

## **Internet Draft Session Initiation Protocol (SIP) Non-eXempt Rate Control**

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## Foreword

This NICC Document (ND) has been produced by NICC SOC WG

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## Introduction

Publication of ND1653 [i1] required the submission of an Internet Draft (I-D), primarily to define and explain the rationale for the new SIP header parameter value and enhanced restriction algorithm used in [i1]. The I-D is embedded in this document in a range of formats that are required/generated by IETF.

The I-D was submitted on 3<sup>rd</sup> Oct 2019, but the original authors of the two relevant RFCs ([1] and [2]) were no longer active in this subject of study, and insufficient feedback was generated that could have led to publication of an RFC. The I-D expired on 3<sup>rd</sup> April 2020.

Notation specific to the embedded I-D documents is defined in section 3 of this document.

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## 1 Scope

The present document is just a container that embeds the I-D document (in several different formats) that derived from the development and publication of [i1]. Although the I-D can be read on its own it will help to refer to [i1].

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## 2 References

### 2.1 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For non-specific references, the latest edition of the referenced document (including any amendments) applies.

- |     |  |
|-----|--|
| [1] | RFC7415 Session Initiation Protocol (SIP) Rate Control     |
| [2] | RFC7339 Session Initiation Protocol (SIP) Overload Control |

### 2.2 Informative references

- |      |  |
|------|--|
| [i1] | ND1653 Overload Control for SIP in UK networks |
|------|--|

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## 3 Definitions, symbols and abbreviations

### 3.1 Definitions

### 3.2 Symbols

The following symbols are used in the embedded documents, and may differ from those used in [i1]:

- |    |   |
|----|---|
| a  | Admission rate from leaky bucket restrictor |
| A  | Arrival rate to leaky bucket restrictor     |
| d  | Discard rate from leaky bucket restrictor   |
| p  | Cost of admission as a fraction of T        |
| r  | Reject rate from leaky bucket restrictor    |
| R  | oc rate                                     |
| T  | Increment size of leaky bucket              |
| T0 | Cost of admission constant                  |

### 3.3 Abbreviations

For the purposes of the present document, the following abbreviations apply:

- |     |                             |
|-----|-----------------------------|
| I-D | Internet Draft              |
| SIP | Session Initiation Protocol |
| SOC | SIP Overload Control        |

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## 4 I-D documents

The I-D is included in this section as embedded files in a range of different formats.

The IETF requires Internet-Draft contributions to be submitted either as a plain-text document or a valid .xml file (which can be processed by the xml2rfc process). A Word template is provided by IETF that has the correct format and initialises the required content. The I-D was first drafted and agreed by the SOC Task Group in Word, copied using the IETF Word template, printed to a file as a text only printer, and then post-processed using a Perl script to obtain the required text file for submission.

After submission, the IETF automatically produces a .pdf and .html file.

All the files associated with the development of the Internet Draft are on the members' site, in the [SOC TG/ ND 1653 Internet Draft files](#) folder.

The PDF version of the Internet Draft file is located on the NICC Public site as - [ND1038 Session Initiation Protocol \(SIP\) Non-eXempt Rate Control](#)

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## 5 History

<b>Document history</b>		
V1.1.1	17 <sup>th</sup> August 2020	Initial publication
V1.1.2	21 <sup>st</sup> September 2020	Republished without the embedded documents but including a link to the PDF Internet Draft
V1.1.3	20 <sup>th</sup> October 2020	Corrections to the Table of Contents