Best Current Operational Practices – Efforts from the Internet Society

Deploy360 – Internet Society

Internet Society

About Me – A Quick History

Name: Jan Žorž

Founder of Slovenian Go6 Institute

Worked in Internet operations for 20+ years

13 years of IPv6 experience

Active and contributing member of RIPE and IETF communities

Primary co-author of RIPE-501/RIPE-554 IPv6 procurement BCP document

Co-author of RFC 6346 (A+P approach to IPv4 depletion)

Joined Internet Society Deploy360 Programme in December 2012

IPv6, DNSSEC, and Routing knowledge including tutorials, case studies, training resources, and more.

http://www.internetsociety.org/deploy360/

About Deploy360

The Challenge:

– The IETF creates protocols based on open standards, but some are not widely known or deployed

– Many people seeking to implement these protocols are confused by a lack of clear, concise deployment information

The Deploy360 Solution:

– Provide hands-on information to advance real-world deployment

– Work with technology experts to collect and create technical resources and openly distribute them to fast-following networks around the globe

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Creating regional repositories of Best Current Operational Practices around the world

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A BCOP Repositories – THE CHALLENGE

Best current operational practices are shared between operators in many different ways:

- hallway conversations

- operator group presentations

- email lists

- web forum threads

- Personal relationships

- IRC/chats

A BCOP Repositories – THE CHALLENGE

There is currently no quick and easy way for an operator to find and reference all of these best practices for immediate use in administering their local network

There is too much clutter in the IT landscape for network operators to easily find reliable, vetted, user-friendly documentation

There may be a need for a globally recognized document series that documents the best practices for operationalizing Internet technologies

A BCOP Repositories – SOLUTION IDEA

We believe a neutral and regionally organized repositories of documents that describes best current operational practices could help:

- speed up deployment of IPv6 and DNSSEC

- make the routing infrastructure more resilient

- simplify network deployments for less traveled operators

These documents should be written by experienced operators and be globally accessible to everyone in an open and neutral location without fees

We are committed to assisting in the creation and promotion of this repositories.

OVERALL SOLUTION IDEA

Let's create a discussion groups inside RIR/NOG communities where operator-to-operator communication and creation of BCOP documents happens

The same group **COULD** be used for operators to communicate their needs and wants from the standards process

This BCOP processes should be owned by operators' groups collectively around the globe

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Regional BCOP Groups – DISCUSSION TOPICS

Presentations from operators that lay out their issues using existing technology, protocols, standards, and implementations, resulting in creation of BCOP documents

Open discussion of what operators need to ease the deployment of new technologies - features and mechanisms needed in the real world

Process owned by operators with content created by operators for other operators

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BCOP work and feedback from around the planet

- NANOG57 – Orlando

- PLNOG10 – Warszaw

- World IPv6 Congress – Paris

- North American IPv6 Summit – Denver

- LACNOG – Medellin

- RIPE Regional SEE2 meeting – Skopje

- CARIBNOG5 - Barbados

- RIPE66 – Dublin

- ENOG – St. Petersburg

- AfNOG/NIC – Lusaka

- UKnof – London (here I am ☺)

- MENOG – Kuwait (still to go)

- PLNOG11 – Krakow (still to go)

- RIPE67 – Athens (still to go)

- LACNOG – Curacao (still to go)

- AFRINIC19 – Ivory Coast (still to go)

BCOP Repositories – already started?

Some years ago, the NANOG community started an IPBCOP effort (Aaron Hughes, Chris Grundemann, and others)

That effort has now becaome a regional BCOP track/WG at NANOG

They asked us to help with starting and promoting a global BCOP repository

BCOP Repositories – already started?

