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Contents

Intellectual Property Rights	2
Foreword.....	2
Modal verbs terminology.....	2
Foreword.....	13
1 Scope	14
2 References	14
3 Definitions and abbreviations.....	16
3.1 Definitions	16
3.2 Abbreviations	17
4 Gx reference point	17
4.1 Overview	17
4.2 Gx Reference model.....	18
4.3 PCC Rules	19
4.3.1 PCC Rule Definition.....	19
4.3.2 Operations on PCC Rules	21
4.3a IP flow mobility routing rules	22
4.3a.1 Functional entities.....	22
4.3a.2 IP flow mobility routing rule definition.....	22
4.3a.3 Operations on Routing rules	22
4.3a.4 PCC procedures for IP flow mobility routing rule over Gx reference point.....	23
4.3a.4.1 Provisioning of IP flow mobility routing rules.....	23
4.3b Void.....	23
4.4 Functional elements.....	23
4.4.1 PCRF	23
4.4.2 PCEF.....	24
4.5 PCC procedures over Gx reference point	25
4.5.1 Request for PCC rules.....	25
4.5.2 Provisioning of PCC rules	27
4.5.2.0 Overview.....	27
4.5.2.1 Selecting a PCC rule for Uplink IP packets	30
4.5.2.2 Selecting a PCC rule and IP CAN Bearer for Downlink IP packets	30
4.5.2.3 Gate function.....	31
4.5.2.4 Policy enforcement for "Authorized QoS" per PCC Rule.....	31
4.5.2.5 Usage Monitoring Control	31
4.5.2.6 Redirect function.....	31
4.5.3 Provisioning of Event Triggers.....	32
4.5.4 Provisioning of charging related information for the IP-CAN session	32
4.5.4.1 Provisioning of Charging Addresses.....	32
4.5.4.2 Provisioning of Default Charging Method.....	33
4.5.4.3 Void.....	33
4.5.4.4 Provisioning of Access Network Charging Identifier	33
4.5.5 Provisioning and Policy Enforcement of Authorized QoS	33
4.5.5.0 Overview	33
4.5.5.0a Provisioning of authorized QoS per IP CAN bearer	34
4.5.5.1 Policy enforcement for authorized QoS per IP CAN bearer	34
4.5.5.2 Policy provisioning for authorized QoS per service data flow.....	34
4.5.5.3 Policy enforcement for authorized QoS per service data flow	34
4.5.5.4 Coordination of authorized QoS scopes in mixed mode	35
4.5.5.5 Provisioning of authorized QoS per QCI	35
4.5.5.6 Policy enforcement for authorized QoS per QCI.....	35
4.5.5.7 Provisioning of authorized QoS per APN	35
4.5.5.8 Policy enforcement for authorized QoS per APN	36
4.5.5.9 Provisioning of authorized QoS for the Default EPS Bearer	37
4.5.5.10 Policy enforcement for authorized QoS of the Default EPS Bearer.....	37

