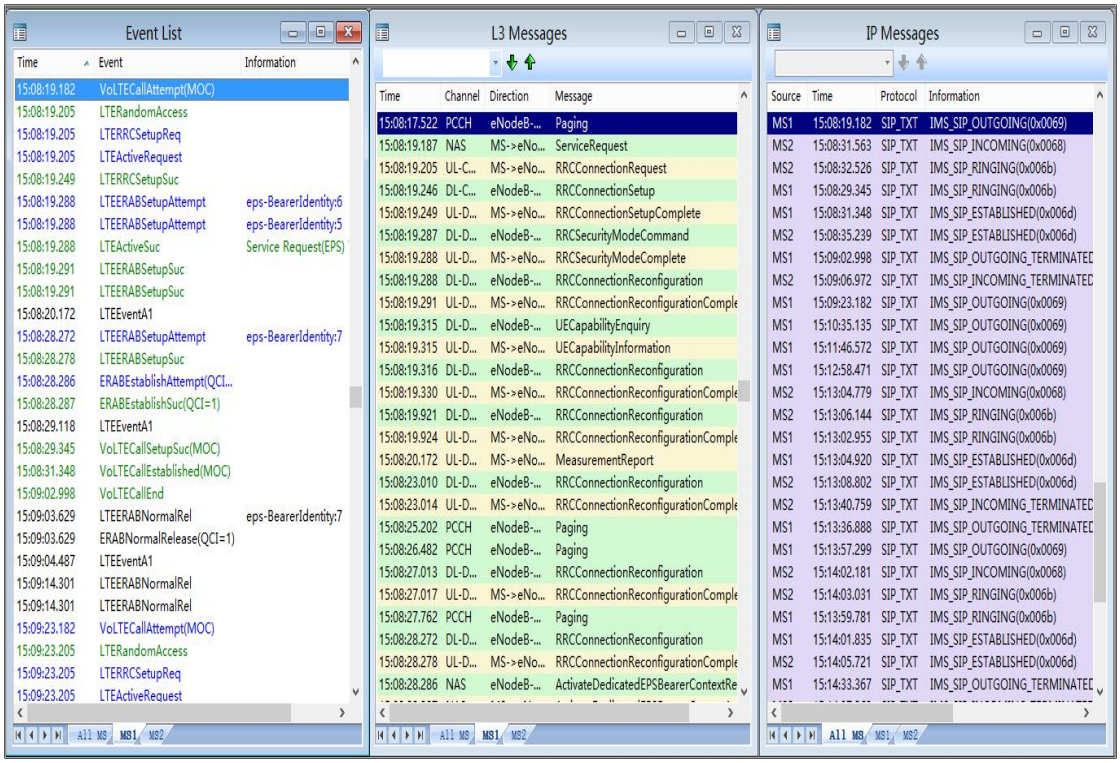
VoLTE呼叫失败案例分析0327

一、 被叫未收到 Paging 消息导致呼叫失败（网格 46）

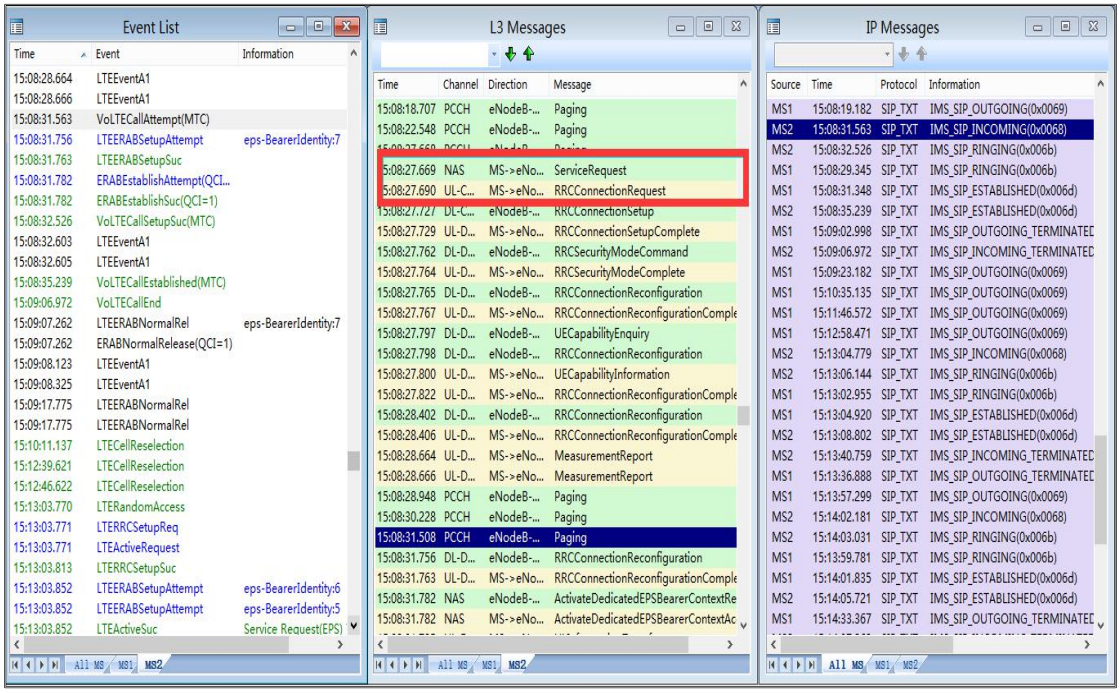
- **问题描述：**

Xxx • xxx，被叫未收到寻呼消息（期间未进行过TAU，只有小区重选）导致呼叫建立失败。