Internet Society

Collaborative Security & MANRS

ENOG 10 – 14 October 2015, Odessa

Maarit Palovirta (palovirta@isoc.org)

Internet Society
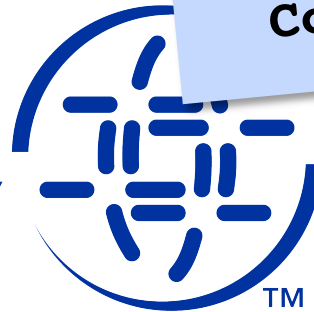
Collaborative Security

An approach to tackling Internet Security issues

APRIL 2015

Internet Society™

Collaborative Security

- Fostering Confidence and Protecting Opportunities
- Collective Responsibility
- Evolution and Consensus
- Fundamental Properties and Values
- Think Globally, Act Locally

Routing Resilience Manifesto
# aka MANRS

https://www.routingmanifesto.org/

https://www.manrs.org/

Mutually Agreed Norms for Routing Security (MANRS)

- **Voluntary, bottom-up agreement between network operators**
  - ❖ Aims to improve the security of the Internet's routing system

- **Builds a visible community of security-minded operators**
  - ❖ Promotes culture of collaborative responsibility

- **Defines four concrete actions that network operators should implement**
  - ❖ Technology-neutral baseline for global adoption

Internet Society ™

Good MANRS
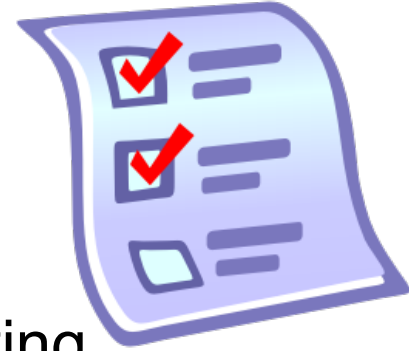
1. **Filtering** – Prevent propagation of incorrect routing information.

2. **Anti-spoofing** – Prevent traffic with spoofed source IP addresses.

3. **Coordination** – Facilitate global operational communication and coordination between network operators.

4. **Global Validation** – Facilitate validation of routing information on a global scale.

MANRS participants today

RIPE NCC	NL	3333	✔	✔	✔	✔
KPN	NL	1136, 5615, 8737	✔	✔	✔	✔
IT.Gate	IT	12779	✔	✔	✔	✔
Cogent Communications, Inc.	US	174	✔	✔	✔	✔
Workonline Communications	ZA	37271	✔	✔	✔	✔
BIT BV	NL	12859	✔	✔	✔	✔
OpenCarrier eG	DE	41692		✔	✔	✔
NOOR Data Networks	EG	20928	✔		✔	✔
RUNNet	RU	3267	✔	✔	✔	✔
Swisscom Ltd.	CH	3303	✔	✔	✔	✔
Gigas	ES, US	57286, 27640	✔	✔	✔	✔

MANRS is not (only) a document – it is a commitment

1) The company **supports** the Principles and **implements** at least one of the Actions for the majority of its infrastructure.

2) The company becomes a Participant of MANRS, helping to **maintain and improve** the document and to **promote** MANRS objectives

Internet Society

Why Should My Company Join?

➢ **Because routing security is a sum of all contributions**

➢ **Because this is a way to demonstrate a new baseline**

➢ **Because a community has gravity that can attract others**

Internet Society ™

Thank you for your attention!

Maarit Palovirta (palovirta@isoc.org)

@European Regional Bureau

Internet Society