The RIR System: A Longer Term Gedankenexperiment

2025.12.11

This is Just a Personal View of an Old Hippie Geek

We talk of long range planning as five years

Let's go for 25

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We Can Fool Ourselves that Not Much Will Change in Five Years

25 Years, Not So Much

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Trust!

As we know, trust doesn't scale. What will the community do to maintain cross regional trust in a fracturing system. How can [we] help slow down the natural decay of an aging system? The IETF has really end failed at this so there are some lessons there.

-- Lucy Lynch

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"In person" proofing - who you know - is still very much part of the real glue in internet operations. As the first rank innovators and the second rank maintainers all age out something will have to take the place of those old relationships. Building that next cohort is critical.

-- Lucy Lynch

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What might the RIRs be in 25 Years?

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How do we Stay in Business?

By Improving the Internet for Our Members and the Community

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IP Resources are Likely to be Completely Commoditised

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Do RIRs Become Just Land Ownership Registries for Resource Ownership and Routability?

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Are Brokers Still Needed Only Because of the RIR Bureaucratic Processes

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What if We Maximise Self Service and Automation

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Then Why do we Need Five RIRs?

Cultural Needs

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Maybe Every Country will Demand its own RIR

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This is Political & Legal, Not Cultural/Operational

See 2022 Thorough Organisational and Legal Alternatives & Analyses

- RIPENCC-EBD1629
- RIPENCC-EBD1638
- RIPENCC-EBD1872

[which led us toward Dubai]

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And How Does That Serve the Operators?

Five RIRs is a Pain for Many Already

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Enable New RIRs?

A person far wiser than I says do not build complex and hard to maintain mechanisms to prevent the inevitable

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Twenty Years Ago the RIRs Feared, Ignored, or Worried About the RPKI

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Now RPKI is a Core Service

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How Soon will it be THE Core Service?

Along with Registering Resource Holders' Identities

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And some Side Services such as Reverse DNS

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25 Years Ago, I Gave this Presentation

The DNS Today
Are we Overloading the Saddlebags on an Old Horse?

Randy Bush <randy@psg.com>

IETF / San Diego 2000.12.13

And 7 Years Ago, Bert Gave This One

Welcome to DNS

- or -

Saving the DNS Camel

Bert Hubert / bert.hubert@powerdns.com / @PowerDNS_Bert

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And DNS Now Causes More Damage than BGP

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Every Hyperscalar Has Died by DNS

FaceBook for Two Days!

Long, Messy Deaths

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The Reason is Complexity

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DNS and BGP are both Globally Distributed Databases

And Now the RPKI is theThird

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And We are Complicating It!

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And it will Draw Serious Attacks

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Be Very Suspicious of Anything which Makes RPKI More Complex

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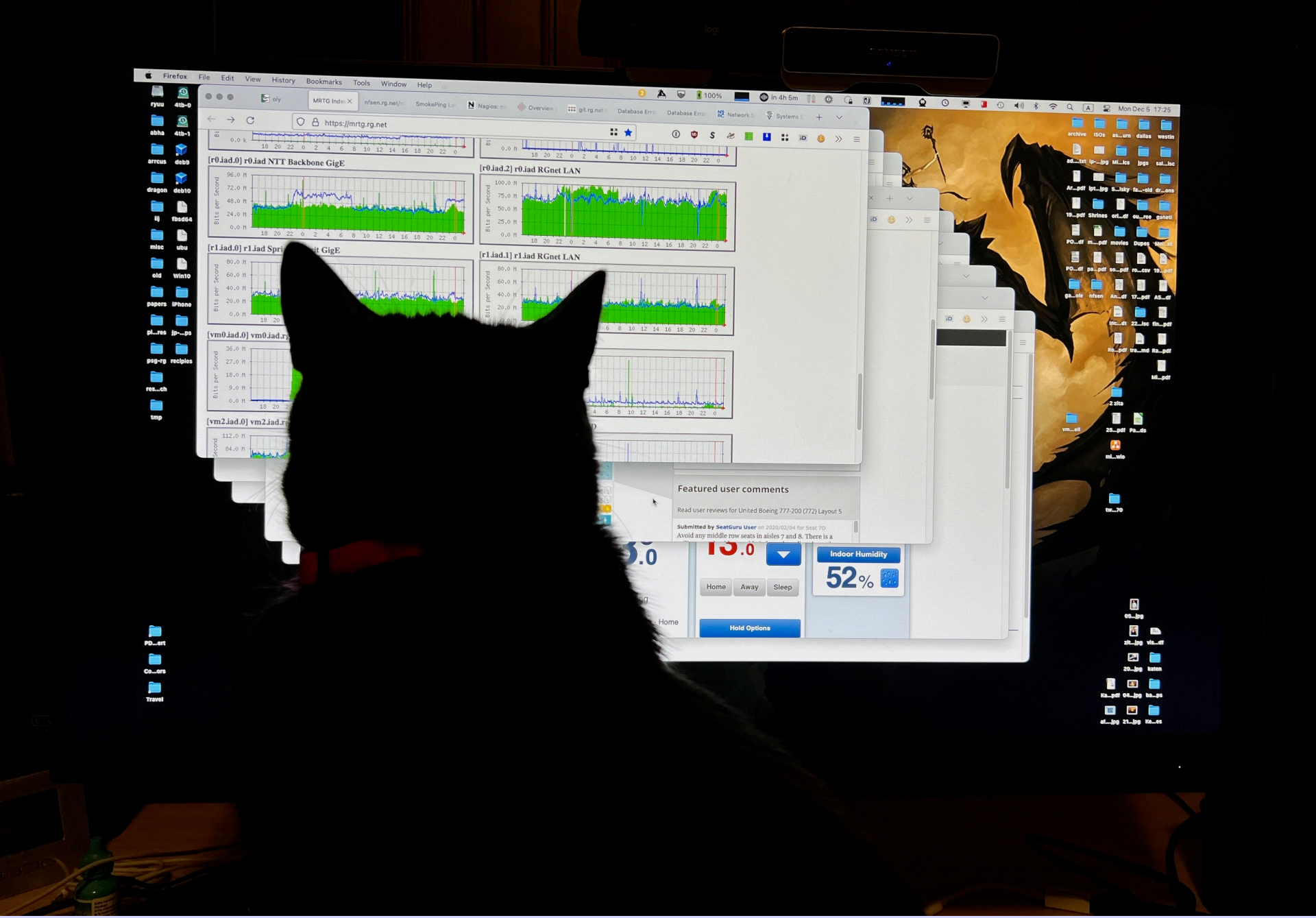

