

# 简述

- 再次对sms相关协议学习中遇到的问题与导师沟通和解决
- 确定下一步的计划
  - 1. 观看导师的jira，学习具体的问题处理方式
  - 2. LTE的机制和流程
  - 3. RCS

# 记录

## Short message information flow

### MT

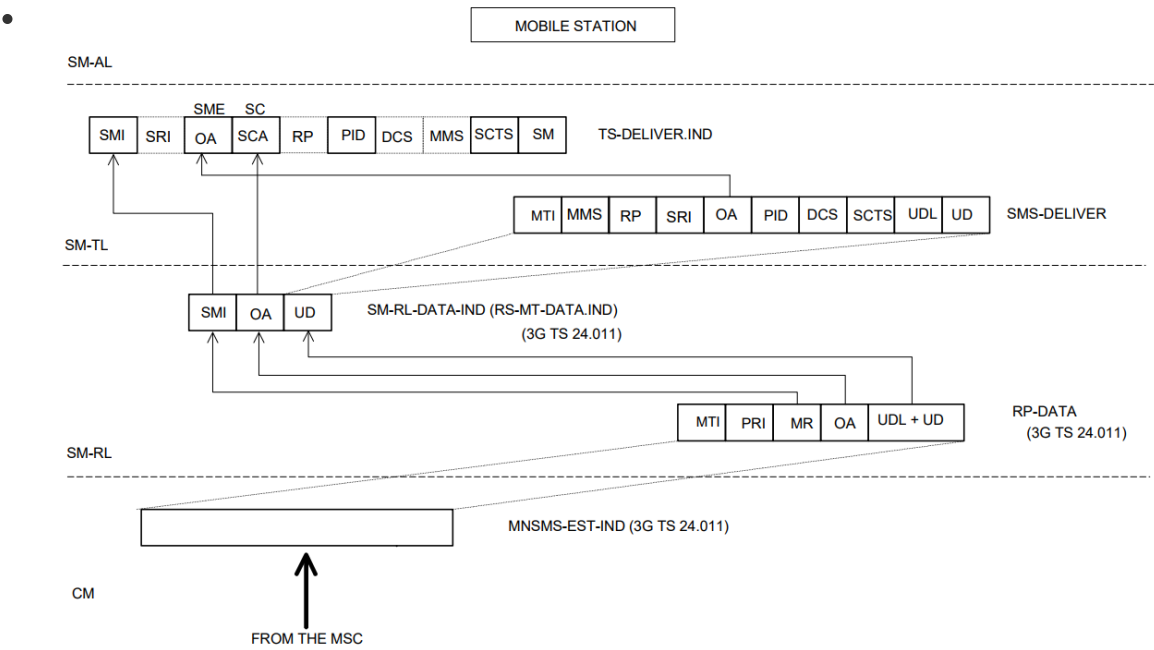


Figure C.4: Mobile terminated short message

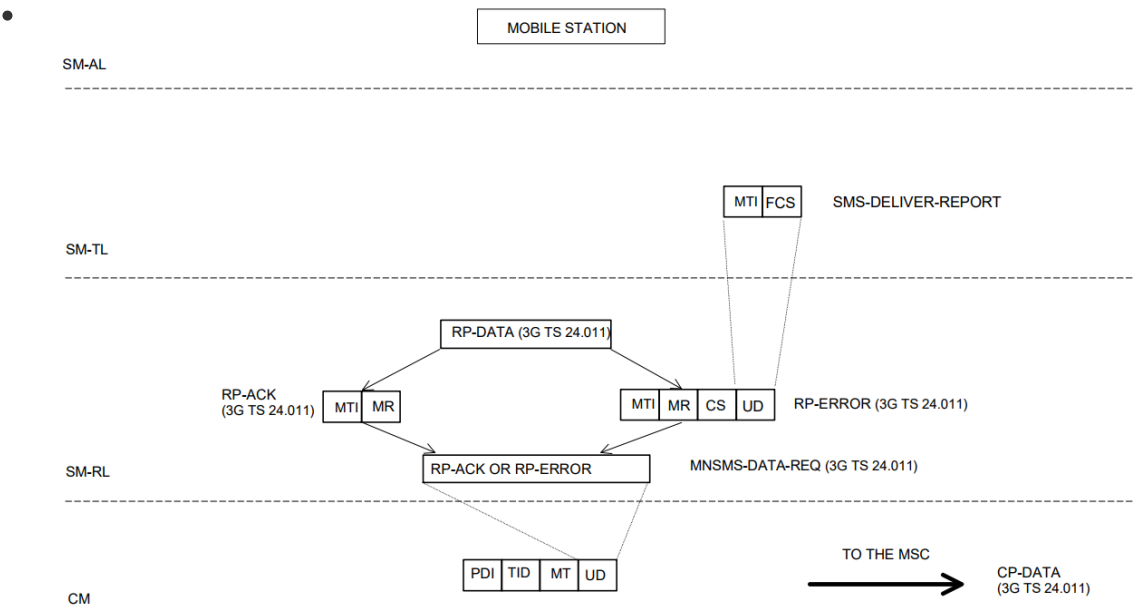


Figure C.5: Acknowledgement in the MT case

# MO

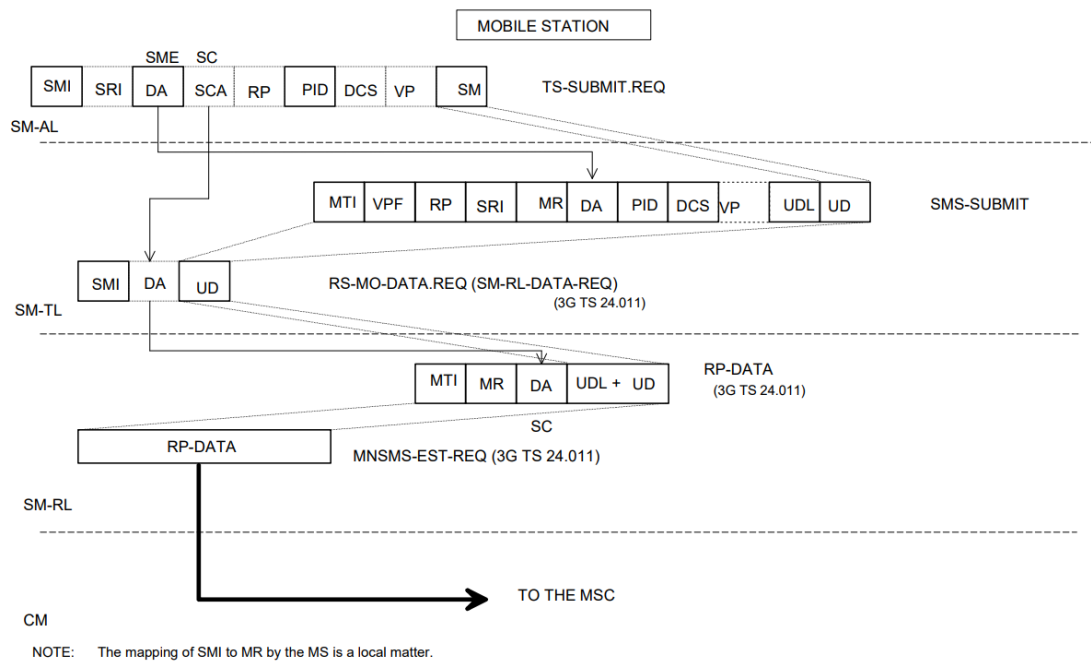


Figure C.9: Mobile originated short message

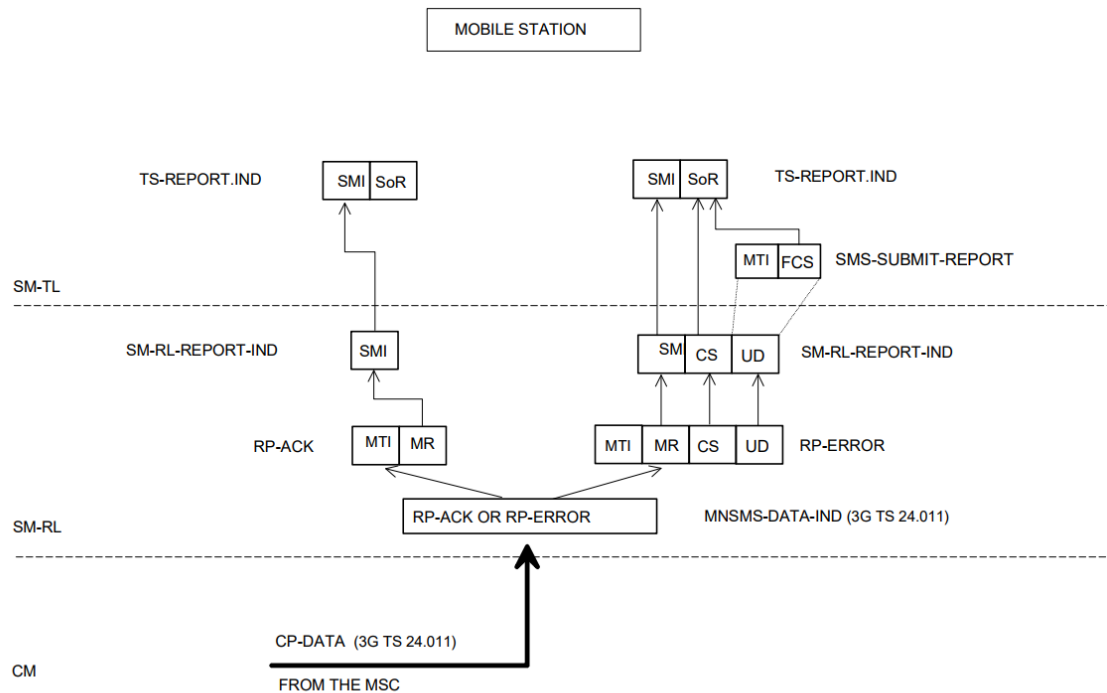


Figure C.16: Acknowledgement in the MO case

## 缩写

- SMR Short Message Relay (entity)
- SMC Short Message Control (entity)
- CM- sub Connection Management sublayer
- SM- CP Short Message Control Protocol
- MM- sub Mobility Management sublayer
- GMM-sub GPRS Mobility Management sublayer
- RR- sub Radio Resource Management sublayer
- LLC-sub Logical Link Control sublayer
- GRR-sub GPRS Radio Resource sublayer in GSM

EMM-sub	EPS Mobility Management sublayer
5GMM-sub	5G Mobility Management sublayer

## Service provided by the CM- sublayer

- In order to support the Short Message Service, the CM- sublayer provides services to the Short Message Relay Layer.