需要进一步跟踪确认MME是否未下发对应寻呼。

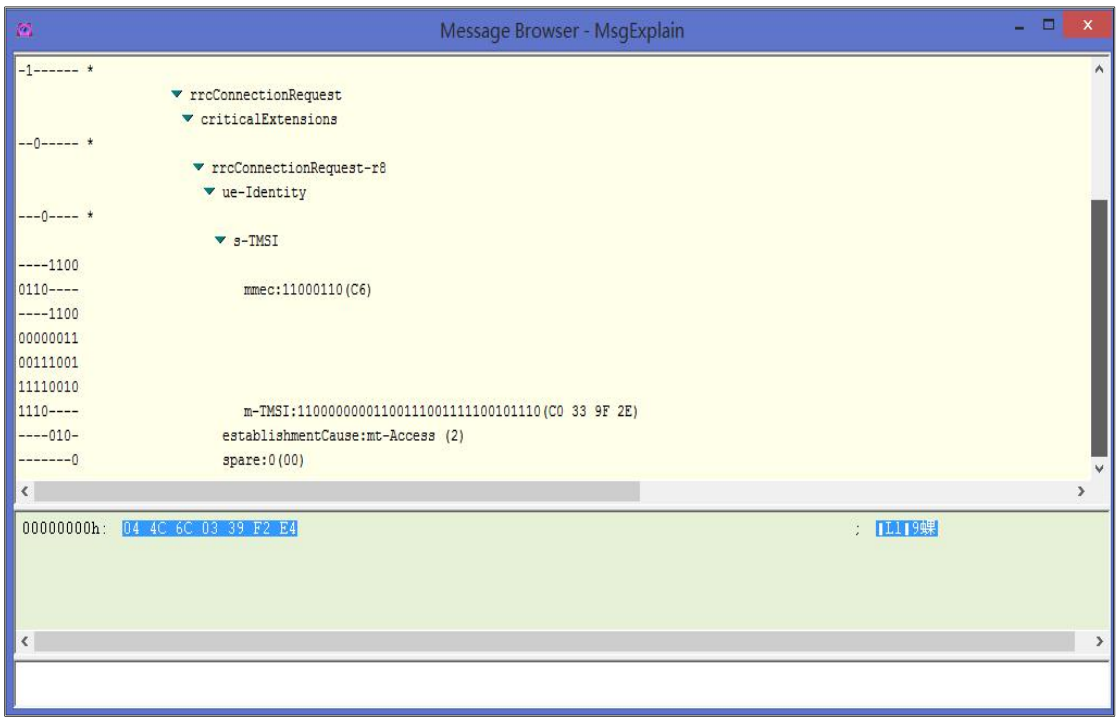
主叫15:09:23.182发起通话请求，~~对应SIP消息Invite，~~在随后的15:09:27.829→15:12:46.611 一共发起三次呼叫尝试，但MS2均未收到寻呼消息，呼叫超时，通话失败。



