



RIPE

Réseaux IP Européens

Rob Blokzijl

RIPE Chairman

K13@NIKHEF.nl



RIPE

- **History**
- **Terms of Reference**
- **Organisation**
- **Meetings**
- **Working Groups**
- **Policy process**



RIPE History

- **Started in May 1989**
- **First Meeting:**
 - 14 participants
 - half day
- **Protocol Wars:**
 - OSI is good
 - Invented by the phone companies
 - TCP/IP is bad
 - Not invented by the phone companies



RIPE 1 Meeting

22 May, 1989

Participants:

Piet Beertema	EUnet/CWI - Netherlands
Rob Blokzijl	NIKHEF/HEPnet – Netherlands
Antonio Blasco Bonito	CNUCE-CNR - Italy
Ives Devillers	INRIA - France
Francis Dupont	INRIA - France
Anders Hillbo	NORDUnet/KTH – Sweden
Daniel Karrenberg	EUnet/CWI - Netherlands
Thomas Lenggenhager	SWITCH - Switzerland
Olivier Martin	CERN - Switzerland
Peter Merdian	BelW"u/Stuttgart - Germany
Arnold Nipper	Uni Karlsruhe - Germany
Federico Ruggieri	INFN/Bari - Italy
Marten Terpstra	NIKHEF – Netherlands
Ruediger Volk	Uni Dortmund/Eunet-D - Germany



RIPE Terms of Reference

- **Operational Co-ordination of IP Networks**
- **No Standards Development**
- **No Names Assignment**
- **No Network Operation**

RIPE Terms of Reference

Recognising that IP networks are growing beyond the LAN's in Europe, and are extending over national and international WAN's in Europe, the RIPE co-ordinating body has been created.

RIPE stands for the "Réseaux IP Européens".

The objective of RIPE is to ensure the necessary administrative and technical co-ordination to allow the operation and expansion of a pan-European IP network.

- RIPE acts as a forum for the exchange of technical information and the creation of expertise on IP networking.
- The area of relevance for RIPE is Europe.
- All parties operating wide area IP networks are encouraged to participate.
- RIPE promotes and co-ordinates interconnection of IP networks within Europe and to other continents.
- RIPE establishes agreement on common network management practices and the operational management of the interconnected networks.
- RIPE serves as a focal point for other common activities of the participants related to IP networking.
- All documents produced by RIPE will be publicly available.
- RIPE is not a network service provider. IP networks collaborating in RIPE remain under the executive authority of their respective organisations.

Amsterdam

29 November 1989



RIPE Terms of Reference (1)

- **RIPE acts as a forum for the exchange of technical information and the creation of expertise on IP networking**
- **The area of relevance for RIPE is Europe**
- **All parties operating wide area IP networks are encouraged to participate**
- **RIPE establishes agreements on common network management practices and the operational management of the interconnected networks**



RIPE Terms of Reference (2)

- **RIPE serves as a focal point for other common activities of the participants related to IP networking**
- **All documents produced by RIPE will be publicly available**
- **RIPE is not a network service provider. IP networks collaborating in RIPE remain under the executive authority of their respective organisations**



RIPE Organisation

- **Not a Legal Entity**
- **No formal membership**
- **No votes – consensus is the word**
- **Chairman:**
 - organise the meetings
 - keep an eye on the work between meetings
 - external liaison
- **Real work is done in the Working Groups - WG**
- **Sometimes Task Forces - TF**
- **Sometimes Birds of a Feather meetings - BOF**

