P802.15.4. Draft 13 Comment Status **Summary Report** CommentType Response Status # 4 SC 00 E/X/O Gifford, lan **CI** 00 Global FDIT The term "868MHz/915MHz" in the following sentences "The physical layer may be implemented in one of three alternate frequency bands d # 9 **CI** 00 Global EDIT **SC** 00 E/X/O Gifford, lan The symbol for kilobit per second is kb/s, not kbps. The symbol for megabit per second is Mb/s, not Mbps. The first usage is "250kbps" in # 10 Team EDIT **SC** 00 E/X/O Gifford, lan The use of shall/should/may/can/will/must throughout the document needs to used in accordance with IEEE's style. # 11 **CI** 00 Picture EDIT **SC** 00 E/X/O Gifford, lan The use of Figure 1 brings up the question how will the 802.15 WG depict the 802 Family as they introduce a 2nd (and 3rd) MAC sublayer to # 15 **CI** 05 Global EDIT SC Figure 1 E/D/O Gifford, lan The Editor has introduced a second Figure 1 (the first is in FrontMatter) which should be Figure 2 in D13. There are multiple xref instances t # 17 **CI** 05 Global EDIT SC 5.3.1 E/X/O Gifford, Ian The term "Section" in sentence "Section 6 contains the specifications for the PHY layer." is incorrect. # 19 Global EDIT **SC** 5.3.2 E/X/O Gifford, Ian **CI** 05 The term "Section" in sentence "Section 7 contains the specifications for the MAC sublayer." is incorrect. # 20 CI 05 Global EDIT SC 5.4 E / X / O Gifford, Ian The term "section" in sentence "This section provides a brief overview of..." is incorrect. # 21 **CI** 05 Global EDIT SC 5.0 E / X / O Gifford, Ian The clause title "5. General Description" is incorrect. **CI** 06 # 23 Global EDIT SC Table 2 E / X / O Gifford, Ian The xref format "(See 6.3.1.1 on Page 28)" is non standard. # 26 **CI** 07 Global EDIT SC 7.1.2.5 E/X/O Gifford, Ian The xref format "(see Table 63 on Page 81)" is non standard. # 55 SC 7.1 **CI** 07 MAC TECH 1/X/O Bourgeois, Monique What if a device receives a primitive that it does not understand? How is this handled? # 83 **CI** 03 Global EDIT **SC** 3.10 E / X / O Bourgeois, Monique Missing punctuation. Add a period at the end for consistency. # 90 **CI** 06 Global EDIT SC Table 1 E / X / O Bourgeois, Monique Change "Kbps" to lower case "kbps". SC 5.4.5.1 # 101 **CI** 05 Clause 5 TECH 1/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 **CI** 07 MAC TECH SC Table 68 1/X/O Bourgeois, Monique Some of the MAC PIB objects are not referenced anywhere in the draft. # 109 MAC TECH SC Table 64 1/X/O Bourgeois, Monigue This is the only mention of multicast/broadcast frames. # 111 **CI** 07 MAC TECH SC 7.3 1/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)? # 112 MAC TECH SC 7.5.4.1 1/X/O Bourgeois, Monigue

What happens if a network coordinator receives a GTS request while it has a previous request pending? How does it handle simultaneous

P802.15.4, Draft 13 Summary Report	CommentType		nt Status ponse Status			
# 113 CI 07 <i>MAC TECH</i>	SC 7.5.2.2.1 1	/ X / O	Bourgeois, Monique			
Does a network coordinator change its macFrameOrder to 15 when it e			3			
# 114 CI 07 <i>MAC TECH</i>		/ X / O	Bourgeois, Monique			
What if two networks do somehow choose the same network ID? How	would this conflict be res		, , , , , , , , , , , , , , , , , , ,			
# 115 CI 07 <i>MAC TECH</i>	SC Table 57	/ X / O	Bourgeois, Monique			
One bit for Address Type does not allow for future expansion of the pr			3			
# 126 CI 07 MAC TECH	SC 7.5.4	/ X / O	Bourgeois, Monique			
When does handshaking occur for GTS transmissions?						