4.5.6	Indication of IP-CAN Bearer Termination Implications.....	37
4.5.7	Indication of IP-CAN Session Termination.....	38
4.5.8	Request of IP-CAN Bearer Termination.....	38
4.5.9	Request of IP-CAN Session Termination.....	38
4.5.10	Bearer Control Mode Selection.....	39
4.5.11	Provisioning of Event Report Indication.....	39
4.5.12	PCC Rule Error Handling.....	40
4.5.13	Time of the day procedures.....	41
4.5.14	Trace activation/deactivation.....	42
4.5.15	IMS Emergency Session Support.....	42
4.5.15.1	Functional Entities.....	42
4.5.15.2	PCC procedures for Emergency services over Gx reference point.....	42
4.5.15.2.1	Request for PCC Rules for Emergency services.....	42
4.5.15.2.2	Provisioning of PCC Rules for Emergency services.....	42
4.5.15.2.2.1	Provisioning of PCC Rules at Gx session establishment.....	42
4.5.15.2.2.2	Provisioning of PCC Rules for Emergency Services.....	43
4.5.15.2.3	Removal of PCC Rules for Emergency Services.....	43
4.5.15.2.4	Removal of PCC Rules at Gx session termination.....	44
4.5.16	Requesting Usage Monitoring Control.....	44
4.5.17	Reporting Accumulated Usage.....	45
4.5.17.0	General.....	45
4.5.17.1	Usage Threshold Reached.....	46
4.5.17.2	PCC Rule Removal.....	46
4.5.17.3	Usage Monitoring Disabled.....	47
4.5.17.4	IP-CAN Session Termination.....	47
4.5.17.5	PCRF Requested Usage Report.....	47
4.5.17.6	Report in case of Monitoring Time provided.....	47
4.5.18	IMS Restoration Support.....	48
4.5.18a	P-CSCF Restoration Enhancement Support.....	48
4.5.19	Multimedia Priority Support.....	48
4.5.19.1	PCC Procedures for Multimedia Priority services over Gx reference point.....	48
4.5.19.1.1	Provisioning of PCC Rules for Multimedia Priority Services.....	48
4.5.19.1.2	Invocation/Revocation of Priority EPS Bearer Services.....	49
4.5.19.1.3	Invocation/Revocation of IMS Multimedia Priority Services.....	50
4.5.20	Sponsored Data Connectivity.....	50
4.5.21	PCRF Failure and Restoration.....	50
4.5.22	Reporting Access Network Information.....	51
4.5.23	Application Detection Information.....	52
4.5.24	Group Communication Service Support.....	52
4.6	Void.....	53
4a	Gxx reference points.....	53
4a.1	Overview.....	53
4a.2	Gxx Reference model.....	53
4a.3	Quality of Service Control Rules.....	55
4a.3.1	Quality of Service Control Rule Definition.....	55
4a.3.2	Operations on QoS Rules.....	56
4a.4	Functional elements.....	57
4a.4.1	PCRF.....	57
4a.4.2	BBERF.....	57
4a.5	PCC procedures over Gxx reference points.....	58
4a.5.1	Gateway control and QoS Rules Request.....	58
4a.5.2	Gateway control and QoS Rules Provision.....	59
4a.5.2.1	Overview.....	59
4a.5.3	Gateway Control Session Termination.....	60
4a.5.4	Request of Gateway Control Session Termination.....	61
4a.5.5	QoS Control Rule error handling.....	61
4a.5.6	Gateway Control session to Gx session linking.....	61
4a.5.7	Multiple BBF support.....	62
4a.5.7.1	General.....	62
4a.5.7.2	Handling of two BBFs associated with the same IP-CAN session during handover.....	62

4a.5.7.3	Handling of multiple BBFs with flow mobility within IP-CAN session.....	64
4a.5.8	Provisioning of Event Triggers.....	64
4a.5.9	Bearer Control Mode Selection	65
4a.5.10	Provisioning and Policy Enforcement of Authorized QoS	65
4a.5.10.1	Provisioning of authorized QoS for the Default EPS Bearer	65
4a.5.10.2	Policy enforcement for authorized QoS of the Default EPS Bearer.....	66
4a.5.10.3	Provisioning of authorized QoS per APN	66
4a.5.10.4	Policy provisioning for authorized QoS per service data flow.....	66
4a.5.10.5	Policy enforcement for authorized QoS per service data flow	66
4a.5.11	Trace activation/deactivation.....	66
4a.5.12	IMS Emergency Session Support	66
4a.5.12.1	PCC procedures for Emergency services over Gxx reference point	66
4a.5.12.1.1	Gateway control and QoS Rules request for Emergency services.....	66
4a.5.12.1.2	Provisioning of QoS Rules for Emergency services.....	67
4a.5.12.1.2.2	Provisioning of QoS Rules for Emergency services.....	67
4a.5.12.2	Gateway Control Session to Gx session linking.....	68
4a.5.12.3	Removal of QoS Rules for Emergency Services.....	68
4a.5.12.4	Termination of Gateway Control session for Emergency Services.....	68
4a.5.13	Time of the day procedures.....	68
4a.5.14	Multimedia Priority Support.....	69
4a.5.14.1	PCC Procedures for Multimedia Priority services over Gxx reference point.....	69
4a.5.14.1.1	Provisioning of QoS Rules for Multimedia Priority Services.....	69
4a.5.14.1.2	Invocation/Revocation of Priority EPS Bearer Services	70
4a.5.14.1.3	Invocation/Revocation of IMS Multimedia Priority Services	70
4a.5.15	PCRF Failure and Restoration	70
4a.5.16	Reporting Access Network Information	70
4b	Sd reference point.....	71
4b.1	Overview	71
4b.2	Sd Reference model.....	71
4b.3	Application Detection and Control Rules.....	73
4b.3.1	Functional entities.....	73
4b.3.2	Application Detection and Control Rule Definition	73
4b.3.3	Operations on ADC Rules	75
4b.4	Functional elements.....	75
4b.4.1	PCRF	75
4b.4.2	TDF.....	76
4b.5	ADC procedures over Sd reference point for solicited application reporting.....	77
4b.5.1	Provisioning of ADC rules	77
4b.5.1.1	General	77
4b.5.1.2	Gate function.....	78
4b.5.1.3	Bandwidth limitation function	78
4b.5.1.4	Redirect function.....	78
4b.5.1.5	Usage Monitoring Control	79
4b.5.2	Request for ADC rules.....	79
4b.5.3	Provisioning of Event Triggers.....	79
4b.5.4	Request of TDF Session Termination.....	79
4b.5.5	ADC Rule Error Handling	80
4b.5.6	Requesting Usage Monitoring Control	80
4b.5.7	Reporting Accumulated Usage	82
4b.5.7.1	General	82
4b.5.7.2	Usage Threshold Reached.....	83
4b.5.7.3	ADC Rule Removal	83
4b.5.7.4	Usage Monitoring Disabled	83
4b.5.7.5	TDF Session Termination	83
4b.5.7.6	PCRF Requested Usage Report.....	83
4b.5.7.7	Report in case of Monitoring Time provided.....	84
4b.5.8	Provisioning of Event Report Indication	84
4b.5.9	Application Detection Information.....	85
4b.5.10	Time of the day procedures.....	85
4b.5.11	PCRF Failure and Restoration	86