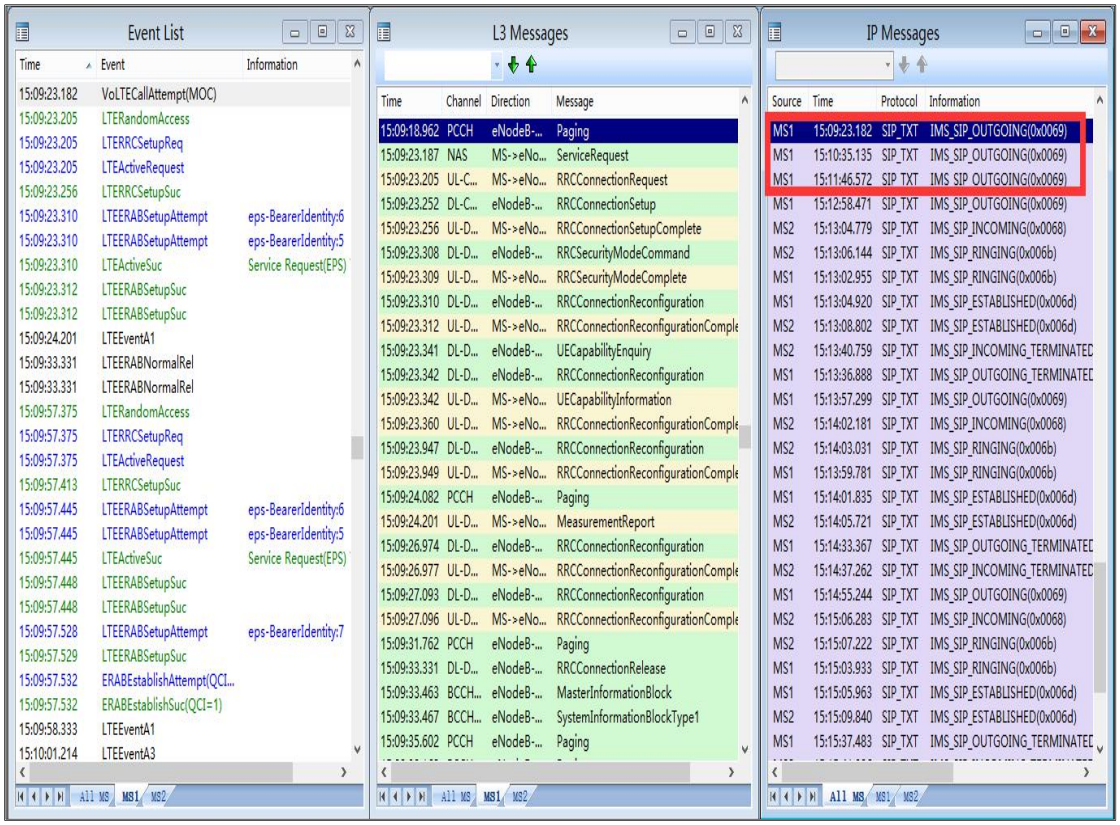
主叫上一次正常发起呼叫请求



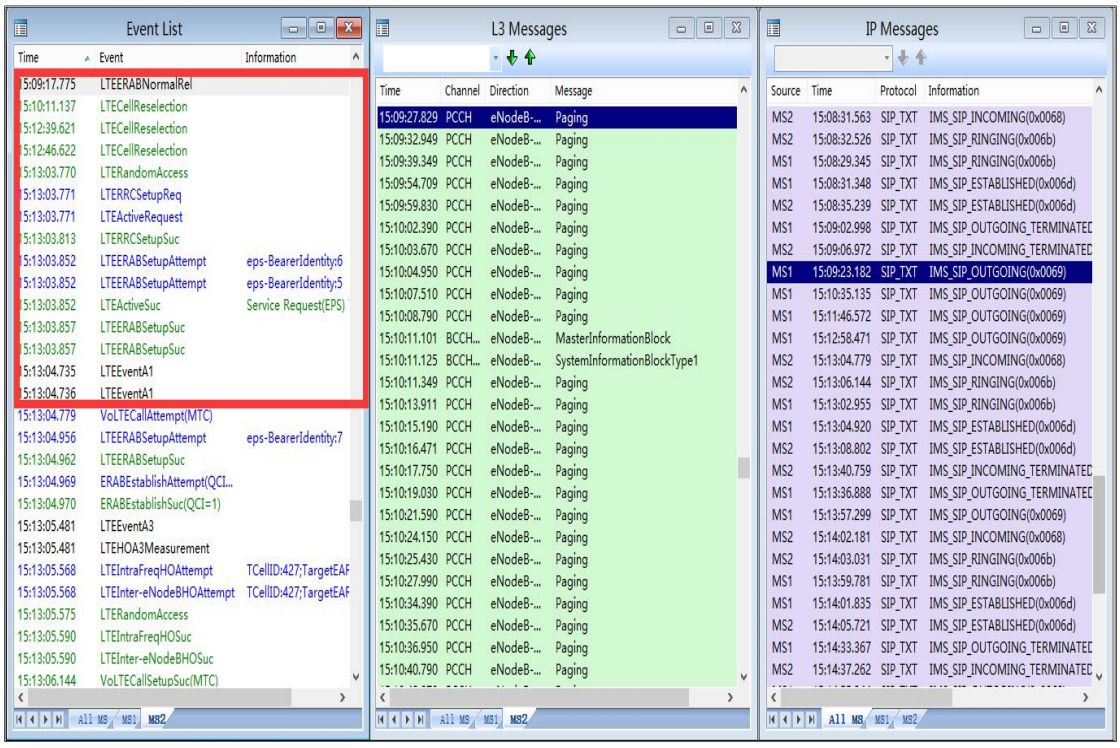
被叫上一次通话正常收到寻呼消息



Paging消息里核心网分配给被叫的TMSI标识（在图中对ＴＭＳＩ加框）



从xxx到xxx主叫连续3次~~主叫~~呼叫失败



3次主叫呼叫期间被叫均~~未收到对其发起的寻呼~~处于idle态

1450	MS2	2015-03-11	15:09:27.829	eNodeB->MME	PCCH	Paging	05 40 0C 6C 09 0A 84 40
1451	MS2	2015-03-11	15:09:32.949	eNodeB->MME	PCCH	Paging	05 40 0C 2E 02 2F 64 A0
1452	MS2	2015-03-11	15:09:39.349	eNodeB->MME	PCCH	Paging	05 40 8C 4D 03 02 CE B0 C4 C0 07 3A A3 00
1453	MS2	2015-03-11	15:09:54.709	eNodeB->MME	PCCH	Paging	05 40 8F 4C 09 75 28 70 F4 F0 1E BE 46 00
1454	MS2	2015-03-11	15:09:59.830	eNodeB->MME	PCCH	Paging	05 40 0F 6C 04 16 75 20
1455	MS2	2015-03-11	15:10:02.390	eNodeB->MME	PCCH	Paging	05 40 0C 4E 01 BF 6C 30
1456	MS2	2015-03-11	15:10:03.670	eNodeB->MME	PCCH	Paging	05 40 0C 6F 0D 8D 1F 60
1457	MS2	2015-03-11	15:10:04.950	eNodeB->MME	PCCH	Paging	05 40 0C 2F 03 1D 2F 10
1458	MS2	2015-03-11	15:10:07.510	eNodeB->MME	PCCH	Paging	05 40 0F 4F 06 00 3B 30
1459	MS2	2015-03-11	15:10:08.790	eNodeB->MME	PCCH	Paging	05 40 8F 4F 0A 69 9C E0 C4 D0 30 2C EE 00
1462	MS2	2015-03-11	15:10:11.349	eNodeB->MME	PCCH	Paging	05 40 8F 4E 0F 21 18 80 F6 E0 1E 52 D6 00
