



**BSI-PP-0012-2005**

**Low Assurance Protection Profile**

for a

**Voice over IP Infrastructure**

**Version 1.1**

developed by

**TNO-ITSEF BV**





**Certificate BSI-PP-0012-2005**

**Low Assurance Protection Profile  
for a Voice over IP Infrastructure,  
Version 1.1**



Common Criteria Arrangement

developed by

**TNO-ITSEF BV**

Assurance Package : EAL1

The Vice President of the Federal Office  
for Information Security

Bonn, May 12<sup>th</sup>, 2005

Hange

L.S.

The Protection Profile mentioned above was evaluated at an accredited and licenced/approved evaluation facility using the Common Methodology for IT Security Evaluation, Version 2.4 revision 256 including draft interpretation #1 - #17 for conformance to the Common Criteria for IT Security Evaluation, Version 2.4, revision 256.

This certificate applies only to the specific version and release of the Protection Profile and in conjunction with the complete Certification Report.

The evaluation has been conducted in accordance with the provisions of the certification scheme of the Federal Office for Information Security. The conclusions of the evaluation facility in the evaluation technical report are consistent with the evidence adduced.

This certificate is not an endorsement of the Protection Profile by the Federal Office for Information Security or any other organisation that recognises or gives effect to this certificate, and no warranty of the Protection Profile by the Federal Office for Information Security or any other organisation that recognises or gives effect to this certificate, is either expressed or implied.



## Preliminary Remarks

Under the BSIG<sup>1</sup> Act, the Federal Office for Information Security (BSI) has the task of issuing certificates for information technology products as well as for Protection Profiles (PP).

A PP defines an implementation-independent set of IT security requirements for a category of TOEs which are intended to meet common consumer needs for IT security. The development and certification of a PP or the reference to an existent one gives consumers the possibility to express their IT security needs without referring to a special product. Product or system certifications can be based on Protection Profiles. For products which have been certified based on a Protection Profile an individual certificate will be issued.

Certification of the Protection Profile is carried out on the instigation of the BSI.

A part of the procedure is the technical examination (evaluation) of the Protection Profile according to Common Criteria [1].

According to the decree issued by the Bundesministerium des Innern (Federal Ministry of the Interior) on February 22<sup>nd</sup>, 2005 the BSI is authorised to issue certificates on the basis of CC version 2.4.

The evaluation is carried out by an evaluation facility recognised by the BSI or by the BSI itself.

The result of the certification procedure is the present Certification Report. This report contains among others the certificate (summarised assessment) and the detailed Certification Results.

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<sup>1</sup> Act setting up the Federal Office for Information Security (BSI-Errichtungsgesetz, BSIG) of December 17<sup>th</sup>, 1990, Bundesgesetzblatt I p. 2834

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## A Certification

### 1 Specifications of the Certification Procedure

The certification body conducts the procedure according to the criteria laid down in the following:

- BSIG<sup>2</sup>
- BSI Certification Ordinance<sup>3</sup>
- BSI Schedule of Costs<sup>4</sup>
- Special decrees issued by the Bundesministerium des Innern (Federal Ministry of the Interior)
- DIN EN 45011
- BSI Certification – Description of the Procedure [3]
- Procedure for the Issuance of a PP certificate by the BSI
- Common Criteria for Information Technology Security Evaluation, Version 2.4, revision 256 [1]
- Common Methodology for IT Security Evaluation, Version 2.4, revision 256 with the CC v2.4 Draft Interpretations #1 - #17 [2]

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<sup>2</sup> Act setting up the Federal Office for Information Security (BSI-Errichtungsgesetz, BSIG) of December 17<sup>th</sup>, 1990, Bundesgesetzblatt I p. 2834

<sup>3</sup> Ordinance on the Procedure for Issuance of a Certificate by the Federal Office for Information Security (BSI-Zertifizierungsverordnung, BSIZertV) of July 07<sup>th</sup>, 1992, Bundesgesetzblatt I p. 1230

<sup>4</sup> Schedule of Cost for Official Procedures of the Federal Office for Information Security (BSI-Kostenverordnung, BSI-KostV) of March 03<sup>rd</sup>, 2005, Bundesgesetzblatt I p. 519

## **2 Recognition Agreements**

In order to avoid multiple certification of the same Protection Profile in different countries a mutual recognition of Protection Profile certificates under certain conditions was agreed.