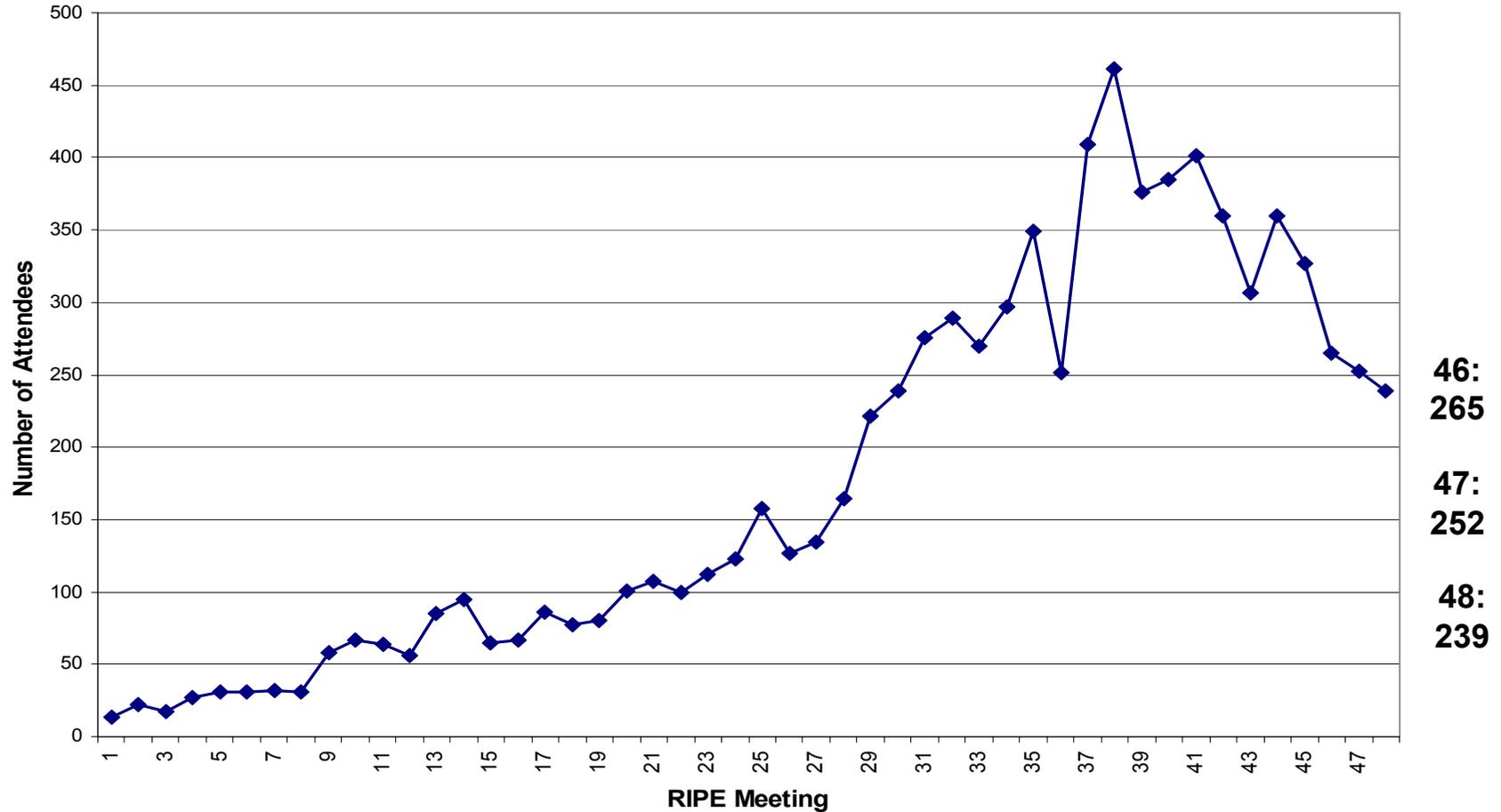


RIPE Meetings

- **3 times a year**
 - 2 times next year as a trial
- **5 days**
- **WG + TF + BOF meetings**
- **Plenary Session**
- **Related Meetings:**
 - RIPE workshops
 - RIPE tutorials
 - RIPE NCC training
- **OPEN - OPEN - OPEN - OPEN**

