Best Current Operational Practices (BCOP) – updates and results from around the world

Deploy360 – Internet Society

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

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

What's a BCOP?

Best Current Operational Practice

- A current document describing how to best achieve an operational practice agreed by subject matter experts and periodically reviewed by community

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Problem Statement

- I have an operational problem and would like to know the best current operational practice to solve it.

- There are hundreds of operational forums globally

- All stored in different formats, some searchable, rarely have speech text or video, no vetting, and state unknown.

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The Challenge

Best Current Operational Practices have historically been shared between operators in many different ways:

- hallway conversations

- operator group presentations

- email lists

- web forum threads

- Personal relationships

- IRC/chats

The Challenge, cont.

Not all operators have access to all of these ad-hoc sharing methods (some, particularly in emerging and developing areas, have none)

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, current, user-friendly documentation

A Solution Idea - BCOP Repositories

We believe a neutral and regionally organized repository of documents that describes Best Current Operational Practices could help:

- speed up deployment of IPv6, DNSSEC, and other key standards

- 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 these repositories.

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What is a BCOP repository?

Open repository of living BCOPs developed in an open forum in which anyone may participate

Bottom Up development process by engineers, for engineers
  – Operator consensus driven

Transparent with all aspects documented and publicly available

On-going and revision controlled, subject to ongoing supervision
  – Vetted via community-written development process and subject matter experts

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What is a BCOP repository? (cont.)

Free from Organizational Agendas
- reflect individual operator experiences

Synthesized knowledge from entire community
- reflect the vast knowledge from all parts of the world

Communal Knowledge available to all
- Adds documentation for any and all to help advance the Internet's development

Advancement of the Internet to all reaches of the world (and beyond)
- contribute to the common knowledge base for all facets of the evolving Internet everywhere in the world

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BCOP work and feedback from around the planet

- NANOG57 – Orlando

- PLNOG10 – Warsaw

- 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

- MENOG – Kuwait

- PLNOG11 – Krakow

- RIPE67 – Athens

- LACNOG – Curacao

- ION Toronto

- AFRINIC - Côte D'Ivoire

- JANOG – Japan (here am I)

- NZNOG – New Zealand (s.t.g.)

- APRICOT – Bangkok (s.t.g.)

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BCOP Repositories – already started?