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IRR, Whois, RDAP, … Whatever We Call It is a Hard to Maintain Mess, Much of which is Unused / Redundant

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And it has a Weak Authority and Security Model

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Does it Become Another PKI?

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Be Careful Not To Reinvent X.500, a Massively Complex PKI-Based Universal Directory that Failed

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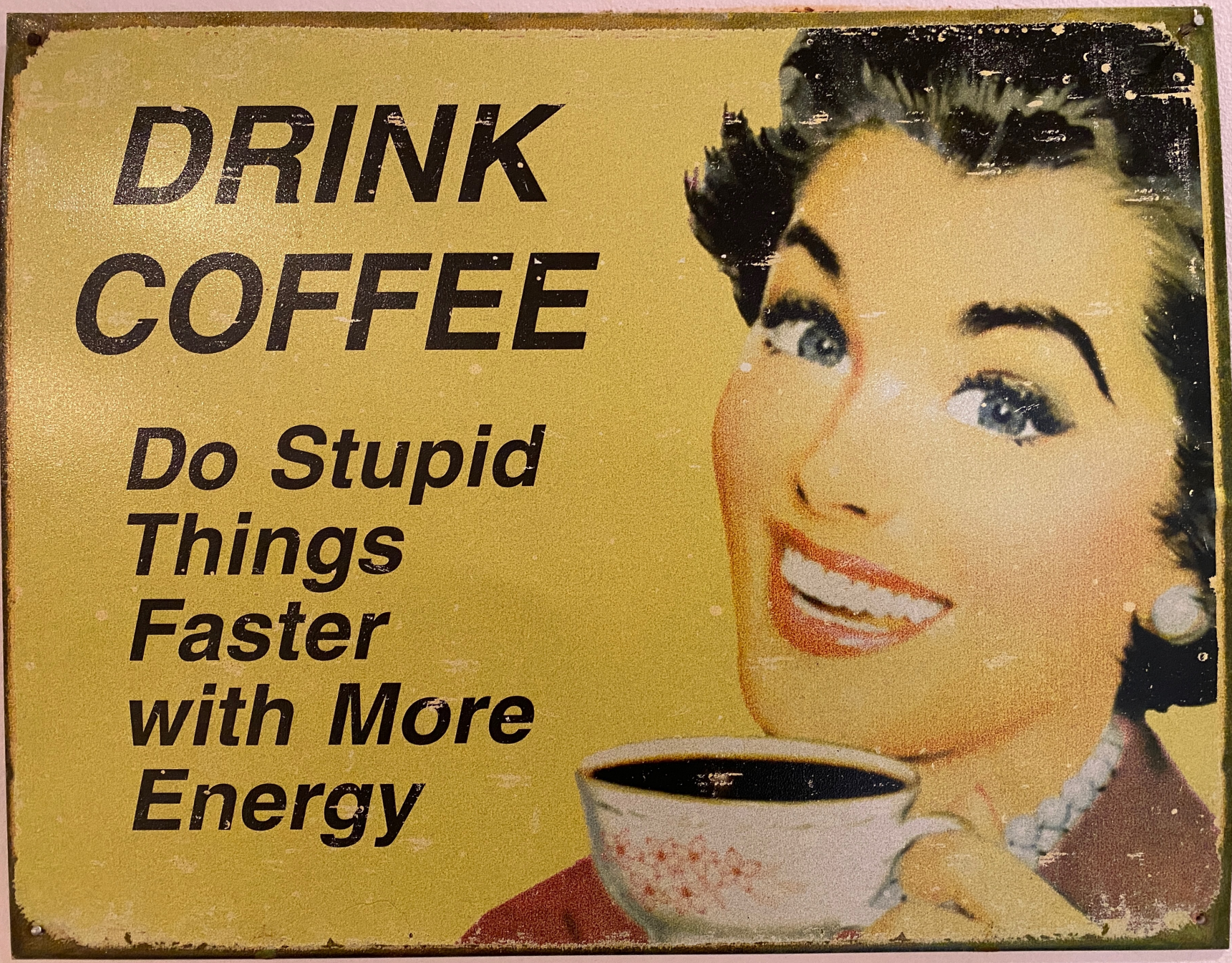
DRINK
COFFEE
Do Stupid
Things
Faster
with More
Energy

