GEN6
Governments enabled IPv6

Uwe Kaiser, Brussels, 23.01.2013

Around 2001:
(ftp://ftp.cordis.europa.eu/pub/ist/docs/rn/ipv6_booklet.pdf)

SATIP6 – satellite broadband access, adaption of DVB-RCS for IP and IPv6
6HOP – multihop wireless IPv6 networks
6Power – deployment of IPv6 using PowerLine using (…) QoS and multicast
6init – promote the introduction of IPv6 multimedia and security services

Around 2011:

IPv6 Observatory – A two-year long study, aiming to monitor the progress of IPv6 deployment around the world

IoT6 – IoT6 is a research project on the future Internet of Things. It aims at exploiting the potential of IPv6 and related standards (6LoWPAN, CORE, COAP, etc.) to overcome current shortcomings and fragmentation of the IoT.

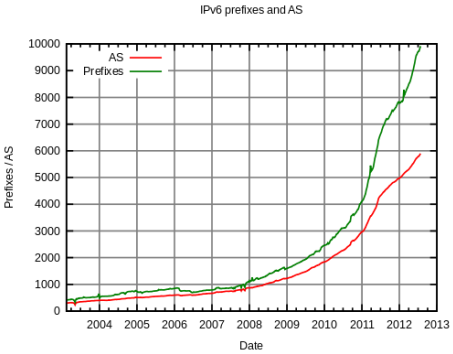
6Deploy – to support the deployment of IPv6 in e-Infrastructure environments

IPv6 is on is way!

v4 addresses only in small quantities available

Provider are changing to IPv6 in "quiet mode"

IPv6 World Days are drawing attention to IPv6



But:

In the government sector there is no big activity to deploy IPv6.

So – what are the arguments?

The introduction of IPv6

- does not necessarily solve existing problems
- has to be planned and organized
- needs human resources
- takes some time
- driving a data center is still the same work as before
- setting a target for oneself

But

The introduction ensures that services can be reached wherever you are and whatever IP-Address a provider assigns to your device.

GOVERNMENTS ENABLED WITH IPv6

National Roadmaps

USA (Gov), Indien, Malaysia, Uganda, Thailand, …….

December 2010:

Maria Häll – IPv6 What We Do Next (Sweden)
Constanze Bürger – IPv6 in the Public Administration of Germany
Davor Sostaric – IPv6 in Slovenia
Petra Holubicková – Governmental Support of IPv6 Deployment in the Czech Republic
Carlo Simon – IPv6 Case Study Luxembourg
Simon Hicks – BIS Perspective on the likely IPv4/IPv6 Migration, and the Way Ahead with 6UK
Onur Bektas – Turkey IPv6 Update

And the rest of Europe? The Institution EU?

GOVERNMENTS ENABLED WITH IPv6

Setting up a CiP project based on

running, national projects

Data Center

Backbone infrastructures

government services, portals

and cross border applications

cross border government services

communication between emergency entities in different member states

Objective

Real everyday services as best practice and showcase for others

Showing practical sized steps for deployment

Documentation of the processes and results


Czech Republic: Access to the government central access point by IPv6


Germany: Transition of data center services for public administrations


Greece: IPv6 school network with focus on end small devices (sensors)


