IVOA Interop: 16-20 May, 2011
Napoli, Italia

State of the TCG

Christophe Arviset
For the TCG

Technical Coordination Group

TCG	Chair	Vice-Chair
TCG	Christophe Arviset	Séverin Gaudet
IVOA Chair	Paolo Padovani	Ajit Kembhavi
Working Groups	**Chair**	**Vice-Chair**
Applications	Tom McGlynn	Mark Taylor
Data Access Layer	Patrick Dowler	Mike Fitzpatrick
Data Model	Mireille Louys	Jesus Salgado
Grid&Web Sevices	Matthew Graham	Paul Harrison
Registry	Gretchen Greene	Pierre Lesidaner
Semantics	Sebastien Derriere	Norman Gray
VOEvent	Rob Seaman	Roy Williams
VOTable (dormant)	François Ochsenbein	n/a
VO Query Language	Merged with DAL since May 2010	
Interest Groups	**Chair**	**Vice-Chair**
Data Curation & Preservation	Alberto Accomazzi	n/a
Knowledge Discovery in Databases	Giuseppe Longo	n/a
Theory	Herve Wozniak	Claudio Gheller
IVOA Committees	**Chair**	**Vice-Chair**
Standard and Processes	Francoise Genova	n/a
Science Priorities	Dave De Young	n/a

http://www.ivoa.net/cgi-bin/twiki/bin/view/IVOA/IvoaTCG

- Technical Coordination amongst WGs/IGs

- Liaison with IVOA Exec

- Specific role in Recommendation Process

- New WG/IG chairs since December

TCG F2F meeting #03 – 15 May

- **Review and update IVOA Architecture**
  - Common understanding of inter dependencies between standards
  - Levels 0 and 1 remains unchanged
  - Level 2 gets new standards in
  - Some updates for various upcoming Standards

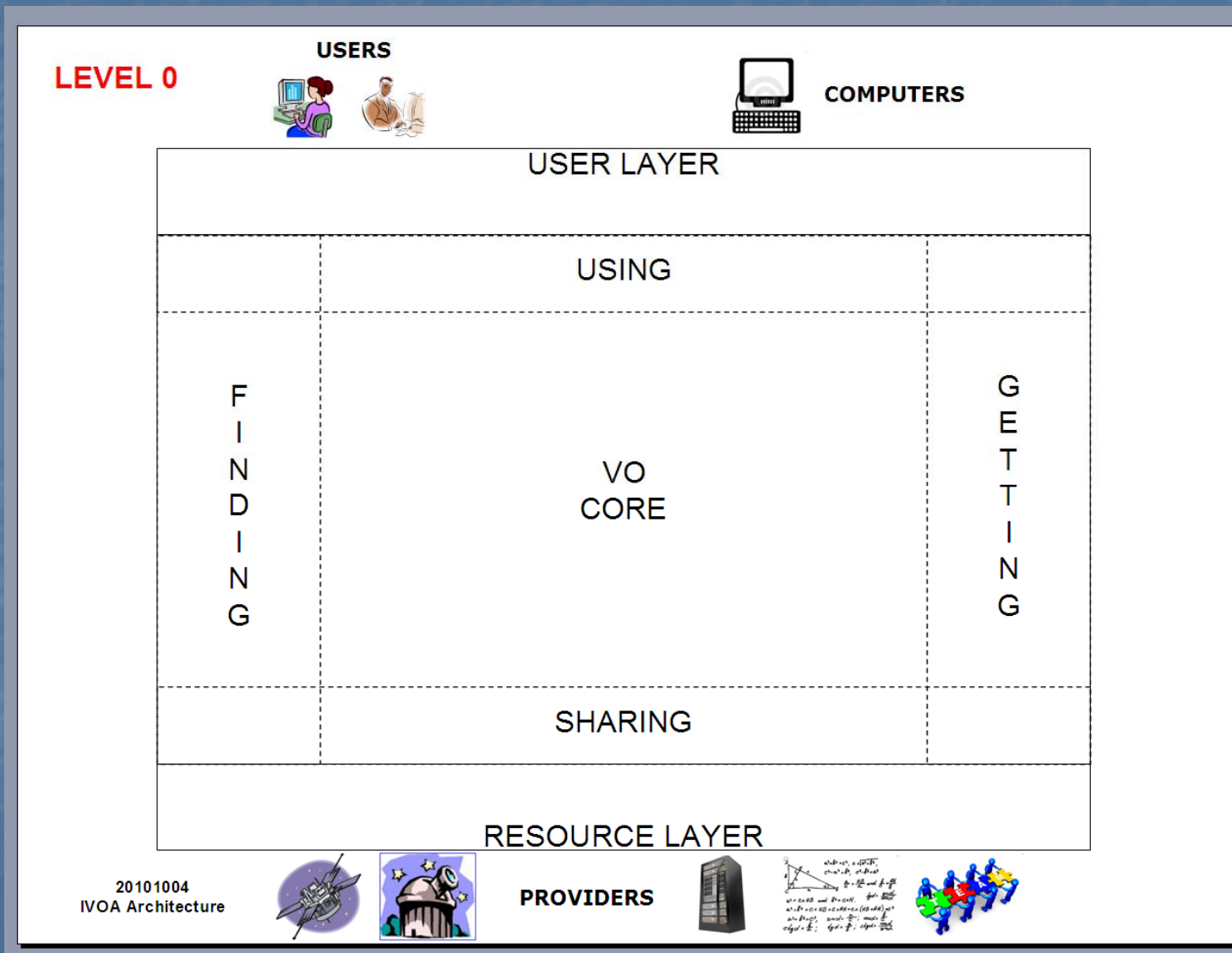- **Discussion and clarification on the IVOA Recommendation Process**

