Technical Specification Group Services and System Aspects ***GTT(01)0028***
Global Text Telephony Workshop, Dusseldorf, Germany, 18-19 April 2001

Source: **Drafting Group (GTT ad hoc)**

Title: **User to User support of CTM**

Document for: **Discussion**

Agenda Item: **5**

This contribution focuses on the generic GTT requirements for user to user Text Telephony.

Possible solutions:

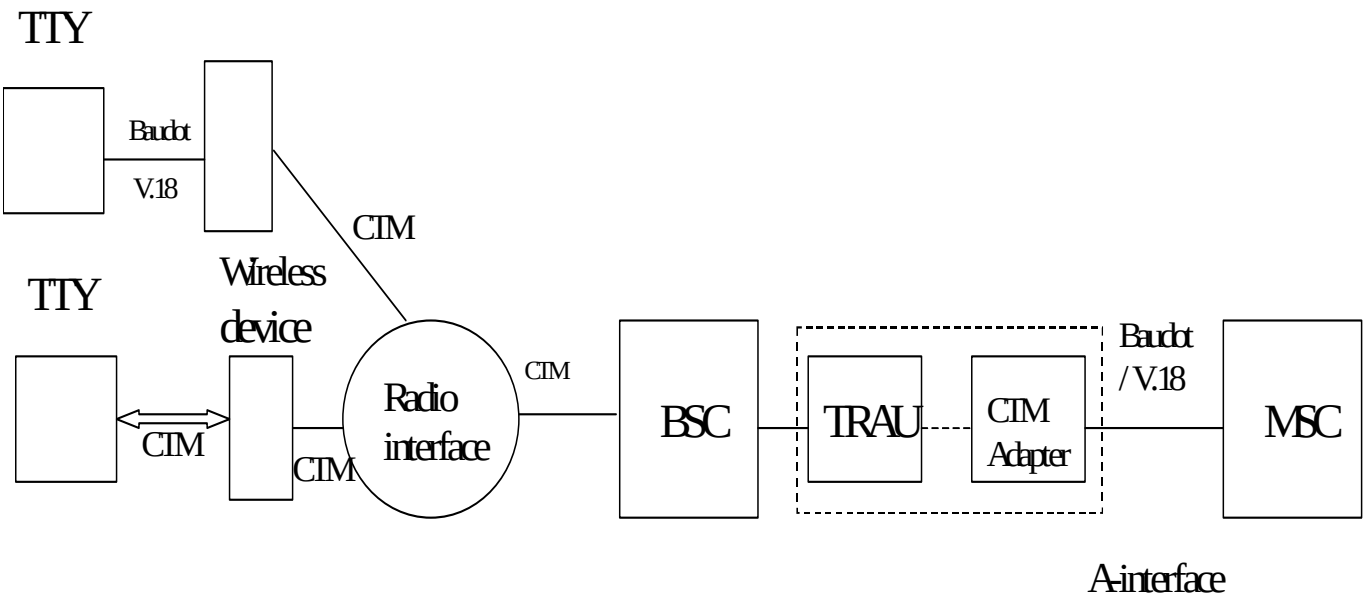
1. All transcoder (GSM and UMTS)
2. Transcoder pooling
3. CTM service node - CAMEL
4. CTM service node – Bearer Capability

Note: In this document the assumption has been taken that prefix/suffix dialling is not used. However, should prefix/suffix dialling be used then alternative mechanisms, such as using standard switch routing mechanisms to route calls via a CTM service node are likely to be possible.

5. **1a – User to User - All transcoder solution (GSM)**

Description

In this solution all the transcoders in a network are upgrade to support the CTM modem.



