

# IPv6 deployment, and future internet research

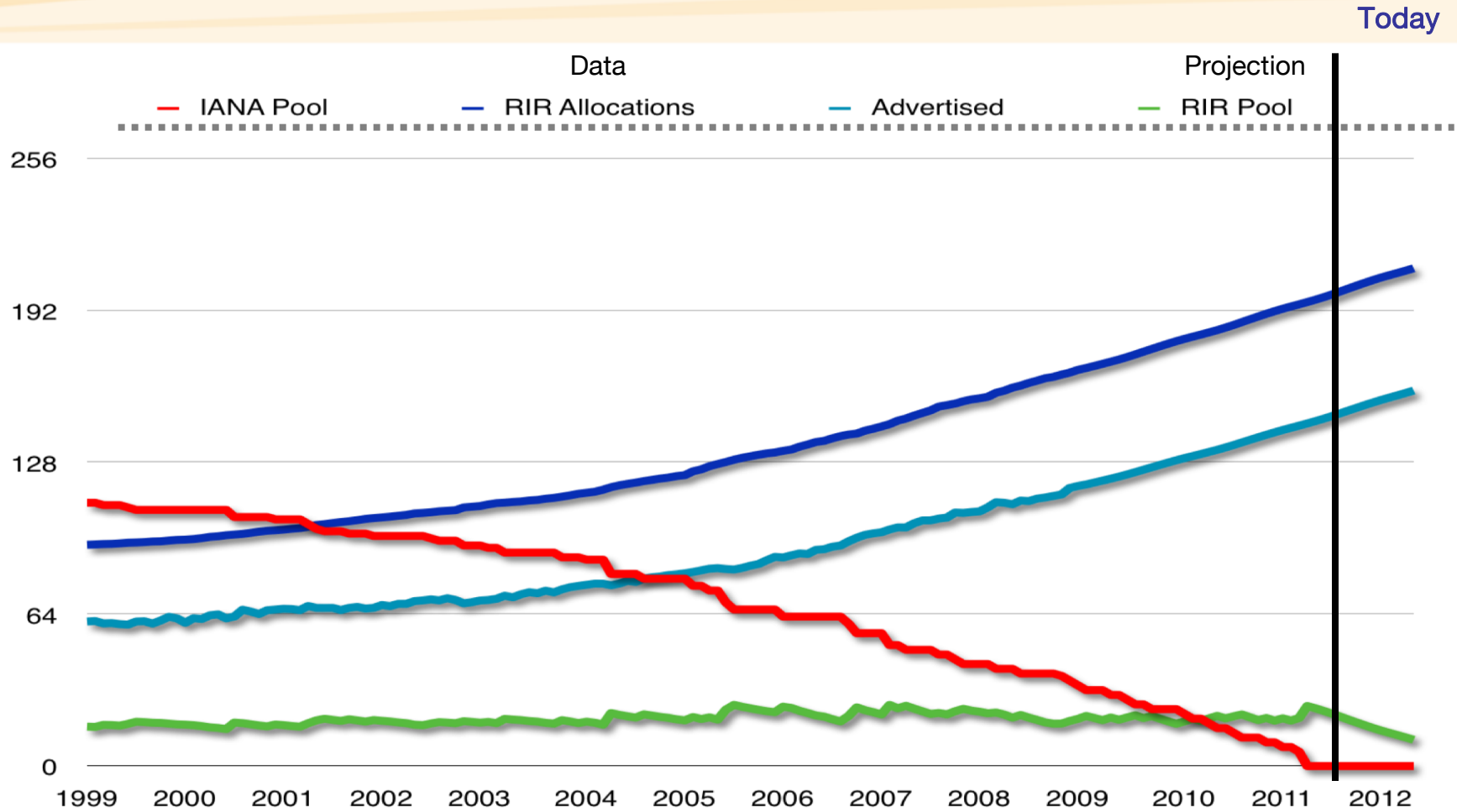
**Jacques Babot**

**European Commission  
DGINFSO**

*DG INFSO F Emerging Technologies and Infrastructures*



# IPv4 Pool - The Future



# Threats: why EC calls for IPv6 deployment?

- ✓ **Slow down of Internet development**
- ✓ **Market distortion**
- ✓ **Negative impact on innovation**



# Action since 15 years

Focus of R&D moving from research to industrial uptake

TIME

R&D projects.. international cooperation... Prepare deployment

R&D projects

IPv6 testbeds demonstrated the feasibility and the value added. GEANT and NRENs IPV6 enable.

Large scale testbeds

Launching of National and EU Task Forces

Dissemination

Communication to MS and EP

Policy actions

Procurement

European Defence Ag has IPv6 enablement in its work plan

ISP Commercial offers

FREE in France and others coming

EU Action plan May 2008

# Action plan 2008

## “Advancing the Internet”

- ✓ Cooperate with content/service providers.
- ✓ Encourage ISPs for IPv6 connectivity.
- ✓ Encourage Member States to use IPv6.
- ✓ Awareness campaigns with different users groups.
- ✓ Inclusion IPv6 in education curricula ( study).
- ✓ Security and Privacy issues ( study).
- ✓ Monitoring IPv6 deployment ( study).