1463	MS2	2015-03-11	15:10:13.911	eNodeB->MME	PCCH	Paging	05 40 8C 4F 0E D2 1B 70 F6 E0 DE 6F 9A 00
1464	MS2	2015-03-11	15:10:15.190	eNodeB->MME	PCCH	Paging	05 40 8F 4F 07 ED 42 C0 C6 F0 FE 01 80 00
1465	MS2	2015-03-11	15:10:16.471	eNodeB->MME	PCCH	Paging	05 41 0C 6E 09 9A BB A0 F4 E0 9D AC 45 0C 2E 0B 31 9A B8
1466	MS2	2015-03-11	15:10:17.750	eNodeB->MME	PCCH	Paging	05 41 0C 6F 02 60 11 70 C6 F0 D8 D1 F6 0C 6E 00 EE 88 F0
1467	MS2	2015-03-11	15:10:19.030	eNodeB->MME	PCCH	Paging	05 40 0C 2C 04 52 94 80
1468	MS2	2015-03-11	15:10:21.590	eNodeB->MME	PCCH	Paging	05 41 0F 6C 00 4A 63 20 F6 C0 A5 8B B7 0C 4D 0C CE 2D D0
1469	MS2	2015-03-11	15:10:24.150	eNodeB->MME	PCCH	Paging	05 40 8F 4D 03 8F FA 70 F6 C0 A5 8B B7 00
1470	MS2	2015-03-11	15:10:25.430	eNodeB->MME	PCCH	Paging	05 41 0C 4D 0D A4 F2 30 F6 E0 8E C3 AE 0C 2C 01 C5 30 90
1471	MS2	2015-03-11	15:10:27.990	eNodeB->MME	PCCH	Paging	05 40 8C 6C 09 0A 84 40 F6 C0 47 E4 EE 00
1472	MS2	2015-03-11	15:10:34.390	eNodeB->MME	PCCH	Paging	05 40 0C 6E 00 EE 88 F0
1473	MS2	2015-03-11	15:10:35.670	eNodeB->MME	PCCH	Paging	05 40 0C 2D 09 E2 16 80
1474	MS2	2015-03-11	15:10:36.950	eNodeB->MME	PCCH	Paging	05 40 0C 4E 01 BF 6C 30
1475	MS2	2015-03-11	15:10:40.790	eNodeB->MME	PCCH	Paging	05 40 0C 4F 06 3C C3 30
