



**Project Meeting
ESO Garching
10 September 2002
9:30 - 16:15**

DRAFT Minutes

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AGENDA

- 1. Adoption of minutes from 2 April 02 meeting and review of actions
- 2. WA 0 [Programme] Report PQ
 - a. Year One Project Milestones
 - b. AVO Work Effort Matrix
 - c. Opticon
 - d. AVO Web
 - e. Press Articles
 - f. IVOA
- 3. WA 1 [Science] Report PB
 - a. Science Requirements Progress
 - b. Target Archives
 - c. Jan 2003 and the SWG
- 4. WA 2 [Interoperability] Report FG
 - a. Interoperability developments

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a.Technology Update and AstroGRID	
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11.FP6 Proposal	PQ
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a.AVO Web developments	MD
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ATTENDANCE

Present: Mark Allen (MA), Piero Benvenuti (PB), Luis da Costa (LC), Markus Dolensky (MD), Daniel Egret (DE), Françoise Genova (FG), Kris Gorski (KG), Jonas Haase (JH), Martin Hill (MH), Marco Leoni (ML), Tony Linde (TL), Yannick Mellier (YM), Alberto Micol (AM), Francesco Pierfederici (FG), Benoit Pirene (BP), Peter Quinn (PQ), Anita Richards (AMSR), Guy Rixon (GTR), Nic Walton (NAW), F

AGENDA ITEMS

Note: Papers presented at the meeting are available on line on the AVO web server at the meeting pages: <http://www.euro-vo.org/twiki/bin/view/Avo/AvoExec10092002>

Item 1 Previous Minutes and Actions

The minutes of the second project meeting held in Paris on 2 April 2002 were adopted. Outstanding actions from 15/11/01 and 02/04/02 were discussed and the follow status noted :

ACTION number	Description	Owner	Due by	Status
01-02/04/02	VOTable release: v1.0 was released 15/04/02	PQ	15/02/2002	CLOSED
02-02/04/02	AVO Web site: upgrades occurring	PQ	10/09/2002	CLOSED
03-02/04/02	WA1 definition of science requirements for Jan 03 Demo	NW	30/06/2002	CLOSED
04-02/04/02	WP definition for Jan 03 AVO Demo: discussed in sect 7.	PQ	10/09/2002	CLOSED
05-02/04/02	Announcement of VO2002 conference to the IVOA	PQ	01/03/2002	CLOSED
06-02/04/02	Update of AVO Work Effort Matrix	PQ	10/09/2002	CLOSED
07-02/04/02	OGSA report – see sec WA3	AL	20/09/2002	ONGOING
08-02/04/02	WA2 data needs fr Jan demonstration	FG	10/09/2002	CLOSED
09-02/04/02	AVO Phase-B IoE for FP6	PQ	01/05/2002	CLOSED
01-15/11/01	GRIDSTART docs on AVO web: now happening	PQ	Jan 02	CLOSED
06-15/11/01	Work effort matrix input to PQ	PB, FG, AL, PD, YM	Jan 02	CLOSED
11-15/11/01	AVO PR	PQ	Dec 01	ONGOING
12-15/11/01	AVO Web update	PQ	Feb 02	CLOSED

Item 2 Work Area 0 (Program Management) Report

Item 2a Year One Project Milestones

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- PQ gave an update on some key milestones leading up to the Nov 15 2002 submission of the year one AVO report to the EC.
 - referring back to the original EU proposal
- By the 1 Nov PQ needs inputs for final report from the WA managers. PQ will make the draft available before submission for comment.

[ACTION 01-10/09/02: due 1 Nov 2002: PB] WA1 report on the SRM and definition of the science drivers for the Demonstration programme

[ACTION 02-10/09/02: due 1 Nov 2002: FG] WA2 report including progress on the working prototype of inter-operable European archives

[ACTION 03-10/09/02: due 1 Nov 2002: AL] WA3 report including progress on benchmarks in network, storage and data-mining tasks

- PQ noted that he would cover Financial and Personnel issues.

