

**Source:** 3GPP TrFO Workshop Convenor  
**Title:** Status Report on TrFO/TFO Harmonisation Workshop to TSG#10  
**Agenda item:** 8.14  
**Document for:** INFORMATION

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## 1 Introduction

Two 3GPP TrFO/TFO Harmonisation (TrFO) Workshops have been held since the last TSG#09 Plenaries, which were chaired by Yun-Chao HU (LM Ericsson AB) and assisted by Kimmo Kymalainen who recently joined MCC. The 3GPP TrFO Workshop#04 has been held on 17-19 October 2000, in Windsor (UK) and was kindly hosted by NEC and Fujitsu Europe. The meeting reviewed **32** documents, produced **2** Liaison Statements and progressed the draft TS 23.153, Out of Band Transcoder Control – stage 2. The meeting was attended by **19** participants, representing CN1, CN4, SA4, and RAN3.

A joint meeting between the TrFO Workshop and TSG RAN WG3 (Iu SWG) has been met on the 18<sup>th</sup> of October and the meeting reviewed **22** documents and was attended by about **50** participants.

The 3GPP TrFO Workshop#05 has been held on 9-10 November 2000, in Stockholm (Sweden) and was kindly hosted by Ericsson. The workshop was chaired by Yun-Chao Hu (LM Ericsson AB) and assisted by Kimmo Kymalainen (MCC). The meeting reviewed 22 documents, produced 1 Liaison Statement and finalized the draft TS 23.153, Out of Band Transcoder Control – stage 2. This draft TS 23.153 was submitted to the CN4#05 meeting for WG approval. The meeting was attended 13 participants, representing CN1, CN4, SA4, and RAN3.

## 2 Questions for Advice and Decisions

None

## 3 Agreements

### 3.1 TSG RAN Work Item

The Joint Meeting noted the WI description of the Transcoder Free Operations, which has been agreed at the previous TSG RAN#09. The Rapporteur of this WI is modified to:  
?? Mr. Alexander Vesely from Siemens.

### 3.2 Storage of RFCIs

It is understood that the RNC can not re-initialise the Iu UP without explicit request from the Core Network. Therefore it was agreed that the R3 specifications needs to be updated to make this understanding explicitly within the Iu UP specifications (R99) so that there is no room for misunderstanding. The RFCI is stable during the call duration if no explicit command from the Core Network has been given to change and this RFCI information is available to the MGW within the Iu UP Initialisation message. This enables that the Storage of RFCI was accepted as the solution to be worked out.

Concerns from one single delegation requested that IN interaction and handover scenarios needs to be addressed. This issue is already described in the stage 2 document and needs to be addressed by the stage 2. It was accepted by the meeting that this was adequately addressed.

### **3.3 Rate Control**

In addition to the RFCI Storage there is a need to control the rate at the remote ends (i.e. RNCs). To simplify the TFO and TrFO procedures it was agreed to use a Maximum Rate Control procedure, which will be described within the Iu UP specifications.

The Rate Control procedure indicates the maximum possible rate from the sending node. By using an indication of the maximum rate from the receiving node, the selected rate control of the channel can be maximised and therefore the rate can be optimised within the “channel”.

### **3.4 DTMF**

The Nb interface will use the Iu Framing protocol, which does not support DTMF tones. As a consequence, DTMF tones will be intercepted at the first accessed MGW and passed via the Nc interface towards the remote end.

### **3.5 CODEC Negotiations**

The CODEC negotiations consist of CODEC Modification and CODEC Re-negotiation procedures once a CODEC has already been selected. It is assumed that BICC CS-2 will provide these capabilities however no clear requirements for the CODEC Renegotiations has not been identified. Therefore it is agreed to have the CODEC Re-negotiation attached as an informative appendix to trigger further investigations into this capability.

### **3.6 External to/from Mobile Scenarios**

The Fixed to Mobile Call Establishment scenarios have been added to the draft to complete the stage 2 documentation. The Transcoder at the Edge is reflected within this part of the stage 2 documentation.

### **3.7 TrFO/TFO Harmonisation**

No contradictions were identified for the TrFO and TFO capabilities. Therefore, the meeting concluded the TrFO/TFO Harmonisation was adequately addressed.

## **4 Conclusions**

The workshop made considerable progress and reached a number of agreements. The draft TS 23.153 was considered to be complete and ready for approval. It was sent to the CN4 WG for WG approval.

## **5 Future Meetings**

Since the stage 2 activities has been completed and the workshop agreed that the stage3 activities shall take place within the appropriate 3GPP WGs, there was no need to schedule additional workshop meetings. It must be noted that the workshop agreed to request for the workshops when a need is identified during the stage 3 activities. In this case an invitation will be sent out on the Email distribution list [3GPP\\_TSG\\_CN\\_WG4\\_TRFO@list.etsi.fr](mailto:3GPP_TSG_CN_WG4_TRFO@list.etsi.fr).

## **6 Acknowledgement**

I would like to thank the Kimmo Kymalainen for his support to the TrFO workshop. I would like to thank the participants for their hard work. Special thanks to Alexander Vesely (Siemens), Phil Hodges (Ericsson) and Toshiyuki Tamura (NEC) for their hard work during editing sessions.