

**27 February - 02 March, 2001**

**Gothenburg, Sweden**

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3GPP TSG SA WG3 - SA 3 #16  
Sophia Anthipolis, France. 28-30 November 2000.

Postponed S3-000723

Dear S3,

A couple of minor comments on 33-8xx\_030.doc: Section 4: There is no UICC-UE interface as the UE contains the UICC inside it. There is a UICC-ME interface. Also 7.1 The UE may have several IP addresses as the UE may contain several devices each with its own IP address.

There have been a number of discussions at the SA and S2 level concerning the openness of the internal UE interfaces and the identification of the UE as a 3GPP UE and not a general internet node. It is understood that an identity equivalent to IMSI has been discussed as a useful parameter to include in SIP messages in S2.

In SA and T it has been discussed how to handle the UE split. One school of thought which has some acceptance is that if the SIP client is outside of the ME then the MT will have to terminate SIP and re-initiate SIP towards the CSCF. This allows for maximum security that the IMSI-equivalent identifier has not been tampered with at an external TE and also that services like Fixed Dialling Number based on USIM security can be maintained.

The attached presentation might also help with thoughts.

<<T2-000587 (Terminal Issues for IP Multimedia) .zip>>

Are there any comments on this?

Regards,

> --  
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3GPP TSG SA2

3GPPSA2 #15

Makuhari, 13-17th November 2000

Tdoc S2 - 000xxxx

# **Terminal Issues for IP Multimedia**

Kevin Holley, 3GPP TSG-T Vice Chair

presented by Paul Voskar, TSG-T

# Background

3GPP TSG-SA held a workshop on the vision and service scenarios for IM in October 2000. During this workshop many of the following slides were presented, and it was felt that a follow-up discussion in S2 was warranted on the Terminal area.

TSG-T would be pleased to receive any comments which S2 would like to make on the following slides, which contain scenarios , a number of these scenarios have been discussed in the SA workshop but have not been discussed or agreed in any TSG-T group. There are also some suggested places for doing the required further study.

# Objective

## Harness growth of IP based applications

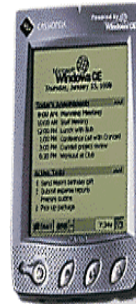
- develop UE architecture to best support this, but carefully taking into account its impact
- use IP lower layer techniques within the UE, between components (objects) of the UE, but not to the exclusion of other techniques
- Support of IP based applications, applications
  - e.g. IM world uses SIP (CS world uses 04.08)
  - e.g. IM world uses MMS (CS world uses SMS)
  - e.g. IM world uses IP control (CS world uses AT commands)

# What is the Terminal?



PC?

Automobile  
active  
component?



Bluetooth PDA?

Headset?



Mobile Equipment?

# What do we support?

- We have to support multiple devices (objects) at the user end
- Each device needs to exist in IP space
  - each device needs its own IP address
  - each device needs IP connectivity to remote Internet or Intranet hosts, enabling the full range of IP based services to be offered
- Each device shall be able to initiate Multimedia Sessions via the MT
- There is a need for IP routing capability within the UE

