IVOA Meeting 7: Full Meeting FM7
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23 July 2003: GMT

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Present:

Mark Allen	<allen@astro.u-strasbg.fr>	MA	AVO
David Barnes	<barnesd@unimelb.edu.au>	DB	Aus-VO
Chenzhou Cui	<ccz@bao.ac.cn>	CC	China-VO
Markus Dolensky	<mdolensk@eso.org>	MD	AVO
Francoise Genova	<genova@astro.u-strasbg.fr>	FG	F-VO
Bob Hanisch	<hanisch@stsci.edu>	BH	NVO
Chung-Ming Ho	<cmko@phy.ncu.edu.tw>	CH	
Sang Chul Kim	<sckim@kao.re.kr>	SK	Korea-VO
Bong Gyu Kim	<bgkim@kao.re.kr>	BK	Korea-VO
Tony Linde	<tol@star.le.ac.uk>	TL	AstroGrid
Oleg Malkov	<malkov@inasan.ru>	OM	RVO
Ray Norris	<ray.norris@csiro.au>	RN	Aus-VO
Francois Ochsenbein	<francois@astro.u-strasbg.fr>	FO	F-VO
Masatoshi Ohishi	<masatoshi.ohishi@nao.ac.jp>	MO	JVO
Peter Quinn	<pjq@eso.org>	PQ	AVO
Guy Rixon	<gtr@ast.cam.ac.uk>	GTR	AstroGrid
Arnold Rots	<arots@head-cfa.harvard.edu>	AR	NVO
David Schade	<David.Schade@nrc.ca>	DS	CVO
Ethan Schreier	<schreier@stsci.edu>	ES	NVO
Milcho Tsvetkov	<milcho@skyarchive.org>	MT	
Nic Walton	<naw@ast.cam.ac.uk>	NW	AstroGrid
Rachael Webster	<rwebster@physics.unimelb.edu.au>	RaW	Aus-VO
Patrick Woudt	<pwoudt@circinus.ast.uct.ac.za	PW	South Africa
Yongheng Zhao	<yzhao@lamost.bao.ac.cn>	YZ	China-VO

Apologies:

Andrew Lawrence	<al@roe.ac.uk>	AL	AstroGrid

Glossary

AstroGrid - UK VO initiative	www.astrogrid.org
Aus-VO - Australian Virtual Observatory	www.aus-vo.org
AVO - Astrophysical Virtual Observatory	www.euro-vo.org
AVO - AVO Science Working Group	
CDS - Centre de Donnes Astronomiques de Strasbourg	www.cdsweb.u-strasbg.fr
China-VO - Chinese Virtual Observatory	www.china-vo.org
CVO - Canadian Virtual Observatory	
F-VO - French VO	
GAVO - German Virtual Observatory	www.g-vo.org
GSC - UK Grid Steering Committee	
VO-India - Indian Virtual Observatory	
JVO - Japanese Virtual Observatory	jvo.nao.ac.jp/index-e.html
KVO - Korean Virtual Observatory	kvo.kao.re.kr
NVO - National Virtual Observatory	www.us-vo.org
RVO - Russian Virtual Observatory	www.inasan.rssi.ru/eng/rvo/

IVOA - International Virtual Observatory Alliance

Note: Chung-Ming Ko is at the National Central University, Chungli, Taiwan
Milcho Tsvetkov is at the Bulgarian Academy of Science

0. Review of open action items from previous meetings and their new status

ACTION FM4-7.3.1 PQ: produce a White Paper on what VO Readiness might mean, and how the Data Providers will integrate into a VO system.

CLOSED - this discussed under item 4.1. (note - new action)

ACTION FM4-7.3.2 DS/PQ: produce a position paper on issues related to data quality and data provenance.

ONGOING - discussed under item 5.

ACTION TM5-6.1.2 ALL: Provide documents to be included in common handout folder of IVOA demo booth and wall papers to TL.

CLOSED

ACTION TM6-3 BH: - clean up the draft standards process document and bring it for formal approval at the Sydney meeting.

Document circulated in draft from by BH for discussion at this meeting.

ONGOING - discussed under items 7.7 and 10.

ACTION TM6-4 FG: upload the current draft of the IAU VO WG terms of reference to the IVOA www site.

CLOSED - discussed under item 6 - note new action.

ACTION TM6-5 BH: to organise a joint meeting (linked with demos - perhaps at the July IAU) with the solar community to look at collaboration possibilities. Need to address whether there are benefits in having common standards.