Enormous feedback from RIPE community in Dublin made us change the proposal and turn it upside-down:

-No more top-down rigid structure

-Not top-heavy anymore

-Directing our efforts and resources in helping the operators' communities around the world start the work, and identifying the topics and individuals in those communities that would lead the regional initiatives
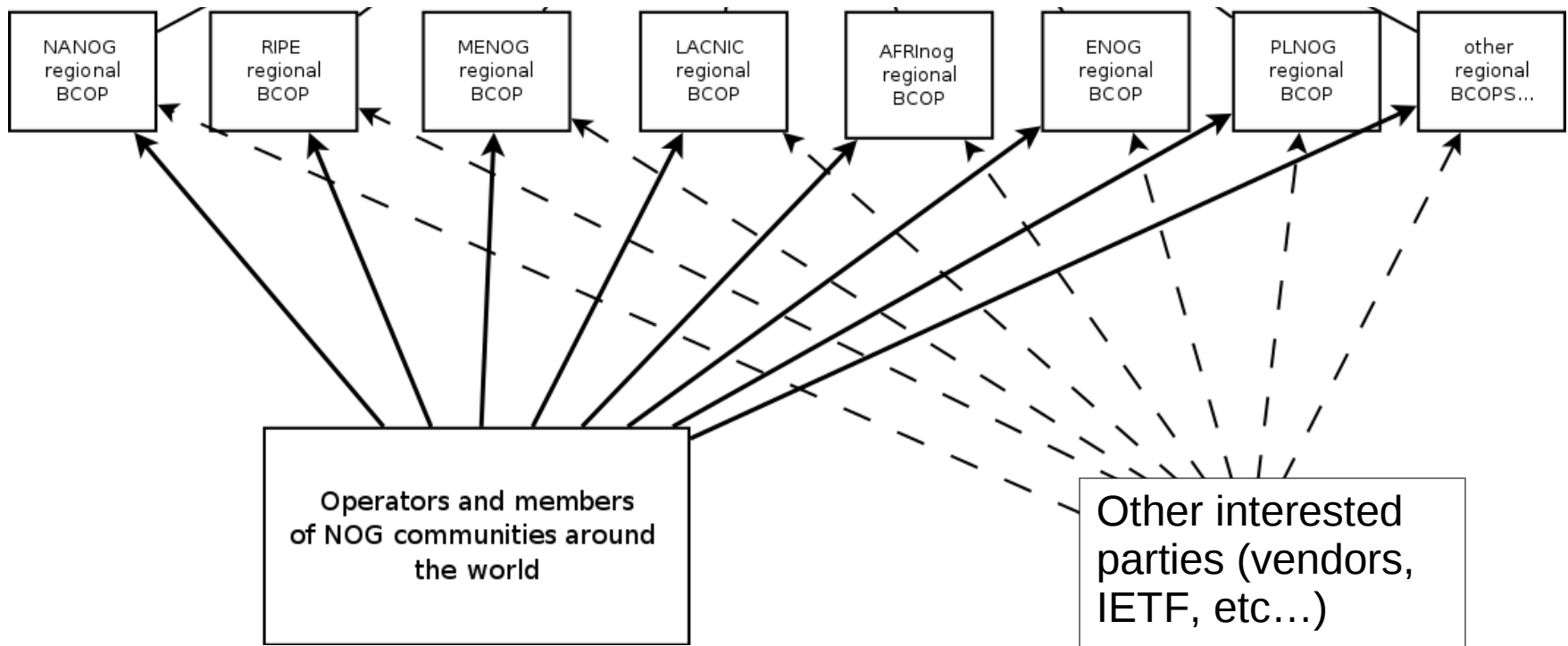
BCOP Repositories – already started?

Enormous feedback from RIPE community in Dublin made us change the proposal and turn it upside-down:

-Let's start the work regionally, produce something useful, and publish it.

