CommentType | Comment Status | Response Status

# 55	**Cl**	07	*MAC TECH*	**SC** 7.1	**T / X / O**	Bourgeois, Monique
What if a device receives a primitive that it does not understand? How is this handled?							
# 101	**Cl**	05	*Clause 5 TECH*	**SC** 5.4.5.1	**T / X / O**	Bourgeois, Monique
This does not specify whether or not "another device currently transmitting on the channel" belongs to the same network as the device.							
# 105	**Cl**	07	*MAC TECH*	**SC** Table 68	**T / X / O**	Bourgeois, Monique
Some of the MAC PIB objects are not referenced anywhere in the draft.							
# 109	**Cl**	07	*MAC TECH*	**SC** Table 64	**T / X / O**	Bourgeois, Monique
This is the only mention of multicast/broadcast frames.							
# 111	**Cl**	07	*MAC TECH*	**SC** 7.3	**T / X / O**	Bourgeois, Monique
Do we really want to use CSMA for beacons, since they are responsible for synchronizing the network (what if GTS is supported)?							
# 113	**Cl**	07	*MAC TECH*	**SC** 7.5.2.2.1	**T / X / O**	Bourgeois, Monique
Does a network coordinator change its macFrameOrder to 15 when it enters snooze mode?							
# 114	**Cl**	07	*MAC TECH*	**SC** 7.5.2.1	**T / X / O**	Bourgeois, Monique
What if two networks do somehow choose the same network ID? How would this conflict be resolved?							
# 133	**Cl**	05	*Picture EDIT*	**SC** Figure 14	**E / X / O**	Bourgeois, Monique
Figure is unclear.							
# 162	**Cl**	05	*Cluster-Tree Team*	**SC** 5.2	**TR / X / O**	Carmeli, Boaz
Cluster-tree seems to be a topology of its own. It has different settings and behaviors described along many sections in this standard. It see							
# 165	**Cl**	05	*Cluster-Tree Team*	**SC** 5.2.1.3	**TR / X / O**	Carmeli, Boaz
The description of the cluster tree topology is not clear. Can simple network node transmit a beacon? if so - is it a peer to peer communicati							
# 169	**Cl**	05	*MAC TECH*	**SC** 5.4.3.2	**TR / X / O**	Carmeli, Boaz
Data request, or data poll from a network node to the network coordinator must receiver an answer. Hance - we should allow the network							
# 172	**Cl**	05	*MAC TECH*	**SC** 5.4.5.1	**T / X / O**	Carmeli, Boaz
It is not clear from the standard what a device should do in case of failer to transnit a beacom when the channel is busy. Should it choose a							
# 188	**Cl**	05	*MAC TECH*	**SC** 5.4.3.2	**T / X / O**	Carmeli, Boaz
What happen to pending message at the network coordinator that is never requested by the relevent network node. Is there a time-to-live ti							
# 199	**Cl**	06	*Coexistence Team*	**SC** 6.9	**T / X / O**	Chen, Hung-Kun
The section of coexistence for 802.15.4 does not address all other IEEE devices using 2.4 GHz band, such as 802.15.1, 802.15.3. Also it on							
# 205	**Cl**	06	*Coexistence Team*	**SC** 6.9	**TR / X / O**	Chen, Kwang-Cheng
The section of coexistence for 802.15.4 does not address all other IEEE devices using 2.4 GHz band, such as 802.15.1, 802.15.3. Also it on							
# 217	**Cl**	00	*Team EDIT*	**SC**	**TR / X / O**	CYPHER, DAVID
Use of the words, must and should, need to be used consistently and with the proper meanings (see IEEE Standards style manual clause 1							
# 222	**Cl**	05	*Picture EDIT*	**SC** Figure -14	**E / X / O**	CYPHER, DAVID
Figure not following IEEE standard style manual (see 16.1)							
# 242	**Cl**	07	*MAC TECH*	**SC** 7.1.1.4.3	**TR / X / O**	CYPHER, DAVID
No action is described for the behavior when the status is DISCARD_PACKET, unless storing packet segments at a null memory address is							
# 263	**Cl**	06	*MAC TECH*	**SC** 6.3.1.3.3	**T / X / O**	CYPHER, DAVID
This clause states that, "The effect on receipt of this primitive by the MAC sublayer is unspecified." Is this statement made because there is							

274 **Cl** 05 *Cluster-Tree Team* **SC** 5.2 **E / X / O** DuVal, Mary

Only 2 topologies mentioned, but 3 are discussed in the following sections.

