



OBJECT MANAGEMENT GROUP

The OMG process

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OBJECT MANAGEMENT GROUP

Introducing OMG

- One of the most successful forums for creating open integration standards in the computer industry
 - CORBA integration platform & many related specifications
 - UML design notation and related specifications
- An industrial consortium with vendor and user members
 - Implementation must be available from OMG member
- Interfaces freely available to all
 - Visit <http://www.omg.org>
- Decisions taken by members



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Worldwide Membership



2AB	Bristol-Myers	Eurocontrol	NATO	SAS Institute
3COM	CA	Fujitsu	NIST	Siemens
ABB	CBOE	GCHQ	Nokia	Sony
Adaptive	Cisco	HP	Oracle	Sun
Agilent	Citigroup	Hitachi	Pentsoft	Sybase
Alcatel	Compuware	IBM	Promia	T-Nova
Aonix	Credit Suisse	IONA	PrismTech	Telefonica
AT&T	Deere & Co.	Lockheed	Project Tech.	Thales
BAE Systems	DHL	Lucent	Rational	Toshiba
BBC R&D	DMSO	Metlife	Raytheon	UBS
BEA Systems	DoCoMo	Motorola	Rockwell	Union Switch
Boeing	DSTC	NASA	SABRE	Unisys
Borland	EDS	NEC	SAP	W3C



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OMG at work: Unified Modelling Language

- The successor to multiplicity of OO A&D notations of early 90s
- Result of OMG process begun in 1994, completed in 1997
- Over 2/3 of organisations now use UML (BZ research, Aug. 04)
 - 80% plan to use UML in future
 - Dozens of tools
 - Over 100 UML-related books
 - Training widely available
 - UML certification
- UML 2.0 now published





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How OMG works

- **OMG adopts and publishes interface specifications**
- **Implementation of the specification must be commercially available from, or in use by, an OMG member**
- **Interfaces freely available to all**
 - **Visit <http://www.omg.org>**
- **Interface selection via open process, now used >200 times**
- **Decisions taken by members**
 - **Strategic direction controlled by Board**
 - **Technical direction determined by Technology Committees**



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Board of Directors

- **Board provides oversight of organisation, makes final decisions on specification publication**
 - **Latter is a formality**
- **Business Committee**
 - **Created by the Board of Directors**
 - **Ensures that specifications to be adopted by OMG will be commercially available**
 - **Issues questionnaire to submitters asking about IP ownership, availability of implementations**



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Technical Oversight

- **Domain and Platform Technology Committees (PTC, DTC)**
 - **Chaired by neutral OMG Staff**
 - **Populated by representatives of “full” OMG members**
 - **... called Domain, Platform and Contributing members**
 - **Makes technology adoption recommendations to BoD**
 - **Delegates most of adoption process to Task Forces (TFs)**
 - **Can also charter Subcommittees (SCs) & Special Interest Groups (SIGs)**
- **Meets four times annually, somewhere**
 - **Typically 300-500 people meeting for a week**



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Technical work

- **Task Forces**
 - Where most of the real technical work gets done
 - Any member, except auditing, can vote in any TF
 - Delegated to run specification adoption in one area
 - Almost always meet co-located with Technology Committee
 - Also do some work by email and document exchange

- **Architecture Board**
 - Fixed size (10 + neutral OMG staff chair)
 - Members elected by TC members for two-year terms
 - Monitors architectural integrity of OMG standards



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Standardisation Process (1)

- **Optional First Step - Request For Information (RFI)**
 - **Used to gather general information on an area of interest**
 - **Drafted by Task Force, then issued by the TC**
 - **Anyone can respond (members and non-members)**
- **Request For Proposals (RFP)**
 - **Requirements document**
 - **Written by Task Force, vetted by AB, issued by TC**
 - **OMG members may then respond with proposed specifications**