Item 2b AVO Work Effort Matrix

- PQ distributed an updated Work Effort matrix valid Sep 2002.
- TL gave revised figures for AstroGrid effort which were noted.
- PQ noted that areas of concern include the current lack of a WA1 AVO scientist hire and identification of the ECF redeploy in WA1.

Item 2c Opticon

- The Paris 23/24 Oct 2002 Opticon will discuss FP6 proposals.
- PQ and Gerry Gilmore have agreed that AVO will not need Opticon endorsement for its FP6 proposal.

Item 2d AVO Web

- PQ: The AVO Web - has been worked upon - see AOB section 13.
- YM noted that publications published under the auspices of the AVO should be centrally collated by the project and copies held in the AVO web area.

[ACTION 04-10/09/02: ALL] send any AVO papers to PQ for inclusion on the AVO web.

Item 2e Press Articles

- PQ noted that Nature are planning a major article on VO's. PQ has given some names to him and so expect contact from Geoffrey Brumfiel at Nature.

Item 2f IVOA

- The IVOA meeting was held in June 2002 - see further in section 9

Item 3 WA1 [Science] Report

Item 3a Science Requirements Progress

- PB reported on the development of the science requirements for the Jan 2003 demo product and the draft implementation plan.**

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- The Science definition of the demo product was led by a SWG sub group chaired by NW. The demo product will focus on providing accessible tools to work on multi-wavelength data for the GOODS fields (CDF-S, HDF-N) and the LMC.
- PB noted a number of issues: visualisation, preview, colour-colour, SED**
- PB noted that the outline implementation plan was to use Aladin as a basis of the demo tool thus - an AVO precursor:**
 - create 2 AVO data cubes - limited in FOV, but multi-lambda and homogeneous (GOODS, LMC).**
 - demo will be an evolving prototype**
 - in PB's view - when you make a cutout all the data in the stack will be loaded
 - a sliding cursor gives interactive SEDs of objects under the cursor.**
 - further tools for fitting, re-extraction, training sets**
 - all data will be distributed**
 - overview of the currently available GOODS data is located on the AVO web site.

Item 3b Target Archives

- PQ: Target archives currently include: ISO, Merlin, ING WFS, ESO/EIS, XMM, ESO, ST-ECF
- FG noted that Aladin has recently been updated with some major new features - contours + colour composition. Also, CDS is collaborating with the Indian VO in the development of an application of VOTable

Item 3c Jan 2003 Demo and the SWG

- In discussion it was noted that the AVO should aim for a good presence of the AVO SWG at the Jan 20/21 2003 demo in Jodrell.

[**ACTION 05-10/09/02: PB**] issue call to SWG re Jan 20/21 demo

Item 4 WA2 Report

Item 4a

FG gave an update on interoperability developments.

VOTable is now gaining wide acceptance both in the USA and Europe. A number of services are now available to handle and process VOTable output.

CDS is collaborating with the Indian VO in the development of VOTable tools.

Item 4b Active Topics

- FG reported that current hot topics include:
 - web services - AstroGrid DB task force
 - glu in the ws context
 - UCD's - one, a few, many?
 - data model (idha/cfa) - space-time, coords, cone search
 - resource and service metadata - Bob Hannisch for the NVO has a prelim doc - AVO will need to review this

Item 4c

- FG noted that Aladin is now linked to a number of target archives, including: ISO, Merlin, INT WFS, ESO/EIS, XMM, ESO, STECF
- Aladin has a number of new features: contours + colour composition

Item 4d

- PQ noted that the IVOA meeting 10 Jan 2003 would focus on a preliminary list of standards. It was vital that the AVO project identify areas requiring standards as soon as possible.

Item 4e

- FG noted that there would be a WA2 meeting at the CDS 30 Sept + 1 Oct 2002. The focus would be on the development of UCD's and interoperability standards.

