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**TELECOMMUNICATION ASSOCIATION  
OF THE UK WATER INDUSTRY  
- TAUWI -**

RESPONSE TO

**Ofcom Consultation**

**On**

**Securing Long Term benefits from Scarce Spectrum Resources  
A strategy for UHF bands IV and V**

***INTRODUCTION***

This response is provided by Atkins Ltd on behalf of the **Telecommunications Association of the UK Water Industry (TAUWI)**. The Water Industry welcomes the opportunity to respond to this Ofcom consultation document. Atkins Ltd act as the main point of contact for TAUWI members and represent their interests on a range of matters, including responding to consultation documents on behalf of its members.

The Association was formed in April 2004 and replaces the Telecommunications Advisory Committee (TAC) which for the previous 14 years had acted as the focus for the UK Water Industry in relation to fixed and mobile communications and scanning telemetry from a technical and regulatory aspect. The scope of TAUWI has been extended to capitalise on new opportunities resulting from emerging technologies and regulatory changes. At the same time, more emphasis is being placed on strategic issues in relation to other sectors of an organisation's operation, such as IT Systems, General Communications Infrastructure and business requirements.

Membership of TAUWI is drawn from representatives from the following Industry Groups:

10 Water Service Companies  
11 Water Supply Companies  
Scottish Water  
Environment Agency  
Northern Ireland Water  
Jersey Public Services Department  
Land Drainage Boards

TAUWI is chaired by Mr Les Ammon of Northumbrian Water Ltd.

In the UK, public water services are monitored and controlled by government-appointed regulators who set legally-binding standards and report each year on progress. Regulation is focused in four main areas: finance and economics; environmental impact; drinking water quality; and health and safety. In England and Wales this is carried out by Ofwat, in Scotland, by the Water Industry Commission for Scotland (WICS) and in Northern Ireland, by the Utility Regulator's Water Directorate.

## **General Comments**

The Water Industry is a major user of Telemetry Systems and various radio communications technologies, including licensed UHF Scanning Telemetry, GSM CSD and GPRS are used to support their mission critical operations. All aspects of water management, including the recovery, treatment and distribution of water, the control and monitoring of water quality and operation of flood defence systems utilise Telemetry to ensure compliance with statutory requirements as well as reducing maintenance and operational costs.

Whilst these telemetry systems can be supported by relatively low speed data links, in line with other Utilities, the water industry is witnessing an increasing requirement to provide greater levels of security at their operational sites. As a consequence, remote CCTV is becoming commonplace and new applications such as IP telephony, remote access control and SCADA upgrades providing enhanced levels of remote monitoring and control will demand substantial increases to current data bandwidths. ADSL and 3G wireless technology are capable of providing increased data bandwidths; however a large percentage of the industries assets are located in remote rural areas where the distance from the local exchange precludes the use of ADSL and the availability of 3G, due to limited rollout and propagation characteristics of the allocated 2.1GHz spectrum.

As a consequence, the industry is in general support of Ofcom's proposal of allocating 700MHz spectrum to mobile broadband use as it has the potential to improve the future availability of high capacity broadband , especially in remote rural areas.

The utilities have a long history of relying on self-provided radio networks to support the operation of their critical national infrastructure. There are a number of reasons for this, including the need to communicate with remote assets as discussed earlier, and a requirement for members to have guaranteed levels of service, something that public mobile operators are unable to provide. In the past, this was recognised by the regulators and spectrum was allocated to the industry for the purpose of supporting the operation of their systems. The proposed change in the use of the 700MHz band provides an opportunity for Ofcom to consider the longer term benefit to citizens by reserving some spectrum for use by the utility sector in order to support the deployment of new applications, ensuring the industry continues to meet both operational needs and future statutory requirements.

Due to the differing geography, requirements of individual companies and diversity of ownership, we are unable, at this time, to provide any greater detail as to the specific TAUWI member requirements. We would however anticipate that the business and various regulatory standards will change in order to meet the future requirements of the EU and the UK regulators.

Representatives from TAUWI would be pleased to meet with Ofcom to discuss present and future requirements of the industry, if this would be of any assistance.