IVOA Architecture Note

- Released on 23/Nov/2010
  - http://www.ivoa.net/Documents/Notes/IVOAArchitecture/20101123/index.html

- General description of IVOA Architecture
  - Level 0, 1, and 2 from general to VO specific
  - Present all IVOA standards in one slide (Level 2)

- For each existing and upcoming IVOA Std
  - Place in IVOA Architecture, link with other stds
  - General (not too technical) description
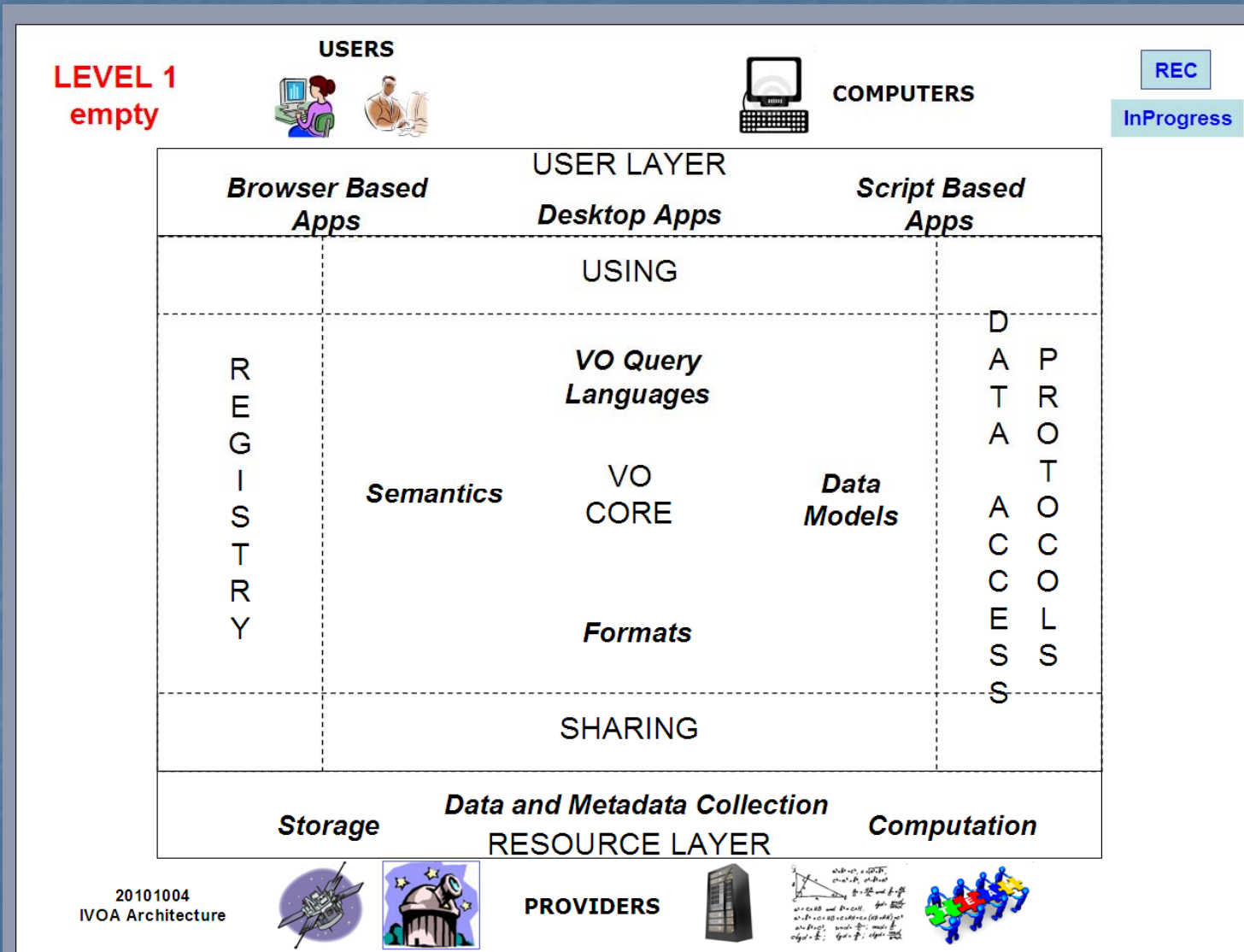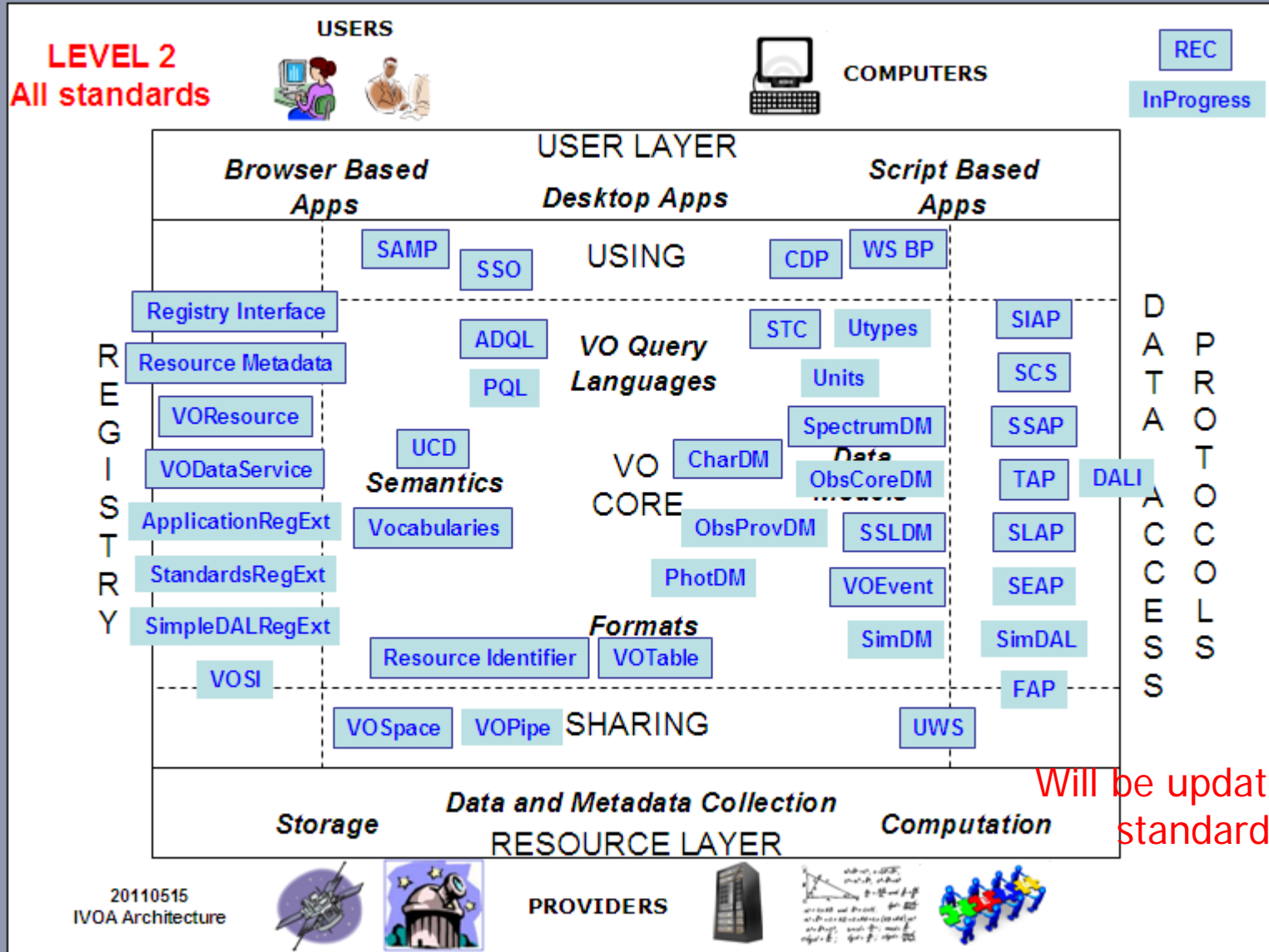
IVOA Architecture Level 0