279 **Cl** 00 *Coexistence Team* **SC** 00 **T / X / O** Golmie, Nada

The current draft for TG4 does not address the issue of coexistence with other systems operating in the same band.

306 **Cl** 05 *Clause 5 EDIT* **SC** 5.0 **E / X / O** Gorday, Paul

The term ""Data Rate"" is unclear.

316 **Cl** 00 *Team EDIT* **SC** ALL **TR / X / O** GUBBI, RAJUGOPAL

Atleast as for as the MAC portions are concerned, this document is at best a requirements document. This does not describe the mechanis

317 **Cl** 00 *Team EDIT* **SC** ALL **TR / X / O** GUBBI, RAJUGOPAL

The list of features claimed in various parts of this draft and the requirements are very similar to those listed for 802.15.3. While 802.15.3 (L

318 **Cl** 00 *Team EDIT* **SC** ALL **TR / X / O** GUBBI, RAJUGOPAL

Interoperability: If this draft becomes a standard as it is, given that all the mechanisms are defined in an higher layer that is not even referen

320 **Cl** 05 *MAC TECH* **SC** 2 **TR / X / O** GUBBI, RAJUGOPAL

The first sentence in second complete para in 5.2 claim that DEVs can talk to each other without NC. How do they detect each other? How i

321 **Cl** 05 *MAC TECH* **SC** 2.1.1 **TR / X / O** GUBBI, RAJUGOPAL

Sentence here claims that a network ID is chosen that is not currently in use by any other network within the radio range. How? What mecl

327 **Cl** 05 *Cluster-Tree Team* **SC** 2.1.2 **E / X / O** GUBBI, RAJUGOPAL

This sentence uses such things as "designated parent" and "child" nodes without first defining them.

328 **Cl** 05 *Cluster-Tree Team* **SC** 2.1.2 **TR / X / O** GUBBI, RAJUGOPAL

If in a cluster tree topology, the devices may only communicate with theire designated parent and child nodes, how is the data forwarding c

329 **Cl** 05 *Cluster-Tree Team* **SC** 2.1.3 **TR / X / O** GUBBI, RAJUGOPAL

Can DDs using different network IDs form parts of the same cluster tree?

330 **Cl** 05 *Cluster-Tree Team* **SC** 2.1.3 **TR / X / O** GUBBI, RAJUGOPAL

This entire paragraph describes the DD nomination and cluster formation from a user/requirement point of view. But no where in the draft th

331 **Cl** 05 *Cluster-Tree Team* **SC** 2.1.3 **TR / X / O** GUBBI, RAJUGOPAL

What is this "predefined time period"

332 **Cl** 05 *Cluster-Tree Team* **SC** Figure 2 **TR / X / O** GUBBI, RAJUGOPAL

This picture states that each cluster of the same tree being in different channels? Is that a requirement?

333 **Cl** 05 *Cluster-Tree Team* **SC** Figure 2 **TR / X / O** GUBBI, RAJUGOPAL

This picture states that each cluster of the same tree being in different channels? if so, how is the DD in one channel know that a DEV/DD f

334 **Cl** 05 *Cluster-Tree Team* **SC** Figure 2 **TR / X / O** GUBBI, RAJUGOPAL

Assuming that a mechanism for DDs to syncup to complete a data transaction is defined, how is that a particular path from a originating DE

336 **Cl** 05 *Cluster-Tree Team* **SC** 2.1.3 **TR / X / O** GUBBI, RAJUGOPAL

What happens when a DD wants to leave? How is the new one chosen and the information transferred to the new one? What happens if t

337 **Cl** 05 *Cluster-Tree Team* **SC** 2.1.3 **TR / X / O** GUBBI, RAJUGOPAL

What happens when a NC wants to leave? How is the new one chosen and the information transferred to the new one? What happens if t

338 **Cl** 05 *Cluster-Tree Team* **SC** 3 **TR / X / O** GUBBI, RAJUGOPAL

Stating that the required mechansisms are in an higher layer and it is out of scope for this draft, does not help in realizing an implementation

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340 **Cl** 05 *MAC TECH* **SC** 3.2 **TR / X / O** GUBBI, RAJUGOPAL
The claim of "Guaranteed packet delivery" in the MAC is ambiguous. There is no receovery mechanism if the max retry has reached. Isn't it?