# 133 CI 05 Picture EDIT	SC Figure 14 E	/ X / O	Bourgeois, Monique			
Figure is unclear.	J					
# 161 CI 05 <i>Global EDIT</i>	SC 5.0 E	/ D / O	Carmeli, Boaz			
up to 254 (or more)						
# 162 CI 05 Cluster-Tree Team	SC 5.2 TF	/ X / O	Carmeli, Boaz			
Cluster-tree seems to be a topology of its own. It has different settings	and behaviors described	along man	y sections in this standard. It see			
# 165 CI 05 Cluster-Tree Team	SC 5.2.1.3 TF	/ X / O	Carmeli, Boaz			
The description of the cluster tree topology is not clear. Can simple net	work node transmit a bead	con? if so -	is it a peer to peer communication			
# 169 CI 05 <i>MAC TECH</i>	SC 5.4.3.2 TF	/ X / O	Carmeli, Boaz			
Data request, or data poll from a network node to the network coordinate	ator must receiver an ans	wer. Hanc	e - we should allow the network			
# 172 CI 05 <i>MAC TECH</i>	SC 5.4.5.1	/ X / O	Carmeli, Boaz			
It is not clear from the standard what a device should do in case of failed	er to transnit a beacom wh	nen the ch	annel is busy. Should it choose a			
# 188 CI 05 <i>MAC TECH</i>	SC 5.4.3.2	/ X / O	Carmeli, Boaz			
What happen to pending message at the network coordinator that is ne	ever requested by the relev	vent netwo	rk node. Is there a time-to-live tir			
# 194 CI 07 <i>MAC EDIT</i>	SC 7.1.1.3.2	/ X / O	Carmeli, Boaz			
What happen to packet with Destantion Address not equal to the Desta	anation Address of the rec	eiving dev	ice (a 'not-for-me' packet). Which			
# 196 CI 07 <i>MAC TECH</i>	SC 7.2.2.4.2	/ X / O	Carmeli, Boaz			
What if there are more then 16 addresses pending? Are they transmitted	ed in cyclic order?					
# 197 CI 00 <i>MAC TECH</i>	SC 00 1	/ X / O	Carmeli, Boaz			
Can we support another addresses convention in which the network in	d will be a single byte long	g, and the	device address will be of two by			
# 199 CI 06 Coexistence Team	SC 6.9	/ 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						
# 200 CI 04 <i>Global EDIT</i>	SC 00 E	/ X / O	Chen, Hung-Kun			
Should add PD(-SAP), MD(-SAP), MA(-SAP) in the acronym section for completeness' sake						
# 205 CI 06 Coexistence Team	SC 6.9 TF	/ 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						
# 207 CI 00 Global EDIT	SC 00 E	/ X / O	CYPHER, DAVID			
Clause headings do not follow IEEE Style Guide.						
# 208 CI 00 Global EDIT	SC 00 E	/ X / O	CYPHER, DAVID			
According to IEEE Style groups of text are referred to as a clause or subclause, not a section						

P802.15.4, Draft 13 Summary Report	CommentType		ent Status esponse Status			
		7 [
# 209 CI 00 Global EDIT	SC	E/X/O	CYPHER, DAVID			
Proper naming convention						
# 210 CI 01 Global EDIT	SC 1.1	1/ X / O	CYPHER, DAVID			
Scope does not match the scope in the PAR (00/248r4)						
# 211 CI 01 Global EDIT	SC 1.2	1/X/O	CYPHER, DAVID			
Purpose does not match purpose in PAR (00/248r4)						
# 214 CI 05 Global EDIT	SC	E/X/O	CYPHER, DAVID			
Terminology						
# 217 CI 00 Team EDIT	SC T	F/X/O	CYPHER, DAVID			
Use of the words, must and should, need to be used consistently and	with the proper meanings	s (see IEEE	Standards style manual clause 1:			
# 222 CI 05 Picture EDIT	SC Figure -14	E / X / O	CYPHER, DAVID			
Figure not following IEEE standard style manual (see 16.1)						
# 225 CI 05 Picture EDIT	SC Figure 17 5.	1/ X / O	CYPHER, DAVID			
Where is items a) and b)? Either items a) and b) are cropped off the	top of the figure, or the ite	ems should	be re-lettered starting at a), not c			
# 242 CI 07 <i>MAC TECH</i>	SC 7.1.1.4.3 T	F/X/O	CYPHER, DAVID			
No action is described for the behavior when the status is DISCARD_I	PACKET, unless storing p	acket segr	nents at a null memory address is			
# 246 CI 07 <i>MAC TECH</i>	SC 7.1.2.5.3 T	F/X/O	CYPHER, DAVID			
An inconsistency with the value of the GTSlength description in table	38 of 7.1.2.6.1 and the te	ext describe	ed here.			
