

# **International Modelling and Simulation**

**Mick Ryan Co-chair and Founder ISAG  
Presentation to M&S Industry Steering Group  
Sheraton Tyson's Corner, Washington DC  
Thursday 3 June 1999**

# UK Synthetic Environment Management Board

The Synthetic Environment Management Board is a joint Government and Industry group which provides a focus for SE activity in the UK and develops and implements combined Government & Industry strategy and policy.

03/20/99

Unclassified



# Constitution

## ◆ Representation :

- British Aerospace (Chair)
- GEC
- Vickers Defence Systems
- GKN Westland
- Thomson Training & Simulation Limited
- British Telecom
- MoD Centre - Synthetic Environment Co-ordination Office
- MoD DPA - Directorate of Procurement Management Policy
- DTI
- DERA
- DMA (Wider Industry)

# Origins

- ◆ Group Formed in 1993 to Encourage Common Infrastructure Support to UK Programmes Such As:
  - Air Defence SE
  - Virtual Aircraft SE
  - Command & Control Information Systems SE

# Purpose

- ◆ To pursue the definition development and exploitation of a National Capability In Synthetic Environment in order to maintain and enhance UK's influence in this field
- ◆ To be the National Advisory Council on Synthetic Environments

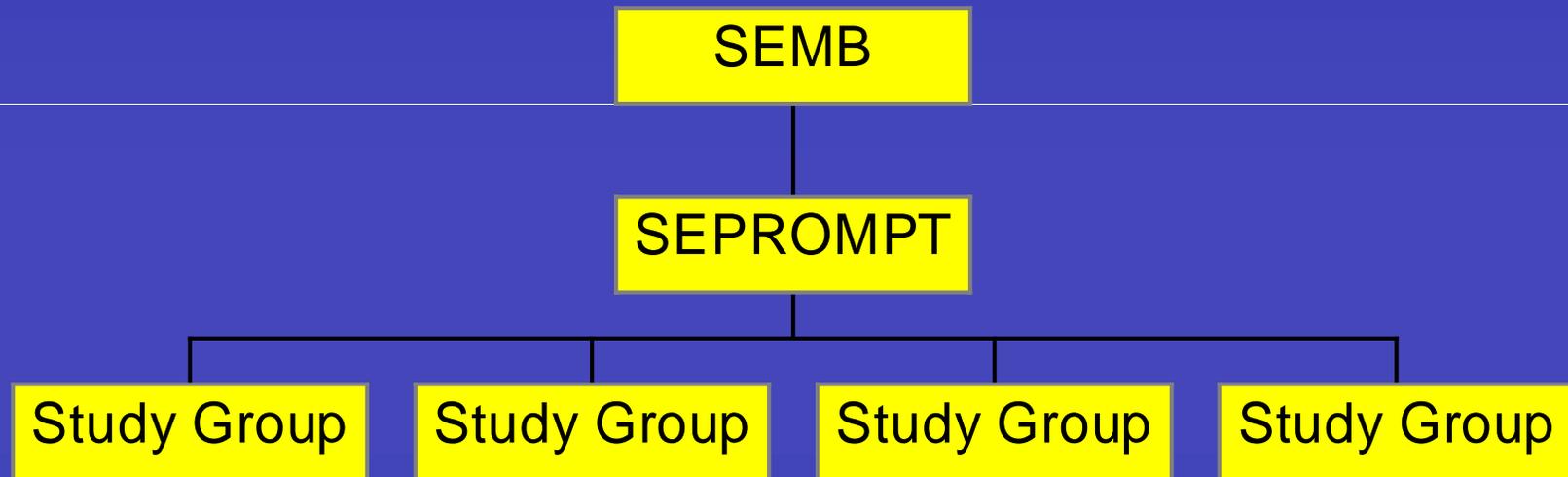
# Terms Of Reference - 1

- ◆ To provide a forum for Industry and Government liaison on SE
- ◆ To define, develop and maintain a cohesive UK Strategy for SE
- ◆ To pursue the dissemination of that strategy within the UK industrial base and its customers
- ◆ To provide briefing events for relevant UK organisations

# Terms Of Reference - 2

- ◆ To define recommend and co-ordinate R&D proposals and activities for UK SE
- ◆ To promote the adoption of SE compatible processes and tools within the UK
- ◆ To co-ordinate UK SE activities with Europe, US, NATO and the ROW
- ◆ To champion the adoption of best practice in the application of SE in the UK
- ◆ To review and evaluate the benefit of SE to UK

