

**Title:** **PROPOSED** Liaison statement on Subscribed Media in IMS Subscriber Profile  
**Response to:**  
**Release:** Release 5  
**Work Item:** IMS-CCR

**Source:** SA  
**To:** CN4  
**Cc:** CN, SA2, CN1

**Agenda item:** **IMS**  
**Document for:** **INFORMATION**

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**1. Overall Description:**

Based on the work done at the joint SA2/CN1 session in Bangkok (11/2002), a new SDP control handling, both at P-CSCF and S-CSCF, has been implemented in CN1 and SA2 specifications.

The SDP control performed in the IMS CN allows the S-CSCF to inform the UE about the Media types, Codec, Direction and Bandwidth which can be used for the session. The control is based on both the local policy and the subscribed media.

Based on this work, SA plenary kindly ask CN4 to handle the needed work on the Cx interface.

In this perspective, it shall be possible to store the subscribed profile in the HSS and to download it to the S-CSCF. The subscribed media can then contain the Media Type, the bandwidth and the Codecs that the subscriber can use for its sessions. It is of course up to CN4 to find the appropriate way to specify it.

**2. Action to CN4:**

Implement the corresponding CR based on the above described working assumption.

**3. Date of Next TSG-SA Meeting:**

SA#19            16-19 March 2003            Birmingham, UK



# 3GPP Standardisation Subscribed Media



# « Reasons for change »

## Before Orange contributions in CN#4:

- No check based on subscription in the IMS
- No possibility to design specific subscriber profiles
- No possibility for the operator to control the use of its resources

## Orange aims to give to the operator:

- More control on the IMS domain
- More scalability on the subscriber profile

# Subscribed Media parameters

- Subscribed media are used to **authorise IMS session** requests on per subscriber basis
- Subscribed media are **part of the Service Profile** stored in the HSS and downloaded to the S-CSCF.

## SUBSCRIBED MEDIA:

- ✓ **Media type:** identifies the media subscribed  
> audio, video, text...
- ✓ **MaxBandwidth:** maximum bandwidth authorised
- ✓ **Direction Tag:** uplink, downlink, both
- ✓ **Codec:** AMR WB, AMR...



# Role of the Subscribed Media parameters



- **Media Type:** high level service information
- **MaxBandwidth:** control resource allocation
- **Direction Tag:** differentiate downlink application from both ways services
- **Codec:** the most accurate information regarding the application