Arnold Benz (current President of IAU Division II Sun and heliosphere - see http://www.iau.org/Organization/divcom/div2/index.html) was invited to this meeting of the IVOA.

ONGOING - discussed under item 15

ACTION TM6-6 PQ, BH and ALL with access to legal council: get legal advice on the acceptability of the draft IVOA license.

ONGOING - discussed under item 11.

ACTION TM6-7A TL: to contact David Barnes (Aus-VO) re details of IAU demo.

CLOSED - demo organised.

ACTION TM6-7B TL: to confirm demo planning telecon for 5 Jun 2003

CLOSED - this telecon occurred.

ACTION TM6-8A BH: will email draft ideas for comment on IVOA structure.

CLOSED - IVOA structure document circulated by BH for discussion at this meeting - see item 4.

ACTION TM6-8B ALL: people to think about these issues (governance etc) as some decisions will need to be taken at the Sydney meeting.

CLOSED - discussed under items 4, 12

ACTION TM6-9A PQ/BH: to issue the meeting draft agenda for 23 Jul 2003 meeting. This will include reports from the IVOA working group activities since the May 2003 Inter-operability meeting.

CLOSED - agenda circulated

ACTION TM6-9B PQ: organise the IVOA dinner for the evening of 23 July 2003.

CLOSED - happened.

1. Roll Call

The participants - as listed above - introduced themselves.

2. Agenda and Thanks

Thanks to Aus-VO (David Barnes, Ray Norris, Rachel Webster et al) for organising activities in Sydney. Thanks to also to Martine Peltzer (ESO) for organisation of the IVOA demo/stand activities.

3. Reports from the VO Projects

3.1 Aus-VO (Australia)

RW reported that the Aus-VO project was underway. Following initial funding, a new application was under consideration, to allow continued funding from 2004. This proposal, would see an increase of partners in the consortium to 10, including both astro and computer science groups.

The recent focus of the Aus-VO has been on the development of the demos for the IAU General Assembly.

DB visited AstroGrid in the UK in Jan 2003 and has also been active in interactions with the Australian Grid community.

There will be a Aus-VO workshop towards the end of the year - 17-18 Nov 2003 - see http://www.aus-vo.org/vo2003/

Two major ’radio’ projects of interest to the Australian community are LOFAR (www.lofar.org) and SKA (www.skatelescope.org). Both of these plan on making radio data available on line - probably through the VO - and with VO integration of pipelines to enable generation of images from uv data.

3.2 CVO (Canada)

DS reported that significant upgrades had been made in early 2003 to the CADC/CVO capability/compute/server/storage resources:

- improved interface to data archive and VO layer
- interface to partial HST/WFPC2 data
- two racks of linux boxes (18 proc)
- 7TB of storage space
- implementation of IBM DB2 database system

The CVO VO prototype was released July 9, 2003 - with multi-wavelength content - see http://services.cadc-ccda.hia-iha.nrc-cnrc.gc.ca/cvo/login.jsp. The metadata describing the data resources is held at the CADC, but these point to original data stored elsewhere.

The CVO is hiring more staff including a 2nd java programmmer

The CVO is involved in collaborations with a number of 'VO' groups:

- GAVO: incorporating xray data into the CVO system
- Aus-VO: incorporating spectroscopic data into the CVO system
- with STScI/ HST - working on a pipeline system

The CVO data model has been adapted to include these additional data resources.

3.3 China-VO (China)

CC gave an update on China-VO activities. Highlights included:

- Thesis of Cui describing the system design of the China-VO Cui has been published - available from http://www.china-vo.org/en/index.php (in Chinese).
- A Cone Search service has been implemented

China-VO are planning a number of demos:

- Abundance gradients in the galaxy, supporting statistical research (2003)
- auto-classification using multi-band data (June 2004)

China-VO is currently funded at the $50K level, and is thus a small project. A meeting is to be organised in Beijing (Oct/Nov 2003), with the KVO and others, to discuss how small VO projects can best contribute (role, R&D focus etc) to the Global VO efforts.

3.4 AVO (Europe)

PQ noted a number of developments with the AVO.

The main recent activity has been in developing and submitting EURO-VO proposals to the EU through its FP6 programme (http://fp6.cordis.lu/fp6/home.cfm) In total three proposals will be submitted (two in Apr/May/Oct 2003) to three funding calls, in sum these will fund the Euro-VO. (This is effectively the Phase-B of the AVO). Over the period 2004-2008 some euro15M has been asked for.

