Global Civil Society Activism and the Public Interest in the Debate on the Future Shape of Spectrum[1]

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ABSTRACT

This paper explores the positions of actors representing public interest goals in recent international policy activity around possible changes to the allocation of spectrum. Its focus is the lead up to the consideration of the future of the so-called 700 MHz and sub-700 MHz bands in the International Telecommunication Union's (ITU) Region 1 at the *World Radiocommunication Conference* (WRC-15) held in Geneva in November 2015. The paper finds is strong evidence of alignment by civil society with commercial and public service players from the broadcasting sector. This has been fruitful in securing a key part of the spectrum from the perceived incursions of the mobile communications industry. It provides further evidence of the increased sophistication of civil society actors operating in international policy-making environments. The paper's findings also underscore how predominantly positioned ideas of the public interest remain in discussions on the future of communication media. Yet at the same time, there is evidence of moves to re-articulate the public interest in this sector in the key respects of what its constituents are/should be and the actors that are/should be charged with its delivery. This process has shown the significance of international civil society actors but simultaneously exposes the limited and highly specific conditions which need to be in place for them to exert influentially their preferences in international policy debates about the allocation of scarce and valuable communications resources.

INTRODUCTION

The use of the airwaves to send and receive signals is one of the most well established and important means of human communication, dating back to the days of telegraphy. The recent phase of microwave based communications is a particularly high profile one. This is because it is underpinned by the two largest growth areas in electronic communication in recent decades: mobile communications and the Internet. The growth in demand for high speed (mostly mobile based) audiovisual communication has called forth a debate on future communicative use of the airwave spectrum. This has an international - as well as domestic - character with key commercial and public interest goals at its core.

This paper explores the positions of actors representing public interest goals in recent international policy activity around possible changes to the allocation of spectrum. It addresses international policy positions and decisions in evidence in the lead up to the consideration of the future of the so-called 700 MHz and sub-700 MHz bands in the International Telecommunication Union's (ITU) Region 1 at the *World Radiocommunication Conference* (WRC-15) held in Geneva in November 2015. Region 1 is large and heterogeneous, comprising the EU, Russia and East European states, the Middle East and Africa. The paper's focus is principally the EU which exhibited an intense degree of debate on spectrum reallocation in the period leading to WRC-15.

Civil society actors have recently been recognized as playing a key role in international policy debates with clear public interest dimensions. In Europe, this role is even seen as having intensified in recent years (Spini, 2011) and thus might have been expected to be particularly prominent in the debate on the future use of spectrum, historically viewed as a key scarce public communication resource.

However, the paper finds evidence of only a narrow range of civil society participation in the debates on spectrum in the EU. Nonetheless, in the case of the involved civil society actors, there is evidence of particular kinds of tactical positioning and argumentation that goes beyond what might be expected to be the remit of the active organisations in question. The paper also finds strong evidence of

alignment by civil society with commercial and public service players from the broadcasting sector. Such strategic sophistication – evidenced to some extent in recent literature on civil society activism (see Mintrom and Norman, 2009; Flohr et al., 2010) – has been fruitful for civil society actors in securing a key part of the spectrum from the perceived incursions of the mobile communications industry. However, it also exposes the limited and highly specific conditions which need to be in place for civil society to exert *influentially* its preferences in international policy debates about the allocation of scarce and valuable communications resources.

This finding leads to the conclusion that civil society actors are thus vulnerable in the pursuit of their policy preferences. They are very limited in their resources and capacity to influence autonomously a policy process in spectrum dominated historically by state and public bodies, and lately multinational capital. Their choice to assert 'aligned' positions in the recent debates on spectrum policy, whilst expedient in the short term, should not belie the fact that civil society preferences for the future of the public interest in the media sector are likely to be tied to those of public service and commercial broadcasting companies. In an uncertain technological and network environment, the extent and pattern of roll out of high speed Internet broadband infrastructures - and potential future changes in the strategies of broadcasters that this might call forth - is likely to be a crucial issue.

THE SPECTRUM DEBATE: BROADCASTING, BROADBAND AND THE FUTURE OF WIRELESS COMMUNICATION

Terrestrial television and radio broadcasting systems have, in Europe, for the most part, utilised key parts of the Ultra High Frequency (UHF) communication spectrum to deliver their services. Other significant users of spectrum in this range have been the providers of services related to the maintenance of public health and security, as well as providers of satellite communications and parties concerned with the testing and development of equipment and systems potentially deployable through the network in the future. Preferences for the shape of this system and its actual deployment were largely a matter of national concern and discretion. However, given the international significance of coordinating effectively the use and development of radio communication, efforts to reach agreement on the allocation and use of

spectrum were developed successfully in the context of the International Telecommunication Union (ITU), based in Geneva (see below).

Historically, in Western Europe, much of the use of the UHF spectrum had underpinning it a public interest rationale. In terms of broadcasting, this reflected the development of public service radio and television through most of the 20th century (Tracey, 1998). Even as terrestrial broadcasting systems using the airwaves became more commercialised from the late 1980s across Europe, through primarily the deployment of funding models other than the licence fee and the introduction of more competition into broadcast markets (Brants and Siune, 1992), the idea of terrestrial broadcasting services as providing at least one of the core public service staples of education, information and entertainment to audiences has persisted (Ferrell Lowe and Martin, 2014). The huge expansion in (particularly) television broadcasting in recent decades, the many details and ramifications of which go beyond the scope of this paper, has been facilitated by capacity infrastructure increases of various kinds. A big part of this has been digitalisation techniques, which have affected cable and airwave based systems (specifically satellite and terrestrial) alike. Digitalisation – through, for example, compression technology - has afforded a more efficient use of the spectrum, and has called forth a major process of transition across most of the world from analogue to digital broadcasting. Such a movement has resulted, *de facto*, in the 'freeing up' of key parts of the spectrum: the so-called 'digital dividend' (Wheeler, 2016). This process having reached a relatively advanced - though far from complete - juncture one of the most significant international communication policy debates of recent years has ensued on what the uses of this extra communication capacity should be and how they should be deployed.