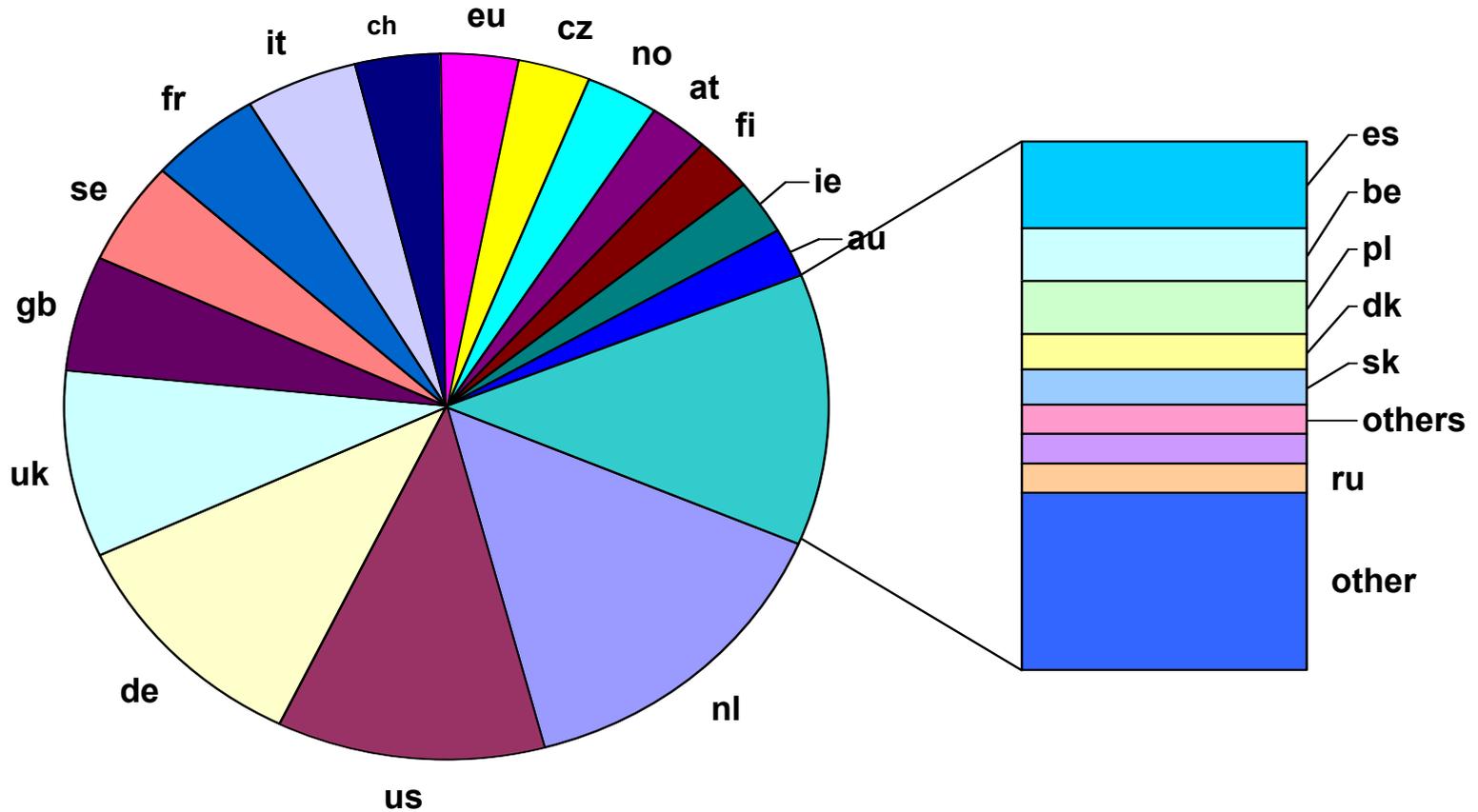


RIPE Meeting Attendees





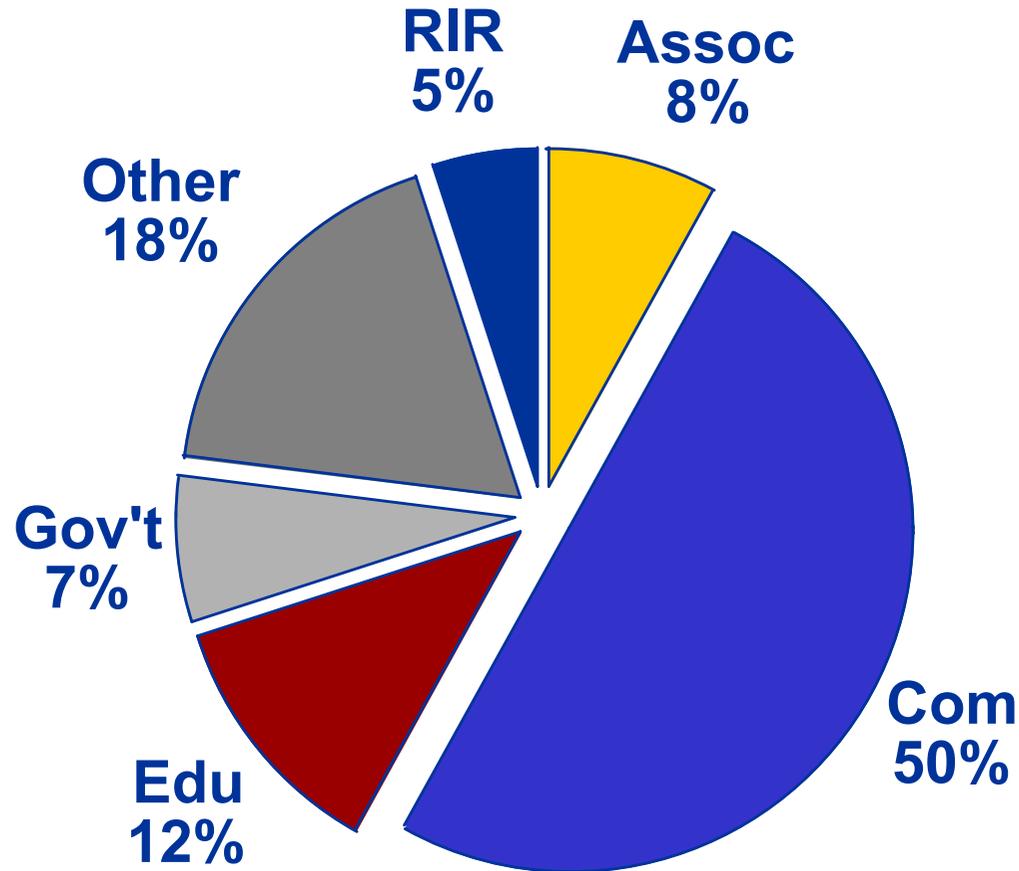
RIPE Meeting Attendance per Country 46,47,48





RIPE Meeting Attendance per Organisational Category

46, 47, 48





RIPE Working Groups (1)

- **Address Policy Working Group:**
 - open forum where RIPE address policy is made that affects address and ASN allocations.
- **Anti-Spam Working Group:**
 - fighting the problem of spam mail on the Internet
- **Database Working Group:**
 - RIPE network management database
- **DNS Working Group:**
 - Domain Name System technical questions and issues



RIPE Working Groups (2)

- **European Internet Exchange Working Group:**
 - European Internet Exchanges technical issues
- **IPv6 Working Group:**
 - IPv6 operational issues
- **RIPE NCC Services Working Group:**
 - discussion of existing and new RIPE NCC services
- **Routing Working Group:**
 - architecture and operations of Internet routing
- **Technical Security Working Group:**
 - technical aspects of Internet security



RIPE Working Groups (3)

- **Test-Traffic Working Group:**
 - Measurement of Internet performance

- **European Operators Forum:**
 - European technical network operation related issues and problems

- **Limerick Working Group:**
 - produce limericks of relevance to the Internet
 - <limerick-wg@ripe.net>



RIPE Working Groups (4)

- **How to join:**
 - subscribe to mailing lists
 - participate in RIPE meetings
- **OPEN - OPEN - OPEN - OPEN**
- **Visit the Web site:**
 - documents
 - meeting minutes
 - mail archives