# 259 CI A Global EDIT	SC T	F/X/O	CYPHER, DAVID			
If this draft is to be voted on to go to sponser ballot, then all clauses s	hould have contents, or n	ot be prese	ent. Placeholders should only be u			
# 260 CI B Global EDIT		F/X/O	CYPHER, DAVID			
If this draft is to be voted on to go to sponser ballot, then all clauses s	hould have contents, or r	not be pres	ent. As this Annex is marked as r			
# 261 CI 07 <i>MAC TECH</i>	SC 7.5.2.1 T	F/X/O	CYPHER, DAVID			
Statement states that "a network coordinator shall ensure that any ne	twork coordinators are	e awake'	and only gives an option on how			
# 263 CI 06 <i>MAC TECH</i>	SC 6.3.1.3.3	1/ X / O	CYPHER, DAVID			
This clause states that, "The effect on receipt of this primitive by the M	AC sublayer is unspecifi	ed." Is this	statement made because there is			
# 274 CI 05 Cluster-Tree Team	· ·	E/X/O	DuVal, Mary			
Only 2 topologies mentioned, but 3 are discussed in the following sec	tions.		•			
# 276 CI 00 Global EDIT	SC 00	E/X/O	Dydyk, Michael			
No Annex A and B			_ , _ ,			
# 279 CI 00 Coexistence Team	SC 00	1/ X / O	Golmie, Nada			
The current draft for TG4 does not address the issue of coexistence			•			
# 306 CI 05 Clause 5 EDIT		E/X/O	Gorday, Paul			
The term ""Data Rate"" is unclear.						
# 316 CI 00 Team EDIT	SC ALL T	F/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 CI 00 Team EDIT	•	F/X/O	GUBBI, RAJUGOPAL			
The list of features claimed in various parts of this draft and the requir			· · · · · · · · · · · · · · · · · · ·			
2. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.						

P802.15.4. Draft 13 Comment Status **Summary Report** CommentType Response Status # 318 SC ALL TF / X / O GUBBI, RAJUGOPAL **CI** 00 Team FDIT 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 # 319 MAC TECH **SC** 2 TF / X / O GUBBI. RAJUGOPAL essentially this sentance claims the DEVs can obtain short addresses for operation in LR-WPAN. Nowhere in the draft the procedure requir # 320 MAC TECH TF / 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 CI 05 MAC TECH SC 2.1.1 TF / 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 mech # 322 MAC TECH SC 2.1.1 TF/X/O GUBBI. RAJUGOPAL How is the network identifier obtained at a DEV? No where in this draft the mechanism needed for such a distribution nor the frame formats # 323 **CI** 05 MAC TECH SC 2.1.1 TF / X / O GUBBI, RAJUGOPAL This sentence claims that task of joining a network occurs above the MAC layer. What does this mean in terms of frame format used and un MAC TECH # 324 **SC** 2.1.2 TF / X / O GUBBI. RAJUGOPAL **CI** 05 The use of word "although" implies that peer-peer network can operate with or without NC. But there is no description of such an operation # 325 CI 05 MAC TECH SC 2.1.2 TF / X / O GUBBI, RAJUGOPAL This sentence claims that NC can be nominated. What if there are multiple DEVs with same network ID waking at the same time and startin # 326 MAC TECH **SC** 2.1.2 TF / X / O GUBBI, RAJUGOPAL This sentence claims that NC can be nominated. What if there are multiple DEVs with same network ID waking at the same time, starting sc **CI** 05 # 327 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 **CI** 05 Cluster-Tree Team **SC** 2.1.2 TF/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 a # 329 CI 05 Cluster-Tree Team **SC** 2.1.3 TF/X/O GUBBI, RAJUGOPAL Can DDs using different network