

Perth, 21 June 2021

re.: FM broadcasting services band in the Perth RA1 licence area - consultation 17/2021;

Thank you for providing the Public to submit comments and ideas about this very important issue;

I hold various radio licenses, but have been (and still am) struggling to acquire a LPON license in Perth;

various problems exist, one is the fact that - in my view - the current regulations about separation distance between transmitters (10Km between transmitters on the same channel and 5 km between transmitters on adjacent channels) is way too strict; such regulation is based on the assumption that there are no obstacles (while, in fact and by definition, in a urban area such as Perth there are buildings and other orographic elements which prevent the propagation of such minuscule - one watt - amount of power) and no interferences; it is also based on the unreal assumption that the receiving antenna is at 10 meters AGL (Above ground level), assumption borrowed from the Television propagation model, which for FM radio is completely unreal - I Have never seen anyone walking or driving around with a 10 meters high FM antenna mast over their heads or automobile roof; on the other hand, there are few LPONs here in Perth which clearly do not comply with the 1 watt power constrain, as they can be heard clearly along vast stretches, for example along the Mitchell freeway; so, on paper there is a strict limitation, but in reality those few lucky enough to have a license sometimes do not comply with its conditions and prevent others to be on air and potentially to generate employment and/or training opportunities;

In some parts of the world, namely Brazil, the vacating of the low VHF spectrum has been recycled to address the FM congestion issue; today in Brazil the FM commercial band starts from 76.1 Mhz;

[https://en.wikipedia.org/wiki/FM\\_extended\\_band\\_in\\_Brazil](https://en.wikipedia.org/wiki/FM_extended_band_in_Brazil)

I don't see why we can't do the same, and in one single move address the current FM congestion issue, and provide more space for small FM stations, conceptually similar to the US Low Power FM (where 100 - one hundred - watts is the legal limit) and/or the New Zealand model, where few frequencies on the dial are reserved for class-licensed FM stations (with limitations of course);

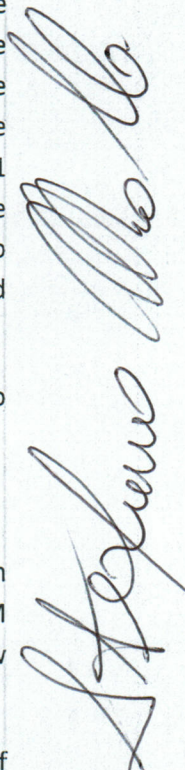
Of the 5 Options, I surely vote for THREE and FIVE, because they address in principle the issue of narrowcasting stations which are crying for more space;

**I propose that:**

the FM band be extended down to 76.1 Mhz, following what Brazil has done;

new LPONs be authorized on some of the newly available spectrum;

these new LPONs should be 5 watts max, 100 Khz separation from each other, 2 Km physical separation between TXs on the same frequency 1 Km separation between 100khz adjacent channels

A large, stylized handwritten signature in dark ink, written vertically along the right margin of the document. The signature appears to be 'Stephen M. D.' or similar, with a long, sweeping horizontal stroke at the bottom.



and no constrain in distance separation if frequency difference is more than 200Khz; BUT, max one TX per location; of course this will have to be refined, this is just a rough idea;

these new LPONs should be NOT allowed to be on air for commercial purposes, however defined; they should NOT be granted to associations, but only to individual person; the idea is to provide the opportunity to the single individual or to the "group of mates" to be on air, to "be heard" by their neighbours, in other words, it's reach should be limited to their immediate vicinity; and NO networking; the intended target of licensees should be the student, the radio experimenter, the local "maker" who is learning about Arduino and RaspberryPI programming, the local journalist reporting on their local school events, and things such as these; you may think of it as a microFM station;

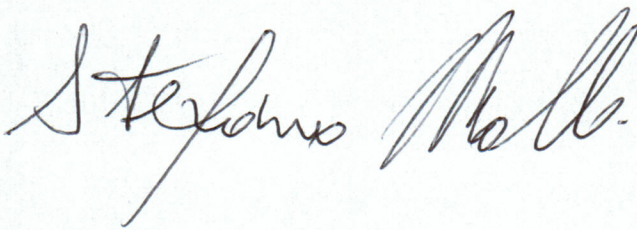
#### **New technologies;**

an incentive should be given to those that apply for a DRM (Digital Radio Mondiale) type of license; in other words, if a person wants to transmit using a digital (any digital) technique / modulation type, this should be encouraged; a segment of the 76.1 to 87.5 spectrum should be reserved to those who want to invest time and money (in small, medium or big scale) in this;

I think of all those electrical engineering students for example, that do have the technological capacity to build such systems - and some Radio Amateurs - that could give a fabulous contribution to the development of new radio technologies and bring Australia up to speed and at the forefront of the radio technological innovation scene.

This is all I have to say, and thanks for this opportunity,

Kindest regards,

A handwritten signature in dark ink, appearing to read 'Stefano Mollo'. The signature is fluid and cursive, with the first name 'Stefano' written in a larger, more prominent script than the last name 'Mollo'.

Stefano Mollo

Perth, WA.