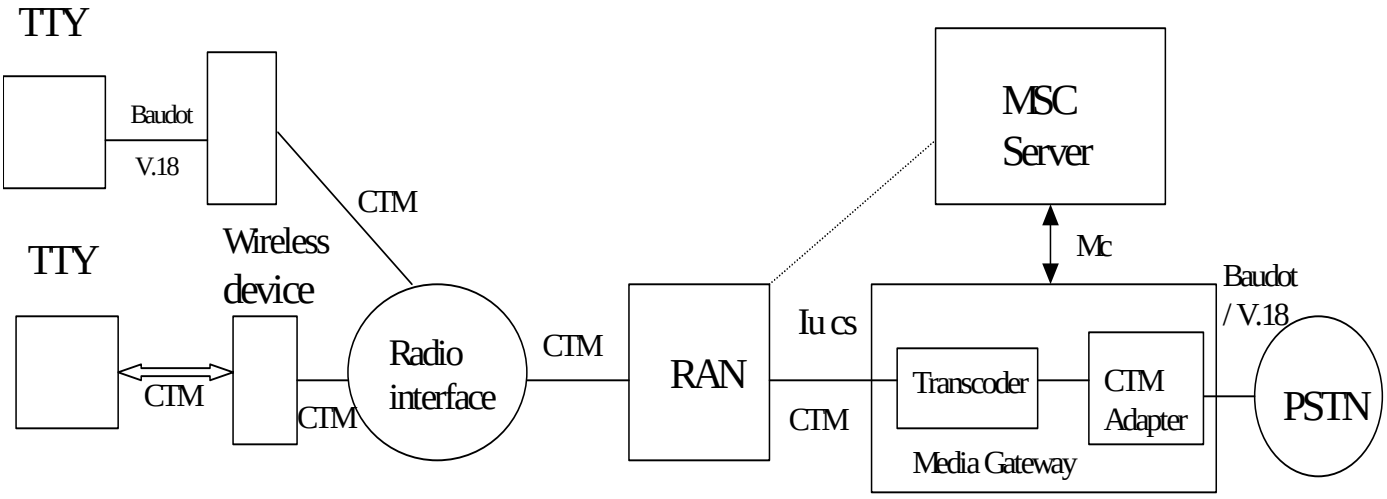
Main Issues

- Every Transcoder needs upgraded to support CTM
- Handover may be an issue with regard to lose of characters.
- Charging considerations, how is appropriate billing information captured?
- Roaming to networks which do not support CTM

1b – User to User - All transcoder solution (UMTS)

Description

In this solution all the transcoders in a network are upgrade to support the CTM modem.