The Euro-VO has three main elements:

- The Data Centre Alliance
- The VO Facility Centre (provides support for the community, outreach, a central registry, etc)

- The VO Technology Centre

RW asked who were the partners in the Euro-VO. PQ replied that they were national representatives from major European countries.

BH noted that NVO was comprised of 17+ groups, and that communication within such a virtual organisation was vitally important. Smaller working groups were required to focus on specific tasks.

3.5 F-VO (France)

FG reported that this project had now been given the formal go ahead in France. Collaborations were being formed with India-VO, AVO etc. VO-type activities in France include data centres (also in space plasma physics and solar physics), active participation to the IVOA WG for the definition of standards and the development of VO tools.

The terms of reference of the Action Specifique OV-France will be discussed in November. It is implemented by INSU (Institut National des Sciences de l'Univers), with participation from CNES (Centre National d'Etudes Spatiales). In addition, a grant from the Ministre de la Recherche (MDA - Massive Data in Astronomy) allows the official start of a forum and some collaboration between IT and astronomy laboratories.

FG reported that she had been active in conversing with other communities in France with a view to transferring best practise across discipline boundaries.

3.6 JVO (Japan)

MS reported that JVO has increased its staff with the hire a new PostDoc from April 03

The original JVO demonstrator was based on the Globus GT2 software, but experience with this showed that it was very slow. JVO have since implemented their system with the NSF Middleware initiative (see http://www.nsf-middleware.org/) version, this gives some speed improvements, but is still not satisfactory. JVO are now investigating the use of GT3 (OGSA) and how to store intermediate user data.

The IAU demo has added in data bases from e.g. Subaru, one case shows an automated search for gravitational lenses from the data - as described in the demo poster - see http://jvo.nao.ac.jp/Documents/IAU-2003-Demo.ppt)

A number of funding requests are in progress:

- one through the NAOJ observatory requesting 3-4 full time staff (results known autumn 2003)
- a second proposal submitted by the JVO directly to central government, level of $0.5M/yr for 5 yrs (this known at end of Aug 2003).

3.7 KVO (Korea)

SK reported that the KVO was established as a joint project of the Korea Astronomy Observatory and University partners (see http://kvo.kao.re.kr/kvoorgan.htm) in 2002. The KVO has now begun activities.

Three people staff are deployed jointly between the KADC (data centre)

and the KVO. The KVO is now hiring two postdocs and looking at collaborating with China-VO.

DS: noted that CADC has a one year visitor from Korea in this area.

3.8 RVO (Russia)

OM reported that more data resources are being incorporated by RVO. In Spring 2004, the RVO will host a mini-symposium in Moscow.

3.9 AstroGrid (UK)

TL reported that AstroGrid:

- has successfully released working software from iteration-2: gives a solid code base to be built upon for future releases.
- has concentrated on infrastructure development rather than user interface (e.g. Registry, Data Access, WorkFlow, MySpace)
- goal is to deliver s/w which makes it easy to add data/tools/people/orgs into a VO

Interest is growing from the UK community as to the process of deploying data and tools online through the AstroGrid system. The AstroGrid infrastructure could be useful for small projects (c.f. the China-VO conf in Oct/Nov 2003)

Work has started on design & dev for AstroGrid's Itn03
- adding Portal, Community, Security
- complete set of components, will be incrementally adding functionality from now on
- standards from the IVOA are being used where they are available.

AstroGrid collaborations
- worked with Aus-VO on grid demo
- talking to Swinburne about 3D viz (part of Aus-VO?)
- with AVO

AstroGrid is in the middle of being reviewed for funding 2005-2007
- bid ~UKP 9M applied for.

3.10 NVO (USA)

BH noted that a registry prototype service ('The NVO Data Inventory Service') had recently been released - based on the IVOA Resource Metadata standard (v7).

The NVO had implemented the Simple Image Access Protocol (SIAP) service shortly after the Cambridge May 2003 IVOA meeting.

NVO will be deploying 'ROME' (Remote Object Management Environment), developed by IPAC, as the front end to grid based computing systems.

Funding: NASA funding to data centres at the level of $1.5M/yr for several years has been agreed from Oct 2004. It is not yet clear how the NSF and NASA funding lines will be managed.

3.11 VO Activities in Taiwan

CH noted that there were currently no VO activities in Taiwan. He was

here to make contact with the VO community, and would report back on further developments.