4b.5.12	Bandwidth limitation function	86
4b.5.13	Provisioning of charging related information for the TDF session	86
4b.5.13.1	Provisioning of Charging Addresses	86
4b.5.13.2	Provisioning of Default Charging Method	87
4b.5.13.3	Provisioning of Charging Characteristics	87
4b.5a	ADC procedures over Sd reference point for unsolicited application reporting	87
4b.5a.1	Provisioning of ADC rules	87
4b.5a.1.1	General	87
4b.5a.2	Application Detection Information	87
4b.5a.3	Request of TDF Session Termination	88
4b.5a.4	TDF session to Gx session linking	88
5	Gx protocol	88
5.1	Protocol support	88
5.2	Initialization, maintenance and termination of connection and session	89
5.3	Gx specific AVPs	89
5.3.1	Bearer-Usage AVP (3GPP-GPRS and 3GPP-EPS access types)	93
5.3.2	Charging-Rule-Install AVP (All access types)	93
5.3.3	Charging-Rule-Remove AVP (All access types)	94
5.3.4	Charging-Rule-Definition AVP (All access types)	94
5.3.5	Charging-Rule-Base-Name AVP (All access types)	95
5.3.6	Charging-Rule-Name AVP (All access types)	95
5.3.7	Event-Trigger AVP (All access types)	95
5.3.8	Metering-Method AVP (All access types)	102
5.3.9	Offline AVP (All access types)	102
5.3.10	Online AVP (All access types)	103
5.3.11	Precedence AVP (All access types)	103
5.3.12	Reporting-Level AVP (All access types)	104
5.3.13	TFT-Filter AVP (3GPP-GPRS access type only)	104
5.3.14	TFT-Packet-Filter-Information AVP (3GPP-GPRS access type only)	105
5.3.15	ToS-Traffic-Class AVP (All access types)	105
5.3.16	QoS-Information AVP (All access types)	105
5.3.17	QoS-Class-Identifier AVP (All access types)	106
5.3.18	Charging-Rule-Report AVP (All access types)	107
5.3.19	PCC-Rule-Status AVP (All access types)	108
5.3.20	Bearer-Identifier AVP (Applicable access type 3GPP-GPRS)	108
5.3.21	Bearer-Operation AVP (Applicable access type 3GPP-GPRS)	109
5.3.22	Access-Network-Charging-Identifier-Gx AVP (All access types)	109
5.3.23	Bearer-Control-Mode AVP	109
5.3.24	Network-Request-Support AVP	110
5.3.25	Guaranteed-Bitrate-DL AVP	110
5.3.26	Guaranteed-Bitrate-UL AVP	110
5.3.27	IP-CAN-Type AVP (All access types)	110
5.3.28	QoS-Negotiation AVP (3GPP-GPRS Access Type only)	111
5.3.29	QoS-Upgrade AVP (3GPP-GPRS Access Type only)	111
5.3.30	Event-Report-Indication AVP (All access types)	112
5.3.31	RAT-Type AVP	113
5.3.32	Allocation-Retention-Priority AVP (All access types)	114
5.3.33	CoA-IP-Address AVP (All access types)	114
5.3.34	Tunnel-Header-Filter AVP (All access types)	114
5.3.35	Tunnel-Header-Length AVP (All access types)	114
5.3.36	Tunnel-Information AVP (All access types)	114
5.3.37	CoA-Information AVP (All access types)	115
5.3.38	Rule-Failure-Code AVP (All access types)	115
5.3.39	APN-Aggregate-Max-Bitrate-DL AVP	117
5.3.40	APN-Aggregate-Max-Bitrate-UL AVP	117
5.3.41	Revalidation-Time (ALL Access Types)	117
5.3.42	Rule-Activation-Time (ALL Access Types)	118
5.3.43	Rule-Deactivation-Time (ALL Access Types)	118
5.3.44	Session-Release-Cause (All access types)	118
5.3.45	Priority-Level AVP (All access types)	118
5.3.46	Pre-emption-Capability AVP	119

