IPsec in IPv6 Node Requirements draft-ietf-6man-node-req-bis-05.txt

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IPv6 Node Requirements

- RFC 4294 (IPv6 Node Requirements) says:
 - IPsec Architecture (RFC 4301) is a MUST
 - Implies IKEv2 is a MUST
 - But 4294 says key management is only a SHOULD
- Problems with the 4294 recommendation:
 - Key management recommendation is mushy/contradictory
 - IPv6/6man WG has never been comfortable with making IKEv2 a MUST for ALL devices
 - Doesn't reflect reality: many devices with IPv6 choose not to include IPsec & IKEv2; MUST language won't change that
 - Mandating IPsec without mandating IKEv2 seems wrong
 - Classes of devices (e.g. constrained) exist for which other security mechanisms are reasonable choices
- Proposed Revision: make IPsec AND IKEv2 (strong) SHOULD
 - Include more text with practical guidance and context

What MUST/SHOULD Means

- MUST/SHOULD as defined in RFC 2119 says:
 - 1. MUST This word, or the terms "REQUIRED" or "SHALL", mean that the definition is an absolute requirement of the specification.
 - 3. SHOULD This word, or the adjective "RECOMMENDED", mean that there may exist valid reasons in particular circumstances to ignore a particular item, but the full implications must be understood and carefully weighed before choosing a different course.
- MUST is absolute: no exceptions
- SHOULD is the right keyword when exceptions need to be made

Questions/Comments?