An arrangement (Common Criteria Arrangement) on the mutual recognition of certificates based on the CC evaluation assurance levels up to and including EAL 4 was signed in May 2000. It includes also the recognition of Protection Profiles based on the CC. The arrangement was signed by the national bodies of Australia, Canada, Finland France, Germany, Greece, Italy, The Netherlands, New Zealand, Norway, Spain, United Kingdom and the United States. Israel joined the arrangement in November 2000, Sweden in February 2002, Austria in November 2002, Hungary and Turkey in September 2003, Japan in November 2003, the Czech Republic in September 2004, the Republic of Singapore in March 2005 and India in April 2005.

### 3 Performance of Evaluation and Certification

The certification body monitors each individual evaluation to ensure a uniform procedure, a uniform interpretation of the criteria and uniform ratings.

The Low Assurance Protection Profile for a 'Voice over IP Infrastructure', Version 1.1 has undergone the certification procedure at the BSI.

The evaluation of the Low Assurance Protection Profile for a 'Voice over IP Infrastructure', Version 1.1 was conducted by the 'SRC Security Research and Consulting GmbH'. The evaluation facility of 'SRC Security Research and Consulting GmbH' is an evaluation facility (ITSEF)<sup>5</sup> recognised by BSI.

Author is TNO-ITSEF BV.

The certification was concluded with

- the comparability check and
- the preparation of this Certification Report.

This work was completed by the BSI on May 12<sup>th</sup>; 2005.

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<sup>5</sup> Information Technology Security Evaluation Facility

## 4 Publication

The following Certification Results contain pages B-1 to B-6.

The Low Assurance Protection Profile for a 'Voice over IP Infrastructure', Version 1.1 has been included in the BSI list of certified and registered Protection Profiles, which is published regularly (see also Internet: <http://www.bsi.bund.de>). Further information can be obtained via the BSI-Infoline +49 228/9582-111.

Further copies of this Certification Report may be ordered from the BSI<sup>6</sup>. The Certification Report may also be obtained in electronic form at the internet address stated above.

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<sup>6</sup> *BSI* - Bundesamt für Sicherheit in der Informationstechnik, Postfach 20 03 63, D-53133 Bonn  
Telefon +49 228 9582-0, Infoline +49 228 9582-111, Telefax +49 228 9582-455

## **B Certification Results**

### **Content of the Certification Results**

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## 1 PP Overview

This Low Assurance Protection Profile for a ‘Voice over IP Infrastructure’, Version 1.1 is established by TNO-ITSEF BV as basis for the development of STs for a VoIP (Voice over IP) infrastructure, as it is used in a typical office environment. The goal of this VoIP infrastructure is to provide telephone and services over an already available IP network thereby obviating the need for a separate telephone infrastructure and allowing the integration between telephony services and other services (e.g. agenda services).

IP telephony enables calls to be made between IP telephone devices and between an IP telephone device and a traditional telephone on a PSTN (Publicly Switched Telephone Network).

## 2 Security Functional Requirements

This section contains the functional requirements that must be satisfied by a TOE claiming compliance to the Low Assurance Protection Profile for a ‘Voice over IP Infrastructure’, Version 1.1.

All functional requirements are drawn from Common Criteria Part 2.