Luxembourg: IPv6 government cloud and Public Safety


Netherlands: Enabling local government front and back office over IPv6


Turkey: Government portal services over IPv6


Spain: Preparing the government core network for IPv6


Slovenia: A IPv6 ready emergency response environment

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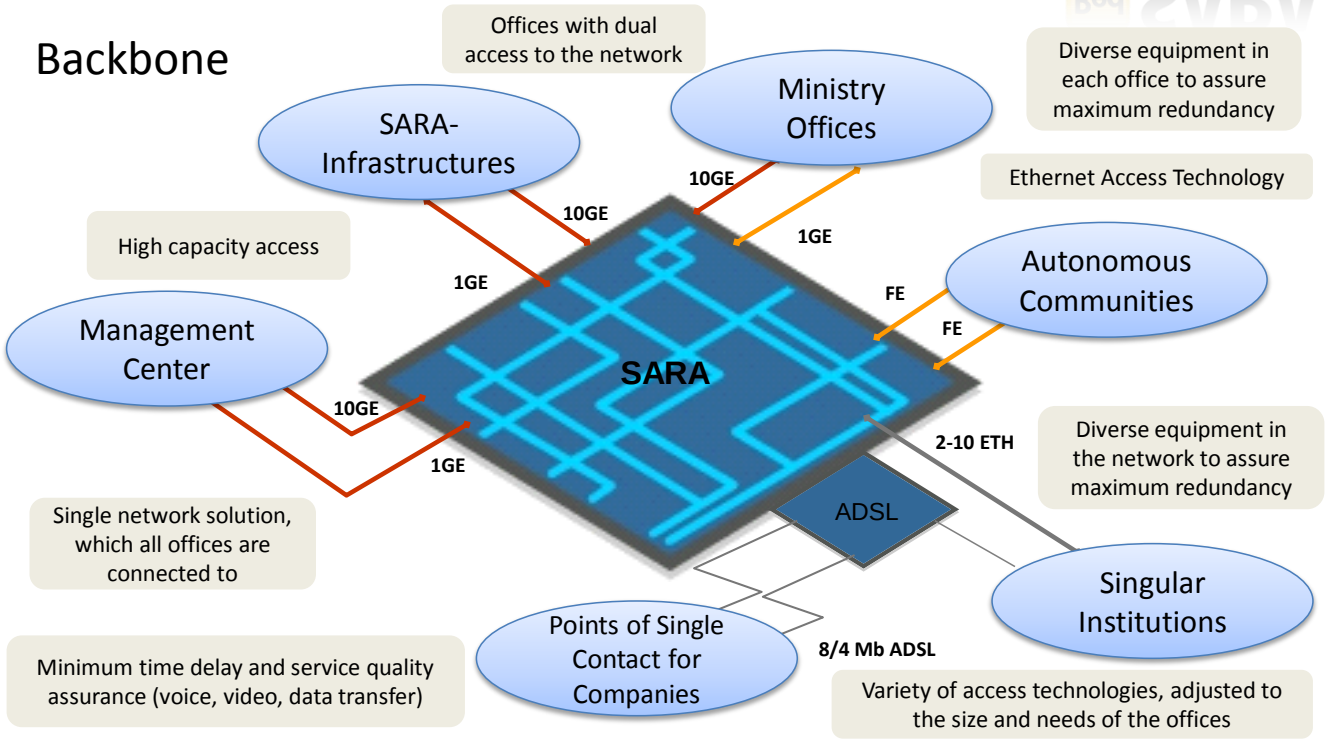
SARA Network - Architecture

