**3GPP TSG- Meeting #**

**, , (revision of S6-253044)**

**Source: Airbus**

**Title: Solution to Key issue 1: Functional architecture**

**Spec: 3GPP TR 23.700-37 V0.2.0**

**Agenda item: 9.1**

**Document for: Approval**

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**1. Introduction**

This pCR proposes solution to KI#1 – Functional architecture for Discreet monitoring. This solution re-uses the Recording architecture and functionality as much as possible.

**2. Reason for Change**

Solutions for KI#1 are missing.

**3. Proposal**

It is proposed to agree the following changes to 3GPP TR 23.700-37 V0.2.0.

\* \* \* First Change \* \* \* \*

## 6.x Solution x (for KI#1): Functional architecture

### 6.x.1 Description

#### 6.x.1.0 General

This solution re-uses functionality of the Recording feature as much as feasible. New functional entities “Discreet monitoring server” and “Discreet monitoring client” are added, as well as a number of new reference points. All new configuration parameters are mimicing those already existing for the Recording feature.

#### 6.x.1.1 Functional model and reference points

##### 6.x.1.1.1 Functional model

Functional model of MC system including Discreet Monitoring functionality is shown in figure 6.x.1.1.1-1. Note that this figure shows only a single MC system, interconnection aspects are not (yet) included.

 

Figure 6.x.1.1.1-1: Functional model of MC system including Discreet Monitoring functionality

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NOTE 2: The dashed lines between DM client and other clients in an MS service UE are only for illustration purposes. They will not be included into the normative TS.

##### 6.x.1.1.2 Functional entity description – DM server

The discreet monitoring (DM) server is a functional entity that receives communications metadata and media of DM target users and target groups, from MC service servers. When media from MC service servers is received in e2ee format, the DM server is capable of decriphering the media. The DM server forwards the media, using secure DM-1 reference point, to the authorized DM clients who have subscribed to receive the target user/group communications.

The target users and/or groups for DM are set in the MC service user profile configuration data (A.3) and in the group configuration data (A.4). This can be done by an authorized DM client utilizing the CSC-4 reference point (user profiles) and CSC-2 reference point (group profiles).

##### 6.x.1.1.3 Functional entity description – DM client

The discreet monitoring client is a functional entity that acts as the application user agent for discreet monitoring services. These services include:

* Setting or modifying target users and target groups for discreet monitoring. This can be done by interacting with the configuration management server via configuration management client and with the group management server via group management client.
* Subscribing to the DM server for receiving media of target users and/or groups.
* Receiving the user/group media from the DM server and providing the media to the MC user.

##### 6.x.1.1.4 Reference point DM-1 (between the DM client and server)

##### Editor's note: The contents of this clause are FFS.6.x.1.1.4 Reference point DM-2 (between the DM server and KMS)

 Editor's note: The contents of this clause are FFS.

##### 6.x.1.1.5 Reference point DM-3 (between the DM server MC Service Servers)

Editor's note: The contents of this clause are FFS.

##### 6.x.1.1.6 Reference point DM-4 (between the DM server and GMS)

Editor's note: The contents of this clause are FFS.

##### 6.x.1.1.7 Reference point DM-5 (between the DM server and CMS)

Editor's note: The contents of this clause are FFS.

#### 6.x.1.2 Configurations

Configuration parameters for DM include:

* DM user (authorized user) profile:
* - Authorizations for Discreet Monitoring of users and groups – the “Recording admin and/or replay service user profile configuration data (on-network)” – Table A.11-1 in TS 23.280 – can be used as a starting point. *If we end up with only one DM client (i.e. no separate ‘admin’ and ‘replay’ clients like for the recording), the number of parameters will be smaller.*
* Target users/groups for DM:
* - For groups, new parameters shall be added to Table A.4 in TS 23.280 (Group configuration data) – “Group is a target for DM” and “DM server address”.
* - For individual users, similar parameters to the MCPTT, MCData and MCVideo user profiles as already exists for Recording i.e. “User is a target for DM” and “DM server address”.
* Editor's note: It is FFS how these parameters can be hidden from the target users.

#### 6.x.1.3 Procedures

- For configurations, the existing procedures can be used (just like for the Recording feature)

- Procedures in the new reference points will mainly mimic those for Recording, but these need to be studied in more detail

- Procedures between DM client and DM server are also FFS. A secure interface is required, can use same security mechanisms as any MC client-server interface --> SA3.

- MC service UE internal procedures between DM client and other clients (see figure above) are implementation specific and out of scope of 3GPP

### 6.x.2 Impacts on existing functional entities and reference points

See figure above.

### 6.x.3 Solution evaluation

\* \* \* End of changes \* \* \* \*