Item 5 WA3 Report

Item5a Technology Update and AstROGRID

- NW reported on developments in Grid technology.
 - WA3 is now fully staffed although there are some issues on fully integrating TeraPix effort into the programme.
 - there was a need to clarify how NGAST technology might be used in the AVO context
 - AstroGrid is developing an ontology based work-flow system
- It was **AGREED** that an IVOA workshop on ontologies in Astronomy should be arranged.
- FG noted that AstroGrid and partners (MyGrid) should include CDS (Sebastain Derriere - CDS UCD expert) in ontology discussions.

[**ACTION 06-10/09/02: PQ/AL**] progress future IVOA ontology workshop.

[**ACTION 07-10/09/02: AL**] NGAST and technology choices clarification

[**ACTION 08-10/09/02: AL/FG**] establish CDS contact for Ontology work

Item 5b Technology Meetings

- NW noted that there would be an upcoming meeting at the NeSC, Edinburgh, 24+25/10/2002 organised by Bob Mann (AstroGrid) and Roy Williams (NVO). The meeting would focus on scientific data mining, integration and visualisation - details and sign-up at <http://www.anc.ed.ac.uk/sdmiv/>

Item 6 Jan 2003 AVO Demo Overview

- PQ outlined the context in which the demo is being developed. PQ showed the matrix like structure of the project, with key deliverables for the WA's in the following 3 years.

WA	1	2	3
2002	SRM doc	interon proto	bench - grid.store.db

- Demo WP4 - Re-extraction from pixel data [ppt]
 - MH presented WA3's current analysis of the re-extraction component of the demo.
 - grid like application that will form a component of the AVO Demo.
 - web service wrapper around SExtractor application
 - can run co-located or remotely
 - fully flexible so that all SExtractor functionality can be accessed
 - long-lived
 - Astronomical Cube Extractor (ACE) implementation plan - nov/dec for system integrate and testing
 - PQ noted that there may be an image transport issue for standards discussion at the Jan 2003 IVOA meeting.

- Demo WP5 - SED plot

Item 7b WA1 Demo Activities

- checking against the draft implementation plan from the SWG/PB.
- PQ/MD/NW/PB - noted the need to consider what would be included in the Aug 2003 demo - especially the ability to bring in spectral and model data.

Item 7c Demo meeting

- FG would host a Fri 15 November 2002 meeting at the CDS - AVO in-house science expertise would also be invited to attend.
- The aim would be to run an alpha version of the baseline demo. A beta version of the demo would be run at AVO Exec meeting mid Dec 2002.

Item 7d Jan Demo at Jodrell

- AR ran through some practicalities of hosting the demo at Jodrell Bank.
- It was noted that mobile phones are not allowed to be switched on at Jodrell Bank - although AR would investigate an exception for use in a possible press conference

[**ACTION 11-10/09/02: AR**] check possible (limited) use of mobile phones in Jodrell.

- There would be a limit of 50 people at the meeting. It was **AGREED** that this would be a good upper limit so as to ensure the workshop nature of the meeting.

[**ACTION 12-10/09/02: PB**] the 20/21 Jan 2003 Demo is arranged under the auspices of the WA1 SWG. PB to issue invites to the SWG, GOODS science team, media representatives, AVO Exec.

Item 7e Purpose of the demo

- PQ noted that the demo would be aimed at the SWG as the primary audience. It would show that the AVO is producing scientifically useful capabilities. It forms the start of an aggressive programme of demonstration capability releases.
- It was noted that the AVO demo would provide a new capability which would enable science, with an initial focus on supporting exploitation of public access GOODS

(and LMC) data sets. The demo would showcase technical progress in the deployment of these scientifically useful capabilities.

- NW asked as to the longevity of the demo product
- It was **AGREED** that the demo capability would be available to users on a zero support basis after the Jan 20/21 2003 demo. The full scope of this continuing availability of the demo would be decided at the mid Dec 2002 AVO meeting.