IDs form parts of the same cluster tree? # 330 **CI** 05 Cluster-Tree Team **SC** 2.1.3 TF/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 Cluster-Tree Team # 331 **CI** 05 **SC** 2.1.3 TF/X/O GUBBI, RAJUGOPAL What is this "predefined time period" # 332 **CI** 05 Cluster-Tree Team SC Figure 2 TF/X/O GUBBI, RAJUGOPAL This picture states that each cluster of the same tree being in different channels? Is that a requirement? # 333 CI 05 Cluster-Tree Team SC Figure 2 TF/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 I # 334 TF / X / O GUBBI. RAJUGOPAL Cluster-Tree Team SC Figure 2 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 # 335 **CI** 00 MAC TECH SC ALL TF / X / O GUBBI. RAJUGOPAL This entire draft is vague about "network ID". In 5.2.1.3 and frame format in Table-61 (pp 79) imply that data can be communicated over diffe # 336 Cluster-Tree Team **SC** 2.1.3 TF / 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 P802.15.4. Draft 13 Comment Status **Summary Report** CommentType Response Status # 337 SC 2.1.3 TF / X / O GUBBI, RAJUGOPAL CI 05 Cluster-Tree Team 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 **CI** 05 Cluster-Tree Team **SC** 3 TF / 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 # 339 MAC TECH **SC** 3.2 TF / X / O GUBBI. RAJUGOPAL The claim of "time slot maintenance" in the MAC is ambiguous. There are no mechanisms defined for GTS request, allocation and deallocati # 340 CI 05 MAC TECH SC 3.2 TF / 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? # 341 MAC TECH **SC** 3.2 TF / X / O GUBBI. RAJUGOPAL This claims list does not cover all that is claimed in clause 5. Where are others like power management, security, association/disassociation # 342 **CI** 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 SC ALL E / X / O GUBBI. RAJUGOPAL **CI** 00 MAC EDIT 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 do # 345 **CI** 00 MAC TECH SC ALL TF / 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 SC ALL # 346 **CI** 00 MAC TECH TF / X / O GUBBI, RAJUGOPAL Security completely escapes the draft SC 4 # 347 **CI** 07 MAC TECH TF / 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 **CI** 05 Cluster-Tree Team **SC** 4.2 TF / 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 CI 05 Cluster-Tree Team SC 2.1.3 TF / 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 **CI** 05 Cluster-Tree Team **SC** 2.1.3 TF / 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 **CI** 05 MAC TECH **SC** 4.3 TF / 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 because # 352 TF / X / O GUBBI, RAJUGOPAL MAC TECH SC 4.3.1 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 # 353 CI 05 MAC TECH SC 4.3.2 TF / X / O GUBBI. RAJUGOPAL how does a node request data (after periodically listening) pending at the NC? (same is true for lines 22:26 on page 18). There is no description # 354 MAC TECH **SC** 4.3.3 TF / 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 **CI** 05 MAC TECH SC 4.3.3 TF / 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 **CI** 05 MAC TECH **SC** 4.3.3 TF/X/O GUBBI. RAJUGOPAL

Comment Type: TR/technical required T/technical E/editorial
Comment Status: X/received D/dispatched for consideration A/accepted R/rejected
Response Status: O/open W/written C/closed U/unsatisfied Z/withdrawn

In peer-peer mode, how do devices discover each other?

