

SAP REG COMMENTS ON OFCOM CONSULTATION OF FREEDOM-4 LICENCE VARIATION REQUEST

1. Introduction

SAP REG has studied the Ofcom consultation document issued on 09 June 2009 in relation to the proposed modification of the current Freedom-4 licence to operate in certain parts of the 3.4-4.2 GHz band.

SAP REG is in the first instance very concerned that Ofcom has expressed its view in the consultation document that it is in effect minded or pre-disposed to grant the licence variation requested by Freedom-4 prior to having received comments in relation to this consultation.

SAP REG comments in this document firstly focus on the issues relating to the Freedom-4 licence variation request to operate fixed services in the band above 3.8 GHz and mobile BWA services in the band above 3.8 GHz. Section 4 contains SAP REG comments relating to the band below 3.8 GHz.

2. SAP REG Comments Relating to Freedom-4 Proposed Fixed BWA Service Use Above 3.8 GHz

SAP REG has considerable concerns in relation to Ofcom's proposal to permit Freedom-4 licence to offer BWA type services in the bands above 3.8 GHz. The SAP REG objections are based on the following considerations:

While SAP REG and other satellite industry bodies continue to have considerable concerns with the establishment and implementation of EC Decision ZZZ 2008/411/EC to permit BWA type services in the band 3.4-3.8 GHz, the context within which that EC Decision was developed should be carefully considered by Ofcom. There was never any EC level proposal or justification to propose harmonised use of the band 3.8-4.2 GHz for Fixed BWA services across the EU. There were primarily two reasons for this:

- Justified requirements for Fixed BWA could be reasonably accommodated in bands below 3.8 GHz or in bands below 3 GHz (e.g. 2.5/2.6 GHz);
- There was a need to maintain the present and future viability of use of the bands 3.8 4.2 GHz for the FSS, noting the severe constraints fixed BWA deployments would place on current and planned FSS use below 3.8 GHz.

SAP REG would request Ofcom to provide sight of the evidence that Freedom-4 has presented to Ofcom to justify its request to offer fixed BWA services above 3.8 GHz. SAP REG believes that there is no clear market justification for Ofcom to take the step of granting the Freedom-4 licence variation request to allow fixed BWA services in the band 3.8 – 4.2 GHz. SAP REG would request Ofcom to provide evidence or information justifying this request by Freedom-4.



SAP REG would also request Ofcom to clarify and to justify in detail Ofcom's decision to accommodate Freedom-4 fixed BWA operations in a band above 3.8 GHz, instead of in an additional equivalent band below 3.6 GHz, and what technical reasons (should they exist) make such accommodation of apparent Freedom-4 requirements not feasible. Ofcom has a duty to promote spectrum efficiency, especially where to do otherwise would negatively affect the use of the band by other primary services or systems. It is not clear that Ofcom has undertaken such an evaluation.

SAP REG for the above reasons strongly objects to Ofcom's proposal to permit relaxations in Freedom-4 licence to offer fixed BWA type services in the bands above 3.8 GHz. SAP REG therefore believes that Ofcom should reject the Freedom-4 licence variation request to offer fixed BWA services in the band 3.8 - 4.2 GHz.

3. SAP REG Comments Relating to Freedom-4 Proposed Mobile Service Use Above 3.8 GHz

SAP REG strongly objects to Ofcom's proposal to permit Freedom-4 licence to offer Mobile Services (MS) in the bands above 3.8 GHz. The SAP REG objections are based on the following considerations:

- a. Industry has a strong legitimate expectation that Ofcom will respect the UK NFAP as well as the ITU Radio Regulations and its Table of Frequency Allocations in terms of what services are permitted to use certain frequency bands allocated to those services on an exclusive primary, coprimary or secondary basis.
- b. The ITU Radio Regulations allocates the frequency bands 3.8-4.2 GHz to the Fixed Satellite Service (FSS) in the space-to-Earth direction and to the Fixed Service (FS) in ITU Region 1.
- c. The UK NFAP similarly allocates the frequency bands 3.8 4.2 GHz to the Fixed Satellite Service (FSS) in the space-to-Earth direction and to the Fixed Service (FS) in ITU Region 1.
- d. There is no ITU or UK NFAP primary allocation to Mobile Service in the bands 3.8 4.2 GHz.
- e. EC Decision 2008/411/EC does not envisage BWA use in 3800 4200 MHz.
- f. Any use of the band $3.8-4.2~\mathrm{GHz}$ by a radio service which is not allocated in the NFAP should be undertaken on a non-interference / non-protection basis and should further not constrain the viable development of any primary service allocated in that band.

SAP REG notes that Ofcom has not attempted to justify its proposed action to grant the Freedom-4 de-facto Mobile Service application in the band $3.8-4.2~\mathrm{GHz}$ GHz by relevant references to the ITU Radio Regulations, CEPT ECA , relevant EC Decisions or the UK NFAP. This is in sharp contrast with Ofcom's lengthy references in the consultation document (for example in its Section 3) to the CEPT ECA and EC Decision 2008/411/EC applicable to the band $3.4-3.8~\mathrm{GHz}$ to justify its treatment of the Freedom-4 licence variation request in the $3.4-3.8~\mathrm{GHz}$ band.

SAP REG considers that the FSS satellite industry has a strong legitimate expectation to use the bands 3.8-4.2 GHz for current and future systems and applications unconstrained by any mobile service system or application in the UK.

SAP REG for the above reasons strongly objects to Ofcom's proposal to permit Freedom-4 licence to offer mobile services in the bands above 3.8 GHz. SAP REG therefore believes that Ofcom should reject the Freedom-4 licence variation request to offer mobile services in the band 3.8 - 4.2 GHz.



Ofcom should note that SAP REG may make in the near future a formal and separate representation to Ofcom regarding the proposed change of use of these frequency bands. In particular we are concerned that the proposed technical and regulatory changes would bring about a dramatic transformation in the value of the spectrum involved, from a niche market FWA service to a high value mobile broadband service. We would question whether it is in the public interest to favour an incumbent operator in this way, when the demand for mobile spectrum is extremely competitive.

4. SAP REG Comments Relating to Freedom-4 Use Below 3.8 GHz

SAP REG is pleased to see that Ofcom recognises the need for coordination of Freedom4 base stations with satellite earth stations. However, the proposed revised Freedom4 licence does not specify the coordination procedure. Indeed, the provisions in sections 5 a) and b) of Schedule 1 of the existing licence are proposed to be removed. SAP REG considers that it is essential to clearly indicate the coordination requirements in the Freedom4 licence. In addition, it is necessary to indicate the requirement to coordinate with earth stations located outside the UK.

In relation to the proposal to remove the requirement to coordinate terminal stations, SAP REG notes that if FDD technology is used, base stations and terminal stations would transmit on different frequencies. In this case, coordination of terminal stations would be required.

Kind regards

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