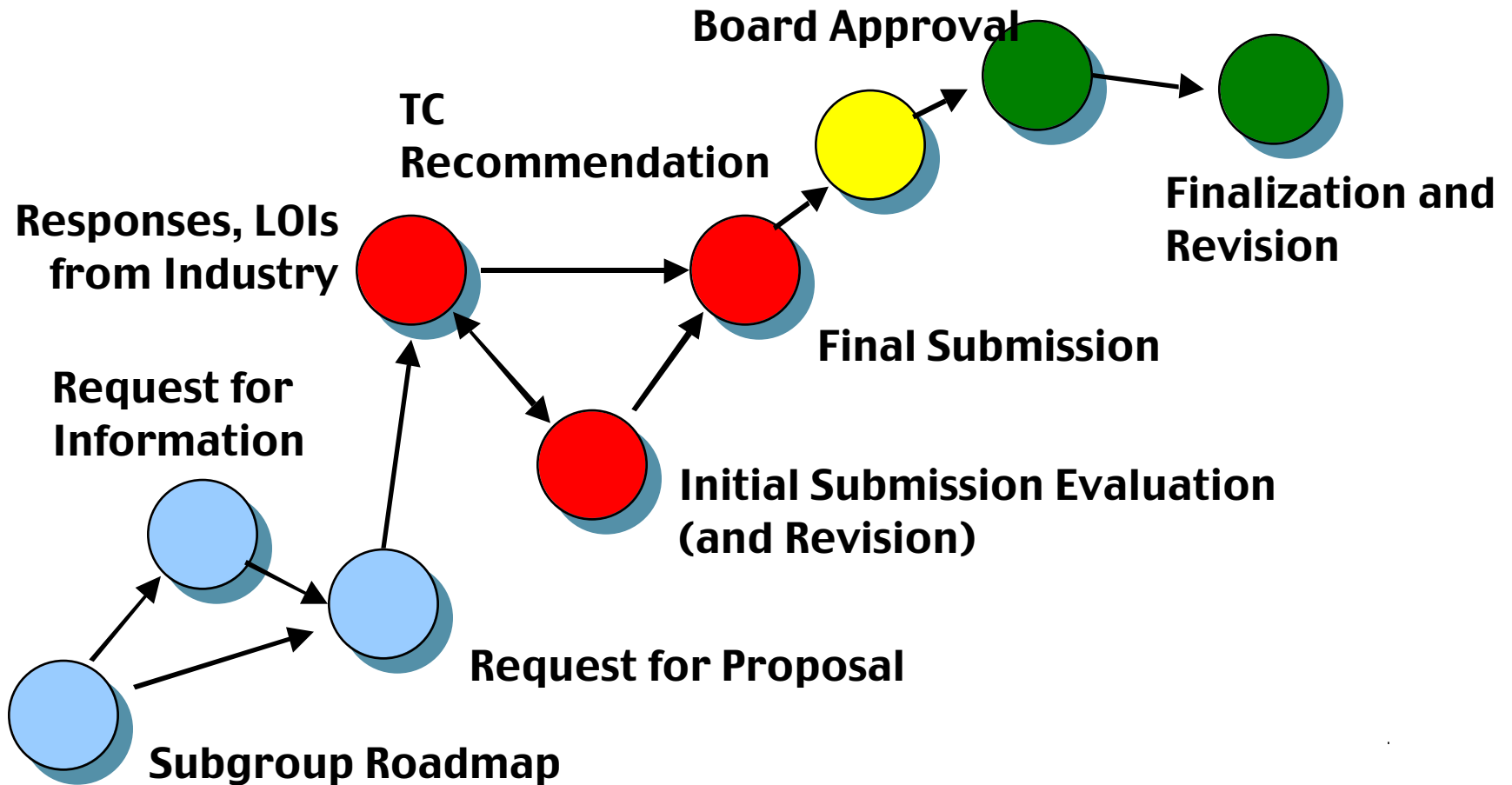


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Standardisation Process (2)

- **RFP Submissions**
 - **Specifications only, not actual software**
 - **... but OMG will want to see evidence of commercial implementation, or actual use at end-user organisation**
 - **Written by submitters outside OMG framework**
 - **Evaluated by Task Force**
 - **After 1-3 rounds of submit-evaluate-revise-resubmit, TF will vote to recommend one submission**
 - **AB evaluates recommended submission for architectural consistency**
 - **TC passes recommendation to BoD**

Submission process summary





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Alternate route to adoption: RFC

- **Allows OMG members to submit complete specifications for “instant” adoption by OMG**
- **Submitters bring completed specification to OMG**
 - **Is vetted by Task Force and Architecture Board to ensure it fits into OMG’s overall architecture**
 - **Must meet other usual criteria on structure, ownership etc.**
 - **Then issued for comment to entire industry - adverse comment can stop the process**
- **Used (for example) to adopt Reusable Asset Specification (RAS) from IBM et al**



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Finalising Specifications

- **Once adopted, specifications are “finalised” by Finalisation Task Force (FTF)**
 - **Fixed slate of named member representatives**
 - **Experts in specification and domain (presumably)**
 - **Fixed timetable to turn submission into publishable specification, cleaning up any bugs found by early users**
 - **Draft (“adopted”) specification available to public and bug (“issue”) reports accepted from anyone**



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After that ...

- **OMG actively maintains its specifications throughout their life**
 - **Revision Task Force typically issues annual minor revision**
- **Publicly-available Specification (PAS) liaison with ISO allows some to be fast-tracked to full ISO standard**
 - **e.g. UML 1.4, with MOF and XMI likely to follow**
- **Major revisions handled via new RFP**
 - **e.g. UML 2.x supercedes UML 1.x**
- **At end of life, sunseting procedure allows redundant specifications to be formally removed from the books**



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Ownership & IP

- Discussion and negotiation of submission contents occurs, but always outside OMG
 - **No anti-trust exemption**
- Submitters continue to own copyright of their specifications
 - **OMG and its members gets licence to duplicate submission for evaluation**
 - **If spec adopted, OMG gets unlimited licence to publish specification and derivative works (e.g. new revisions)**
- **No confidential material may be submitted to OMG or discussed at an OMG meeting**



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Summary

OMG's strengths are:

Committed international membership

Rapid, neutral, open process

Commitment to deployment of standards

Transparent process management

Simple IP rights management

Proven track record (we've done this >200 times)