**3GPP TSG-CT WG1 Meeting #123-eC1-202759**

**Electronic meeting, 16-24 April 2020**

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| *CR-Form-v11.2* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
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|  | **24.229** | **CR** | **6404** | **rev** | **8** | **Current version:** | **16.5.0** |  |
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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 | **x** | Radio Access Network |  | Core Network |  |

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| ***Title:*** | Correction in IMS\_Registration\_handling policy about how UE should deregister. | | | | | | | | | |
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| ***Source to WG:*** | MediaTek Inc. | | | | | | | | | |
| ***Source to TSG:*** | C1 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | TEI16 | | | | |  | | ***Date:*** | | 2020-04-06 |
|  |  | | | |  | | |  | |  |
| ***Category:*** | **F** |  | | | | | | ***Release:*** | | Rel-16 |
|  | *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 can be 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-12 (Release 12)* *Rel-13 (Release 13) Rel-14 (Release 14) Rel-15 (Release 15) Rel-16 (Release 16)* | |
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| ***Reason for change:*** | | In 24.229 sections B.3.1.0a, L.3.1.0a, U.3.1.0A, W.3.1.0a IMS\_Registration\_handling actions are covered.  This section specifies that if IMSVoPS indicator shows that voice is not supported, the UE should deregister from IMS. This is not correct because IMSVoPS indication is only for voice based services and IMS includes non-voice based services (Like SMS) also (for which the IMSVoPS indication is not required).  If UE deregister from IMS, then the user will not be able to use the non-voice base d services over IMS (Like SMS).  The correct implementation should be that if IMSVoPS indication shows voice not supported, then UE should de-register from all the services which are dependent on IMSVoPS indication | | | | | | | | |
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| ***Summary of change:*** | | In the section B.3.1.0a, L.3.1.0a, U.3.1.0A, W.3.1.0a the “deregister from IMS” is replace this with “send re-registration as per section 5.1.1.4 and include media feature tags of only those services which are independent of IMSVoPS” | | | | | | | | |
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| ***Consequences if not approved:*** | | Since the UE will deregister from IMS, the user will not be able to use non-voice based IMS services like SMS. | | | | | | | | |
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| ***Clauses affected:*** | | B.3.1.0a, L.3.1.0a, U.3.1.0A, W.3.1.0a | | | | | | | | |
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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 ... | | | |
|  | |  | | | | | | | | |
| ***Other comments:*** | |  | | | | | | | | |

\*\*\*\*\* Next change \*\*\*\*\*

### B.3.1.0a IMS\_Registration\_handling policy

The IMS\_Registration\_handling policy indicates whether the UE deregisters from IMS after a configured amount of time after receiving an indication that the IMS Voice over PS Session is not supported.

The UE may support the IMS\_Registration\_handling policy.

If the UE supports the IMS\_Registration\_handling policy, the UE may support being configured with the IMS\_Registration\_handling policy using one or more of the following methods:

a) the IMS\_Registration\_Policy node of the EFIMSConfigData file described in 3GPP TS 31.102 [15C];

b) the IMS\_Registration\_Policy node of the EFIMSConfigData file described in 3GPP TS 31.103 [15B]; and

c) the IMS\_Registration\_Policy node of 3GPP TS 24.167 [8G].

If the UE is configured with both the IMS\_Registration\_Policy node of 3GPP TS 24.167 [8G] and the IMS\_Registration\_Policy node of the EFIMSConfigData file described in 3GPP TS 31.102 [15C] or 3GPP TS 31.103 [15B], then the IMS\_Registration\_Policy node of the EFIMSConfigData file shall take precedence.

NOTE 1: Precedence for files configured on both the USIM and ISIM is defined in 3GPP TS 31.103 [15B].

If the UE is registered with IMS and the IMSVoPS indicator, provided by the lower layers (see 3GPP TS 24.301 [8J]), indicates voice is not supported, the UE shall:

A) if the Stay\_Registered\_When\_VoPS\_Not\_Supported leaf indicates requirement to stay registered, the UE needs not to deregister and maintains the registration as required for IMS services; or

NOTE 2: The UE will periodically refresh the registration when needed.

B) if the Stay\_Registered\_When\_VoPS\_Not\_Supported leaf indicates requirement to deregister and the Deregistration\_Timer leaf used to configure the NoVoPS-dereg timer defined in table 7.8.1 contains a timer value for the time to wait before deregistrerting from IMS, start a timer with the value indicated in the policy and:

a) if the timer expires before the UE receives an indication from the lower layers that IMS voice is supported:

1) if there is no ongoing IMS session, either performs reregistration as specified in subclause 5.1.1.4 and shall only include feature tags associated with services that are independent of the IMSVoPS indicator or deregister from the IMS following the procedures specified in subclause 5.1.1.6; or

2) if there is ongoing IMS session, and

i) if the UE does not receive indication from the lower layer that the IMS voice is supported before the ongoing IMS session is terminated, either performs reregistration as specified in subclause 5.1.1.4 and shall only include feature tags associated with services that are independent of IMSVoPS indicator or deregister from the IMS following the procedures specified in subclause 5.1.1.6 as soon as the ongoing IMS based service is terminated ; or

ii) if the UE receives indication from the lower layer that the IMS voice is supported before the ongoing IMS session is terminated, cancel the timer; or

NOTE 3: How the UE selects reregistration or deregistration is implementation dependent (e.g., SMS service)

b) if the UE receives an indication from the lower layers that IMS voice is supported before the timer expires, cancel the timer.