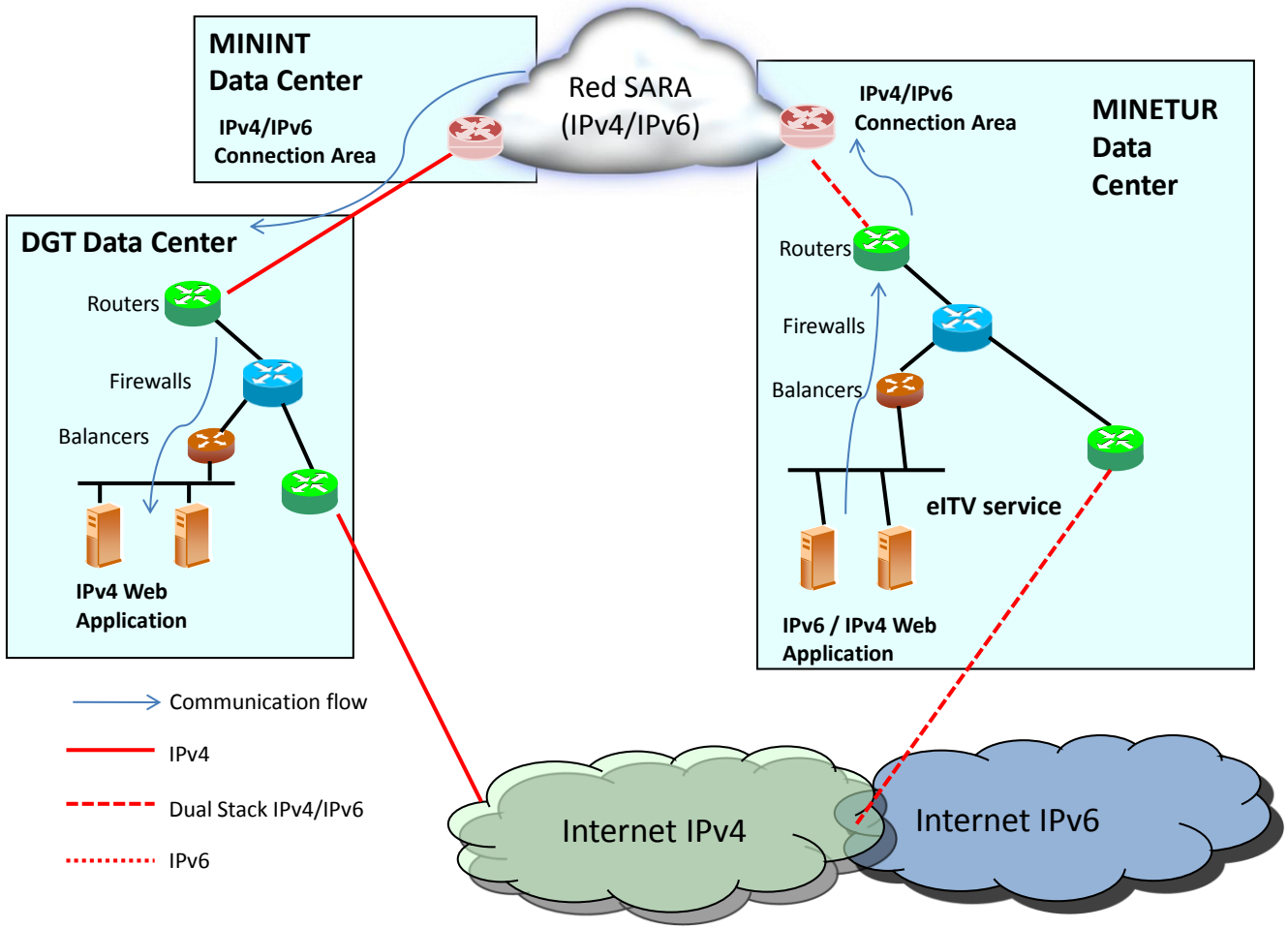
Red SARA

- Backbone

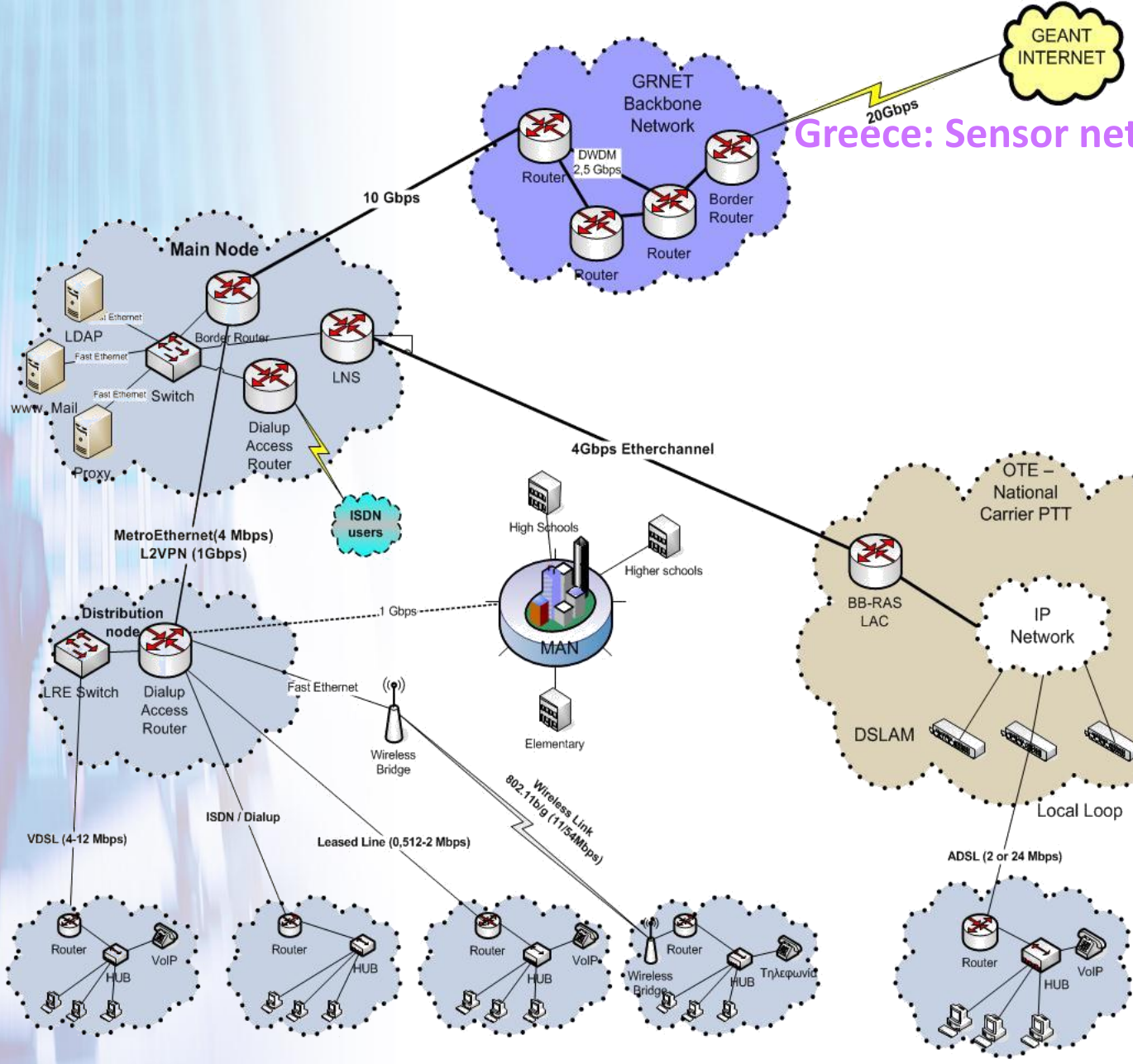


@dministración electrónica

Spain: Backbone on 6

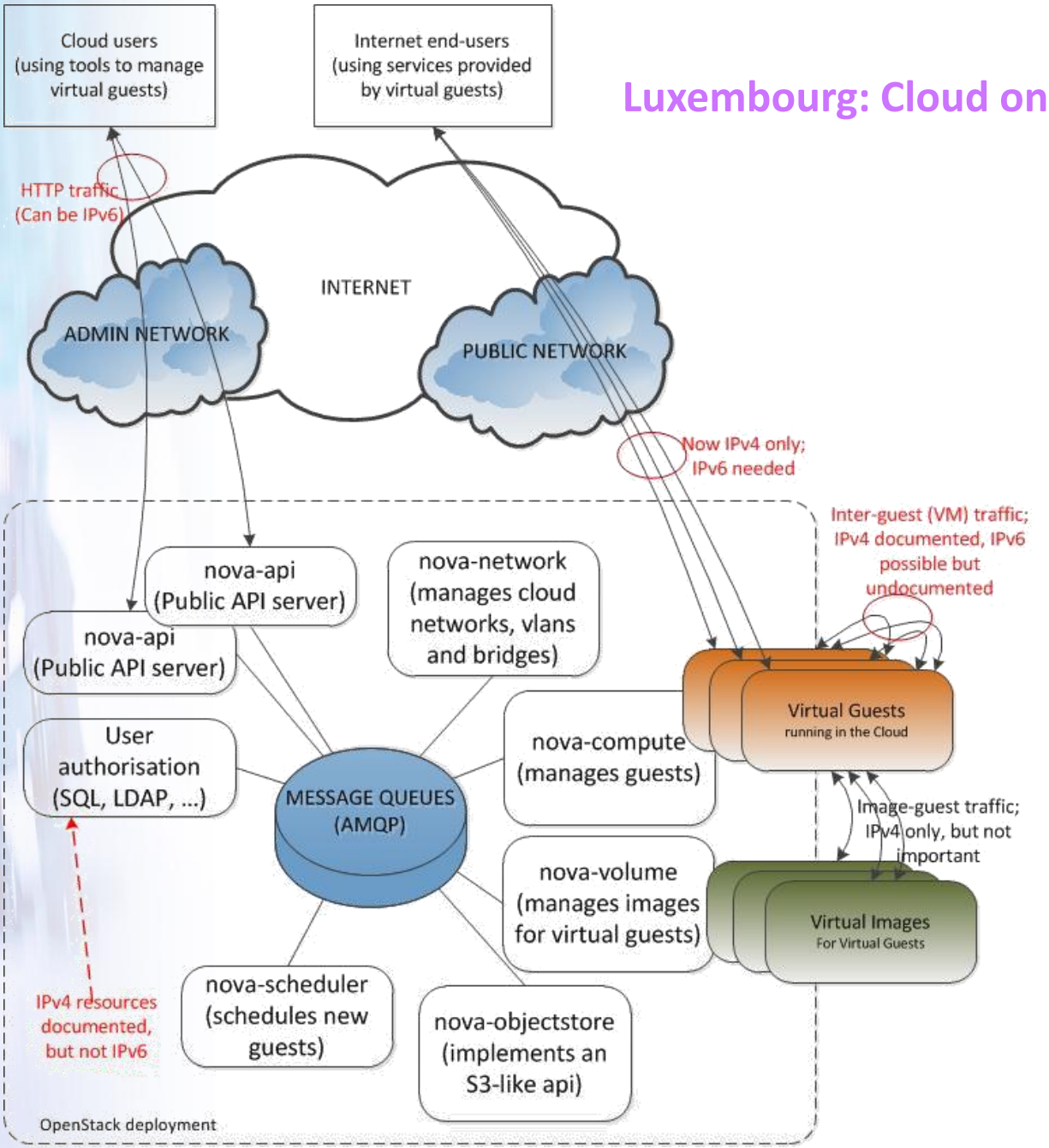


Greece: Sensor network