# Operator interest in Subscribed Media

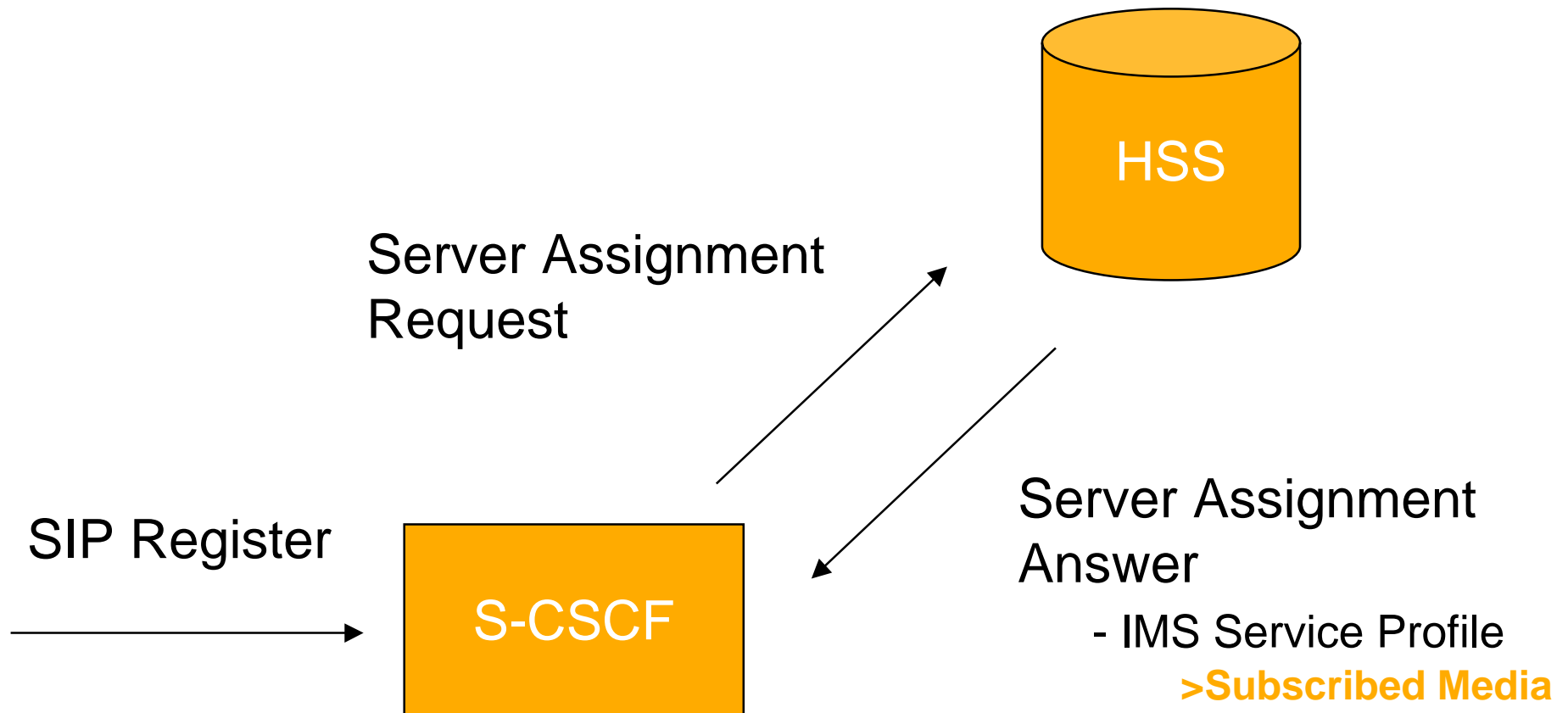
The knowledge of the Subscribed Media at the S-CSCF allows the operator to:

- Offer **wide range of subscriptions**
  - > premium, basic...
- **Control the services** used in the network
- **Control the resources** requested by the subscriber
- **Prevent Fraud** by checking the “rights” of the subscriber before to accept the request