5.3.47	Pre-emption-Vulnerability AVP	119
5.3.48	Default-EPS-Bearer-QoS AVP	119
5.3.49	AN-GW-Address AVP (All access types)	119
5.3.50	Resource-Allocation-Notification AVP (All access types).....	120
5.3.51	Security-Parameter-Index AVP (All access types)	120
5.3.52	Flow-Label AVP (All access types)	120
5.3.53	Flow-Information AVP (All access types).....	120
5.3.54	Packet-Filter-Content AVP	121
5.3.55	Packet-Filter-Identifier AVP	121
5.3.56	Packet-Filter-Information AVP	121
5.3.57	Packet-Filter-Operation AVP.....	122
5.3.58	PDN-Connection-ID AVP	122
5.3.59	Monitoring-Key AVP	122
5.3.60	Usage-Monitoring-Information AVP.....	122
5.3.61	Usage-Monitoring-Level AVP.....	123
5.3.62	Usage-Monitoring-Report AVP.....	123
5.3.63	Usage-Monitoring-Support AVP	124
5.3.64	CSG-Information-Reporting AVP	124
5.3.65	Flow-Direction AVP	124
5.3.66	Packet-Filter-Usage AVP (All access types)	125
5.3.67	Charging-Correlation-Indicator AVP (All access types)	125
5.3.68	Routing-Rule-Install AVP	125
5.3.69	Routing-Rule-Remove AVP	125
5.3.70	Routing-Rule-Definition AVP	125
5.3.71	Routing-Rule-Identifier AVP.....	126
5.3.72	Routing-Filter AVP.....	126
5.3.73	Routing-IP-Address AVP	126
5.3.74	Void	126
5.3.75	Void	126
5.3.76	Void	126
5.3.77	TDF-Application-Identifier AVP.....	127
5.3.78	TDF-Information AVP	127
5.3.79	TDF-Destination-Realm AVP	127
5.3.80	TDF-Destination-Host AVP	127
5.3.81	TDF-IP-Address AVP.....	127
5.3.82	Redirect-Information AVP	127
5.3.83	Redirect-Support AVP.....	128
5.3.84	PS-to-CS-Session-Continuity AVP (3GPP-EPS access type only)	128
5.3.85	Void	128
5.3.86	Void	128
5.3.87	Void	128
5.3.88	Void	128
5.3.89	Void	128
5.3.90	Void	128
5.3.91	Application-Detection-Information AVP	128
5.3.92	TDF-Application-Instance-Identifier AVP	129
5.3.93	Void	129
5.3.94	Void	129
5.3.95	HeNB-Local-IP-Address AVP (3GPP-EPS access type only)	129
5.3.96	UE-Local-IP-Address AVP (Non-3GPP-EPS access type only)	129
5.3.97	UDP-Source-Port AVP (3GPP-EPS and Non-3GPP-EPS access types)	129
5.3.98	Mute-Notification AVP	129
5.3.99	Monitoring-Time AVP	130
5.3.100	AN-GW-Status AVP (3GPP-EPS access type).....	130
5.3.101	User-Location-Info-Time AVP.....	130
5.3.102	Credit-Management-Status AVP	130
5.3.103	Default-QoS-Information AVP (FBA access type)	130
5.3.104	Default-QoS-Name AVP (FBA access type).....	131
5.3.105	Conditional-APN-Aggregate-Max-Bitrate (All access types)	131
5.3.106	RAN-NAS-Release-Cause AVP (3GPP-EPS access type).....	131
5.3.107	Presence-Reporting-Area-Elements-List AVP (3GPP-EPS access type)	131
5.3.108	Presence-Reporting-Area-Identifier AVP (3GPP-EPS access type).....	132