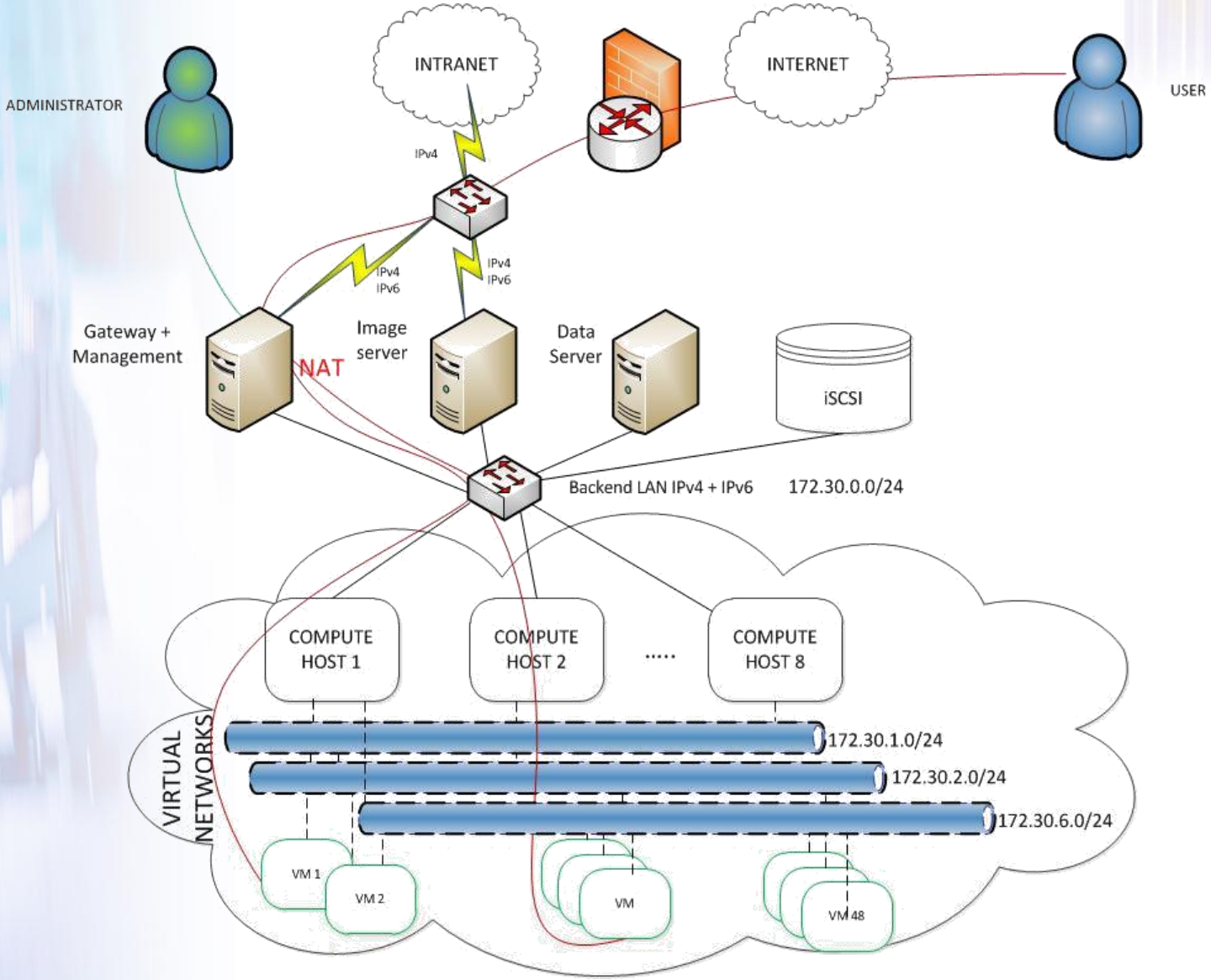


GOVERNMENTS ENABLED WITH IPv6

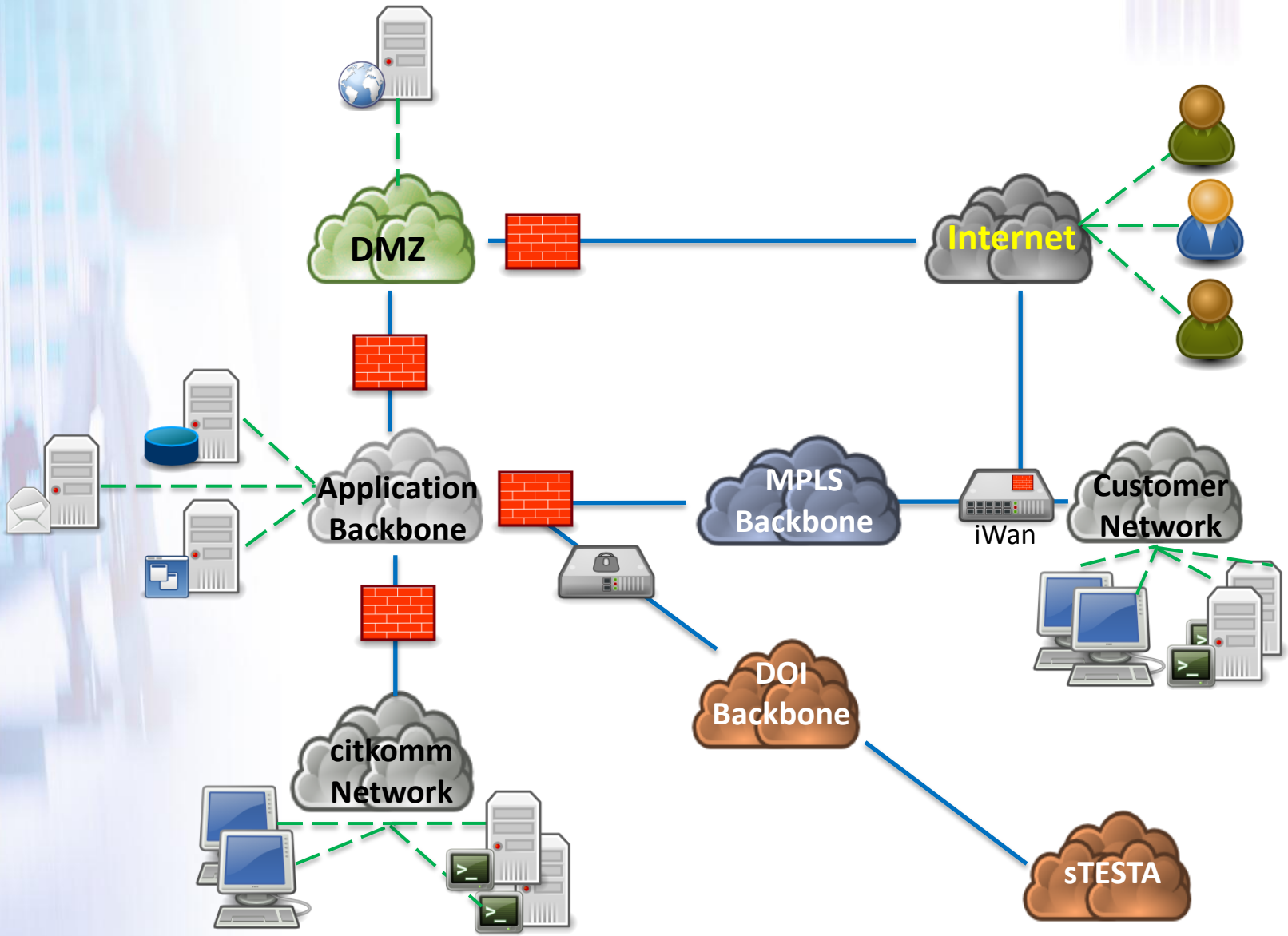
Luxembourg: Cloud on 6



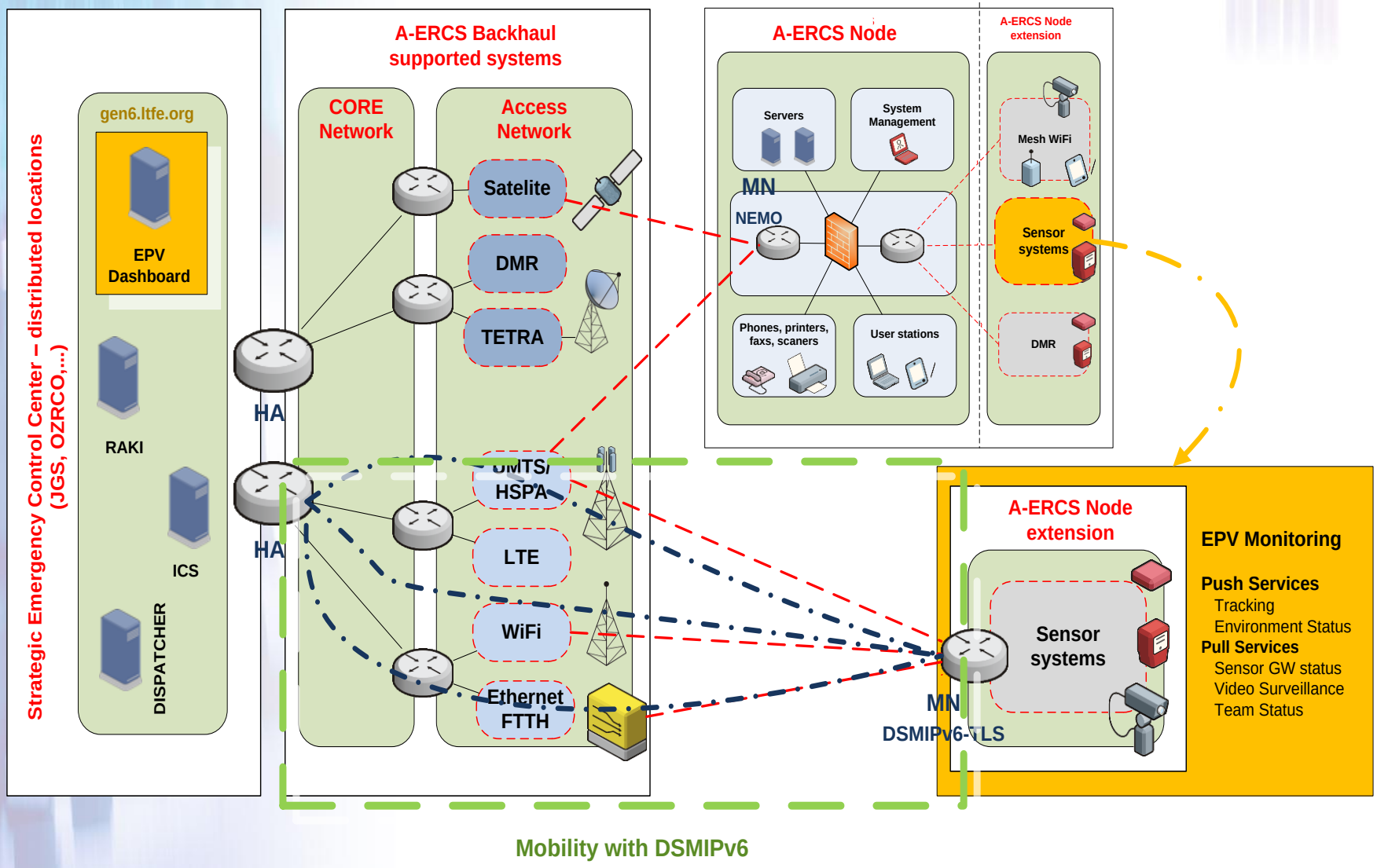
Luxembourg: Cloud on 6



