Standardization as Governance Without Government: A Critical Reassessment of the Digital Video Broadcasting Project’s Success Story

Niclas Meyer, Fraunhofer Institute for Systems and Innovation Research, Germany

ABSTRACT

Industry-led technical standardization is often cited as an example for governance without government and the Digital Video Broadcasting (DVB) Project is often presented as a particularly successful case of such private governance. Succeeding the spectacular failure of the government-led high-definition television standardization project in Europe, the successes of the industry-led DVB Project have often been cited as evidence for the superior governance capacity of private industry. While the commercial and engineering success of the DVB Project is unequivocal, this paper raises the question whether it has been equally successful from a governance point of view.

Keywords: Digital Television, Digital Video Broadcasting, Governance, Public Policy, Standardization

INTRODUCTION

This article examines whether and, if so, under what circumstances governance through industry-led—as opposed to government-led—standardization may provide a solution to the challenges posed to conventional governance through government. These challenges are well illustrated by the history of government involvement in international and European high-definition television (HDTV) standardization. First, the case of HDTV standardization demonstrated the difficulties of global governance where governments need to collaborate and agree to common measures. When HDTV standardization was first brought onto the agenda of the CCIR (Consultative Committee for International Radio) by the government of Japan the international community failed to overcome its divergent interests and to find agreement on a common standard. As each government sought to install its domestic technology as the international standard, the negotiations quickly erupted into an international standards war, which could not have been any more passionate, as demonstrated by the following statement by an executive of the French company Thomson:

“High-definition television was to be the [Japanese’] ultimate weapon—an instrument with which to squeeze their European competitors out of their own domestic market and blitzkrieg

DOI: 10.4018/jitsr.2012070102
the wide-open American market. In short, move in for the kill [...] This was to be the new Verdun." (Interview with an unnamed Thomson executive in, “The world at war,” 1990)

Secondly, the story of HDTV standardization also revealed the informational problems of government-lead standardization in particular and government intervention in high tech industries in general. Upon the initiative of the French government and the European Commission close to €1 billion in public subsidies were sunk into the development of an HDTV standard, which was never deployed (Cawson, 1995; Peterson & Sharp, 1998). Many commentators began to refer to this failure to support their arguments that governmental actors should not stay out of technical standardization processes (Cave, 1997; Cawson, 1995; Galprin, 2002; Levy, 1997).

The subsequent success of the industry-led Digital Video Broadcasting (DVB) Project, in turn, seemed to have lent the critics of government interventionism with evidence for the superior governance capacity of industry-led technical standardization processes. DVB standardization was a great engineering and commercial success (de Bruin & Smits, 1999; Cave, 1997; Reimers, 2006). Its standards are today used in more than 500 million devices all over the world (DVB Project, 2010a). This led many commentators to the conclusion that industry knew best what technical standards were needed and how to develop them and that government should stay out of industry standardization processes (de Bruin & Smits, 1999; Dai, 2008; Brown, 2005).

This article challenges this conclusion. Although it does not question the unequivocal engineering and commercial success of the DVB Project, it raises the question whether it has been equally successful as a mode of governance. Before a detailed empirical investigation of the DVB case, the following Section provides a brief introduction to and definition of the concept of governance, which is applied in this article.

**GOVERNING THROUGH STANDARDS**

This article starts from the institutionalist premises that economic exchange cannot take place or create value without the presence of institutions, such as property rights, antitrust rules, contract law, enforcement mechanisms, payment systems etc. (North, 1990; Fligstein, 1996). The process of creating and maintaining these institutions is described as governance. It is the institutionalized social coordination that is necessary to produce and implement collectively binding rules or to provide collective goods (Mayntz, 2004). As market competition depends on institutions to function properly or to take place at all, markets cannot provide governance, i.e., the institutions that constitute and govern them themselves. Governance, by definition, is thus a coordinative, non-competitive process.\(^1\)

Traditionally, governance was provided by government. Faced with an accelerating pace of technical change and economic internationalization, however, governmental actors increasingly find themselves unable to provide the public goods and the coordination that they used to be able to provide. Technical change challenges the governance capacity of governmental actors. They often lack the technical expertise and market information that is necessary to keep pace with—not to mention influencing the direction of—these developments. Given their size and ability to adopt and enforce legally binding decisions, public actors are considered influential. But for their lack of information they are unable to use this influence in a purposeful way. This was also demonstrated by the above-mentioned case of European HDTV standardization, where large amounts of public subsidies were sunk in an outdated technology that was never deployed. And even where public entrepreneurs had this information and expertise, Auriol and Benaim (2000) and David (1990) suggest, they would only have a ‘narrow time window’ to intervene before markets were locked in and before their technical knowledge became obsolete.