China
India
Canada
Spain
Italy
Armenia
France
Germany
Hungary
Japan
Korea
USA
Russia
UK (AstroGrid)
Australia

International Virtual Observatory Alliance

Member Organizations

IVOA status

- Evolution from the construction of the framework (essential standards) to operation: in this new phase, take-up by data centres, science usage by the community
- WE NEED THE BASIC STANDARDS, among which SSAP, STC + many others
- Significant progress expected at this meeting
- The proper balance between useful and useable standards: the 'proper' level of complexity

  Basic and advanced levels
- The standards will not be perfect and will not fit all needs: aim is to fit most needs, build compromises

IVOA evolutions

- TCG = technical coordination group, WG chairs, chaired by Roy Williams

- A nominal term of 3 years for the WG chairs

- Nomination of vice-chairs for the WGs/IGs
  to help the chair

- WG/IG structure can evolve, cf. the transformation of the Applications IG to a WG with the additional task of developing the required standards (messsaging)

IVOA 2007 Roadmap

International
Virtual
Observatory
Alliance

The IVOA in 2007: Assessment and Future Roadmap

IVOA Technical Coordination Committee

Version:

2007 May 1 this is DRAFT 2

Author:
Roy Williams

In consultation with:
IVOA Technical Coordination Committee:
Mark Allen, Francoise Genova, Bob Hanisch, Gerard Lemson, Jonathan McDowell, Reagan Moore, Francois Ochsenbein, Pedro Osuna, Ray Plante, Andrea Preite Martinez, Guy Rixon, Doug Tody, Nic Walton

Abstract:
This document is the result of a study by the IVOA Technical Coordination Committee with the intention of coordinating the IVOA Working Groups and Interest Groups. Specific objectives are:
- Building a roadmap for the IVOA that is a union of roadmaps for the Working Groups and Interest Groups.
- Ensuring productive crosstalk of the WG/IG so that workpackages cover relevant ground, but also do not overlap.
- Evaluating dependencies of one WG/IG on another and minimizing impact.
- Attaching milestones to the WG/IG roadmaps, representing planned achievements and target dates.
- Ensuring an effective evaluation of proposed standards during the RFC period.
- Providing a continuous reporting checkpoint to the IVOA Executive Committee on roadmap status.

- We need an up-to-date Roadmap
- Updated every year during Spring
- An excellent preparatory work from the TCG
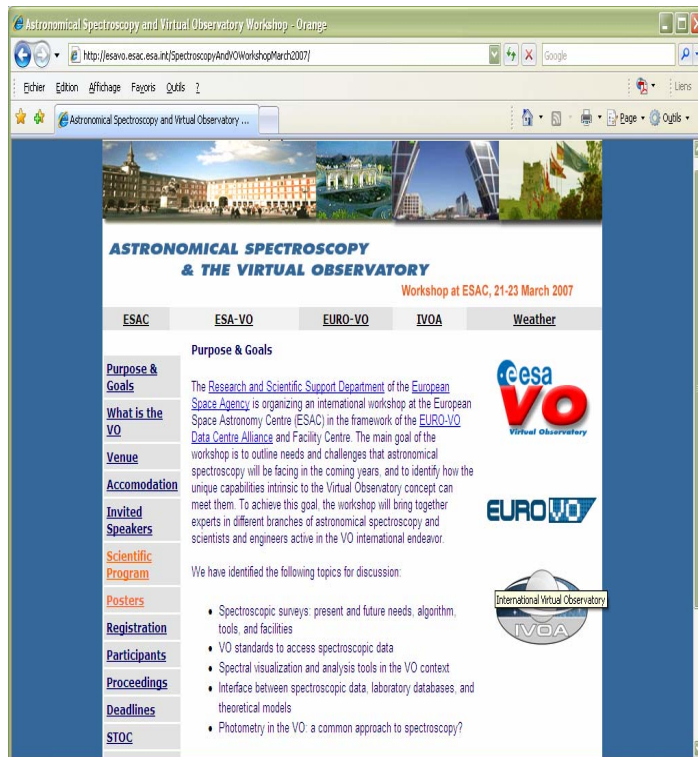- Final version after this meeting

Transition to operations (1)

- Assessment of Implementation of IVOA standards by Data Centres (document by D. Schade, C. Arviset; checks and warnings by B. Hanisch): importance of registry curation, validation tools, assessment of what 'compliance' means

Transition to operations (2)

- Assessment of IVOA: questionnaire to the IVOA community (not only to Exec), with room for comments on all questions – thanks to all who took the time to answer, very useful comments
  - Goals and organisation
  - Exec
  - WGs/IGs
  - Standardisation process
  - Interop meetings
  - Small project meetings
  - Communication inside/outside IVOA
  - What is the community

Relevance to the community needs

- Euro-VO workshop at ESAC (March 2007): Spectroscopy and the VO
- 120 participants
- 2/3 non VO
- Hot discussions on requirements, standards, several excellent reviews
- More details in the WG discussions
- There will be a Note to IVOA on the findings
- Cf also VOEvent

What we heard, among other things

- The community understands the need for standards and is ready to give requirements
- Standards needed now
- Importance of proper data characterisation, provenance
- Medium term goal: interface with widely used legacy s/w
- Lots of interest and expectations