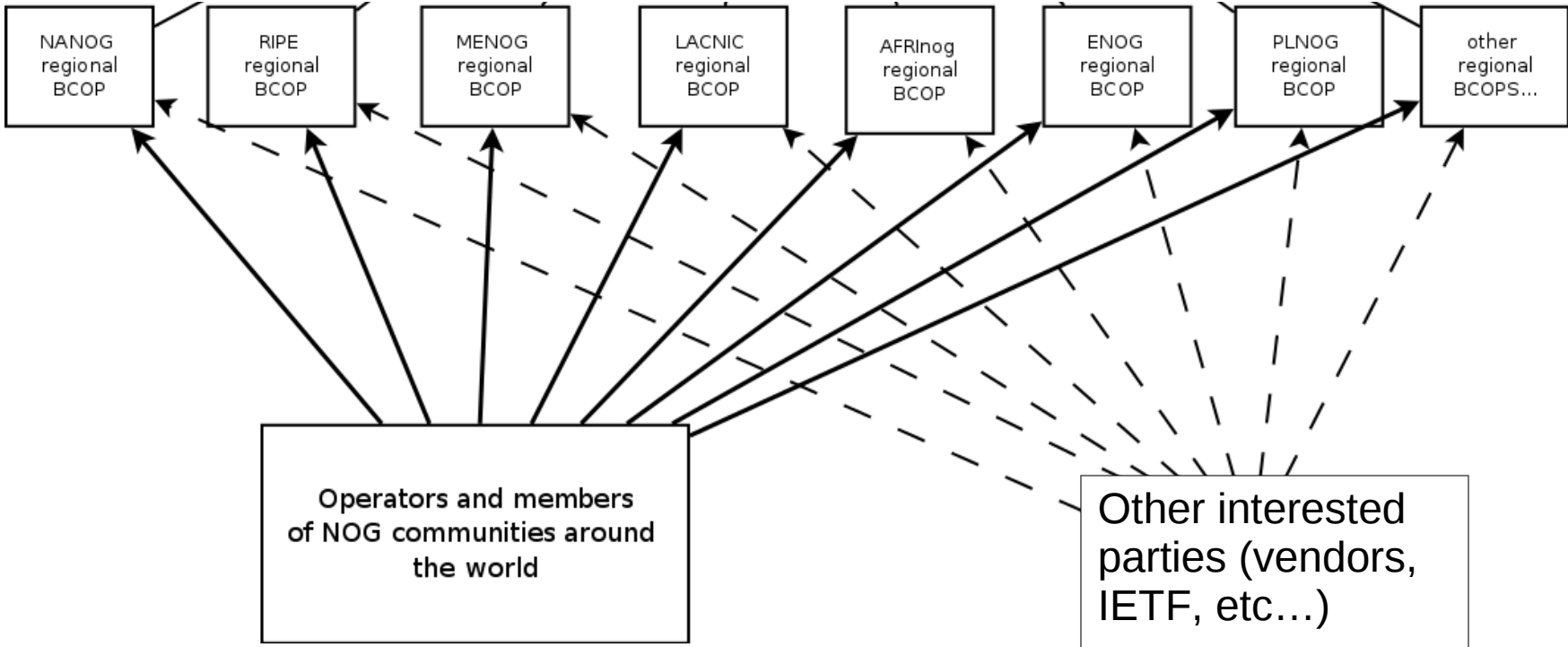-Coordination and a global repository might naturally emerge out of a real need.

