Chapter 9
Mobile Telephony, Public and Private Planning and Regulation: A UK Perspective

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ABSTRACT

The global connectivity, experience and opportunities afforded by the expansion of modern informational mobility is particularly evident in the sustained expansion of mobile, cell and smart phones which are held to offer important social and economic benefits to individuals, businesses and governments. In practical terms, these are held to provide greater spatial mobility and connectivity, whilst potentially contributing to economic competitiveness, social emancipation, and territorial cohesion. Yet, the invisible connectivity afforded by such devices necessitates a visible physical infrastructure in rural and urban localities. This chapter discusses the technological, environmental and socio-economic implications of providing a mobile telephony infrastructure through a case study of the land use planning regulatory framework in the UK. Specific reference is made to Scotland which introduced statutory planning regulation in the public interest. This chapter explores the theoretical dimensions of the regulatory challenge of mobile telephony from a public and private perspective.

INTRODUCTION

Information and Communication Technologies are generally held as critical in meeting the needs of a modern information society, better enabling nation states compete in a global economy, and offering opportunities for promoting improved social cohesion (Castells, 1996). The vision of an 'E-topia' articulated by Mitchell (1999) highlights, for example, the changes that were expected to take place in different places and spaces as a consequence of the anticipated digital revolution. In practice, technological change in the communications sector has been rapid, certainly instrumental and potentially transformational. The specific development of high capacity broadband networks, the use of the Internet, and high-speed information networks have combined in various

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complementary ways to generate new patterns of networking, and to open up and expand novel potentialities for information gathering and knowledge exchange.

Digital networks have emerged as an important component of urban and rural infrastructure, leading Mitchell (1995), for example, to argue that digital telecommunications technology both extends and intensifies the reach and impact of earlier transportation networks, such as the mail, telegraph and telephone systems, thereby providing for economic and social integration on a larger geographic scale. This ambition necessarily cuts across established political borders. Extending this logic to the present, the emergent concept of ubiquitous infrastructure technologies (U-infrastructure) is held to represent a new paradigm of intelligent infrastructure provision, comprising a complex of inter-connected urban infrastructures that combine and facilitate information and communication technologies and digital networks (Lee *et al*., 2008). This predominantly Korean perspective chimes with related debates around the need to establish a secure urbanism and the provision of a resilient infrastructure which can respond to emerging ecological constraints and environmental challenges in modern metropolitan areas (Hodson & Marvin, 2009a). This in turn raises questions for the institutional frameworks and multi-layered governance arrangements for managing the transition to accommodate and manage the new technologies (Hodson & Marvin, 2009b). This is particularly the case where competitive regimes exist and where unanticipated impacts of new technologies remain unknown.

Significantly, Gow (2005) argued that the essential characteristics of a ubiquitous network society were its 'invisibility and pervasiveness' (p. 4). Yet, the perspective of this chapter is that such "invisible" technological activity requires a physical and material supporting infrastructure. Here, Graham and Marvin (1995), for example, argued that the underlying complexities associated with the required utilities infrastructure risked becoming a 'missing link' in debates concerned with urban redevelopment and restructuring, and made a case for more appropriate empirical research into the relationship between utility, infrastructure and regulation. Notwithstanding the evident miniaturisation and portability of different communications media, the devices still require a communications network. The necessary supporting facilities and structures are likely to be relatively more visible and material in character and, as a consequence, bring with them the possibility of creating different contestations around the ownership, use and development of spaces and places.

In effect, the supporting infrastructure for the invisible technology is very much more visible and potentially intrusive in different social, political and environmental contexts. Indeed, its very physicality has potentially cumulative and tangible impacts on different localities and communities. Such effects are likely to feature, or indeed be concentrated at specific points, in defined urban neighbourhoods, rural environments, or along linear transport and infrastructure corridors. Specifically, this chapter is concerned with the strategic mediation and site-specific facilitation of the necessary infrastructure development for mobile telephony through the UK statutory land use planning system.

In practical terms, this chapter examines attempts in Scotland to design an appropriate regulatory regime to reconcile the environmental, economic, technocratic, and democratic considerations needed to support the physical distribution networks required to support mobile telephony. In many ways, this wider environmental perspective is not a new concern. During the 1920s, for example, campaigning groups in the UK militated against the perceived intrusion of urban paraphernalia, including the erection of telegraph poles and advertising hoardings (Gallent *et al*., 2008). Notably, the Campaign for the Protection of Rural England, and the equivalent body for Wales, were