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SERIES M: TELECOMMUNICATION MANAGEMENT,
INCLUDING TMN AND NETWORK MAINTENANCE

International telephone circuits

Planned outage notification point

Recommendation ITU-T M.727



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Recommendation ITU-T M.727

Planned outage notification point

Summary

Recommendation ITU-T M.727 defines the planned outage notification point and describes its responsibilities and functions. It focuses on the interaction between a customer and a service provider.

History

Edition	Recommendation	Approval	Study Group
1.0	ITU-T M.727	2011-03-01	2

Keywords

Customer, network operator, one-stop-shopping, planned outage notification, service agreement, service provider, user.

FOREWORD

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The World Telecommunication Standardization Assembly (WTSA), which meets every four years, establishes the topics for study by the ITU-T study groups which, in turn, produce Recommendations on these topics.

The approval of ITU-T Recommendations is covered by the procedure laid down in WTSA Resolution 1.

In some areas of information technology which fall within ITU-T's purview, the necessary standards are prepared on a collaborative basis with ISO and IEC.

NOTE

In this Recommendation, the expression "Administration" is used for conciseness to indicate both a telecommunication administration and a recognized operating agency.

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Introduction

Traditionally, an end-to-end private international service has been jointly provided by bilateral network operators who have individual bilateral service agreements with both end customers. An end-to-end domestic service has been solely provided by a single network operator under a single service agreement with the customer.

Currently, these end-to-end services are in many cases provided by multiple network operators. In this case, a single service provider normally has an end-to-end service agreement with the customer. This agreement is called one-stop-shopping. The service provider has contracts with all network operators involved. The customer normally requires the service provider to notify in advance all planned outages in any network portion within the end-to-end connection.

The function responsible for notifying the customer is called planned outage notification point (PONP). Recommendation ITU-T M.727 describes the process and the functions of the PONP. Related Recommendation ITU-T M.1541 (planned outage notification to customer) describes the procedures for planned outage notification between the service provider and the customer for different network architectures and different types of service agreements.

Recommendation ITU-T M.727

Planned outage notification point

1 Scope

Planned maintenance actions by a network operator may cause outage of services. Especially, maintenance of local access facilities will normally cause service outage because there is usually no backup available. From the view point of customer satisfaction, such outages caused by planned maintenance actions should be notified to the customer in advance.

Under some service agreements such as one-stop-shopping, a service provider is required to notify the customer not only his actual planned outages but also other planned outages by the other contracted network operators such as neighbour and distant network operators.

The present Recommendation introduces the concept of planned outage notification point and describes its responsibilities and functions.

2 References

The following ITU-T Recommendations and other references contain provisions which, through reference in this text, constitute provisions of this Recommendation. At the time of publication, the editions indicated were valid. All Recommendations and other references are subject to revision; users of this Recommendation are therefore encouraged to investigate the possibility of applying the most recent edition of the Recommendations and other references listed below. A list of the currently valid ITU-T Recommendations is regularly published. The reference to a document within this Recommendation does not give it, as a stand-alone document, the status of a Recommendation.

- [ITU-T M.60] Recommendation ITU-T M.60 (1993), *Maintenance terminology and definition*.
- [ITU-T M.1400] Recommendation ITU-T M.1400 (2006), *Designations for interconnections among operators' networks*.
- [ITU-T M.1541] Recommendation ITU-T M.1541 (2011), *Planned outage notification to customer*.
- [ITU-T M.3050.2] Recommendation ITU-T M.3050.2 (2007), *Enhanced Telecom Operations Map (eTOM) – Process decompositions and descriptions*.
- [ITU-T M.3342] Recommendation ITU-T M.3342 (2006), *Guidelines for the definition of SLA representation templates*.
- [ITU-T M.3344] Recommendation ITU-T M.3344 (2011), *Requirements and analysis for NGN appointment management across the business to business and customer to business interfaces*.

3 Definitions

3.1 Terms defined elsewhere

This Recommendation uses the following terms defined elsewhere:

3.1.1 customer [ITU-T M.60]: An entity which receives services offered by a service provider based on a contractual relationship. It may include the role of a network user.