1476	MS2	2015-03-11	15:10:42.070	eNodeB->MME	PCCH	Paging	05 40 8F 4F 0E 99 2F 78 C4 D0 CC E2 DD 00
1477	MS2	2015-03-11	15:10:43.350	eNodeB->MME	PCCH	Paging	05 40 0F 4F 01 77 EE C0
1478	MS2	2015-03-11	15:10:45.910	eNodeB->MME	PCCH	Paging	05 40 0C 4F 0F 4E 8B E0
1479	MS2	2015-03-11	15:10:51.031	eNodeB->MME	PCCH	Paging	05 40 0F 4F 0A 69 9C E0
1480	MS2	2015-03-11	15:10:53.591	eNodeB->MME	PCCH	Paging	05 40 8C 2C 0E D0 AC D0 C6 F0 FE 01 80 00
1481	MS2	2015-03-11	15:10:56.151	eNodeB->MME	PCCH	Paging	05 40 0F 4D 08 3A 58 F0
1482	MS2	2015-03-11	15:10:57.431	eNodeB->MME	PCCH	Paging	05 40 8C 4C 0E 27 4C 50 F6 F0 10 87 A1 00
1483	MS2	2015-03-11	15:10:58.711	eNodeB->MME	PCCH	Paging	05 40 0C 2D 03 44 C3 70
1484	MS2	2015-03-11	15:11:01.271	eNodeB->MME	PCCH	Paging	05 40 8C 2F 07 B9 B6 90 F6 F0 91 FF 49 80
1485	MS2	2015-03-11	15:11:02.551	eNodeB->MME	PCCH	Paging	05 40 0C 2E 0D F9 8A 50
1486	MS2	2015-03-11	15:11:03.831	eNodeB->MME	PCCH	Paging	05 40 0F 4C 09 75 28 70
1487	MS2	2015-03-11	15:11:05.111	eNodeB->MME	PCCH	Paging	05 40 0F 6C 0A 58 BB 70
1488	MS2	2015-03-11	15:11:06.391	eNodeB->MME	PCCH	Paging	05 40 0C 4F 0F 4E 8B E0
1489	MS2	2015-03-11	15:11:07.671	eNodeB->MME	PCCH	Paging	05 40 0F 4C 08 82 37 D0