P802.15.4. Draft 13 Comment Status **Summary Report** Response Status CommentType TF / X / O GUBBI, RAJUGOPAL # 357 CI 05 MAC TECH SC 4.4 PHY-MAC layering is arbitrary? there are MAC types in PHY header!! **SC** 4.4 # 358 **CI** 05 MAC TECH TF/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? # 359 MAC TECH TF / X / O GUBBI. RAJUGOPAL Why seg-num in handshake pkt repeated. There is no description as how to process this packet format at the recipient. If there is an error in # 360 CI 05 MAC TECH **SC** 4.5.3 TF/X/O GUBBI. RAJUGOPAL If applications above the MAC decide message verification scheme for themselves, how is this imagined to be implemented uniformly in all p Coexistence Team SC 9 TF / 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 # 366 **CI** 07 MAC TECH SC TF/X/O GUBBI. RAJUGOPAL "Handles and maintains the GTS mechanism" is an overstatement for the description present in the draft # 367 TF/X/O GUBBI. RAJUGOPAL **CI** 07 MAC TECH SC 1.1.1.1 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 all # 368 **CI** 07 MAC TECH **SC** 2.1 TF/X/O GUBBI. RAJUGOPAL Table 54/55: What is PCS? figures 11 and 12 used CRC in the same position. E/X/O GUBBI. RAJUGOPAL # 370 MAC EDIT **SC** 2.1.2 **CI** 07 While this table is useful, it has to absolutely accompany text description of who uses which format. For example, a line "a non-NC DEV use # 371 **CI** 07 MAC TECH **SC** 2.1.2 TF / X / O GUBBI. RAJUGOPAL In star network, when a DEV rx packet a forwarded packet from NC, how does it know who the original sender was? Or is the data frame # 372 MAC TECH SC 2.2.5.1 TF / X / O GUBBI. RAJUGOPAL Zone update requirement is mentioned, but not the mechanism needed to achieve it? similarly other componenets needed for power manag # 375 **CI** 07 MAC TECH **SC** 5.1 TF / 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 **CI** 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 **CI** 07 MAC TECH SC 5.1.1 TF / X / O GUBBI, RAJUGOPAL Why is backoff counter decrementing irrespective of channel conditions? Measuring CCA for a small time unit (phy-slot) and decrementing I # 379 MAC TECH SC 5.1.1 TF / 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 TF / X / O GUBBI, RAJUGOPAL # 380 **CI** 07 MAC TECH SC 5.1.1 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 TF / X / O GUBBI, RAJUGOPAL SC 5.2.1 MAC TECH 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 MAC TECH SC 5.2.2.1 TF/X/O GUBBI. RAJUGOPAL if NC is snoozing how do non-NC-capable DEVs detect the presence of NC # 384 MAC TECH SC 5.2.2.1 TF/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 remaining

P802.15.4. Draft 13 Comment Status **Summary Report** CommentType Response Status SC 2.2.5.1 TF / X / O GUBBI, RAJUGOPAL # 385 **CI** 07 MAC TECH It is not clear as where this zone specification (8-bits wide) is present in the packet format. It seems like each entry in the AddressList in a l # 386 **CI** 07 MAC TECH **SC** 2.2.4 TF / X / O GUBBI. RAJUGOPAL Since AddressList is optional, it may not be present in beacons from an NC. then there is no way for a DEV to know its zone. MAC TECH **SC** 5.4 TF / X / O GUBBI. RAJUGOPAL this clause also assumes that there are no GTS-alloc/dealloc related transactions over the air initiated/terminated-at MAC. How do GTS re-a # 388 **CI** 07 MAC TECH SC 5.5 TF / X / O GUBBI. RAJUGOPAL DCS: How does the NC know the channel condition at DEVs to decide to change the channel? How does it communicate the decision to the # 389 SC 5.5 MAC TECH TF / X / O GUBBI. RAJUGOPAL DCS: What is the timeout for DEVs to start searching for the missing NC? How does a DEV distinguish the conditions among (a) bad chann # 390 **CI** 07 MAC TECH **SC** 5.6 TF/X/O GUBBI, RAJUGOPAL How does the "macMAxHandshakeWaitDuration" work in GTS? # 391 MAC TECH SC 5.6.1 TF / X / O GUBBI. RAJUGOPAL **CI** 07 This clause does an attempt to describe the ack-timeout procedure. If what is needed already exists in an understood format, especially