The availability of new spectrum capacity has also coincided with a particularly significant period in the growth of the mobile communications industry. The emergence of personal mobile communications services has been arguably the most prominent development in telecommunications of the last 30 years (Humphreys and Simpson, 2005). Already commercially significant in terms of voice call revenues, the value of mobile communications has been turbo-charged by the growth of broadband Internet communications services. Initially conceived of as a development of cable based network communications through infrastructural upgrading from copper to

optical fibre based networks - a huge and far from completed project in itself – the opportunity to develop high quality mobile Internet broadband services is now seen as a key strategic goal for an increasingly diverse communications sector (Bauer, 2010). Thus, whilst the industry cliché of the 1990s that 'the future is mobile' has not materialised at this point, the mobile communication personal handset or 'smartphone' has become, for a large number of users, a device which allows them not only to have voice based conversations, but to conduct a wealth of other activity incorporating the sending and receipt of voice, data, text and pictures: online communication in all its variety is becoming increasingly mobile (Dwyer, 2009). Like its 'fixed link' broadband equivalent, the timely availability of network capacity (Papachrissi and Zaks, 2006) – in this case spectrum – is considered an essential ingredient in the future of mobile communication.

These separate developments in broadcasting and mobile communications have taken centre stage – but are far from the only considerations - in the debate on the digital dividend. The historical view of spectrum as a key public resource, the utilisation of which requires careful consideration of a raft of issues including - though not exclusively comprising - commercial exploitation, has meant that a number of matters related to the use of spectrum for public purposes (see below) have also taken their place in the recent debate. Articulated by public service and civil society voices, for the most part, they have at their core the supposition that in decision-taking processes around the allocation of scarce communication resources, the interests and needs of people as citizens (understood as being evolutionarily and not statically defined), as well as consumers, should take their place in the discursive process of establishing policy needs, and thus priorities. This relates directly to a consideration of what of the public interest in 21st century communications might be, and how it might be delivered (Puppis, Simpson and Van den Bulck, 2016).

The ensuing debate is far from straightforward in respect of spectrum and reflects to a significant extent, broader concerns about the nature and delivery of the public interest in media environments. A key question is the extent to which matters of public concern might be addressed by actors (and their associated activities) other than those from civil society. Here, in broadcasting in particular, the role of public service – but also regulated commercial – providers comes to mind. More radically,

and drawing commercial (tele)communications service providers into the debate, it is possible to argue that the provision of advanced fixed and mobile broadband communications on a commercial basis, fulfils, to some extent at least, a public interest function. Relatedly, and in the light of public policy strategies pursued in the neo-liberal environment by states in sectors beyond communication – such as health, security and education - it is possible to contend that communications services with an express and exclusive public function, might be delivered most effectively through regulated private, commercial means. In media, a clear privatisation of the public interest has been recognised and strongly questioned (Freedman, 2008). It is within this complex policy milieu, that the debate on spectrum allocation in Europe - and the activism of international civil society players within it - has recently evolved.

CIVIL SOCIETY ACTIVISM IN INTERNATIONAL PUBLIC POLICY PROCESSES

For many years assumed to be marginal players, active - at best - in nationally based contexts of public policy making, recent academic work has highlighted the growing, multi-faceted influence exerted by civil society interests organised internationally. A key activity for civil society historically has been articulation of protest and resistance to dominant positions in debates. The emergence of the online environment has for some created an empowering context for new social movements (Castells, 2012). There is no doubt that this function of civil society has created a presence and 'noise' *around* policy processes. However, recent work in political science asserts a deepening involvement of civil society in policy-making. There are two highly sought after aspects of this which are fundamentally pragmatic in nature. First, civil society contributions to the policy making process can have distinct practical value through the provision of technical information, as well as knowledge and expertise. Second, civil society ensconced in the policy process has the capacity to make a significant contribution to policy innovation and development. This may emerge through an understanding of technical or human behavioural matters, broadly defined.

For Sending and Neumann (2006), it is now the case that the interactions and resolutions of civil society are a central feature in the exercise of governmental

power, broadly defined. The capacity of these actors to exert influence is strongest in environments characterised by the pursuit of voluntary compliance. Though claims have been made for the emergence of a global civil society, the international regional level has been more significant. It is also important to note that, depending on the sector and topic in question, civil society interests can have very different manifestations such that use of the term in a blanket fashion may no longer be appropriate (Raymond and DeNardis, 2015). Spini (2011) argues that the growth of civil society activism has tended to be most strongly manifest in the 'first world', notably Europe, where 'in EU governance, the role of civil society is nothing short of pivotal' (p. 26).