1489	MS2	2015-03-11	15:11:07.671	eNodeB->MME	PCCH	Paging	05 40 0F 4C 08 82 37 D0
1490	MS2	2015-03-11	15:11:08.951	eNodeB->MME	PCCH	Paging	05 40 0C 2C 0E D0 AC D0
1491	MS2	2015-03-11	15:11:10.231	eNodeB->MME	PCCH	Paging	05 40 0F 4F 0E 87 9B 10
1492	MS2	2015-03-11	15:11:11.511	eNodeB->MME	PCCH	Paging	05 40 8C 4E 01 BF 6C 30 C6 D0 D8 82 8E 00
1493	MS2	2015-03-11	15:11:14.071	eNodeB->MME	PCCH	Paging	05 40 0C 2E 05 23 40 08
1494	MS2	2015-03-11	15:11:17.911	eNodeB->MME	PCCH	Paging	05 40 0F 6E 01 E5 2D 60
1495	MS2	2015-03-11	15:11:19.192	eNodeB->MME	PCCH	Paging	05 40 8F 4E 0F 21 18 80 F6 F0 A6 3F 69 00
1496	MS2	2015-03-11	15:11:21.752	eNodeB->MME	PCCH	Paging	05 40 0C 4D 0A F5 D9 F0
1497	MS2	2015-03-11	15:11:24.312	eNodeB->MME	PCCH	Paging	05 40 0C 2D 07 B3 FD 40
1498	MS2	2015-03-11	15:11:25.591	eNodeB->MME	PCCH	Paging	05 40 0F 6D 00 37 D5 F0
1499	MS2	2015-03-11	15:11:26.871	eNodeB->MME	PCCH	Paging	05 40 8C 4E 01 BF 6C 30 F6 E0 DB A2 8D 00
1500	MS2	2015-03-11	15:11:29.432	eNodeB->MME	PCCH	Paging	05 40 0F 4F 07 ED 42 C0
1501	MS2	2015-03-11	15:11:30.711	eNodeB->MME	PCCH	Paging	05 40 8F 4D 03 6F FA 70 F4 F0 60 03 E3 00
1502	MS2	2015-03-11	15:11:33.272	eNodeB->MME	PCCH	Paging	05 40 8C 6E 00 EE 88 F0 C6 F0 D6 D1 F6 00
1503	MS2	2015-03-11	15:11:34.552	eNodeB->MME	PCCH	Paging	05 40 8C 2C 04 52 94 80 C2 C0 DB CE CA 80
1504	MS2	2015-03-11	15:11:38.392	eNodeB->MME	PCCH	Paging	05 40 8C 6E 06 A8 78 70 F6 E0 1E 52 D6 00
1505	MS2	2015-03-11	15:11:39.672	eNodeB->MME	PCCH	Paging	05 40 0C 6E 0E 77 0F 20
1506	MS2	2015-03-11	15:11:42.232	eNodeB->MME	PCCH	Paging	05 40 0C 4F 0F 4E 8B E0
1507	MS2	2015-03-11	15:11:43.512	eNodeB->MME	PCCH	Paging	05 40 0C 6E 0E 77 0F 20
1508	MS2	2015-03-11	15:11:47.352	eNodeB->MME	PCCH	Paging	05 40 8F 4E 0F 21 18 80 F4 D0 38 FF A7 00
1509	MS2	2015-03-11	15:11:49.912	eNodeB->MME	PCCH	Paging	05 40 0F 6E 01 E5 2D 60
1510	MS2	2015-03-11	15:11:51.193	eNodeB->MME	PCCH	Paging	05 40 0C 4D 0C CE 2D D8
1511	MS2	2015-03-11	15:11:55.032	eNodeB->MME	PCCH	Paging	05 40 0F 4C 08 82 37 D0
1512	MS2	2015-03-11	15:11:56.872	eNodeB->MME	PCCH	Paging	05 40 8C 6C 05 01 BB 10 C6 F0 FE 01 80 00
1513	MS2	2015-03-11	15:12:01.432	eNodeB->MME	PCCH	Paging	05 40 0C 2F 03 1D 2F 10
1514	MS2	2015-03-11	15:12:02.712	eNodeB->MME	PCCH	Paging	05 41 0C 6E 00 E0 05 10 C4 E0 1B F6 C3 0F 4D 04 36 EF 90
1515	MS2	2015-03-11	15:12:03.992	eNodeB->MME	PCCH	Paging	05 40 8F 6F 01 2A D2 00 C4 D0 AF 5D 9F 00
1516	MS2	2015-03-11	15:12:06.552	eNodeB->MME	PCCH	Paging	05 40 0F 6F 08 A1 20 50
1517	MS2	2015-03-11	15:12:07.832	eNodeB->MME	PCCH	Paging	05 40 0F 6C 05 CD 6A D0
1518	MS2	2015-03-11	15:12:12.952	eNodeB->MME	PCCH	Paging	05 40 8C 2C 0E 57 13 10 C2 E0 05 B4 AF 00
1519	MS2	2015-03-11	15:12:14.232	eNodeB->MME	PCCH	Paging	05 40 0F 4E 0F 21 18 80
1520	MS2	2015-03-11	15:12:15.512	eNodeB->MME	PCCH	Paging	05 40 0F 4D 0D 07 3C 98
1521	MS2	2015-03-11	15:12:19.352	eNodeB->MME	PCCH	Paging	05 40 0C 6C 05 BC 88 80
1522	MS2	2015-03-11	15:12:21.913	eNodeB->MME	PCCH	Paging	05 40 8F 6C 05 CD 6A D0 C6 C0 EB C8 88 00
1523	MS2	2015-03-11	15:12:25.753	eNodeB->MME	PCCH	Paging	05 40 8C 6C 05 BC 88 80 F4 D0 38 FF A7 00
1524	MS2	2015-03-11	15:12:27.033	eNodeB->MME	PCCH	Paging	05 40 0C 4D 0A F5 D9 F0
1525	MS2	2015-03-11	15:12:29.593	eNodeB->MME	PCCH	Paging	05 40 0F 6F 08 A1 20 50
1526	MS2	2015-03-11	15:12:30.873	eNodeB->MME	PCCH	Paging	05 40 0F 4F 0E 87 9B 18

