

Frontier Silicon LTD  
3<sup>rd</sup> December 2009

**Dear Philippe,**

**Please see my replies below regarding the questions posed in your questionnaire.**

**Question 1 : Can we say that the standard that could be used for existing multiplex covering one zone could be T-DMB or DAB+ ?  
(example : 3 MUX in DMB and 5 in DAB+)**

Mark> Technically this is perfectly feasible.

**Question 2 : Is it technically correct to say that it is perfectly possible without particular risk nor significant cost, within the same multiplex to use both T-DMB and DAB+ standard ?**

Mark> Technically this is perfectly feasible. We already test our receiver technology with test streams containing DAB, DAB+ and DMB-Radio.

**Question 3 : Could you make some propositions of possible composition in term of number of programs based on the necessity to have optimum sound quality and be able to broadcast PAD as well with the option of question 1 (3 MUX in T-DMB and 5 in DAB+) and the option of question 2 (1 MUX only) ?**

Mark> I'm not sure as a receiver technology provider we are in the best position to comment (I would have thought the broadcasters and encoder suppliers would be better positioned). All I can say is we've tested down to 48Kbits/sec AAC and at this bit rate the sound is not so good.

**Question 4 : Is it true to say that radio receivers that can receive T-DMB audio (T-DMB Radio) can all also receive DAB+ ?**

Mark> Yes this is true. For example, Frontier Silicon provide WorldDMB profile 1 receivers which support DAB/DAB+/DMB-Radio in a single module. This is very cost effective. The only down side is the additional royalties the receiver manufacturers need to pay beyond pure DAB (\$0.98 to Via Licensing for AAC and \$0.05 to MPEG LA for MPEG TS (DMB-Radio only)).

Best regards,

Mark Hopgood  
Director of Marketing  
Frontier Silicon LTD.