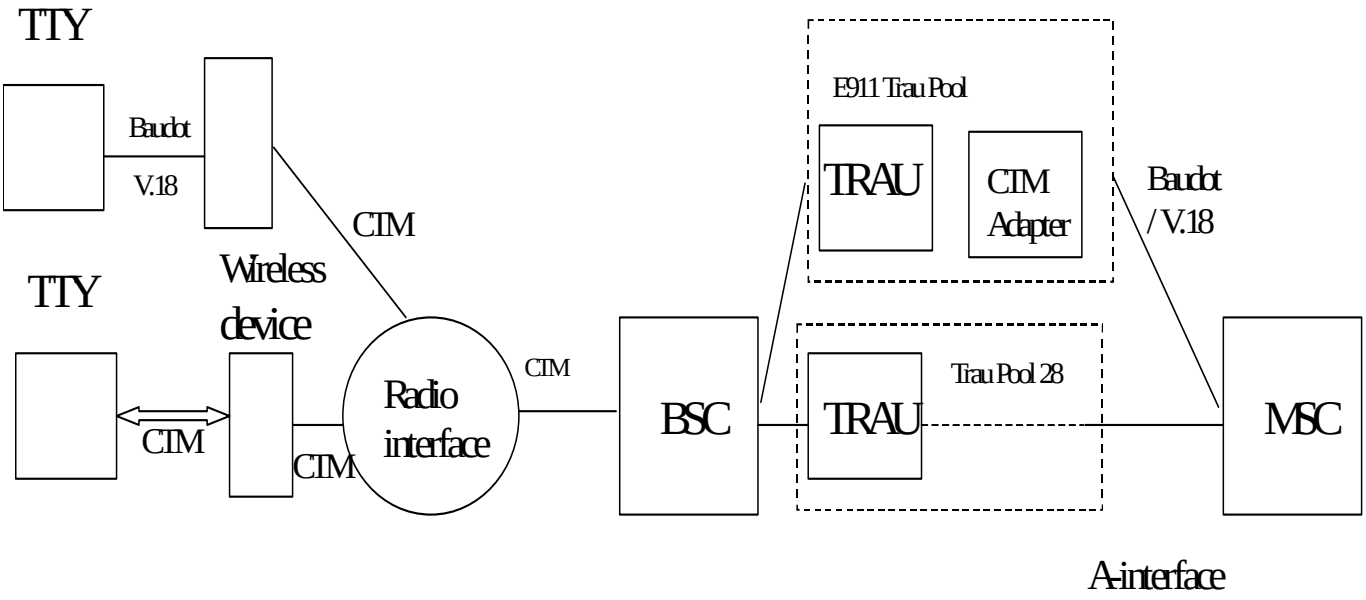
Main Issues

- Every Transcoder needs upgraded to support CTM
- The assumption has been taken that all emergency service centres support text telephony.
- Charging considerations, how is appropriate billing information captured (look more possible than GSM)?
- Roaming to networks which do not support CTM

2 – User to User - Pooling of CTM Trau resources (GSM)

Description

In this solution a Trau pool is created which supports the CTM modem. All emergency calls are routed via a CTM (E911) Trau pool using standard techniques defined for trau pooling.



