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Technical Advisory Committee

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Dear Grant,

Thank you for inviting feedback on the TAC's "HF Amateur Band Planning 40m Band Harmonisation Challenges" paper.

I applaud the committee's initiative in trying to bring about some degree of harmonisation to the 40 m band plans across regions. Despite my strong reservations about the proposal in its current form, I do acknowledge and appreciate the effort put into its development. It is my hope that the feedback you receive will allow you to develop a revised proposal which the vastly disparate amateur community will be able to support. Good luck.

I have provided responses to the published questions below for the committee's consideration.

Kind regards,

Lance Conry

VK7ZA

Q1. Do agree that there is merit in seeking to globally harmonise the amateur service 40m band plan?

Yes.

Q2. Do you agree with the way the different quantities of spectrum for different modes has been determined? If not, please suggest alternative models that can be considered for making the assessments.

No.

I would like to point out some flaws as I see it in the methodology:

- ClubLog is not representative. Whilst it may have a good following amongst DXers, it really doesn't seem to be used by many rag chewers or those who participate in nets. In my experience, many such operators don't log contacts at all.
- QSO counts are being erroneously used to denote activity. Assuming a best-case scenario where all contacts are logged:
 - A rag-chewing or net contact has a far longer duration than a short mode contact.
 - When trying to work a weak station for DX on CW or SSB, a single contact can take a long time to exchange callsigns and signal reports.
 - When working DX, part of operating is slowly tuning across the bands looking for the needed contact, then attempting to work them. I can spend an hour on CW looking for and working a single contact. Despite only logging one contact, I was still active for an hour decoding and identifying stations I didn't want to work.
- I expect FT4/8 QSO counts will be far larger than other modes for a couple of reasons:
 - o The software will automatically log contacts, so every contact is logged.
 - o Every QSO is only one minute long.
 - The purported widespread use of bots allows fully automated operation, so in an
 evening, someone operating with their radio on CW, SSB, RTTY, PSK etc. may
 come away with a handful of contacts compared to potentially hundreds with
 FT8. Being generous, and assuming both bot-run FT8 and other mode users
 were equally actively engaged in operating, the logged statistics will show far
 greater FT8 activity.

As for a better method for measuring activity, I suggest the only truly accurate measure of band utilisation should be to deploy a network of SDR receivers and record spectrum use over a period of multiple months, covering all seasons. As to the practicability, I don't know. The network would have to be extensive given my experience of how often I'm not heard by the Reverse Beacon Network.

Q3. Do you agree that more should be done to protect EmComm frequencies particularly from contest activity?

No.

I believe that modern communications infrastructure and operational procedures have no need for amateur radio. The only emergencies I am aware of in recent years where amateurs were used, was using emergency services' own infrastructure. In a report following the 2013 Tasmanian fires, the government recommended that volunteers (amateur radio operators) no longer be used as part of emergency response.

For all intents and purposes, I feel that amateur radio equipment and operators have no place in modern emergency response. Leave it to the professionals.

Q4. Do you agree that the proposals to separate out contesting and other traffic types are suitable and would be acceptable to contest organisers?

No.

At least in Australia, there are very few contests which blanket 40 m such that it would be hard to conduct other activities. Additionally, several bands exist on which no contest activity is allowed.

Q5. Do you see merit in separating DX SSB activity from local communications activity (including local nets) etc?

No.

Q6. Do you consider it appropriate to consider the "SSB" segment as a "Voice" segment, and thus in the future when digital voice modes become more prevalent, that they should rightly belong in the SSB segment alongside SSB operators, or is there a need to consider a separation of the "Voice" segment into analogue and digital voice?

I have no informed opinion.

Q7. Do you think the band plan should be more or less prescriptive about individual submodes within an operating category? (i.e. should the band plan specifically separate/designate WSJT, PSK, RTTY, Winlink and other data communications types?) Or is sufficient to name it the data sub-band, perhaps with a couple of indicative centres of activity for core activities named?

Less prescriptive, with a caveat.

A published data sub-band with indicative centres of activity would be of benefit, if only to help users of less used modes find each other.

I do wonder if there needs to be a limited sub-band for non-interactive modes such as FT-8 (assuming high bot usage) lest they swamp other digital modes. The issue with being non-interactive is that the computer never gets tired, or needs to eat or sleep, so there is no natural limit to operating time, which is what makes sharing a block of spectrum work amongst humans.

Q8. Is there anything else you would like to comment on regarding this discussion paper or other concepts or ideas that haven't been mentioned that you feel should be considered?

CW

I would encourage the CW spectrum to remain unchanged, and I base that on some points I don't feel have been taken into consideration:

- For most people, CW is the last bastion of achievable home designed and made transceivers. Whilst a normal signal doesn't need much bandwidth, old or homebrew rigs often have a passband of a couple of kHz at least.
- During dark hours when propagation allows global communication, large portions of the CW segment frequently experience QRM. Having the agility to be able to move about in the segment makes a significant difference when trying to work DX. I know that as secondary users we can use the whole band, however other operators are only looking for our signals in the CW portion.
- CW use appears to be increasing. This is apparent both in Australia and internationally.
 In addition to traditional DX and rag chewing, portable operating via programs such as SOTA, WWFF, POTA, BOTA, etc. are increasing CW operators due to the availability of relatively low-cost single mode radios. I believe this is largely driven by home based

QRM and the rising popularity of portable operating. As I don't expect QRM to reduce, I anticipate portable operation to continue to grow in popularity, and with it, CW use.

Automated operation

I have a general feeling of unease with the notion of increasing the data segment to create more space for FT4/8. I have no inherent dislike for digital modes and would feel no different were software developed for automated CW, SSB, RTTY etc. contacts. My concern relates to increased bandwidth allocation for automated operation. By automated, I mean operation where no human interaction is required.

I worry that regardless of how much space is provided, such activity will simply grow to fill it, with no corresponding increased enjoyment of the hobby by participants.

In conclusion, if more space must be allocated for digital modes, I would propose a block for automated operation rather than a specific mode; ft8 will no doubt be replaced soon enough. How do you choose which modes fall under automated operation? I don't know, but whilst I grant that not all FT8 is fully automated, it is broadly purported that bot use is both widespread and common, and I would suggest that there is no putting that genie back in its bottle.