Joint TSG-S4#10 - SMG11#15 Meeting **_Tdoc S4/SMG11 (00)0108_**

February 28-March 3, 2000, Helsinki, Finland
3GPP TSG SA2 #11 Tdoc S2-000285
Puerto Vallarta, Mexico, 24 - 28 January 2000

Source: TSG SA WG2[1]

Title: Liaison statement on the working plan to complete OoBTC in R99

To: SA WG4, CN WG1, CN WG2, RAN WG2, RAN WG3

At the last SA#6 Plenary, it was recognised that the coordination among WGs activities on the OBTC (Out-of-Band Transcoder Control) was necessary in order to complete it in R99. At the time, SA WG2 was mandated to take the action item.

At the SA WG2 #11 meeting held on 24 – 28, January 2000, the attached document (S2-000049) clarifying the working plan with remaining open issues was discussed. SA WG2 would kindly ask all relevant WGs to review the attached document and liaise back the comments on if all relevant WGs can solve its remaining open issues in time for R99 or not.

Since the final coordination is necessary at the next SA WG2#12 meeting held on 6-9, March 2000, all relevant WGs are kindly requested to send the above assessments by that meeting.

Attachment: S2-000049 with comments

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3GPP TSG-SA WG2 #11 **TDoc S2-000049**
24 – 28 January 2000, Puerto Vallarta, Mexico

Agenda Item: 9
WI/Topic: Out-of-Band Transcoder Control
Source: NTT DoCoMo
Title: Working Plan to complete OoBTC in R99 (Ver. 2.4)
Document for: Information and approval

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1. Introduction

In the last SA plenary, the necessity of coordination among WGs acitivities on the OBTC (Out-of-Band Transcoder Control) was recognized in order to complete it in R99. It is important for all WGs to recognize the whole relation and the remaining open issues on OBTC. This contribution clarifies the relation among WGs, and clarifies the working plans to finalize OBTC in R99.

2. Working Assumption

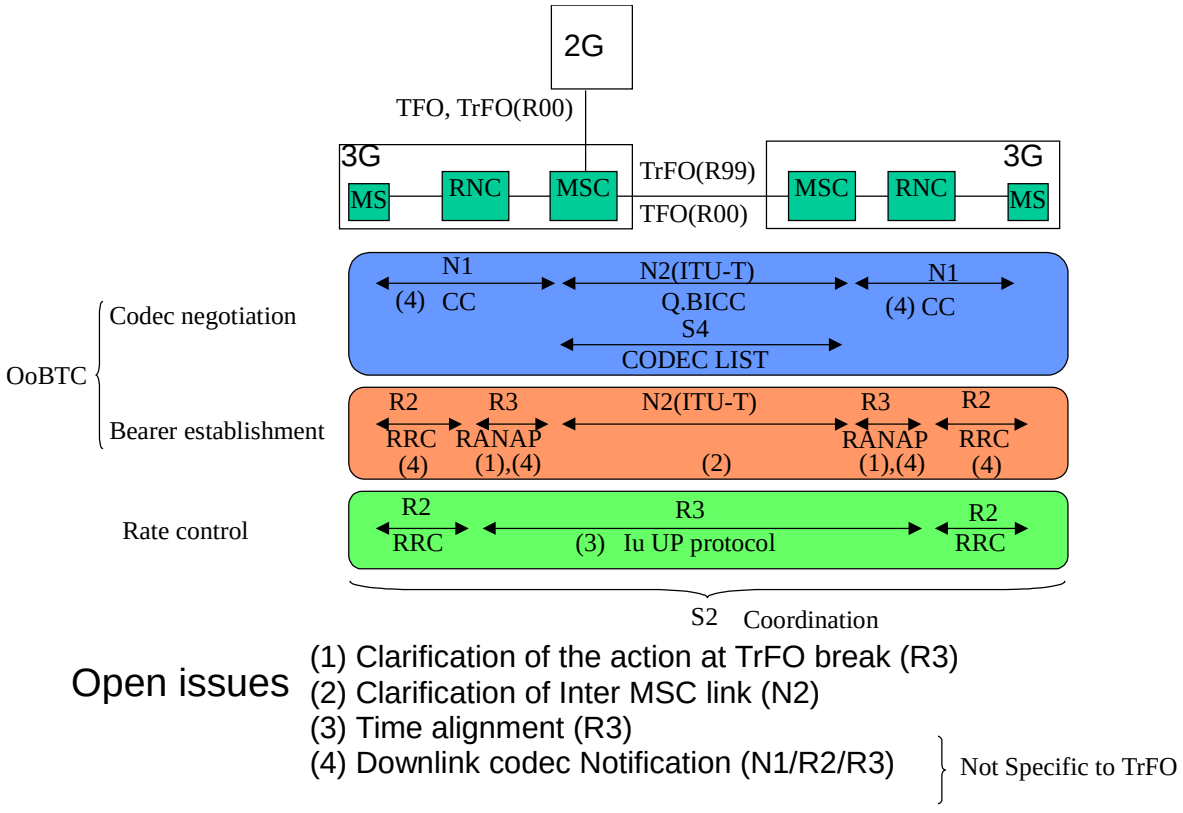
OBTC is part of necessary functions to realize TrFO. Therefore, it is more understandable to clarify overall TrFO functions.

