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**ANSA Phase III**

**OMG status report - November '93**

**Andrew Watson**

**Abstract**

Slides for a presentation to the TC on the status on the OMG liaison activity.

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APM.1082.00.01

**Draft**

29 October 1993

Request for Comments (confidential to ANSA consortium for 2 years)

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**Distribution:**

**Supersedes:**

**Superseded by:**



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# **OMG Status, November '93**

## **Standards Liaison report**

**Andrew Watson**

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## Activity summary

- **Attended OMG TC meetings in:**

<b>San Diego</b>	<b>March</b>
<b>Paris</b>	<b>May</b>
<b>St. Charles, Illinois</b>	<b>July</b>
<b>Stokholm</b>	<b>September</b>
- **Chaired ORB2 Task Force**
- **Watching brief on other OMG activities**

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## Talk objective

- **Provide briefing on current status of OMG activities**
  - **ORB2 Task Force**
  - **Object Services Task Force**
  - **Others**
- **Provide feedback on impact of ANSA on OMG**
- **Explore future contributions ANSA can make to OMG**
- **Provide context for discussion of OMG services in ANSA prototypes**

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## Current areas of activity

- **ORB2 TF** Issued RFPs for ORB2 functions  
Working on C++ ORB mapping
- **Object Services TF** Adopted 3 (of 4) initial services  
Next round of submissions due Nov 29th
- **Analysis and Design SIG** Produced book surveying methods  
Proposed Tools interoperability TF
- **ORB revision TF** Revising ORB 1.1 C language mapping
- **Common Facilities TF** Just about to get rolling
- **SmallTalk SIG** Still leading an independent life
- **Database SIG** Tension with ODMG?

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## Object Request Broker 2

- Issued RFI, response deadline 26/4/93
- 21 responses (including 6 from ANSA consortium members):

Hyperdesk	Sematech	IBM (Yorktown heights)
Data Analysis	ICL	ISIS
Transarc	Symbiotics	Bellcore
NeXT	Expersoft	HP
Sun	IBM (products)	Tandem
BT	BNR	TRW
Andersen	Tivoli	APM

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## **Main ORB2 RFI response concerns**

- **Interoperability (17/21)**
- **Transactions (15/21)**
- **Asynchronous messaging (12/21)**
- **Concurrency (12/21)**
- **Standards (12/21)**
- **Other language bindings (10/21)**
- **Object Adaptors (10/21)**
- **Repositories (9/21)**
- **Compliance testing (8/21)**
- **Security (6/21)**



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## RFI response analysis

- **Most responses dealt with functional requirements (“we want ...”)**
  - **Quite a small minority addressed technology (“here’s how to ...”)**
- **Three broad areas of functional requirement**
  - **Federation issues:**
    - Interoperability**
    - Transparent support for objects of all sizes**
    - Reconfigurability (e.g. adding new ORBs to a system)**
    - Security**
  - **Dependability issues:**
    - Transactions**
    - Replication**
    - Management & monitoring**
  - **Support for other interaction models**
- **Technology concerns varied and unclassifiable**

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## ORB2 RFPs

- **As a result of RFI analysis, two RFPs issued**
  - **Interface repository**                      **LOIs due Feb 16th, Initial responses May 16th**
  - **Interoperability & Initialisation**                      **LOIs due Dec 8th, Initial responses Mar 7th**

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## **C++ Language mapping**

- **Agreed last year that C++ would be next language mapping (after C)**
- **LOIs (19th Feb '93):** Iona, NEC, Sun, Hyperdesk, HP
- **Initial responses (23rd April '93)** HP/Iona/Sun, NEC, Hyperdesk
- **Revised responses due 23rd July '93 (Chicago TC)**
  - HIS and Hyperdesk made presentations, NEC on verge of joining HIS
  - Main difference of opinion over ease-of-use (HyperDesk) vs. representational compatibility between C and C++ (HIS)
  - Extension to 8th September (1st day of Stockholm TC) granted to allow time for a merger
- **No merger by 8th September**
  - HP had left HIS (no longer a submitter) but NEC had joined
  - After more discussion, agreed original C mapping was root of the problem
  - ORB 1.2 revision TF revived to modify ORB C mapping

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## **C++ mapping: current status**

- **C++ submitters and ORB 1.2 revision TF given until 1st November to work up consistent proposals**
- **C++ submitters have now, finally, definitively, agreed to disagree**
- **Final C++ mappings available 15th November**
- **A competitive selection vote is in prospect (first in OMG's history?)**

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## Object Services summary

- **3 services (out of 4 in first round) accepted by OSTF**
  - **Naming, Events, Lifecycle**
  - **Persistence still subject of vigorous discussion between JOSS and IBM**
  - **Recommendation to be approved by TC in early December**
- **All 3 initial services use design principles familiar within ANSA**
  - **I'm almost certain OMG naming service is based on ANSA naming model**
- **Wait for this afternoon's talk for more details on OS1 services**
- **OS2 RFP submissions due 29th November**

**Concurrency control  
Time**

**Externalisation  
Transactions**

**Relationships**

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## Potential ANSA contributions to OMG

- **OSTF doing groundwork on security for OS3 - can we contribute?**
- **Make sure they really do take up trading when X.900 spec becomes available**
- **Evaluate or contribute to OSTF transaction work?**
  - **Similarly for other OS RFPs**
- **Federation**
  - **Part of OMG's long-term vision ...**
  - **... but not something they specifically address as a separate topic**
  - **We can provide immediate input on federation aspects of repositories**
  - **Medium term, provide guidance on federation aspects of all OS and CF work**
- **AJW to give TC talk based on ANSA computational model type research**