SFRs	Component-Name
FAU_GEN.1	Security audit data generation
FDP_ACC.1	Subset access control
FDP_ACF.1	Security attribute based access control
FIA_UID.2	User identification before any action
FIA_UAU.1	Timing of authentication
FIA_UAU.2	User authentication before any action
FMT_MSA.1	Management of security attributes
FMT_MTD.1	Management of TSF data
FMT_SMR.1	Security roles
FPT_SEP.1	TSF domain separation

## 3 Assurance Package

The security assurance requirements are based entirely on the assurance components defined in Part 3 of the Common Criteria. The assurance requirements are assurance level EAL1 (Evaluation Assurance Level 1).

## 4 Strength of Functions

The strength of function-examination is no more part of the CC in version 2.4.

## 5 Results of the Evaluation

The Evaluation Technical Report (ETR) [7] was provided by the ITSEF according to the Common Criteria [1], the Methodology [2], the requirements of the scheme [3] and all interpretations and guidelines of the scheme [4] as relevant for the TOE.

The verdicts for the CC, Part 3 assurance components (according to EAL1 and the class ASE for the Security Target evaluation) are summarised in the following table.

<b>CC Aspect</b>	<b>Result</b>
CC Class APE	PASS.
APE_CCL.1	PASS.
APE_ECD.1	PASS.
APE_INT.1	PASS.
APE_OBJ.0	PASS.
APE_REQ.1	PASS.

The Low Assurance Protection Profile for a 'Voice over IP Infrastructure', Version 1.1 meets the requirements for Protection Profiles as specified in class APE and Draft Interpretation #2 of the CC, Version 2.4, Revision 256.

## 6 Definitions

### 6.1 Acronyms

<b>CC</b>	Common Criteria for IT Security Evaluation
<b>EAL</b>	Evaluation Assurance Level
<b>IT</b>	Information Technology
<b>ITSEF</b>	Information Technology Security Evaluation Facility
<b>PP</b>	Protection Profile
<b>SF</b>	Security Function
<b>SFP</b>	Security Function Policy
<b>ST</b>	Security Target
<b>TOE</b>	Target of Evaluation

### 6.2 Glossary

**Augmentation** - The addition of one or more assurance component(s) from Part 3 to an EAL or assurance package.

**Extension** - The addition to an ST or PP of functional requirements not contained in Part 2 and/or assurance requirements not contained in Part 3 of the CC.

**Formal** - Expressed in a restricted syntax language with defined semantics based on well-established mathematical concepts.

**Informal** - Expressed in natural language.

**Object** - An entity within the TSC that contains or receives information and upon which subjects perform operations.

**Protection Profile** - An implementation-independent set of security requirements for a category of TOEs that meet specific consumer needs.

**Security Function** - A part or parts of the TOE that have to be relied upon for enforcing a closely related subset of the rules from the TSP.

**Security Target** - A set of security requirements and specifications to be used as the basis for evaluation of an identified TOE.

**Semiformal** - Expressed in a restricted syntax language with defined semantics.

**Subject** - An entity within the TSC that causes operations to be performed.

**Target of Evaluation** - An IT product or system and its associated administrator and user guidance documentation that is the subject of an evaluation.

**TOE Security Functions** - A set consisting of all hardware, software, and firmware of the TOE that must be relied upon for the correct enforcement of the TSP.

**TOE Security Policy** - A set of rules that regulate how assets are managed, protected and distributed within a TOE.

**TSP Scope of Control** - The set of interactions that can occur with or within a TOE and are subject to the rules of the TSP.

## 7 Bibliography

- [1] Common Criteria for Information Technology Security Evaluation, Version 2.4, revision 256
- [2] Common Methodology for Information Security Evaluation, Version 2.4, revision 256 with the CC v2.4 Draft Interpretations #1 - #17
- [3] BSI Certification – Description of the Procedure (BSI 7125)
- [4] Application Notes and Interpretations of the Scheme (AIS) as relevant for the TOE
- [5] German IT Security Certificates (BSI 7148, BSI 7149)
- [6] Low Assurance Protection Profile for a 'Voice over IP Infrastructure', Version 1.1, 14.03.2005
- [7] Evaluation Technical Report (ETR), Version 1.05, 04.05.2005

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**Annex: Protection Profile**