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Information technology — Security techniques — Cybersecurity and ISO and IEC Standards

Technologies de l'information — Techniques de sécurité — Cybersécurité et normes ISO et IEC

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Foreword

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This document was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 27, *IT Security techniques*.

Introduction

Security on the Internet and other networks is a subject of growing concern. Organizations around the world, in both government and industry sectors, are seeking ways to address and manage cybersecurity risks, including via baseline cybersecurity measures that can be implemented as requirements or guidance. The demonstrated security and economic value of utilising existing best practices to develop approaches to cyber risk management has led organizations to assess how to use and improve upon existing approaches.

Perspectives, and consequent approaches, to risk management are affected by the terminology used, e.g. “cybersecurity” versus “information security”. Where similar risks are addressed, this different perspective can result in “cybersecurity” approaches focusing on external threats and the need to use information for organizational purposes, while, in contrast, ”information security” approaches consider all risks whether from internal or external sources. There can also be a perception that cybersecurity risks are primarily related to antagonistic threats, and that a lack of “cybersecurity” can create worse consequences to the organization than a lack of “information security”. Thus, cybersecurity can be perceived as more relevant to the organization than information security. This perception can cause confusion and also reduces the effectiveness of risk assessment and treatment.

Regardless of perception, the concepts behind information security can be used to assess and manage cybersecurity risks. The key question is how to manage cybersecurity risk in a comprehensive and structured manner, and ensure that processes, governance and controls exist and are fit for purpose. This can be done through a management systems approach. An Information Security Management System (ISMS) as described in ISO/IEC 27001 is a well proven way for any organization to implement a risk-based approach to cybersecurity.

This document demonstrates how a cybersecurity framework can utilize current information security standards to achieve a well-controlled approach to cybersecurity management.

Information technology — Security techniques — Cybersecurity and ISO and IEC Standards

1 Scope

This document provides guidance on how to leverage existing standards in a cybersecurity framework.

2 Normative references

There are no normative references in this document.