LEVEL 0

USERS

COMPUTERS

USER LAYER

USING

FINDING

VO CORE

GETTING

SHARING

RESOURCE LAYER

20101004
IVOA Architecture

PROVIDERS

IVOA Architecture Level 1

IVOA Architecture Level 3

20110515
IVOA Architecture

Will be updated when new standards appear

ObsCoreDM

USERS

COMPUTERS

REC

InProgress

USER LAYER

Browser Based Apps

Desktop Apps

Script Based Apps

USING

ADQL

VO Query Languages

STC   Utypes

Units

R E G I S T R Y

VOResource

VODataService

Semantics

VO CORE

CharDM

SpectrumDM

ObsCoreDM

Models

ObsProvDM

D A T A   A C C E S S

P R O T O C O L S

TAP

StandardsRegExt

Formats

Resource Identifier   VOTable

SHARING

Data and Metadata Collection

Storage

Computation

RESOURCE LAYER
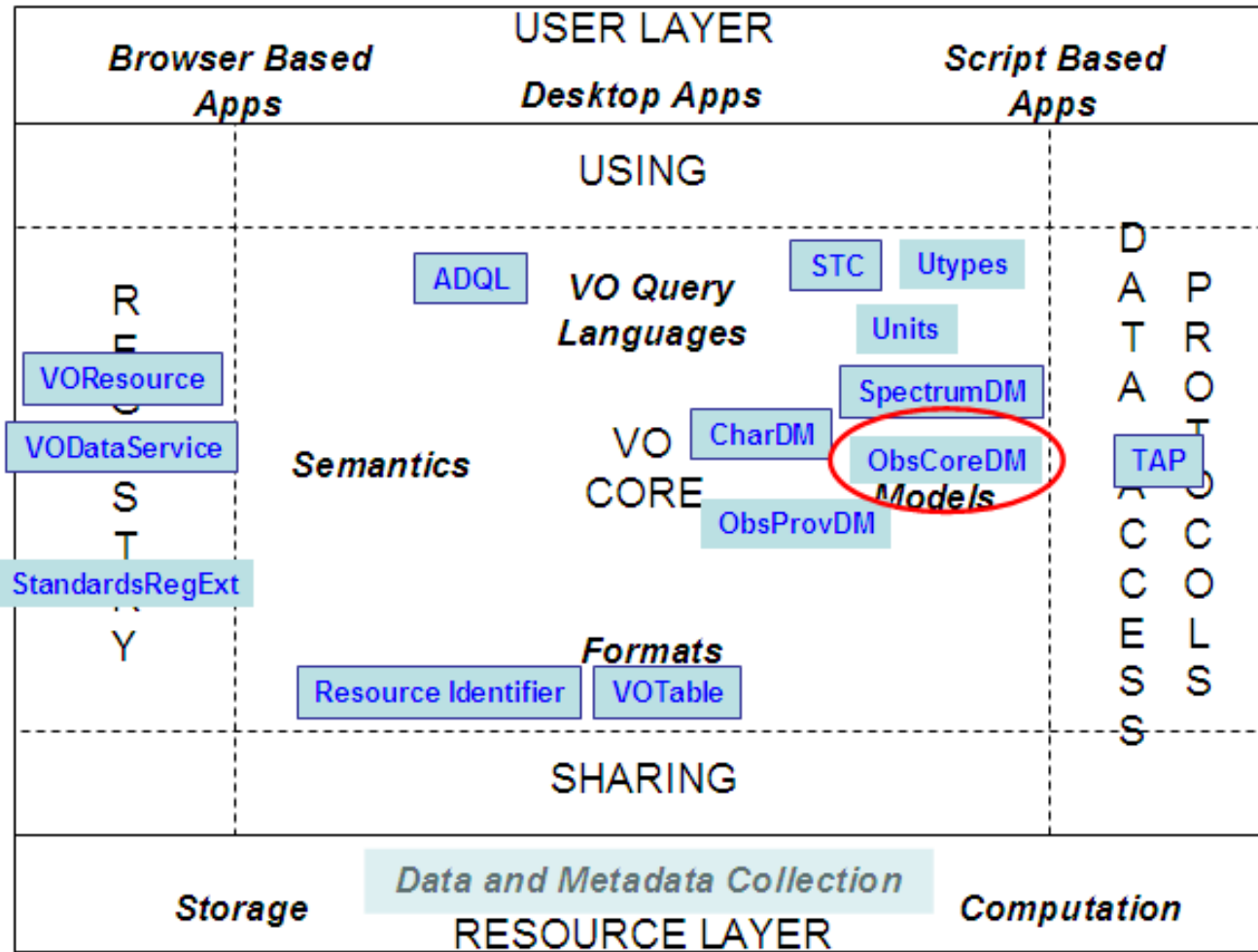
20110515
IVOA Architecture
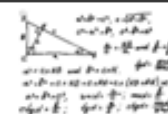
PROVIDERS