3.12 VO Activities in Bulgaria

MT stated that there was increasing interest in Bulgaria in VO developments. A number of plate archive data resources were now being made available through the CDS in Strasbourg.

3.13 VO Activities in South Africa

PW reported that initiatives were underway to begin VO activities in South Africa. The focus of these would be providing support and access to key South African based data resources: SALT, SAAO, the 26-m radio telescope at Hartebeesthoek, etc.

A working group was currently constructing a funding proposal.

3.14 GAVO (Germany), VO-India (India) and DRACO (Italy)

There were no formal reports received

DS commented that GAVO have an interest in the theory aspects of the VO. NW stated that AstroGrid is also beginning to consider theory side services.

PQ reported that PB is now leading up Italy's INAF for an initial period of at least 12 months. The Italian VO project has been renamed to DRACO - see http://www.ivoa.net/pub/events/italyvo_ho.pdf

3.15 VO Comments

BH noted that there seems to be increasing and widespread backing for the VO programmes. It is clear from the talks and presentations at this IAU General Assembly, that VO initiatives are being followed closely by the opinion formers and leadership figures in astronomy. Many of the major project talks also mention the use of VO's as being of key strategic importance in delivering new content to the community. The IVOA in turn is seen as an essential international forum in ensuring the long term success of the VO initiatives.

4.0 Participation in the IVOA

PQ reported that a draft white paper on what participation in the IVOA means, responsibilities that it entails, and so forth had been prepared and distributed. This is attached as IVOA-participation-Jul03.pdf

TL thought that add a section was required on the standards (development) process, whilst AL though that the IVOA organisational structure needed to be described, e.g. what are the responsibilities, etc, of the key posts such as Chair, Secretary, and so forth.

ACTION FM7-4.0 ALL: comments on the participation paper to PQ with aim to agree document at the next IVOA meeting.

4.1 VOs and Key Projects

ES thought that another white paper is required which describes how a large astronomy project can interface into a VO. What would the costs and benefits of integrating into the VO be, and so forth.

RaW suggested that VO projects look for early adopter projects to feed their VOs.

DS noted the Canadian experience, that both Gemini and Keck are becoming more aware, and interacting more with the CADC on VO issues.

ACTION FM7-4.1A PQ/ES/DS: develop a paper that defines what interfacing to a VO means from the point of view of a large project. Cases studies to include OWL, LOFAR etc.

ACTION FM7-4.1B ALL: think of nationally important projects for case studies and feed input to PQ/ES/DS

5.0 Data Quality and Provenance in a VO

DS presented his current update on progress with the paper on this topic. His notes are attached as ivoa-fm7-schade.doc

The meeting AGREED that the VO projects would not judge data quality, rather act to ensure that enough information (meta-data) was provided about data available through a VO to ensure that users could make their own judgements as to the provenance and data quality for their particular circumstance.

RaW indicated that the VO systems should enable the capture of feedback from users on their experience of their use of data delivered via the VO systems.

PQ thought there would be a need to facilitate self evaluation of data:
- characterisation of DQ
- documenting data quality
- preservation of data

BH asked at what granularity do you need to describe data (this is linked to the registry issue at some level).

GTR thought that if VO's allow the inclusion of user uploaded data resources, tracking of 'data quality' may need to happen at fine resolution, e.g. on an individual ccd frame level.

DS indicated that it would be technically elegant to track which data has been used in any published paper. On a related point NW thought that VO's should enable credit to be given to data when used (data citations).

DB wondered as to technical issues with serving automatically 'good' data - perhaps linked to data citations.

GTR raised the issue of tracking changes to copies of data (version control on mirrored data resources).

BH commented whether the VO's should implement inclusive or exclusive registries. The meeting AGREED, that in principle, the registry should be inclusive.

ACTION FM7-5.0 DS/PQ: to bring to next meeting a draft paper on data provenance and data quality to enable closure on this issue. A Draft would be issued by mid Sept 2003.

6.0 IAU Comm 5 VO WG

FG reported that the new Chair of the IAU Comm 5 FITS WG is Bill Pence from HEASARC and that Francois Ochsenbein is new vice chair. The FITS WG is aiming to speed up its procedures to allow for faster turn around time in developing and agreeing FITS standards.

At the IAU VO WG kick off meeting at the IAU General Assembly (21 July 2003), there was an indication that some potential members (from outside the VO community) would not be willing to just 'rubber stamp' standards sent for approval from the IVOA. They would want to be more actively involved in the development process.

