

The certification body of TÜV Informationstechnik GmbH hereby awards this certificate to the company

Telekom Deutschland GmbH
Landgrabenweg 151
53227 Bonn, Germany

to confirm that its processes

**Quality assurance of rating and
billing processes for Public Land
Mobile Network and for Public
Switched Telephone Network**

fulfils all requirements of the criteria

TÜViT Trusted Process, Version 1.2

of TÜV Informationstechnik GmbH. The requirements are summarized in the appendix to this certificate.

The appendix is part of the certificate and consists of 6 pages.

The certificate is valid only in conjunction with the evaluation report.



Certificate ID: 5134.18

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Zertifikat gültig bis
2020-08-31

Essen, 2018-10-02

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Certificate

Certification System

The certification body of TÜV Informationstechnik GmbH performs its certification on the basis of the following certification scheme:

- German document: “Zertifizierungsprogramm (nicht akkreditierter Bereich) der Zertifizierungsstelle der TÜV Informationstechnik GmbH”, version 1.0 as of 2015-08-24, TÜV Informationstechnik GmbH

Audit Report

- German document: “Prozesse zur Qualitätssicherung der Abrechnungsprozesse (Mobilfunk und Festnetz) der Telekom Deutschland GmbH”, version 1.0 as of 2018-05-24, TÜV Informationstechnik GmbH

Audit Requirements

- German document: “TÜViT Trusted Process (TPCS)”, version 1.2 as of 2017-05-12, TÜV Informationstechnik GmbH

The following criteria catalogue was derived from the TÜViT Trusted Process (TPCS) Criteria and from the process specific evaluation criteria:

- German document: “Prüfgrundlage zur Prüfung der Prozesse zur Qualitätssicherung der Abrechnungsprozesse Mobilfunk und Festnetz der Telekom Deutschland GmbH”, version 1.3 as of 2018-03-02, TÜV Informationstechnik GmbH

Audit Target

The object of the audit are the processes “Quality assurance of rating and billing processes for Public Land Mobile Network and for Public Switched Telephone Network”. These processes, which comprise rating and billing of consumer customers

(Retail), consist of the following, scopes of Public Land Mobile network (PLMN) and/or Public Switched Land network (PSTN) are indicated in parenthesis:

- Documented and quality-assured provisioning of tariff changes as ordered (PLMN, PSTN)
- Quantitative and qualitative evaluation of all data records rejected by the rating engine (PLMN, PSTN)
- Check of a selected sample of all records evaluated by means of an additional rating system (PSTN)
- Test billing run for selected groups of customers (PLMN)
- Test bill generation on real data in the production environment (PSTN)
- Release process for starting the billing runs due to a special analysis of data sets (PLMN)
- Release process for further processing after completion of the billing runs of the current month (PLMN)
- Monitoring of balance equations (PLMN, PSTN)
- Check of correct configuration of the pricing of calls abroad (PSTN)
- Check of quality and completeness of tickets (PSTN)
- Check of quality and completeness of debts and credits by help of limiting amounts (PSTN)
- Check of correct configuration of the pricing of products (PSTN)
- Tests of correct implementation of data rates with regard to volume and speed in active operation (PLMN)
- Approval process of technical changes (PLMN, PSTN)

- Process of Revenue Assurance Analysis for all billing-relevant themes (PLMN, PSTN)
- Regular checking of the quality and ongoing improvement of of the control activities (PLMN, PSTN)

These examined processes and their interfaces are described in the following documentation:

- German document “Zertifizierung der qualitätssichernden Kontrollen entlang des Abrechnungsprozesses für Mobilfunk (Retail, Postpay)”, version 4.0 as of 2018-02-08, Telekom Deutschland GmbH
- German document “Zertifizierung der qualitätssichernden Kontrollen entlang des Abrechnungsprozesses für Fest-netz”, version 3.0 as of 2018-02-08, Telekom Deutschland GmbH

Audit Result

The processes fulfil the requirements of the following evaluation criteria for processes of quality assurance of rating and billing process and the criteria TÜViT Trusted Process (TPCS), version 1.2.

Evaluation criteria for processes of quality assurance of rating and billing process:

The following quality objectives must be achieved:

1 The bill must be complete

Billing of the services used must be carried out completely within the framework of a defined and examined process.

2 The services must be billed in the correct billing period

The services used must be billed in the correct month.

3 Correctness of assignment of customer / contract

The services used must be assigned to the correct customer / contract.

4 The correct service must be invoiced

The services used (e.g. data, speech, SMS etc.) must be correctly identified within the defined and examined process.

5 Pricing must be correct

All the services used are billed in accordance with the applicable price list and the contractual agreements entered into with the customer.

6 One time charges must be correct

The one-time charges (e. g. basic charge, prepayments,...) must be determined within the defined and examined process.

7 Correctness of budgets, discounts, credits

The budgets, discounts and credits must be applied correctly according to amount and time related to the contractual agreement. Residual credits are correctly transferred and the correct discounting rules are applied.

8 Correct aggregation

The billed items must be correctly totalled and shown in the correct sections of the bill.

9 Correctness of billing run

The billing run must be carried out according to plan. The contents of the bills are checked.

10 Correctness of presentation on the bill / list of individual calls / connections

The entire billing data must be shown on the bill.

Summary of TÜViT Trusted Process criteria:

1 Process Documentation

The process documentation is the basis for the process and its defined procedures. It appropriately documents the process requirements and serves as a basis for assessment and improvement. The documentation is sufficiently detailed to allow process reproducibility within certain limits.

2 Process Development and Implementation

The process has been developed and implemented based on interested parties' required objectives. The current process is consistent with its documentation.

3 Process Performance and Effectiveness

The process is developed to provide long term effectiveness. For this purpose, it is subject to continual performance measurements that may result in process or documentation improvements and the implementation of any change.

4 Consideration of Interested Parties

The objectives of the process are aligned with the parties interested in performance and success of the process, its measures and its results.

5 Quality Assurance

The process has been designed to repeatedly show both quality and success in its results. The process involves intermediate quality checks to ensure that it consistently achieves its intended goal. Quality criteria for the checks

and related checklists are described in the process documentation.

6 Resources

The process consists of a series of measures and corresponding resources to achieve intended results.

7 Risks and Dangers

A procedure exists to control risks and dangers associated with the process and this is detailed in the process documentation.