5.3.109	Presence-Reporting-Area-Information AVP (3GPP-EPS access type).....	132
5.3.110	Presence-Reporting-Area-Status AVP (3GPP-EPS access type).....	132
5.3.111	NetLoc-Access-Support AVP.....	132
5.3.112	Fixed-User-Location-Info AVP (FBA access type).....	132
5.3.113	PCSCF-Restoration-Indication AVP.....	133
5.3.114	IP-CAN-Session-Charging-Scope AVP.....	133
5.4	Gx re-used AVPs.....	133
5.4.1	Use of the Supported-Features AVP on the Gx reference point.....	138
5.4.2	Flow-Description AVP.....	141
5.5	Gx specific Experimental-Result-Code AVP values.....	141
5.5.1	General.....	141
5.5.2	Success.....	142
5.5.3	Permanent Failures.....	142
5.5.4	Transient Failures.....	143
5.6	Gx Messages.....	143
5.6.1	Gx Application.....	143
5.6.2	CC-Request (CCR) Command.....	143
5.6.3	CC-Answer (CCA) Command.....	145
5.6.4	Re-Auth-Request (RAR) Command.....	145
5.6.5	Re-Auth-Answer (RAA) Command.....	146
5a	Gxx protocols.....	146
5a.1	Protocol support.....	146
5a.2	Initialization, maintenance and termination of connection and session.....	147
5a.3	Gxx specific AVPs.....	147
5a.3.1	QoS-Rule-Install AVP (All access types).....	147
5a.3.2	QoS-Rule-Remove AVP (All access types).....	148
5a.3.3	QoS-Rule-Definition AVP (All access types).....	148
5a.3.4	QoS-Rule-Name AVP (All access types).....	149
5a.3.5	QoS-Rule-Report AVP (All access types).....	149
5a.3.6	Session-Linking-Indicator AVP (All access types).....	149
5a.3.7	QoS-Rule-Base-Name AVP (All access types).....	150
5a.4	Gxx re-used AVPs.....	150
5a.4.1	Use of the Supported-Features AVP on the Gxx reference point.....	154
5a.5	Gxx specific Experimental-Result-Code AVP values.....	156
5a.6	Gxx Messages.....	156
5a.6.1	Gxx Application.....	156
5a.6.2	CC-Request (CCR) Command.....	156
5a.6.3	CC-Answer (CCA) Command.....	157
5a.6.4	Re-Auth-Request (RAR) Command.....	157
5a.6.5	Re-Auth-Answer (RAA) Command.....	158
5b	Sd protocol.....	158
5b.1	Protocol support.....	158
5b.2	Initialization, maintenance and termination of connection and session.....	158
5b.3	Sd specific AVPs.....	159
5b.3.1	ADC-Rule-Install AVP.....	159
5b.3.2	ADC-Rule-Remove AVP.....	159
5b.3.3	ADC-Rule-Definition AVP.....	160
5b.3.4	ADC-Rule-Base-Name AVP.....	160
5b.3.5	ADC-Rule-Name AVP.....	160
5b.3.6	ADC-Rule-Report AVP.....	160
5b.3.7	Void.....	161
5b.4	Sd re-used AVPs.....	161
5b.4.1	Use of the Supported-Features AVP on the Sd reference point.....	167
5b.5	Sd specific Experimental-Result-Code AVP values.....	168
5b.5.1	General.....	168
5b.5.2	Success.....	168
5b.5.3	Permanent Failures.....	168
5b.5.4	Transient Failures.....	169
5b.6	Sd Messages.....	169
5b.6.1	Sd Application.....	169

