3GPP TSG-RAN WG2 Meeting #109e R2-20xxxxx

Online, 24 February – 6 March 2020

**Agenda item: 7.7**

**Source: Reliance Jio (offline email discussion rapporteur)**

**Title: Report of [AT109e][607][NAVIC] NavIC CRs (Reliance Jio)**

**Document for: Report**

# 1 Scope of the offline email discussion

This document contains the summary of the offline email discussion [AT109e][607][NAVIC] NavIC CRs (Reliance Jio), as indicated below:

* [AT109e][607][NAVIC] NavIC CRs (Reliance Jio)

**Status:** Started

**Scope:** Agree to the CRs in R2-2000153, R2-2000157, and R2-2000158.  Note: Updates to the CRs will be needed to align with the output of [AT109e][601].

**Intended Outcome:** Agreed CRs

**Deadline:** Tuesday 2020-03-03 1200 CET

# 2 Offline email discussion

All the CRs corresponding to LCS\_NAVIC-Core were agreed in principle in RAN2#108 meeting. The submitted CRs for RAN2#109e are essentially the same with minor updates as listed below.

**R2-2000153: CR of TS 37.355 for introducing NavIC in LTE**

- Migrated TS 36.355 CR (R2-1916406) to TS 37.355

- Minor IE updates to ensure sync with CR for BDS B1C inclusion (GNSS-ClockModel, GNSS-OrbitModel, & GNSS-Almanac)

- ISRO added to source list

Companies are requested to provide comments in the table below (one row for each new comment to better keep track of the discussion – please don’t edit the previous comments).

|  |  |  |
| --- | --- | --- |
| **Company** | **Do you agree with the intent of the CR?** | **Detailed comments** |
| Lenovo | **Yes** | • Cover page: Should be checked with Juha whether the CR#0247 from 36.355 can be inherited for 37.355.  • Cover page: In “Other specs affected”: the box to “Other core specifications” should be ticked to “Y” and the CRs to 36.305 and 36.331 should be added.   * UTC-ModelSet2: utcWNlsf is mandatory present, whereas, utcWNlsf-ext is optionally present. So, it should be clarified in the field description whether both fields can be present or not.   [Reliance Jio]:  Cross checked with Juha Korhonen <[Juha.Korhonen@etsi.org](mailto:Juha.Korhonen@etsi.org)>. Inheriting 36.355 CR# for 37.355 is okay for practical reasons.  Other comments accepted. |
| Spirent Communications | **Yes** | 1. In table “KlobucharModelParamater field descriptions” I think you should add “[xx]” for each parameter  2. “Either weekNumber of weekNumber-ext” should be “Either weekNumber or weekNumber-ext”  3. “navigation messageprovided through” needs a space adding  4. “Delay(GIVD)as defined” needs two spaces adding  5. “assistancefrom the location” needs a space adding  [Reliance Jio]:  All comments accepted. |
| CATT | **Yes** | 1. Cover page: ME should be involved. 2. Cover page: rev should start from -. it seems that 5 is not correct since the CR is for 37.355 3. The reference file name and version seem not correct: [xx] IRNSS Signal-In-Space (SPS) Interference Control Document (IDC) for standard positioning service version 1.1, Aug 2017.   The info from www.isro.gov.in: Signal in Space Interface Control Document for NavIC messaging service (ICD Ver 1.0 - June 2018 | ICD Ver 1.0 - March 2019 | ICD Ver 1.1 - July 2019   1. GPS, Galileo, GLONASS, BDS are all System name. Why NavIC is used as the system name instead of IRNSS? Just a reminder, NavIC looks different term from other satellite systems. But I’m fine with NavIC if it should be.   [Reliance Jio]:  1. OK.  2. OK.  3. The correct ICD for IRNSS SPS is following:  <https://www.isro.gov.in/sites/default/files/irnss_sps_icd_version1.1-2017.pdf>  The one referred to in above comment corresponds to ICD for Emergency messaging service via NavIC.  Name of the document to be corrected.  4. In April 2016, IRNSS was renamed Navigation Indian Constellation (NAVIC). ICG has officially accepted it. |

Conclusion: TBC

Proposal: TBC

**R2-2000157: CR of TS 36.331 for introducing NavIC in LTE**

- Migrated the CR (R2-1916407) to latest version of specification.

- ISRO added to source list

Companies are requested to provide comments in the table below (one row for each new comment to better keep track of the discussion – please don’t edit the previous comments).