If the IMS\_Registration\_handling policy is not configured, the UE behaviour is implementation specific.

\*\*\*\*\* Next change \*\*\*\*\*

### L.3.1.0a IMS\_Registration\_handling policy

The IMS\_Registration\_handling policy indicates whether the UE deregisters from IMS after a configured amount of time after receiving an indication that the IMS Voice over PS Session is not supported.

The UE may support the IMS\_Registration\_handling policy.

If the UE supports the IMS\_Registration\_handling policy, the UE may support being configured with the IMS\_Registration\_handling policy using one or more of the following methods:

a) the IMS\_Registration\_Policy node of the EFIMSConfigData file described in 3GPP TS 31.102 [15C];

b) the IMS\_Registration\_Policy node of the EFIMSConfigData file described in 3GPP TS 31.103 [15B]; and

c) the IMS\_Registration\_Policy node of 3GPP TS 24.167 [8G].

If the UE is configured with both the IMS\_Registration\_Policy node of 3GPP TS 24.167 [8G] and the IMS\_Registration\_Policy node of the EFIMSConfigData file described in 3GPP TS 31.102 [15C] or 3GPP TS 31.103 [15B], then the IMS\_Registration\_Policy node of the EFIMSConfigData file shall take precedence.

NOTE 1: Precedence for files configured on both the USIM and ISIM is defined in 3GPP TS 31.103 [15B].

If the UE is registered with IMS and the IMSVoPS indicator, provided by the lower layers (see 3GPP TS 24.301 [8J]), indicates voice is not supported, the UE shall:

A) if the Stay\_Registered\_When\_VoPS\_Not\_Supported leaf indicates requirement to stay registered, the UE needs not to deregister and maintains the registration as required for IMS services; or

NOTE 2: The UE will periodically refresh the registration when needed.

B) if the Stay\_Registered\_When\_VoPS\_Not\_Supported leaf indicates requirement to deregister and the Deregistration\_Timer leaf used to configure the NoVoPS-dereg timer defined in table 7.8.1 contains a timer value for the time to wait before deregistrerting from IMS, start a timer with the value indicated in the policy and:

a) if the timer expires before the UE receives an indication from the lower layers that IMS voice is supported:

1) if there is no ongoing IMS session, the UE either performs reregistration as specified in subclause 5.1.1.4 and shall only include feature tags associated with services that are independent of IMSVoPS indicator or deregister from the IMS following the procedures specified in subclause 5.1.1.6; or

2) if there is ongoing IMS session, and

i) if the UE does not receive indication from the lower layer that the IMS voice is supported before the ongoing IMS session is terminated, the UE either performs reregistration as specified in subclause 5.1.1.4 and shall only include feature tags associated with services that are independent of IMSVoPS indicator or deregister from the IMS following the procedures specified in subclause 5.1.1.6 as soon as the ongoing IMS based service is terminated; or

ii) if the UE receives indication from the lower layer that the IMS voice is supported before the ongoing IMS session is terminated, cancel the timer; or

NOTE 3: How the UE selects reregistration or deregistration is implementation dependent (e.g., SMS service)

b) if the UE receives an indication from the lower layers that IMS voice is supported before the timer expires, cancel the timer.

If the IMS\_Registration\_handling policy is not configured, the UE behaviour is implementation specific.

\*\*\*\*\* Next change \*\*\*\*\*

U.3.1.0A IMS\_Registration\_handling policy

The IMS\_Registration\_handling policy indicates whether the UE deregisters from IMS after a configured amount of time after receiving an indication that the IMS Voice over PS Session is not supported.

The UE may support the IMS\_Registration\_handling policy.

If the UE supports the IMS\_Registration\_handling policy, the UE may support being configured with the IMS\_Registration\_handling policy using one or more of the following methods:

a) the IMS\_Registration\_Policy node of the EFIMSConfigData file described in 3GPP TS 31.102 [15C];

b) the IMS\_Registration\_Policy node of the EFIMSConfigData file described in 3GPP TS 31.103 [15B]; and

c) the IMS\_Registration\_Policy node of 3GPP TS 24.167 [8G].

If the UE is configured with both the IMS\_Registration\_Policy node of 3GPP TS 24.167 [8G] and the IMS\_Registration\_Policy node of the EFIMSConfigData file described in 3GPP TS 31.102 [15C] or 3GPP TS 31.103 [15B], then the IMS\_Registration\_Policy node of the EFIMSConfigData file shall take precedence.

NOTE 1: Precedence for files configured on both the USIM and ISIM is defined in 3GPP TS 31.103 [15B].