5b.6.2	TDF-Session-Request (TSR) Command.....	169
5b.6.3	TDF-Session-Answer (TSA) Command.....	170
5b.6.4	CC-Request (CCR) Command.....	170
5b.6.5	CC-Answer (CCA) Command.....	171
5b.6.6	Re-Auth-Request (RAR) Command.....	171
5b.6.7	Re-Auth-Answer (RAA) Command.....	172
Annex A (normative): Access specific aspects (GPRS).....		173
A.1	Scope.....	173
A.2	Reference model.....	173
A.2	Functional elements.....	173
A.2.1	PCRF.....	173
A.3	PCC procedures.....	173
A.3.1	Request for PCC rules.....	173
A.3.2	Provisioning of PCC rules.....	174
A.3.2.1	PCC rule request for services not known to PCRF.....	175
A.3.2.2	Selecting a PCC rule and IP CAN Bearer for Downlink IP packets.....	175
A.3.3	Provisioning and Policy Enforcement of Authorized QoS.....	175
A.3.3.0	Overview.....	175
A.3.3.1	Provisioning of authorized QoS per IP CAN bearer.....	175
A.3.3.2	Policy enforcement for authorized QoS per IP CAN bearer.....	177
A.3.3.2a	Policy provisioning for authorized QoS per service data flow.....	177
A.3.3.3	Policy enforcement for authorized QoS per service data flow.....	177
A.3.3.3a	Coordination of authorized QoS scopes in mixed mode.....	177
A.3.3.3b	Provisioning of authorized QoS per QCI.....	178
A.3.3.4	Policy enforcement for authorized QoS per QCI.....	178
A.3.3.5	Void.....	178
A.3.3.6	Provisioning of authorized QoS per APN.....	178
A.3.4	Indication of IP-CAN Bearer Termination Implications.....	178
A.3.5	Indication of IP-CAN Session Termination.....	178
A.3.6	Request of IP-CAN Bearer Termination.....	179
A.3.7	Request of IP-CAN Session Termination.....	179
A.3.8	Bearer Control Mode Selection.....	179
A.3.9	Bearer Binding Mechanism.....	180
A.3.10	Void.....	180
A.3.11	PCC Rule Error Handling.....	180
A.3.12	IMS Emergency Session Support.....	180
A.3.12.1	Request of PCC Rules for an Emergency services.....	180
A.3.12.2	Provisioning of PCC Rules for an Emergency services.....	180
A.3.13	Removal of PCC Rules for Emergency Services.....	181
A.3.14	Removal of PCC Rules at Gx session termination.....	181
A.3.15	IMS Restoration Support.....	181
A.3.16	Provisioning of CSG information reporting indication.....	181
A.3.17	Packet-Filter-Usage AVP.....	181
A.3.18	Precedence handling.....	181
A.3.19	Reporting Access Network Information.....	182
A.3.20	User CSG Information Reporting.....	182
A.4	QoS mapping.....	182
A.4.1	GPRS QCI to UM3GPP TS QoS parameter mapping.....	182
A.4.2	GPRS ARP to UM3GPP TS ARP parameter mapping.....	183
Annex B (normative): Access specific aspects, 3GPP (GERAN/UTRAN/E-UTRAN) EPS		184
B.1	Scope.....	184
B.2	Functional Elements.....	184
B.2.1	PCRF.....	184
B.2.2	PCEF.....	184
B.2.3	BBERF.....	184