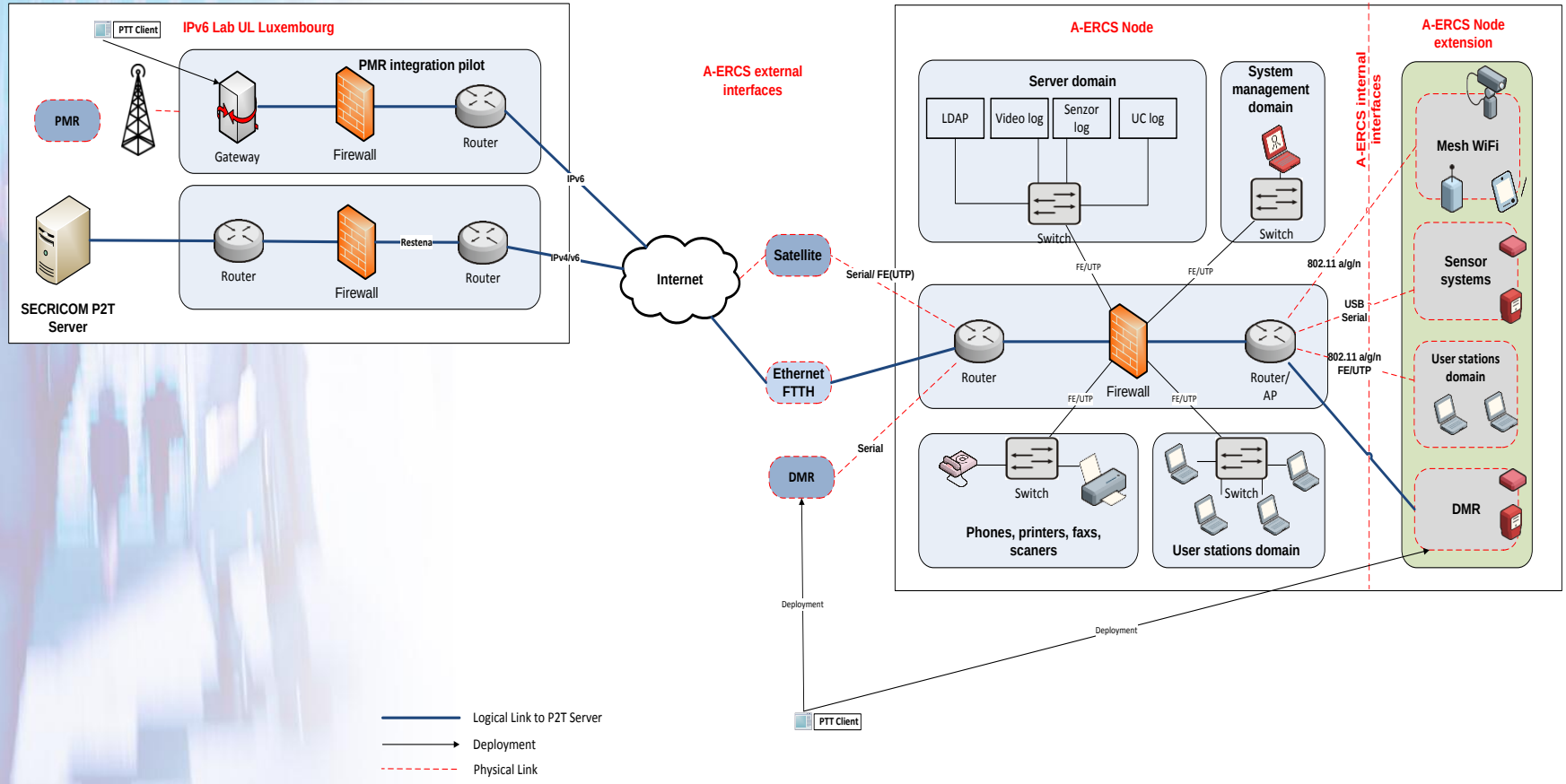
Germany: Data Center on 6



Slovenia: A-ERCS



Cross Border: Emergency Response



GOVERNMENTS ENABLED WITH IPv6

Monitoring

	Webserver	DNS	Mail
www.bundestag.de	000	002	004
www.bundesregierung.de	000	005	002
www.bmi.bund.de	000	115	002
www.auswaertiges-amt.de	000	002	002
www.bmj.bund.de	000	115	002
www.bmg.bund.de	000	115	002
www.bmvbs.de	000	003	001
www.bmfsfj.de	000	224	002
www.bmwi.de	000	002	002
www.bmas.de	000	224	000
www.bmbf.de	000	222	002
www.bundesfinanzministerium.de	000	224	000
www.bmu.de	000	002	002
www.bmz.de	000	002	002
www.bmvg.de	000	222	000
www.bmelv.de	000	333	000