VOEvent

USERS

COMPUTERS

REC
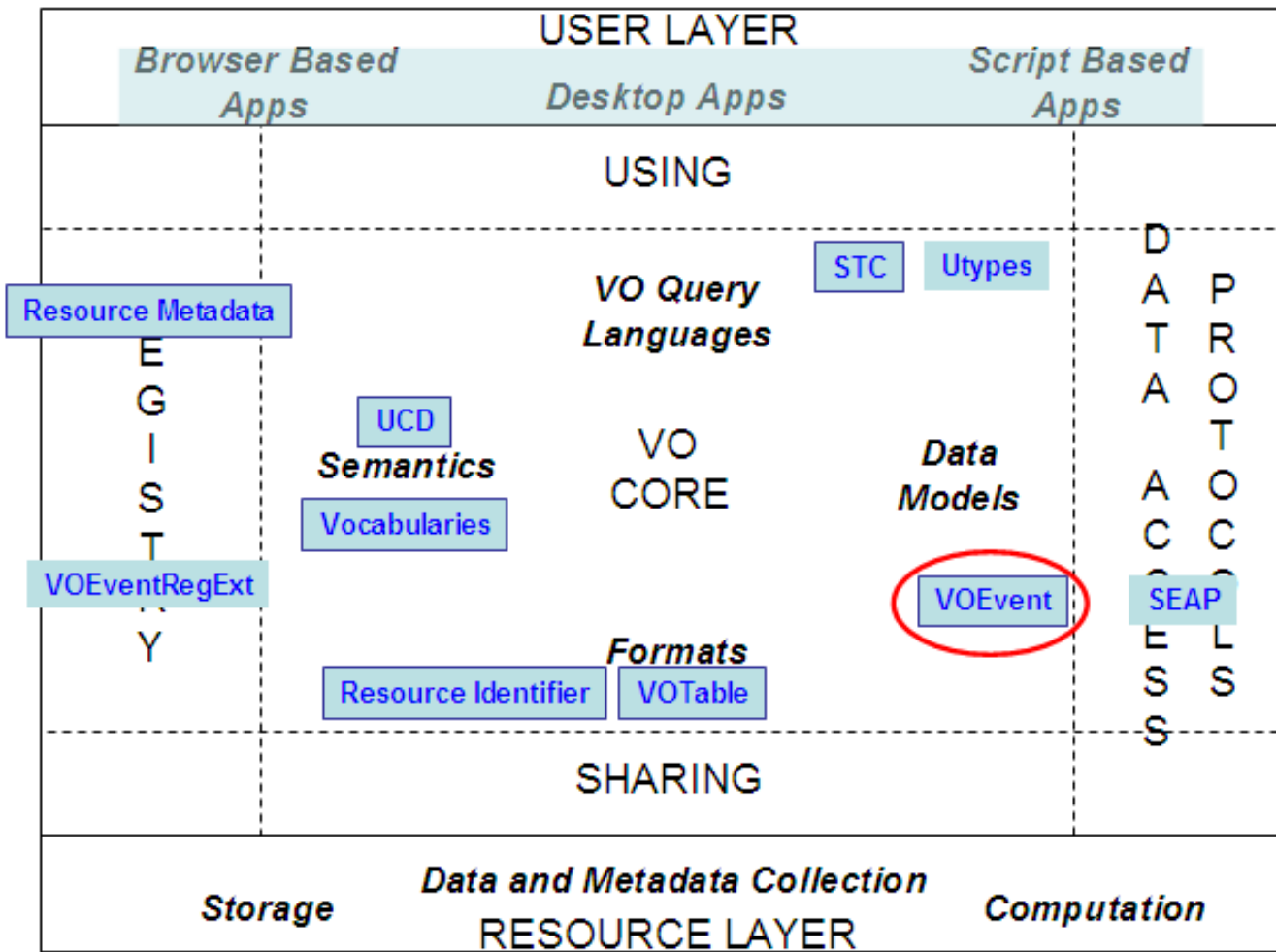
InProgress

USER LAYER

Browser Based Apps   Desktop Apps   Script Based Apps

USING

VO Query Languages

STC   Utypes

Resource Metadata

REGISTRY

UCD

Semantics

VO CORE

Data Models

DATA PROTOCOLS

DATA ACCESS

Vocabularies

VOEventRegExt

VOEvent

SEAP

Formats

Resource Identifier   VOTable

SHARING

Data and Metadata Collection

Storage   Computation

RESOURCE LAYER

20110515
IVOA Architecture

PROVIDERS
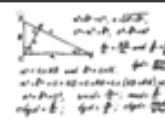
Technical Specifications

Group	Title	Most stable	In progress	Version history
App	Simple Application Messaging Protocol	1.2	|1.3|	|1.3| 1.2 1.2 1.2 1.11 1.11 1.10 1.00
DAL	Simple Cone Search	1.03		1.03 1.02 1.01 1.00
	Simple Image Access	1.0		1.0 1.0 1.0 1.01 1.00
	Simple Line Access	1.0		1.0 1.0 1.0 1.0 1.0
	Simple Spectral Access	1.04	RFC	1.1 1.04 1.03 1.02 1.01 1.01 1.00
	Table Access Protocol	1.0		1.0 1.0 1.0 1.0 1.0 1.00
	TAPRegExt: a VOResource Schema Extension for Describing TAP Services	1.0	1.0	1.0
	IVOA Astronomical Data Query Language	2.00		2.00 2.00 2.00 1.01 1.00
	IVOA SkyNode Interface	1.01		1.01 1.00
DaM	Simulation Data Model	1.0	1.0	1.0 1.0
	Space-Time Coordinate Metadata for the Virtual Observatory (STC)	1.33		1.33 1.31 1.30 1.21 1.20 1.10 1.00
	Data Model for Astronomical DataSet Characterisation	1.13		1.13 1.12 1.12 1.11 1.10 1.00
	Simple Spectral Lines Data Model	1.0		1.0 1.0 1.0 1.0 1.0
	IVOA Spectral Data Model	1.1	RFC	1.1 1.03 1.02 1.01 1.01 1.01 1.00