# Organisation



# Study Group Activities

- ◆ Communications
- ◆ Commercial
- ◆ Research Database
- ◆ SE Taxonomy
- ◆ SE Application
- ◆ SE Strategy and Policy
- ◆ Research & Technology  
Prioritisation

# SEMB Contact Details:

- ◆ WWW:

- [www.semb.co.uk](http://www.semb.co.uk)

- ◆ e-mail:

- [tony-p.balmer@bae.co.uk](mailto:tony-p.balmer@bae.co.uk)

- ◆ or by voice!:

- Tony Balmer, Secretary to the SEMB:

- +44-1252 384983 / +44-1772 853838



# SEPROMT

## Overview of Study Programme

03/20/99

Unclassified

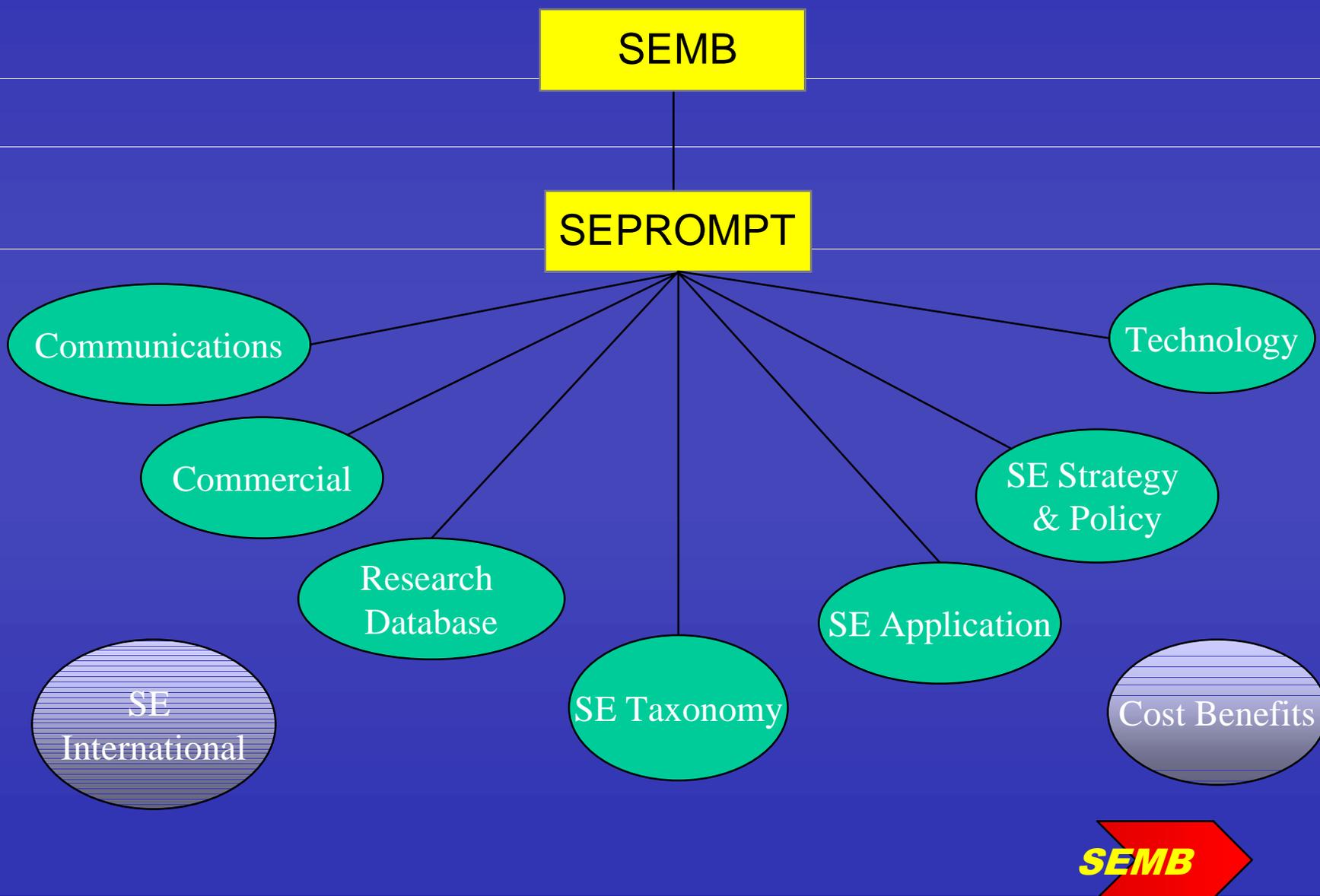
**SEMB** 

# Purpose of the SEPROMT

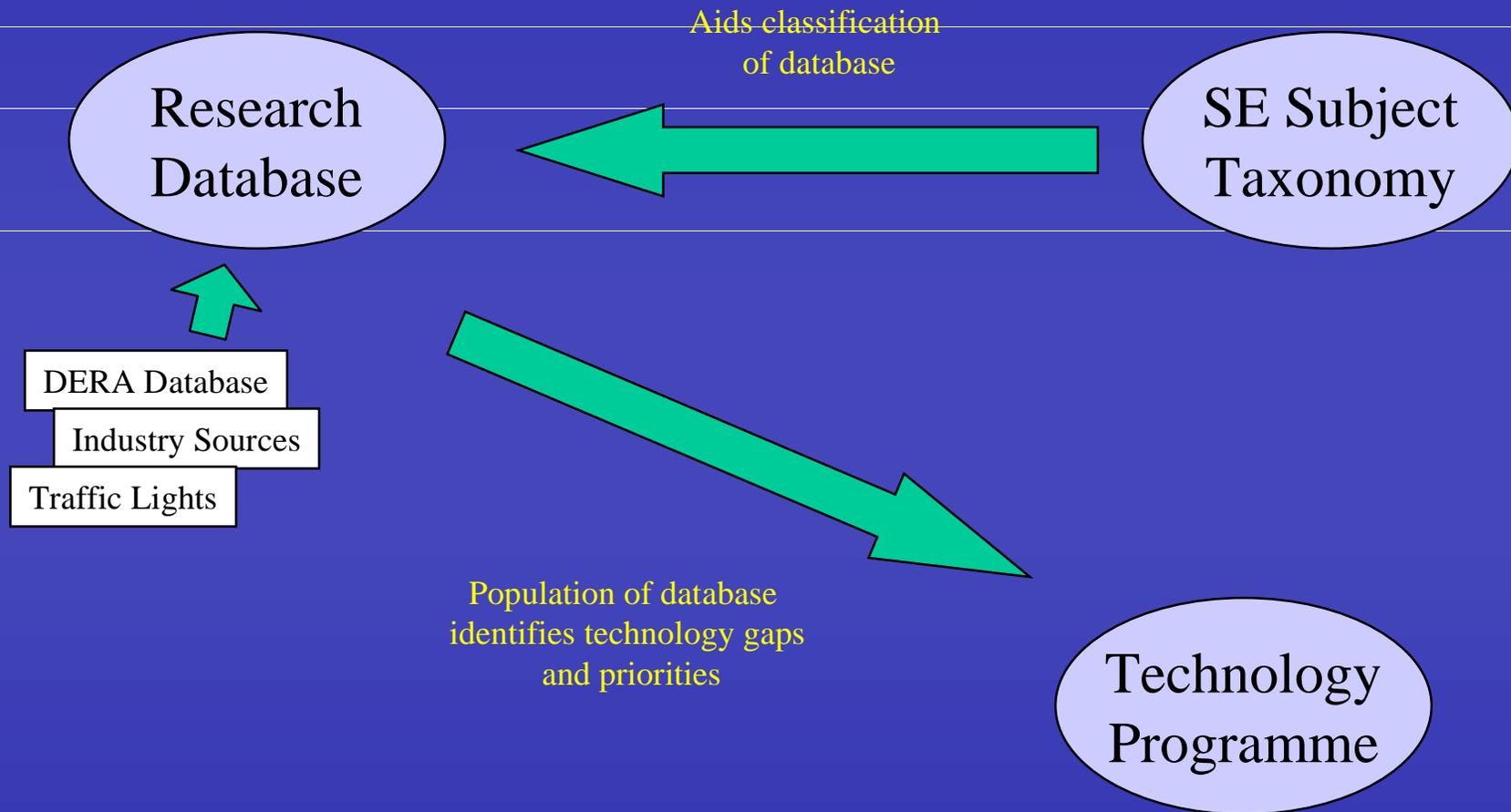
SEPROMT are directed by the SEMB to carry out the studies that are required to permit the development of UK SE strategy and Policy