<http://www.ripe.net>



Policy Development Principles

- **Open**

- Anyone Can Participate
 - This includes Governments
- Policy Fora
- Mail Lists

- **Developed Bottom-Up**

- Internet Community
- Technology Changes
- IETF

- **Transparent**

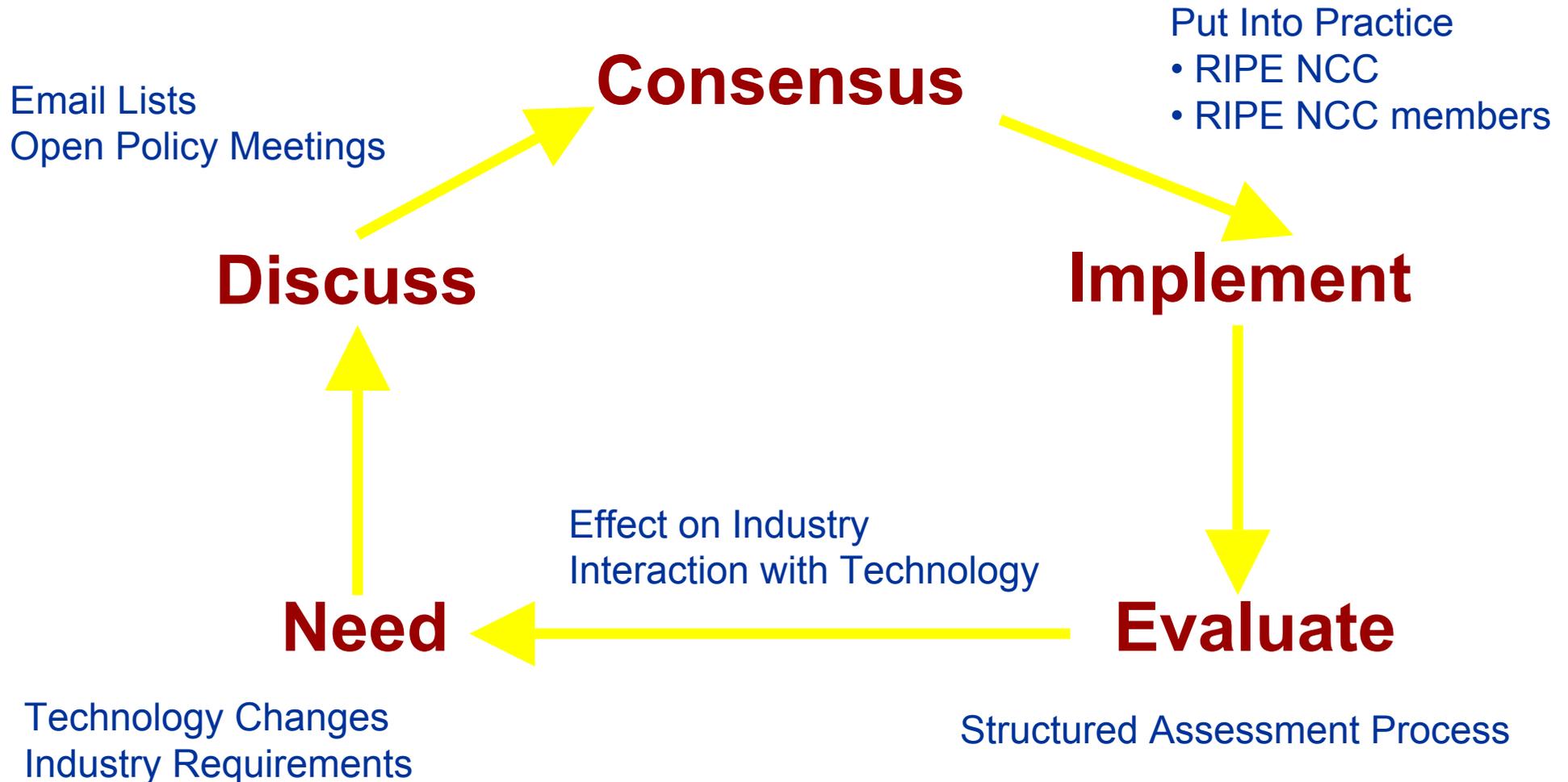
- Mailing List Archives
- Minutes
 - Policy Fora
 - RIR Boards

- **Documented**

- Formal Policy Documents
- Implementation Procedures



Policy Development Process



Address Management Policy

Conservation

- Efficient Use of Resources
- Allocation Based on Need

Aggregation

- Limit Routing Table Growth
- Support Provider-Based Routing Policies

Registration

- Ensure Uniqueness
- Trouble Shooting

Questions



<http://www.ripe.net>