FG noted that it was proposed that the membership of the IAU VO WG be of order 10 people. This would include a representative from the IAU FITS WG and one from the Solar community (IAU Division 2).

NW suggested that it might be preferable to commence IAU VO WG activities at the next IAU General Assembly (Prague, 2006).

There followed a discussion on the timescales involved in agreeing standards, and whether there was a place for implementations based on proto-standards. There was some concern that the IAU timelines, if too long, could hamper VO developments.

AR suggested that there could be the concept of standards conventions, these could be agreed by the IAU VO WG, comment from which could feed back into the next version of the standard.

ES wondered whether the endorsement from the IAU needed when considering VO standards. He noted that the IAU has a WG looking at large observatories - but it this doesn't set standards, rather acts as a supportive forum to enable the development of new ideas.

BH thought that the IAU would give legitimacy to agreed standards. IAU endorsement would be the final step as work in agreeing the standard would have happened before the proposal reached the IAU VO WG. The role of the WG would then be more of validating the process of the standard development.

The meeting AGREED that the IAU should be involved in the area of standards approval. FG noted that the VO WG should be in operation by Autumn 2003.

ACTION FM7-6 FG: to present draft VO WG terms of reference (charter) at next IVOA meeting

6.1 IAU VO WG Membership

ACTION FM7-6.1 ALL: provide FG with suggestions as to who should be representatives on the IAU VO WG. Deadline 8 August 2003.

7.0 Reports from the IVOA Technical Groups

7.1 Registry report from TL

WWW site at http://www.ivoa.net/twiki/bin/view/IVOA/IvoaResReg

Since the May IVOA Interop meeting, BH had released a new version of the resource Metadata document (v7). A structured version was currently being developed by TL and Ray Plante.

More community input was needed in developing science cases and more general use cases.

BH noted, that practical experience gained in populating the registry during development of the latest NVO demo (see http://heasarc.gsfc.nasa.gov/vo/data-inventory.html), had been instructive.

ACTION FM7-7.1A BH: submit a report on lessons learned in populating a registry.

ACTION FM7-7.1B TL: submit a report on experiences gained by AstroGrid in their implementation of a registry based on the RM v6 document.

PQ suggested that there was a need (by September 2003?) to get the registry standard agreed for use in the Jan 04 demos.

FG noted that the CDS were investigating how the CDS GLU could fit into the context of the evolving registry standard.

BH thought that use could be made of the Dublin Core, for instance in holding bibcodes.

7.2 Data Models

WWW site at http://www.ivoa.net/twiki/bin/view/IVOA/IvoaDataModel

BH reported that Jonathan McDowell is leading efforts in this area.

DS reported that Pat Dowell had attempted to organise a meeting in July 2003 - but this had not been possible.

7.3 Data Access Layer

WWW site at http://www.ivoa.net/twiki/bin/view/IVOA/IvoaDAL

BH noted that the list of items for work including adding support for one dimensional spectra - priorities had been agreed in Cambridge (May 2003). Modifications were being made to SIAP, with a target to finish by end summer 2003. A current priority was to fully develop the spectral access model to enable development of Jan 04 demo products.

MD reported that Doug Tody (WG lead) had visited CDS and ESO to coordinate SIA and SSA developments.

7.4 VOQL

WWW site at http://www.ivoa.net/twiki/bin/view/IVOA/IvoaVOQL

MO reported that the:

'Working Group had been set up in the January meeting of the IVOA. Several people (US, Canada, UK, France, Japan, Australia, etc.) attend the WG to exchange opinions on the common VOQL. During the IVOA workshop in Cambridge, UK, the WG agreed to adopt two-step approach to develop the VOQL SQL-like language as the first step, and XML-based language for the second step.

Two people (Wil O'Mullane of JHU and Naoki Yasuda of NAOJ) are working

very hard for the first step. They aim to achieve the following: 1) first draft will be distributed by the end of August to VOQL WG; 2) it will be, then, submitted to the IVOA as a draft recommendation, hopefully, in October; 3) they try to add a document on the position regarding OGSA-DAI; 4) in parallel with its preparation and review within IVOA, they will implement test modules for VOQL Query interface and ADQL by the end of this year.

We (Wil, Yasuda and I) need to agree on the actual specification. Wil is preparing a 2 page description of the Query interface and ADQL. In JHU Wil and his colleague, Vivek Haridas, have demonstrated that from a single WSDL they may create a .NET WebService as well as an AXIS (Java) WebService and have a single client also generated from the WSDL be able to talk to either. In conclusion the first step work for the VOQL is going quite well.'

