Topics for SA2#164 meeting

**(Total 2 Tus)**

# TS 23.401 topics for KI#2:

## 1. General description of S&F satellite operation

|  |  |  |  |
| --- | --- | --- | --- |
| **Target clausee** | **Potential content** | **Possible CRs** | **Comments** |
| 3.1 | Add Definition: S&F Satellite operation; | CR#2 |  |
| 3.2 | Add S&F abbreviation | CR#2 |  |
|  |  |  |  |
| 4.2.x | S&F architecture | CR#2 |  |
| 4.13.x | Support of Store and Forward Satellite operation | CR#2 |  |
| 4.13.x.1 | General  Including general concept, archs | CR#2 |  |

**Interested companies:**

Qualcomm, China Mobile, LGE, Tencent, Nokia, Samsung, OPPO, NEC, IPLOOK, Sateliot

**Convener for CRs discussion (may not first author): Nokia?**

## 2. Functional description for S&F satellite operation with MME split option

|  |  |  |  |
| --- | --- | --- | --- |
| **Target clause** | **Potential content** | **Possible CRs** | **Comments** |
| 4.13.x.2 | MME split | CR#3 |  |
| 4.13.x.2.1 | General | CR#3 |  |
| 4.13.x.2.2 | UE Authentication for S&F Satellite operation | CR#3 |  |
| 4.13.x.2.3 | Transition between SSF and Normal Modes | CR#3 |  |
|  |  |  |  |
| 4.13.x.2.4 | MO data transmission | CR#4 |  |
| 4.13.x.2.5 | MT data transmission | CR#4 |  |

**Interested companies:**

Qualcomm, CATT, Nokia, Samsung, NEC, Vivo, Tencent, CTC, LGE

**Convener for CRs discussion (may not first author): Samsung?**

## 3. Functional description for S&F satellite operation with whole EPC onboard

|  |  |  |  |
| --- | --- | --- | --- |
| **Target clause** | **Potential content** | **Possible CRs** | **Comments** |
| 4.13.x.3 | EPC on-board | CR#5 |  |
| 4.13.x.3.1 | General | CR#5 |  |
| 4.13.x.3.2 | Transition between SSF and Normal Modes | CR#5 |  |
|  |  |  |  |
| 4.13.x.3.3 | MO data transmission | CR#6 |  |
| 4.13.x.3.4 | MT data transmission | CR#6 |  |
|  |  |  |  |

**Interested companies:**

Qualcomm, Samsung, CATT, OPPO

**Convener for CRs discussion (may not first author): Qualcomm?**

## 4. Exposure of S&F parameters

|  |  |  |  |
| --- | --- | --- | --- |
| **Target clause** | **Potential content** | **Possible CRs** | **Comments** |
| 4.13.x.4 | Exposure of S&F parameters | CR#7 |  |

**Interested companies:**

CATT, Tencent, Samsung

**Convener for CRs discussion (may not first author): CATT?**

# TS 23.682 topics for KI#2:

## 5. New parameters for Monitoring Event

|  |  |  |  |
| --- | --- | --- | --- |
| **Target clause** | **Potential content** | **Possible CRs** | **Comments** |
| 5.6.1.x | Specific Parameters for Monitoring Event: Registered in S&F Mode | CR#8 |  |
| 5.6.1.y | Specific Parameters for Monitoring Event: Estimated delivery time | CR#8 |  |

**Interested companies:**

Samsung

**Convener for CRs discussion (may not first author): Samsung?**

# TS 23.501 topics for KI#3:

## 6. Functional description for activating UE-SAT-UE communication

|  |  |  |  |
| --- | --- | --- | --- |
| **Target clause** | **Potential content** | **Possible CRs** | **Comments** |
| 3.1 | Definition of UE-Satellite-UE communication | CR#10 | CATT, OPPO |
| 3.2 | Abbreviation of UE-Satellite-UE communication | CR#10 | CATT, OPPO |
|  |  |  |  |
| 4.2.x (new) | Architecture for UE-Satellite-UE communication | CR#10? | Vivo，CMCC, OPPO |
| 5.4.x(new) | Support of UE-Satellite-UE communication | CR#10 | CATT, Nokia, OPPO |
| 5.4.x.1 | General description | CR#10 | CTC, CATT, Tencent, Nokia, NTT DOCOMO, OPPO |
| 5.4.x.2 | UPF and IMS-AGW onboard the satellites | CR#10 | vivo, CTC, CATT, Nokia, NTT DOCOMO, OPPO |
| 5.4.x.2.1 | Activation of UE-Satellite-UE communication | CR#10 | vivo, CTC，CMCC, CATT, Nokia, NTT DOCOMO, OPPO,CSCN |