One of the most interesting aspects of civil society activity is the recognition of the role the latter can play in the process of cultural normalisation (Anheier et al. 2002). The policy entrepreneurial role of civil society actors has also been recognised as important, though their ability to be effective hinges on a number of factors. The scope to articulate key ideas, to secure appropriate timing of inputs through using windows of opportunity (Kingdon 1995) and to gain access to key policy insiders are important. Mintrom and Norman (2009) also point up the value of 'social acuity' involving the ability to understand key ideas, motives and concerns of a range of parties and to respond effectively to these. Crucially, policy entrepreneurs 'must be able to understand the workings of a given context without becoming so acculturated to it that they lose their critical perspective' (Mintrom and Norman 2009: 656). Finnemore and Sikkink (1998) have argued that the role of the norm entrepreneur, specifically, involves a process blending instrumentalism with social construction.

An interesting aspect these developments is transnational civil society's involvement in norm setting through alignment with private actors (Flohr et al., 2010), where both parties can be seen to take action formerly within the purview of the state. It has been noted that commercial players have even involved themselves in activities with the pursuit of civil rights as their underpinning (Spini, 2011). With reference to Doh (2008: 281-90), Flohr et al. have gone as far as to suggest that 'Rather than just acting as lobbyists who pressure governments or the private sector to protect   political, economic, environmental and human rights, non-governmental organizations (NGOs) take on new responsibilities by establishing cooperative relationships with

states and business as initiators or cooperative partners in joint governance initiatives' (Flohr et al., 2010: 6). A key issue is the point in the policy process at which civil society actors are able to exert influence. Being able to influence the input stages of policy-making affords potentially more significance to the role of civil society actors than being in a reactive position where commentary on - and analysis of - the outcomes of policy has often been the sum total of civil society engagement. However, involvement in the earlier stages of policy development requires a focus on the degree of representation of civil society, where there is a debate over what might constitute a sufficient level of representation (Kohler-Koch 2010) beyond token presence in decision making fora.

THE INTERNATIONAL TELECOMMUNICATION UNION AND WRC-15

The focus of this paper is on the role of non-state actors in the decision-making process *leading up* to the International Telecommunication Union (ITU)'s World Radiocommunications Conference (WRC) in 2015. Therefore, decision-making *within* the actual premises of the ITU's WRC in Geneva is of less interest to this study. Under the general structure of the United Nations, the ITU remains the foremost *intergovernmental* organisation responsible for regulating electronic communications globally. The Radiocommunications area (ITU-R) is one of the three sectors the organisation's work is split into. The other two operating areas are standardisation (ITU-T), and telecommunications and ICT development and assistance in developing regions (ITU-D).

In the area of radio-frequency regulation, the ITU holds an exclusive mandate to manage spectrum for electronic communications and its internationally harmonised allocation in order to avoid interference (Irion, 2009: 5) between various user sectors (e.g. broadcasting, mobile, aviation). The Radio Regulations that are adopted at the WRCs are thus binding for the member states that have ratified the ITU Convention (ITU Radio Regulations, 2016). The allocated spectrum in a frequency band is based on primary and secondary rights of use, granted in accordance with the results produced by compatibility and co-existence studies measuring degrees of interference between the potential sharers (Louis, 2011 in El-Moghazi et al., 2012: 4). In this

respect, services granted secondary rights of use must not cause harmful interference to those benefitting from primary rights and they are not entitled to protection from interference with the primary rights holders (El-Moghazi et al., 2012: 4).

With the liberalisation and privatisation of national telecommunications industries, participation in the work of the ITU was opened to the private sector (Irion, 2009: 2; see also, MacLean, 2008: 84). Triggered by the dynamic sectoral developments in telecommunications, in 1998 and 2002 the organisation took steps to strengthen the role of the private sector and incorporate into its structure corporate companies from telecommunications, broadcasting and IT industries (McCormick, 2007: 71). Currently, the ITU accommodates more than 700 non-state 'sector members' and industry 'associates'[2] (ITU Membership, 2016). This has brought a division of labour in which most of the "requisite technical work", especially in radio frequency decision-making (McCormick, 2007: 70) is conducted by corporate members, while member states have become the representatives of the public interest (Irion, 2009: 2-3). This, in combination, has resembled something of a public-private cooperation, where the final say lies with state administrations as voting members in the WRCs and the financial and technical contributions of sector members, which hold an observant status (El-Moghazi at al., 2012: 9). In terms of financial contributions, private sector member and associates reportedly contribute to more than 27 per cent of the ITU's budget (McCormick, 2007: 74).

There have been also differences in the strength of participation between the various member states of the three ITU Regions[3]. Membership has proved to not equate participation, especially in relation to developing countries, which have "lack[ed] sufficient knowledgeable and experienced staff to articulate and successfully lobby", thus "the vast majority of private sector delegates to the Plenipotentiary Conference, the supreme organ of the ITU, come from the core countries that dominate the global

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[2] While the former are eligible to "participate in all activities in ITU, including chairing groups, take part in consensus-based decisions, and make contributions to all meetings", the latter can participate in a single study group in one of the three sectors, without having the right to take part in the decision-making process (ITU Membership fees, 2015).

[3] Region 1 – Europe, Middle East and Africa (EMEA), Region 2 – North and South America, Region 3 - Asia-Pacific.

telecommunications market, namely, the USA, the UK, Japan, Canada, France and Italy" (McCormick, 2007: 71; 74).