wit # 392 **CI** 07 MAC TECH SC 5.6.1 TF / 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 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!! **CI** 07 # 395 MAC TECH **SC** 5.7.3 TF / 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 in # 396 CI A Global EDIT SC TF / X / O GUBBI. RAJUGOPAL With SDL I am sure one will be able to catch more issues than I have listed in this comments list. Without that I am not approving this doc. SC # 397 CI A Global EDIT TF / X / O GUBBI, RAJUGOPAL PICS helps a lot in defining the boundaries of the level of implementation and also helps in interoperability issues # 409 **CI** 05 MAC TECH **SC** 5.4.3.2 1/X/O Gutierrez. Jose Section 5.4.3.2 (and figure 10) What happens when the NC is polled by a network device and there is no data to send back. What is the a # 422 **CI** 06 MAC TECH SC 6.3.1.1 1/X/O Gutierrez. Jose What happens when a PD-Data.reguest is done with a MPDU whose length makes the overall phyPacketsize greater than the phyMaxPacket SC # 425 Clause 5 EDIT 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 **CI** 05 SC # 431 PHY TECH 1/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 function # 435 SC 6.9 **CI** 06 Coexistence Team **1/X/O** Gutierrez. Jose Section 6.9 needs to be expanded. Not enough information # 436 **CI** 07 MAC TECH SC Table 29 1/X/O Gutierrez. Jose The parameter "DISCARD PACKET" is not mentioned in the enumeration table. Under w hat circumstances the LLC would like to discard MAC EDIT **SC** 7.1.2.9.2 E/X/O Gutierrez. Jose Page 65: Section 7.1.2.9.2: The Zone concept is mentioned here but it has not been explained earlier. Recommend adding some text in

P802.15.4. Draft 13 Comment Status **Summary Report** CommentType Response Status # 442 1/X/O Gutierrez. Jose **CI** 07 MAC TECH SC 7.1.2.10 Section 7.1.2.10: This paragraph needs to be reworded or some introductory text added in section 5. Make a reference for the non-existing # 444 **CI** 07 MAC TECH SC Table 42 1/X/O Gutierrez, Jose Page 67: Table 42: The valid range of this primitive should have a reference, the information supplied is not enough. We have a primiti # 448 **SC** 7.1.2.19 E/X/O Gutierrez, Jose EXPAND! Make a reference. Should explain that only the NC does this! # 449 **CI** 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 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 # 460 **CI** 07 MAC TECH SC 7.2.2.5.1 1/X/O Gutierrez, Jose How a device get a Zone assigned? Does the AddressList contain only a single byte when using zoning? How the Network layer control # 465 MAC EDIT SC Figure 26 E/X/O **CI** 07 Gutierrez, Jose Fix step 4 on figure # 469 **CI** 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 # 471 **CI** 07 MAC EDIT SC Figure 30 E/X/O Gutierrez, Jose Page 96: Figure 30: Change conditional block "has the timer expired?" to "handshake Timer Expired?" # 472 **CI** 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! # 473 **CI** 07 MAC EDIT SC Figure 31 E/X/O Gutierrez. Jose Figure 31: Improve. Images are crop # 474 **CI** 07 MAC EDIT **SC** Figure 32 E/X/O Gutierrez, Jose Figure 32: block (1) should say Packet?, What about using PIB terminology like: phyMaxPacketSize?. In addition, the title of the fi # 475 MAC TECH SC 7.5.7.3 1/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 # 476 **CI** 07 MAC TECH SC Figure 33 1/X/O Gutierrez, Jose It is not clear how the "data indication" works after all the segments are received! How the upper layers recognize a complete reception of a # 479 MAC TECH SC 1/X/O Gutierrez, Jose Need sequence diagrams showing some scenarios of operation of the cluster tree -> the Use of the MAC primitives specific for cluster tree # 480 **CI** 07 MAC TECH SC 1/X/O Gutierrez, Jose HOW A SHORT ADDRESS IS ALLOCATED? SC # 481 MAC TECH **CI** 07 1/X/O Gutierrez, Jose HOW A ZONE IS ASSIGNED? # 482 **CI** 07 MAC TECH SC Table 26 1/X/O Gutierrez. Jose Table 26: In TxOptions: What is the meaning of "transmit in the current GTS"? # 483 MAC TECH SC 7.1.2.6 1/X/O Gutierrez, Jose Page 63 and 64: The GTS Reallocation looks like garbage collection. I would like to eliminate this functionality and leave it for the upper I