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| --- | --- | --- |
| **Company** | **Do you agree with the intent of the CR?** | **Detailed comments** |
| Lenovo | **Yes** | 1. Cover page issue need to be fixed:  * In “Other specs affected”: the box to “Other core specifications” should be ticked to “Y” and the CRs to 37.355 and 36.305 should be added.  1. As result of the RRC CR merge (see R2-2001159) the following changes need to be made in InDeviceCoexIndication-v16xy-IEs:  * The suffices of victimSystemType need to be corrected to “-v16xy”.   victimSystemType-v16xy VictimSystemType-v16xy  • In IE VictimSystemType-r16 the suffix needs to be corrected to “-v16xy”. Furthermore, we see no need to add extension marker in the IE. This can be removed.  VictimSystemType-r16 ::= SEQUENCE {  navic-r16 ENUMERATED {true} OPTIONAL,  ...  }   * We wonder whether it might be better to introduce victimSystemType-v16xy as NCE of ul-CA-AssistanceInfo-r11 to keep the context, see below.   InDeviceCoexIndication-v16xy-IEs::= SEQUENCE {  ul-CA-AssistanceInfo-v16xy SEQUENCE {  victimSystemType-v16xy VictimSystemType-v16xy  } OPTIONAL,  nonCriticalExtension SEQUENCE {} OPTIONAL  }  [Reliance Jio]:  1. Accepted.  2. WRT suggestion to introduce victimSystemType-v16xy as NCE of ul-CA-AssistanceInfo –  Initial proposal in NavIC CR for TS 36.331 was on similar lines, however the current IE structure was agreed after discussions at RAN2#108 where the CR was technically agreed.  All other sub bullets under 2 accepted. |
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Conclusion: TBC

Proposal: TBC

**R2-2000158: CR of TS 36.305 for introducing NavIC in LTE**

- ISRO added to source list

Companies are requested to provide comments in the table below (one row for each new comment to better keep track of the discussion – please don’t edit the previous comments).

|  |  |  |
| --- | --- | --- |
| **Company** | **Do you agree with the intent of the CR?** | **Detailed comments** |
| Lenovo | **Yes** | Cover page issues need to be fixed/clarified:   * In “Proposed change affects” we wonder why ME is not affected but CN. * In “Other specs affected”: the box to “Other core specifications” should be ticked to “Y” and the CRs to 37.355 and 36.331 should be added.   [Reliance Jio]:  All comments accepted. |
| CATT | **Yes** | 1. Cover page: ME should be involved. 2. The reference file name and version seem not correct: [xx] IRNSS Signal-In-Space (SPS) Interference Control Document (IDC) for standard positioning service version 1.1, Aug 2017.   The info from www.isro.gov.in: Signal in Space Interface Control Document for NavIC messaging service (ICD Ver 1.0 - June 2018 | ICD Ver 1.0 - March 2019 | ICD Ver 1.1 - July 2019  [Reliance Jio]:  1. OK.  2. The correct ICD for IRNSS SPS is following: <https://www.isro.gov.in/sites/default/files/irnss_sps_icd_version1.1-2017.pdf>  The one referred to in above comment corresponds to ICD for Emergency messaging service via NavIC.  Name of the document to be corrected. |
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Conclusion: TBC

Proposal: TBC

# 3 Conclusions

**Conclusions:**

TBC

**Agreed CRs:**

TBC – agreed Rel-16 CRs (with Tdoc numbers).

# 4 List of referenced documents

[1] [R2-2000153](ftp://3gpp.org/tsg_ran/WG2_RL2/TSGR2_109_e/Docs/R2-2000053.zip) CR of TS 37.355 for introducing NavIC in LTE Reliance Jio, MediaTek Inc., Huawei, ISRO, CEWiT, Saankhya Labs Private Limited, Tejas Networks Ltd., Qualcomm Incorporated CR Rel-16 37.355 15.0.0 0247 - B LCS\_NAVIC-Core.

[2] [R2-2000157](ftp://3gpp.org/tsg_ran/WG2_RL2/TSGR2_109_e/Docs/R2-2000057.zip) CR of TS 36.331 for introducing NavIC in LTE Reliance Jio, MediaTek Inc., Huawei, ISRO, CEWiT, Saankhya Labs Private Limited, Tejas Networks Ltd., Qualcomm Incorporated CR Rel-16 36.311 15.8.0 4137 - B LCS\_NAVIC-Core.

[3] [R2-2000158](ftp://3gpp.org/tsg_ran/WG2_RL2/TSGR2_109_e/Docs/R2-2000058.zip) CR of TS 36.305 for introducing NavIC in LTE Reliance Jio, MediaTek Inc., Huawei, ISRO, CEWiT, Saankhya Labs Private Limited, Tejas Networks Ltd. CR Rel-16 36.305 15.4.0 0084 - B LCS\_NAVIC-Core.