Chapter VI

Standardization and Competing Consortia: The Trade-Off between Speed and Compatibility

Marc van Wegberg, University of Maastricht, The Netherlands

ABSTRACT

The consortia movement in the standardization world has led to a fragmentation of standardization processes. This fragmentation is partly of a competitive nature, where rival coalitions support competing technologies. A critique on this movement is that it fragments technologies and multiplies the number of standards. The aim of supporting competing technologies may reflect experimentation with different technological paths. It may also, however, reflect differences in intellectual property rights of firms. From a user’s perspective, the competing technologies may represent spurious differences that increase uncertainty, and create transaction costs. The consortia do have a function for end users: Established industry-wide standard development organizations (SDOs) may be slow to act, bureaucratic, and inflexible to changes in users’ needs and new opportunities; consortia speed up the process of standardization. This chapter argues that consortia do indeed tend to correct these coordination failures of the official SDOs. They do so at a cost, however, and because of this, industry-wide SDOs still have a role to play.
INTRODUCTION

The standardization landscape in the information and communication technology (ICT) industries is fragmented in many different standardization bodies, industry consortia, and alliances. Some of these coalitions cooperate with each other, while others compete. The consortia movement is a major cause of competitive fragmentation of standardization. Practitioners and analysts argue with each other about whether this fragmentation leads to coordination failures. The existence of competing standardization coalitions may prevent coordination on a common standard. The argument in this chapter is that consortia exist for a reason. A better understanding of why companies have standardization strategies that give rise to fragmentation may show the possible advantages of fragmentation.

An important form of innovation in the ICT industries consists of developing new combinations of components. The ability to connect devices can increase their utility to end-users. An end user can increase the utility of a product by connecting it to complementary products. Hardware and software are examples of this. Connecting different devices may also benefit users by enabling them to communicate with each other by voice or data communication. In both examples, network externalities are realized. These are defined as situations where the utility of a product (or a service) to a user increases when more users use the same product or compatible technologies. Compatibility standards set specifications for components that make it possible to connect these components to each other. By improving the connectability of products, compatibility standards make it possible to realize network externalities. They create value for the end users or for their suppliers. The standardization process can therefore be an important value-generating process. How this process is organized affects the outcome of the standardization process. Standardization processes are partly organized in coalitions. How many coalitions there are, and how many members each has, is known as the coalition structure of the standardization process (Bloch, 1995). An important aspect of the coalition structure is the level of centralization, defined here as the extent to which decision making about standards is concentrated in one or more coalitions.

The most centralized coalition structure is the grand coalition: a coalition that includes all participants in the standardizing process. In the case of a standard that affects an industry, this will be an industry-wide coalition. It may take the form of an official standards development organization (SDO). A grand coalition has access to the widest number of players and their information. A consensual decision-making process means that specifications are accepted only if no one (or at most a sufficiently small minority) holds out against them. The consensus provides legitimacy to its specifications. Due to its comprehensive membership, information about the new standards is widely available in the field. The comprehensive coordination makes it possible to convene on a single