**3GPP TSG-RAN Meeting #16** ***Tdoc RP-020391***
**Marco Island, USA, 4th – 7th June, 2002**

# Status Report for WI to TSG

**Work Item Name:** SI: Introduction of direct transport bearers between SRNC and Node-B

**SOURCE:** Sharokh Amirijoo (Ericsson) **TSG:** RAN **WG:** WG3

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**Ref. to WI sheet:** RP-010492

## Progress Report since the last TSG (for all involved WGs):

Of remaining four open issues, one open issue was close in RAN3#27.

At RAN3#28, two compromise solutions were presented that would limit the direct bearer to:

First solution:

- ATM option where the AAL2 Switch resides within the DRNC; and
- IP option.

Second solution:
- IP option.

## Conclusion

RAN3 has concluded that there is no clear benefits on supporting Direct transport bearers between SRNC and Node-B.
Furthermore, RAN3 has concluded that there is very limited impact to the RAN3 protocol specifications for supporting Direct transport bearers between SRNC and Node-B. The impact is due to support of the Bearer re-arrangement functionality (which was introduced in Rel-5 for Iub) combined with the Direct transport bearer functionality, for which the Bearer re-arrangement procedure will have to be extended to the Iur interface.

RAN3 could not agree to which extend the direct bearer feature should be introduced in the specifications:

- Five companies have indicated that they consider the benefits of the direct bearer feature only significant for the IP transport option and thus would like to see this feature only introduced for the IP transport option and not for the ATM transport option.

- One company has indicated that due to the architecture split between Radio Network Layer (RNL) and Transport Network Layer (TNL), there is no reason to introduce this feature for only a subset of the supported TNL's. Therefore this feature should be introduced in a TNL independent way.

## List of Completed elements (for complex work items):

## List of open issues:

The following open issues are identified in the TR:
1. Establishment delay: Does the use of an AAL2 switch provides an additional gain in delay if this implies the same two-step ALCAP establishment as it is done in the current approach (DRNC involved)?

2. Reliability: What happened if an AAL2 switch fails? Is it still possible to perform ATM Path Switching? Is it then needed a redundant AAL2 switch?
3. How does the RNC know if it supports a functionality that completely depends on the transport network configuration? For example, what happened if a Node supports the feature but there is not an AAL2 switch in the path?

Of above remaining open issues:
- The issue 1 is related to ATM transport option only. RAN3 was not be able to estimate the gains or loss in this case. This could be considered as an implementation issue.
- The issues 2 is mainly related to the ATM option. However, in some implementations, network structures and error cases same problem may arise for the IP transport option.
- The issue 3 are common to both transport options.

## Estimates of the level of completion (when possible):

## WI completion date review resulting from the discussion at the working group:
RAN3 is not in a position to estimate the completion date for this SI.

## References to WG's internal documentation and/or TRs:
R3-021646: TR 25.883 v0.3.0