B.3	PCC procedures.....	184
B.3.1	Request for PCC and/or QoS rules.....	184
B.3.2	Provisioning of PCC and/or QoS rules.....	186
B.3.3	Provisioning and Policy Enforcement of Authorized QoS.....	186
B.3.3.1	Provisioning of authorized QoS per APN.....	186
B.3.3.2	Policy enforcement for authorized QoS per APN.....	186
B.3.3.3	QoS handling for interoperation with Gn/Gp SGSN.....	186
B.3.3.4	Void.....	189
B.3.3.5	Policy provisioning for authorized QoS per service data flow.....	189
B.3.3.6	Policy enforcement for authorized QoS of the Default EPS Bearer.....	189
B.3.4	Packet-Filter-Information AVP.....	190
B.3.5	Bearer Control Mode Selection.....	190
B.3.6	Trace activation/deactivation at P-GW.....	190
B.3.7	IMS Restoration Support.....	190
B.3.8	Provisioning of CSG information reporting indication.....	190
B.3.9	Packet-Filter-Usage AVP.....	190
B.3.10	User CSG Information Reporting.....	191
B.3.10.1	GTP-based S5/S8.....	191
B.3.10.2	PMIP-based S5/S8.....	191
B.3.11	Request of IP-CAN Bearer Termination.....	191
B.3.12	CS to PS handover.....	191
B.3.13	Precedence handling.....	192
B.3.14	S-GW Restoration Support.....	192
B.3.15	Reporting Access Network Information.....	193
B.3.16	Presence Reporting Area Information reporting.....	193
Annex C (Informative): Mapping table for type of access networks.....		195
Annex D (normative): Access specific aspects (EPC-based Non-3GPP).....		196
D.1	Scope.....	196
D.2	EPC-based eHRPD Access.....	196
D.2.1	General.....	196
D.2.2	Gxa procedures.....	196
D.2.2.1	Request for QoS rules.....	196
D.2.2.2	Provisioning of QoS rules.....	197
D.2.2.2.1	QoS rule request for services not known to PCRF.....	197
D.2.2.3	Provisioning and Policy Enforcement of Authorized QoS.....	197
D.2.2.3.1	Provisioning of authorized QoS.....	197
D.2.2.3.2	Policy enforcement for authorized QoS.....	197
D.2.3	Bearer Control Mode selection.....	197
D.2.4	QoS Mapping.....	198
D.2.4.1	QCI to eHRPD QoS parameter mapping.....	198
D.3	EPC-based Trusted WLAN Access with S2a.....	198
Annex E (normative): Access specific aspects, Fixed Broadband Access interworking with EPC.....		199
E.1	Scope.....	199
E.2	Definitions and abbreviations.....	199
E.2.1	Definitions.....	199
E.2.2	Abbreviations.....	199
E.3	Reference points and Reference model.....	199
E.3.0	General.....	199
E.3.1	Gx Reference Point.....	200
E.3.2	Gxx Reference Point.....	200
E.3.3	S15 Reference Point.....	200
E.3.3a	Sd Reference Point.....	200
E.3.4	Reference Model.....	200

E.4	Functional Elements	203
E.4.1	PCRF	203
E.4.2	PCEF	204
E.4.3	BBERF	204
E.4.4	HNB GW	204
E.5	PCC procedures	204
E.5.1	PCC procedures over Gx reference point	204
E.5.2	PCC procedures over Gxx reference point	205
E.5.2.1	Gateway Control Session Establishment	205
E.5.2.2	Gateway Control Session Modification	205
E.5.2.3	Gateway Control Session Termination	205
E.5.2.4	Request of Gateway Control Session Termination	205
E.5.3	S15 Procedures	205
E.5.3.1	S15 Session Establishment	205
E.5.3.2	S15 Session Modification	206
E.5.3.2.1	S15 Session Modification initiated by the HNB GW	206
E.5.3.2.2	S15 Session Modification initiated by the PCRF	206
E.5.3.3	S15 Session Termination	206
E.5.4	ADC procedures over Sd reference point for solicited application reporting	206
E.5.4.1	TDF session establishment	206
E.5.5	ADC procedures over Sd reference point for unsolicited application reporting	207
E.5.5.1	General	207
E.5.5.2	TDF session to S9a* session linking	207
E.6	S15 Protocol	207
E.6.1	Protocol support	207
E.6.2	Initialization, maintenance and termination of connection and session	208
E.6.3	S15 specific AVPs	208
E.6.3.1	General	208
E.6.3.2	CS-Service-QoS-Request-Identifier	208
E.6.3.3	CS-Service-QoS-Request-Operation	209
E.6.3.4	CS-Service-Resource-Result-Operation	209
E.6.3.5	CS-Service-Resource-Failure-Cause	209
E.6.3.6	CS-Service-Resource-Report	209
E.6.4	S15 re- used AVPs	210
E.6.4.1	General	210
E.6.4.2	Use of the Supported-Features AVP on the S15 reference point	210
E.6.5	S15 specific Experimental-Result-Code AVP values	211
E.6.5.1	General	211
E.6.5.2	Success	211
E.6.5.3	Permanent Failures	211
E.6.5.4	Transient Failures	211
E.6.6	S15 Messages	211
E.6.6.1	S15 Application	211
E.6.6.2	CC-Request (CCR) Command	211
E.6.6.3	CC-Answer (CCA) Command	212
E.6.6.4	Re-Auth-Request (RAR) Command	212
E.6.6.5	Re-Auth-Answer (RAA) Command	213
Annex F (informative):	Disabling/re-enabling Usage Monitoring for a PCC/ADC rule	214
Annex G (normative):	Access specific aspects, Fixed Broadband Access network convergence	215
G.1	Scope	215
G.2	Definitions and abbreviations	215
G.2.1	Definitions	215
G.2.2	Abbreviations	215
G.3	Reference points and Reference model	216
G.3.1	Reference architecture	216
G.3.1.1	General	216