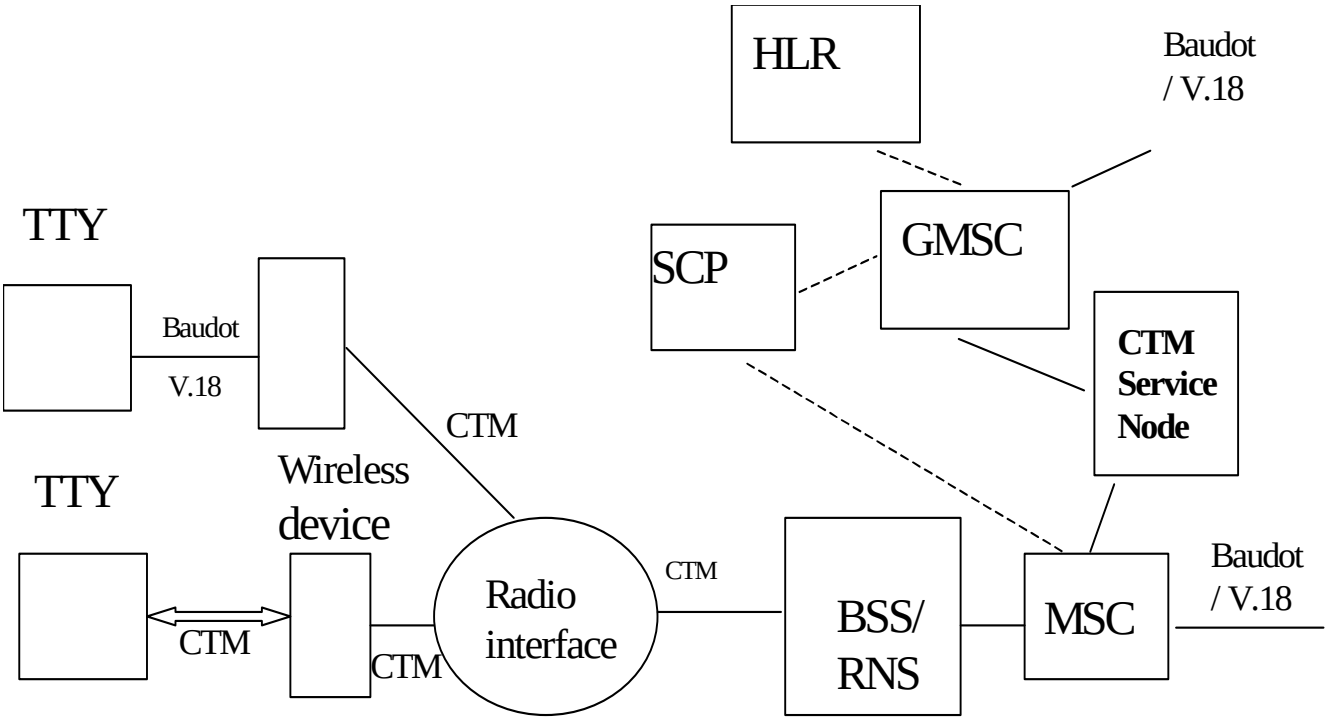
Main Issues

- Bearer capabilities (of CTM support in the mobile) need to be provided to the network, an additional bearer code point in the bearer capability is required.
- 08.08 will need to be updated to show how this category of pool is supported.
- MSC needs to link the call with access to the CTM trau pool.
- Handover may be an issue with regard to lose of characters.
- Charging considerations, how is appropriate billing information captured?
- CTM to Baudot/V.18 conversion will not be provided while roaming to a networks that does not support any CTM conversion functionality.

3 – User to user - CTM service node solution – CAMEL -(GSM)

Description

CAMEL is used to route calls via the CTM service node.



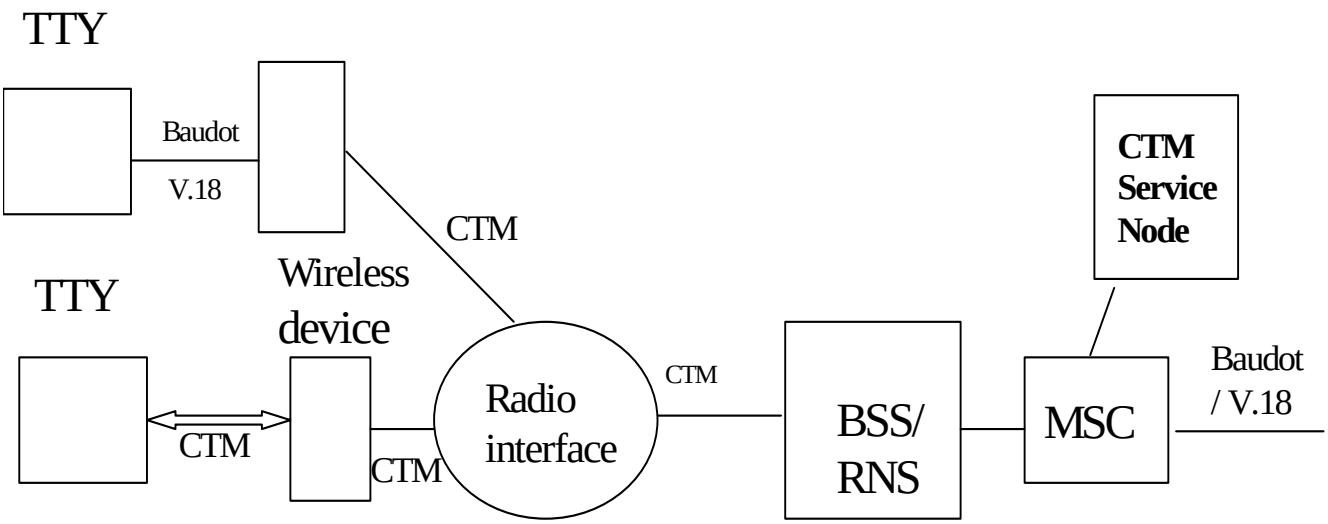
Main Issues

- Registration of subscribers requiring service
- CTM CAMEL service interaction with other CAMEL services
- It will be complicated to synchronise echo cancelling, speech enhancement, TrFO and TFO in the Trau with CTM usage.
- CAMEL needs to be supported
- Roaming CTM support only works for Non-emergency calls in networks that support CAMEL.
- International transmission of CTM, is this an issue?

4 – User to User - CTM service node solution – Bearer Capability (GSM)

Description

In this solution bearer capability information is used to route calls to the CTM at call set up.



Main Issues

- Bearer capabilities (of CTM support in the mobile) need to be provided to the network, an additional bearer code point in the bearer capability is required.
- MSC needs to link the call with access to the CTM service node.
- CTM to Baudot/V.18 conversion will not be provided while roaming to networks that do not support any CTM conversion functionality.

Question: How are terminating calls handled?