**Interested companies:**

CATT, Vivo, CTC, CMCC, Nokia, Tencent, NTT DOCOMO, OPPO, CSCN

**Convener for CRs discussion (may not first author): CATT?**

## 7. Mobility support for UE-SAT-UE communication

|  |  |  |  |
| --- | --- | --- | --- |
| **Target clause** | **Potential content** | **Possible CRs** | **Comments** |
| 5.4.x.2.2 | Mobility support | CR#11 |  |
| 5.4.x.2.3 | Deactivation of UE-Satellite-UE communication | CR#11 |  |

**Interested companies:**

vivo, CTC, CATT, Nokia, NTT DOCOMO

**Convener for CRs discussion (may not first author): Vivo?**

# TS 23.503 topics for KI#3:

## 8. Policy control enhancement to support UE-SAT-UE communication

|  |  |  |  |
| --- | --- | --- | --- |
| **Target clause** | **Potential content** | **Possible CRs** | **Comments** |
| 6.1.3.5 | Enhancing PCRT "Access Network Information report" to support "Satellite ID" information. | CR#12 |  |
| 6.1.3.18 | Enhancing Event Reporting to support Satellite ID information. | CR#12 |  |

**Interested companies:**

CTC, CATT, OPPO

**Convener for CRs discussion (may not first author): CTC?**

# TS 23.228 topics for KI#3 (if no objection to handle it):

## 9. IMS layer functional description for UE-SAT-UE communication

|  |  |  |  |
| --- | --- | --- | --- |
| **Target clause** | **Potential content** | **Possible CRs** | **Comments** |
| New Annex X | Add description for UE-Satellite-UE communication |  | (SA2#165 onwards?) |
| X.1 | General description for the architecture for UE-Satellite-UE communication |  |  |

**Interested companies:**

CMCC, NTT DOCOMO, CTC

**Convener for CRs discussion (may not first author): CMCC?**

# Annex: Information collected from reflector

*First priority:*

## TS 23.401:

|  |  |  |  |
| --- | --- | --- | --- |
| **Clause** | **Content/Comment** |  | **Contributing Companies** |
| 3.1 | Add Definition: S&F Satellite operation; | CR#2 | Samsung, IPLOOK |
| 3.2 | Add S&F abbreviation | CR#2 | Samsung, IPLOOK |
|  |  |  |  |
| 4.2.x | S&F architecture | CR#2 | Qualcomm, China Mobile, Tencent, Nokia, Samsung, OPPO, NEC, Sateliot |
| 4.13.x | Support of Store and Forward Satellite operation | CR#2 | Qualcomm, China Mobile, LGE, Tencent, Nokia, Samsung, OPPO, NEC |
| 4.13.x.1 | General  Including general concept, archs | CR#2 | Qualcomm, LGE, Nokia, Samsung, OPPO, NEC |
|  |  |  |  |
| 4.13.x.2 | MME split | CR#3 | Qualcomm, CATT, Nokia, Samsung, NEC |
| 4.13.x.2.1 | General | CR#3 | Qualcomm, CATT, Nokia, Samsung, NEC |
| 4.13.x.2.2 | UE Authentication for S&F Satellite operation | CR#3 | Vivo, Qualcomm, CATT, Nokia, Samsung |
| 4.13.x.2.3 | Transition between SSF and Normal Modes | CR#3 | Vivo, Qualcomm, CATT, Tencent, Samsung |
|  |  |  |  |
| 4.13.x.2.4 | MO data transmission | CR#4 | vivo, CTC, LGE, Samsung, NEC |
| 4.13.x.2.5 | MT data transmission | CR#4 | vivo, CTC, LGE, Samsung, NEC |
|  |  |  |  |
| 4.13.x.3 | EPC on-board | CR#5 | Qualcomm, Samsung, OPPO |
| 4.13.x.3.1 | General | CR#5 | Qualcomm, Samsung, OPPO |
| 4.13.x.3.2 | Transition between SSF and Normal Modes | CR#5 | Qualcomm, Samsung, OPPO |
|  |  |  |  |
| 4.13.x.3.3 | MO data transmission | CR#6 | CATT, Samsung, OPPO |
| 4.13.x.3.4 | MT data transmission | CR#6 | CATT, Samsung, OPPO |
|  |  |  |  |
| 4.13.x.4 | Exposure of S&F parameters | CR#7 | CATT, Tencent, Samsung |
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*Second priority:*

