B5G_UE - 错误 #3217

L1c下发给Pucch的接口参数，ucipayload值错误，影响pucch上报ack

2025-04-23 15:52 - 王 金伏

状态:	已解决	**开始日期:**	2025-04-23
优先级:	普通	**计划完成日期:**	
指派给:	白 瑞朋	**% 完成:**	0%
类别:		**预期时间:**	0.00 小时
目标版本:		**耗时:**	0.00 小时

描述

Lc1下发给Pucch的接口参数，ucipayload值错误，影响pucch上报ack

历史记录

#1 - 2025-04-23 15:52 - 王 金伏

- 主题 从 Lc1下发给Pucch的接口参数，ucipayload值错误，影响pucch上报ack 变更为 L1c下发给Pucch的接口参数，ucipayload值错误，影响pucch上报ack

#2 - 2025-04-23 17:35 - 白 瑞朋

- 状态 从 新建 变更为 进行中

【问题分析】
1.L1C计算ucipayload时，会先判断msg4的CRC结果，只有在CRC解对才会计算ucipayload，函数prep_dlharq_pucch_forMsg4()，ue状态机是UE_RA_MSG4_HARQ_ACK；
2.分析msg4的PDSCH的CRC结果，发现解析msg4时没有存CRC结果，代码有缺失；

下一步
加上CRC结果存储代码，进行测试；

#3 - 2025-04-23 20:36 - 白 瑞朋

【问题解决】
ucipayload=128,基站可以解对PUCCH ACK。

#4 - 2025-04-24 10:55 - 白 瑞朋

- 文件 1.jpg 已添加

- 文件 2.jpg 已添加

附代码流程
L1C状态机=UE_RA_MSG4_HARQ_ACK，调用prep_dlharq_pucch_forMsg4()进行msg4 ACK的配置

```
1223:
1224:            break;
1225:        case UE_RA_MSG4_HARQ_ACK:
1226:            if(DL_HARQ_NOT_PREP == msg4_post_state)
1227:            {
1228:                prep_dlharq_pucch_forMsg4(curSlot);
1229:                msg4_post_state = DL_HARQ_PREP;
1230:
1231:            }
1232:            else if(DL_HARQ_PREP == msg4_post_state)
1233:            {
1234:                uint32_t pucch_send_slot;
1235:                uint32_t pucch_fill_slot;
1236:                SteUePucchRecpReq       *pucchRecpReq;
1237:                SteUePucchRecpReq       *pucch_Req;
1238:                //uint32_t pucch_adv_SlotIdx;
```

```
1642:   pucch.harqBitSize = 1;
1643:                                   // for msg4, only transmit the harq info
1644:   crcState = LOAD_EX_B(&phyDlRx->sPdschRxStruct[0].crcState);
1645:   if( crcState == CRC_SUCCESS )
1646:   {
1647:       // 最低位表示先调度的PDSCH 或 1<<7(最高位表示先调度的PDSCH)
1648:       uciPayload = LOAD_EX_B(&ueCfg->recpReqInfo.pucchRecpReq[pucchSlotIdex].uciPayload);
1649:       uciPayload  |= 1<<7;// 最低位表示先调度的PDSCH 或 1<<7(最高位表示先调度的PDSCH)
1650:       STORE_EX_B(&ueCfg->recpReqInfo.pucchRecpReq[pucchSlotIdex].uciPayload, uciPayload);
1651:   }
1652:   //recpReqInfo.pucchRecpReq[pucchSlotIdex].msg4HarqFlg = TRUE;
1653:   STORE_EX_W(&ueCfg->recpReqInfo.pucchRecpReq[pucchSlotIdex].msg4HarqFlg, TRUE);//[20250403]
1654:
1655:   /*参考协议38213:9.2.1: 计算rPUCCH*/
```