Although the organisation has attempted to diversify the participants in decision-making and include more representatives from civil society, this endeavour did not develop much beyond the ITU's role in the World Summit on Information Society (WSIS) (2003 and 2005) in terms of Internet governance. As Irion (2009: 11) notes, although there has been sufficient civil society interest in participation, its involvement has been restricted to the ITU Radiocommunications (ITU-R) and Standardisation (ITU-T) policy-making areas. According to MacLean (2008: 93), only a "handful of technically oriented organizations" have represented civil society even within the radiocommunications domain. The high membership fees for non-state members have contributed to this (McCormick, 2007; Irion, 2009). In 2015, the charge for sector members' participation in ITU-R and ITU-T domains was set to 31,800 CHF (approx. 22,550 GBP). Associates had to pay one third of that fee for the two sectors, while the fees for the development (ITU-D) domain were comparatively lower – 3,975 CHF (approx. 2,800 GBP). This was also the fee for the participation of academics in any of the three domains (ITU Membership Fees, 2015). Within this environment, the ITU has restricted access to working documents and various contributions to standards and telecommunications decision-making, reserving this right exclusively for members. A lack of transparency in its "procedural aspects" (Irion, 2009: 12) has thus been noted.

An *intergovernmental* organisation, the role of the state is decisive in determining the extent of private sector's involvement. In relation to this, MacLean (2008: 103) distinguishes between the governance preferences of the three "superpowers" – United States, European Union (EU) and Japan. The most economically liberal, the USA – a sceptic of the ITU in general - has also tended to be the most conservative, favouring no further "enlargement of the ITU's sphere of activity" and limited "sharing of power with other sectors, be they the private sector, nongovernmental organizations, or the staff of the union itself." On the contrary, Japan has been in favour of further enlargement and involvement of the private sector contributors in telecommunications decision-making. The EU has taken an intermediate position

between the preferences of the two. It has shown a preference for expanding private sector participation, but less that in terms of ITU's involvement in new activity areas.

THE SHAPE OF CIVIL SOCIETY ACTIVISM IN THE DEBATE ON SPECTRUM USE

This section outlines the stakeholder activity demonstrated in the process of European decision-making as regards the UHF 470-790 MHz band in the leading up to the ITU's WRC-15. Terrestrial broadcasters have been the primary occupants of the band. At the previous WRC in 2012, the adopted resolutions 233 and 232 established the two most controversial agenda items for the succeeding WRC-15. Agenda item 1.1 required states to identify additional frequency bands for allocation to mobile services on a primary basis, in line with Resolution 233 (ITU, 2015). Whereas, Resolution 232 declared that states in ITU's region 1 (Europe, Middle East and Africa) should allocate the 694-790 MHz frequencies (the upper 700 MHz band) for the mobile industry on a co-primary basis, to become effective immediately after the WRC-15 (ITU Resolution 232, 2012). In relation to this, WRC-15 agenda item 1.2 invited member states to study the spectrum needs of the sector in the 700 MHz band, to decide on the lower edge of the band and to study compatibility and coexistence requirements with the already existing operations in the band, notably terrestrial broadcasting (ITU Resolution 232, 2012).

Shortly before the closure of WRC-12, in April 2012, the European Conference of Postal and Telecommunications Administrations (CEPT)'s European Communications Committee (ECC) started its work on the preparations of the WRC-15 (ECC Conference Preparatory Group, 18/04/2012). The ECC has been responsible for pan-European harmonisation and developing common policies for spectrum use. In the wake of the upcoming ITU conference, in June 2013 the ECC announced the creation of a new Task Group (TG6) to study the long-term vision of the 470-694 MHz band (ECC Announcement, 21/06/2013). Between 2013-2015 the TG6 held two joint workshops with the EC, where key stakeholders were invited to participate. The workshops collected stakeholders' reactions to draft European Common Proposals to the WRC-15, which CEPT had to finalise (Joint European Commission-CEPT Workshop, 14/04/2015). Similarly, the high level advisory group – the Radio

Spectrum Policy Group (RSPG) [4] – responsible for assisting the European Commission (EC) in proposing 'common policy objectives' for the ITU conferences, published its first interim opinion in May 2013 (RSPG, 2013). It was followed by a final draft opinion that was open to a public consultation in 2014/2015. Additionally, the RSPG conducted a public consultation on its Draft opinion on a long-term strategy on the UHF band in Europe (see RSPG Consultations, 2015).

Finally, in respect of WRC-15, the EC also convened the High Level Group on the Future of the UHF band, chaired by the former EU Commissioner for Trade, Pascal Lamy. Lamy published his report as a result of the debates within the group and opened the document to a public consultation in Spring 2015.

Not surprisingly, the outcomes of the consultations demonstrated a clash between the future UHF spectrum interests of two major sectors of stakeholders – broadcasting and mobile broadband communications. It involved complex interrelationships and strategic alignments between public and private actors from both sides of the debate. As seen below, civil society interests have become a key contributor to this complexity.