The ICANN and the IANA are Captured by an Untrustworthy State

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So RIPE is on its Own Talking to Governments

We Already Have Two People in Brussels

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And the IETF is who Talks with the ITU etc?

They have Been at War for 30 Years

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The NRO is Not Real

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Do We Want to Spend Money, Smart Staff, Legal, … to Legitimise the NRO?

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CLEAN BEFORE EACH LOAD
ADVERTENCIA
Peligro de Incendio
Ninguna lavadora puede eliminar completamente el aceite.
No seque ningún artículo que haya tenido alguna vez cualquier tipo de aceite (incluyendo los aceites de cocina).
Los artículos que contengan espuma, hule o plástico deben secarse en un tendedero o usando un Ciclo de Aire.
No seguir estas instrucciones puede ocasionar la muerte o un incendio.
ADVERTENCIA
Peligro de Explosión
Mantenga los materiales y vapores inflamables, tales como la gasolina, alejados de la secadora.
No seque ningún artículo que haya tenido alguna vez cualquier substancia inflamable (aun después de lavarlo).
No seguir estas instrucciones puede ocasionar la muerte, explosión o incendio.
WARNING
Fire Hazard
WARNING
Explosion Hazard
Keep flammable materials and vapors, such
as gasoline, away from dryer.

How do Public Goods: K Root, Atlas, RIS, Education, Outreach etc. Survive

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These Services are of Major Benefit to Members and All Operators

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Do Members Continue to Pay for Them Indirectly?

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Should/Can RIPE Charge for their Use?

How Would That Work Out of Region?

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Shared Among All RIRs via NRO or Whatever?

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Government Funded a la RouteViews?

If they Fund it, Eventually They Want to Own It

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Long Term Funding Model Or Lose Them!!!

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Are the RIRs Legitimate?

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Can / Will RIRs be Attacked as a Cartel?

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Or by the ITU?

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ICP-2 and the NRO's Legitimacy are at the Core of This

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LEA, Governments, Copyright Holders, … Want Stronger Relationships, Access, and Control

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Data Privacy is an Increasing Concern

And the EU is Backing Off!

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Which Data do we Keep?
And for How Long?
and Who May Access?

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And there is Data Sovereignty

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As is
Relying on the Cloud and Megascalers

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All this is Against a Backdrop of Increasing Geo-Political Turmoil and Climate Disaster

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And Continuing Industry Consolidation

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Will Most of the Current/Smaller ISP/LIRs be Gone?

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Leaving Hyperscalers Telcos, CDNs, and Uninterested End-Sites?

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We are Trying to Make
the Internet a Better
and Safer Place

For Everyone

This Page Intentionally Left Blank

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There is a Quiz!

Take Home / Open Book

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Charge for IPv6 as we do for IPv4?

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Maintain Focus & Expense of Justifying Utilisation?

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Maximise Self-Service & Automation?

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Attempt to Displace IPvX Address Brokers?

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Should the NCC Plan to Grow? Shrink? Stay About the Same?

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Encourage or Resist Formation of New RIRs?

Enable NIRs?

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Make NRO Real?

Thin or Thick Model?

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How to Fund Non-Reg: K Root, RIS, Atlas, Education, …

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More Focus on Brussels to Facilitate Clue Exchange?

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How to End this Ridiculously Long Slide Deck?

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