7.5 UCD's

WWW site at http://www.ivoa.net/twiki/bin/view/IVOA/IvoaUCD

BH relayed a report from Roy Williams.

Currently restructuring of UCD's was occurring. A steering committee for UCD's had been established in Cambridge (May 2003). Agreement of the UCD standard will be reached by mid Oct 2003 at the Strasbourg Interoperability meeting.

7.6 VOTable

WWW site at http://www.ivoa.net/twiki/bin/view/IVOA/IvoaVOTable

FO reported that following the May 2003 Cambridge meeting, further discussion on what extensions are required to the standard v1.0 were taking place. Proposals were to enable grouping of UCDs, allow structures in VOTables and so forth. Specific attributes would be added to allow links to data models.

There is now software available to manipulate data in VOTable format, parsers and so forth.

7.7 Standards process (TL, BH, FG, NW, PQ)

WWW site at http://www.ivoa.net/twiki/bin/view/IVOA/IvoaStdsDocsProc

BH noted that the v0.1 draft specification has been issued, following initial discussions between BH, TL, FG, PQ and NW at the Cambridge May 2003 meeting). This is based on TL's suggestion that the W3C process, suitably adapted, be followed.

More discussion on this issue follows under item 10.

BH suggested that the IAU FITS WG might like to consider this approach as well.

8 Additional IVOA Working Groups.

It was AGREED that there was a need for a new 'Grid and Web Services' working group. GTR would lead this group. This would extend and replace the current web services group.

ACTION FM7-8A GTR: Set up the Grid and Web Services IVOA Working Group.

ACTION FM7-8B MD: redirect postings from <web@ivoa.net> to <grid@ivoa.net> and redirect the Web Service page http://www.ivoa.net/twiki/bin/view/IVOA/IvoaWebServices to a new grid page.

9. IVOA And the Global Grid Forum.

NW made case for the IVOA to support a proposed Astronomy Research Group within the Global Grid Forum (see http://www.ggf.org). The GGF is the standards organisation responsible for setting 'grid' standards, underlying technology that a number of VO projects are employing (e.g. AstroGrid, JVO etc). Involvement in the Astro-RG will best ensure that demands specific to the astronomical world are best input into the 'grid' world.

The draft charter - drawn up by Reagan Moore and NW - for the Astro-RG is attached to these minutes as Astro-RG-charter.pdf

FG noted that Andre Schaaff from CDS will participate in this group.

MO commented that he had spoken to Satoshi Matsuokas in Tokyo about this proposal, Satoshi is the relevant Area Director at the GGF. This interaction will allow exchange an between the Computer Science and Astronomy domains. The GGF might be able to (co-)sponsor workshops.

It was AGREED that the draft charter and a request to set this research group up be submitted to the GGF.

ACTION FM7-9 NW: Submit proposal for an Astronomy Research Group to the GGF.

10. IVOA Standards Process

BH presented the four level model for standard development.

i) note (informal)

ii) working draft (1st level of formal doc) (can be prepared and prosed by working groups)

iii) proposed recommendation (chair of WG is satisfied that draft is ready - recommendation goes IVOA wide - request for comments with a 4 weeks comment period) - at this level it should be a consensus of the working group.

iv) recommendation (highest level of doc within the IVOA framework) - this can be used a a standard document to develop implementations against

v) IVOA recommendations would be forwarded (when appropriate) to the IAU VO WG for endorsement - review of the process

ACTION FM7-10 BH: issue a Request For Comment (RFC) on the v0.1 stds process document. Aim to agree this as the process at the end Sept 2003 telecon.

11. IVOA Software Licensing Arrangements

TL presented a draft based on the IBM Public license.

BH had spoken to legal council of AURA, it appears that this draft license looks reasonable.

PQ mentioned that ESO currently uses GPL. However, if future software uses GPL software, it too must become open.

DB indicated that he believed that open source software developed by the VO projects should stay open source if taken as a component of future software, thus recommended the use of the GPL license.

DS commented that national funding agencies (e.g. in Canada) encourage commercialisation - thus licensing that allows this is best.

PQ noted the need to have a mechanism in place to protect core VO software components. What is the longterm implication for ownership?

ACTION FM7-11A FG: investigate and report back on the legal status of IAU endorsed standards.