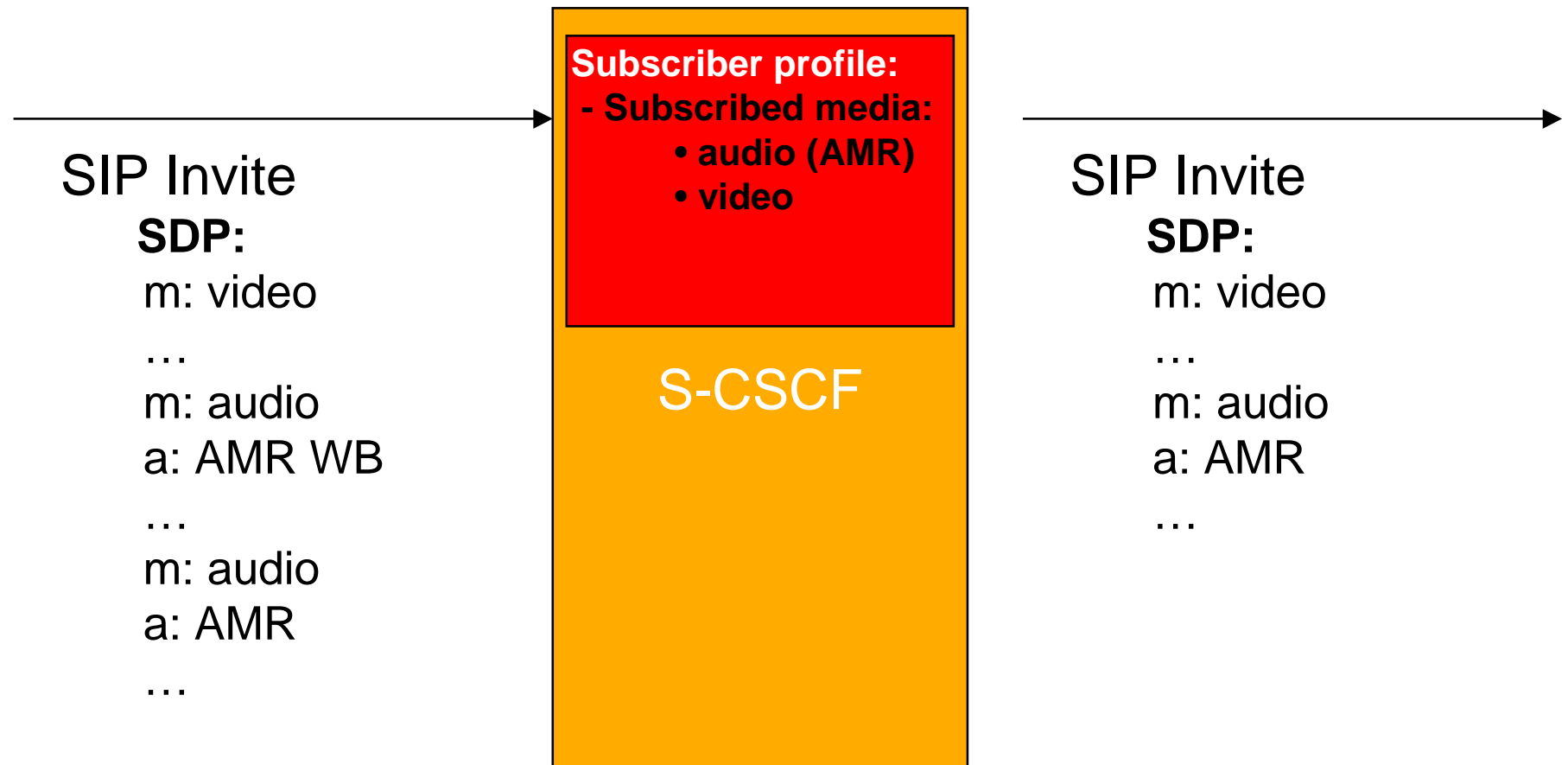
# Annex: Functional description

Transfer on the Cx interface (Diameter)



# Annex: Functional Description

Control procedure in the S-CSCF (Control of the SDP field)





# Annex: Subscribed Media in 3GPP

Extracts from SA2 and CN1 specifications 1/2

## **TS 23.228, chapter 5 "IP multimedia subsystem procedures":**

« 5.6.1 (MO#1) Mobile origination, roaming  
S-CSCF validates the service profile, and performs any origination service control required for this subscriber. **This includes authorisation of the requested SDP based on the user's subscription for multi-media services.** »

## **TS 23.228, chapter 5 "IP multimedia subsystem procedures":**

« 5.11.3.1 Codec and media characteristics flow negotiation during initial session establishment

**S-CSCF#1 examines the media parameters, and removes any choices that the subscriber does not have authority to request.** As part of the S-CSCF session processing an 'application server' may be involved. When an 'application server' is involved the application server may also examine the media parameters and revise the session description. »

# Annex: Subscribed Media in 3GPP

Extracts from SA2 and CN1 specifications 2/2

## TS 24.229, chapter 6 "Application usage of SDP":

### « 6.3 Procedures at the S-CSCF

When the S-CSCF receives an INVITE or reINVITE, **the S-CSCF shall examine the media parameters in the received SDP**, and remove those media streams which are not allowed **based on the subscription**.

**The S-CSCF will also remove those codecs** from the approved media streams which are **not allowed by the subscription**. If the S-CSCF modifies the SDP, it shall also revise the SDP to reflect the modified bandwidth requirements. For the rejected media streams, the S-CSCF should ignore the b= lines. »

# Annex: Orange Contacts

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