**SA WG2 Meeting #163 S2-2406897**

**May 20 - 31, 2024 Jeju, South Korea (Revision of S2-2406348)**

**Source: China Mobile, vivo, NTT DOCOMO**

**Title: KI #6, Conclusion update for KI#6**

**Document for: Approval**

**Agenda Item: 19.2**

**Work Item / Release: FS\_NG\_RTC\_Ph2 / Rel-19**

*Abstract of the contribution: This contribution provides update of conclusion for key issue #6.*

# 1 Discussion

This contribution updates the interim conclusions for KI#6.

# 2 Proposal

It is proposed to capture the following contents into TR 23.700-77.

*FIRST CHANGE*

# 8 Conclusions

## 8.X Interim conclusion of KI#6

The following interim conclusions for KI#6 "Support of Standalone IMS Data Channel Sessions" are agreed:

- Scenarios including establishing IMS session with standalone bootstrap DC, standalone application DC, or a combination of standalone bootstrap DC and application DC shall be supported in this release;

- An IMS session with only standalone bootstrap DC can be used for downloading application list from DCSF. The SIP session terminates at the local IMS network of the originating UE, i.e. there is no IMS session with the terminating UE.

- An IMS session with only standalone bootstrap DC can also be established between two UEs. The procedure will in general reuse the procedure in TS 23.228 Annex AC.7.1.

- On top of the above bullets, an IMS session with a combination of standalone bootstrap DC and application DC if the originating UE already has the DC application stored.

- The SDP offer/answer procedure is used to change an IMS session with audio/video/DC media components to a standalone IMS DC session and adding audio/video media components to an established standalone IMS DC session.

NOTE 1: How the charging system is notified about the changing of the media components is in scope of SA5.

- The handling of SIP preconditions for standalone IMS DC session will be addressed during normative phase.

- Standalone IMS data channel sessions use SIP session timer as per RFC 4028 [20] to avoid hanging resources in the UE and the network. Usage of SIP session timer in IMS is specified in TS 24.229 [10].

- The standalone IMS data channel session is terminated by the existing session release procedure specified in TS 23.228 [5]. The session release may be triggered by the expiry of the session timer or by sending a SIP BYE request.

- The binding information is included in the SDP offer as specified in Rel-18.

NOTE 2：If the binding information needs to be enhanced, SA4 is responsible for necessary SDP definitions, e.g. to provide version compatibility information, if necessary. The alignment with SA4 can be done in normative phase if required.

- When the UE initiates a IMS session with standalone bootstrap DC:

- The originating UE generally follows existing procedures to establish bootstrap DC as specified in 23.228 for standalone DC session establishment with the addition that the UE may only include DC media components when generating SDP offer in initial INVITE request;

- The DCSF serving the UE may instruct IMS AS to terminate the session and reserve only the originating side media resource based on the received DC media components and Requested-URI;

- When the UE initiates an IMS session with combination of standalone bootstrap DC and standalone application DC

- The originating UE only include DC media components for both bootstrap DC and application DC when generating SDP offer in initial INVITE request;

- If the terminating UE has downloaded the application and if the user accept the session, the terminating UE responds with the SDP answers for both bootstrap DC and application DC;

- If the terminating UE has not downloaded the application, the terminating UE responds with the SDP answer for bootstrap DC and reject the application DC and downloads the application after the bootstrap DC is established. The terminating UE, via the SDP answer, informs the originating UE that the terminating UE is downloading the application and will update the session further after downloading the application. After the application is downloaded, the terminating UE updates the session by adding the application DC for the application towards the originating UE and then alerts the user.

NOTE 3: Coordination with SA4 to confirm the suitability of the proposal in this bullet may be needed.

NOTE 4: How the terminating UE informs originating UE of downloading application is determined by SA4.

- Additional subscription for standalone data channel is optional. When additional subscription for standalone data channel is required, the subscription information is stored in service data of IMS data channel, based on which the IMS AS determines whether to accept the standalone data channel IMS session.

NOTE 6: It is assumed that all the IMS ASes supporting IMS DC are supporting standalone DC session in deployment.

*End of CHANGES*