If the UE is registered with IMS and the IMSVoPS indicator, provided by the lower layers (see 3GPP TS 24.501 [258]), indicates voice is not supported, the UE shall:

A) if the Stay\_Registered\_When\_VoPS\_Not\_Supported leaf indicates requirement to stay registered, the UE needs not to deregister and maintains the registration as required for IMS services; or

NOTE 2: The UE will periodically refresh the registration when needed.

B) if the Stay\_Registered\_When\_VoPS\_Not\_Supported leaf indicates requirement to deregister and the Deregistration\_Timer leaf used to configure the NoVoPS-dereg timer defined in table 7.8.1 contains a timer value for the time to wait before deregistrerting from IMS, start a timer with the value indicated in the policy and:

a) if the timer expires before the UE receives an indication from the lower layers that IMS voice is supported:

1) if there is no ongoing IMS session, the UE either performs reregistration as specified in subclause 5.1.1.4 and shall only include feature tags associated with services that are independent of IMSVoPS indicator or deregister from the IMS following the procedures specified in subclause 5.1.1.6; or

2) if there is ongoing IMS session, and

i) if the UE does not receive indication from the lower layer that the IMS voice is supported before the ongoing IMS session is terminated, the UE either performs reregistration as specified in subclause 5.1.1.4 and shall only include feature tags associated with services that are independent of IMSVoPS indicator or deregister from the IMS following the procedures specified in subclause 5.1.1.6 as soon as the ongoing IMS based service is terminated; or

ii) if the UE receives indication from the lower layer that the IMS voice is supported before the ongoing IMS session is terminated, cancel the timer; or

NOTE 3: How the UE selects reregistration or deregistration is implementation dependent (e.g., SMS service)

b) if the UE receives an indication from the lower layers that IMS voice is supported before the timer expires, cancel the timer.

If the IMS\_Registration\_handling policy is not configured, the UE behaviour is implementation specific.

\*\*\*\*\* Next change \*\*\*\*\*

### W.3.1.0a IMS\_Registration\_handling policy

The IMS\_Registration\_handling policy indicates whether the UE deregisters from IMS after a configured amount of time after receiving an indication that the IMS Voice over PS Session is not supported.

The UE may support the IMS\_Registration\_handling policy.

If the UE supports the IMS\_Registration\_handling policy, the UE may support being configured with the IMS\_Registration\_handling policy using one or more of the following methods:

a) the IMS\_Registration\_Policy node of the EFIMSConfigData file described in 3GPP TS 31.102 [15C];

b) the IMS\_Registration\_Policy node of the EFIMSConfigData file described in 3GPP TS 31.103 [15B]; and

c) the IMS\_Registration\_Policy node of 3GPP TS 24.167 [8G].

If the UE is configured with both the IMS\_Registration\_Policy node of 3GPP TS 24.167 [8G] and the IMS\_Registration\_Policy node of the EFIMSConfigData file described in 3GPP TS 31.102 [15C] or 3GPP TS 31.103 [15B], then the IMS\_Registration\_Policy node of the EFIMSConfigData file shall take precedence.

NOTE 1: Precedence for files configured on both the USIM and ISIM is defined in 3GPP TS 31.103 [15B].

If the UE is registered with IMS and the IMSVoPS indicator, provided by the lower layers (see 3GPP TS 24.501 [258]), indicates voice is not supported, the UE shall:

A) if the Stay\_Registered\_When\_VoPS\_Not\_Supported leaf indicates requirement to stay registered, the UE needs not to deregister and maintains the registration as required for IMS services; or

NOTE 2: The UE will periodically refresh the registration when needed.

B) if the Stay\_Registered\_When\_VoPS\_Not\_Supported leaf indicates requirement to deregister and the Deregistration\_Timer leaf used to configure the NoVoPS-dereg timer defined in table 7.8.1 contains a timer value for the time to wait before deregistrerting from IMS, start a timer with the value indicated in the policy and:

a) if the timer expires before the UE receives an indication from the lower layers that IMS voice is supported:

1) if there is no ongoing IMS session, the UE either performs reregistration as specified in subclause 5.1.1.4 and shall only include feature tags associated with services that are independent of IMSVoPS indicator or deregister from the IMS following the procedures specified in subclause 5.1.1.6; or

2) if there is ongoing IMS session, and

i) if the UE does not receive indication from the lower layer that the IMS voice is supported before the ongoing IMS session is terminated, the UE either performs reregistration as specified in subclause 5.1.1.4 and shall only include feature tags associated with services that are independent of IMSVoPS indicator or deregister from the IMS following the procedures specified in subclause 5.1.1.6 as soon as the ongoing IMS based service is terminated; or

ii) if the UE receives indication from the lower layer that the IMS voice is supported before the ongoing IMS session is terminated, cancel the timer; or

NOTE 3: How the UE selects reregistration or deregistration is implementation dependent (e.g., SMS service)

b) if the UE receives an indication from the lower layers that IMS voice is supported before the timer expires, cancel the timer.

If the IMS\_Registration\_handling policy is not configured, the UE behaviour is implementation specific.