P802.15.4. Draft 13 Comment Status **Summary Report** CommentType Response Status # 484 1/X/O Gutierrez. Jose **CI** 07 MAC TECH SC 7.5.4.2 Why the upper layers have to do a confirmation of the GTS reallocation? Can we leave the reallocation for the upper layers? # 485 **CI** 07 MAC TECH SC 7.5.4.1 1/X/O Gutierrez, Jose What is the protocol for a NC to setup a GTS? How does a node request a GTS? MAC EDIT SC Figure 29 E/X/O Gutierrez, Jose Figure 29 shows SuperFrame! change to Frame # 489 CI 05 Picture EDIT SC 5.5 - Figure 7 E / X / O Gutierrez. Jose The first two items of this picture disapeared! ("a" and "b") # 494 Global EDIT SC Contents E/X/O **CI** 00 Jamieson, Phil Something a little odd has gone wrong with the Annex entries. The names of the clauses Annex A and B appear below the name of the Ar # 525 **CI** 07 MAC TECH SC 7.1.1 1/X/O Jamieson, Phil Now that there are two interfaces to the LLC and above, how does the system distinguish between the MD-SAP and MA-SAP interfaces? # 532 SC Table 41 MAC TECH 1/X/O Jamieson, Phil The DstAddr parameter is supposed to contain a list of addresses rather than just a single device address. The description of the "Beacon # 533 **CI** 07 MAC TECH SC 7.1.2.10/11 1/X/O Jamieson, Phil The descriptions of how the MLME-NODE-NOTIFY, indication and MLME-NODE-NOTIFY, request primitives are used is virually non existent. # 534 MAC TECH **SC** 7.1.2.12 1/X/O Jamieson, Phil I'm not sure if this primitive is needed anymore. It was originally added to enable the reply mechanism in the MAC/LLC. As this is no longer # 535 **CI** 07 MAC TECH SC Table 44 1/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 1/X/O # 538 MAC TECH SC Table 46 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 # 540 **CI** 07 MAC EDIT SC 7.1.2.19 E/X/O Jamieson, Phil Editorials - see remedy. # 541 **CI** 07 MAC TECH **SC** 7.2 1/X/O Jamieson, Phil The description of the MAC PPDU may need to be changed for clarity - the BEACON and HANDSHAKE packets contain their configuration # 542 **CI** 07 MAC TECH SC 7.2.1 1/X/O Jamieson, Phil The BEACON packet is defined as having an MSDU containing all the beacon information. This is better represented as a header and inclu # 545 MAC TECH SC 7.2.1.4 1/X/O Jamieson, Phil The description may now need to change as a previous comment suggested having an MSDU only for the data packet. # 564 **CI** 07 MAC TECH SC 7.5.2.4 1/X/O Jamieson, Phil Editorials - see remedy. Paragraph 2, the synchronization "as described above" probably needs to be spelled out - synchronisation as defi # 566 MAC EDIT **SC** 7.5.4.2 E/X/O Jamieson, Phil Editorials - see remedy. # 567 **CI** 07 MAC FDIT SC 7.5.6 E / X / O Jamieson, Phil Editorials - see remedy. SC # 569 **CI** 07 MAC TECH 1/X/O Jamieson, Phil It would be extremely useful to have a "packet following" feature in the protocol. This would be different from the rest in that for downlink to

P802.15.4. Draft 13 Comment Status **Summary Report** CommentType Response Status # 570 1/X/O **CI** 07 MAC TECH SC Jamieson, Phil We have done some analysis of timings in the system and have come to the conclusion that some transfers will require a good portion of tin # 571 **CI** 07 MAC TECH SC 1/X/O Jamieson, Phil Currently the MAC PIB entry macMaxPacketSize is defined to be phyMaxPacketSize - 26. This overhead (26) is computed from the worst c # 572 **CI** 00 Global EDIT SC E/X/O Jamieson, Phil Some tables/figures are not referenced in the text. # 573 **CI** 06 MAC TECH SC 6.7 1/X/O Jamieson, Phil Text needed in this section. SC # 574 Global EDIT E / X / O **CI** 00 Jamieson, Phil There are a lot of period (.) characters missing in the text, especially in tables and bullet points. # 575 **CI** 00 MAC TECH SC 1/X/O Jamieson, Phil