

Electronic elections, also known as i-voting might help in removing the crisis in our democracy, which is reflected in non-cooperation in the opportunity of expressing their opinions during direct elections. A reasonable set up of information and communication technologies in technical and financial terms could help that elections would be attended by more voters. The implementation of electronic elections could achieve that the way of governance in the democratic republic will be truly represented by the view of the vast majority of people who are authorized to elect. The introduction of the i-voting system could be efficient from the financial point of view. This electoral process could reduce the risk of human error as well as the risk of manipulation of votes since most of the processes would be automated.

This thesis proposes a definition of the basic requirements for an ideal i-voting system which compares the requirements for ensuring the safety of two previously proposed electronic electoral systems. Thanks to a deeper analysis of these two systems the thesis also describes the imperfection in safety and it raises the possibility of basic attacks on components and systems properties due to imperfections in security.