A more consistent RPKI service for the global Internet community

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What’s your role in the Internet routing system?

- Operator of content network
- Operator of transit network
- Developer of tools
- Researcher
- Other?
What I would like you to take from this preso...

AWARENESS ABOUT THE NRO RPKI PROGRAM

ENOUGH INTEREST TO REACH OUT

ENOUGH CURIOSITY TO WANT TO LEARN MORE
A bit about me and the NRO

• About me
  – Telematics Engineer → Product Manager → Ontological Coach
  – IETF attendee but have not actively participated in any WG
  – LACNIC → Master’s → APNIC → NRO

• NRO = Number Resource Organization

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To actively contribute to an open, stable and secure internet, through:

- Providing and promoting a coordinated Internet number registry system
- Being an authoritative voice on the multi-stakeholder model and bottom-up policy process in Internet governance
- Coordinating and supporting joint activities of the RIRs
THE NRO RPKI PROGRAM
Program Intro

• NRO EC agreed to work toward providing a robust, coordinated and secure RPKI service

The NRO RPKI Program was created

• Purpose: “To provide a more consistent and uniformly secure, resilient and reliable RPKI service”
• Removing barriers for RPKI adoption currently experienced by network operators who create RPKI objects through multiple RIRs.
Why is this program important?

- It creates a space for structured coordination and collaboration on RPKI among the RIRs
- Current diversity/inconsistency among RIRs

Source: https://manrs.org/resources/common-roa-management-requirements-and-security-standards-for-operators-of-rpki-services-ors/
Differences in different aspects of the RPKI system

• In RPKI related services being offered
  • Hosted/delegated, testing env, API
• In user experience
• In API endpoints
• In design decisions, implementations, etc.
E.g. Differences in the UI
Are those differences hindering the adoption of RPKI?
What do we want to achieve?

• **Purpose**: “To provide a more consistent and uniformly secure, resilient and reliable RPKI service”

• More specifically, we want to achieve the following outcomes:
  – Definition of what a **single global RPKI system** looks like.
  – Better **understanding** and improved **transparency of the robustness** of the RPKI system
  – **Enhanced security consistency** of the RPKI system across the different RIRs
  – The technical community is kept **informed and engaged** throughout the program, and their **concerns are addressed in a coordinated way.**
What does a single global RPKI system look like?

• List of RPKI-related services/features with current status for each RIR
  – To identify and prioritise gaps
• Problem statement for current TA configuration, including history since 2005
• Prep for user research to validate whether the differences in RPKI-related services among RIRs are hindering RPKI adoption.
Who is “we”? – The Program Team

The NRO EC, as the executive sponsor of the program, with a role of strategic goal prioritisation, approval and funding.

The NRO RPKI Program Manager, with a role of operational direction, oversight and support.

The RPKI Steering Group, which includes RPKI experts from the five RIRs and has a role of specific direction and advise related to agreed objectives.

Other RIR RPKI Subject Matter Experts (SMEs) and consultative groups, with a role of goal delivery and execution.
LEARN MORE AND REACH OUT
Do you want to know more?

• Visit our webpage:
  – https://www.nro.net/technical-coordination/security/certification/#rpki_program

• Read our blog series:
  – https://www.arin.net/blog/2024/03/11/improving-rir-alignment-rpki/
  – https://www.arin.net/blog/2024/05/15/nro-rpki-program-series-2/
We want to hear from you!

• What are the **main barriers or obstacles** for RPKI adoption that could be solved (or at least improved!) through **better coordination and collaboration** among the RIRs?

• Do you have ideas of initiatives we should consider?

• Please share them sending an email to **rpki_program@nro.net**
THANKS FOR YOUR ATTENTION!