Should we really be refering to "point-point" rather than "peer-peer" network topologies throughout? # 578 Global EDIT SC TF / X / O Kinney, Patrick **CI** 00 The key to a standard is interoperability. Interoperability requires unambiguous terminology and typically includes SDL. # 585 **CI** 06 Coexistence Team SC 9.2 1/ 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 will # 588 **SC** 1.2.7 TF / X / O Kinney, Patrick **CI** 07 MAC TECH The reallocation of GTSs is a good idea but I cannot understand how the mechanism's stated in this section will work. Specifically how will **CI** 07 # 589 MAC TECH SC 5.2.2.1 TF / 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 # 590 **CI** 07 MAC TECH SC 2.2.5.1 TF / X / O Kinney, Patrick Zones Specification is not well described. How is a zone assigned? how is it optimized for battery or other? SC 5.2.2 # 591 **CI** 07 MAC TECH TF / 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 TF / X / O Kinney, Patrick # 592 **CI** 07 MAC TECH **SC** 5.5 Dynamic Channel Selection is a good feature (very good for coexistence) but is not described in detail # 593 **CI** 07 MAC TECH SC 5.2.3 TF / X / O Kinney, Patrick In Network Synchronization, there really is no description of the procedure to attach and join a network. Specifically I believe that logical ad **CI** 07 # 594 MAC TECH SC 5.2.3 TF / X / O Kinney, Patrick In Network Synchronization, there really is no description of the procedure to attach and join a network. Specifically, how is authorization (# 597 **CI** 06 Coexistence Team SC 6.9 TF / 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 SC 6.9 Coexistence Team TF / 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 # 601 **CI** 00 Team FDIT **SC** 00 1/X/O Maa, Yeong-Chang Is GTS/CFP really needed for the LR-WPAN? # 608 CI A Global EDIT **SC** 00 TF/X/O McInnis, Michael D. Annex A Specification and Description Language (SDL) was not provided for voter comment and review.

Comment Type: TR/technical required T/technical E/editorial
Comment Status: X/received D/dispatched for consideration A/accepted R/rejected
Response Status: O/open W/written C/closed U/unsatisfied Z/withdrawn

P802.15.4, Draft 13 Summary Report			<u>CommentTyp</u>		ent Status sponse Status		
# 609 CI	В	Global EDIT	SC 00	TF/X/O	McInnis, Michael D.		
Annex B Protocol Implementation Conformance Statement was not provided for voter comment and review.							
# 611 CI	00	MAC TECH	SC	TF/X/O	Rasor, Gregg		
It is my strong feeling that the TG4 MAC must and shall support at least an optional form of authentication so the netweork that is formed co							
# 617 CI	00	Coexistence Team	SC	TF/X/O	Shellhammer, Steve		
The standard does n	ot suffic	iently address the issue of wireless coexis	stence.				
# 621 CI	06	Global EDIT	SC Table 4	E/X/O	Shepherd, Nick		
Table 4 split over 2 pages							
# 644 CI	07	MAC TECH	SC 5.4.1	1/X/O	Shepherd, Nick		
This explanation of allocating a GTS is not complete. Is it possible to allocate the complete frame to GTSs, leaving no contention period? Sh							
# 645 CI	07	MAC EDIT	SC Figure 29	E/X/O	Shepherd, Nick		
Another occurrence of "Super-frame"							
# 646 CI	07	MAC TECH	SC 5.5	1/ 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							
# 648 CI	07	Picture EDIT	SC Figure 33	E/X/O	Shepherd, Nick		
Figure 53 is in the wrong clause							
# 650 CI	Α	Global EDIT	SC 1	1/X/O	Shepherd, Nick		
Empty Annex.							
# 651 CI	В	Global EDIT	SC	1/X/O	Shepherd, Nick		
No conformance statement							
# 657 CI	С	Global EDIT	SC Table 71	E/X/O	Shepherd, Nick		
Table 71 is split over two pages							
# 658 CI	С	Global EDIT	SC 5	E/X/O	Shepherd, Nick		
the "-" has become disconnected to its "36"							
# 660 CI	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

Comment Type: TR/technical required T/technical E/editorial
Comment Status: X/received D/dispatched for consideration A/accepted R/rejected
Response Status: O/open W/written C/closed U/unsatisfied Z/withdrawn