**3GPP TSG-SA5 Meeting #162 *S5-253913***

Goteborg, Sweden, 25 - 29 August 2025

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| *CR-Form-v12.3* |
| **CHANGE REQUEST** |
|  |
|  |  | **CR** | **0247** | **rev** | **1** | **Current version:** | **19.1.0** |  |
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| *For* [***HE******LP***](http://www.3gpp.org/3G_Specs/CRs.htm#_blank)*on using this form: comprehensive instructions can be found at* [*http://www.3gpp.org/Change-Requests*](http://www.3gpp.org/Change-Requests)*.* |
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| ***Proposed change affects:*** | UICC apps |  | ME |  | Radio Access Network | **X** | Core Network |  |

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| ***Title:***  | Procedure for IAB-node configuration |
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| ***Source to WG:*** | Ericsson |
| ***Source to TSG:*** | SA5 |
|  |  |
| ***Work item code:*** | NR\_MOBILE\_IAB\_OAM |  | ***Date:*** | 2025-08-15 |
|  |  |  |  |  |
| ***Category:*** | B |  | ***Release:*** | Rel-19 |
|  | *Use one of the following categories:****F*** *(correction)****A*** *(mirror corresponding to a change in an earlier release)****B*** *(addition of feature),* ***C*** *(functional modification of feature)****D*** *(editorial modification)*Detailed explanations of the above categories canbe found in 3GPP [TR 21.900](http://www.3gpp.org/ftp/Specs/html-info/21900.htm). | *Use one of the following releases:Rel-8 (Release 8)Rel-9 (Release 9)Rel-10 (Release 10)Rel-11 (Release 11)…Rel-17 (Release 17)Rel-18 (Release 18)Rel-19 (Release 19) Rel-20 (Release 20)* |
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| ***Reason for change:*** | This is nomative work for Rel-19 study on management of IAB nodes. |
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| ***Summary of change:*** | Add procedure IAB-node configuration.  |
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| ***Consequences if not approved:*** |  Miss the procedure for IAB-node configuration. |
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| ***Clauses affected:*** | 7.x, C.x |
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|  | **Y** | **N** |  |  |
| ***Other specs*** |  | **X** |  Other core specifications  | TS/TR ... CR ...  |
| ***affected:*** |  | **X** |  Test specifications | TS/TR ... CR ...  |
| ***(show related CRs)*** |  | **X** |  O&M Specifications | TS/TR ... CR ...  |
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| ***Other comments:*** |  |
|  |  |
| ***This CR's revision history:*** |  |

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| **1st Change** |

# 2 References

The following documents contain provisions which, through reference in this text, constitute provisions of the present document.

- References are either specific (identified by date of publication, edition number, version number, etc.) or non‑specific.

- For a specific reference, subsequent revisions do not apply.

- For a non-specific reference, the latest version applies. In the case of a reference to a 3GPP document (including a GSM document), a non-specific reference implicitly refers to the latest version of that document *in the same Release as the present document*.

[1] 3GPP TR 21.905: "Vocabulary for 3GPP Specifications".

[2] 3GPP TS 28.525: "Telecommunication management; Life Cycle Management (LCM) for mobile networks that include virtualized network functions; Requirements".

[3] ETSI GS NFV-IFA 013 (V4.5.1) (2023-09): "Network Function Virtualisation (NFV); Release 4; Management and Orchestration; Os-Ma-nfvo reference point - Interface and Information Model Specification".

[4] 3GPP TS 28.530: "Management and orchestration; Concepts, use cases and requirements".

[5] 3GPP TS 22.261 "Service requirements for next generation new services and markets".

[6] 3GPP TS 28.541: "Management and orchestration; 5G Network Resource Model (NRM); Stage 2 and stage 3".

[7] Void.

[8] 3GPP TS 28.532: "Management and orchestration; Generic management services".

[9] GSMA NG.116 Generic Network Slice Template v9.0 (2023-04-27) - NG.116-v9.0.pdf (gsma.com).

[10] 3GPP TS 23.501: "Technical Specification Group Services and System Aspects;System Architecture for the 5G System;Stage 2".

[11] 3GPP TS 38.300: "Technical Specification Group Radio Access Network;NR; NR and NG-RAN Overall Description;Stage 2".

[12] ETSI GS NFV-IFA 014 (V4.2.1) (2021-05): "Network Function Virtualisation (NFV); Release 4; Management and Orchestration; Network Service Templates Specification".

