Source:	**SA5 (Telecom Management)**
Title:	**Recommendation to include "GSM LCS Charging – CDR definition" in either 12.05 or 12.71 (S5-000310)**
Document for:	**Information**
Agenda Item:	**6.5.1**

SA5 informs SA#8 that:

TSG-SA WG5 (Telecom Management) has agreed during its Meeting #12 in Rome:

1. to submit for SA#8 approval the 12.71 (GSM LCS O&M) without "Charging definition" (SP-000224) &

2. to submit to SA#9 a CR against either 12.05 or 12.71 for inclusion of the "Charging definition".

3GPP TSG-SA5 (Network Management) Meeting #12   **SA5#12(00)0310**
Rome, Italy, 6th – 9th June, 2000

Source:	**Motorola (**ideaki01@email.mot.com**)**
Title:	**GSM LCS Charging Proposal**

Document for: Discussion

Category:	Contribution to Charging Group
Document Specification(s) involved:	This contribution provides a proposal for charging of GSM LSC services.
	12.71, 12.05

1   Introduction

Based on the Charging Requirements detailed in Section 13 Operational Aspects of TS 03.71. This contribution proposes call detail records required for charging of GSM Location services.

Four call detail records are used for the accounting of the LCS provision;

> LCS-MO and GMLC-LCS-MO for Mobile originated LCS request.
> LCS-MT and GMLC-LCS-MT for Mobile terminated LCS request.

The following identities are recorded for the purpose of accounting.

*   The served (requesting) IMSI, IMEI and MSISDN if the LCS requestor is a Mobile subscriber.

*   The targeted MSISDN of the Mobile subscriber provided by the requesting LCS client.

*   The served LCS Client Identity. This will be the address of the external LCS requestor or the LCS client served with the location information if requested by the MS.

2   MSC Call Detail Records

2.1   Mobile Originated LCS Request

For a Mobile originated LCS request, an LCS-MO record shall be produced in the MSC.

Table 1: LCS-MO record

Field		Description
Record Type	M	LCS-Mobile originated.
Served IMSI	M	The IMSI of the subscriber initiating LCS request.
Served MSISDN	O	The primary MSISDN of the subscriber LCS requester.
Recording Entity	M	The address (E.164) of this MSC.
Gateway Entity	M	The address (E.164) of the served Gateway MLC.
LCS Client Type	M	Identifies the type LCS client from among the following: - Emergency Services - Value Added Services - PLMN Operator Services - Lawful Intercept Services
Client Identity	M	The address of the LCS client to which the result was sent.
LCS Service Requested	M	The type of location service requested by the Client
Location Result	M	The Location Information provided to the GMLC for the Target Mobile Subscriber.
Event Time stamp	M	The time at which the message was received by the SMLC from the subscriber.
Message Reference	M	A reference, uniquely identifying this message.
Record extensions	O	A set of network/ manufacturer specific extensions to the record.

2.2   Mobile Terminated LCS Request

For a Mobile terminated LCS request, an LCS-MT record shall be produced in the MSC.

Table 2: LCS-MO record

Field		Description
Record Type	M	LCS-Mobile terminated.
Client Identity	M	The address of the requesting LCS client.
LCS Client Type	M	Identifies the type LCS client.
Target IMSI	M	The IMSI of the Targeted LCS subscriber.
Target MSISDN	O	The primary MSISDN of the Targeted subscriber, if available.
Recording Entity	M	The address (E.164) of this MSC.
Gateway Entity	M	The address (E.164) of the requesting Gateway MLC.
LCS Service Requested	M	The type of location service requested by the Client
Location Result	M	The Location Information provided to the GMLC for the Target Mobile Subscriber.
Event Time stamp	M	The time at which the message was received by the SMLC from the subscriber.
Message Reference	M	A reference, uniquely identifying this message.
Record extensions	O	A set of network/ manufacturer specific extensions to the record.

3   GMLC Call Detail Records

3.1   GMLC Mobile Originated LCS Request

For a Mobile originated LCS request, a GMLC-LCS-MO record shall be produced.

Table 3: GMLC-LCS-MO record

Field		Description
Record Type	M	GMLC-LCS-Mobile originated.
Served IMSI	M	The IMSI of the subscriber initiating LCS request.
Served MSISDN	O	The primary MSISDN of the subscriber LCS requester.
Recording Entity	M	The address (E.164) of this Gateway MLC
MSC Entity	M	The address (E.164) of the Serving MSC.
Client Identity	M	The address of the LCS client to which the result was sent.
LCS Client Type	M	Identifies the type LCS client.
LCS Service Requested	M	The type of location service requested by the Client
Location Result	M	The Location Information provided to the GMLC for the Target Mobile Subscriber.
Event Time stamp	M	The time at which the message was received by the GMLC from the subscriber.
Message Reference	M	A reference, uniquely identifying this message.
Record extensions	O	A set of network/ manufacturer specific extensions to the record.

3.2   GMLC Mobile Terminated LCS Request

For a Mobile terminated LCS request, a GMLC-LCS-MO record shall be produced.

Table 4: GMLC-LCS-MT record

Field		Description
Record Type	M	GMLC-LCS-Mobile terminated.
Client Identity	M	The address of the requesting LCS client.
LCS Client Type	M	Identifies the type LCS client.
Target IMSI	O	The IMSI of the Targeted LCS subscriber, if available.
Target MSISDN	M	The primary MSISDN of the Targeted subscriber.
Recording Entity	M	The address (E.164) of this Gateway MLC.
MSC Entity	M	The address (E.164) of the Serving MSC.
LCS Service Requested	M	The type of location service requested by the Client
Location Result	M	The Location Information provided to the GMLC for the Target Mobile Subscriber.
Event Time stamp	M	The time at which the message was received by the GMLC from the subscriber.
Message Reference	M	A reference, uniquely identifying this message.
Record extensions	O	A set of network/ manufacturer specific extensions to the record.