	Observation Data Model Core Components and its Implementation in the Table Access Protocol	1.0	RFC	1.0 1.0
GWS	IVOA Single-Sign-On Profile: Authentication Mechanisms	1.01		1.01 1.01 1.00 1.00
	VOSpace service specification	1.15	2.0	2.0 2.0 2.0 1.15 2.0 1.15 1.15 1.14 1.13 1.12 1.12 1.11 1.10 1.02 1.02 1.01 1.00 1.00
	IVOA Credential Delegation Protocol	1.0		1.0 1.0 1.01 1.01 1.00
	Universal Worker Service	1.0		1.0 1.0 1.0 1.0 1.0
	IVOA Support Interfaces	1.0	RFC	1.0 1.0 1.0 1.0 1.0
	IVOA Web Service Basic Profile	1.0		1.0 1.0 1.0 1.0 1.0
ReR	Describing Simple Data Access Services	1.0	1.0	1.0
	IVOA Identifiers	1.12		1.12 1.11 1.10 1.10 1.10 1.00
	IVOA Registry Interfaces	1.0		1.0 1.0 1.00 1.02 1.01 1.00
	Resource Metadata for the Virtual Observatory	1.12		1.12 1.12 1.10 1.10 1.01 1.01 1.00 1.00
	StandardsRegExt: a VOResource Schema Extension for Describing IVOA Standards	1.0	RFC	1.0 1.0
	VOResource: an XML Encoding Schema for Resource Metadata	1.03		1.03 1.02 1.02 1.01 1.00
	VODataService: a VOResource Schema Extension for Describing Collections and Services	1.1		1.1 1.1 1.1 1.1 1.1 1.10
Semantics	An IVOA standard for Unified Content Descriptors	1.10		1.10 1.10 1.06 1.05 1.03
	UCD1+ Controlled Vocabulary	1.23		1.23 1.22 1.21 1.20 1.20 1.11 1.11 1.10 1.02 1.00
	Maintenance of the list of UCD words			
	Vocabularies in the Virtual Observatory			
SDP	IVOA Document Standards			
VOE	Sky Event Reporting Metadata (VOEvent)			
VOT	VOTable Format Specification			

Good view reflecting Doc Repository full content

Need another view with ONLY REC versions (dark green)