342 **Cl** 00 *MAC EDIT* **SC** ALL **E / X / O** GUBBI, RAJUGOPAL
Use of "Handshake" instead of plain Ack. Why invent terms when implementors are already familiar with the same concept by a well-knowr

344 **Cl** 00 *MAC EDIT* **SC** ALL **E / X / O** GUBBI, RAJUGOPAL
Use of abbreviations and different terms for the same field or concept is rampant in the draft. for example (a) use of FSB in 7.5.7.3. what d

345 **Cl** 00 *MAC TECH* **SC** ALL **TR / X / O** GUBBI, RAJUGOPAL
Power management completely escapes the draft except the mention of its requirement in 5.4.1. For example there is absolutely nothing in t

346 **Cl** 00 *MAC TECH* **SC** ALL **TR / X / O** GUBBI, RAJUGOPAL
Security completely escapes the draft

347 **Cl** 07 *MAC TECH* **SC** 4 **TR / X / O** GUBBI, RAJUGOPAL
Choose macBaseFrameDuration to be a power of 2. It eases the implementation of timers to be 'm' bit wide. Otherwise it depends on the 'm

348 **Cl** 05 *Cluster-Tree Team* **SC** 4.2 **TR / X / O** GUBBI, RAJUGOPAL
If NCs chose the macFrameOrder, how is this made uniform in cluster-trees? how do DDs exchange this info across the clusters?

349 **Cl** 05 *Cluster-Tree Team* **SC** 2.1.3 **TR / X / O** GUBBI, RAJUGOPAL
How do DDs propagate info from NCs beacon, if one is present? Do they send pseudo beacons? or they just don't care.

350 **Cl** 05 *Cluster-Tree Team* **SC** 2.1.3 **TR / X / O** GUBBI, RAJUGOPAL
How do a DEV in a cluster-tree sync up for slotted CSMA/CA timings with other DEVs that are so far apart from itself but close enough to b

351 **Cl** 05 *MAC TECH* **SC** 4.3 **TR / X / O** GUBBI, RAJUGOPAL
These lines are not clear enough. If beacon is needed for network connection purposes and if NC is currently not sending beacons becaus

352 **Cl** 05 *MAC TECH* **SC** 4.3.1 **TR / X / O** GUBBI, RAJUGOPAL
These lines are not clear enough. if beacons are absent doesn't the clock drift at DEVs make the slotted CSMA/CA timings to get misaligned

354 **Cl** 05 *MAC TECH* **SC** 4.3.3 **TR / X / O** GUBBI, RAJUGOPAL
how do devices sync up to slotted CSMA/CA timings without beacon? Who distributes the short addresses in the absence of NC?

355 **Cl** 05 *MAC TECH* **SC** 4.3.3 **TR / X / O** GUBBI, RAJUGOPAL
CAn a DEV have multiple network-ID? if so, how does it choose to pick one for current peer-peer communication?

356 **Cl** 05 *MAC TECH* **SC** 4.3.3 **TR / X / O** GUBBI, RAJUGOPAL
In peer-peer mode, how do devices discover each other?

357 **Cl** 05 *MAC TECH* **SC** 4.4 **TR / X / O** GUBBI, RAJUGOPAL
PHY-MAC layering is arbitrary? there are MAC types in PHY header!!

358 **Cl** 05 *MAC TECH* **SC** 4.4 **TR / X / O** GUBBI, RAJUGOPAL
Thre is no CRC in PHY header. If length is wrong, how does the DEV know where the packet end is?

365 **Cl** 06 *Coexistence Team* **SC** 9 **TR / X / O** GUBBI, RAJUGOPAL
I haven't seen any supporting evidence that the 802.15.4 devices will take less than 1% duty cycle? How was this derived? Please add jus

367 **Cl** 07 *MAC TECH* **SC** 1.1.1.1 **TR / X / O** GUBBI, RAJUGOPAL
msduLength: The term MSDU is used for the chunk of bytes rxd from higher layer which is fragmented into packets by the MAC (clause 3 a

368 **Cl** 07 *MAC TECH* **SC** 2.1 **TR / X / O** GUBBI, RAJUGOPAL
Table 54/55: What is PCS? figures 11 and 12 used CRC in the same position.

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375 **Cl** 07 *MAC TECH* **SC** 5.1 **TR / X / O** GUBBI, RAJUGOPAL
While clause-5 (especially the FRAME format in figure-5) claimed to have been using slotted CSMA/CA, there is no such mention of it in 7.5.