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

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

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

BCOP Repositories – already started?
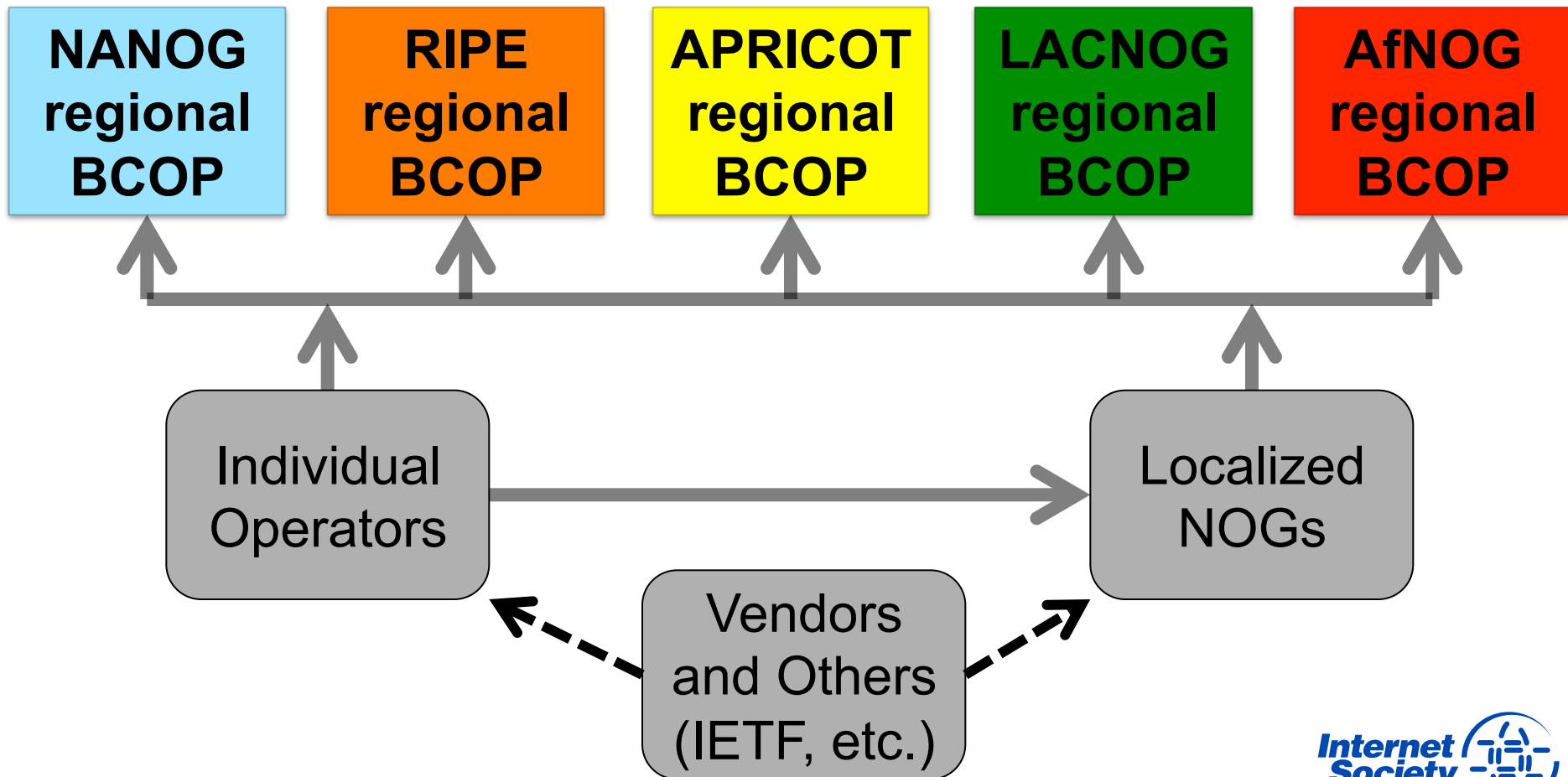
Our original proposal involved a top-down global structure

Strong feedback from the global operator community (particularly at RIPE and NANOG) led us to pivot:

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

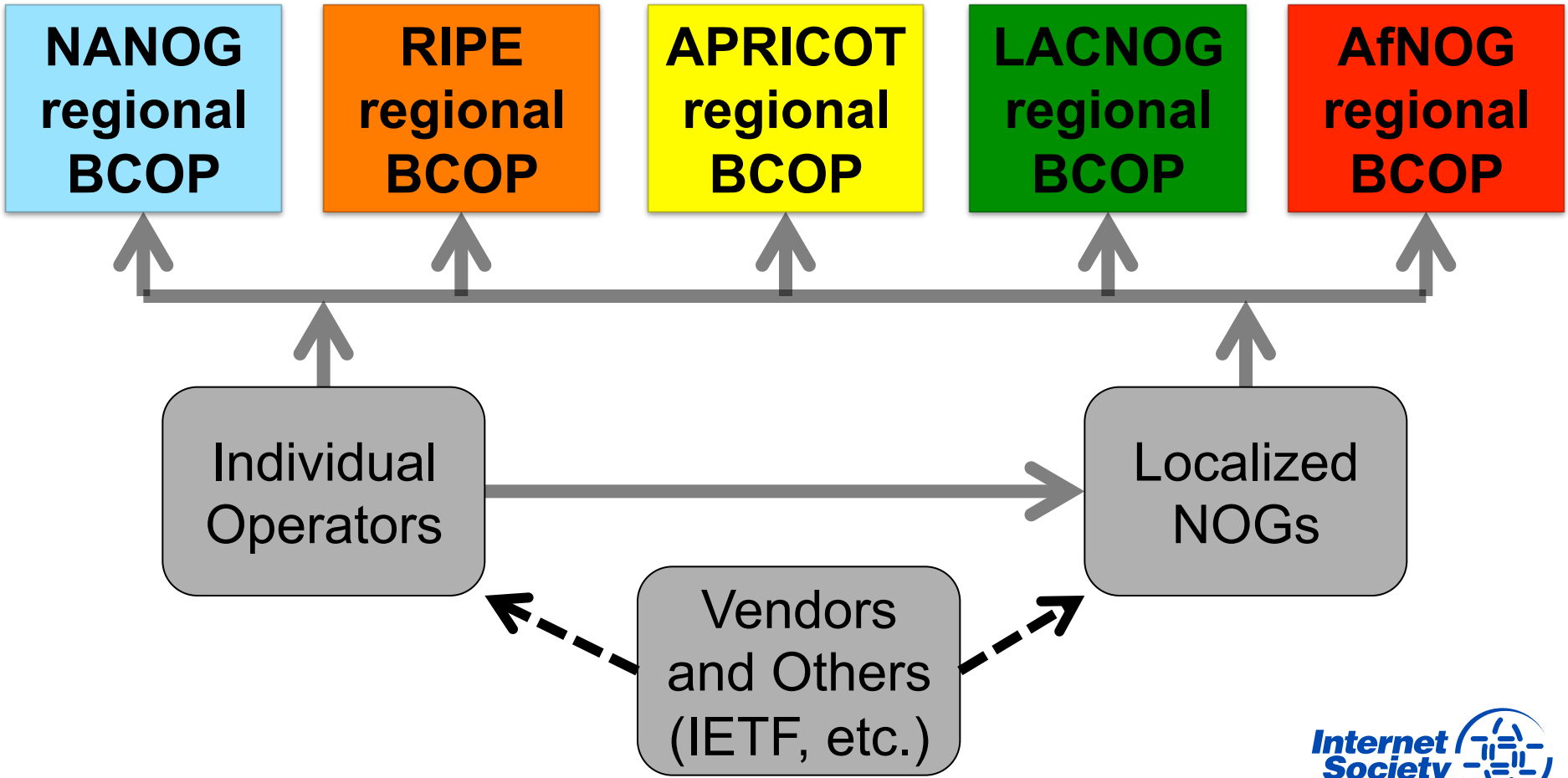- Coordination and a global repository might naturally emerge out of a real need