## TS 23.682:

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| --- | --- | --- | --- |
| **Clause** | **Content/Comment** |  | **Contributing Companies** |
| 5.6.1.x | Specific Parameters for Monitoring Event: Registered in S&F Mode | CR#8 | Samsung |
| 5.6.1.y | Specific Parameters for Monitoring Event: Estimated delivery time | CR#8 | Samsung |
|  |  |  |  |
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*First priority*

## TS 23.501

|  |  |  |  |
| --- | --- | --- | --- |
| **Clause** | **Content/Comment** |  | **Contributing Companies** |
| 3.1 | Definition of UE-Satellite-UE communication | CR#10 | CATT, OPPO |
| 3.2 | Abbreviation of UE-Satellite-UE communication | CR#10 | CATT, OPPO |
|  |  |  |  |
| 4.2.x (new) | Architecture for UE-Satellite-UE communication | CR#10? | Vivo，CMCC, OPPO |
| 5.4.x(new) | Support of UE-Satellite-UE communication | CR#10 | CATT, Nokia, OPPO |
| 5.4.x.1 | General description | CR#10 | CTC, CATT, Tencent, Nokia, NTT DOCOMO, OPPO |
| 5.4.x.2 | UPF and IMS-AGW onboard the satellites | CR#10 | vivo, CTC, CATT, Nokia, NTT DOCOMO, OPPO |
| 5.4.x.2.1 | Activation of UE-Satellite-UE communication | CR#10 | vivo, CTC，CMCC, CATT, Nokia, NTT DOCOMO, OPPO,CSCN |
|  |  |  |  |
| 5.4.x.2.2 | Mobility support | CR#11 | vivo, CTC, CATT, Nokia, NTT DOCOMO |
| 5.4.x.2.3 | Deactivation of UE-Satellite-UE communication | CR#11 | vivo, CTC, CATT, NTT DOCOMO |
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*Second priority:*

## TS 23.503

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| --- | --- | --- | --- |
| **Clause** | **Content/Comment** |  | **Contributing Companies** |
| 6.1.3.5 | Enhancing PCRT "Access Network Information report" to support "Satellite ID" information. | CR#12 | CTC, CATT, OPPO |
| 6.1.3.18 | Enhancing Event Reporting to support Satellite ID information. | CR#12 | CTC, CATT, OPPO |
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# Future meetings

## TS 23.401:

|  |  |  |  |
| --- | --- | --- | --- |
| **Clause** | **Content/Comment** |  | **Contributing Companies** |
| 5.3.2.1 | E-UTRAN Initial Attach updates |  | (SA2#165?) |
| 5.3.3 | TAU procedure updates |  | OPPO |
| 5.3.4 | Service request procedures updates |  |  |
| 5.5.4B | Data Transport in Control Plane CIoT EPS Optimisation updates |  |  |
| 5.3.8 | Detach procedure |  |  |
| 5.11 | UE Capability Handling updates |  | OPPO |

## TS 23.501

|  |  |  |  |
| --- | --- | --- | --- |
| **Clause** | **Content/Comment** |  | **Contributing Companies** |
| 5.4.x.3 | TBD(e.g., Only UPF onboard, LI consideration) |  | TBD |
|  |  |  |  |
|  |  |  |  |

## TS 23.502

|  |  |  |  |
| --- | --- | --- | --- |
| **Clause** | **Content/Comment** |  | **Contributing Companies** |
| 4.2.2.2 | Add new access information (e.g. Satellite IDs) in Registration procedures |  | (SA2#165 onwards): |
| 4.3 | Add new access information in Session Management procedures |  | (SA2#165 onwards): |
| 5.2.2 | AMF services update |  | (SA2#165 onwards): |
| 5.2.5 | PCF services update |  | (SA2#165 onwards): |
| 5.2.8 | SMF services update |  | (SA2#165 onwards): |

## TS 23.228

|  |  |  |  |
| --- | --- | --- | --- |
| **Clause** | **Content/Comment** |  | **Contributing Companies** |
| New Annex X | Add description for UE-Satellite-UE communication |  | (SA2#165 onwards):  CMCC, NTT DOCOMO |
| X.1 | General description for the architecture for UE-Satellite-UE communication |  | CTC |