Chapter 2

**LITERATURE SURVEY**

A review of the currently deployed vote verification methods, The aim is to propose a more reliable and robust vote verification method. Here is a proposal for a vote verification technique which would be able to verify vote against major possible threats and enables all election participants to verify votes. For this purpose, there is a need to investigate a combination of both technological and procedural solutions. Design for e-voting systems based on dependable web services is proposed. The results got from the analysis of the evaluation of the proposed design, presented that the solution, increase the dependability to a great extent. Also explained that this design can respond to main requirements of e-voting.

The availability is one of key attributes and the most important requirement for e-voting as important as security, which is fulfilled. Considering that the security is a very important requirement of e-voting systems, the existing solutions to achieve web service security is used. Architecture for internet voting system based on dependable web services is proposed[3]. Then the system is modeled with RBD and Reward Petri Nets. Finally the system is evaluated quantitatively. Also by looking at the results of evaluation, it was decided whether to use this system or not. This architecture increased dependability very much. Also main requirements of voting like secrecy, mobility, accuracy, uniqueness and etc are considered. Paying attention to security needs of voting, some approaches to create a secure system are used. It is shown that this system will not fail even if some components fail and both availability and security as the most important specification of voting systems will be addressed.

As voting via internet is very easy and has no time and money costs for voters. So, system can anchor age people to take part in the election. An E-voting procedure which ensures voters and candidate’s confidentiality and accuracy is proposed[4]. Many issues still exist, for example, when large number of voters cast their ballots at the same time, will it cause denial of service (DOS) in the Internet? How to design an efficient and secure online voting system? Nevertheless, at least for the counting procedure, different levels of measurements introduced in this proposal have decreased the risk for unfairness in actual elections. The proposed design contains that the voting can be done only at the places where the voting places are installed[5].