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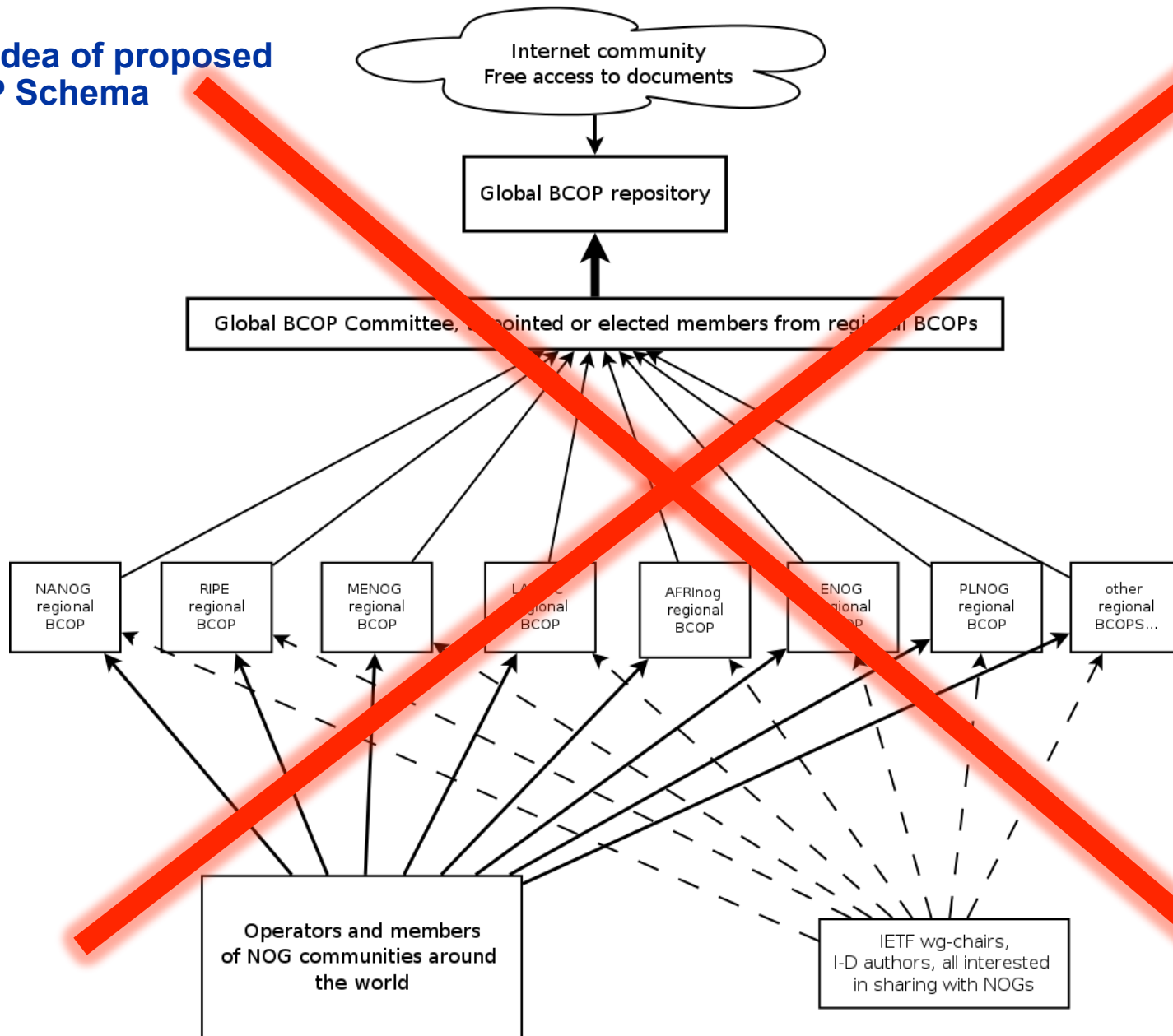
Let's get the content in the regions started first;
the global structure will emerge naturally if needed

| NANOG regional BCOP | RIPE regional BCOP | APRICOT regional BCOP | LACNOG regional BCOP | AfNOG regional BCOP |

Individual Operators

Localized NOGs

Vendors and Others (IETF, etc.)

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NANOG regional BCOP

RIPE regional BCOP

APRICOT regional BCOP

LACNOG regional BCOP

AfNOG regional BCOP

Individual Operators

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BCOP activity around the world:

- Africa region: We started the initiative (BoF) at AFRINIC meeting in Côte D'Ivoire, lead by Douglas Onyango

- Latin America: started a BCOP Task Force (Carlos Martínez Cagnazzo and Antonio Marcos Moreiras volunteered to run the effort)

- North America: NANOG BCOP Track established

- Europe: RIPE BCOP Task Force created

- Middle East: Presented at MENOG in Kuwait

- Asia: Here I am at JANOG, talking about it also at NZNOG and APRICOT

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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)

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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

- We started 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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Removing one of the next IPv6 speedbumps

Title: *"Generic IPv6 troubleshooting procedures for helpdesks around the world"*

Contributors: Lee Howard, John Jason Brzozowski, David Freedman, Jason Fesler, Tim Chown, Sander Steffann, Chris Grundemann, Jan Žorž

This document is intended to provide a starting point for technical support staff at ISPs or enterprise IT helpdesks in supporting IPv6. Problems with IPv6 are very rare, but fear of the unknown has prevented or delayed many organizations from rolling out IPv6 to their users, when all technical problems have been solved. While this document cannot encompass all possible problems, it should provide a solid first step for front-line support personnel.

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/

Jan Žorž

Internet Society Deploy360 Programme
http://www.internetsociety.org/deploy360/

mailto:<zorz@isoc.org>

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