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Foreword

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International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of the joint technical committee is to prepare International Standards. Draft International Standards adopted by the joint technical committee are circulated to national bodies for voting. Publication as an International Standard requires approval by at least 75 % of the national bodies casting a vote.

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Introduction

A vulnerability is a weakness of software, hardware, or online service that can be exploited. An exploitation of vulnerabilities results in a disruption of the confidentiality, integrity, or availability of the ICT system or related information assets, which may cause a breach of data privacy, interruption of operation of mission critical systems, and so on.

Vulnerabilities can be caused by both software or hardware design and programming flaws. Poor administrative processes and a lack of user awareness and education can also be a source of vulnerabilities, as can unforeseen changes in operating environments. Regardless of the cause, an exploitation of such vulnerabilities may result in real threats to mission-critical information systems. Individuals and organizations, including businesses and governments, rely heavily on hardware and software components used in operating systems, applications, networks, and critical national infrastructure. Vulnerabilities in these components increase risk to the information residing on them, thus increasing risks to users and owners of the information. In addition, the lack of awareness about these vulnerabilities also increases risk.

Inappropriate disclosure of a vulnerability could not only delay the deployment of the vulnerability resolution but also give attackers hints to exploit it. That is why vulnerability disclosure should be carried out appropriately.

Vulnerability disclosure is a process through which vendors and vulnerability finders may work cooperatively in finding solutions that reduce the risks associated with a vulnerability. It encompasses actions such as reporting, coordinating, and publishing information about a vulnerability and its resolution.

The goals of vulnerability disclosure include the following:

a) ensuring that identified vulnerabilities are addressed;

b) minimizing the risk from vulnerabilities;

c) providing users with sufficient information to evaluate risks from vulnerabilities to their systems;

d) setting expectations to promote positive communication and coordination among involved parties.

This International Standard provides guidelines for vendors to be included in their business processes when receiving information about potential vulnerabilities and distributing vulnerability resolution information.