GOVERNMENTS ENABLED WITH IPv6

Monitoring

GEN6

	Webserver	DNS	Mail
www.baden-wuerttemberg.de	000	003	002
www.bayern.de	000	002	001
www.berlin.de	111	333	001
www.brandenburg.de	000	002	002
landesportal.bremen.de	111	223	001
www.hamburg.de	000	224	002
www.staatskanzlei.hessen.de	000	003	003
www.mv-regierung.de	000	002	002
www.niedersachsen.de	000	114	003
www.nrw.de	000	003	001
www.rlp.de	000	003	002
www.saarland.de	000	004	001
www.regierung.sachsen.de	000	224	002
www.sachsen-anhalt.de	000	224	003
www.schleswig-holstein.de	000	002	131
www.thueringen.de	000	224	001
www.tu-berlin.de	000	003	001
www.fokus.fraunhofer.de	111	224	004
www.fraunhofer.de	000	224	004

Network topologies and addressing types/schemes

Examples for addressing plans

Deployment strategies

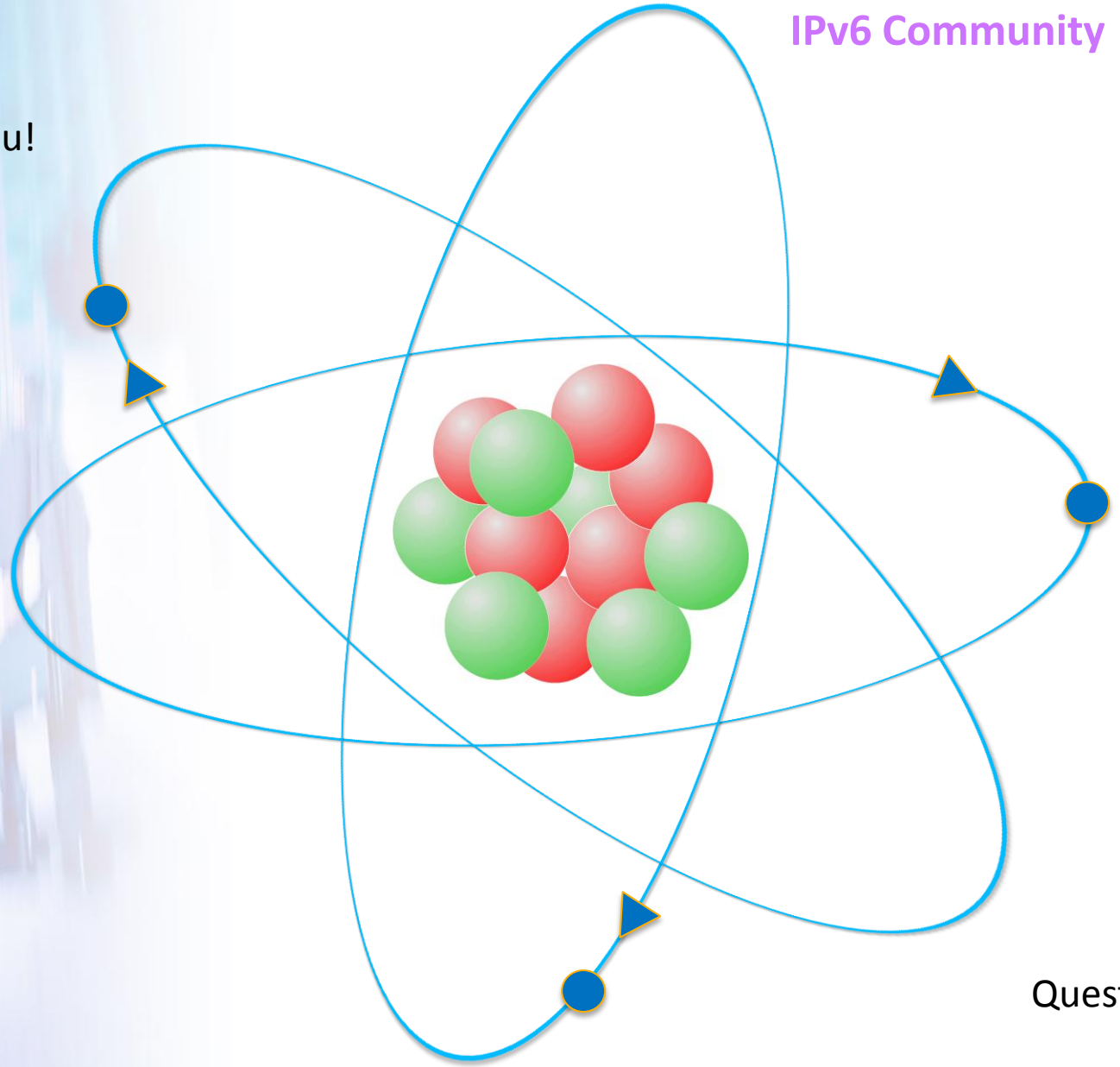
Profiles for Interoperability

Reports on IPv6 implementation
(Requirements, Progress Reports)

Monitoring

IPv6 Community

Thank You!



Questions ?