According to the discussion in 3GPP until now, the working assumption for TrFO is assumed as following, which is mostly based on the LS statement from N2 to S4/S2, "N2-99j56", and N2 specification, "TS 23.153".

- TrFO in 2G(GSM) is out of scope for R99
- Inband TFO between 2G and 3G is expected
- TFO in 3G targets R00.

3. Whole structure and Open issues

The relationship between TrFO and the function specified in each WG is shown in figure 1.



Open issues
(1) Clarification of the action at TrFO break (R3)
(2) Clarification of Inter MSC link (N2)
(3) Time alignment (R3)
(4) Downlink codec Notification (N1/R2/R3) } Not Specific to TrFO

Figure 1. TrFO related WGs and Open issues

After reviewing the relative specifications, only 4 open issues were identified on the function necessary for TrFO as shown in figure 1. However two of them are not specific to TrFO. "DL Codec list notification" issue is caused by not the introduction of TrFO but the location of the transcoder. "Time Alignment" is also applied to the features other than TrFO and it has been already studied in R3 for R99. Thus these two issues should be clearly separated from TrFO discussion.

Also the functions used in TrFO are summarized in Table 1. Almost all of them have been already completed in each WGs. Since the normal procedure between UE and RNC is applied for TrFO, it is not considered that there is the specific issue on TrFO between UE and RNC.

WG	Responsible feature	Open Issues
S2	- Coordination among relative WGs	- N/A
S4	- Codec and Codec list	- Completed
N1	- Codec Negotiation between UE and MSC	- CC or RRC for notification of the selected Codec list to UE ➔ N1 agreed to use CC, and the CC is included in RANAP & RRC (*1). (14th, Jan.) - How the codec information supported by MS should be encoded. ➔ N1 agreed to add a new information element. (14th, Jan.)
N2	- Codec Negotiation inter MSC - Bearer establishment inter MSC	- N2 clarify the requirement of the Inter MSC link, which type of bearer can be applied. ➔ N2 agreed to discuss via e-mail to decide how to describe the clarification in stage 2 specification by 4th, Feb.
R2	- Bearer establishment between UE and RAN - TFC control by RRC	- Specify new IE in RRC to include CC. ➔ R2 will support the transfer of CC related signalling.
R3	- Bearer establishment between MSC and RNC as well as RNC and Node B - Notification of the Codec mode to RAN - Iu UP control procedure (rate control, initialization, time alignment)	- Review of the procedure at TrFO break. - Iu UP Time Alignment - Specify new IE in RANAP to include CC. - Timing of RAB establisment and Iu-UP initialization

Table 1 Open issues in each WGs

(note) (*1) Compromised solution proposed by Ericsson, Siemens, & DoCoMo.

4. Working Steps towards completion of TrFO

To finalize TrFO as R99, the remaining open issues should be solved within the limited time schedule, see Annex. It is suggested that the status on TrFO in the relative WGs should be reported as Liaison Statement to one another in order to confirm the stability.

1) N1 (1/11-14)

- N1 agrees whether the selected codec list is informed to UE with CC message or not. [DONE]

(This issue is very critical not only to TrFO but also to normal setup procedures. Since the R2/3 may need more works depending on the decision, this issue should be solved definitely by the end of 14th Jan. Otherwise, normal procedures cannot be finalized by March, 2000.)

- N1 agrees how the codec information supported by MS should be encoded. [DONE]

2) N2, R2 (1/17-21)

- N2 clarifies the requirement of the Inter MSC link, which type of bearer can be applied. [Will be

done by 4th of Feb.]

- R2 specifies the new IE in the RRC message to include CC message. [Will support the transfer of CC related signalling (selected codec information) contained within RANAP.]

3) R3, S4, S2 (1/24-28)

- R3 clarifies the procedure on Iu when TrFO is broken.
- R3 specifies the new IE in the RANAP message to include CC message.
- R3 develops and finalizes Iu UP Time Alignment procedure.
- S4 reflects the result from other WGs, if necessary.
- S2 confirms and finalizes coordination works.

Annex

2000 Meeting schedule toward the end of R99