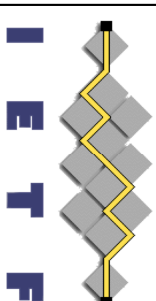
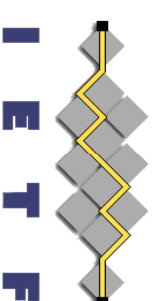


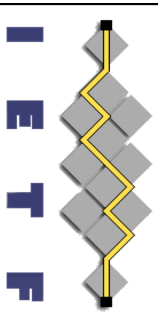
Operational Security Considerations for IPv6 Networks



K. Chittimaneni, E. Vyncke, M. Kaeo

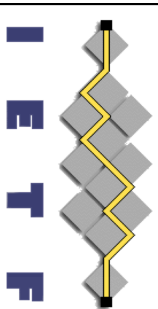


IETF 83, March 26 2012,
Paris, France



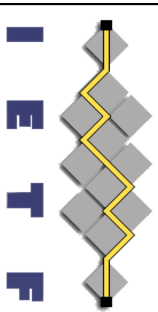
Updates

- Goal is to be short and practical and to provide pointers to further details
- Modified layout to start with generic security considerations (done) and then apply to specific scenarios (yet to be done):
 - Enterprise
 - Service Provider
 - Residential



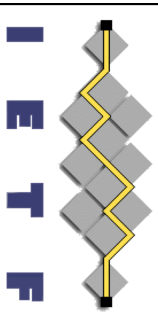
Generic Security Topics

- Addressing Architecture
 - Overall Structure
 - Use of ULAs
 - Point-to-Point Links
 - Privacy Addresses
 - DHCP/DNS Considerations
- Link Layer Security
 - SEND and CGA
 - DHCP Snooping
 - ND/RA Rate Limiting / Filtering



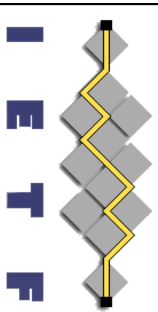
Generic Security Topics

- Control Plane Security
 - Control Protocols
 - Management Protocols
 - Packet Exceptions
- Routing Security
 - Authenticating Neighbors/Peers
 - Securing Routing Updates Between Peers
 - Route Filtering



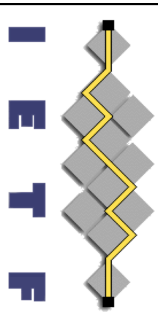
Generic Security Topics

- Logging/Monitoring
 - Data Sources
 - Use of collected data: inventory, forensic, ...
- Transition/Coexistence Technologies
 - Dual Stack
 - Tunneling Mechanisms
 - Translation Mechanisms
- General Device Hardening



Next Steps

- Get feedback from -00 draft and incorporate working group comments
 - **draft-vyncke-opsec-v6-00.txt**
- Continue to work with v6ops and homenet WGs to avoid overlaps or conflicts
- Contact us at v4tov6sec@snozzages.com



Q&A

THANK YOU!