Spectrum allocation has become one of the few areas that united public service and commercial broadcasters to support a common stance. Both acted in line with the (private) broadcast network operators that delivered the transmission of digital broadcasting services in Europe. These included companies such as the Arqiva in the UK, ORS in Austria and 14 other operators as part of the Broadcast Networks Europe (BNE) association. A fourth party in support of the interests of the broadcast community were the Programme Making and Special Events (PMSE) services providers. These included provisions of wireless microphones and wireless in-ear monitor (IEM) systems which were used mainly in large venues and productions, such as concerts halls, churches, schools, theatres, sports and political events. They have peacefully co-existed with the broadcasters in the UHF bands, utilising so-called 'white spaces' left unoccupied by the broadcasters in order to avoid interference

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[4] Its members include senior representatives from regulatory authorities or ministries of the 28 EU member states and representatives of the European Commission.

between channels. In the WRC-15 spectrum debate, their positions were represented by organisations such as the British Entertainment Industry Radio Group (BEIRG), the Dutch PMSE, Pearle – Live Performance Europe and the Association of Professional Wireless Production Technologies (APWPT) that united a number of similar organisations across Europe. The broadcasters' demands were also backed by the independent television and film production industry and by the representatives of the unions and guilds of media workers. On an individual level, citizens' support was split between the two sides of the debate. Yet, on an organisational level, civil society representatives became aligned with the broadcast community and joined a formal alliance – the Wider Spectrum Group that included associations representing the above-mentioned groups of stakeholders. The members of the group were the European Broadcasting Union (EBU), BNE, Digital UK (BBC, ITV, Channel 4, Arqiva), the Digital Television Action Group (DigiTAG), the European Federation of Journalists, the Association of European Radios (AER), the APWPT, the European Coordination of Independent Producers, the Uni Global Union – Media, Entertainment and Arts (UNIMEI) and the Voice of the Listener and Viewer (VLV).

To start with, the spectrum activism of the broadcast community has focused predominantly on WRC-15's agenda item 1.1, which required the identification of additional spectrum bands for mobile services. Due to its attractive propagation characteristics, the UHF 470-694 (sub-700 MHz) band has became a target for potential re-allocation to mobile communications. United by a common interest, the above mentioned groups of stakeholders put forward arguments defending no further spectrum cuts for terrestrial services, opposing any considerations of sharing the sub-700 MHz band with mobile network operators. Agenda item 1.2 concerned the already allocated to the mobile sector 700 MHz band in WRC-12 (while the 2015 Conference required determining only the lower edge of the band). As pointed out by the VLV, the reallocation of this part of the spectrum was a "*fait accompli* that only require[d] ratification at the WRC-15" (VLV, 2015a: 11). In addition, a number of governments (the UK, France, Germany, Finland, Sweden) had already announced decisions to license the 700 MHz band to mobile services. Therefore, discussions on this agenda item focused more on the potential timetables for implementation of this decision, which for broadcasters meant further efforts for planning and funding the move from the band.

Unlike in other ITU Regions, however, the decision-making on WRC-15 demonstrated Europe's political consensus on the need for prosperous digital terrestrial television (DTT) broadcasting system[5]. The European decision-makers acknowledged the social and economic contributions of DTT. In particular, Pascal Lamy's Report (2014) noted that:

> The European audiovisual model has provided citizens with a broad range of quality programming, free at the point of access (so-called free-to-air) and fulfils major public policy objectives such as cultural diversity and media pluralism. This is particularly important for the most vulnerable in society and must be maintained. In most EU Member States digital terrestrial television (DTT) represents the backbone of this model. (p. 3)

Therefore, although unable to reach a consensus between the participants of the HLG[6], Pascal Lamy's Report adopted a compromise position that promised to provide "certainty" and "predictability" of spectrum resources for the broadcasting sector. The so-called '20-25-30 model' of Lamy envisaged freeing the 700 MHz band for mobile communications by 2020, while preserving the sub-700 MHz band for broadcasting until 2030. In the middle of this period, by 2025, he proposed a stock-taking to inform a potential review of the UHF spectrum policy in the EU. The RSPG also agreed that "DTT will continue to play an essential role for the foreseeable future due to its characteristics of delivering high-quality linear services to mass audiences and ensuring universal and free-to-air access to citizens." (RSPG, 2014a: 17). In this respect, the RSPG also proposed no mobile allocation in the 470-694 (sub-700 MHz) band until 2030. The broadcasters, joined by the local and pan-European representatives of the broadcasting listeners and viewers – VLV and Euralva, welcomed the proposals, yet demanded further clarification that the band was

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[5] As opposed to US proposals for allocation of the sub-700 MHz band to mobile services on a co-primary basis.

[6] They included broadcasters (Mediaset, ARD, MTV Media, BBC); broadcast network operators (TDF, Albertis Telecom, OiV); mobile network operators (Vodafone, Telefonica, Deutsche Telekom, Orange, Teliasonera, KPN); associations (GSMA, BNE, EBU, Digital Europe, CMFE, APWPT) (European Commission Press Release, 13/01/2014).

preserved for broadcasting *at least* until 2030 (see Association of Commercial Broadcasters and Audiovisual Services in Germany (VPRT), 2015a; RTE, 2015; Mediaset, 2015. In addition, reminding the EU's rules on subsidiarity, the VLV demanded that those dates should not be forced as "targets", rather be seen as "guides" for the potential transformations in the UHF bands (VLV, 2015a).

The broadcast community expressed their suspicion about the growing need for spectrum for the mobile communications sector, referring to studies which have established that, first, the DTT has returned greater value from spectrum than mobile[7], second, WiFi has began to demonstrate significant amounts of cellular mobile traffic offload[8]. In this respect, the VLV and European Alliance of Listeners' and Viewers' Associations (Euralva) called for more evidence-based policy-making and no hasty decisions about further spectrum allocation to the mobile industry. As expressed by Euralva, there was a need "for concrete evidence and transparency of the way the MT [mobile telecommunications] and WBB [the wireless broadband] industry is using already allocated spectrum" (Euralva, 2015a; Euralva, 2015b). The organisation demanded:

> to see studies about the incremental value of further spectrum allocations to the MT/WBB industry. For instance, the likely re-allocation of the 700 MHz band represents a small percentage of the spectrum currently licensed to mobile operators in Europe. What could the MT/WBB industry offer with this and further (as demanded) allocations that would be so exceptional and would far outweigh the substantial economic, social and cultural value that the DTT platform currently offers? (Euralva, 2015b).