[**ACTION 13-10/09/02: PQ**] Add an Exec meeting #4 agenda item. continuing availability of the demo post 20/21 Jan 2003.

Item 8 IVOA Activities

- PQ noted that the IVOA emerged from informal discussions earlier in 2002. The concept of the VO roadmap and demos programme emerged from these discussions with AVO, AstroGrid, NVO colleagues.
- The IVOA was officially formed at the June 13, 2002 kick off meeting. Members from AstroGrid, AVO and NVO were joined by projects from Australia (eAA), Canada (CVO), India (India-VO), Germany (GAVO) and Russia (RVO).
- These projects are funded at the following levels:
 - Canadian C\$4M -> 4yr
 - Australian A\$0.5M -> 1yr
 - Russians have internal funds
 - GAVO euro 5M - funding to be agreed
 - Indian VO has some funding
- The Japanese VO team have been in contact - Kazuhiro Sekiguchi is their contact.
- PQ noted that the 10 Jan 2003 Seattle IVOA meeting would consider future interoperability standards that will be required by the VO community.

[**ACTION 14-10/09/02: ALL**] send PQ for collation suggestions as to future IVOA standards - e.g. Astronomical Query Language, cut out service etc.

- FG noted that there would be a IVOA sponsored Mar/Apr 2003 meeting in Pune, India.

Item 9 June 2002 VO Conference

- KG gave a brief meeting report. The conference was considered a success. 30 Sept 2002 is the deadline for proceedings submissions.
- The conference had a good spread of science and technical input with excellent keynote speeches.
- PQ noted that highlights of the June meeting were the formation of the IVOA plus positive comments from senior scientists such as Ostriker and Peebles. Also, representatives from the funding agencies were able to see good progress in the area of VO initiatives.
- The conference was well structured and focused and gave a clear idea of what VO's are about. (c.f. less focused Aspen 2000 meeting).

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- FG commented on the IAU Sydney General Assembly. There would be a Joint Discussion covering VO's and Large Telescopes. This would have a scientific focus to meeting (IAU dictated). Associated IAU Commission V meetings could be used to discuss specific topics. The JD would be 2-3 days in mid July 2003

Item 10 SPIE Hawai'i Aug 02 Meeting Report

- PQ reported that Alex Szalay organised the VO conference. The focus was on bringing VO techniques to a different audience than the June meeting - including instrument builders.
- PQ noted a cultural shift in the US - they now think that archives are important and vital to new missions. there is a need for a data heritage.
- NOAO - now have an archive - includes raw data only just now
- VOTable now accepted as a standard.
- NVO want to move on with setting stds - need to deal with this (cut out interface looming as an issue).
- There will be no explicit VO session at the Glasgow 2004 meeting - but VO will be integrated into a large/new facilities theme.

Item 11 FP6 Proposal

- PQ noted that the IVOE expression of interest for FP6 was submitted to the EU - paper attached.
 - This was not submitted to the Integrated Infrastructure Initiative programme but rather the Integrated Projects programme.
 - The proposal was modelled on the CERN proposal.
- The eventual proposal will be submitted at the end 2003 call and be called 'euro-vo'. A fuller set of partners will be included to include theory data centres. Operational aspects/funds will be asked for as euro-vo will generate a production class capability for Europe.
- PQ believes that this programme has a reasonable chance of being funded.
- KG - is this the only funding route for the next level of AVO.
- PQ - individual organisations could provide continuing funds.
- NW - funds could come from the funding agencies as VO's are becoming seen as more important in supporting the exploitation of major new astronomical facilities.
- The FP6 1st call is the end of 2002 - but the EURO-VO proposal will be submitted end 2003.
- PB - AstroVirtel ends formally spring of 2003 - but extension of programme to end 2003 to support Cycle 3 programme.
 - Maybe that another submission goes in to the EU. PB would like to submit as otherwise there will be a yr delay in AstroVirtel funding.
- PQ - should put in a coupled submission - AstroVirtel to i3 (Opticon is an example - the old thematic networks - now integrated infrastructure initiatives.)
- PQ - AstroVirtel would sit in front of the Euro-VO but - FG has some doubts.
- NW - AstroVirtel FP6 could concentrate on developing algorithms to complement the digital sky and telescope that AVO/euro-vo is building