3.1.2 network operator [ITU-T M.1400]: An operator that manages a telecommunications network. A network operator may be a service provider and vice versa. A network operator may or may not provide particular telecommunications services.

3.1.3 service provider [ITU-T M.1400]: A general reference to an operator that provides telecommunication services to customers and other users either on a tariff or contract basis. A service provider may or may not operate a network. A service provider may or may not be a customer of another service provider.

3.1.4 user [ITU-T M.60]: A person or a machine delegated by a customer to use the services and/or facilities of a telecommunications network.

3.2 Terms defined in this Recommendation

This Recommendation defines the following terms:

3.2.1 one-stop-shopping: An arrangement whereby a single service provider provides and/or coordinates with multiple network operators the provision of one or more telecommunication services to a customer. It is designed to provide the customer with a single point of contact for ordering, implementation, billing and maintenance of the partial services provided by each involved network operator.

NOTE – This definition is derived from the applicable definition in [ITU-T M.60], by replacing the term "administration" with "service provider" or "network operator".

3.2.2 planned outage notification point (PONP): A planned outage notification point (PONP) is an element within the service provider's organization, responsible for initiating and coordinating service notification activities to customers in case of planned outages on any network section within the scope of the service agreement between a customer and a service provider.

4 Abbreviations

This Recommendation uses the following abbreviations:

eTOM	enhanced Telecom Operations Map
PONP	Planned Outage Notification Point
QoS	Quality of Service
SLA	Service Level Agreement
UNI	User Network Interface

5 Conventions

None.

6 General principles for the planned outage notification point

The PONP is in principle identified in the SLA between the service provider and the customer. The responsibilities and functions of the PONP are given in clause 8.

In case of one-stop-shopping, the scope of the PONP generally includes an end-to-end (UNI-UNI) telecommunication service connection, even though some network sections are provided by other network operators.

7 Relation with other Recommendations

The Recommendation on eTOM process decompositions and descriptions, [ITU-T M.3050.2], addresses in clause 7.1.7 the subject of informing the customer "of any planned maintenance or other scheduled events likely to impact delivery of the customer's service" as part of the "Manage QoS/SLA violation" process. It should be noted, however, that it depends on the exact provisions of the SLA whether an outage due to planned maintenance indeed constitutes an SLA violation. Also, e.g., when a certain number of outages is allowed, and a planned outage does not cause that number to be exceeded, it may still be required to inform the customer. The provisions of this Recommendation provide a detailed description of the steps involved in informing the customer, independent of whether the outage will cause an SLA violation.

[ITU-T M.3342] provides guidelines for the definition of SLA representation templates. The PONP can be understood as a specific case of the "Points of Contact" as described in clauses 6.3.2 and 7.2.1 of [ITU-T M.3342].

8 Responsibilities and functions

The PONP is responsible for the following set of functions:

- 1) Receiving the maintenance plan, including possibly service affecting maintenance actions, from the maintenance department within its network operations organization or from the maintenance department of other contractually involved network operators.
- 2) Identifying the degree of impact on services.
- 3) Listing up the customers to be affected.
- 4) Requesting and coordinating with the maintenance departments any required changes to the maintenance plan.
- 5) Deciding whether the outage caused by planned maintenance will be notified to the customer. (Specific agreements in the SLA could exempt outages occurring during predefined timeslots, e.g., specific holidays or during customers' maintenance activities, from the need to be notified to the customer.)
- 6) Notifying the planned outage to the customer.
- 7) Negotiating, if required, with the customer a suitable timeslot for the outage.
NOTE – The negotiation can be conducted according to the provisions of [ITU-T M.3344], "Requirements and analysis for NGN appointment management across the business to business and customer to business interfaces".
- 8) Confirming the planned outage with the customer.
- 9) Monitoring and, if required, coordinating the progress of the planned maintenance.
- 10) Confirming the return to normal service conditions after the planned maintenance has been finished.
- 11) Reporting the events to the customer.
- 12) Reporting the events to the service department, if required, and to other contractual network operators concerned.

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