Annex I: A.1 justification for proposed draft new Recommendation X.SRNV

Question:	2/17	**Proposed new ITU-T Recommendation**	**29 August-6 September 2017**
Reference and title:		Recommendation ITU-T <X.SRNV> "Security Requirements of Network Virtualization"	

Scope (defines the intent or object of the Recommendation and the aspects covered, thereby indicating the limits of its applicability):

The recommendation analyses security threats and challenges on Network Virtualization (NV), and provides the security requirements on physical resources layer, virtual resources layer and LINP layer in NV.

Summary (provides a brief overview of the purpose and contents of the Recommendation, thus permitting readers to judge its usefulness for their work):

Network Virtualization (NV) is a technology that realizes isolated and flexible networks in order to support a broad range of network architectures, services, and users that do not interfere with others. It also enables the easy establishment of experimental networks and accelerates research and development on future network technologies.

network virtualization have three layers: physical resources layer, virtual resources layer and logically isolated network partitions (LINP) layer. All the three layers face particular security threats and challenges such as management system security vulnerabilities, eavesdropping, etc. This recommendation is to analyse the security threats and challenges and security requirements of physical resources layer, virtual resources layer and LINP layer in NV. This recommendation could help to address the security issues in Network Virtualization implementation.

Relations to ITU-T Recommendations or to other standards (approved or under development):

- ITU-T Y.3011 (Framework of network virtualization for future networks): focuses on the framework of network virtualization for future networks, but only describes common high-level security requirements on NV.
- ITU-T Y.3012 (Requirements of network virtualization for future networks): focuses on the basic functional requirements of network virtualization for future network, but also only describes common high-level security requirements on NV.
- ETSI GR NFV-SEC 001 (NFV Security; Problem Statement): focus on the high-level security threats analysis on Network Functions Virtualization (NFV), but only focus on NFV not NV and no clarification of security requirements of Network Virtualization.
- ETSI GR NFV-SEC 002 (NFV Security; Cataloguing security features in management software): focuses on high-level requirements on the management software of NFV, but only focus on NFV not NV and no clarification of security requirements of Network Virtualization.

Liaisons with other study groups or with other standards bodies:

ITU-T SG13，ETSI

Annex II: Draft Recommandation ITU-T X.SRNV

Security Requirements of Network Virtualization

Summary

<Mandatory material>

Keywords

<Optional>

Introduction

<Optional – This clause should appear only if it contains information different from Scope and Summary>

1   Scope

The recommendation analyzes security challenges and threats on Network Virtualization, and provides the security requirements on physical resources layer, virtual resources layer and LINP layer in Network Virtualization (NV).

2   References

[1]   ITU-T X.3001 (2011), *Future network: Objectives and design goals.*

[2]   ITU-T Y.3011 (2012), *Framework of network virtualization for future networks.*

[3]   ITU-T Y.3012 (2014), *Requirements of network virtualization for future networks.*

3   Definitions

<Check in ITU-T Terms and definitions database under http://www.itu.int/sancho/index.htm if the term is not already defined in another recommendation. It could be more consistent to refer to such a definition rather than redefined it>

4   Abbreviations

<Include all abbreviations used in this Recommendation>

5   Convention

6   Overview

7   Security challenges and threats of Network Virtualization

8   Security requirements of physical resources layer in Network Virtualization

9   Security requirements of virtual resources layer in Network Virtualization

10   Security requirements of LINP layer in Network Virtualization

_____

Error! Use the Home tab to apply Docnumber to the text that you want to appear here.

Error! Use the Home tab to apply Docnumber to the text that you want to appear here.