Standards into REC since last Interop

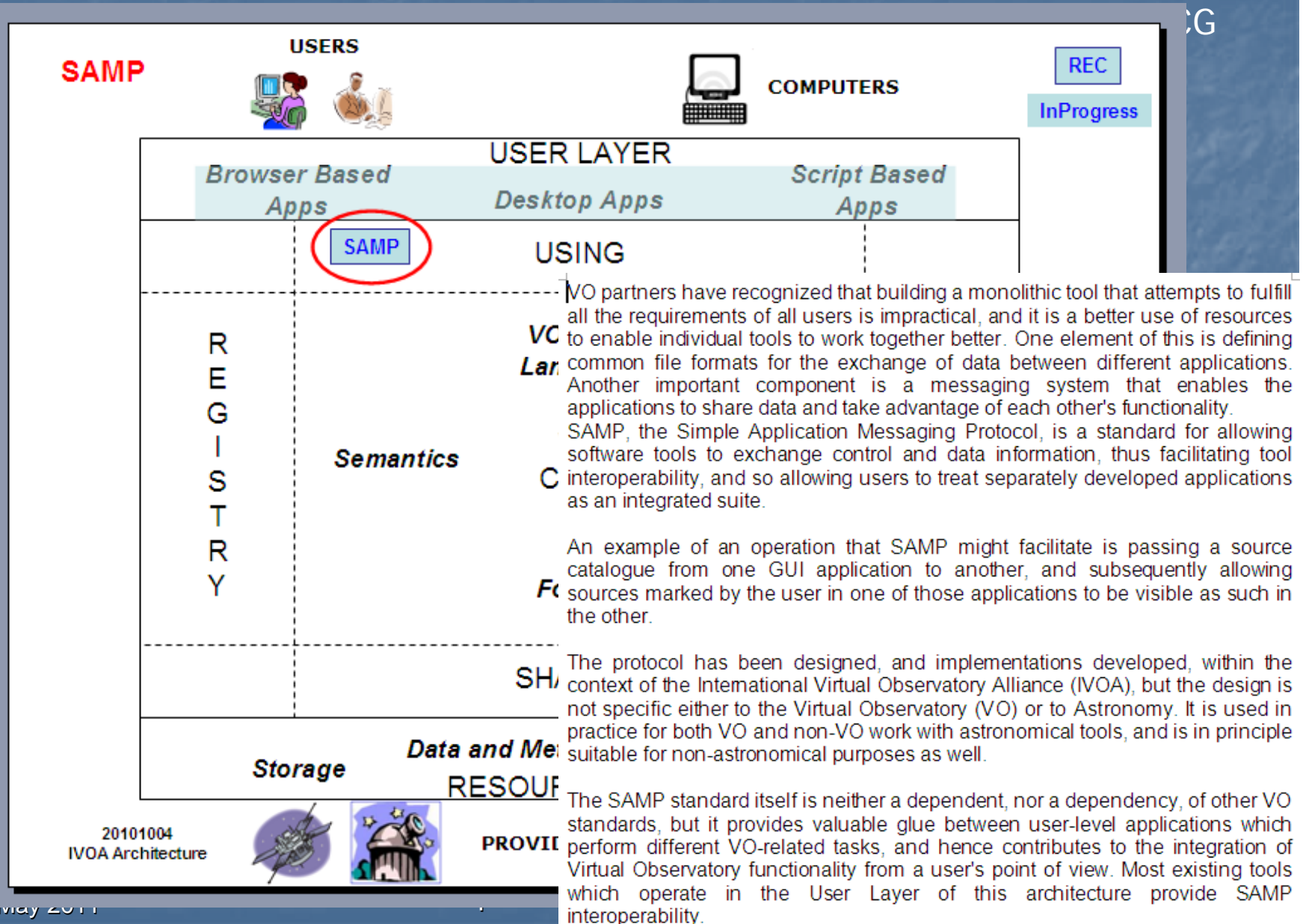- [GWS] Web Service Basic Profile 1.0
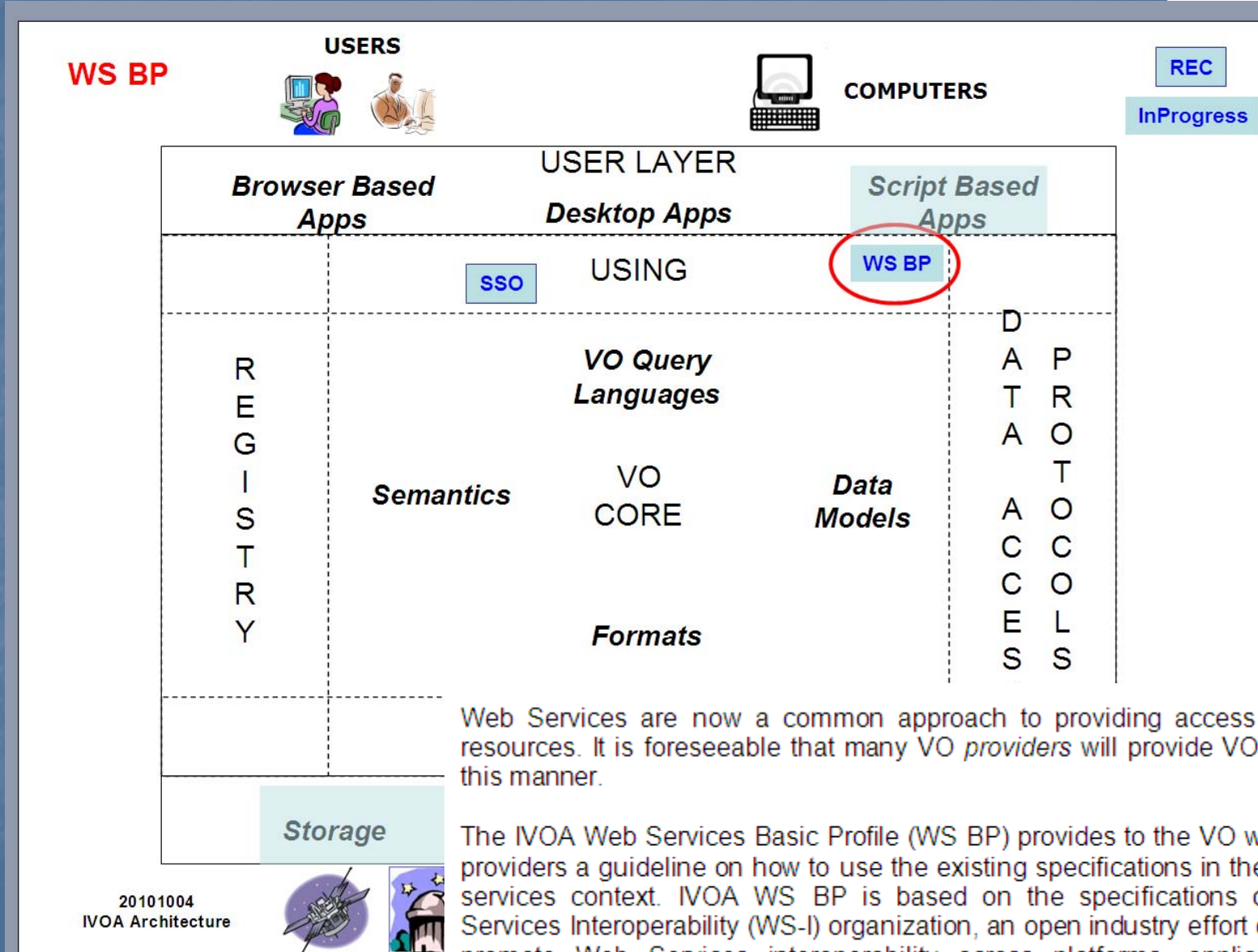 - 16 December 2010

