How can we work together to improve security and resilience of the global routing system?
The Mutually Agreed Norms for Routing Security (MANRS)

- https://www.routingmanifesto.org/manrs/
- Defines a minimum package
- Emphasizes collective focus

“While the mass media often create awareness—knowledge of an innovation, interpersonal communication with peers is necessary to persuade most individuals to adopt a new idea” (Rogers & Kincaid, 1981).
The MANRS document, in more detail

- Principles of addressing issues of routing resilience
  - Interdependence and reciprocity (including collaboration)
  - Commitment to Best Practices
  - Encouragement of customers and peers
- “The package” indicating the most important actions
  - BGP Filtering
  - Anti-spoofing
  - Coordination and collaboration
- High-level document specifying “what”
  - “How” is in external documents (e.g. BCPs)
Good MANRS

1. Prevent propagation of incorrect routing information

2. Prevent traffic with spoofed source IP address

3. Facilitate global operational communication and coordination between the network operators
MANRS is not (only) a document – it is a commitment

Clear and tangible message:

“We do at least this and expect you to do the same”
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. Implemented Actions are marked with a check-box. The Action "Facilitate global operational communication" cannot be the only one and requires that another Action is also implemented.

2) The company becomes a Participant of MANRS, helping to maintain and improve the document, for example, by suggesting new Actions and maintaining an up-to-date list of references to BCOPs and other documents with more detailed implementation guidance.
Are you interested in participating?

Filtering  Anti-Spoofing  Coordination  Global scale
Next Steps

• Redesigning the site for the launch – 6 November
• Expanding the group of participants
• Expanding the scope of the MANRS