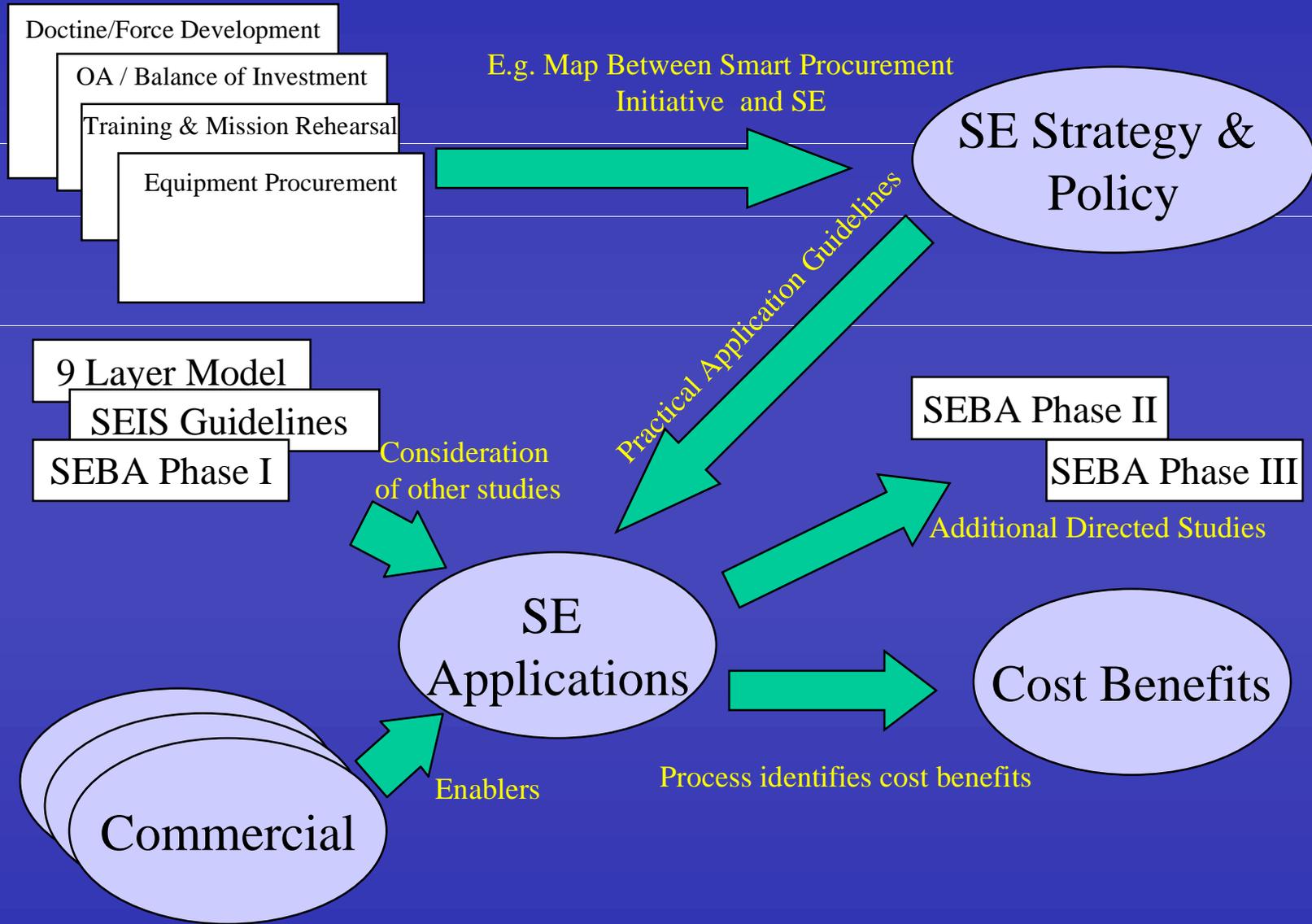
# Current Study Groups



# Relationship of SEPROMT Studies - 1



# Relationship of SEPROMT Studies - 2



# Communications

- ◆ Focussed at improving Internal & External visibility of the SEMB
  - Its Role & operations
- ◆ Overall Aims:
  - ensure effective communication of the benefits of SE to the whole range of customer organisations
    - both in the UK and abroad,
  - to ensure that all companies with an interest in SE are aware, and have a route to get involved in SEMB activities

# SE Taxonomy

- ◆ The Study aims to:
  - establish a consistent framework for Synthetic Environment related topics, terms and data across the range of application domains.
  - Rationalise the use of terminology and abbreviations with existing definitions, frameworks and glossaries used within the Modelling & Simulation community.
  - complete Version 1 of the SE Taxonomy by November 1999.

# Research Database

- ◆ The aim of this study is
  - to identify, collate and describe research and other activities that are being carried out throughout the UK, which are aimed at developing the technologies utilised within SE.
  - The activities identified will be placed within a database to allow analysis of the overall developments taking place in SE,
  - to help identify those areas which require new or additional focus

# Technology

- ◆ The aim of the technology group is to study the maturity of all the technologies required for SE in order to:
  - develop and communicate a shared understanding of industry, funding agency and other stakeholders needs and priorities for research and technology development
  - maintain an overview of UK competitiveness in the field of SE technology
  - advise key stakeholders (Industry, MoD and the Defence and Aerospace Foresight Panel) of key themes and directions for the national effort in research and technology development, taking account of European and International initiatives.