376 **Cl** 07 *MAC TECH* **SC** 5.1.1 **E / X / O** GUBBI, RAJUGOPAL
Since backoff scheme is already well understood in 802-wireless community, why not use the already familiar terms to define it? Why the

377 **Cl** 07 *MAC TECH* **SC** 5.1.1 **TR / X / O** GUBBI, RAJUGOPAL
Why is backoff counter decrementing irrespective of channel conditions? Measuring CCA for a small time unit (phy-slot) and decrementing h

379 **Cl** 07 *MAC TECH* **SC** 5.1.1 **TR / X / O** GUBBI, RAJUGOPAL
if the backoff timer is arbitrary, how does the next transmission supposed to sync up with the slotted CSMA/CA timings

380 **Cl** 07 *MAC TECH* **SC** 5.1.1 **TR / X / O** GUBBI, RAJUGOPAL
These lines seem to provide a means to higher layers using which they can indicate tx-immediate or abort a packet. since this retry-limit is a

381 **Cl** 07 *MAC TECH* **SC** 5.2.1 **TR / X / O** GUBBI, RAJUGOPAL
What does sending a data packet with broadcast network ID do to the snoozing NCs? It is not one of the stimulus listed in 7.5.2.2.1 anyway!

382 **Cl** 07 *MAC TECH* **SC** 5.2.2.1 **TR / X / O** GUBBI, RAJUGOPAL
if NC is snoozing how do non-NC-capable DEVs detect the presence of NC

384 **Cl** 07 *MAC TECH* **SC** 5.2.2.1 **TR / X / O** GUBBI, RAJUGOPAL
This means that the NC must be awake-enough to receive a packet, demodulate it, check CRC, decode the packet type. So what is remaini

391 **Cl** 07 *MAC TECH* **SC** 5.6.1 **TR / X / O** GUBBI, RAJUGOPAL
This clause does an attempt to describe the ack-timeout procedure. If what is needed already exists in an understood format, especially wit

392 **Cl** 07 *MAC TECH* **SC** 5.6.1 **TR / X / O** GUBBI, RAJUGOPAL
When retries on a fragment (segment) is exhausted, all the remianing fragments of the same MSDU are thrown away, right?

393 **Cl** 07 *MAC EDIT* **SC** 5.7.1 **E / X / O** GUBBI, RAJUGOPAL
In 7.5.7.1, "packet segment Bit" is not a bit. it is "Packet segment specifier" according to table-57. But the same is correctly used in 7.5.7.2 !!

395 **Cl** 07 *MAC TECH* **SC** 5.7.3 **TR / X / O** GUBBI, RAJUGOPAL
How does this sequencing work in peer-peer scenario? Is the sequence number per link, that is a seperate counter for each pair of DEVs ir

409 **Cl** 05 *MAC TECH* **SC** 5.4.3.2 **T / X / O** Gutierrez, Jose
Section 5.4.3.2 (and figure 10) What happens w hen the NC is polled by a netw ork device and there is no data to send back. What is the a

422 **Cl** 06 *MAC TECH* **SC** 6.3.1.1 **T / X / O** Gutierrez, Jose
What happens when a PD-Data.request is done with a MPDU whose length makes the overall phyPacketsize greater than the phyMaxPacke

425 **Cl** 06 *Clause 5 EDIT* **SC** **E / X / O** Gutierrez, Jose
We should explain somewhere why we have the ED and CCA primitives (just a clarification).<CR><CR>This must be done in section 5

431 **Cl** 05 *PHY TECH* **SC** **T / X / O** Gutierrez, Jose
We need to add information related to the need of the sync burst packet. Nowhere in the whole document is mention the need of this functic

435 **Cl** 06 *Coexistence Team* **SC** 6.9 **T / X / O** Gutierrez, Jose
Section 6.9 needs to be expanded. Not enough information

436 **Cl** 07 *MAC TECH* **SC** Table 29 **T / X / O** Gutierrez, Jose
The parameter "DISCARD_PACKET" is not mentioned in the enumeration table. Under w hat circumstances the LLC w ould like to discard

448 **Cl** 07 *MAC EDIT* **SC** 7.1.2.19 **E / X / O** Gutierrez, Jose
EXPAND! Make a reference. Should explain that only the NC does this!

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449 **Cl** 07 *MAC EDIT* **SC** Table 51 **E / X / O** Gutierrez, Jose
Table 51: What is the meaning of "Invalid Value" (under what conditions this situation happens?)