- MNSMS service primitives on the MS-side

SERVICE PRIMITIVES		PARAMETER
NAME	TYPE	
MNSMS-ABORT	Req	Cause
MNSMS-DATA-	Req	MO RPDU
MNSMS-DATA-	Ind	MT RPDU
MNSMS-EST-	Req	MO RPDU
MNSMS-EST-	Ind	MT RPDU
MNSMS-ERROR	Ind	Cause
MNSMS-REL	Req	Cause

- MNSMS- ABORT- REQuest: A request from an SMR entity to release a CM-connection in abnormal cases.
- MNSMS- DATA- REQuest: A request from an SMR entity to send a RPDU on the established CM- connection.
- MNSMS- DATA- INDication: An indication used by the SMC entity to pass the user information element (RPDU) of a received CP- DATA message to SM- RL.
- MNSMS- ESTablish- REQuest: A request from an SMR entity to establish a CM-connection. The request contains a RP- DATA UNIT as a parameter.
  - establishment of a CM- connection for this SMR entity;
  - forming of the CP- DATA message containing the RPDU; and
  - passing of CP- DATA to the MM- sublayer.
- MNSMS- ESTablish- INDication: An indication used by the SMC entity to pass the SM- user information (RPDU) of a received CP- DATA message to SM- RL. It implies completion of the establishment of the CM- connection for this SMR entity.

## Service provided by SM- RL

- In order to support the Short Message Service, the Short Message Relay Layer provides services to the Short Message Transfer Layer.
- Definition of primitives on the MS side

SERVICE PRIMITIVES	PARAMETER	
--------------------	-----------	--

SERVICE PRIMITIVES	PARAMETER	
NAME	TYPE	
SM-RL-DATA-	Req	MO SMSTPDU
SM-RL-DATA-	Ind	MT SMSTPDU
SM-RL-MEMORY AVAILABLE	Req	See subclause 3.3.1.3
SM-RL-REPORT-	Req	See subclause 3.3.1.4
SM-RL-REPORT-	Ind	See subclause 3.3.1.5

- SM-RL-DATA-REQuest: A request from the SM-TL entity to pass the SMS-TPDU and necessary control information to SM-RL
  - establishment of an SM-RL connection for MO message transfer;
  - forming of the RP-DATA message, containing the SMS-TPDU;
  - transfer of the RP-DATA message as an RPDU in an MNSMS-EST-Req.
- SM-RL-DATA-INDication: An indication used by the SMR entity to pass the SMS-TPDU and necessary control information of a received RP-DATA message to SM-TL.