# SE Strategy & Policy

- ◆ The purpose of this study group is:
  - to develop and document joint Industry and MoD strategy and policy for the UK corporate exploitation of SEs for defence.
  - to build on and develop the existing separate Industry and MoD documents
  - to arrive at a strategy, backed up with procedures and route maps for achievement, for the future development of UK SE capability

# SE Application

- ◆ The aim of this study is to examine the practical application of Synthetic Environments for each of the four UK MOD application domains:
- ◆ Operational Analysis / Balance of Investment
  - Training and Mission Rehearsal
  - Equipment procurement
    - e.g. Application of SE to support Smart Procurement Initiative (SPI)
  - Doctrine and Force Development

# Commercial

- ◆ It is recognised that in order to maximise the benefits of using SE within the acquisition of systems, changes will need to be made to commercial, as well as technical practices & procedures.
- ◆ The commercial programme is focussed at resolving commercial issues associated with the wider application of SE within SPI, such as:
  - ownership & visibility of Intellectual Property within shared modelling environments,
  - application of competition policy
  - contracting mechanisms.

# INTERNATIONAL SIMULATION ADVISORY GROUP

- |                           |                    |                                 |
|---------------------------|--------------------|---------------------------------|
| 1. <b>UK</b>              | 14. Czech Republic | 27. Romania                     |
| 2. <b>Germany</b>         | 15. Denmark        | 28. Russia                      |
| 3. <b>France</b>          | 16. Estonia        | 29. Singapore                   |
| 4. <b>The Netherlands</b> | 17. Finland        | 30. Slovenia                    |
| 5. <b>Sweden</b>          | 18. Hungary        | 31. South Africa                |
| 6. <b>Australia</b>       | 19. India          | 32. Turkey                      |
| 7. <b>Austria</b>         | 20. Israel         | 33. Ukraine                     |
| 8. <b>Belgium</b>         | 21. Italy          | 34. <b>USA</b>                  |
| 9. <b>Brazil</b>          | 22. Japan          | 35. European Space Agency (ESA) |
| 10. <b>Canada</b>         | 23. Latvia         | 36. EuroControl                 |
| 11. <b>China</b>          | 24. Malaysia       | 37. <b>NATO</b>                 |
| 12. <b>Chinese Taipei</b> | 25. Norway         | 38. SCS (International)         |
| 13. <b>Croatia</b>        | 26. Poland         |                                 |

# ISAG Progress

## ◆ Three Objectives over Last Three Years - All Achieved:

1. Release of the RunTime Infrastructure on to Internet
2. Forum at SISO Workshop to discuss IEEE1278 Transition Issues. Now a Non-HLA Forum
3. Affiliation of ISAG to SISO

# ISAG Progress

## ◆ Achieved Affiliation to SISO

- First Meeting between ISAG & SISO EXCOM 16th March 1999
- EXCOM wants more international members to stand for Committee Posts in SISO Mick now on SISO EXCOM
- EXCOM wanted ISAG Recommendations for Conferences outside N America for SISO Recognition or Act as SISO Workshop Sites. ISAG's 1st recs:
  - ITEC (99 The Hague 13-16Apr99)
  - NATO PfP/PWP Workshop Brno 3-5May99
  - UK SE Conference RMCS Shrivenham October each year
  - SIMTECT2000 Australia

# ISAG Progress

- ◆ **Now 32 Members & 4 Organisations**
- ◆ **Thanks are Due to the Swedish Government for Funding Admin and Website for ISAG**
- ◆ **ISAG Website at URL:**

**[www.isag.cx](http://www.isag.cx)**

# ISAG at Spring99 SISO Workshop

## ◆ 97 International Delegates:

● UK	35
● France	17
● Sweden	12
● Germany	10
● Canada	7
● The Netherlands	6
● Israel	3
● Japan	3
● NATO	3
● Italy	1

# Opportunities for ISAG Members

- ◆ **ITEC each April**
- ◆ **Every 2 months SISO Web  
Newsletter International Section**
- ◆ **ISAG Website Pages**
- ◆ **International Briefing Session at  
Every SISO Workshop, Orlando**

# ISAG Concerns 1999

- ◆ **Potential Divergence of Standards -IEEE v OMG**
- ◆ **Potential Version Discrepancy Between Tools and RTI**

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