#5 - 2025-04-24 11:04 - 白 瑞朋

- 文件 3_uci获取.jpg 已添加

- 文件 4_修改.jpg 已添加

- 状态 从 进行中 变更为 已解决

```
void l1c_fill_pucch_info_to_phy(  uint32_t slotIdx , SteUePucchRecpReq *pucchRecpReq )
{
    uint8_t idx;
    SteUciFormatEnum pucchFormatType ;

    uint32_t  SlotAdvIdx  = slotIdx % gMaxSlotNum ;
    uint32_t  iCtx        = get_ul_sf_ctx( SlotAdvIdx );
    PHYStateULTx *phyUlTx = phy_gue_ul_get_ctx( ) ;

    PucchTxParaStruct    *pucchTxPara = &phyUlTx->sPucchTxPara;
    pucchFormat0ParaStruct *psPucchFormat0;
    pucchFormat1ParaStruct *psPucchFormat1;
    pucchFormat2ParaStruct *psPucchFormat2;
    pucchFormat3ParaStruct *psPucchFormat3;
    pucchFormat4ParaStruct *psPucchFormat4;

    pucchFormatType = LOAD_EX_W(&pucchRecpReq->frmtTyp);//pucchRecpReq->frmtTyp ;

    if(pucchFormatType == STE_PUCCH_FORMAT_0)
    {
        pucchTxPara->numPucchFrmt0 = 1 ;
        psPucchFormat0 = &pucchTxPara->sPucchFormat0Para[0];

        //psPucchFormat0->nRNTI            = ueCfg->cRnti;
        //psPucchFormat0->nUEId            = ueCfg->ueId;
        //psPucchFormat0->slotIdx         = (SlotAdvIdx % cellCfg->numOfSlotsPerRadioFrame);
        psPucchFormat0->slotIdx         = (SlotAdvIdx % LOAD_EX_S(&cellCfg->numOfSlotsPerRadioFrame));
        psPucchFormat0->intraSlotFhEn   = LOAD_EX_B(&pucchRecpReq->freqHopFlag);
        psPucchFormat0->startingPrb     = LOAD_EX_S(&pucchRecpReq->startRb);
        psPucchFormat0->secondHopPrb    = LOAD_EX_S(&pucchRecpReq->secndHopPrb);
        psPucchFormat0->groupHoppingCfg = LOAD_EX_B(&pucchRecpReq->grpHopFlag); //????
        psPucchFormat0->nId             = LOAD_EX_S(&pucchRecpReq->hoppingId);
        psPucchFormat0->lStart          = LOAD_EX_B(&pucchRecpReq->strtSymb);
        psPucchFormat0->nSym            = LOAD_EX_B(&pucchRecpReq->numSymb);
        /*这个需要根据pdsch CRC或者 SR positive来确定,基站侧最大8位,最高位用来存最近调度的PDSCH的反馈
        STE保持和基站一致*/
        psPucchFormat0->uciPayload      = LOAD_EX_B(&pucchRecpReq->uciPayload);
        psPucchFormat0->ucipayLoadLen   = LOAD_EX_S(&pucchRecpReq->uciBitLen);

        psPucchFormat0->SR              = LOAD_EX_B(&pucchRecpReq->u.f0.srPres);
        psPucchFormat0->csM0            = LOAD_EX_B(&pucchRecpReq->u.f0.cyclcShift);
```

source-code/UEPhy/UE_PDSCH/UEPdschSchBit/src/Ful_Nr_Pusch_SchCbSubTask.s.c: 83337724

```
903
904
905             }
906             else if(DL_TB_IND == report_format)
907             {
908                 if(0 == tb_crc[ue_index])
909                 {
910
911                     decode_data11hdr_ptr = (L1MsgHdr_t *)g_cb_proc_dm_addr.bytebr_out_addr;
912                     decode_data11hdr_ptr->msgNum = 1;
913                     decode_data11hdr_ptr->cellIndex = g_phy_cell_cfg.cell_index;
914                     decode_data11hdr_ptr->rev = 0;
915
916                     decode_data11genrhdr_ptr = (L1GeneralMsgHdr_t *)(decode_data11hdr_ptr + 1);
917                     decode_data11genrhdr_ptr->msgId = FAPI_UE_DL_TB_IND;
918                     msg_length = addr_offset - sizeof(L1MsgHdr_t) - sizeof(L1GeneralMsgHdr_t);
919                     decode_data11genrhdr_ptr->msgSize = msg_length;
920
921                     wnDlTbIndT   *dl_tb_ind = (wnDlTbIndT  *)(decode_data11genrhdr_ptr + 1);
922                     dl_tb_ind->seqNum = FAPI_UE_DL_TB_IND;
923                     dl_tb_ind->SFN = sfn;
924                     dl_tb_ind->slot = slot;
925                     if(UE_ACTIVE == ueState)
926                     {
927                         dl_tb_ind->rntiType = C_RNTI_TYPE;
928                         dl_tb_ind->rnti = LOAD_EX_W(&ueCfg->cRnti);
929
930                     }
931                     else
932                     {
933                         dl_tb_ind->rntiType = TEMP_C_RNTI_TYPE;
934                         dl_tb_ind->rnti = LOAD_EX_W(&ueCfg->tcRnti);
935
936                         STORE_EX_B(&phyDlRx->sPdschRxStruct[0].crcState, CRC_SUCCESS);//[20250407]
937                         LOG_INFO_S("EEEE crcState:%d \n", LOAD_EX_B(&phyDlRx->sPdschRxStruct[0].crcState));
938                     }
939                     dl_tb_ind->deviceId = dl_tb_ind->rnti;
940                     dl_tb_ind->taType = BIT6_TA;
```

文件

1.jpg	78.1 KB	2025-04-24	白 瑞朋
2.jpg	144 KB	2025-04-24	白 瑞朋
3_uci获取.jpg	332 KB	2025-04-24	白 瑞朋
4_修改.jpg	262 KB	2025-04-24	白 瑞朋