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[7] See, in particular, Digital UK (2014).
[8] See ARD (2015) and Arqiva (2015), referring to Wik/Aegis' Study on Impact of traffic off-loading and related technological trends on the demand for wireless broadband spectrum. According the Wik and Aegis study commissioned by the EC's DG CONNECT, the latter has been intensified with "the considerable effort that equipment vendors and standards bodies have invested in developing both Wi-Fi and cellular standards to improve interworking between the two and to optimise use of the available spectrum" (Wik and Aegis, 2013).

The strongest argument in support of DTT broadcasting (especially in countries like Italy and the UK where the terrestrial system has been a dominant platform) was its promise of universal coverage and distribution of free-to-air television content to every segment of the population willing to access it (see, in particular, Mediaset, 2015). According to the EBU, long term spectrum certainty was needed to encourage investment in upgrading to more spectrum-efficient standards (DVB-T2, HEVC) and ensure the evolution to high definition and ultra high definition broadcasting and the viability of the DTT system (EBU, 2015a; BBC, 2014; ARD, 2015). For the union of the media workers, UNIMEI, its viability meant sustainability of this model and opportunity for producing content diversity, but also growth of employment in the European "audiovisual ecosystem". An ecosystem that "represent[ed] 14 million jobs and €860bn of turnover in Europe" (Wider Spectrum Group, Press Release, 28/01/2015). Furthermore, civil society organisations such as the VLV and Euralva highlighted the importance of preserving the currently independent nature of the DTT platform. Euralva argued that "[a] weakened DTT platform [would] result in powerful gatekeepers and too much market power in the hands of players (e.g. telecommunications operators) who have not been subject to content regulation traditionally thereby putting at risk the significant public policy goals associated with DTT" (Euralva, 2015a).

In addition to "certainty", however, the European decision-makers acknowledged also the need for allowing the 'flexibility' to accommodate a supplemental downlink for wireless/mobile broadband provisions in the sub-700 MHz band, in member states where there was no further demand for terrestrial broadcasting (Pascal Lamy's Report, 2014; RSPG, 2014a: 22; RSPG, 2014b: 8-9; ECC Report 224, 2014). For broadcasters[9] and broadcast network operators (Arqiva, BNE, ORS) the introduction of a 'flexibility option' in the sub-700 MHz band presented potential risks for interference with DTT and constraining its evolution, as well as with the services of the Program Making and Special Events (PMSE) licensees that operate in the unoccupied by the DTT 'white spaces' of the UHF band. The VLV joined this opposition, resembling the proposal to a 'Trojan Horse' that would effectively mean a

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[9] See, the EBU, 2015a, 2015b; ARD, 2015; BBC, 2014; Mediaset, 2015; VPRT, 2015a, 2015b; Digital UK, 2015a, 2015b, 2015c.

co-primary allocation of the sub-700 MHz band and allow member states to deploy MT/WBB instead of DTT, if they wanted to do so. The organisation demanded no consideration of such option at the WRC-15, "until the actual impact on DTT users of the transfer of the 700 and 800 MHz bands for MT and WBB use has been established and the need for additional spectrum has been proven beyond doubt" (VLV, 2015b).

In response to the Lamy's Report (2014), the German Association for Information Technology, Telecommunications and New Media (BITKOM) [10] argued that the introduction of a 'flexible option' would provide a 'win-win' situation for both the broadcasters and the mobile broadband industry. The association suggested that the supplemental downlink could be also used for the provision of broadcast content to mobile devices, with the utilisation of advanced LTE standards (e.g. evolved Multimedia Broadcast Multicast Service (eMBMS)) (Bitkom's response to Lamy's report, 2014). Similarly, global representatives of the semiconductor (Qualcomm) and the mobile consumer electronics industry (Samsung, Ericsson, Huawei), not particularly against the preservation of the DTT platform[11], presented ideas for more flexible and innovative utilisation of the sub-700 MHz band. Qualcomm declared that they "fully" supported the RSPG's "assessment of the benefits of the DTT platform" (Qualcomm, 2015a). However, the company argued that the DTT should extend from purely broadband services (e.g. BBC iPlayer, YouTube and Netflix) to next generation (non-linear) broadcast services reaching out mobile terminals and devices (Qualcomm, 2015b). This would allow a convergence and complementarity between broadcasting and mobile telecommunications players (See, Huawei, 2014). More importantly, this would "benefit European broadcast content providers and reposition them against purely internet based services" (Qualcomm, 2015b).

The debates about the future of the UHF band in the wake of the WRC-15 revealed an interesting differentiation between the spectrum interests of mobile LTE and the

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[10] An association that represents companies (including SMEs and start-ups) operating in telecommunications and internet services as well as hardware and consumer electronics manufacturers.

