

**Agenda Item:** 16.2  
**Source:** Rapporteur  
**Title:** Capability Exchange Study Item: Report and Proposal  
**Document for:** Discussion

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## 1 Status

At TSG-RAN-WG3#5 a study item was created to discuss the content of the capability exchange message (taken as a working assumption) on the Iub interface, and the applicability of this message on the other UTRAN interfaces. This report summarises the discussions to date.

## 2 Discussion Items

The applicability of the Capability Exchange message for release 99 was deemed to be dependent on the content of the message. It was agreed at TSG-RAN-WG3#5 that the message should not contain any information relating to protocol version handling, and that the information exchanged in this message would consist of a 'feature set' relating to UTRAN functionality such as TDD/FDD. The discussions held over the reflector can be summarised as follows.

1. Study item initiated by rapporteur. Capability exchange message proposed for the Iub interface to include the following parameters in the 'feature set' IE.
    - Release Version
    - TDD/FDD Support Indicator
    - Frequency Band Indicator
    - Softer Handover Combining
- The use of the Capability Exchange message was also proposed on the Iu and Iur interfaces, supporting at least a 'Release Version' indicator. The possibility of the Iur message also indicating TDD/FDD mode support was also proposed.
2. Additional proposal from rapporteur that the Capability Exchange message should also contain an 'SSDT Support' indicator.
  3. Comments received from Ericsson describing how the proposed elements of the Capability Exchange message are already addressed.
    - Release Version – implicit from protocol version handling since a new version must be compiled for each release.
    - TDD/FDD Support Indicator – should be addressed by operator management. Fault case will be supported in the protocol.
    - Frequency Band Indicator – again a new protocol version would be required to support the new frequencies in the messaging so this is implicit.
    - Softer Handover Combining – fault cases are provided in the protocol.
  4. Tdoc 865 submitted by Motorola proposing an NBAP Capability Exchange message with the following feature set.
    - TDD/FDD Support Indicator.
    - SSDT Support Indicator.
    - Softer Handover Combining Indicator.
    - Version ID – an indicator appended to each function to indicate the version of the feature supported (i.e. release 99 or release 00).

Also proposed is a Capability ACK message containing the greatest common features supported by both Nodes.

## 3 Conclusion

No consensus has been reached as a result of the study item discussion. The following alternatives have currently been discussed.

1. NBAP Capability Exchange message (and ACK) included as per tdoc 865 from Motorola.
2. Additionally, a Frequency Band Indicator may be added to the feature set in tdoc 865.
3. NBAP Capability exchange message not included in release 99 as per Ericsson comments (or some of the functions identified in the feature set are not included).
4. Capability Exchange message included on Iu/Iur interface with 'Release Version' indicator. TDD/FDD Support indicator possibly included in Iur message.