ASET Colloquium

Indian EVM
by Prof. Dinesh Sharma (IIT Bombay)

Friday, 24 March 2017 from 16:00 to 17:00 at AG-66

Abstract:

Electronic voting was introduced to India in a by-election to North Paravur assembly constituency in Kerala in 1982. The use of electronic voting machines (EVM) has now become almost universal in all elections in India.

Electronic voting machines face unique technical challenges. An election requires privacy at the same time as transparency. The machines should provide advanced features for security, but at the same time their user interface should be simple enough to be used intuitively by any citizen of India, whatever be their background. The election process is carried out under the supervision of
non-technical staff. Operation of the machine should be quickly learnt by the non-technical staff manning the polling booths. In spite of these challenges, it is widely agreed that the use of EVMs has led to elimination of many strong arm tactics like `booth capturing' in the election process.

The EVM is not without its detractors, though. Since the accounting of votes is done electronically, serious doubts have been raised about the possibility of `hacking' these machines to manipulate the number of votes. However, various administrative and electronic safeguards included in the electoral process make it impossible to manipulate votes.

I shall talk about the technical and non-technical challenges faced by the EVM and what is being done to improve these machines further.