Paging消息里没有被叫TMSI标识

从ｘｘｘ到ｘｘｘ时间段内被叫所收到的Paging消息里没有携带被叫TMSI标识

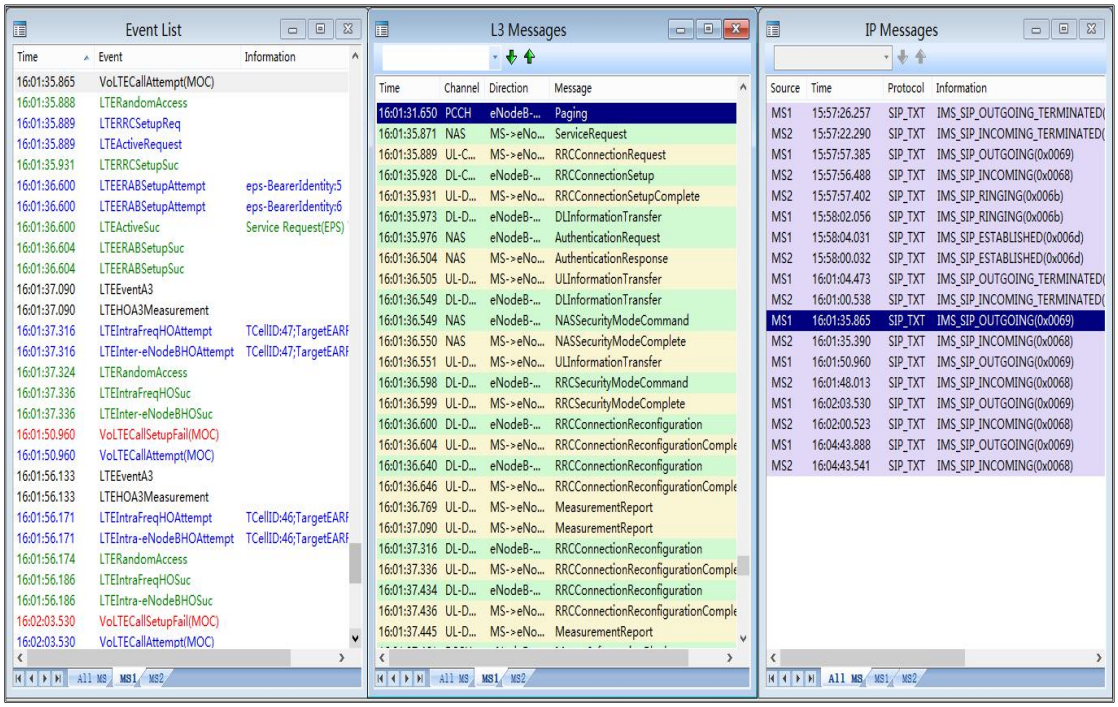
在图中标识出哪些字段是ＴＭＳＩ

二、 主被叫魏收到 QCI1 建立命令导致呼叫未建立（网格 61 博华路路段）

➢ **问题描述：**

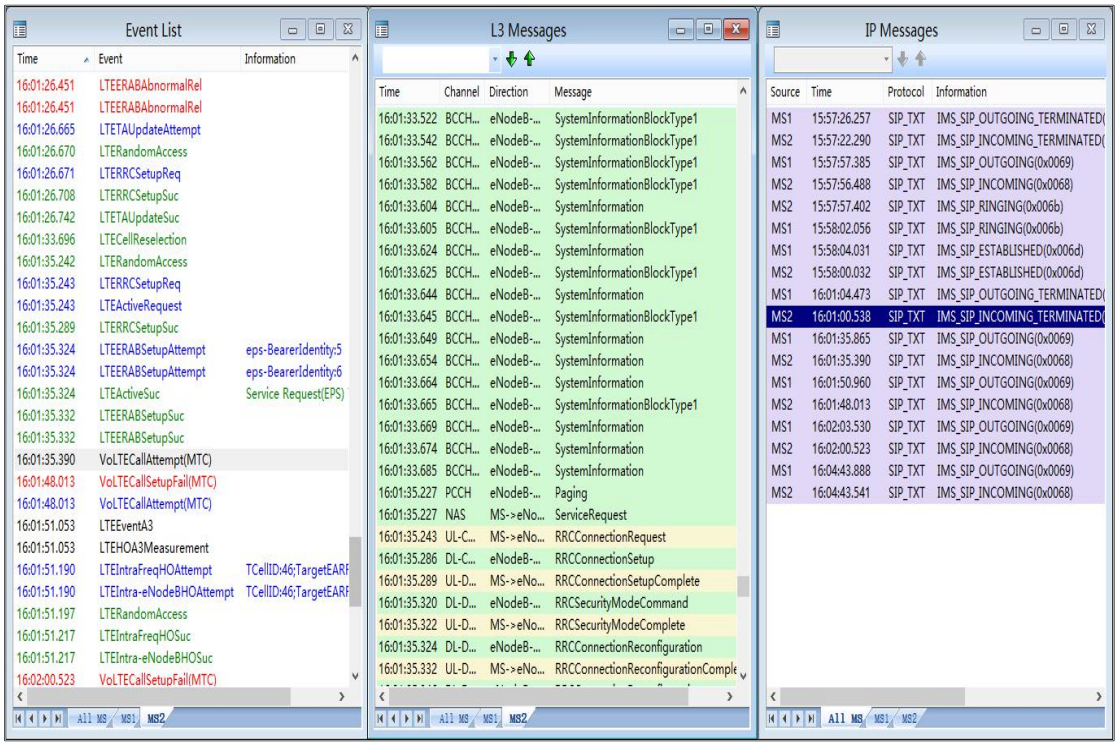
主叫发出INVITE消息后，被叫收到对应寻呼并完成RRC连接以及QCI9和QCI5的承载，以及INVITE消息，但主被叫均未收到来自网络侧的QCI1 EPC Bearer建立命令，语音承载未建立，导致呼叫失败。需要核心网侧检查失败原因。