# How does the PDA connect to the MT?

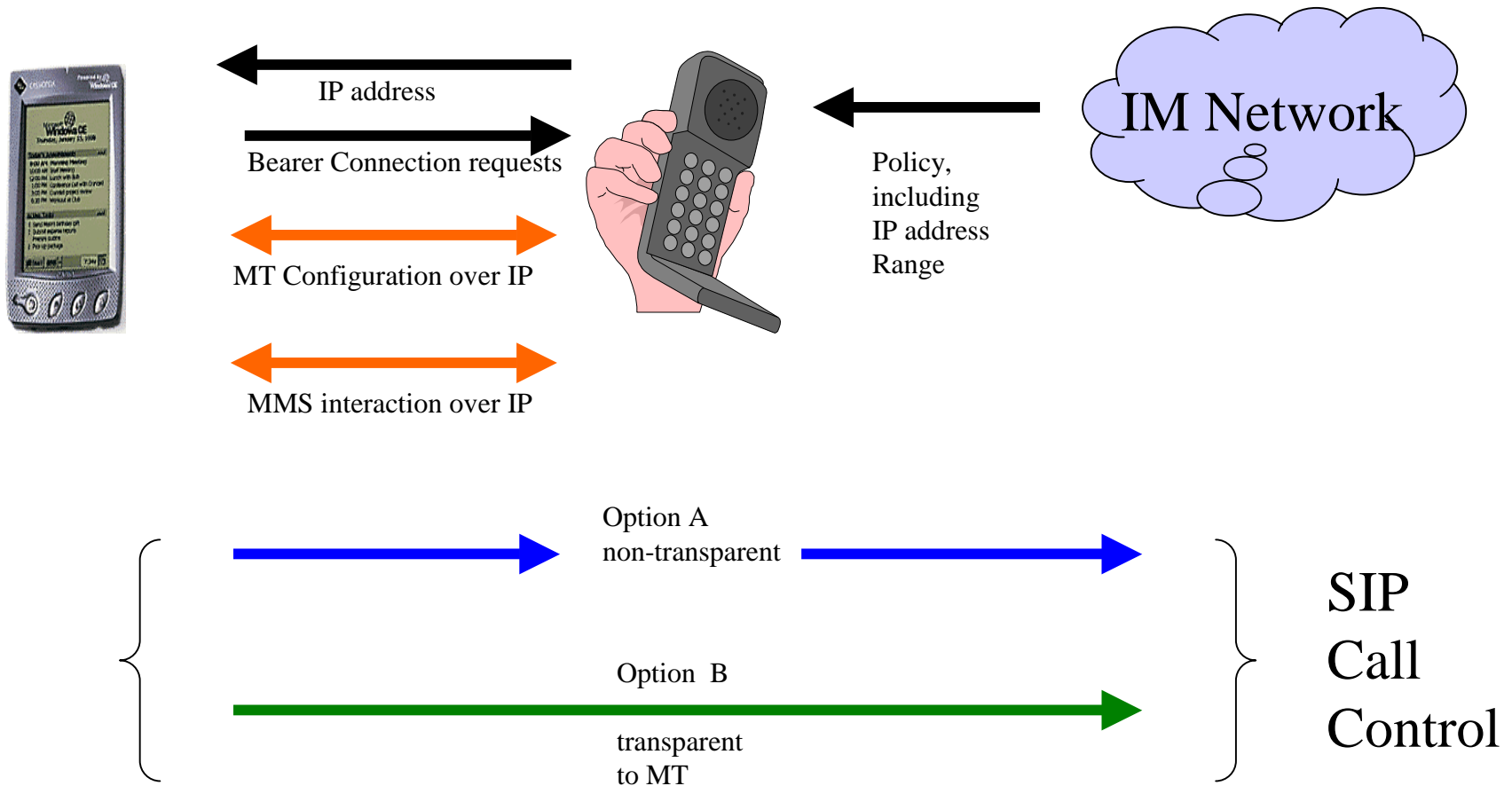
- Physical Connection (e.g. Bluetooth)
- Obtain IP address for PDA, e.g. DHCP
- IP based communications now possible
  
- These are already defined elsewhere, e.g. Bluetooth specs.; IETF specs.