ACTION FM7-11B TL: make IBM public license template available for use by VO projects if wanted

AGREED that the IVOA will not assert a need on projects to adopt any particular license.

Note: NW 20030823 - the IBM Public License (IPL) is being replaced with the Common Public License (CPL) - this may be more appropriate for IVOA usage. See http://www-106.ibm.com/developerworks/opensource/library/os-cplfaq.html for discussion as to the diffences between the IPL and CPL.

IPL - http://www-124.ibm.com/developerworks/oss/license10.html
CPL - http://www-124.ibm.com/developerworks/oss/CPLv1.0.htm
GPL - http://www.gnu.org/licenses/licenses.html (and LGPL etc).

12. IVOA operating procedures.

BH asked how formal should the governance procedures be in the IVOA. Should there be voting procedures in place, how is the IVA governed? BH and PQ have begun preliminary discussions on these issues.

The general consensus was that the current informal operation of the IVOA was to be preferred. This could be reviewed at a later date if considered necessary. (ES commented that there may be a future need for a more formal structure c.f. the IETF for the Internet).

AGREED that there be no change to the current governance of the IVOA.

13. Next International VO Conference

A number of ideas were discussed for a VO science based meeting (~300 people) in 2004.

- Cambridge (Boston)
- Washington area
- Tuscon
- Glasgow (scheduled around the June SPIE meeting)

The Science Organising Committee would be formed by

PQ/NW/Dave DeYoung/BH/DB

ACTION FM7-13A ALL: email NW suggested additional SOC member names.

ACTION FM7-13B NW: investigate possible options for a meeting around the 20-25 June 2004 in SPIE Telescopes meeting in Glasgow.

13.1 Interoperability meetings.

All AGREED that the May 2003 meeting in Cambridge had been extremely useful and that significant progress had been made.

The next interoperability meeting is Oct 16-17 2003 in Strasbourg (following the ADASS XIII) - see http://www.adass.org:8080/meetings/adass2003/meetings/IVOA

A IVOA Exec plus InterOp meeting before Feb 2004 in India was considered too early by all.

ACTION FM7-13.1A BH: contact Ajit Khembavi to postpone a possible meeting late 03/early 04 in Pune until a later date.

The next large interoperability meeting should be April/May 2004, perhaps at the NeSC if there is no Glasgow based VO conference in June 2004.

ACTION FM7-13.1B FG, BH, NW: Act as the Interop Steering Group to organise next IVOA Interoperability meeting.

13.2 January 2004 Demos.

The next significant US-VO demos will be at the AAS meeting in Atlanta 4-8 Jan 2004 - see http://www.aas.org

ACTION FM7-13.2 BH: organise IVOA Exec meeting at the end of this AAS meeting - thus 8 Jan (pm) plus 9 Jan 2004.

13.3 IAU

RN noted that now would be a good time to start thinking about a science based symposium for the 2006 Prague General Assembly - as planning could start mid to end 2004 for this. A letter of intent will need to go to the IAU by end 2004. NW noted that this should be linked this to major science programmes.

14. Appointment of New Officers

The meeting thanked to Bob Hanisch for his work as Chair over the last year.

The meeting AGREED the appointment of the following officers, with effect from 1 August 2003.

Peter Quinn: Chair
Andy Lawrence: Deputy Chair
Roy Williams: Technical Lead
Nic Walton: Secretary
Marco Leoni: Document Coordinator

Note: The Document Coordinator is a new post. This position has jurisdiction over the process of submitting and publication of standards documents (primarily through the www.ivoa.net www site).

15. IVOA Scope and Interactions with Space Science Disciplines

BH reported that there was a new programme manager for the Planetary Data System arm of NASA - see http://pds.jpl.nasa.gov/. They are investigating the use of IVOA standards.

Arnold Benz (current President of IAU Division II Sun and heliosphere - see http://www.iau.org/Organization/divcom/div2/index.html) was invited to this meeting of the IVOA to discuss possible linkages to the Solar community. However he was unable to attend due to late running of a Symposium at the IAU of which he was Chair.

FG reported that she had been in conversation with Benz, and that there was a willingness to explore possible involvement of the Solar community with the IVOA. The IAU Div 2 was forming a VO Working Group. There could be cross membership with the IAU Comm 5 VO WG.

TL noted that we need to avoid developing two sets of VO stds if possible (one for solar, one for astrophysics). The IVOA should be open to members from across astronomy (solar etc).