G.3.1.2	Reference architecture	216
G.3.2	Gx Reference Point	217
G.3.3	Sd Reference Point	217
G.4	Functional Elements	217
G.4.1	PCRF	217
G.4.2	PCEF(IP Edge)	218
G.4.3	TDF	218
G.5	PCC procedures	218
G.5.1	Concept Adaptations for Fixed Broadband Access Network Convergence	218
G.5.1.1	General	218
G.5.1.2	IP-CAN session	218
G.5.1.3	IP-CAN bearer	219
G.5.1.4	PCC rule	219
G.5.1.5	ADC rule	219
G.5.1.6	Subscriber Identifier	219
G.5.1.7	Default QoS control	219
G.5.2	IP-CAN Session Establishment	220
G.5.3	IP-CAN Session Termination	221
G.5.4	IP-CAN Session Modification	221
G.5.4.1	PCEF-Initiated IP-CAN Session Modification	221
G.5.4.2	PCRF-Initiated IP-CAN Session Modification	221
Annex H (informative):	Change history	222
History		225

Foreword

This Technical Specification has been produced by the 3rd Generation Partnership Project (3GPP).

The contents of the present document are subject to continuing work within the TSG and may change following formal TSG approval. Should the TSG modify the contents of the present document, it will be re-released by the TSG with an identifying change of release date and an increase in version number as follows:

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- x the first digit:
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- y the second digit is incremented for all changes of substance, i.e. technical enhancements, corrections, updates, etc.
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1 Scope

The present document provides the stage 3 specification of the Gx, Gxx and Sd reference points for the present release. The functional requirements and the stage 2 specifications of the Gx, Gxx and Sd reference points are contained in 3GPP TS 23.203 [7]. The Gx reference point lies between the Policy and Charging Rule Function and the Policy and Charging Enforcement Function. The Gxx reference point lies between the Policy and Charging Rule Function and the Bearer Binding and Event Reporting Function. The Sd reference point lies between the Policy and Charging Rule Function and the Traffic Detection Function.

Whenever it is possible the present document specifies the requirements for the protocol by reference to specifications produced by the IETF within the scope of Diameter. Where this is not possible, extensions to Diameter are defined within the present document.

2 References

The following documents contain provisions which, through reference in this text, constitute provisions of the present document.

- References are either specific (identified by date of publication and/or edition number or version number) or non-specific.
- For a specific reference, subsequent revisions do not apply.
- For a non-specific reference, the latest version applies. In the case of a reference to a 3GPP document (including a GSM document), a non-specific reference implicitly refers to the latest version of that document in the same Release as the present document.

- [1] 3GPP TR 21.905: "Vocabulary for 3GPP Specifications".
- [2] 3GPP TS 29.210: "Charging Rule Provisioning over Gx Interface".
- [3] Void.
- [4] Void.
- [5] IETF RFC 3588: "Diameter Base Protocol".
- [6] Void.
- [7] 3GPP TS 23.203: "Policy Control and Charging architecture".
- [8] 3GPP TS 29.213: "Policy and charging control signalling flows and Quality of Service (QoS) parameter mapping".
- [9] IETF RFC 4006: "Diameter Credit Control Application".
- [10] 3GPP TS 29.214: "Policy and Charging Control over Rx reference point".
- [11] 3GPP TS 29.061: "Interworking between the Public Land Mobile Network (PLMN) supporting packet based services and Packet Data Networks (PDN)".
- [12] IETF RFC 4005: "Diameter Network Access Server Application".
- [13] 3GPP TS 24.008: "Mobile radio interface Layer 3 specification".
- [14] 3GPP TS 29.229: "Cx and Dx interfaces based on Diameter protocol; Protocol details".
- [15] IETF RFC 3162: "Radius and Ipv6".
- [16] 3GPP TS 32.295: "Telecommunication management; Charging management; Charging Data Record (CDR) transfer".