- [Apps] SAMP 1.2
  - 16 December 2010

CG

WS BP

USERS

COMPUTERS

REC

InProgress

USER LAYER

Browser Based Apps

Desktop Apps

Script Based Apps

USING

SSO

WS BP

R E G I S T R Y

Semantics

VO Query Languages

VO CORE

Data Models

D A T A A C C E S S

P R O T O C O L S

Formats

Storage

20101004
IVOA Architecture

Web Services are now a common approach to providing access to Internet resources. It is foreseeable that many VO *providers* will provide VO services in this manner.

The IVOA Web Services Basic Profile (WS BP) provides to the VO web services providers a guideline on how to use the existing specifications in the IVOA web services context. IVOA WS BP is based on the specifications of the Web Services Interoperability (WS-I) organization, an open industry effort chartered to promote Web Services interoperability across platforms, applications, and programming languages.

State

16 May 2011

Existing IVOA REC standards - 1

Standards	WG	Date	Comments
2003			
IVOA Document Standards v1.0	Standards & Process Committee	October. 2003	IVOA Doc Std v1.2 in 2010
2004			
VOTable v1.10 VOTable Format Definition	VOTable	August 2004	VOTable v1.2 in 2009
2005			
UCD v1.10 An IVOA Standard for Unified Content Descriptors	Semantics	August 2005	
2006			
Maintenance of the list of UCD words v1.20	Semantics	May 2006	
VOEvent v1.11 Sky Event Reporting Metadata	VOEvent	November 2006	
2007			
Standards	**WG**	**Date**	**Comments**
IVOA Identifiers v1.12	Registry	March 2007	
Resource Metadata for the Virtual Observatory v1.12	Registry	March 2007	
UCD 1+ v1.23 The UCD1+ controlled vocabulary	Semantics	April 2007	UCD 1+ v1.3 expected in 2009
STC v1.33 Space-Time Coordinate Metadata for the VO	DM	October 2007	
SpectraDM v1.01 Spectral Data Model	DM	October 2007	

More details can be found
on the IVOA Document pages at:
http://www.ivoa.net/Documents/

Existing IVOA REC standards - 2

2008			
Standards	**WG**	**Date**	**Comments**
SSO v1.03 Single-Sign-On Profile: Authentication Mechanisms	GWS	January 2008	
VOSpace v1.02 VOSpace service specification	GWS	January 2008	VOSpace v1.15 in September 2009
VOResource v1.03 VOResource: an XML Encoding Schema for Resource Metadata	Registry	February 2008	
SCS v1.03 Simple Cone Search	DAL	February 2008	
SSAP v1.04 Simple Spectra Access Protocol	DAL	February 2008	
CharDM v1.13 Data Model for Astronomical DataSet Characterization	DM	March 2008	
ADQL v2.0 Astronomical Data Query Language	VOQL	October 2008	

2009			
Standards	**WG**	**Date**	**Comments**
SAMP 1.11 Simple Application Messaging Protocol	Apps	April 2009	
Vocabularies 1.16	Semantics	September 2009	
VOSpace 1.5	GWS	September 2009	Update from VOSpace 1.0
Registry Interface 1.01	Registry	September 2009	
SIAP 1.0 Simple Image Access Protocol	DAL	November 2009	
VOTable v1.2 VOTable Format Definition	VOTABLE	November 2009	Update from VOTable 1.10
CDP 1.0 Credential Delegation Protocol	GWS	November 2009	

More details can be found on the IVOA Document pages at:
http://www.ivoa.net/Documents/