[13] 3GPP TS 28.622: "Telecommunication management; Generic Network Resource Model (NRM) Integration Reference Point (IRP); Information Service (IS)".

[14] ETSI GS NFV-IFA 011 (V4.3.1) (2022-06): "Network Function Virtualisation (NFV); Release 4; Management and Orchestration; VNF Descriptor and Packaging Specification".

[15] ETSI GS NFV-IFA 008 (V4.3.1) (2022-05): "Network Function Virtualisation (NFV); Release 4; Management and Orchestration; Ve-Vnfm reference point - Interface and Information Model Specification".

[16] 3GPP TS 28.623: "Telecommunication management; Generic Network Resource Model (NRM) Integration Reference Point (IRP); Solution Set (SS) definitions".

[17] 3GPP TS 32.158: "Management and orchestration; Design rules for REpresentational State Transfer (REST) Solution Sets (SS)".

[18] 3GPP TS 38.401: "Technical Specification Group Radio Access Network; NG-RAN; Architecture description".

[x] 3GPP TS 28.315: “Management and orchestration; Plug and Connect; Procedure flows”.

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| **2nd Change** |

## 7.x Procedure of IAB-node configuration

The Figure 7.x-1 illustrates the procedure of IAB-node configuration based on its location.



Figure 7.x-1 IAB-node configuration

1) After IAB-node connecting to 3GPP management system via PnC (see TS 28.315 [x] clause 5.6), the provisioning MnS producer of IAB-node sends location information via any of the following notifications:

- notifyMOICreation

- notifyMOIAttributeValueChanges

- notifyMOIChanges

- notifyMOIDeletion

2) The provisioning MnS consumer (management system) perfoms configuration mapping with IAB-node location.

3) The provisioning MnS consumer (management system) provisions IAB-node configuration via any of the following operations upon the reception of notifications:

- createMOI

- modifyMOIAttributes

- deleteMOI

- changeMOIs

4) When IAB-node moves to a new location which may connect to a different management system based on its location (see TS 28.315 [x] clause 5.6), procedures of step 1) to 3) as above are repeated for mobile IAB-node to obtain configuration based on its location.

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| **2nd Change** |

# C.x Procedure of IAB-node configuration

@startuml

skinparam shadowing false

skinparam monochrome true

hide footbox

participant “MS\_P” as MnS\_Producer

participant "MS\_C" as MnS\_Consumer

alt MnS producer of IAB-node sends notifyMOICreation with locationInfo to management system (MnS consumer)

MnS\_Producer -> MnS\_Consumer: 1-a. notifyMOICreation (locationInfo)

End

alt or MnS producer of IAB-node sends notifyMOIAttributeValueChanges with locationInfo to management system (MnS consumer)

MnS\_Producer -> MnS\_Consumer: 1-b. notifyMOIAttributeValueChanges (locationInfo)

End

 alt or MnS producer of IAB-node sends notifyMOIChanges with locationInfo to management system (MnS consumer)

MnS\_Producer -> MnS\_Consumer: 1-c. notifyMOIChanges(locationInfo)

End

 alt or MnS producer of IAB-node sends notifyMOIChanges with locationInfo to management system (MnS consumer)

MnS\_Producer -> MnS\_Consumer: 1-d. notifyMOIDeletion(locationInfo)

End

MnS\_Consumer -> MnS\_Consumer: 2. Performs configuation mapping with IAB-node location

alt management system (MnS consumer) provisions the configuration via createMOI() to MnS producer of IAB-node

MnS\_Consumer -> MnS\_Producer: 3-a. createMOI()

End

alt or management system (MnS consumer) provisions the configuration via modifyMOIAttributes to Mn producer of IAB-node

MnS\_Consumer -> MnS\_Producer: 3-b. modifyMOIAttributes()

End

alt or management system (MnS consumer) provisions the configuration via modifyMOIAttributes to Mn producer of IAB-node

MnS\_Consumer -> MnS\_Producer: 3-c. deleteMOI()

End

alt or management system (MnS consumer) provisions the configuration via modifyMOIAttributes to Mn producer of IAB-node

MnS\_Consumer -> MnS\_Producer: 3-d. changeMOIs()

End

   opt If IAB-node moves to new location

      ref over MnS\_Producer, MnS\_Consumer

         4. Procedures as above 1-3

      end ref

   end opt

@enduml

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| **End of change** |