[11] Samsung, in particular, did not oppose Ofcom's proposal for 'no change' policy to the primary allocation of the sub-700 MHz for DTT (See, Samsung Electronics UK, 2014).

wireless internet (WiFi) broadband sector. The representatives of the cellular industry demanded the co-allocation of the sub-700 band for mobile operations, focusing on the attractive propagation characteristics for reaching out more isolated and rural areas (GSMA, 2015). In contrast, the Dynamic Spectrum Alliance (DSA), which included - among others - companies such as Google, Microsoft, Facebook, BskyB[12], did not ask for further action to acquire spectrum from broadcasters. Instead, the Alliance demanded the use of the already available white spaces on the basis of a dynamic licence-exempt regime. According to the DSA, this would increase the availability of more ubiquitous and affordable broadband access in rural and hard-to-reach areas, which would arguably help narrow the urban/rural digital divide. In addition, the Alliance argued that opportunities for licence-exempt use of white spaces would foster further innovation (e.g. machine-to-machine communications) and contribute to meeting socio-economic goals (DSA, 2015). Similarly, another alliance with stakes in the provision of broadband through use of white spaces, the White Spectrum Alliance (WSA)[13], acknowledged the important public service of free-to-air broadcasting and argued that allowing licence-exempt usage of the UHF spectrum would further benefit citizens (WSA, 2015). Both alliances referred to the continuing development of standards (IEEE 802.11af, IEEE 802.22 Wi-FAR) for the use of white spaces for less expensive and improved access to internet in rural and difficult to reach areas.

A 'Group of Citizens' that included seven individuals[14], however, furthered the demands of both the DSA and WSA, demanding the allocation of a block of additional spectrum for wireless broadband on a license exempt principle. According to this Group of Citizens:

> The social and economic benefits of broadband are widely recognised. At the micro level, they appear mainly as consumer surplus creation, labour

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[12] The complete list of their members can be seen here:
http://www.dynamicspectrumalliance.org/members/
[13] The members of the Alliance are listed here:
https://www.whitespacealliance.org/Members.html
[14] Although involved in organisations (e.g. Open Spectrum Alliance, Open Spectrum Foundation) advocating licence-exempt usage of white spaces, the individuals demanded their submission to be treated separate from their institutional affiliations.

productivity gains and improvements in operating efficiency for firms, leading to accelerated economic growth and new job creation. … We are not aware of any claim that broadcasting has similar self-augmenting economic benefits. So given a choice between broadband and broadcasting, more bandwidth for the former should be preferred. (Group of Citizens, 2015).

Pointing to the growing penetration of cable, satellite and internet ways for broadcasting, the Group suggested that the wireless bandwidth for DTT should be reduced and "a significant part of the spectrum between 470 and 694 MHz for license-exempt bi-directional [instead of downlink-only] broadband communications" should be released.

CONCLUSION: WRC-15, THE PUBLIC INTEREST AND THE SIGNIFICANCE OF INTERNATIONAL CIVIL SOCIETY ACTIVISM

Policy processes around WRC-15 provide important evidence of the significance of civil society actors in the debate on the reallocation of the 700MHz band. The debate signals strongly how important it is to make the distinction between the presence and voice of civil society actors, on the one hand, and the existence and promotion of societal (or public interest) positions, on the other. In the former case, in the EU, the availability of quite extensive consultation exercises in the lead up to WRC-15 provided civil society with an important policy window of opportunity within which its voice could be articulated and its strategic position developed. However, as shown, civil society participation is noteworthy for the relative organisational narrowness of its inputs, where viewers' and listeners' associations – a very particular kind of civil society organisation - figure most prominently. It is interesting that the Lamy Group - as it turned out a key position forming body on spectrum - had only one representative from civil society quarters (the Community Media Forum, Europe) amidst a plethora of prominent, well resourced, actors from the broadcasting and mobile communications sectors, in particular. Thus, despite a presence in this elite gathering, the extent to which token involvement for civil society in such fora can be beneficial to the latter continues to be open to scepticism on the evidence of the spectrum debate.

Here, much has hinged on the extent to which the positions of civil society actors and broadcast providers of one kind or another became aligned in the debate. The spectrum issue is unusual in that arguments propounded by the latter have strong public interest characteristics, which largely formed a policy vanguard to argue for the retention of the 470-694 MHz band for terrestrial broadcasting, at least for the time being. It is important to note the coming together here of perspectives from public service and commercial quarters in broadcast service provision, along with broadcast network infrastructure owners, and, lastly, programme making and special events services providers. Civil society alignment with this miscellany of actors (which far from always find themselves in agreement), was crucial to advancement of the former's positions. This shows evidence of breadth of strategic argumentation on civil society actors' behalf. For example, media workers unions, such as UNIMEI, took their place in the Wider Spectrum Group and advanced arguments for retaining spectrum allocation in terms of ensuring the maintenance of content diversity, as well as its core interest of employment.

However, the debate also witnessed the employment by civil society bodies of direct challenges to the mobile communication industry, using language mostly associated with the latter's arguments to be allowed to occupy new parts of the spectrum. Euralva, the international viewers' and listeners' representative body, for example, went outside what could be regarded as its core remit, by arguing strongly for studies to establish both the practical need and relative value of more spectrum allocation to the mobile sector. It also produced economic arguments around market structure and linked them to a potential detrimental impact on the public policy goals of digital terrestrial television.

This kind of argumentation aligned with - and was bolstered by - a raft of technical arguments propounded by the broadcasting industry, which were linked, somewhat symmetrically, to public interest matters of universal coverage, as well as the ability to secure future spectrum efficiency generating innovations through research and development. An interesting alignment also developed between broadcast and civil society interests in respect of arguments over the extent to which so-called white space should be used for mobile communication. Opposed directly by interests in

PMSE and broadcast service provision, civil society, in the shape of Euralva, aligned itself behind these interests by reiterating the need for hard evidence of the necessity of downlinking, as well as the more emotive 'Trojan Horse' argument noted in the previous section.