# Next steps ...

## Actions should be targeted on:

- ✓ Operators, ISPs
- ✓ Equipment and Content providers,
- ✓ Member States, public authorities.....



# FIRE

## Future Internet Research & Experimentation

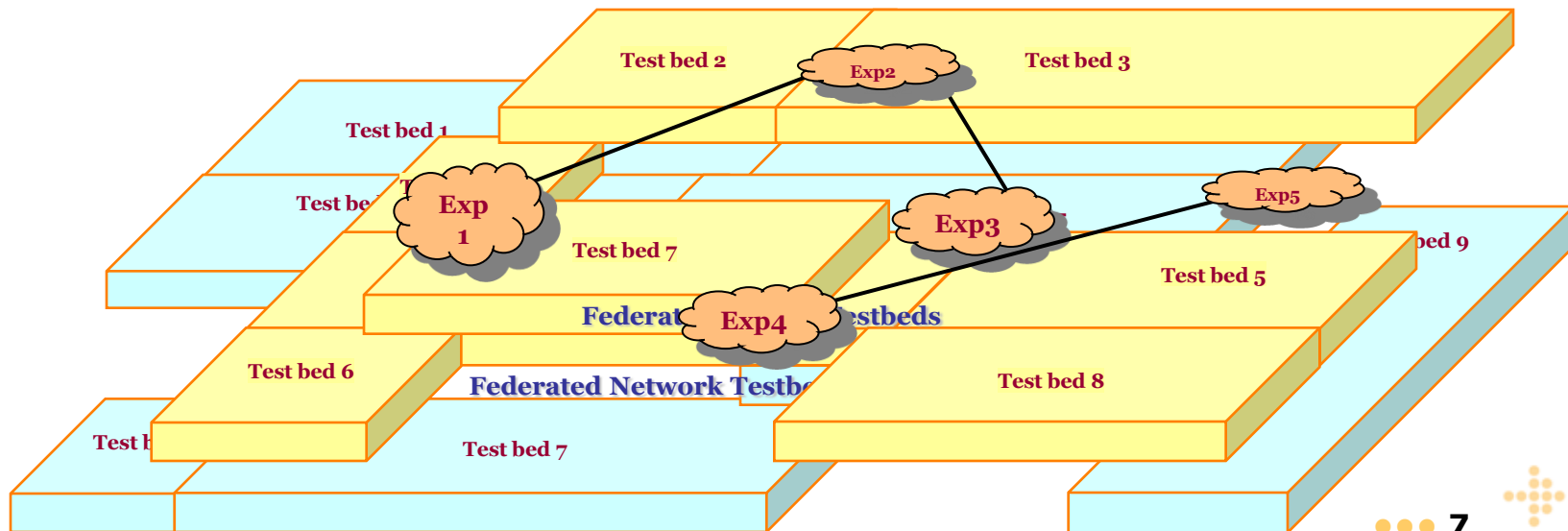
### FIRE Experimental Facility

- Supporting research and innovation on new network and service architectures
- Through large scale experimentation, predict behavior and assess non-technical impact

### FIRE Research



User Communities



# FIRE Projects

14 projects, 40 M€ - Call 2 - 2008

17 projects, 50 M€ - Call 5 - 2010

## Coordination and Support Actions

FIREBALL

MyFire

FIRE Station

FIREworks

PARADISO 2

PARADISO

## Building the Experimental Facility and stimulating its use

BonFIRE

Smart Santander

TEFIS

Ofelia

ONELAB2

PII

CREW

WISEBED

Users

Users

VITAL++

## Experimentally-driven Research

CONNECT

EULER

SCAMPI

CONVERGENCE

LAWA

SPITFIRE

HOBNET

NOVI

OPNEX

ECODE

Research

Validation

Large Scale Experiments

N4C

SMART-NET

PERIMETER

CONNECT

Requirements

Nanodatacenters

SELF-NET

IP Facility Projects Call 5

STREP Projects Call 5

Coordination & support actions Call 5

IP & STREP Facility Projects Call 2

STREP Projects Call 2

Coordination & support actions Call 2

# Panel FI/IPv6

- **Laurens Cloete** (Director) Meraka
- **Jacques Babot** European Commission DG INFSO
- **Louis Coetzee** (Internet of Things Research Group Leader) Meraka
- **Karel Matthee** (Trusted Network Infrastructures and Services Research Group Leader) Meraka
- **Philippe Cousin**, Rapporteur
- **Latif Ladid**, IPv6 Forum
- **Serge Fdida**, University Pierre et Marie Curie France
- **Hagen Woesner** EICT GmbH, Link with DTelekom Germany
- **Sotiris Nikolettseas** CTI Greece



# Questions to the panel

1. What is the future of internet, is there a need for a new internet?
2. Low cost technology to access internet. Is there any plan within internet research?
3. Is there need for Internet of things for developing and emerging countries?
4. What are the main problems Africa faces in IPv6 deployment?
5. Energy efficiency versus future internet and IPv6?

