

**RESPONSE TO OFCOM STRATEGIC
REVIEW OF THE UHF SPECTRUM AT 420 –
470 MHZ UHF BANDS 1 AND 2**

Department: Wastewater Assets

Team: Technical

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AUTHORISATION

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SUMMARY OF CHANGES

VERSION NUMBER	SUMMARY OF CHANGES
I1	
I2	

1.0 INTRODUCTION

This document covers the review that Southern Water Services have undertaken of the “Strategic Review of UHF Spectrum at 420-470 MHz” document provided by Ofcom dated 4th December 2014.

The strategic review document explains how the current uses and configuration of the 420-470 MHz frequency range, known as the UHF 1 and UHF 2 bands, has future challenges for its efficient management, with particular implications for managing congestion, future competing demand, and interference.

Frequencies in this range are attractive to users due to their favourable propagation characteristics; they deliver good coverage along with better in-building penetration.

The band is used by a wide range of parties to deliver a diverse set of services this includes Southern Water Services.

The use of the 420-470 MHz band is particularly complex and its current configuration is not fully aligned with the relevant European legislation.

There are indications of increasing demand from some existing users of the 420-470 MHz band, particularly in dense urban areas, and signs that new types of use also want to make use of these frequencies. In addition, the risk of interference is growing from wideband and narrowband technologies deployed by continental neighbours (which can be exacerbated in some meteorological/ atmospheric conditions).

The strategic review seeks to understand whether the current approach to managing the band is able to meet the needs of current and future users.

Ofcom have invited views and comments on the questions posed in this CFI from stakeholders representing all incumbent users as well as those with a future interest in the 420-470 MHz band.

The initial response closing date was the 19th February 2015 but this was extended to the 26th February 2015.

Section 2.0 of this document contains the responses from Southern Water Services to the questions raised in Annex 4 of the “Strategic Review of UHF Spectrum at 420-470 MHz” document.

2.0 RESPONSE

This report was only recently brought to the attention of an employee of Southern Water by one of Southern Water’s suppliers, thus other utilities might not be aware of the report.

Response to Annex 4

Question 1 & 2

Southern Water operates within the utilities sector and utilises the licence exempt bands and therefore we fall into the sectors a) and g)

Question 3 Do you agree there is no demand for a wide band service

There is a likely future demand for an increased wideband service as Southern Water require CCTV verification of events at remote sites.

Question 4

No information available to respond to this question.

Question 5 Additional information (Please consider the response to this question as Confidential)

Question 6

Currently not able to confirm agreement with the proposed solutions

Question 7 Do you have any Further comments to how to manage the spectrum

Any new re-allocation of this spectrum will need to include provision for the following :-

- Additional channels to the existing utility radio spectrum for data communication.
- Replacement for the potential loss of 458 MHz for point to point telemetry communications.
- A small allocation for on site communications possible at 20 mw maximum erp.

These could be an extension to the existing utilities allocation or below 420 MHz.

With this in mind

Southern water recently made a representation at the Business radio Interest Group 29 January 2015 and tabled the proposal for a new UHF allocation for the utilities

The general proposal has the initial support of the Joint radio company (JRC) that allocates the

existing Utility radio spectrum and also the power network industry and this could also be aligned with the European proposals

The exact Radio spectrum requirements of the UK utilities needs discussing in order to arrive at a common solution for the 21st century and as such at the recent meeting at OFCOM it was agreed that further meetings and work would take place this year

Question 8 Comments on the proposed program of work *(Please consider the response to this question as Confidential)*

Considerable planning and consultation would also be required to prevent any risk of plant within the Critical National Infrastructure (**CNI**) failing.