On the opposite side of the debate, it is interesting to note the use of public interest arguments by mobile communication players suggesting strongly an open and contested process in (re) consideration of the public interest in communications. Here, the Dynamic Spectrum Alliance (DSA) and White Spectrum Alliance appealed to the idea of universality of service, where the reallocation of spectrum in the direction of the mobile communications industry would allow servicing of outlying areas, as well as innovations around technical standards making that would yield public interest goods. The mobile communications sector also attempted to introduce a new normative frame around the use of white spaces, with the idea of licence-exempt access to it, thereby challenging the licence dominated norm of broadcasting usage of spectrum. Another interesting perspective from the mobile communications community was a definitional stretching of the term 'civil society' through the so-called Group of Citizens. This could be viewed as an attempt to articulate the public interest – here argued to be deliverable through the commercial activity of the mobile communication sector - in the language of consumer surplus creation, efficiency, growth and job creation. The Group comprised individuals with strong mobile communication industry backgrounds which insisted in presenting in the debate as civil society proponents. Another interesting normative twist was the introduction by players from telecommunication and electronics of the idea of delivery of public interest goals through commercial means couched in the language of media convergence, which attempted to link together DTV's future inextricably with the mobile communication sector. This led to the positing of the outcome of WRC-15 in respect of the sub-700Mhz part of the spectrum unconvincingly by the DSA as a 'win-win' situation. A key question for the future is the extent to which civil society interests might consider it attractive to align with these attempted normative re-conceptualisations of the public interest in spectrum and the communications sector more broadly.

Undoubtedly, the key role played in the policy deliberations on the future use of the sub-700MHz part of the spectrum was played by (non civil society) interests from broadcasting. The articulation of their perspectives in considerable part centred around a simultaneous pointing up of the public value track record of the broadcasting sector's use of spectrum and in the process a questioning of the value that might be realised from its transference for use by the mobile communication sector. On this occasion, there is clear evidence of protection and promotion of the public interest, albeit possibly indirectly in the case of commercial broadcast players. This provided fertile alignment ground for the involved civil society parties in the debate. The analysis of civil society engagement in the EU in the lead up to WRC-15 can be expressed in the following typology (see Table 1).

Table 1: Civil Society Activism as 'Alignment' Strategies in Key Policy Events

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Precursor Conditions

1. Possession of at least some resources (personnel, financial, electronic)
2. Possession of specific information/knowledge assets
3. Windows of policy opportunity

Alignment Process

1. Willingness/ability to engage in areas beyond core expertise (learning capacity)
2. Ability to add value to the lobby process through linking with related agendas (issue linking and development capacity)
3. Presence of non-civil society (at least part) publicly resourced actors
4. Receptive private interest actors

Future Sustainability Capacity

1. Establishment of formal/informal cooperative understanding
2. Display of persuasiveness over 'noise'
3. Anticipation of changes in external environment and normative and instrumental strategic response capacity

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In the light of the outcome of WRC-15, the European Commission proposed to its Member States a *Decision on the Use of the 470-790 MHz Frequency Band in the Union* (European Commission, 2016). The Commission's concern is to create a coordinated approach to the use of the 700MHz part of the spectrum, where there is perceived to be 'a need for a coordinated designation and authorisation of the 700MHz band for wireless broadband by 2020 and coordinated designation of the sub 700 MHz for flexible use which safeguards the provision of audiovisual media services to mass audience, as well as investments into more efficient technologies, which are needed to vacate the current use of the 700 MHz band by DTT' (European Commission, 2016: 3-4). The Commission estimated that providing the 700 MHz frequency for mobile broadband would create 'universal coverage at high transmission speeds of at least 30 Mb/s per user' in a typical market and would tie in with the deployment of 5G mobile broadband services. The 'flexible use' of spectrum in the sub-700MHz frequency should be limited, in the case of introduction of mobile communication services, to so-called downlink only provision i.e. one way transmission from the network service provider to the receiving terminal equipment. The proposed Decision, if adopted by Member States, will mean that by 30 June 2020, the 694-790 MHz band shall be allowed by all Member States for terrestrial mobile broadband communications only. To facilitate this, all cross-border frequency coordination agreements would be in place by the end of 2017. Additionally, by 30 June 2022, EU Member States would allow the transfer or leasing of rights of use of spectrum in the 694-790 MHz band. Article 4 of the proposed Decision would require Member States to ensure the availability of the 470-694MHz band or parts of it for what is described as 'audiovisual media services to mass audiences, including free television, and for use by wireless audio PMSE equipment, based on national broadcasting needs'. Any other electronic communication services authorised in this band must be down-link only in nature. The Decision would also require Member States to produce national plans by 30 June 2017 in respect of fulfilling these requirements. Article 6 of the Decision would require the European Commission to undertake a review of the use of the 470-694MHz part of the spectrum by the beginning of 2025 (European Commission, 2016: 14).

The European Union agreement can be viewed as something of a compromise, holding position. Much will hinge on how technology and infrastructure develop over

the next decade. Investing the responsibility in broadcasting players to uphold the public interest in media in this environment is risky. However, they have displayed strong powers of coordination and suasion. Civil society actors have been seen to play important assistive roles in aligning themselves with these actors. However, they have been at best junior players in a debate which has seen the definitional nature of the public interest in communication challenged and stretched, a process sure to continue for the foreseeable future.

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