
Real-Time Rating System Interface Generic Requirements

Contents

1. Introduction.....	1-1
1.1 Overview	1-1
1.2 Requirements Terminology.....	1-2
1.3 Additional Information.....	1-3
1.4 Document Organization	1-3
2. Initial Applications of the RTRS	2-1
3. Evolution Toward the Advanced Intelligent Network.....	3-1
4. Transporting the RTRS Message Set.....	4-1
4.1 Open System Interconnection (OSI) Reference Model	4-1
4.2 Use of X.25	4-2
4.2.1 Network Layer	4-3
4.2.2 Data link Layer.....	4-3
4.2.3 Physical Layer.....	4-4
4.3 Other Transport Protocols	4-5
4.4 Accessing the RTRS	4-6
5. Rating Message Set.....	5-1
5.1 Rating Query Messages.....	5-1
5.1.1 Key Query Parameters	5-3
5.1.2 Detail Query Parameters	5-8
5.1.3 Service-specific Query Parameters	5-16
5.2 Rating Response Messages	5-17
5.2.1 Key Response Parameters.....	5-17
5.2.2 Service-specific Response Parameters.....	5-19
5.3 Protocol Usage	5-20
5.3.1 Traditional Coin Service	5-20
5.3.1.1 Traditional Coin Service Description	5-20
5.3.1.2 Pre-Paid Overtime Traditional Coin Message Exchange	5-21
5.3.1.3 Post-Paid Overtime Traditional Coin Message Exchange... ..	5-22
5.3.2 Intelligent Public Access Platform.....	5-23
5.3.2.1 Intelligent Public Access Platform Service Description.. ..	5-23
5.3.2.2 IPAP Message Exchange.....	5-24
5.3.3 Busy Line Verification with Interrupt.....	5-25
5.3.3.1 Busy Line Verification with Interrupt Service Description. ..	5-25
5.3.3.2 BLV/INT Message Exchange.....	5-25

5.3.4	Directory Assistance Service	5-26
5.3.4.1	Directory Assistance Service Description	5-26
5.3.4.2	DA Message Exchange.....	5-27
5.3.5	Directory Assistance Call Completion Service.....	5-27
5.3.5.1	Directory Assistance Call Completion Service Description	5-27
5.3.5.2	DACC Message Exchange	5-28
5.3.6	Rate Quotation	5-29
5.3.6.1	Rate Quotation Service Description	5-29
5.3.6.2	Rate Quotation Message Exchange	5-29
5.3.7	Time and Charges	5-30
5.3.7.1	Time and Charges Service Description	5-30
5.3.7.2	Time and Charges Message Exchange	5-31
5.3.8	Notify	5-32
5.3.8.1	Notify Service Description	5-32
5.3.8.2	Notify Message Exchange	5-32
6.	Protocol Version Negotiation.....	6-1
7.	Error and Congestion Conditions.....	7-1
7.1	Detecting Error Conditions	7-1
7.1.1	Status Indicator Errors	7-1
7.1.2	Time-out Errors.....	7-2
7.2	Handling Error Conditions	7-2
8.	Operation, Administration, and Maintenance	8-1
9.	Billing and Automatic Message Accounting	9-1
10.	Transition and Testing	10-1
10.1	Transition	10-1
10.2	Testing.....	10-1
	References.....	refernces-1
	Acronyms and Abbreviations	Ac-1
	List of Generic Requirements Statements	Req-1

List of Figures

Figure 1-1.	The RTRS Connected to Several Possible RSCs	1-2
Figure 2-1.	Intelligent Public Access Platform Connected to the RTR	2-1
Figure 4-1.	The OSI Reference Model and the RTRS Interface	4-2
Figure 5-1.	Pre-Paid Overtime Traditional Coin Rating Messages.....	5-21
Figure 5-2.	Post-Paid Overtime Traditional Coin Rating Messages	5-22
Figure 5-3.	Intelligent Public Access Platform Rating Messages	5-24
Figure 5-4.	Busy Line Verification/Interrupt Service Rating Messages	5-26
Figure 5-5.	DA Service Rating Messages	5-27
Figure 5-6.	DACC Service Rating Messages	5-28
Figure 5-7.	Rate Quotation Service Rating Messages.....	5-29
Figure 5-8.	Time and Charges Service Rating Messages.....	5-31
Figure 5-9.	Notify Service Rating Message	5-33

List of Tables

Table 5-1.	Key Query Parameters	5-1
Table 5-2.	Detail Query Parameters.....	5-2
Table 5-3.	Service-specific Query Parameters.....	5-2
Table 5-4.	Message Type Encoding.....	5-3
Table 5-5.	Transaction ID Encoding.....	5-4
Table 5-6.	Service Indicator Encoding	5-5
Table 5-7.	Service Modifier Encoding.....	5-6
Table 5-8.	Billing Option Encoding.....	5-8
Table 5-9.	Company Code Encoding.....	5-9
Table 5-10.	Network Element ID Encoding	5-9
Table 5-11.	Calling Number Encoding	5-10
Table 5-12.	Called/Service Access Number Encoding.....	5-11
Table 5-13.	Dialing Variation Encoding.....	5-12
Table 5-14.	Handling Method Encoding.....	5-12
Table 5-15.	Billed Party Encoding.....	5-13
Table 5-16.	Time of Day Encoding	5-14
Table 5-17.	Date Encoding	5-14
Table 5-18.	Operator Handled Indicator Encoding.....	5-15
Table 5-19.	Occurrences Encoding	5-15
Table 5-20.	Charge Amount Encoding	5-16
Table 5-21.	Time Interval Encoding	5-16
Table 5-22.	Key Response Parameters	5-17
Table 5-23.	Service-specific Response Parameters	5-17
Table 5-24.	Status Indicator Encoding.....	5-19
Table 6-1.	Protocol Version Messages	6-1
Table 6-2.	Protocol Version Number Encoding.....	6-1
Table 7-1.	Methods for Handling RTRS Failures.....	7-3