



ATIS-0100021(2022-01)

ANALYSIS OF FCC REPORTABLE SERVICE OUTAGE DATA

TECHNICAL REPORT



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ATIS-0100021(2022-01), *Analysis of FCC-Reportable Service Outage Data*

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[Revision of ATIS-0100021 (2012)]

Technical Report on

Analysis of FCC-Reportable Service Outage Data

Alliance for Telecommunications Industry Solutions

Approved January 25, 2022

Abstract

This Technical Report provides methods (guidelines and algorithms) for the analysis of service outage data reported to the FCC in response to outage reporting requirements which became effective in January 2005. These techniques are provided as an aid to the telecommunications industry, the public, individual reporting service providers, agencies, and committees with access to the reports of data captured from the reports.

Foreword

The Alliance for Telecommunication Industry Solutions (ATIS) serves the public through improved understanding between carriers, customers, and manufacturers. The ATIS Network Reliability Steering Committee (NRSC) was formed at the request of the first Network Reliability Council (NRC-1) to monitor network reliability. NRSC is a consensus-based industry committee that analyzes the communications industry's reporting of network outages, makes recommendations aimed at improving network reliability, distributes the results of its findings to industry, and, where applicable, refers matters to appropriate industry forums for further resolution. The NRSC also reviews regulatory developments affecting network reliability and submits consensus-developed comments on matters of common interest to NRSC members.

The mandatory requirements are designated by the word *shall* and recommendations by the word *should*. Where both a mandatory requirement and a recommendation are specified for the same criterion, the recommendation represents a goal currently identifiable as having distinct compatibility or performance advantages. The word *may* denotes an optional capability that could augment the standard. The standard is fully functional without the incorporation of this optional capability.

Suggestions for improvement of this document are welcome. They should be sent to the Alliance for Telecommunication Industry Solutions, NRSC, 1200 G Street NW, Suite 500, Washington, DC 20005.

NRSC, at the time of developing this Technical Report, had the following leadership:

Carolyn Brown, NRSC Co-Chair (Lumen)
Andis Kalnins, NRSC Co-Chair (Verizon)

The **Outage Reporting Advisory Subcommittee** (ORAS), which was responsible for the development of this document, had the following leadership:

Becky Wormsley, NRSC ORAS Co-Chair (T-Mobile)
Christopher Desmond, NRSC ORAS Co-Chair (Verizon Wireless)

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Table of Contents

1	Purpose, Scope, & Application	1
1.1	Scope	1
1.2	Application	1
2	References	1
3	Definitions, Acronyms, & Abbreviations	2
3.1	Definitions	2
3.2	Acronyms & Abbreviations	2
4	Data Elements Reported To The FCC	3
5	Outage Index	3
5.1	Desirable Outage Index Properties	3
5.2	Definition Of Outage Index	3
5.2.1	<i>Service Weight</i>	3
5.2.2	<i>Duration Weight</i>	4
5.2.3	<i>Magnitude Weight</i>	4
5.3	Outage Index Examples	7
5.3.1	<i>Outage Index Values Given Outage Duration & Outage Magnitude Metric</i>	7
5.3.2	<i>Outage Durations & Outage Magnitude Metrics That Result In A Given Outage Index Value</i>	10
5.4	Definition Of Aggregated Outage Index	11
6	Control Charts	11
6.1	Control Charts For Aggregated Outage Index	12
6.1.1	Control Chart Example	13
6.2	Considerations For Application Of Outage Index/Control Charts	14
7	Trend Analysis	15
7.1	Trend And Seasonality Analysis Of Outage Frequency	15
7.1.1	<i>Visualizing Outage Frequency Data</i>	15
7.1.2	<i>Modeling Outage Frequency</i>	16
7.1.2.2	<i>Modeling Seasonality</i>	17
7.1.3	<i>Projection</i>	18
7.2	Duration Trends	19
7.2.1	<i>Visualizing Outage Duration Data</i>	19
7.2.2	<i>Testing For Significance</i>	19
7.3	Trends In Number Of Concurrent Outages (Outages In Progress)	20
7.3.1	<i>Visualizing Concurrent Outages</i>	20
8	Summary	21
A	Generalized Linear Model (GLM)	22

Table of Figures

Figure 1: Duration Weight as a Function of Outage Duration	4
Figure 2: Magnitude Weight as a Function of Customers Affected	5
Figure 3: Detail of Magnitude Weight as a Function of Customers Affected	6
Figure 4: Outage Index Contours Given Magnitude and Duration (E911 Not Affected).....	10
Figure 5: Outage Index Contours Given Magnitude and Duration (E911 Affected).....	11
Figure 6: Example Outage Index Control Chart	14
Figure 7: Plot of Example Network Outage Reports.....	15
Figure 8: Analysis of Example Network Outage Reports.....	16
Figure 9: Example Duration Trends.....	19
Figure 10: Example Outages in Progress.....	21

Table of Tables

Table 1: Outage Index Given Magnitude and Duration (E911 Not Affected).....	8
Table 2: Outage Index Given Magnitude and Duration (E911 Affected)	9
Table 3: Example Outage Analysis Data	13
Table 4: Parameters of Model Selection.....	18

Technical Report on –

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1 Purpose, Scope, & Application

In 2005, the FCC initiated a set of service outage reporting requirements for service providers [Ref 1]. These requirements extended reporting beyond the wireline segment of the telecommunications industry to include the wireless, satellite, and cable segments. In addition, it created metric threshold requirements for reporting and identified data items for reporting.

In 2012, noting the increased usage of VoIP-enabled telephone service, the FCC expanded part of outage reporting requirements to include VoIP service providers [Ref 2]. These requirements were subsequently amended in 2017 to account for advancements in telecommunications. Notably, the FCC adopted an OC3-based reporting metric of 667 OC3 minutes, to replace the existing DS3-based metric. A standard of 900,000 user minutes was implemented for wireless outages, as were adjustments to regulations regarding special facilities, public service answering points, and 911 facilities [Ref 3].

This Technical Report, ATIS-0100021(2022-01), provides techniques for the analysis of FCC-reportable service outage data relevant to the reporting requirements the FCC initiated in 2005.

1.1 Scope

This Technical Report replaces the work of ATIS-0100021, *Analysis of FCC-Reportable Service Outage Data, Version 2*, for applicability with respect to Network Outage Reporting System (NORS) data.

1.2 Application

This Technical Report enables the telecommunications industry and the general public to evaluate the reliability of telecommunications networks. The techniques outlined in this document allow for independent analysis of the outage data as reported to the FCC via NORS.

Additionally, Clause 5.2 of the document defines an outage index for wireline communications with the following parameters:

- Services affected (General Communications, and/or E911).
- Duration of the outage.
- Estimate of number of potentially affected customers.

2 References

[Ref 1] FCC 04-188, *In the Matter of New Part 4 of the Commission's Rules Concerning Disruptions to Communications*, August 19, 2004.¹

¹ This document is available from the Federal Communications Commission at < <http://www.fcc.gov> >.