PQ stressed the need to keep momentum in the IVOA, and therefore looked to organic growth to include VO projects from Solar/STP etc based on common interests and science needs.

BH noted that the initial focus of the IVOA has been in sidereal astronomy but the IVOA is moving to include drivers of relevance to solar/STP communities (e.g. temporal studies etc).

NW reported that AstroGrid has a remit to include drivers from the Solar and STP communities and that some of the AstroGrid science drivers are driven by Solar/STP science. FG noted that the F-VO will also represent the French Solar/STP communities.

FG commented that the IAU Comm 5 VO WG could take on a overview of all IAU VO activities, but will determine the best route once the Solar Div 2 VO WG is active.

TL suggested that the IVOA look for common areas where there are links between components for say solar/ astro and look to form common working groups in these areas.

BH mentioned the cost in coordination of differing communities, but these costs may not be so high in reality.

NW noted that many core infrastructure components are common for astro/solar etc. TL presented the AstroGrid infrastructure component diagram (see http://wiki.astrogrid.org/pub/Astrogrid/OversightCommittee/PMReport.pdf - see slide 12).

The meeting AGREED that the IVOA welcomes possible participation from VO groups in related disciplines (e.g. Solar, STP) upon approach, and expects the IVOA to grow organically with time.

ACTION FM7-15 BH/NW/FG/TL: Contact Solar/STP groups. BH will try to organise a telecon at some point (Oct 2003) to explore common ground.

16. AOB

NW suggested that the IVOA look at how to set up video meetings to facilitate group meetings. Perhaps based on AccessGrid technology or similar.

ACTION FM7- Roy Williams /RN/NW/PQ - look into setting up video conferencing, perhaps based on a video-node at ESO.

17 Date of Next Meeting.

Next telecon 9am EST (14.00 uk) on 29 sept

Meeting Closed 23 July 2003 at 17.00

18. List of FM7 Actions:

ACTION FM7-4.0 ALL: comments on the participation paper to PQ with aim to agree document at the next IVOA meeting.

ACTION FM7-4.1A PQ/ES/DS: develop a paper that defines what interfacing to a VO means from the point of view of a large project. Cases studies to include OWL, LOFAR etc.

ACTION FM7-4.1B ALL: think of nationally important projects for case studies and feed input to PQ/ES/DS

ACTION FM7-5.0 DS/PQ: to bring to next meeting a draft paper on data provenance and data quality to enable closure on this issue. A Draft would be issued by mid Sept 2003.

ACTION FM7-6 FG: to present draft VO WG terms of reference (charter) at next IVOA meeting

ACTION FM7-6.1 ALL: provide FG with suggestions as to who should be representatives on the IAU VO WG. Deadline 8 August 2003.

ACTION FM7-7.1A BH: submit a report on lessons learned in populating a registry.

ACTION FM7-7.1B TL: submit a report on experiences gained by AstroGrid in their implementation of a registry based on the RM v6 document.

ACTION FM7-8A GTR: Set up the Grid and Web Services IVOA Working Group.

ACTION FM7-8B MD: redirect postings from <web@ivoa.net> to <grid@ivoa.net> and redirect the Web Service page http://www.ivoa.net/twiki/bin/view/IVOA/IvoaWebServices to a new grid page.

ACTION FM7-9 NW: Submit proposal for an Astronomy Research Group to the GGF.

ACTION FM7-10 BH: issue a Request For Comment (RFC) on the v0.1 stds process document. Aim to agree this as the process at the end Sept 2003 telecon.

ACTION FM7-11A FG: investigate and report back on the legal status of IAU endorsed standards.

ACTION FM7-11B TL: make IBM public license template available for use by VO projects if wanted

ACTION FM7-13A ALL: email NW suggested additional SOC member names.

ACTION FM7-13B NW: investigate possible options for a meeting around the 20-25 June 2004 in SPIE Telescopes meeting in Glasgow.

ACTION FM7-13.1A BH: contact Ajit Khembavi to postpone a possible meeting late 03/early 04 in Pune until a later date.

ACTION FM7-13.1B FG, BH, NW: Act as the Interop Steering Group to organise next IVOA Interoperability meeting.

ACTION FM7-13.2 BH: organise IVOA Exec meeting at the end of this AAS meeting - thus 8 Jan (pm) plus 9 Jan 2004.

ACTION FM7-15 BH/NW/FG/TL: Contact Solar/STP groups. BH will try to organise a telecon at some point (Oct 2003) to explore common ground.

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