450 **Cl** 07 *MAC EDIT* **SC** 7.1.2.21 **E / X / O** Gutierrez, Jose
Section 7.1.2.21: expand explanation of this primitive It would be nice if some introductory text were added in section 5 about the need for

469 **Cl** 07 *MAC EDIT* **SC** 7.5.2 **E / X / O** Gutierrez, Jose
Recommend to add a flow diagram for Sections 7.5.2.1 and 7.5.2.2

472 **Cl** 07 *MAC EDIT* **SC** Figure 30 **E / X / O** Gutierrez, Jose
In this explanation the Sequence Number of a Packet can be further explained. It is not clear from previous explanations!

475 **Cl** 07 *MAC TECH* **SC** 7.5.7.3 **T / X / O** Gutierrez, Jose
The explanation of data sequencing is not clear. This whole section looks wrong. Check section 7.5.8 for Bit naming (FSB instead of PSB

535 **Cl** 07 *MAC TECH* **SC** Table 44 **T / X / O** Jamieson, Phil
The ChannelList parameter talks about a list of channels from the list of available PHY channels. How will this be done? Do we refer to the

538 **Cl** 07 *MAC TECH* **SC** Table 46 **T / X / O** Jamieson, Phil
If the MLME-SCAN.confirm primitive will be used for cluster tree networks as well as for stars, the nwid field probably aught to be a Beacor

564 **Cl** 07 *MAC TECH* **SC** 7.5.2.4 **T / X / O** Jamieson, Phil
Editorials - see remedy. Paragraph 2, the synchronization "as described above" probably needs to be spelled out - synchronisation as defi

568 **Cl** 07 *MAC TECH* **SC** 7.5.7 **T / R / O** Jamieson, Phil
I do not think that packet fragmentation should be part of this standard. <CR><CR>The PHY can only transmit a finite amount of data (phy

573 **Cl** 06 *MAC TECH* **SC** 6.7 **T / X / O** Jamieson, Phil
Text needed in this section.

575 **Cl** 00 *MAC TECH* **SC** **T / X / O** Jamieson, Phil
Should we really be refering to "point-point" rather than "peer-peer" network topologies throughout?

585 **Cl** 06 *Coexistence Team* **SC** 9.2 **T / X / O** Kinney, Patrick
The following verbage isn't strong enough: The 802.15.4 devices have several characteristics that improves its coexistence with other wi

589 **Cl** 07 *MAC TECH* **SC** 5.2.2.1 **TR / X / O** Kinney, Patrick
coordinator snoozing does not achieve any desireable quality that I can think of, typically it's used to save power but this implementation rec

591 **Cl** 07 *MAC TECH* **SC** 5.2.2 **TR / X / O** Kinney, Patrick
I did not find any description of the mechanism for resolving duplicate network id's. I understand the network search but it may not find a ne

596 **Cl** 06 *Coexistence Team* **SC** 00 **TR / A / O** Lansford, Jim
This specification describes a physical layer that, at the RF interface, is not interoperable, and does not coexist with other IEEE adopted or p

597 **Cl** 06 *Coexistence Team* **SC** 6.9 **TR / X / O** Liu, Shawn
The section of coexistence for 802.15.4 does not address all other IEEE devices using 2.4 GHz band, such as 802.15.1, 802.15.3. Also it on

600 **Cl** 06 *Coexistence Team* **SC** 6.9 **TR / X / O** Maa, Yeong-Chang
The section of coexistence for 802.15.4 does not address all other IEEE devices using 2.4 GHz band, such as 802.15.1, 802.15.3. Also it on

617 **Cl** 00 *Coexistence Team* **SC** **TR / X / O** Shellhammer, Steve
The standard does not sufficiently address the issue of wireless coexistence.

646 **Cl** 07 *MAC TECH* **SC** 5.5 **T / X / O** Shepherd, Nick
This clause specifies that a clear channel is detected by use of the MLME-ED Energy Detection method, in conflict with clause 6.8.10

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648 **Cl** 07 *Picture EDIT* **SC** Figure 33 **E / X / O** Shepherd, Nick

Figure 53 is in the wrong clause

660 **Cl** 00 *Global EDIT* **SC** **E / X / O** Kinney, Pat

SPECIALLY ADDED COMMENT:<CR><CR>It has come to my attention that what TG4 calls a "packet" 802.11 calls a<CR>frame. This will