# What else is needed?

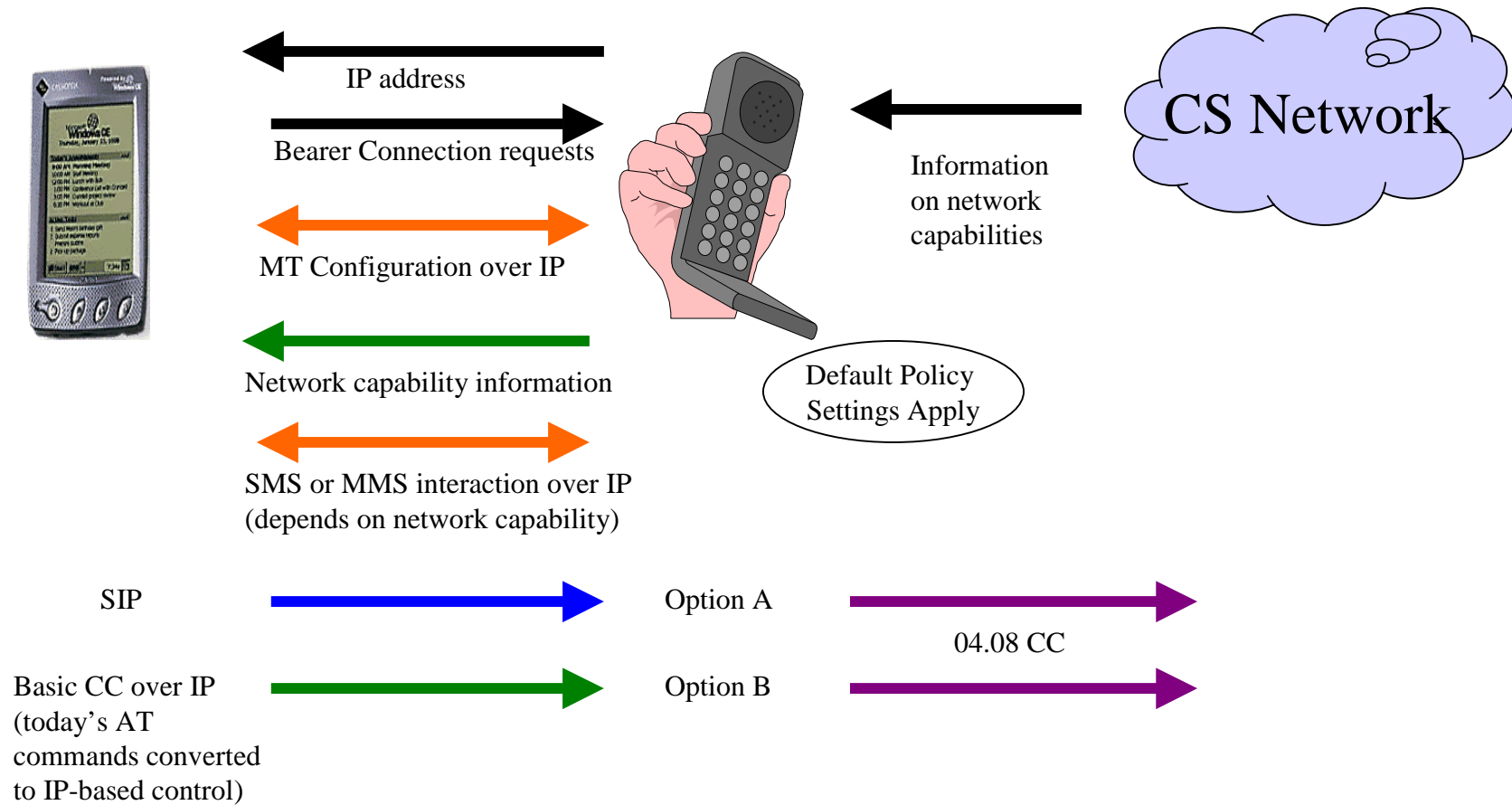
- IP based commands to the ME (*TSG-T*)
  - Provides AT command functionality
  - Multiple Sessions Possible
- Network “programmes” ME (*S2 to consider?*) for:
  - Prevention of Denial-Of-Service attacks on the network (e.g. allowed frequency of call attempts)
  - Other “policy” requirements (e.g. IP address range to use for UE objects)



# Calls from UE objects (1)



# Calls From UE Objects (2)



# Further Study

A possible scenario described in this slide pack provides a basic concept, BUT:

- Do we need policing of **Call Control** at the mobile? (*S2*)
  - If “mobile-enhanced” SIP requires identification of the ME or USIM, a PDA would need to send CC via the ME in order for the ME/USIM identification to be securely attached
- What is the USIM interaction? (*TSG-T*)
  - e.g. Services like Fixed Dialling number?

# Further Study

Continued:

- How does the external device indicate QoS requirements to the MT (*S2*)?
- How to authenticate external devices?
  - Perhaps already solved in DHCP?
- How to secure external links?
- How to get the IETF to develop protocols?
  - For transport of MMS, SMS, MT configuration etc. over IP