Sociopolitical, Ethical and Technological Factors in e-Elections

A. Reggios and E. Magkos

Department of Informatics, Ionian University Plateia Tsirigoti 7, 49100, Corfu, Greece e-mail: {c10reng, emagos}@ionio.gr

Abstract. The recent elections held in Estonia and Norway provided the electorate with the option of casting their vote over the Internet. The use of technological means in binding political elections might be interpreted as mere modernization of the traditional electoral process, a trend driven by expectations of increased efficiency and functionality. The representation of citizens and their participation in political decision making is considered to be the cornerstone of modern democratic societies, or at least every citizen's opportunity to actively intervene in public affairs. Thus any transformation of these political procedures cannot be evaluated only in terms of novelty and technological evolution. The traditional paper ballot election process already presents multiple challenges, fragile balances, mandatory compromises and even symbolic characteristics, thus creating a complex environment where political and socioeconomic factors intertwine and interact in some cases competitively. Adding the technological factor to this complexity creates even more challenges. First, e-voting must comply with fundamental social values and Constitutional principles but at the same time it may amend and adapt some of them into new requirements. The sociopolitical aspects of e-voting, while important, they are not always objective. Every single polity has its own cultural, social and economic characteristics, experiences and traditions, which differentiate the conditions, objectives and the feasibility of using such technologies in political functions. Furthermore, confidence and trust, mainly from the point of view of voter's privacy and election integrity, but also social acceptance, have been attributed by researchers as the fundamental tools for assisting complex socio-technical systems such as e-voting to work. In this paper we survey the diverse requirements, perceptions, risks, expectations, opportunities and research challenges related with the use of Internet voting systems.