First idea of proposed BCOP Schema
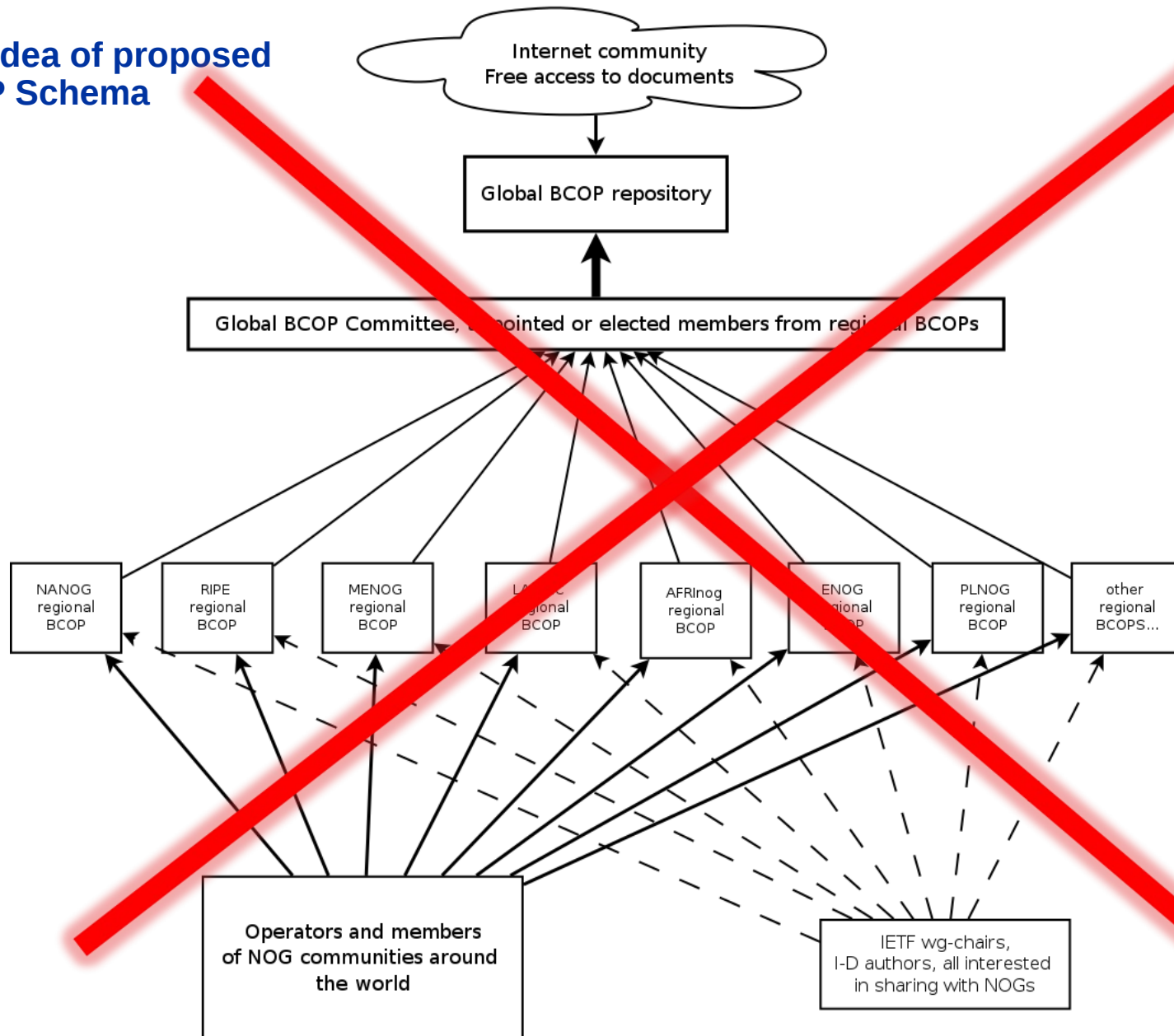
Let's get the content in the regions started first; the global structure might emerge naturally

Websites

BCOP topics:

http://www.internetsociety.org/deploy360/about/bcop/topics/

What's going on around the world:

http://www.internetsociety.org/deploy360/about/bcop/

Some of the identified topics
(mainly from NANOG and RIPE region so far)

- Inhibiting Address Spoofing

- BGP Policies

- Peering Policies

- DNS Policies

- Email Policies

- ICMP Filtering

- Pingable attribute in whois

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Some of the identified topics
(mainly from NANOG and RIPE region so far)

- How to test your network performance

- How to check your visibility from global Internet

- Ethernet OAM

- De-Aggregation: strict filtering /48s out of /32

- How are operators using IRR?

- IPv6 enterprise network renumbering scenarios, considerations, and methods

- … (we need more suggestions)

Removing one of the next IPv6 speedbumps

- One of the first speedbumps was addressed by RIPE-554

- Next speedbump is lack of IPv6 knowledge at ISP helpdesks

- Let's start a document "Generic IPv6 troubleshooting and procedures for helpdesks around the world…"

- This could be a first cross-regions cooperation effort as every region is probably a bit different.

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BCOP activity around the world:

- Africa region: we identified the "engine" of the effort, mr. Douglas Onyango and we are starting the initiative

- Latin America: starting a BCOP at Curacao meeting

- North America: NANOG BCOP

- Europe: RIPE BCOP

- Middle East: Still to go

- Asia: Seed planted at APNIC meeting

Advantages of BCOP work

Common understanding of best operational practices amongst operators worldwide

Documents created by operators may prevent governments from creating and mandating their own operational practices documents

Improved communication between operators globally

A regional BCOP Repository – Question nr. 1:

Who in this room is willing to participate in the BCOP process (and actually do some work)?

Jan Žorž

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