（后续3次通话均因为主被叫未建立专有承载QCI=1导致呼叫失败）



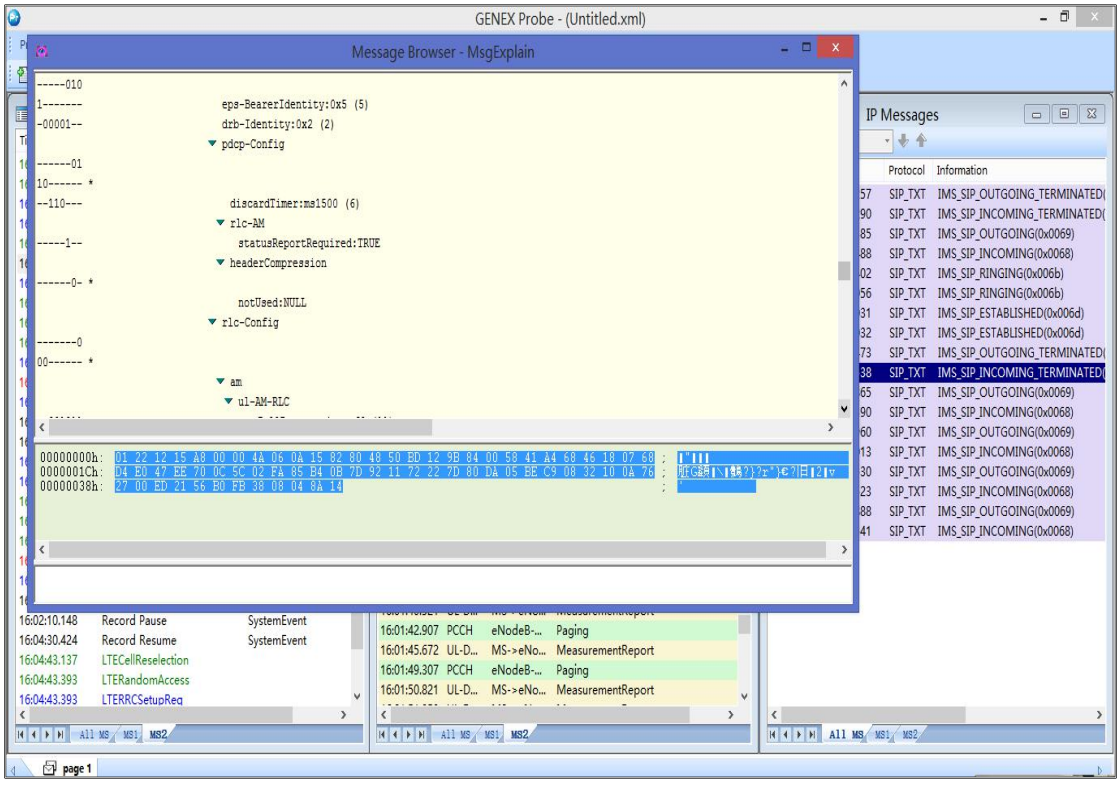
主叫发起通话请求后建立QCI=5和QCI=9但未建立QCI=1

圈出QCI9和QCI5的建立event

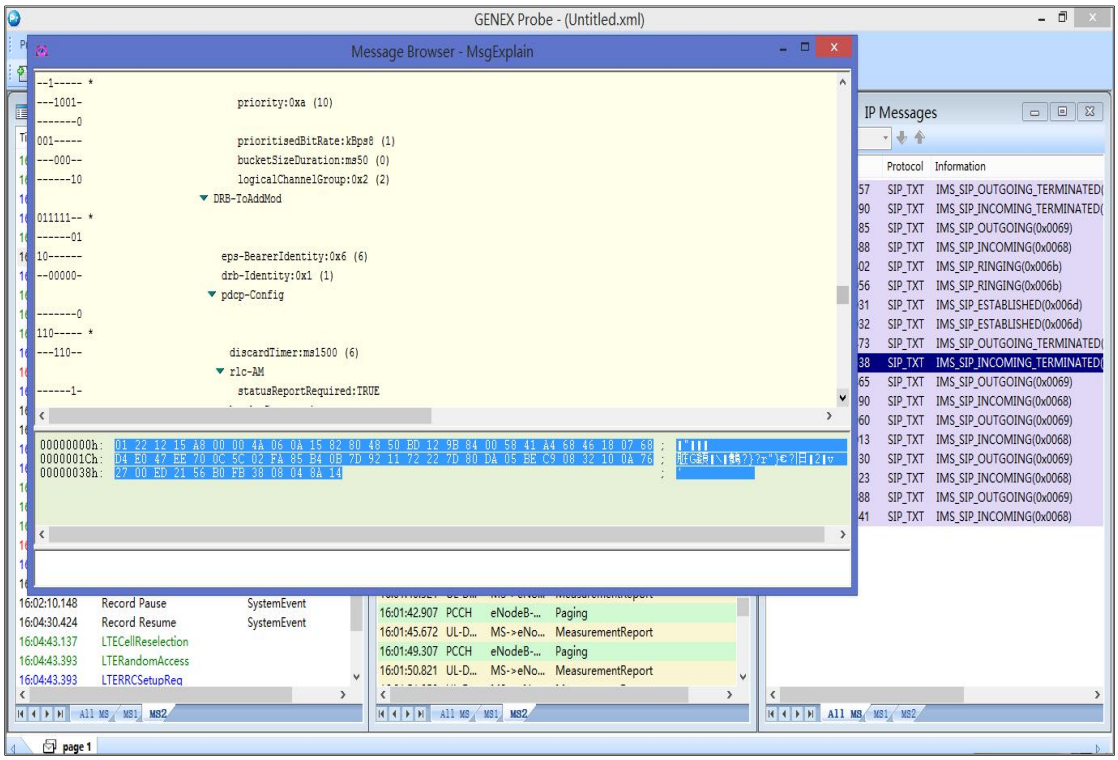


被叫收到寻呼请求前建立QCI=5和QCI=9但之后未建立QCI=1

圈出QCI9和QCI5的建立event



RRC配置消息里被叫的默认承载QCI=9激活



RRC配置消息里被叫的默认承载QCI=5激活

补2张图，表示主被叫一直到失败均未发生QCI1的建立过程

Xxxx时间点被叫先进行TAU（从TAC6232到TAC6214），完成后随即RRC连接释放。之后收到寻呼消息，且成功建立RRC连接以及QCI9和QCI5的承载，但一直未收到被叫INVITE消息，随后RRC连接被释放。