- YM - need to remember that the AVO demo's are very similar to what AstroVirtel provides
- PB - focus of next AstroVirtel proposal will be different to last one.

[**ACTION 15-10/09/02: PQ/PB**] Status of AstroVirtel for Dec 2002 Exec meeting
Agenda item

Item 12 AOB

Item 12a AVO Web Development

- KG on status of new AVO Wiki areas
- new web site has three layers:
 - a general vo science area
 - a professional astronomer layer
 - a Wiki development layer
- Lars Christiansen is the graphics adviser for the PR pages MD/KG are responsible for content for the upper two layers
- NW - when will access be available.
 - PQ - will be available by Nov 15 or before - depends on the domain name
- Wiki will all be open to the public located at <http://www.euro-vo.org>. The IVOA area at <http://www.ivoa.net> will also be hosted on ESO machines.
- FG - need mailing lists which are relevant for specific topics eg for UCDs just now.

[**ACTION 16-10/09/02: MD**] mailing lists located on the AVO Wiki.

[**ACTION 17-10/09/02: MD**] Need an announcements area for all meetings.

Item 12b Access Grid

- NW Access-grid needs to be looked into as a possible enabling technology for distributed meetings.

Item 12c Upcoming meetings

- Nov 15 2002 - technical team meeting for baseline demo run - CDS

Item 13 Next Meeting

- Provisonal agreement on 16 Dec 2002 at the IoA, Cambridge.

ACTION SUMMARY

ACTION number	Description	Owner	Due by
01-10/09/02	WA1 report on the SRM and definition of the science drivers for the	PB	1 Nov 2002

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	Demonstration program		
02-10/09/02	WA2 report including progress on the working prototype of inter-operable European archives	FG	01/11/02
03-10/09/02	WA3 report including progress on benchmarks in network, storage and data-mining tasks	AL	01/11/02
04-10/09/02	send any AVO papers to PQ for inclusion on the AVO web	ALL	16/12/02
05-10/09/02	issue call to SWG re Jan 20/21 demo	PB	16/12/02
06-10/09/02	progress future IVOA ontology workshop	PQ/AL	16/12/02
07-10/09/02	NGAST and technology choices clarification	AL	16/12/02
08-10/09/02	establish CDS contact for Ontology work	AL/FG	16/12/02
09-10/09/02	update baseline description of the demo to explicitly state that the demo will include the generation of SED plots	MD	16/12/02
10-10/09/02	define which capabilities in the Jan 2003 demo will be locally accessible c.f. externally accessible	MD	16/12/02
11-10/09/02	check possible (limited) use of mobile phones in Jodrell	AR	16/12/02
12-10/09/02	the 20/21 Demo is arranged under the auspices of the WA1 SWG. PB to issue invites to the SWG, GOODS science team, media representatives, AVO Exec	PB	16/12/02
13-10/09/02	Exec meeting #4 agenda item - continuing availability of the demo post 20/21 Jan 2003	PQ	16/12/02
14-10/09/02	send PQ for collation suggestions as to future IVOA standards - e.g. Astronomical Query	ALL	16/12/02

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	Language, cut out service etc		
15-10/09/02	Status of AstroVirtel for Dec 2002 Exec meeting Agenda item	PB/PQ	16/12/02
16-10/09/02	mailing lists located on the AVO Wiki.	MD	16/12/02
07-02/04/02	OGSA report	GTR	Sept 2002
11-15/11/01	AVO PR	PQ	Dec 01