Existing IVOA REC standards - 3

2010			
Standards	**WG**	**Date**	**Comments**
TAP 1.0 Table Access Protocol	DAL	February 2010	
IVOA Document Standards v1.2	Standards & Process Committee	March 2010	Update from IVOA Document Standards v1.0
UWS 1.0 Universal Worker Service	GWS	October 2010	
VODataService 1.1	Registry	October 2010	
SSLDM 1.0 Simple Spectra Line DM	DM	November 2010	
SLAP 1.0 Simple Line Access Protocol	DAL	November 2010	
WS BP 1.0 Web Service Basic Profile	GWS	December 2010	
SAMP 1.2 Simple Application Messaging Protocol	Apps	December 2010	Minor updates from SAMP 1.11

More details can be found
on the IVOA Document pages at:
http://www.ivoa.net/Documents/

Standards to become REC soon

On-going Recommendations (RFC period)

- StandardsRegExt 1.0 RFC, 14/April/2011-14/May/2011
- SSAP 1.1 and SpectrumDM 1.1 RFC, 20/April/2011-17/May/2011
- ObsCoreDM 1.0 RFC, 3/May/2011-3/June/2011
- SimDM 1.0 RFC, 4/May/2011-4/June/2011

On-going Recommendations (TCG Review)

- VOEvent 2.0 RFC, 11/April/2011-06/May/2011, TCG Review 9/May/2011-6/June/2011

On-going Recommendations (Exec Review)

- IVOA Support Interfaces (VOSI) 1.0 RFC, 09/04/2010-14/05/2010, TCG Review 8/Dec/2010-7/Jan/2011, Exec Review from 13/May/2011
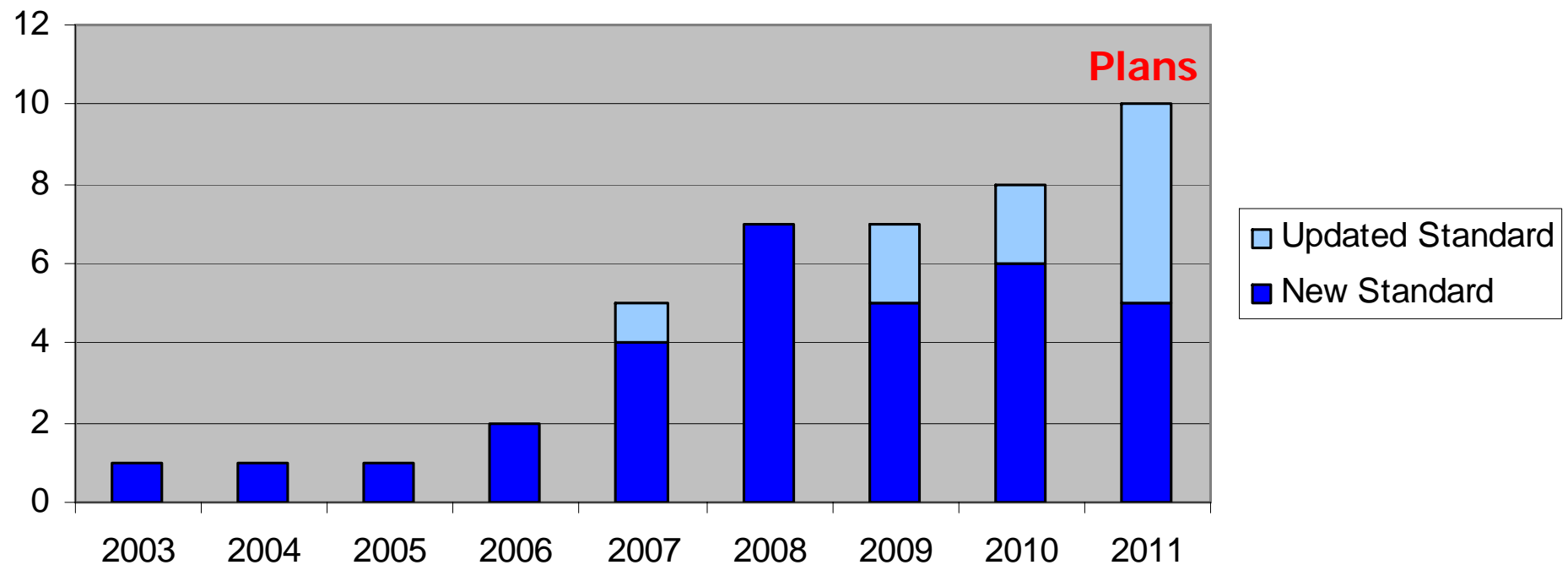
- **More to start RFC soon after Naples**
  - PhotDM 1.0, SAMP 1.3, VOSpace 2.0
  - SSAP/SpectrumDM 1.2, Units?

IVOA Standards per year

IVOA Standards issued per year

Plans

Legend:
- Updated Standard
- New Standard

TCG

Naples Interop Program

- **Closer internal TCG coordination to setup this Interop program**
  - **Hopefully little "incompatibilities" between parallel sessions**

- **2 new sessions "Splinter meetings, hack-a-thon"**
  - **Wed and Thu 16:30-18:00**
  - **Forum for dedicated focused discussions**
  - **Indicate them in the wiki page**
    - http://www.ivoa.net/cgi-bin/twiki/bin/view/IVOA/InterOpMay2011Splinter

Main upcoming TCG activities after Naples Interop

TCG

- REC process of various IVOA standards

- Update IVOA Technical Assessment and Roadmap 2011

- Update IVOA Architecture Note

- More regular teleconf
  - Every 2-3 month, keep the "pace"