Developing a Global Ecosystem for TV White Spaces

Recent years have seen much progress towards understanding how TV white spaces (TVWS) might be used, in terms of regulation, technology, and potential services. The USA has finalised its rules for using TVWS and regulation is on its way in the UK. Consensus is forming around using geolocation databases to manage access to TVWS, and this will act as a catalyst to further TVWS rule-making. Some promising applications are emerging, too, including TVWS-based broadband systems that could finally connect the world’s hardest-to-reach communities in rural and remote areas.

But the TVWS ecosystem is at a nascent stage, with concrete steps taken towards regulation taken by only a few countries, technology standards not yet complete, and uncertainties remaining about TVWS applications and business models. There are also enduring concerns from incumbent users, particularly programme making and special events (PMSE), that white space devices could cause harmful interference to their services. These issues need to be addressed for the TVWS industry to fully emerge and prosper.

*Developing a Global Ecosystem for TV White Spaces* evaluates the status of the emerging TVWS industry, assessing developments in regulation, technologies, trials, and applications. It explores what remains to be done for a global TVWS ecosystem to materialise and how long this might take. The report considers the attitudes of regulators and industry towards TVWS proposals against the background of these developments, drawing on data gathered during a survey undertaken by *PolicyTracker* in Q2 2012.

Written by Catherine Viola, and edited by Martin Sims, this 90-page *PolicyTracker* report:

- Includes findings from *PolicyTracker*’s survey, revealing the opinions of regulators and industry stakeholders on TVWS developments.
- Evaluates the emerging use cases for TVWS, including rural broadband, extended-range hotspots, machine-to-machine communications, cellular offload, and LTE over TVWS.
- Discusses the progress of TVWS rule-making in the USA, UK, Canada, Singapore, and elsewhere, and assesses if and when regulation will go global.
- Reviews the progress of technology development and standardisation, and gauges the timescales for bringing TVWS systems and devices to market.
- Assesses how the remaining barriers to the emerging TVWS ecosystem can be overcome.
- Introduces a TVWS industry maturity model which maps out five key stages of evolution.
- Looks at the prospects for dynamic spectrum sharing beyond the TV band and identifies the key candidate bands.
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The 90-page report includes 30 figures and 8 tables.

Why buy this report?

Developing a Global Ecosystem for TV White Spaces enables you to:

- Find out what regulators, TVWS technology suppliers, mobile network operators, broadcasters, PMSE users, academics, and other stakeholders think about TVWS initiatives, from aggregated survey data and qualitative comments included in the report.
- Use a single source of information to get up to speed quickly on global developments in TVWS, including regulation, standards development, applications, and trials.
- Benefit from an independent perspective on where the TVWS industry stands today and how long it will take to mature.
- Find out which are the most promising initial applications for TVWS, and why.
- Gain insight into the main issues and barriers that need to be addressed for a fully-fledged TVWS ecosystem to emerge.
- Identify which countries and regions are likely to progress most rapidly with TVWS regulation.
- Use the report as a catalyst for discussion within your organisation.

Who should buy this report?

- **Regulators and policy-makers**: Analyse TVWS developments worldwide and their potential impact on your country market, and gain insight into the perspectives of both incumbent TV band users and TVWS proponents.
- **Broadcasters and PMSE users**: Assess the implications of emerging TVWS regulation for your business and what is being done to protect your services from interference.
- **Technology suppliers**: Identify the most promising country markets for your technologies and the threat from competing technologies.
- **Geolocation database providers**: Pinpoint where TVWS regulation will emerge most quickly and opportunities to expand your services.
- **Mobile network operators**: Weigh up the potential benefits and drawbacks of using unlicensed TVWS to help manage your data traffic growth.
- **Wireless ISPs**: Find out when TVWS regulation might reach your market and when suitable TVWS systems will be available.
Developing a Global Ecosystem for TV White Spaces

- **Municipalities and local authorities:** Understand the potential role of TVWS in developing smart cities and identify trial partners.

- **Utility communications providers:** Understand the opportunities and threats posed by TVWS for smart metering and smart grid communications.

**Pricing**

The report is available in pdf format, priced at GBP1750 for up to five users within a single organisation. Please enquire for corporate licensing options.

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