

INTERNATIONAL STANDARDIZED PROFILE

**ISO/IEC
ISP
10613-20**

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Information technology — International Standardized Profile RA — Relaying the Connectionless-mode Network Service —

Part 20:

**Security employing the Network Layer Security
Protocol — Connection-mode with SDT-PDU
based Protection over X.25 packet switched
data networks using virtual calls, for
RA1111/RA1121 profiles**

*Technologies de l'information — Profil normalisé international RA — Relais
de service de réseau en mode sans connexion —*

*Partie 20: Sécurité employant le protocole de sécurité de la couche
réseau — Mode connexion avec protection basée SDT-PDU sur réseaux
de données à commutation par paquets X.25 utilisant des appels virtuels,
pour profils RA1111/RA1121*



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Foreword

ISO (the International Organization for Standardization) and IEC (the International Electrotechnical Commission) form the specialized system for worldwide standardization. National bodies that are members of ISO or IEC participate in the development of International Standards through technical committees established by the respective organization to deal with particular fields of technical activity. ISO and IEC technical committees collaborate in fields of mutual interest. Other international organizations, governmental and non-governmental, in liaison with ISO and IEC, also take part in the work.

In the field of information technology, ISO and IEC have established a joint technical committee, ISO/IEC JTC 1. In addition to developing International Standards, ISO/IEC JTC 1 has created a Special Group on Functional Standardization for the elaboration of International Standardized Profiles.

An International Standardized Profile is an internationally agreed, harmonized document which identifies a standard or group of standards, together with options and parameters, necessary to accomplish a function or a set of functions.

Draft International Standardized Profiles are circulated to national bodies for voting. Publication as an International Standardized Profile requires approval by at least 75 % of the national bodies casting a vote.

International Standardized Profile ISO/IEC ISP 10613-20 was prepared with the collaboration of

- Asia-Oceania Workshop (AOW);
- European Workshop for Open Systems (EWOS);
- Open Systems Environment Implementors' Workshop (OIW).

ISO/IEC ISP 10613 consists of the following parts, under the general title *Information technology — International Standardized Profile RA — Relaying the Connectionless-mode Network Service*:

- *Part 1: Subnetwork-independent requirements*
- *Part 2: LAN subnetwork-dependent, media-independent requirements*
- *Part 3: CSMA/CD LAN subnetwork-dependent, media-dependent requirements*
- *Part 4: FDDI LAN subnetwork-dependent, media-dependent requirements*
- *Part 5: Definition of profile RA51.51, relaying the Connectionless-mode Network Service between CSMA/CD LAN subnetworks*
- *Part 6: Definition of profile RA51.54, relaying the Connectionless-mode Network Service between CSMA/CD LAN subnetworks and FDDI LAN subnetworks*
- *Part 7: PSDN subnetwork-dependent, media-dependent requirements for virtual calls over a permanent access*

- *Part 8: Definition of profile RA51.1111, relaying the Connectionless-mode Network Service between CSMA/CD LAN subnetworks and PSDNs using virtual calls over a PSTN leased line permanent access*
- *Part 9: Definition of profile RA51.1121, relaying the Connectionless-mode Network Service between CSMA/CD LAN subnetworks and PSDNs using virtual calls over a digital data circuit/CSDN leased line permanent access*
- *Part 10: Token Ring LAN subnetwork-dependent, media-dependent requirements*
- *Part 11: Definition of profile RA51.53, relaying the Connectionless-mode Network Service between CSMA/CD LAN subnetworks and Token Ring LAN subnetworks*
- *Part 12: Definition of profile RA53.53, relaying the Connectionless-mode Network Service between Token Ring LAN subnetworks*
- *Part 13: Definition of profile RA53.54, relaying the Connectionless-mode Network Service between Token Ring LAN subnetworks and FDDI LAN subnetworks*
- *Part 14: Definition of profile RA54.54, relaying the Connectionless-mode Network Service between FDDI LAN subnetworks*
- *Part 15: Definition of profile RA53.1111, relaying the Connectionless-mode Network Service between Token Ring LAN subnetworks and PSDNs using virtual calls over a PSTN leased line permanent access*
- *Part 16: Definition of profile RA53.1121, relaying the Connectionless-mode Network Service between Token Ring LAN subnetworks and PSDNs using virtual calls over a digital data circuit/CSDN leased line permanent access*
- *Part 17: Definition of profile RA54.1111, relaying the Connectionless-mode Network Service between FDDI LAN subnetworks and PSDNs using virtual calls over a PSTN leased line permanent access*
- *Part 18: Definition of profile RA54.1121, relaying the Connectionless-mode Network Service between FDDI LAN subnetworks and PSDNs using virtual calls over a digital data circuit/CSDN leased line permanent access*
- *Part 19: Security employing the Network Layer Security Protocol — Connectionless-mode, for RAnn.nn profiles*
- *Part 20: Security employing the Network Layer Security Protocol — Connection-mode with SDT-PDU based Protection over X.25 packet switched data networks using virtual calls, for RA1111/RA1121 profiles*

Annex A forms an integral part of this part of ISO/IEC ISP 10613. Annex B is for information only.

Introduction

ISO/IEC ISP 10613 is defined in accordance with the principles specified by ISO/IEC Technical Report 10000.

The context of Functional Standardization is one area in the overall field of Information Technology (IT) standardization activities, covering base standards, profiles, and registration mechanisms. A profile defines a combination of base standards that collectively perform a specific well-defined IT function. Profiles standardize the use of options and other variations in the base standards, and provide a basis for the development of uniform, internationally recognized system tests.

ISPs are produced not simply to 'legitimize' a particular choice of base standards and options, but to promote real system interoperability. One of the most important roles for an ISP is to serve as the basis for the development (by organizations other than ISO and IEC) of internationally recognized tests. The development and widespread acceptance of tests based on this and other ISPs is crucial to the successful realization of this goal.

ISO/IEC ISP 10613 consists of several parts of which this is part 20. This part of ISO/IEC 10613 specifies the security profile requirements employing the Network Layer Security Protocol (ITU-T X.273 | ISO/IEC 11577) connection-mode with SDT-PDU based protection over an X.25 packet-switched data network using virtual calls.

This part of ISO/IEC ISP 10613 extends existing RA1111 or RA1121 profiles adding security protection.